



CITY *of* CLOVIS

AGENDA • CITY COUNCIL MEETING

Council Chamber, 1033 Fifth Street, Clovis, CA 93612 (559) 324-2060
www.clovisca.gov

October 6, 2025

6:00 PM

Council Chamber

In compliance with the Americans with Disabilities Act, if you need special assistance to access the City Council Chamber to participate at this meeting, please contact the City Clerk or General Services Director at (559) 324-2060 (TTY – 711). Notification 48 hours prior to the meeting will enable the City to make reasonable arrangements to ensure accessibility to the Council Chamber.

The Clovis City Council meetings are open to the public at the physical address listed above. There are numerous ways to participate in the City Council meetings: you are able to attend in person; you may submit written comments as described below; and you may view the meeting which is webcast and accessed at www.clovisca.gov/agendas.

Written Comments

- Members of the public are encouraged to submit written comments at: www.clovisca.gov/agendas at least two (2) hours before the meeting (4:00 p.m.). You will be prompted to provide:
 - Council Meeting Date
 - Item Number
 - Name
 - Email
 - Comment
- Please submit a separate form for each item you are commenting on.
- A copy of your written comment will be provided to the City Council noting the item number. If you wish to make a verbal comment, please see instructions below.
- Please be aware that any written comments received that do not specify a particular agenda item will be marked for the general public comment portion of the agenda.
- If a written comment is received after 4:00 p.m. on the day of the meeting, efforts will be made to provide the comment to the City Council during the meeting. However, staff cannot guarantee that written comments received after 4:00 p.m. will be provided to City Council during the meeting. All written comments received prior to the end of the meeting will be made part of the record of proceedings.



SCAN ME

CAMPAIGN CONTRIBUTION PROHIBITIONS AND MANDATORY DISCLOSURE – Pursuant to Government Code section 84308, a Councilmember shall not accept, solicit, or direct a campaign contribution of more than \$500 from any party or their agent, or from any participant or their agent, while a proceeding involving a license, permit, contract, or other entitlement for use is pending before the City or for 12 months after a final decision is rendered in that proceeding. Any Councilmember who has received a campaign contribution of more than \$500 within the preceding 12 months from a party or their agent, or from a participant or their agent, must disclose that fact on the record of the proceeding and shall not make, participate in making, or in any way attempt to use their official position to influence the decision.

Pursuant to Government Code section 84308, subdivision (e), any party to a covered proceeding before the City Council is required to disclose on the record of the proceeding any campaign contribution, including aggregated contributions, of more than \$500 made within the preceding 12 months by the party or their agent to any Councilmember. The disclosure shall be made as required by Government Code Section 84308, subdivision (e)(1) and California Code of Regulations, Title 2, section 18438.8. No party or their agent, and no participant or their agent, shall make a campaign contribution of more than \$500 to any Councilmember during the covered proceeding or for 12 months after a final decision is made in that proceeding. The foregoing statements do not constitute legal advice, and parties and participants are urged to consult with their own legal counsel regarding the applicable requirements of the law.

CALL TO ORDER

FLAG SALUTE - Councilmember Basgall

ROLL CALL

PRESENTATIONS/PROCLAMATIONS

1. Presentation of Proclamation declaring October 2025, as Domestic Violence Awareness Month.

PUBLIC COMMENTS - This is an opportunity for the members of the public to address the City Council on any matter within the City Council's jurisdiction that is not listed on the Agenda. In order for everyone to be heard, please limit your comments to 3 minutes or less, or 10 minutes per topic. Anyone wishing to be placed on the Agenda for a specific topic should contact the City Manager's office and submit correspondence at least 10 days before the desired date of appearance.

CONSENT CALENDAR - Items considered routine in nature are to be placed upon the Consent Calendar. They will all be considered and voted upon in one vote as one item unless a Councilmember requests individual consideration. A Councilmember's vote in favor of the Consent Calendar is considered and recorded as a separate affirmative vote in favor of each action listed. Motions in favor of adoption of the Consent Calendar are deemed to include a motion to waive the reading of any ordinance or resolution on the Consent Calendar. For adoption of ordinances, only those that have received a unanimous vote upon introduction are considered Consent items.

2. Administration - Approval - Minutes from the September 15, 2025, Council Meeting.

3. General Services – Approval of Contract Award for Consultant Services for a Strategic Operations Plan (SOP) to Jarrett Walker & Associates, LLC for \$169,907.97; and Authorize the City Manager to Execute the Contract on behalf of the City.
4. General Services – Approval - Res. 25-____, Authorize the Federal Funding Under Federal Transit Administration (FTA) Section 5310 (49 U.S.C. Section 5310) with Fresno Council of Governments (FCOG) and the Execution of Certifications and Assurances, Applications, and Documents; and Authorize the Deputy General Services Director to execute all necessary documentation.
5. Planning and Development Services – Approval – Final Acceptance for CIP 21-15 Armstrong Avenue Street Improvements, with a final contract cost of \$529,880.88.
6. Planning and Development Services – Approval – Partial Acceptance for Final Map for Tract 6086, and reduction of the Performance Surety and Labor and Materials Surety to the appropriate values of the remaining improvements to be completed, located at the southeast corner of Shaw Avenue and Leonard Avenue (Lennar Homes of California, LLC).
7. Planning and Development Services – Approval – Final Acceptance for Final Map for Tract 6107, acceptance of public improvements with authorization to record the Notice of Completion, and release of sureties as required, located at the southwest corner of Shaw and Highland Avenues (Lennar Homes of California).
8. Public Utilities – Approval – Waive Formal Bidding Requirements and Authorize the Purchase of a 2026 Ford F750 Altec Tree Trimming Truck Model LR856 from Altec Industries, Inc., Utilizing the Sourcewell Cooperative Purchasing Contract in the Total Amount of \$211,736.37.
9. Public Utilities – Approval – Res. 25-____, Authorizing the Submittal of an Application Under the San Joaquin Valley Air Pollution Control District Public Benefit Grant Program - New Alternative Fuel Vehicle Purchase and Authorizing the City Manager to be the Contract Authority; and Approval – Waive Formal Bidding Requirements and Authorize the Purchase of Five (5) 2025 Chevrolet Silverado EV Crew Cab Work Trucks from Hedricks Chevrolet in the Amount of \$359,549.40.
10. Public Utilities – Approval – Waive Formal Bidding Requirements and Authorize the City Manager to Enter into a Contract with Golden Bell Products, Inc., for Insect Control in Sanitary Sewer Manholes, in the Amount of \$221,120.

ADMINISTRATIVE ITEMS - Administrative Items are matters on the regular City Council Agenda other than Public Hearings.

11. Workshop - Presentation on Cybersecurity Awareness.

Staff: Jesse Velez, I.T. Deputy Director

Recommendation: Receive and File

COUNCIL ITEMS

12. Consider Approval – Res. 25-____ Adopting a Position of Opposition to Proposition 50 on the November 4, 2025, Ballot, Authorizing Temporary Changes to Congressional District Maps.

Staff: Paul Armendariz, Assistant City Manager

Recommendation: Consider

CITY MANAGER COMMENTS

COUNCIL COMMENTS

CLOSED SESSION - A “closed door” (not public) City Council meeting, allowed by State law, for consideration of pending legal matters and certain matters related to personnel and real estate transactions.

13. Government Code Section 54957.6
CONFERENCE WITH LABOR NEGOTIATORS
Agency designated representatives: Andrew Haussler, Paul Armendariz, Amy Hance, Bethany Berube, Jay Schengel, Scott Cross
Employee Organizations: Transit Employees Bargaining Unit, Clovis Public Safety Employees Association, Clovis Police Officers Association, Clovis Public Works Employees Association, and Unrepresented Employees

RECONVENE INTO OPEN SESSION AND REPORT FROM CLOSED SESSION

ADJOURNMENT

FUTURE MEETINGS

Regular City Council Meetings are held at 6:00 P.M. in the Council Chamber. The following are future meeting dates:

Oct. 13, 2025 (Mon.) (Joint Meeting with CUSD)
Oct. 20, 2025 (Mon.)
Nov. 3, 2025 (Mon.)
Nov. 10, 2025 (Mon.)
Nov. 17, 2025 (Mon.)

CITY of CLOVIS

Proclamation

Proclaiming October 2025 as
Domestic Violence Awareness Month

WHEREAS, domestic violence impacts countless individuals, without regard to age, race, religion, or economic status; as victims suffer at the hands of a spouse or partner, it affects their children, families, and entire communities. Domestic violence is widespread and affects over 12 million men and women in the United States each year, and at its most tragic level, kills an average of three women every day; and

WHEREAS, more than 600 domestic violence reports were filed by City of Clovis law enforcement last year, and as Fresno County's only dedicated provider of domestic violence safe housing and comprehensive support services, Marjaree Mason Center served 8,482 adults and children impacted by domestic violence last year, including over 81,000 nights of safe shelter; and

WHEREAS, Marjaree Mason Center has operated a safe house for survivors of domestic violence in the City of Clovis as transitional housing for the last twelve years. Marjaree Mason Center actively partners with the City of Clovis, the Clovis Police Department and other community partners to ensure survivors have access to safe housing, support with restraining orders and other services; and

WHEREAS, each October, the formal recognition of Domestic Violence Awareness Month allows the community to acknowledge and show their support for survivors and advocates to end the cycle of abuse through education; and

WHEREAS, Purple Thursday, October 16, is a national day dedicated to remembering the victims of domestic violence, to supporting survivors, and to raising awareness on local resources available to put an end to domestic violence; and

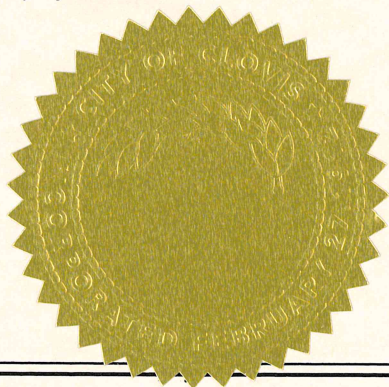
WHEREAS, a partnership of organizations has emerged to directly confront this crisis and are achieving success. The Marjaree Mason Center, along with law enforcement, health care providers, clergy and concerned citizens are helping in the effort to end domestic violence. We must recognize the compassion and dedication of these volunteers and professionals and increase public understanding of this important problem.

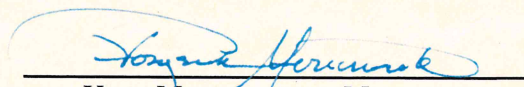
NOW, THEREFORE, BE IT RESOLVED, that the Clovis City Council, on behalf of the citizens of Clovis, does proclaim the month of October 2025 as

Domestic Violence Awareness Month

AND urge all citizens of Clovis to work together to end the cycle of violence in our community.

IN WITNESS THEREOF, I hereunto set my hand and cause the official seal of the City of Clovis to be affixed this 6th day of October 2025.




Vong Mouanoutoua, Mayor

CLOVIS CITY COUNCIL MEETING

September 15, 2025

6:00 P.M.

Council Chamber

Meeting called to order by Mayor Mouanoutoua at **6:00**

Flag Salute led by Councilmember Ashbeck

Roll Call: Present: Councilmembers Ashbeck, Basgall, Mayor Pro Tem Pearce
 Mayor Mouanoutoua
 Absent: Councilmember Bessinger

Mayor Mouanoutoua requested a moment of silence in memory of Former Fresno Councilmember and Assemblymember Mike Briggs, Luis Salazar (father-in-law of Former Mayor Jose Flores), and American political activist and author Charlie Kirk.

PRESENTATION – 6:02

6:02 – ITEM 1 - Presentation of Proclamation Recognizing September 17th through 23rd as Constitution Week.

PUBLIC COMMENTS – 6:07

Mayor Mouanoutoua noted for the record that five public comments were received regarding the Clovis Senior Center and the Dance Instructor, the display of “In God We Trust” in the Council Chamber, and support for Proposition 50.

Bill Scott, a resident, commented on the recent passing of Charlie Kirk and then spoke regarding divisive debates on the Council.

Debbie Graeber, Beverly Trenhaile, Shirley C., Henry Wegermann, and Sharon Foster spoke regarding the Senior Center dance classes.

Steven Trevino, a resident, spoke regarding Proposition 50, expressing disagreement with placing the conversation on the agenda, and also commented on the recent passing of Charlie Kirk.

Bob Gallup, resident, spoke regarding the City of Clovis flag.

CONSENT CALENDAR – 6:32

Upon call, there was no public comment.

Motion by Councilmember Ashbeck, seconded by Councilmember Basgall, that the items on the Consent Calendar be approved. Motion carried by 4-0-1, with Councilmember Bessinger absent.

2. Administration - Approval - Minutes from the September 8, 2025, Council Meeting.
3. Finance - Approval - **Res. 25-98**, Budget Amendment to Increase Expenditures Related to Approved Negotiated Salary and Benefit Adjustments.

4. Fire – Approval – **Res. 25-99**, Adopting the City of Clovis Local Hazard Mitigation Plan (LHMP) Annex as part of the Fresno County Multi-Jurisdictional Hazard Mitigation Plan (MJHMP).
5. Fire – Approval – **Res. 25-100**, Amending the FY 2025-2026 Fire Department Budget to reflect the \$31,000 awarded in 2025 State Homeland Security Grant Program (SHSGP) to fund Fire Department radio equipment.
6. Fire – Approval - Various actions related to the purchase of two (2) Type 6 fire engines to be used as fire squad apparatus by the Fire Department: a) Waive the City's formal bidding requirements, b) Authorize the sole-source purchase of two (2) Boise Mobile Equipment (BME) Type 6 fire engines from Golden State Fire Apparatus in Sacramento, CA for \$870,731.26, and c) Authorize the City Manager to sign the purchase agreements.
7. Fire – Approval – **Res. 25-101**, Confirming Weed Abatement and Rubbish Charges for 2025.
8. Planning and Development Services – Approval – Final Acceptance for CIP 23-02, Herndon Avenue Street Improvements, with the final contract cost of \$1,435,781.86.
9. Planning and Development Services – Approval – Final Acceptance for CIP 25-01 Rubberized Cape Seal 2025, with the final contract cost of \$1,677,106.08.
10. Planning and Development Services – Approval – Authorize the City Manager to execute a Farm Lease Agreement between the City of Clovis and Gil Management, Inc., for the property located at 3778 East Behymer Avenue.

PUBLIC HEARINGS – 6:35

- 6:35 ITEM 11 - Consider Approval and Conduct a Public Hearing - **Res. 25-102**, Amended and Restated Resolution Authorizing the City to Join the Statewide Community Infrastructure Program, Authorizing California Statewide Communities Development Authority (CSCDA) to Accept Applications, Levy Assessments and Special Taxes, Form Assessment and Community Facilities Districts, Approve Form of Acquisition Agreement, and Authorize Related Actions.

Julie Kutka, Land Acquisition and Development with De Young Properties, and Darren Rose, CEO of the Building Industry Association of Fresno-Madera, spoke in support.

The public hearing closed at 7:03

Motion for approval by Councilmember Ashbeck, seconded by Mayor Pro Tem Pearce. Motion carried by 4-0-1, with Councilmember Bessinger absent.

- 7:04 ITEM 12 - Workshop - Mental Health Liaison Officer, A new approach for Clovis Police Department.

Mary Gibson, a resident, spoke regarding an issue with her neighbor and their mental health.

CITY MANAGER COMMENTS – 7:56

City Manager Haussler announced upcoming park tour stops at Pasa Tiempo Park, and Dry Creek Park through September; announced ClovisFest at the end of September; and the community

survey was distributed to a sample group of residents later; and showed appreciation to Officer Jacobson for her efforts related to mental health for the City of Clovis.

COUNCIL COMMENTS – 7:57

There was no formal Council direction for staff.

CLOSED SESSION – 8:09

Upon call, there was no public comment.

ITEM 13 - GOVERNMENT CODE SECTION 54957.6 CONFERENCE WITH LABOR NEGOTIATORS AGENCY DESIGNATED REPRESENTATIVES: ANDREW HAUSSLER, PAUL ARMENDARIZ, AMY HANCE, JAY SCHENGEL, SCOTT CROSS EMPLOYEE ORGANIZATION: UNREPRESENTED EMPLOYEES

RECONVENE INTO OPEN SESSION AND REPORT FROM CLOSED SESSION

No action taken.

ADJOURNMENT

Mayor Mouanoutoua adjourned the meeting of the Council to October 6, 2025.

Meeting adjourned: 8:48 p.m.

Mayor

City Clerk



CITY *of* CLOVIS

REPORT TO THE CITY COUNCIL

TO: Mayor and City Council

FROM: General Services

DATE: October 6, 2025

SUBJECT: General Services – Approval of Contract Award for Consultant Services for a Strategic Operations Plan (SOP) to Jarrett Walker & Associates, LLC for \$169,907.97; and Authorize the City Manager to Execute the Contract on behalf of the City.

ATTACHMENTS: 1. Contract
2. Proposal

RECOMMENDATION

For City Council to approve the contract award for consultant services for a Strategic Operations Plan (SOP) to Jarrett Walker & Associates, LLC, for \$169,907.97 and authorize the City Manager to execute the contract on behalf of the City.

EXECUTIVE SUMMARY

The City successfully applied for and received the Caltrans Sustainable Transportation Planning Grant FY2024-25, which will finance the development of the City of Clovis - Transit Strategic Operations Plan (SOP). On June 19, 2025, a Request for Proposal (RFP) was issued to obtain consultant services to support Clovis Transit in creating a SOP plan. The RFP concluded on July 9, 2025, and four (4) proposals were received. Staff recommends that Jarrett Walker & Associates, LLC be awarded the contract for \$169,907.97. The City Manager will execute the agreement on behalf of the City.

BACKGROUND

The Strategic Operations Plan (SOP) will serve as a roadmap for the trajectory of the City's transit division, supporting the City of Clovis' goal of establishing and maintaining a local environment protected from air pollution and harmful emissions. The Clovis Transit SOP will assist the City in providing the vision, direction, and pathway to meet identified strategic goals and objectives, provide performance measures, and guide the transit division to the next generation of a multimodal transportation system which focuses on accessibility, safety, innovation, housing, land use and preservation, air quality, health, and sustainability.

State-funded Sustainable Communities grants aim to implement Regional Transportation Plans (RTPs) to achieve California's greenhouse gas (GHG) reduction targets of 40% and 80% below

1990 levels by 2030 and 2050, respectively. Senate Bill 1 (SB 1) allocates \$25 million annually for Sustainable Communities Grants, prioritizing projects with a focus on public transportation that enhances multi-modal transportation system. On July 9, 2024, the City of Clovis was awarded a \$172,500 Sustainable Transportation Planning Grant for its City of Clovis Strategic Operations Plan. The Caltrans Sustainable Communities grant will fund the Strategic Operations Plan (SOP) and support the transit staff in creating an SOP.

On June 19, 2025, Clovis Transit released an RFP for Consultant Services for a Strategic Operations Plan (SOP). The RFP Scope of Work included seven (7) major tasks, emphasizing community outreach. The proposals were not to exceed the budget amount of \$170,000. The RFP concluded on July 9, 2025, and the City received four (4) proposals. An evaluation committee was assembled, and proposals were reviewed, evaluated, and ranked. The evaluation committee ranked the proposals as follows:

PROPOSERS	PROPOSAL AMOUNT
1. Jarrett Walker & Associates, LLC	\$169,907.97
2. Walker Consultants, Inc.	\$169,830.00
3. VRPA Technologies, Inc.	\$169,653.46
4. LSC Transportation Consultants, Inc.	\$167,832.00

Jarrett Walker & Associates, LLC, has both international and local experience in the development of transit planning documents. They prioritize community interactions and educating the community on public transit and accessibility. Their proposal also focused on communicating information clearly and concisely to passengers, and plan to include such a design in our SOP. The project is expected to be completed in 16 months, fulfilling the Caltrans Sustainable Communities grant timeline requirement.

FISCAL IMPACT

This contract will have no impact on the existing Transit budget. Caltrans's Sustainable Communities Grant will fund the total cost. The total project cost is \$172,500, with consulting services not to exceed \$170,000 and \$2,500 for project administration by City staff. The grant provides \$152,714 (88.53%) towards the full project cost, and the City will provide the local match requirement of \$19,786 (11.47%) with Local Transit Funds (LTF).

REASON FOR RECOMMENDATION

The City has successfully applied for and received the Caltrans Sustainable Transportation Planning Grant FY2024-25, which will finance the development of the City of Clovis - Transit Strategic Operations Plan. Jarrett Walker & Associates, LLC, will work with staff to create a comprehensive plan that will serve as guidance for Transit's current and future needs. Upon completion, the plan will be presented to City Council.

ACTIONS FOLLOWING APPROVAL

The City Manager will execute the contract with Jarrett Walker & Associates, LLC. The signed contract will be shared with Caltrans, and the project kickoff meeting will be scheduled.

CONFLICT OF INTEREST

None.

Prepared by: Susanna Herrera, Management Analyst

Reviewed by: City Manager AH

CITY OF CLOVIS CONSULTANT SERVICES AGREEMENT

This Consultant Services Agreement ("Agreement") is entered into between the City of Clovis, a California general law city ("City"), and Jarrett Walker & Associates, LLC ("Consultant") with respect to the following recitals, which are a substantive part of this Agreement. This Agreement shall be effective on **October 15, 2025** ("Effective Date").

RECITALS

- A. City desires to obtain professional consulting services, more fully described in **Exhibit A** ("Services"), and, if applicable, as further set forth in the Consultant's Proposal attached as **Exhibit B**, which are incorporated herein by reference, for the development of a Strategic Operations Plan (SOP) for the City's Transit Department ("Project").
- B. Consultant is engaged in the business of furnishing the Services and hereby warrants and represents that Consultant is qualified, experienced, and capable of performing the Services, and possesses any required licenses, certifications, security/bonding, and/or training necessary to perform the Services.
- C. City desires to retain Consultant, and Consultant desires to provide the City with the Services, on the terms and conditions set forth in this Agreement.

NOW, THEREFORE, in consideration of the promises and mutual agreements herein, City and Consultant agree as follows:

AGREEMENT

1. Scope of Services. Consultant shall perform the Services described in the Recitals and detailed in **Exhibits A & B**. Changes in the Scope of Services, including the work performed and/or deliverables produced, shall be made in writing, and particularly describe the changes in Services, including payment/costs and schedule/term, as applicable.
2. Priority and Conflicts; Exclusions. If the terms and requirements of this Agreement and/or **Exhibit A** conflict with **Exhibit B**, this Agreement and **Exhibit A** shall control. No contractual terms and/or conditions found in **Exhibit B** shall purport to waive, disclaim, or limit Consultant's liability indemnification obligations, warranties, damages for breach or delay, or any security, bonding, or insurance requirements, and any such provisions shall have no force or effect with respect to this Agreement and the Services performed by Consultant.
3. Term of Agreement; Commencement of Services; Schedule. The term of this Agreement shall commence on **October 15, 2025**, and Consultant shall begin performing the Services on that date, unless otherwise instructed by City. This Agreement shall terminate on March 31, 2027. This Agreement may be terminated prior to the end of the term pursuant to Sections 21 and 22 herein.

City and Consultant shall mutually agree on a schedule for the performance of the Services and completion of any deliverables. Consultant shall initially perform the Services in accordance with **Exhibit B**, but such schedule shall be subject to modification based on the City's operational needs. City and Consultant shall mutually agree upon any modification to the performance schedule.

4. Payment for Services. City shall pay Consultant for the Services performed pursuant to this Agreement according to the rate(s) stated in **Exhibit A**. The total amount paid by City to the Consultant shall not exceed One-Hundred Sixty-Nine Thousand Nine Hundred Seven and Ninety-Seven Cents (\$169,907.97).

The foregoing is inclusive of all labor, equipment, materials, costs and expenses, taxes, and overhead. City shall

pay Consultant for Services satisfactorily performed pursuant to this Agreement. Consultant shall submit monthly invoices to City containing detailed billing information regarding the Services provided, and unless otherwise specified in **Exhibit A**, City shall tender payment to Consultant within thirty (30) days after receipt of invoice.

5. Independent Contractor Status. Consultant and its subcontractors shall perform the Services as independent contractors and not as officers, employees, agents or volunteers of City. Consultant is engaged in an independently established trade, occupation, or business to perform the Services required by this Agreement and is hereby retained to perform work that is outside the usual course of City's business. Consultant is free from the control and direction of City in connection with the manner of performance of the work. Nothing contained in this Agreement shall be deemed to create any contractual relationship between City and Consultant's employees or subcontractors, nor shall anything contained in this Agreement be deemed to give any third party, including but not limited to Consultant's employees or subcontractors, any claim or right of action against City. Consultant has complete and sole discretion for the manner in which the Services under this Agreement will be performed.

6. Consultant Representations; Standard of Care; Compliance with Law. Consultant represents that Consultant and any subcontractors utilized by Consultant are and will be qualified in the field for which Services are being provided under this Agreement and Consultant and any subcontractors are now, and will be throughout their performance of the Services under this Agreement, properly licensed, certified, secured/bonded, trained, and/or otherwise qualified and authorized to perform the Services required and contemplated by this Agreement, as may be required by law. Consultant and its subcontractors shall utilize the standard of care and skill customarily exercised by members of their profession, shall use reasonable diligence and best judgment while performing the Services, and shall comply with all applicable laws, regulations, and industry standards. Consultant shall comply with all Labor Code requirements for public works projects if applicable to Consultant's work under this Agreement.

7. Key Personnel. Consultant agrees and designates the following Project team members as "Key Personnel":

- Principal Consultant/Lead Network Planner: Jarrett Walker
- Project Manager: Alvaro Caviedes
- Planner/Deputy PM: Evan Landman
- President/Financial Specialist/Transit Planner: Dennis Brooks
- Community Engagement and Outreach Lead: Elea Carey
- Senior Planner: Andrea Breault
- Senior Advisor: Selena Barlow

Consultant agrees that said Key Personnel and other staff will be able to dedicate the necessary amount of their time to the Services, as needed, for the successful and timely completion of the Project.

8. Identity of Subcontractors. Consultant shall, before commencing any work under this Agreement, provide to City in writing: (a) the identity of all subcontractors, if any, Consultant intends to utilize in Consultant's performance of this Agreement; and (b) a detailed description of the full scope of work to be provided by such subcontractors. Consultant shall only employ subcontractors pre-approved by City and in no event shall Consultant replace an approved subcontractor without the advance written permission of City, with the understanding that City's permission will not be unreasonably withheld. Notwithstanding any other provisions in this Agreement, Consultant shall be liable to City for the performance of Consultant's subcontractors.

9. Subcontractor Provisions. Consultant shall include in its written agreements with its subcontractors, if any, provisions which: (a) impose upon the subcontractors the obligation to provide to City the same insurance and indemnity obligations that Consultant owes to City; (b) make clear that City intends to rely upon the reports, opinions, conclusions and other work product prepared and performed by subcontractors for Consultant; and (c) entitle City to impose upon subcontractors the assignment rights found elsewhere in this Agreement.

10. Drug Free Workplace. Consultant acknowledges that City has adopted a policy of maintaining a drug free

workplace and Consultant agrees to abide by the provisions of City's substance abuse policy provide to Consultant under separate cover. Violation of this provision may result in immediate termination of this Agreement.

11. Power to Act on Behalf of City. Consultant is not acting as an agent of City and shall not have any right, power, or authority to create any obligation, express or implied, or make representations on behalf of City except as may be expressly authorized in advance in writing from time to time by City and then only to the extent of such authorization.

12. Record Keeping; Reports. Consultant shall keep complete records showing the type of Services performed. Consultant shall be responsible and shall require its subcontractors to keep similar records. City shall be given reasonable access to the records of Consultant and its subcontractors for inspection and audit purposes. Consultant shall provide City with a working draft of all reports upon reasonable request by City and of all final reports prepared by Consultant under this Agreement.

13. Ownership and Inspection of Documents. All reports, analyses, documents, records, conclusions, opinions, recommendations, and other work product specifically generated by, or produced for, Consultant or its subcontractors solely on behalf of City in connection with the Services, regardless of the medium, shall be and remain the property of City ("Work Product"). The City retains all right, title, and interest in the Work Product and shall be the exclusive and perpetual owner of the Work Product. City shall have the right to use, copy, modify, and reuse the Work Product as it sees fit. Upon City's request, Consultant shall make available for inspection and copying all such Work Product and all Work Product shall be turned over to City promptly at City's request or upon termination of this Agreement, whichever occurs first. Consultant shall not release any Work Product to third parties without prior written approval of City. This obligation shall survive termination of this Agreement in perpetuity.

14. Confidentiality. All Work Product prepared and performed by and on behalf of Consultant in connection with the Services performed pursuant to this Agreement shall be kept confidential and shall be disclosed only to City, unless otherwise provided by law or expressly authorized by City. Consultant shall not disclose or permit the disclosure of any confidential information acquired during performance of the Services, except to its agents, employees, and subcontractors who need such confidential information in order to properly perform their duties relative to this Agreement. Consultant shall also require its subcontractors to be bound to these confidentiality provisions.

15. Professional Responsibility. Notwithstanding any other provision in this Agreement, the review and/or approval by City, or any of its directors, officers, employees, or agents, of any technical specifications, design documents, and all other work products or project communications prepared by the Consultant or any of its subcontractors, or of any acts or failures to act by Consultant or any of its subcontractors, shall not relieve the Consultant or any of its subcontractors of any professional responsibility for the Services performed.

16. Implementation and Integration Services. Consultant will coordinate all activities, including but not limited to implementation and integration services, inspection, field testing of equipment, monitoring and reporting Consultant's progress with and to City. Consultant will cooperate with and advise City of Consultant's progress and timing schedules for the Project and shall provide City access to Consultant's equipment and facilities for City's inspections of this Project. City shall have the authority to cause Consultant's work to be stopped if such work is not in accordance with **Exhibits A and B**. City shall designate a representative ("City Representative") who shall have the authority to take all actions on behalf of City. Consultant shall direct all notices and other correspondence to the City Representative. Any notices or approvals from City that are not sent by the City Representative shall be subsequently confirmed by the City Representative.

17. Extra Work. In the event Consultant requests a Change Order for extra work required as a result of conditions which are significantly different from those reasonably anticipated when this Agreement was executed, such request shall be submitted to City in writing and shall be accompanied by the following declaration, signed by the Consultant:

I, _____ (name of Consultant's authorized representative) being the _____ (title of Consultant's authorized representative) of _____ (Consultant's name) ("Consultant") declare under penalty of perjury under the laws of the State of California, and do personally certify and attest that: I have thoroughly reviewed the attached claim for additional compensation and/or extension of time, know its contents, and know said claim is made in good faith; the supporting data is truthful and accurate; the amount requested accurately reflects the Agreement adjustment for which Consultant believes the City is liable. I am familiar with California Penal Code section 72 and California Government Code sections 12560, et seq., pertaining to false claims, and I know and understand that submission or certification of a false claim may lead to fines, imprisonment, and/or other severe legal consequences.

Signature

Title

Date

Submission of a claim, properly certified, with all required supporting documentation, and written rejection or denial of all or part of the claim by the City, is a condition precedent to any action, proceeding, litigation, suit, or demand for arbitration by Consultant.

Consultant's disagreement over the amount to be paid for extra work shall not relieve Consultant of the obligation to continue to perform all the Services on the Project as required in **Exhibits A and B**.

18. City Name and Logo. Consultant shall not use City's name or insignia, photographs relating to the City projects or work for which Consultant's services are rendered, or any publicity pertaining to the Consultant's Services under this Agreement in any magazine, trade paper, newspaper, television or radio production, internet website, social media, or other similar medium without the prior written consent of City.

19. Conflicts of Interest. Consultant warrants that neither Consultant nor any of its employees have an improper interest, present or contemplated, in the Services which would affect Consultant's or its employees' performance of the Services and the Work Product produced. Consultant further warrants that neither Consultant nor any of its employees have real property, business interests or income that will be affected by the Services. Consultant covenants that no person having any such interest, whether an employee or subcontractor shall perform the Services under this Agreement. During the performance of the Services, Consultant shall not employ or retain the services of any person who is employed by the City or a member of any City Board or Commission.

20. Non-liability of Officers and Employees. No officer or employee of City shall be personally liable to Consultant, or any successors in interest, in the event of a default or breach by City for any amount which may become due Consultant or its successor, or for any breach of any obligation under the terms of this Agreement.

21. Termination of Agreement. Consultant acknowledges that City may terminate the Agreement for cause or for convenience under the Agreement's terms and conditions, which provide the manner by which termination will be made effective and the basis for settlement. (See Appendix II. subd. (B) to Code of Fed. Regs., tit. 2, pt. 200, "Contract Provisions for Non-Federal Entity Contracts Under Federal Awards," and FTA Circular 4220.1F, chapter IV, ¶ 2, subd. (b)(6)(b)(4), "Termination.")

This Agreement shall terminate as provided in Section 3, unless terminated earlier pursuant to the following:

- a. Termination by City: For Convenience. City may, at its discretion, terminate this Agreement for convenience and without cause upon thirty (30) days prior written notice to Consultant. Upon receipt of a termination notice pursuant to this subsection, Consultant shall promptly discontinue all Services affected, unless the notice directs otherwise.

- b. Termination by City or Consultant: For Cause. Either party may terminate this Agreement upon fourteen (14) days prior written notice to the other party of a material breach, and a failure within that time period to cure or commence reasonable steps to cure the breach.
- c. Compensation to Consultant Upon Termination. Consultant shall be paid compensation for Services satisfactorily performed prior to notice of termination. As to any phase partially performed but for which the applicable portion of Consultant's compensation has not become due, Consultant shall be paid the reasonable value of its Services provided. However, in no event shall such payment when added to any other payment due under the applicable part of the work exceed the total compensation of such part as specified Section 4.
- d. Effect of Termination. Upon termination of this Agreement, Consultant shall: (i) promptly discontinue all Services affected, unless the notice of termination directs otherwise; and (ii) within fourteen (14) days of termination, deliver or otherwise make available to the City, without additional compensation, all Work Product and/or deliverables accumulated by the Consultant in performing this Agreement, whether completed or in process. Consultant may not refuse to provide such Work Product for any reason whatsoever.

22. Default/Material Breach. If either party defaults in the performance of this Agreement or materially breaches any of its provisions, the non-breaching party may terminate this Agreement by giving written notification to the breaching party. Termination will take effect immediately on receipt of notice by the breaching party or five (5) days after mailing of notice, whichever occurs first. For purposes of this paragraph, material breach of this Agreement includes, but is not limited to, the following:

- a. City's failure to pay Consultant any undisputed compensation due within thirty (30) days after written demand for payment;
- b. Consultant's material breach of any representation or agreement contained herein, and failure to commence actions to correct such breach within fourteen (14) days of written notice by City; or
- c. City's material breach of any representation or agreement contained herein, and failure to commence actions to correct such breach within fourteen (14) days of written notice by the Consultant.

23. Insurance. Consultant shall satisfy the insurance requirements set forth in **Exhibit C**.

24. Indemnity and Defense. Notwithstanding anything to the contrary, Consultant hereby agrees to indemnify, defend and hold the City, its officials, officers, employees, agents, and volunteers harmless from and against all third party claims, demands, causes of action, actions, damages, losses, expenses, and other liabilities, (including without limitation reasonable attorney fees and costs of litigation) to the extent arising out of or in connection with any negligent acts, errors, or omissions of Consultant or its subcontractors relating to the performance of Services described herein to the fullest extent permitted by law, unless the injuries or damages are the result of City's sole negligence or willful misconduct, subject to any limitations imposed by law. Consultant and City agree that said indemnity and defense obligations shall survive the expiration or termination of this Agreement for any items specified herein that arose or occurred during the term of this Agreement. City shall cooperate with Consultant in the defense of any such claim.

25. Taxes. Consultant agrees to pay all taxes, licenses, and fees levied or assessed by any governmental agency on Consultant incident to the performance of Services under this Agreement, and unemployment and workers' compensation insurance, social security, or any other taxes upon the wages of Consultant, its employees, agents, and representatives. Consultant agrees to obtain and renew an annual business tax certificate from City and pay the applicable annual business registration tax to City during the term of this Agreement.

26. Assignment. Neither this Agreement nor any duties or obligations hereunder shall be assignable by Consultant without the prior written consent of City, which consent shall not be unreasonably withheld or delayed. In the event of an assignment to which City has consented, the assignee shall agree in writing to personally assume and perform the covenants, obligations, and agreements herein contained. In addition, Consultant shall not assign the payment of any monies due Consultant from City under the terms of this Agreement to any other individual, corporation, or entity. City retains the right to pay any and all monies due Consultant directly to Consultant.

27. Form and Service of Notices. Any and all notices or other communications required or permitted by this Agreement or by law to be delivered to, served upon, or given to either party to this Agreement by the other party shall be in writing and shall be deemed properly delivered, served or given by one of the following methods:

- a. Delivered by e-mail to a known address of the party to whom it is directed provided the e-mail is accompanied by an acknowledgment of receipt by the other party. Service shall be deemed the date of acknowledgement.
- b. Delivery by a reliable overnight delivery service (ex., Federal Express) receipted, and addressed to the addressees set forth below the signatories to this Agreement. Service shall be deemed the date of delivery.
- c. Delivery by deposit in the United States mail, first class, postage prepaid. Service shall be deemed delivered ninety-six (96) hours after deposit.

28. Entire Agreement. This Agreement, including the Exhibits and any other attachments, represents the entire Agreement between City and Consultant, and supersedes all prior negotiations, representations or agreements, either written or oral with respect to the subject matter herein. This Agreement may be amended only by written instrument signed by both City and Consultant.

29. Successors and Assigns. This Agreement shall be binding upon and shall inure to the benefit of the parties hereto and their respective successors and assigns.

30. Authority. The signatories to this Agreement warrant and represent that they have the legal right, power, and authority to execute this Agreement and bind their respective entities. Evidence of Consultant's authority is attached as **Exhibit D**.

31. Severability. In the event any term or provision of this Agreement is declared to be invalid or illegal for any reason, this Agreement will remain in full force and effect and will be interpreted as though such invalid or illegal provision were not a part of this Agreement. The remaining provisions will be construed to preserve the intent and purpose of this Agreement and the parties will negotiate in good faith to modify any invalidated provisions to preserve each party's anticipated benefits.

32. Applicable Law and Interpretation and Venue. This Agreement shall be interpreted in accordance with the laws of the State of California. The language of all parts of this Agreement shall, in all cases, be construed as a whole, according to its fair meaning, and not strictly for or against either party. This Agreement is entered into by City and Consultant in the County of Fresno, California. Thus, in the event of litigation, venue shall only lie with the appropriate state or federal court in Fresno County.

33. Amendments and Waiver. This Agreement shall not be modified or amended in any way, and no provision shall be waived, except in writing signed by the parties hereto. No waiver of any provision of this Agreement shall be deemed, or shall constitute, a waiver of any other provision, whether or not similar, nor shall any such waiver constitute a continuing or subsequent waiver of the same provision. Failure of either party to enforce any provision of this Agreement shall not constitute a waiver of the right to compel enforcement of the remaining provisions of this Agreement.

34. Third Party Beneficiaries. Nothing in this Agreement shall be construed to confer any rights upon any party not a signatory to this Agreement.

35. Execution in Counterparts. This Agreement may be executed in counterparts such that the signatures may appear on separate signature pages. A copy or an original, with all signatures appended together, shall be deemed a fully executed Agreement.

36. Alternative Dispute Resolution. If a dispute arises out of or relating to this Agreement, or the alleged breach thereof, and if said dispute cannot be settled through negotiation, the parties agree first to try in good faith to settle the dispute by non-binding mediation before resorting to litigation. The mediator shall be mutually selected by the parties, but in case of disagreement, the mediator shall be selected by lot from among two (2) nominations provided by each party. All costs and fees required by the mediator shall be split equally by the parties, otherwise each party shall bear its own costs of mediation. If mediation fails to resolve the dispute within thirty (30) days, either party may pursue litigation to resolve the dispute.

Demand for mediation shall be in writing and delivered to the other party to this Agreement. A demand for mediation shall be made within reasonable time after the claim, dispute or other matter in question has arisen. In no event shall the demand for mediation be made after the date when institution of legal or equitable proceedings based on such a claim, dispute or other matter in question would be barred by California statutes of limitations.

37. Performance Requirements. If the Services performed hereunder are not in conformity with the requirements of this Agreement and other pertinent documents, City shall have the right to require Consultant to correct the work in conformity with the requirements of this Agreement at no additional increase in the payment to Consultant. Consultant shall promptly correct the work rejected by City for failing to conform to the requirements of the Agreement. Remedy for non-compliance or non-performance shall commence within twenty-four (24) hours of notice. City shall also have the right to require Consultant to take all necessary steps to ensure future performance of the Services in conformity with the requirements of this Agreement. In the event Consultant fails to correct the work or fails to take necessary steps to ensure future performance of the Services in conformity with the requirements of this Agreement, City shall have the right to immediately terminate this Agreement for default.

38. No Federal Government Obligations to Third Parties. Notwithstanding any concurrence by the Federal Government in or approval of the solicitation or award of the underlying Agreement, absent the express written consent by the Federal Government, the Federal Government is not a party to this Contract and shall not be subject to any obligations or liabilities to Consultant or any other party (whether or not a party to that contract) pertaining to any matter resulting from the underlying Agreement. The Consultant agrees to include the above clause in each subcontract financed in whole or in part with Federal assistance provided by the Federal Transit Administration (FTA).

39. Notification to FTA. If a current or prospective legal matter that may affect the Federal Government emerges, Consultant must promptly notify City, who will notify the FTA Chief Counsel and FTA Regional Counsel for Region IX. Consultant must include an equivalent provision in its sub-agreements at every tier for any agreement that is a "covered transaction" according to Code of Federal Regulations, title 2, sections 180.220 and 1200.220.

- a. Types of Legal Matters Requiring Notification. The types of legal matters that require notification include, but are not limited to, a major dispute, breach, default, litigation, or instances where the Federal Government was named as a party to litigation or a legal disagreement in any forum for any reason.
- b. Matters Affecting the Federal Government. Matters that may affect the Federal Government include, but are not limited to, the Federal Government's interests in the Award, the Agreement, and any Amendments thereto, or the Federal Government's administration or enforcement of

federal laws, regulations, and requirements.

- c. Additional Notice to U.S. Department of Transportation (DOT) Inspector General. If Consultant has knowledge of potential fraud, waste, or abuse occurring on a Project receiving assistance from FTA, then Consultant must promptly notify City, who will notify the U.S. DOT Inspector General, in addition to the FTA Chief Counsel or Regional Counsel for Region IX. The notification provision applies if a principal, officer, employee, agent, third-party participant (including subcontractors at any tier), or any other person who has or may have submitted a false claim under the False Claims Act, 31 U.S.C. § 3729, et seq., or has or may have committed a criminal or civil violation of law pertaining to such matters as fraud, conflict of interest, bid rigging, misappropriation or embezzlement, bribery, gratuity, or similar misconduct involving federal assistance. This responsibility occurs whether the Project is subject to this Agreement or another agreement between City and FTA, or an agreement involving a principal, officer, employee, agent, or Third-Party Participant of City. It also applies to subcontractors at any tier. Knowledge, as used in this paragraph, includes, but is not limited to, knowledge of a criminal or civil investigation by a Federal, state, or local law enforcement or other investigative agency, a criminal indictment or civil complaint, or probable cause that could support a criminal indictment, or any other credible information in the possession of Consultant. In this paragraph, “promptly” means to refer information without delay and without change. This notification provision also applies to all divisions of City, including divisions tasked with law enforcement or investigatory functions.

40. Program Fraud and False or Fraudulent Statements and Related Acts. Consultant acknowledges that the provisions of the Program Fraud Civil Remedies Act of 1986, as amended, 31 U.S.C. § 3801 et seq. and U.S. DOT regulations, "Program Fraud Civil Remedies," 49 C.F.R. part 31, apply to its actions pertaining to this agreement. Upon execution of the underlying contract, the Consultant certifies or affirms the truthfulness and accuracy of any statement it has made, it makes, it may make, or causes to be made, pertaining to the underlying contract or the FTA assisted project for which this contract work is being performed. In addition to other penalties that may be applicable, the Consultant further acknowledges that if it makes, or causes to be made, a false, fictitious, or fraudulent claim, statement, submission, or certification, the Federal Government reserves the right to impose the penalties of the Program Fraud Civil Remedies Act of 1986 on the Consultant to the extent the Federal Government deems appropriate. The Consultant also acknowledges that if it makes, or causes to be made, a false, fictitious, or fraudulent claim, statement, submission, or certification to the Federal Government under a contract connected with a project that is financed in whole or in part with Federal assistance originally awarded by FTA under the authority of 49 U.S.C. chapter 53, the Government reserves the right to impose the penalties of 18 U.S.C. § 1001 and 49 U.S.C. § 5323(l) on the Consultant, to the extent the Federal Government deems appropriate. Consultant agrees to include the above clause in each subcontract financed in whole or in part with Federal assistance provided by FTA.

41. Access to Records, Reports, and Sites.

- a. Record Retention. Consultant and any Subcontractor shall both maintain and retain, and will require its subcontractor(s) of all tiers to maintain and retain, complete and readily accessible records related in whole or in part to the Agreement, including, but not limited to, documents, reports, statistics, sub-agreements, leases, subcontracts, arrangements, other third-party agreements of any type and supporting materials related to those records.
- b. Retention Period. Consultant agrees to comply with the record retention requirements in accordance with 2 C.F.R. § 200.333. Consultant shall maintain all books, records, accounts, and reports required under this Agreement for a period of not less than three (3) years after the date of termination or expiration of this Agreement, except in the event of litigation or settlement of claims arising from the performance of this Agreement, in which case records shall be maintained until the disposition of all such litigation, appeals, claims or exceptions related thereto.

- c. Access to Records. Consultant shall provide sufficient access to the U.S. Secretary of Transportation, Comptroller General of the U.S., FTA, DOT Office of Inspector General, the State, City, or any of their duly authorized representatives to inspect and audit records, including such records and information City or Consultant may regard as confidential or proprietary, pertaining to the performance of this Agreement as reasonably may be required.
- d. Access to the Sites of Performance. Consultant shall also permit FTA and its Consultants access to the sites of performance under this contract as reasonably may be required. Consultant agrees to include the above clause in each subcontract financed in whole or in part with Federal assistance provided by FTA.

42. Federal Changes. Consultant shall at all times comply with all applicable FTA regulations, policies, procedures, and directives, including without limitation those listed directly or by reference in the Master Agreement between City and FTA, as they may be amended or promulgated from time to time during the term of this contract. Consultant shall also ensure compliance by subcontractors at any tier of any applicable change to federal requirements

43. Civil Rights.

- a. Subcontract. Consultant shall include these requirements in each subcontract entered into as part thereof.
- b. Non-discrimination. In accordance with Federal transit law at 49 U.S.C. § 5332, Consultant agrees that it will not discriminate against any employee or applicant for employment because of race, color, religion, national origin, sex, gender identity, sexual orientation, disability, or age. In addition, the Consultant agrees to comply with applicable Federal implementing regulations and other implementing requirements FTA may issue.
- c. Race, Color, Religion, National Origin, Sex. In accordance with Title VII of the Civil Rights Act, as amended, 42 U.S.C. § 2000e et seq., and Federal transit laws at 49 U.S.C. § 5332, the Consultant agrees to comply with all applicable equal employment opportunity requirements of U.S. Department of Labor (U.S. DOL) regulations, "Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor," 41 C.F.R. chapter 60, and Executive Order No. 11246, "Equal Employment Opportunity in Federal Employment," September 24, 1965, 42 U.S.C. § 2000e note, as amended by any later Executive Order that amends or supersedes it, referenced in 42 U.S.C. § 2000e note. Consultant agrees to take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, national origin, or sex (including sexual orientation and gender identity). Such actions shall include, but not be limited to, the following: employment, promotion, demotion or transfer, recruitment or recruitment advertising, layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. In addition, Consultant agrees to comply with any implementing requirements FTA may issue.
- d. Age. In accordance with the Age Discrimination in Employment Act, 29 U.S.C. §§ 621- 634, U.S. Equal Employment Opportunity Commission (U.S. EEOC) regulations, "Age Discrimination in Employment Act," 29 C.F.R. part 1625, the Age Discrimination Act of 1975, as amended, 42 U.S.C. § 6101 et seq., U.S. Health and Human Services regulations, "Nondiscrimination on the Basis of Age in Programs or Activities Receiving Federal Financial Assistance," 45 C.F.R. part 90, and Federal transit law at 49 U.S.C. § 5332, the Consultant agrees to refrain from discrimination against present and prospective employees for reason of age. In addition, the Consultant agrees to comply with any implementing requirements FTA may issue.
- e. Disabilities. In accordance with section 504 of the Rehabilitation Act of 1973, as amended, 29 U.S.C. § 794, the Americans with Disabilities Act of 1990, as amended, 42 U.S.C. § 12101 et seq., the

Architectural Barriers Act of 1968, as amended, 42 U.S.C. § A-27 4151 et seq., and Federal transit law at 49 U.S.C. § 5332, Consultant agrees that it will not discriminate against individuals on the basis of disability. In addition, Consultant agrees to comply with any implementing requirements FTA may issue.

44. Consultant Assurance. Consultant and SubConsultant(s) shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The Consultant shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by Consultant to carry out these requirements is a material breach of this contract, which may result in the termination of this Agreement or such other remedy as City deems appropriate, which may include, but is not limited to: (1) Withholding monthly progress payments; (2) Assessing sanctions; (3) Liquidated damages; and/or (4) Disqualifying Consultant from future bidding as non-responsible. Each subcontract Consultant signs with a SubConsultant must include the assurance in this paragraph.

45. Incorporation of Federal Transit Administration (FTA) Terms. The preceding provisions include, in part, certain Standard Terms and Conditions required by the Department of Transportation (DOT), whether or not expressly set forth in the preceding contract provisions. All contractual provisions required by DOT, as set forth in FTA Circular 4220.1F, are hereby incorporated by reference. Notwithstanding, all FTA-mandated terms shall be deemed to control in the event of a conflict with other provisions contained in this Agreement. The Consultant shall not perform any act, fail to perform any act, or refuse to comply with any City requests that would cause City to be in violation of FTA terms and conditions.

46. Free Speech & Religious Liberty. All Federal funding must be expended in full accordance with the U.S. Constitution, Federal Law, and statutory and public policy requirements

47. Debarment, Suspension, Ineligibility, and Voluntary Exclusion.

- a. Consultant shall comply and facilitate compliance with U.S. DOT regulations, “Non-procurement, Suspension, and Debarment,” 2 CFR part 1200, which adopts and supplements the U.S. Office of Management and Budget (U.S. OMB) “Guidelines to Agencies on Government-Wide Debarment and Suspension (Non-procurement),” 2 CFR part 180. These provisions apply to each agreement at any tier of \$25,000 or more, to each contract at any tier for a federally required audit (irrespective of the agreement amount), and to each agreement at any tier that must be approved by an FTA official irrespective of the contract amount.
- b. Consultant shall verify that its principals, affiliates, and subcontractors are eligible to participate in this federally-funded Agreement (which includes review of SAM at sam.gov, if necessary to comply with U.S. DOT regulations, 2 CFR Part 1200) and are not presently declared by any Federal department or City to be: (1) debarred from participation in any federally-assisted Award; (2) suspended from participation in any federally-assisted Award; (3) proposed for debarment from participation in any federally-assisted Award; (4) declared ineligible to participate in any federally-assisted Award; (5) voluntarily excluded from participation in any federally-assisted Award; or (6) disqualified from participation in any federally-assisted Award.
- c. By signing and submitting its bid or proposal, the bidder or proposer certifies as follows:
The certification in this clause is a material representation of fact relied upon by City. If it is later determined by City that Consultant knowingly rendered an erroneous certification, in addition to remedies available to City, the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment. Consultant shall comply with the requirements of 2 CFR part 180, subpart C, as supplemented by 2 CFR part 1200, while this offer is valid and throughout the period of any contract that may arise from this offer. Consultant further agrees to include a provision requiring such compliance in its lower-tier covered transactions.
- d. Consultant agrees that it will not enter into any “covered transaction” (as defined at 2 CFR 180.220 and 1200.220) with any “third party participant” (as defined in Section 1 of FTA’s Master Agreement

(Version 31, dated May 2, 2024), as may be updated or amended) that is, or whose principal is, suspended, debarred, or otherwise excluded from participating in covered transactions except as otherwise authorized by applicable Federal laws, regulations, or requirements regarding participation with debarred or suspended Recipients or Third-Party Participants. Consultant further agrees that it will review the Federal Government's "System for Award Management — Lists of Parties Excluded from Federal Procurement and Non-procurement Programs," if required by USDOT regulations (2 C.F.R. Part 1200).

48. ADA Access. Consultant shall comply with all applicable requirements of the Americans with Disabilities Act of 1990 (ADA), 42 USC section 12101, et seq; Section 504 of the Rehabilitation Act of 1973, as amended, 29 USC section 794; 49 USC section 5301, subd. (d), which prohibit discrimination on the basis of handicaps, with the Americans with Disabilities Act of 1990 (ADA), as amended, 42 U.S.C. §§ 12101, et seq., which requires that accessible facilities and services be made available to persons with disabilities, including any subsequent amendments to that Act, and with the Architectural Barriers Act of 1968, as amended, 42 U.S.C. §§ 4151, et seq., which requires that buildings and public accommodations be accessible to persons with disabilities, including any subsequent amendments to that Act.

49. Lobbying Restrictions. Consultants who apply or bid for an award of \$100,000 or more shall certify that it has not used and will not use Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any Federal agency, a member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant, or any other award covered by 31 U.S.C. § 1352 (Byrd Anti-Lobbying Amendment), as required by 49 C.F.R. Part 20, "New Restrictions on Lobbying." Consultants shall obtain the certification required by 49 C.F.R. Part 20 from any and all subcontractors at any tier.

Consultants shall complete and submit the disclosure form required by 49 C.F.R. Part 20, "New Restrictions on Lobbying" (Standard Form LLL, "Disclosure Form to Report Lobbying"), if the Consultant has made or has agreed to make any payment using non-Federal funds (to include profits from any covered Federal action), which would be prohibited under paragraph (1) of this clause if paid for with Federal appropriated funds. Consultants shall obtain such disclosures, if required, from their subcontractors at any tier for whom a contract in excess of \$100,000 is contemplated. Such disclosures shall be forwarded from tier to tier up to SUBRECIPIENT.

Consultants shall complete and submit a disclosure form at the end of each calendar quarter in which there occurs an event that requires disclosure or that materially affects the accuracy of the information contained in any disclosure form previously submitted in accordance with paragraph (2) above. An event that materially affects the accuracy of the information reported includes: (a) A cumulative increase of \$25,000 or more in the amount paid or expected to be paid for influencing or attempting to influence a covered Federal action; or (b) A change in the person(s) or individual(s) influencing or attempting to influence a covered Federal action; or (c) A change in the officer(s), employee(s), or member(s) contacted to influence or attempt to influence a covered Federal action. Consultants shall obtain such disclosures, if required, from its subcontractors at any tier for whom a contract in excess of \$100,000 is contemplated. Such disclosures shall be forwarded from tier to tier up to SUBRECIPIENT.

Consultants shall include this clause in each subcontract and require subcontractors to flow down this clause to each lower-tier subcontractor.

50. Safe Operation of Motor Vehicles.

- a. Seat Belt Use. Consultant is encouraged to adopt and promote on-the-job seat belt use policies and programs for its employees and other personnel that operate company-owned vehicles, company-rented vehicles, or personally operated vehicles. The terms "company-owned" and "company-leased" refer to vehicles owned or leased either by the Consultant or City.
- b. Distracted Driving. Consultant is encouraged to adopt and promote workplace safety policies to decrease crashes caused by distracted drivers, including policies to ban text messaging while using an

electronic device supplied by an employer, and driving a vehicle the driver owns or rents, a vehicle Consultant owns, leases, or rents, or a privately-owned vehicle when on official business in connection with the work performed under this Agreement. Consultant agrees to conduct workplace safety initiatives in a manner commensurate with its size, such as establishing new rules and programs to prohibit text messaging while driving, re-evaluating the existing programs to prohibit text messaging while driving, and providing education, awareness, and other outreach to employees about the safety risks associated with texting while driving.

51. Environmental Protections.

- a. General. Consultant agrees to comply with all applicable environmental and resource use laws, regulations, and requirements, and follow applicable guidance, now in effect or that may become effective in the future, including state and local laws, ordinances, regulations, and requirements, and follow applicable guidance.
- b. National Environmental Policy Act. An Award of federal assistance requires full compliance with applicable environmental laws, regulations, and requirements. Accordingly, Consultant agrees that it will: (1) Comply and facilitate compliance with federal laws, regulations, and requirements, including, but not limited to: (a) Federal transit laws, such as 49 U.S.C. § 5323(c)(2), and 23 U.S.C. § 139, (b) The National Environmental Policy Act of 1969 (NEPA), as amended, 42 U.S.C. §§ 4321 et seq., as limited by 42 U.S.C. § 5159, and CEQ's implementing regulations 40 C.F.R. part 1500 – 1508, (c) Joint FHWA and FTA regulations, "Environmental Impact and Related Procedures," 23 C.F.R. part 771 and 49 C.F.R. part 622, (d) Executive Order No. 11514, as amended, "Protection and Enhancement of Environmental Quality," March 5, 1970, 42 U.S.C. § 4321 note, and (e) Other federal environmental protection laws, regulations, and requirements applicable to the Recipient or the Award, the accompanying Underlying Agreement, and any Amendments thereto. (2) Follow the federal guidance identified herein to the extent that the guidance is consistent with applicable authorizing legislation: (a) Joint FHWA and FTA final guidance, "Interim Guidance on MAP-21 Section 1319, Accelerated Decision making in Environmental Reviews," January 14, 2013, (b) Joint FHWA and FTA final guidance, "SAFETEA-LU Environmental Review Process (Pub. L. 109-59)," 71 Fed. Reg. 66576, November 15, 2006, and (c) Other federal environmental guidance applicable to the Recipient or the Award, the accompanying Underlying Agreement, and any Amendments thereto.
- c. Environmental Justice. Consultant agrees to promote environmental justice by following: (1) Executive Order No. 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," February 11, 1994, 42 U.S.C. § 4321 note, as well as facilitating compliance with that Executive Order, (2) U.S. DOT Order 5610.2, "Department of Transportation Actions To Address Environmental Justice in Minority Populations and Low-Income Populations," 62 Fed. Reg. 18377, April 15, 1997, and (3) The most recent edition of FTA Circular 4703.1, "Environmental Justice Policy Guidance for Federal Transit Administration Recipients," August 15, 2012, to the extent consistent with applicable federal laws, regulations, requirements, and guidance.
- d. Other Environmental Federal Laws. Consultant agrees that it will comply or facilitate compliance with all applicable federal laws, regulations, and requirements, and will follow applicable guidance, including, but not limited to, the Clean Air Act, Clean Water Act, Wild and Scenic Rivers Act of 1968, Coastal Zone Management Act of 1972, the Endangered Species Act of 1973, Magnuson Stevens Fishery Conservation and Management Act, Resource Conservation and Recovery Act, Comprehensive Environmental Response, Compensation, and Liability Act, Executive Order No. 11990 relating to "Protection of Wetlands," and Executive Order Nos. 11988 and 13690 relating to "Floodplain Management."
- e. Use of Certain Public Lands. Consultant agrees it will comply with U.S. DOT laws, specifically 49 U.S.C. § 303 (often referred to as "section 4(f)"), and joint FHWA and FTA regulations, "Parks,

Recreation Areas, Wildlife and Waterfowl Refuges, and Historic Sites,” 23 C.F.R. part 774, and referenced in 49 C.F.R. part 622.

- f. Historic Preservation. Consultant agrees that it will: (1) Comply with U.S. DOT laws, including 49 U.S.C. § 303 (often referred to as “section 4(f)”), which requires certain findings be made before an Award may be undertaken if it involves the use of any land from a historic site that is on or eligible for inclusion on the National Register of Historic Places. (2) Encourage compliance with the federal historic and archaeological preservation requirements of section 106 of the National Historic Preservation Act, as amended, 54 U.S.C. § 306108. (3) Comply with the Archeological and Historic Preservation Act of 1974, as amended, 54 U.S.C. § 312501 et seq. (4) Comply with U.S. Advisory Council on Historic Preservation regulations, “Protection of Historic Properties,” 36 C.F.R. part 800. (5) Comply with federal requirements and follow federal guidance to avoid or mitigate adverse effects on historic properties.
- g. Indian Sacred Sites. Consultant agrees that it will facilitate compliance with federal efforts to promote the preservation of places and objects of religious importance to American Indians, Eskimos, Aleuts, and Native Hawaiians, and facilitate compliance with the American Indian Religious Freedom Act, 42 U.S.C. § 1996, and Executive Order No. 13007, “Indian Sacred Sites,” May 24, 1996, 42 U.S.C. § 3161 note.

52. Clean Air Act & Federal Water Pollution Control Act. Consultant shall ensure that it: **(A)** will not use any violating facilities; **(B)** will report the use of facilities placed on or likely to be placed on the U.S. EPA “List of Violating Facilities” to SUBRECIPIENT; **(C)** understands and agrees that SUBRECIPIENT will report violations of use of prohibited facilities to FTA; and **(D)** will comply with the inspection and other requirements of the Clean Air Act, as amended (42 U.S.C. §§ 7401 – 7671q); and the Federal Water Pollution Control Act as amended (33 U.S.C. §§ 1251-1387).

53. Energy Conservation. Consultant and any Subcontractor agree to comply with the mandatory energy efficiency standards and policies within the applicable state energy conservation plans issued in compliance with the Energy Policy and Conservation Act, 42 U.S.C. §§ 6321 et seq and 49 C.F.R. part 622, subpart C.

54. Trafficking In Persons. Consultant and its subcontractors or their employees shall not: (A) engage in severe forms of trafficking in persons during the Agreement Term as defined Section 103 of the Trafficking Victims Protection Act of 2000 (“TVPA”), as amended, 22 U.S.C. § 7102; (B) procure a commercial sex act during the Contract Term as defined Section 103 of the TVPA, as amended, 22 U.S.C. § 7102; or (C) use forced labor in the performance of the Agreement. Consultant shall inform City immediately of any information Consultant receives from any source alleging a violation of a prohibition in this section. City may terminate this Agreement for any violation of this section; such right of termination is in addition to all other remedies for noncompliance that are available to City.

55. Private Act. Consultant agrees to: a) comply with, and assures the compliance of its employees with, the information restrictions and other applicable requirements of the Privacy Act of 1974, 5 U.S.C. § 552a. Among other things, Consultant agrees to obtain the express consent of the Federal Government before Consultant or its employees operate a system of records on behalf of the Federal Government. Consultant understands that the requirements of the Privacy Act, including the civil and criminal penalties for violation of that Act, apply to those individuals involved, and that failure to comply with the terms of the Privacy Act may result in termination of the underlying Agreement; and b) include these requirements in each subcontract to administer any system of records on behalf of the Federal Government financed in whole or in part with Federal assistance provided by FTA.

56. Section 508 Compliance. Any reports or information that will be provided to DOT or any other Federal agency must comply with Section 508 of the Rehabilitation Act of 1973.

[Signature Page Follows]

Now, therefore, the City and Consultant have executed this Agreement on the date(s) set forth below.

CONSULTANT

By: 
Daniel Costantino, Vice President/Principal

Date: 16 September 2025

CITY OF CLOVIS

By: _____
Andrew Haussler, City Manager

Date: _____

Party Identification and Contact Information:

Consultant

Jarrett Walker and Associates
Attn: Daniel Costantino
Vice President/Principal
1021 SE Caruthers St.
Portland, OR 97214
daniel@jarrettwalker.com
(971) 277-3629

City of Clovis

General Services - Transit
Attn: Nick Chin
Transit Manager
785 Third Street
Clovis, CA 93612
nickc@clovisca.gov
(559) 324-2762

ATTEST

Briana Parra, City Clerk

APPROVED AS TO FORM

Scott G. Cross, City Attorney

EXHIBIT A

Scope of Work (SOW)

1. Review Existing Conditions – Collect and review all existing resources necessary for documenting baseline operations and understanding future needs of the Clovis Transit system. Once a thorough understanding is achieved by the consulting team, a meeting with Clovis Transit will occur to review foundational information. Items to collect and review include, but are not limited to:

- a. Transit plans
- b. GIS data
- c. Regional Transportation Plans/Sustainable Communities Strategies
- d. Sustainability plans
- e. GHG (Greenhouse Gases) reduction plans
- f. Circulation elements
- g. Transit maps
- h. Transit performance indicators

Deliverables:

- **Analyses of existing conditions**
- **An online map showing demographic, land use and transit data**
- **An internal-draft Existing Conditions Report, and a final draft for publication**
- **Trip # 1: Field Trip (plus activities Task 4 and 5)**

2. Research and Analysis – The consultant will be required to research and review federal, state, regional, and local sources for planning documents that would provide direction for the City of Clovis. A research summary of the essential documents with reference sections and expectations will be reviewed by Clovis Transit.

Deliverables:

- **Research summary on planning documents with noted reference sections and expectations.**
- **This summary will be included as a chapter in the Existing Conditions Report.**

3. Visioning Process – Multiple meetings will be scheduled between the consultant and transit staff to discuss the existing conditions and the vision for the transition of Clovis Transit into a new generation of transit. The consultant will provide an explanation as to how the researched and reviewed planning documents will align with transit's vision of the evolution of Clovis Transit. After said meetings, the consultant and transit staff will generate a draft of the vision, strategies, and objectives for the City of Clovis Strategic Operations Plan.

Additional city staff meetings will be held with various departments to review their involvement with Clovis Transit and decipher the impacts of transit on their specific areas of expertise. The consultant will gather feedback and review the draft with suggested modifications. The consultant will also determine possible future collaboration between Clovis Transit and other City departments.

Deliverables:

- **Vision, Goals, and Strategies for the SOP**
- **Meetings with City departments to gather feedback about the vision, goals, and strategies**
- **Trip #2 - Core Design Workshop**
- **SOP 10 year network and service improvements**
- **Equity and performance analysis of 10 year network**

4. Stakeholder Engagement – A potential stakeholder list will be provided to the consultant by transit staff. Stakeholders will be involved from start to finish of the project through scheduled meetings. Throughout the project, stakeholders will have multiple opportunities to review and offer suggestions to help modify the plan.

At the first meeting, the consultant team will register attendees/include them on the committee list, review the project purpose, discuss stakeholder's role, and schedule future meetings. The consultant will be responsible for providing agendas, taking notes, and distributing meeting summaries/minutes.

Deliverables:

- **Stakeholder list**
- **Invitations to events**
- **Event #1: Stakeholder in-person workshop**
- **Event #2: Vision, goals, and strategies virtual presentation**
- **Event #2 Draft Plan virtual presentation**
- **Agendas, PowerPoint Presentations, and meeting minutes and summaries for the three stakeholder events.**
- **Trip # 1: Stakeholder workshop (plus activities Task 1 and 5)**

5. Community Outreach and Events – Community engagement is an essential component to ensure that all levels of socio-economic backgrounds, including the disadvantaged and low- income populations are targeted and offered the opportunity to participate. Outreach methods will provide Clovis Transit and the consultant team an opportunity to inform the public of the Strategic Operations Plan and obtain feedback.

Outreach methods will include:

- a. Two (2) in-person community events
- b. Two (2) pop-up tents at various transit transfer points/points of interest
- c. Bus shelter postings
- d. Bus interior postings
- e. Website posts
- f. Email distribution through community organizations
- g. Social media – Facebook and Instagram

Deliverables:

- **Community Outreach and Events Phase 1:**
 - **Public Outreach Plan**
 - **Community Survey Development and Analysis (online and on board)**
 - **Public Engagement Outreach Material (bus shelter postings, bus interior postings, social media and website posts)**
 - **Distribution of the survey online, on-board buses, email, and in key community locations.**
 - **1 Community meeting or open house**
 - **1 Tabling event/pop-up activity**
 - **Community engagement summary**
 - **Trip # 1: Community outreach phase 1 events (plus activities Task 1 and 4)**
 - **Trip # 3 Community outreach phase 2 events**

- **Community Outreach and Events Phase 2:**

- **Community Survey Development and Analysis (online)**
- **Public Engagement Outreach Material (bus shelter postings, bus interior postings, social media and website posts)**
- **Distribution of the survey online, on-board buses, email and in key community locations**
- **1 Community meeting or open house**
- **1 Tabling event/pop-up activity**
- **Community engagement summary**

6. Draft and Final Plan – The draft process of the Strategic Operations Plan will begin during the research and analysis of the various planning sources will include federal, state, regional, and local plans. These references will serve as the backbone for the design of the document. Suggestions will be solicited from stakeholders and the community. A draft will be in hand as the consultant presents to the community during outreach and engagement efforts, and the community will have several opportunities to provide feedback. Once stakeholder and community feedback have been considered, the consultant will finalize the document.

Deliverables:

- **Draft plan**
 - **Introduction**
 - **Existing Conditions**
 - **Vision**
 - **Strategies**
 - **Objectives**
 - **Summary of Stakeholder Involvement**
 - **Community Feedback**
 - **Implementation Plan**
- **Community review with a list of comments from the public and stakeholders**
- **Final plan, including a summary of the next steps towards implementation (must have credits to Caltrans on cover page)**
- **Bound, unbound, electronic documents (including GIS databases and ArcGIS maps)**

7. Presentation, Board Review, and Approval – The consultant will provide a final PowerPoint presentation to be created and shared with city staff and then presented to the City of Clovis City Council for approval. The principal will lead the in-person presentation to the City Council, with potential support from the project manager. The presentation will include the purpose of the project, the generated vision, strategies, and objectives that will serve the City in its efforts to be innovative, equitable, multimodal, and an evolving transportation system.

Deliverables:

- **Presentation to the City Council at the beginning of the project**
- **Presentation to deliver the Draft Plan to the City Council and gather feedback for the Final Plan**
- **PowerPoint presentation materials**
- **Trip #4 City Council Presentation: The principal will lead an in-person City Council presentation, potentially with the project manager**

Cost Proposal

Task#	Task Title	Cost
0	Project Management	\$ 27,322.37
1	Existing Conditions Report	\$ 37,029.84
2	Research and Analysis	\$ 8,491.26
3	Visioning Process	\$ 24,355.13
4	Stakeholder Committee	\$ 19,713.91
5	Community Outreach and Engagement	\$ 35,152.17
6	Draft and Final Plan	\$ 14,957.60
7	Presentation, Board Review, and Approval	\$ 2,885.69
	Total Cost:	\$ 169,907.97

Consultant will not initiate miscellaneous services unless written pre-approval has been provided by City.

These rates/fees represent the total cost for all Services provided under this Agreement, including labor, equipment, materials, costs and expenses, taxes, and overhead, to be paid for services satisfactorily performed.

Total compensation, including expense reimbursement, shall not exceed:

CONTRACT TOTAL: \$169,907.97

EXHIBIT B

CONSULTANT'S PROPOSAL

EXHIBIT C

INSURANCE REQUIREMENTS

Prior to commencement of the Services, Consultant shall take out and maintain at its own expense the insurance coverage required by this Exhibit C. Consultant shall cause any subcontractor with whom Consultant contracts for the performance of Services pursuant to this Agreement to take out and maintain equivalent insurance coverage. Said insurance shall be maintained at all times during Consultant's

performance of Services under this Agreement, and for any additional period specified herein. All insurance shall be placed with insurance companies that are licensed and admitted to conduct business in the State of California and are rated at a minimum with an "A:VII" by A.M. Best Company, unless otherwise acceptable to the City.

a. Minimum Limits of Insurance. Consultant shall maintain the following types of insurance with limits no less than specified:

(i) General Liability Insurance (including operations, products and completed operations coverages) in an amount not less than \$1,000,000 per occurrence. If Commercial General Liability insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project/location (ISO CG 25 03 or 25 04) or the general aggregate limit shall be twice the required occurrence limit.

(ii) Cyber Liability: \$500,000 per occurrence or claim, \$500,000 aggregate.

(iii) Product & Completed Operations: \$2,000,000 per occurrence or claim, \$2,000,000 aggregate.

If Consultant maintains higher limits than the minimums shown above, the City shall be entitled to coverage at the higher limits maintained.

b. Other Insurance Provisions. The general liability policy is to contain, or be endorsed to contain, the following provisions:

(i) For any claims related to the Services performed pursuant to this Agreement, the Consultant's insurance coverage shall be primary insurance as respects the City, its officers, officials, employees, agents, and volunteers. Any insurance or self-insurance maintained by the City, its officers, officials, employees, agents or volunteers shall be excess of the Consultant's insurance and shall not contribute with it.

(ii) Each insurance policy required by this section shall be endorsed to state that the City shall receive written notice at least thirty (30) days prior to the cancellation, non-renewal, or material modification of the coverages required herein.

(iii) Consultant grants to the City a waiver of any right to subrogation which any insurer of said Consultant may acquire against the City by virtue of the payment of any loss under such insurance. Consultant agrees to obtain any endorsement that may be necessary to affect this waiver of subrogation, but this provision applies regardless of whether or not the City has received a waiver of subrogation endorsement from the insurer.

(iv) Any deductibles or self-insured retentions must be declared to and approved by the City of Clovis Risk Services. The City may require the Consultant to purchase coverage with a lower deductible or retention or provide proof of ability to pay losses and related investigations, claim administration, and defense expenses within the retention.

c. Evidence of Coverage. Consultant shall deliver to City written evidence of the above insurance coverages, including the required endorsements prior to commencing Services under this Agreement; and the production of such written evidence shall be an express condition precedent, notwithstanding anything to the contrary in this Agreement, to Consultant's right to be paid any compensation under this Agreement. City's failure, at any time, to object to Consultant's failure to provide the specified insurance or written evidence thereof (either as to the type or amount of such insurance), shall not be deemed a waiver of City's right to insist upon such insurance later.

d. Maintenance of Insurance. If Consultant fails to furnish and maintain the insurance required by this section, City may (but is not required to) purchase such insurance on behalf of Consultant, and the Consultant shall pay the cost thereof to City upon demand, and City shall furnish Consultant with any information needed to obtain such insurance. Moreover, at its discretion, City may pay for such insurance with funds otherwise due Consultant under this Agreement.

e. Subcontractors. If the Consultant should subcontract all or any portion of the work to be performed in this Agreement, the Consultant shall cover the subcontractor, and/or require each subcontractor to adhere to all the requirements contained herein. Similarly, any cancellation, lapse, reduction or change of subcontractor's insurance shall have the same impact as described above.

f. Special Risks or Circumstances. The City reserves the right to modify these requirements, including limits, based on the nature of the risk, prior experience, insurer, coverage, or other special circumstances.

g. Indemnity and Defense. Except as otherwise expressly provided, the insurance requirements in this section shall not in any way limit, in either scope or amount, the indemnity and defense obligations separately owed by Consultant to City under this Agreement.

EXHIBIT D

SIGNING AUTHORITY



REQUEST FOR PROPOSAL CONSULTANT SERVICES

Issue Date: June 19, 2025

Closing Date: July 9, 2025

All Questions and Responses must be electronically submitted on the Bid Page on Planet Bids:

For assistance, contact Susanna Herrera at (559) 324-2485 or susannah@clovisca.gov

CONTRACTOR TO COMPLETE

Undersigned agrees to furnish the commodity or service stipulated in the attached at the prices and terms stated in this RFP.

Bid must be signed and dated by an authorized officer or employee.

Jarrett Walker and Associates

COMPANY

Daniel Costantino

CONTACT PERSON

1021 SE Caruthers St

ADDRESS

Portland

Oregon

97214

CITY

STATE

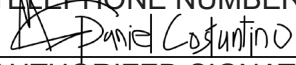
ZIP CODE

(971) 277 3629

daniel@jarrettwalker.com

TELEPHONE NUMBER

E-MAIL ADDRESS

 Daniel Costantino

AUTHORIZED SIGNATURE

Vice President

Daniel Costantino

PRINT NAME

TITLE

CITY OF CLOVIS



ADDENDUM NUMBER: ONE (1)

CONSULTANT SERVICES

Issue Date: July 2, 2025

Closing Date: July 9, 2025 at 3:00 PM

All Proposals must be electronically submitted to the Bid Page on Planet Bids:

<https://vendors.planetbids.com/portal/14742/bo/bo-detail/131198>

For assistance, contact Susanna Herrera at (559) 324-2785 or SusannaH@clovisaca.gov.

NOTE THE FOLLOWING AND ATTACHED ADDITIONS, DELETIONS AND/OR CHANGES TO THE REQUIREMENTS OF REQUEST FOR PROPOSAL AND INCLUDE THEM IN YOUR RESPONSE. PLEASE SIGN AND RETURN THIS ADDENDUM WITH YOUR PROPOSAL.

- **Questions and Answers**
- **Included Trade Secret Form – See “Attachment A – Trade Secret Form”**
- **Updated Checklist – See “Attachment B – Update Checklist”**
- **Updated Proposal Content Requirements – See “Attachment C – Updated Proposal Content Requirements”**

ACKNOWLEDGMENT OF ADDENDUM NUMBER ONE (1) TO RFP.

COMPANY NAME: Jarrett Walker and Associates

SIGNATURE:  (PRINT)

NAME & TITLE: Daniel Costantino, Vice President (PRINT)

July 9th, 2025

Subject: City of Clovis, Strategic Operations Plan

To Whom It May Concern,

On behalf of Jarrett Walker & Associates, LLC. (JWA) I am pleased to submit this proposal to the City of Clovis in response to the RFP for a Strategic Operations Plan (SOP)

In light of the significant shifts impacting the transit industry, from evolving clean air regulations to emerging technologies and equity-driven policies, Clovis Transit's Strategic Operations Plan (SOP) represents a timely and important opportunity to shape the future of transit in the region. The SOP, funded by a 2024 Sustainable Transportation Planning Grant from Caltrans, will help Clovis Transit respond to state and federal requirements, meet the expectations of its community, and plan for an equitable, safe, and sustainable future.

Our team sees this project not just as a planning exercise, but as a chance to reconcile current service realities with long-term aspirations. By grounding the plan in practical insights, such as local ridership patterns, community needs, and operational constraints, while advancing a forward-looking vision, we aim to help Clovis Transit design a road map that is both achievable and transformative.

JWA is one of the nation's leading firms in transit planning. Some of our better-known successes include implemented network redesigns for Monterey Salinas (MST), San Jose (VTA), Sacramento (SacRT), Houston (METRO), Dallas (DART), Cleveland (GCRTA), and Dublin, Ireland (NTA). All of these agencies have put network changes based on our work into practice and were happy with the results.

We are pleased to propose Álvaro Caviedes as the Project Manager for this SOP. Álvaro brings over 8 years of exceptional experience in transit and data analysis and has consistently demonstrated strong leadership, strategic thinking, and a results-driven approach to managing complex projects. Álvaro will be supported in this effort by a team of experts, including our founder Jarrett Walker.

The keys to our approach include:

- **A reality-based public conversation.** We make collaborative plans guided in large part by public engagement. To make this possible, we educate decision-makers and stakeholders about trade-offs in service design, including ridership versus coverage or complexity versus connections. Our public and stakeholder involvement processes don't just generate competing "wish lists" from constituent groups that we, or you, have to reconcile. Instead, they generate thoughtful public input on the real, hard choices that transit agencies must make.
- **A team of dedicated specialists.** As a firm that specializes in transit network planning, we team with other companies that are as dedicated to their core practice area as we are. Besides community engagement, we have included AMMA for their strategic thinking skills and expertise in on-demand response.
- **We focus on transit's usefulness and its ability to facilitate individual freedom.** We've found that we succeed when we talk about freedom. When we study people's access to opportunity, meaning their freedom to go places

1021 SE Caruthers
St, Portland, OR
97214
971-277-3629
jarrettwalker.com

1021 SE Caruthers
St, Portland, OR
97214
971-277-3629
jarrettwalker.com

and do things, we come to the most compelling description of transit's benefits and the best guide on how to make a network better.

- **Embedding environmental justice and Title VI needs throughout the planning process.** In our work, we consider the full range of environmental justice needs and concerns. In a JWA led process we look at these issues when assessing markets and needs, in developing service concepts and alternatives, and in analyzing the outcomes of potential changes. Our analytic processes always include assessments of how access to opportunity and proximity to services change for a wide range of populations.
- **Distinguishing between technical analyses and value judgments.** We are planners, but we are also facilitators, analysts, illuminators, synthesizers, and presenters. In those roles, we ask questions about your community's values and priorities, but we do not answer them. We know the difference between our technical expertise and your community's desires for its future. We don't confuse the two, but we integrate them into a plan that is technically rigorous and clear about its priorities.
- **Locally-relevant experience.** JWA has worked in several projects in California, including service redesigns, TMP updates, and COAs in Fresno, Monterey-Salinas, Santa Cruz, and Sacramento. We are currently working in the Imperial Valley, Palm Springs, Solano, Glendale and San Jose.

We hope you will agree that our team offers a unique set of capabilities, and look forward to the opportunity to discuss them with you further soon.

Respectfully yours,



Daniel Costantino

Vice President, Jarrett Walker & Associates, LLC



Image: Photo by Jacob,
Adobe Stock Photos

Clovis Transit - Strategic Operation Plan

City of Clovis | California

Submitted by Jarrett Walker + Associates
July 9, 2025

Submitted by:

**JARRETT
WALKER**
+ ASSOCIATES
Let's think about transit

In association with:

AMMA
TRANSIT PLANNING INC.

Contact Person: Alvaro Caviedes

Email: alvaro@jarrettwalker.com

Phone: 971-277-3629

Address:

1021 SE Caruthers Street
Portland, OR 97214, USA

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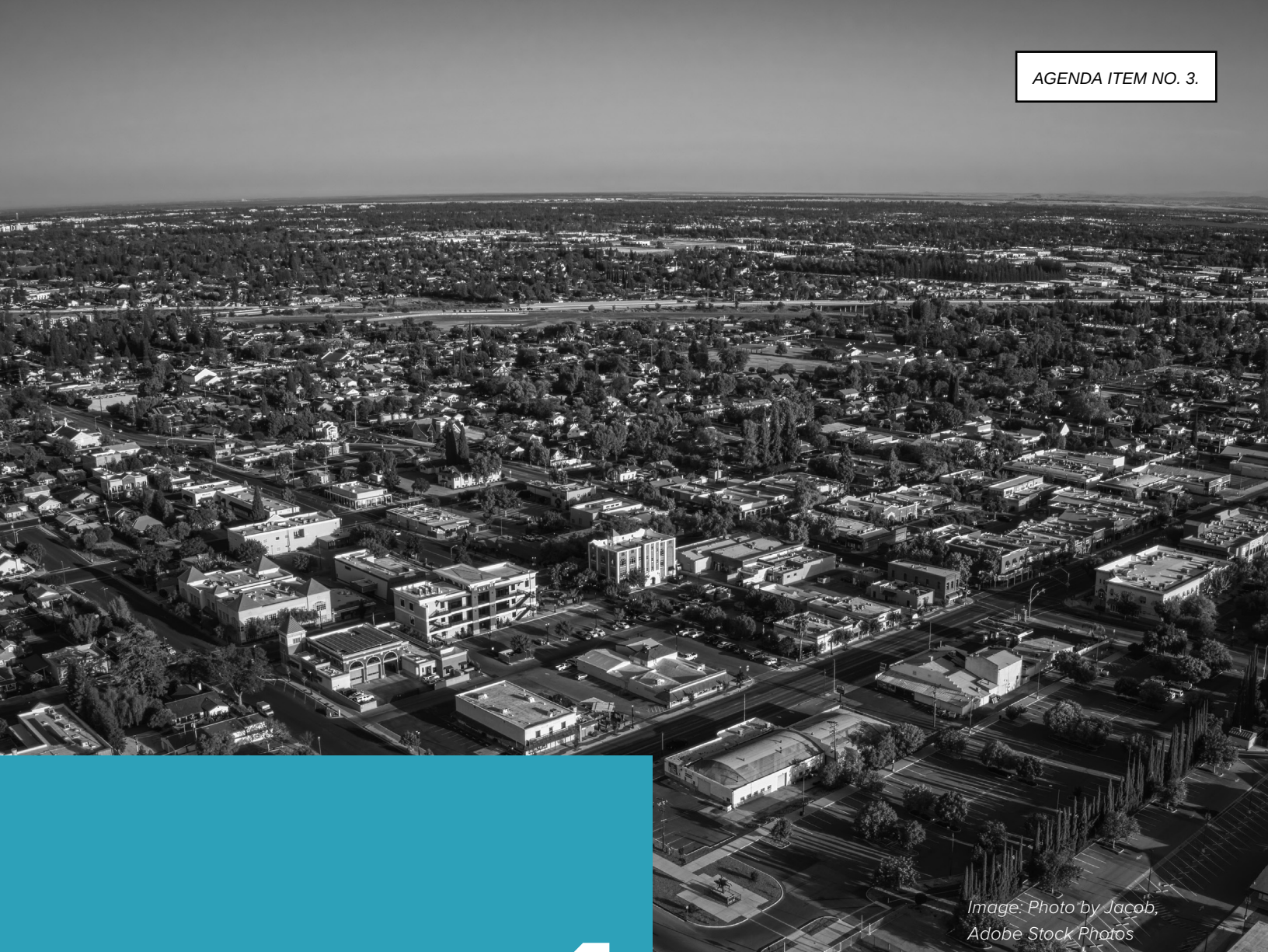
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*Image: Photo by Jacob,
Adobe Stock Photos*

1

Forms

Conflict of Interest Statement

JWA and its project partners affirm that there is no conflict of interest, as defined by the City of Clovis, with respect to this proposal. None of our team members are current employees of the City of Clovis or any public agency for which the City Council serves as the governing body. Furthermore, no member of our team has been employed in such a capacity within the past twelve (12) months, nor have any of us participated in developing the specifications for this contract or related services.

Additionally, no team member or affiliate of JWA has a financial interest in, or relationship with, any City employee that would create a real or perceived conflict of interest. We also confirm that none of our staff members are in a position to influence or have been influenced by any City employee involved in the selection process for this RFP.

We are committed to complying fully with all applicable federal, state, and local conflict of interest laws, statutes, and regulations. Should any potential conflict of interest arise during the course of the project, we will promptly disclose it to the City and work collaboratively to address it in a transparent and appropriate manner.

Signature: 

Name: Daniel Costantino

Title: Vice President

Date: July 8th, 2025

TRADE SECRET ACKNOWLEDGEMENT

Each proposal submitted is a public record under the California Public Records Act (Cal. Gov. Code, secs. 6250 and following) and is therefore open to inspection by the public as required by Section 6253 of the California Government Code. This section generally states that "every person has a right to inspect any public record". The City will not exclude any proposal or portion of a proposal from treatment as a public record except information that it is properly submitted as a "trade secret" (defined below), and determined by the City to be a "trade secret" (if not otherwise subject to disclosure, as stated below). Information submitted as "proprietary", "confidential" or under any other terms that might state or suggest restricted public access will not be excluded from treatment as public record.

"Trade secrets" as defined by Section 6254.7 of the California Government Code are not treated as a public record under that section. This section defines trade secrets as:

"...Trade secrets," as used in this section, may include, but are not limited to, any formula, plan, pattern, process, tool, mechanism, compound, procedure, production data or compilation of information that is not patented, which is known only to certain individuals within a commercial concern who are using it to fabricate, produce, or compound an article of trade or a service having commercial value and which gives its user an opportunity to obtain a business advantage over competitors who do not know or use it."

Such information must be submitted in a separate PDF file named "Trade Secret" and marked as "Confidential" in the Planet Bids system. Contractors must include a clear and concise statement that sets out the reasons for confidentiality in accordance with the foregoing definition of "trade secret." Examples of information not considered trade secrets are pricing, cover letter, promotional materials, references, and the like.

Information submitted by a Contractor as "trade secret" will be reviewed by the City, with the assistance of the City's legal counsel, to determine conformance or non-conformance to the foregoing definition.

Information that is properly identified as "trade secret" and which the City determines to conform to the definition will not become public record (if not otherwise subject to disclosure, as stated below). The City will safeguard this information in an appropriate manner, provided however, in the event of a request, demand, or legal action by any person or entity seeking access to the "trade secret" information, the City will inform the Contractor of such request, demand, or legal action, and the Contractor shall defend, indemnify, and hold harmless the City, including its officers and employees, against any and all claims, liabilities, damages, or costs or expenses, including attorney's fees and costs, relating to such request, demand or legal action, seeking access to the "trade secret" information.

Information submitted by Contractor as trade secret and determined by the City not to be in conformance with the foregoing California Government Code definition shall be excluded from the proposal and deleted by the City.

The City shall not in any way be liable or responsible for the disclosure of any proposals or portions thereof, if (1) they are not electronically submitted in a separate PDF that is marked "Trade Secret" and marked as Confidential in the Planet Bids system; or (2) disclosure thereof is required or allowed under the law or by order of court.

Contractors are advised that the City does not wish to receive trade secrets and that Contractors are not to supply trade secrets unless they are absolutely necessary.

I have read and understand, and agree to the above "Trade Secret Acknowledgement."

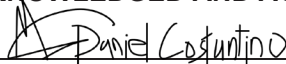
CONTRACTOR MUST CHECK ONE OF THE FOLLOWING:

Has Contractor submitted certain bid information that is a "trade secret," as defined by Section 6254.7 of the California Government Code, and in compliance with the requirements of this Trade Secrets Acknowledgement?

By marking "**NO**", Contractor does not claim any confidentiality of any bid information submitted to the City.

☐ YES ☒ NO

ACKNOWLEDGED AND AGREED BY CONTRACTOR:

 _____ Signature	July 8th, 2025 _____ Date
Daniel Costantino _____ Print Name	Vice President _____ Title

DEBARMENT AND SUSPENSION CERTIFICATION

AGENDA ITEM NO. 3.

Check one box below (and provide an explanation if necessary):

☒ The Contractor certifies that the Contractor and its principals:

1. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily or involuntarily excluded from covered transactions by any federal department or agency;

2. Have not, within the preceding three years, been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public or private agreement or transaction; violation of federal or state antitrust statutes, including those proscribing price fixing between competitors, allocation of customers between competitors, and bid rigging; commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, receiving stolen property, making false claims, or obstruction of justice; or commission of any other offense indicating a lack of business integrity or business honesty;

3. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (federal, state, or local) with commission of any offense described in Paragraph 2 of this certification;

4. Have not, within the preceding three years, had one or more public transactions (federal, state, or local) terminated for cause or default.

– OR –

☐ The Contractor is unable to certify to all of the statements in this certification and attaches its explanation to this certification. (In the explanation, the Contractor must certify to those statements that can be certified and explain why the other statements cannot be certified.)

The Contractor shall require that the language of this certification be included in the contract documents for all subcontractors and material suppliers at all tiers, and that all subcontractors and material suppliers shall certify and disclose accordingly.

The Contractor certifies or affirms the truthfulness and accuracy of the contents of the statements submitted on or with this certification. In addition, the Contractor understands and agrees that the provisions of 31 U.S.C. §§ 3801 et al. are applicable to this certification.

Company: Jarrett Walker and Associates

Name: Daniel Costantino

Title: Vice President

Signature: 

Date: July 8th, 2025

XI. TAX LIABILITY CERTIFICATION

The Contractor certifies that:

1. It has no unpaid federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability;
2. It has not been convicted of a felony criminal violation under any federal law within the preceding 24 months; and
3. It shall require that the language of this certification be included in the award documents for all sub-contractors and material suppliers at all tiers, and that all subcontractors and material suppliers shall certify and disclose accordingly.

The Contractor certifies or affirms the truthfulness and accuracy of the contents of the statements submitted on or with this certification. In addition, the Proposer understands and agrees that the provisions of 31 U.S.C. §§ 3801 et al. are applicable to this certification.

Company: Jarrett Walker and Associates

Name: Daniel Costantino

Title: Vice President

Signature: 

Date: July 8th, 2025

D. EXHIBIT D – LOBBYING RESTRICTIONS FORM

The undersigned certifies, to the best of his or her knowledge and belief, that:

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
3. The undersigned shall require that the language of this certification be included in the award documents for all sub-awards at all tiers (including subcontracts, sub-grants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.



Signature of Contractor's Authorized Official

Daniel Costantino, Vice President

Name and Title of Contractor's Authorized Official

July 8th, 2025

Date

REFERENCE LIST

AGENDA ITEM NO. 3.

VENDOR MUST COMPLETE AND RETURN WITH REQUEST FOR PROPOSAL

Firm: Jarrett Walker and Associates

Provide a list of at least five (5) customers for whom you have recently provided similar services. If you have held a contract for similar services with the City of Clovis within the past seven (7) years, list the City as one of your customers. Please list the person most familiar with your contract. Be sure to include all requested information.

Reference Name: Canby Area Transit Contact: Todd Wood
Address: 195 S Hazel Dell Way
City: Canby State: OR Zip: 97013
Phone: (503) 266 0751 Project Date: December 2023-November 2024
Service Provided: Transit Master Plan update

Reference Name: Monterey Salinas Transit Contact: Michelle Overmeyer
Address: 9 Upper Ragsdale Drive, Suite 200
City: Monterey State: CA Zip: 93940
Phone: (831) 264 5877 Project Date: November 2020-November 2022
Service Provided: Comprehensive Operational Plan

Reference Name: Missoula Urban Transp. District Contact: Corey Aldridge
Address: 200 West Pine St
City: Missoula State: MT Zip: 59802
Phone: (406) 370 9208 Project Date: 2017-2018
Service Provided: Strategic Service Plan, including a short and long term planning component

Reference Name: Santa Cruz Metro Contact: John Urgo
Address: 603 Front St.
City: Santa Cruz State: CA Zip: 95060
Phone: (909) 884 8276 Project Date: December 2022-December 2024
Service Provided: Reimagine METRO: Comprehensive Network Review. Both JWA and AMMA worked on this project.

Reference Name: San Bernardino County Transp. Authority Contact: Nancy Strickert
Address: 1170 W. Third Street
City: San Bernardino State: CA Zip: 92410
Phone: (908) 884 Project Date: On call assistance from AMMA since 1991
Service Provided: On Call Assistance includes: continuing technical support on transit, ADA, unmet transit needs hearing process; regional grant solicitation efforts; public outreach and engagement; transit operator financial reviews; and staffing PASTACC, the Public and Specialized Transportation Advisory and Coordination Council.

PARTICIPATION

AGENDA ITEM NO. 3.

The successful Contractor agrees to allow the City of Clovis and with the City's consent, other public agencies to purchase additional items at the same terms and conditions as in their submitted proposal for a period not to exceed one year from the date of award. Participating agencies may enter into a contract with the successful vendor for the purchase the services and/or equipment noted herein based on the terms, conditions, prices, and percentages offered by the successful vendor to the City. Purchase Orders issued by other public agencies referencing this agreement, shall be the sole responsibility of the agency placing the order. The City reserves the right to extend the one-year time period with mutual consent of the successful vendor.

Any agency choosing to avail itself of this opportunity, will make purchases in their own name, make payment directly to the contractor, be liable to the contractor and vice versa, per the terms of the original contract, all the while holding the City of Clovis harmless. If awarded this contract, please indicate whether you would extend the same terms and conditions to all tax supported agencies within this group as you are proposing to extend to the City of Clovis.

*** Note: This form/information is not used for evaluation purposes.**

☐

Yes, we will extend contract terms and conditions to all qualified public agencies.

☒

No, we will not extend contract terms to any agency other than the City of Clovis.



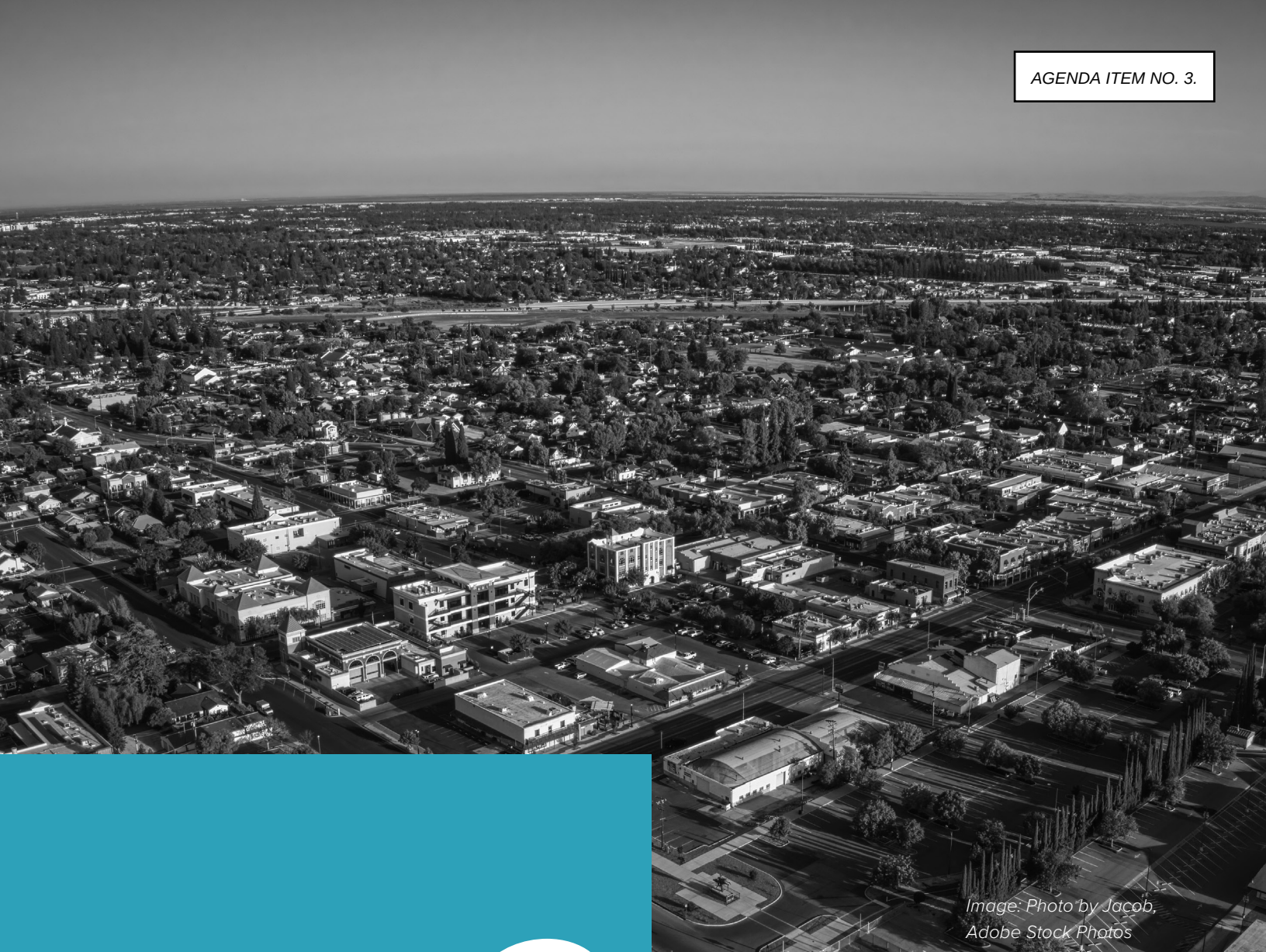
(Authorized Signature)

Daniel Costantino, Vice President

Title

Contractor Exceptions

We have no exceptions to the language of the RFP.



*Image: Photo by Jacob,
Adobe Stock Photos*

2

Vendor Company Data and Management Plan

A. Proposer Profile

JARRETT WALKER

+ ASSOCIATES

Let's think about transit

Jarrett Walker + Associates (JWA) was founded in 2011 by Jarrett Walker, the author of *Human Transit*. JWA's mission is to foster clear conversations about transit, leading to confident decisions. We specialize in helping communities

understand transit choices and their consequences, informed by excellent maps, analysis and presentation. Since its founding, JWA has:

- Led short- and long-range **transit network plans** (including assessing existing conditions, key choices, developing network scenarios, and integrating public input into draft and final plans) in more than 40 cities and towns throughout North America and in Ireland, Iceland, and New Zealand (12 years).
- Led the development of **transit plans that supported successful ballot measures** for transit funding, including in Missoula, Indianapolis and Raleigh (12 years).
- Analyzed **transit priority and high capacity**

corridors in Vancouver, BC; Portland, OR; and Santa Clara County, CA (12 years).

- Facilitated interactive **stakeholder and elected official workshops** for numerous transit agencies, conferences, cities and counties (13 years).
- Advised transit agencies on **service branding**, including in San Francisco, Oakland, San Jose, and Vancouver, BC (10 years).
- Designed exceptional **transit system maps** for Miami, Oakville, San Antonio and AC Transit (5 years).

JWA is a Limited Liability Corporation (C Corp) incorporated in Oregon in December 2011. The firm is jointly owned by eight of its employees: Jarrett Walker, Scudder Wagg, Michelle Poyourow, Daniel Costantino, Evan Landman, Gavin Pritchard, Ricky Angueira and Álvaro Caviedes. JWA has two offices, located in Portland, Oregon (16 employees) and Arlington, Virginia (4 employees). We work across the US and Canada, as well as in Europe, Australia, and New Zealand.



Figure 1: Map showing where JWA has worked. Red and green dots show transit network plans that are adopted and either partly or fully implemented.



AMMA Transit Planning, Inc.

is a small, public transit-oriented planning firm founded in 1987 and

newly incorporated in 2022. For the purposes of this agreement, AMMA will be the sole subcontractor, working with the support of Transit Happy and Transit Marketing. AMMA's foundation is a strong background in paratransit operations through implementation of the Americans with Disabilities Act of 1990, with extensive credentials in the evaluation and improvement of public demand response services. Expansion into coordinated planning with its focus on older adults, persons with disabilities and persons of low-income led AMMA authorship of dozens of coordinated public transit-human services transportation plans across California and in other western states. AMMA's public engagement and outreach focus – honed through these many Coordinated Plans – is effective in reaching under-represented community members.

AMMA's coordinated planning work led to a range of multi-modal service planning projects to address fixed-route service planning, bus and rail connections, rural transportation, non-emergency medical transportation, call center evaluation, fleet electrification, and more. AMMA worked on multiple Short Range Transit Plans and Comprehensive Operations Plans and has promoted transit ridership as a key area of focus. AMMA's planning approach recognizes the important intersection of service planning and marketing to retain and expand the transit rider base. Ridership growth has become ever more critical in the wake of the COVID-19 Pandemic with AMMA embracing tools of rider education, awareness and transit promotional campaigns to introduce people to public transit and build confidence in its use.

Paratransit, on-demand transportation planning expertise, another long-time strength of AMMA's, has readily translated to new micro transit services. Our team's understanding of the reservation, scheduling and dispatching technologies includes implementing selected software platforms, with the result that we bring tested guidance to clients.

As a small firm, AMMA has long viewed its

strategic partnerships, with like-minded firms and colleagues, as a critical way of bringing value and adding breadth to client projects. These partnerships, in both prime and subcontractor roles, have enabled AMMA to take on a wide-ranging array of projects throughout California; in other states that include Oregon, Arizona, Ohio, Alaska, Kansas and North Carolina; statewide for the CalAct organization; and national projects for the Transit Cooperative Research Program (TCRP), Community Transportation Association of America (CTAA), and the American Association of Retired Persons (AARP). AMMA is certified by Los Angeles METRO and the California Unified Certification Program as a small business and as a disadvantaged business based in Riverside, CA.

Further information can be found at www.AmmaTransitPlanning.com

Jarrett Walker + Associates (JWA) would be the prime contractor. JWA would perform all tasks, and help guide the key themes and issues to address in public outreach, participate in select stakeholder conversations, and present to Clovis Transit board, committees, local city councils and/or other decision-making bodies as appropriate.

AMMA would be a subcontractor to JWA. AMMA would lead the planning and execution of most of the public outreach activities. This would include stakeholder interviews, surveys, tabling events, one-on-one meetings, project website updates and public engagement material. AMMA would also perform tasks related to demand response and help defining the vision and goals.

The structure of this team and key personnel involved are resumed in the Organization Chart and Key Personnel descriptions that follow.

Consistency in Assignments and Availability

We understand that consistency and predictability in project staffing is critical to the success of any major network design study. As such, **we commit that the key personnel proposed will be available to perform the proposed services**

for the duration of this contract, and that no person designated as "key" to the proposed service shall be removed or replaced without the prior written concurrence of Clovis Transit.

We have a highly capable team currently supporting multiple projects, and we are pleased to confirm that we have sufficient capacity to take on this engagement without impacting the quality or timeliness of our other commitments. For this project, our assigned Project Manager will dedicate 60% of their time to ensure focused leadership, timely communication, and efficient delivery. Additionally, our core technical team has availability to support project needs and scale as necessary based on the timeline and deliverables. This allocation reflects our commitment to delivering high-quality results while maintaining the agility to respond to project needs as they evolve. We estimate staff's availability based on the level of commitment and attention necessary, based on the person's position in the organizational chart. Hours dedicated in our budget estimates (see Cost Proposal).

There has not been contracts terminated before completion with the last five years.

No lawsuits or legal actions that are currently pending, or that have been resolved within the last 5 years.

No Payment problems that JWA had with the City within the past three years.

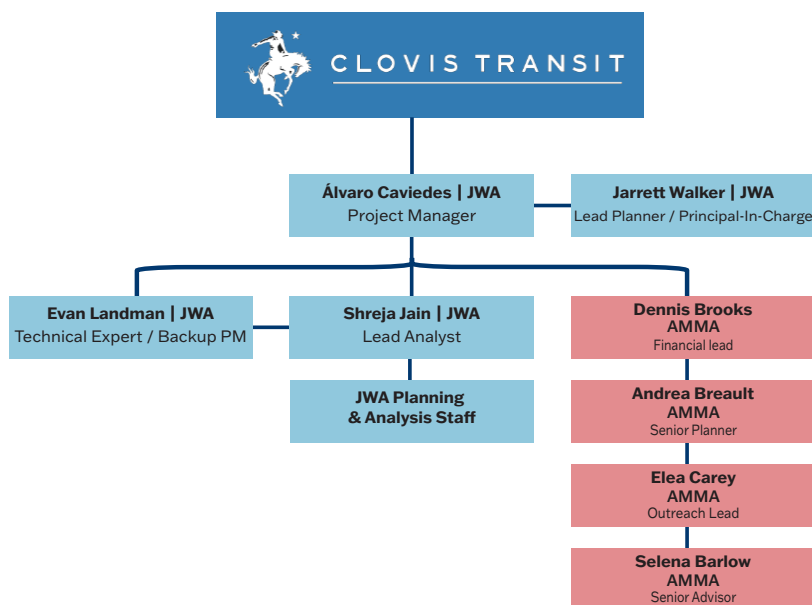


Figure 2: Team Organization Chart

Staff Qualifications

Jarrett Walker + Associates

Álvaro Caviedes

Project Manager



Álvaro is a project manager, transit planner, and data analyst at Jarrett Walker + Associates. Alvaro's combination of technical and people-focused experience has honed his ability to communicate complex information in English and Spanish to a diverse range audiences and support policymakers in confident decision-making. **As Project Manager, Álvaro will lead all of the consulting team's efforts.** Álvaro will be ultimately responsible for the quality and timeliness of all project deliverables. Álvaro has managed the recent Transit Master Plan update for the City of Canby, and participated as a lead analyst in bus network redesign projects like Imperial County California, Monterey Salinas Transint, PACE ReVision Network, and Santa Cruz METRO.

Jarrett Walker (JWA)

Role: Lead Network Planner

Jarrett is an international consultant in public transit planning and policy. In his 28 years of transit consulting, he has worked on more than 200 public transit planning projects. He has led network design projects in more than 50 cities, many of which have been implemented successfully. **As Lead Network Planner, Jarrett's primary role will be to facilitate in network design workshops.** He will also provide follow-on advice as needed, and review first drafts of any reports on existing conditions and the service implementation plans.



Evan Landman

Planner / Deputy PM

Evan is the most technically skilled principal at JWA. In addition to managing network design studies, in his 10+ years with the firm, Evan has led the development of all of JWA's signature spatial analysis, cartography and visualization. Evan was part of the team to redesign the



FAX network back in 2013-15, which was implemented in 2018. **Evan will provide planning guidance to the Project Manager, review Clovis Transit schedule and operation agreements, and he will also be available as the back-up Project Manager if Álvaro becomes unavailable.**

Shreya Jain

Lead Analyst



Shreya will serve as an analyst and cartographer as well, supporting the team through the analysis of existing conditions and the development of material to build the SOP presentations and reports. **As Lead Analyst, Shreya will lead our team on all technical, mapping, and analysis-related issues.** Shreya offers experience in municipal planning, geographic analysis, data analysis and cartography. She is knowledgeable about California transportation plans and challenges thanks to her work in Solano, San Jose and Santa Cruz.

Liz Marchalonis

Analyst Support

Liz provides cartography, data analysis and publication support for JWA's transit network planning efforts. She brings her professional experience in the architecture industry, and an eye for detail and clear communication, to her work on behalf of JWA's transit agency clients. Liz has been the lead analyst in the Imperial County project in Southern California.



AMMA**Dennis Brooks****President, Financial Specialist/Transit Planner**

Dennis Brooks, AMMA's President and Transit Planner, with a specific background in financial analysis, has been with AMMA for 19 years, since 2006. He recently concluded the Riverside County Transportation Commission project to prepare the Transit Funding Policies and Procedures Manuals for both the Commission's and the county's public transit operators. He recently concluded a paratransit "interoperability" project to improve data exchange in a coordinated paratransit program among Ecolane, 5M, and TransTrack software platforms. Among extensive small-operator technical assistance roles, he assisted VCTC and 211 Ventura in designing a call-center program and securing FTA 5310 funds. Mr. Brooks is just concluding a field assessment and program evaluation of 22 Riverside County paratransit and specialized transportation programs and is closing out the county's development of a Transit Funding Handbook.

Andrea Breault**Senior Planner**

Andrea Breault has 19 years' experience in the transportation operations and planning fields, including in the field of university shuttle and parking services, fleet operations, and transit planning. Andrea began her work in transportation as the Transportation Demand Management Supervisor at Princeton University, where she developed programs aimed at reducing campus traffic and emissions. She then served as Assistant Director of Parking and Transportation Services at Tufts University, overseeing shuttle operations and parking services across four campuses in Massachusetts. Prior to last fall, Andrea led Cascades East Transit (CET) as Transportation Director for six years, managing a fleet of 85 vehicles and a team of 70 staff. She guided the agency through the challenges of the COVID-19 pandemic while advancing CET's fixed-route

and demand-response programs. She is currently working on Coordinated Plan efforts for Riverside and San Bernardino counties, an SRTTP for Mountain Transit, and an integration of nine dial-a-ride agencies in Ventura County.

Elea Carey**Community Engagement and Outreach Lead**

Elea Carey has 30 years of marketing experience, including introducing new marketing ideas in emerging environments. When the pandemic hit, she shuttered her Silicon Valley marketing consultancy and opened Transit Happy to serve public transit agencies nationwide. She promotes transit surveys and outreach efforts to gather meaningful community input. Her recent work in California includes planning and developing community engagement efforts in San Bernardino and Riverside counties and developing marketing plans for SRTTP updates for the Yosemite Area Regional Transportation System, and in Butte and El Dorado counties. Elea also develops strategic marketing plans, launches creative, PR, and paid-media campaigns, and implements marketing tactics on behalf of clients. Promoting transit to multilingual audiences is one of her greatest passions.

Selena Barlow**Senior Advisor**

Selena Barlow, sole proprietor of Transit Marketing, has more than 30 years of experience marketing and planning public transportation services throughout the U.S. Selena has worked with dozens of small-urban and rural transit agencies throughout the nation, including in Fresno County and its adjacent counties. She's experienced in developing and leading nuanced, tailored community outreach plans that yield unique and accurate rider, stakeholder, and potential-rider feedback. She most recently supported Transit Happy's rider interviews and stakeholder engagement processes in Butte County.

Álvaro Caviedes

Senior Associate

AGENDA ITEM NO. 3.

JARRETT WALKER + ASSOCIATES



Álvaro Caviedes is a transit planner and data analyst at Jarrett Walker + Associates. He brings experience in urban planning, social equity, statistical and spatial analysis, cartography, and research from his work in North and South America. He is also skilled at programming and automation of large analysis tasks. Álvaro holds a dual master's degree in Urban Planning and Civil Engineering. He has also helped JWA creating products and translating documents into Spanish to reach a broader audience.

Education

Master of Urban and Regional Planning, Portland State University, 2017

Master of Science, Civil Engineering, Portland State University, 2017

Bachelor of Science, Civil Engineering, Universidad de los Andes, 2012

Positions Held

2019 – present	Senior Associate, Jarrett Walker + Associates
2018	Data Analysis Intern, Puget Sound Regional Council
2017 – 2018	Consultant, Inter-American Development Bank
2014 – 2017	Research Assistant, Portland State University

Transit Network Plans

Álvaro Caviedes has taken a lead role in many transit planning projects, including:

- ▶ **Project Manager** for the Transit Master Plan in Canby, Oregon, and co-managed the second phase of the network redesign project in Dallas, Texas.
- ▶ **Deputy Project Manager** for full bus network redesign projects in the Chicago suburbs (PACE); Santa Cruz, California; Monterey County, California; and Dallas, Texas.

Spatial and Transportation Data Analysis

Álvaro is skilled in statistical analysis, data visualization, spatial analysis, and GIS. His experience in JWA includes:

- ▶ Consultant project manager and analyst for the current Canby Transit Master Plan, Canby, Oregon.
- ▶ Assisting on the Service Planning Redesign for Santa Cruz Metro. Álvaro managed and designed the new public-facing network and route maps for Headways, METRO's schedule magazine.
- ▶ Transit network design, access analysis and cartography for the Forward Together Analysis for TriMet, in Portland, Oregon. This analysis included an evaluation of different corridor options for one of the main segments in the network in order to identify the best frequency and terminus options.
- ▶ Detailed transit performance assessment and access analyses in support of a DART New Bus Network, implemented in 2022. He managed a 5 and 10 year plan to improve service in the service area. This analysis includes an evaluation of transit flexible options (GoLink) and their integration into the overall network. Álvaro also facilitated online community meetings in Spanish.

Jarrett Walker

Founder and Principal Consultant

JARRETT WALKER + ASSOCIATES



AGENDA ITEM NO. 3.

Jarrett Walker is an international consultant in public transport planning and policy, including the links between transport and all aspects of community planning and urban structure. His clients include transport authorities, cities, developers, and non-profits – anyone who wants to make better use of public transport to support their goals.

In his over 30 years of consulting, Jarrett has been the lead planner on more than 100 public transport planning projects in North America, Europe, Australia, and New Zealand.

Jarrett is also known for his work educating stakeholders about the choices that public transport requires, building clear public consultation processes, and helping organizations form coherent and implementable transport goals. He is author of the popular book *Human Transit*, which explains transit concepts to the general reader, and HumanTransit.org, a blog and collection of articles explaining key transport concepts and emerging issues.

Education and Past Employment

He holds a Ph.D. from Stanford University (1996) and a BA from Pomona College (1984). His past employers are Nelson/Nygaard (1993-2005) and MR Cagney in Australia (2005-10). He founded Jarrett Walker & Associates in 2011. At JWA, he serves as project director and lead planner for all of the firm's major network design projects.

Transit Network Design Studies

Since 1993 Jarrett has led the planning on about 100 bus network redesigns, most of them successfully implemented, including recent ones in Houston (2013-15); Dublin (2017-20); San Jose and Silicon Valley (2018-20); Auckland, New Zealand (2015-21), Cleveland (2019-22), Dallas (2018-22), Miami (2022) and many others.

Transit Expansion Programs

Jarrett has led the transit planning behind many successful funding proposals for transit expansions, including in Raleigh, North Carolina (2016) and Indianapolis (2016).

Transit Infrastructure and Land Use

Jarrett has worked on many projects integrating transit infrastructure with land use – including major transit station projects in Vancouver, BC; Surrey, BC, and Edmonton. He frequently provides input on the design of transit facilities to improve transit service performance.

Publications

Book: *Human Transit: How Clearer Thinking about Public Transit Can Enrich Our Communities and Our Lives*. Island Press, 2011 (first edition), 2024 (revised edition).

Scholarly Papers:

- ▶ 2008 “Purpose-driven public transport: creating a clear conversation about public transport goals.” *Journal of Transport Geography*, 16 (6): 436-432.
- ▶ 2018 “To Predict with Confidence, Plan for Freedom,” *Journal of Public Transportation*, 21 (1): 119-127

Many articles on public transport topics in news publications, including the *Washington Post*, *The Atlantic*, the *Sydney Morning Herald*, the *Atlanta Journal-Constitution*, and *The Times* (Ireland).

Evan Landman

Principal Associate

AGENDA ITEM NO. 3.

JARRETT WALKER + ASSOCIATES



Evan Landman is a project manager and analyst who fills many roles at Jarrett Walker + Associates. In addition to managing major network design studies, in his 10 years with JWA, Evan has led the development of all of JWA's signature spatial analysis, cartography and visualization techniques. Evan has a rare ability to turn columns of data into compelling visual and narrative explanations that help people understand how transit works and the choices it presents.

Education

Bachelor of Arts, Human Geography (Urban Studies), The University of British Columbia, 2012

Major Project Experience

Evan has been engaged in all phases of JWA's major transit planning projects, as a project manager, lead analyst, and planner. Examples include:

- ▶ Akron, OH, Akron METRO Reimagine METRO (2021 - 2023) * Δ
- ▶ Cleveland, OH, RTA System Redesign Study (2019)* Δ
- ▶ Portland, OR, TriMet Comprehensive Operations Analysis (2021 - 2023)* Δ
- ▶ Dublin, Ireland, BusConnects network redesign (2017 - 2019) Δ
- ▶ Chicago, CTA Bus Vision Study (2020 - ongoing)
- ▶ Vancouver, BC, TransLink Bus Improvement Plan (2017 - 2018) Δ
- ▶ Portland, OR, PBOT Rose Lanes Project (2019 - 2021)*
- ▶ San Jose, CA, Transit Ridership Improvement Program (2015 - 2017) Δ
- ▶ Salt Lake City, UT, UTA Service Choices (2018 - 2020)*
- ▶ Houston, TX, METRO Transit System Reimagining (2013 - 2015) Δ

* Project Manager

Δ Implemented Network Plan

JWA's Analysis Leader

JWA's projects rely on Evan's expertise in spatial analysis and map design. Evan has spearheaded the development of critical tools used in JWA's practice working for transit agencies and other clients, including:

- ▶ GTFS-based methods of schedule analysis used in dozens of transit network studies.
- ▶ Web-based, interactive transit trip planner and travel time isochrone tools for use in transit agencies public processes.
- ▶ Access and travel time analysis workflows based on OpenTripPlanner that allow direct before and after comparison of network redesign studies without the need to prepare a schedule.
- ▶ Numerous methods and visualizations used to understand patterns of transit ridership, speed and reliability.



Shreya Jain is a transit planner and data analyst at Jarrett Walker + Associates. Through her work on municipal planning, programs and infrastructure at the City of Portland, as well as her educational background, Shreya has developed broad skills in stakeholder engagement, plan development, data analysis, mapping and visual communication.

Education

Master of Urban & Regional Planning, Portland State University, 2020

Bachelor of Science, Environmental Science, Portland State University, 2017

Positions Held

- | | |
|-----------------|---|
| 2022 – present: | Senior Associate, Jarrett Walker + Associates |
| 2021 – 2021: | Associate, Kearns & West |
| 2019 – 2021: | Planning Assistant, Portland Bureau of Transportation |

Transit Network Planning & Analysis

Shreya has contributed to service planning, mapping, analysis, cost estimates, and public involvement efforts on several projects, including the following:

- ▶ Des Moines, IA, Reimagine DART Network Plan (Lead Analyst)
- ▶ Canby, OR, Transit Master Plan (Lead Analyst)
- ▶ Solano County, CA SolTrans Comprehensive Operational Analysis (Lead Analyst)
- ▶ Portland, OR, TriMet Forward Together Long Range Plan
- ▶ South Bend, IN, Connect Transit Comprehensive Operational Analysis
- ▶ Albuquerque, NM, ABQ RIDE Forward Network Plan
- ▶ Greensboro, NC, GoBORO Long Range Transit Plan

Cartography & Design

Shreya has contributed cartography and graphic design services for JWA projects including:

- ▶ Portland, OR, TriMet Forward Together Long Range Plan: Shreya worked on mapping efforts involving a significant expansion and redesign of service for TriMet.
- ▶ Santa Cruz, CA Reimagine METRO: Shreya supported the development of public-facing transit network maps and individual route maps for METRO's bus rider's guide.
- ▶ Wilsonville, OR SMART Transit Master Plan: Shreya led the development of planning maps and public-facing transit maps for this project.

Liz Marchalonis

Associate

JARRETT WALKER + ASSOCIATES



AGENDA ITEM NO. 3.

Liz provides cartography, data analysis and publication support for JWA’s transit network planning efforts. She brings her professional experience in the architecture industry, and an eye for detail and clear communication, to her work on behalf of JWA’s transit agency clients.

Education

GIS Certificate, Portland Community College, 2023

Bachelor of Architecture, University of Arizona College of Architecture, Planning and Landscape Architecture, 2004

Positions Held

2023 - Present	Associate, Jarrett Walker + Associates
2014 - 2021	Architectural Designer, WDP Project Management, Concept Development, Space Planning, Property Research, Commercial and Residential Code Research and Permitting, Custom Fabrication Drawing, 3-D Modeling and Rendering, Commercial Tenant Improvement

Transit Network Planning & Analysis

- ▶ Basin Transit SRTP | Morongo Basin, CA: Participation in public outreach events and on-site bus stop assessment. On-demand productivity and zone mapping.
- ▶ Pace ReVision Suburban Bus | NE Illinois: Design support and preparation of network alternatives report and creation of public survey.
- ▶ MARTA Bus Network Design | Atlanta, GA: Network design support and preparation of final reports and public outreach documents

Cartography & Design

- ▶ ATI | San Juan, Puerto Rico: Design and production of bilingual public-facing network and route maps.
- ▶ MARTA Bus Network Design | Atlanta, GA: Preparation of public-facing maps showing a proposed new network and analysis results
- ▶ Pace Suburban Bus, RTA | Northeastern Illinois: Mapping demographic and Census data and network cartography
- ▶ IVT | Imperial Valley CA: Maps of Census and Replica data for existing conditions report

Dennis Brooks

President

ABOUT

Dennis Brooks' considerable financial and mathematical abilities are coupled with his own highly organized style, enabling him to provide strong analytic products that are foundational to project efforts and shape project recommendations. He has been with AMMA for 19 years and brings considerable experience as technical assistance liaison for discretionary grant programs and analytical assessments of demand response programs. Mr. Brooks is effective in helping agencies navigate transit regulations and requirements, including for example, Zero Emission Bus rules in rural Calaveras and Tuolumne Counties and conduct of Transportation Development Act (TDA) triennial performance audits for five San Luis Obispo County agencies.

PROJECT EXPERIENCE

- **Short Range Transit Plan for Ventura County | Demand Response Lead.** Dennis leads the regional demand response analysis and countywide integration assessment effort for transit operations in the County of Ventura.
- **Butte County Association of Governments (BCAG): Non-Emergency Transportation Needs Assessment for Butte County | Co-Project Manager.** Dennis led this needs assessment with Valerie Mackintosh to identify NEMT needs and feasible solutions for this rural and small urban county. Recommendation included a suite of strategies to address rural and small urban medical transportation needs.
- **Placer County Transportation Planning Agency: South Placer Transit Information Center | Project Manager.** Dennis led an in-depth assessment of the South Placer Transit Information Center, demand response call reception and scheduling center to inform decisions in addressing rising operating costs and diminishing funding sources.
- **San Luis Obispo Council of Governments: Central Coast Rail Services Study | Route Scheduling and Logistics.** Dennis developed bus schedules and timetables for two intercity bus services over three projected timeframes, across multiple scenarios, to supplement anticipated increased coastal rail service between Salinas, Santa Barbara and the Central Valley.
- **Pomona Valley Transportation Authority: Technology Integration Assistance | Project Manager.** Ensured that three software systems of TransTrack, Ecolane and 3M were communicating effectively, sharing data through standardized protocols, and generating data to be reliably used for NTD reporting.



AGENDA ITEM NO. 3.

OTHER RELEVANT PROJECTS

San Bernardino County Transportation Authority (SBCTA): Transit and Specialized Transit Staff Support and Technical Assistance | Project Manager

Riverside County Transportation Commission: Transit Funding Handbook Development | Project Manager

EXPERTISE

- Technical Assistance and Grant Development
- Performance Reporting and Documentation
- Auditing and Functional Analyses
- Coordinated Planning and Outreach
- Operational Analyses and Short-Range Planning

EDUCATION

Associate Arts, Administration and Information Systems, Riverside City College

Associate Arts, Social and Behavioral Studies, Riverside City College

University of the Pacific's Transit and Paratransit Management Certificate program

Andrea Breault

Senior Planner

ABOUT

With eighteen years of comprehensive experience in transportation operations and planning, Andrea Breault has developed expertise in both the public and private sectors. Over the course of her career, Andrea has worked across a variety of transportation systems, contributing to the efficient and sustainable management of university shuttle and parking services, and fleet management. Specifically, Andrea served as Transportation Demand Management Supervisor for Princeton University, developing TDM programs to reduce traffic and emissions on campus; and then as Assistant Director of Parking and Transportation Services at Tufts University, where she managed parking operations and shuttle services throughout four campuses in Massachusetts.

In addition to her work in higher education transportation, Andrea has spent six years as Transportation Director for Cascades East Transit (CET), where she oversaw a fleet of 85 vehicles, a team of 70 employees, and lead the team through the COVID-19 pandemic. Her focus was on improving CET's demand response program, fixed-route transit, and grant management program. During this time, she helped design and implement innovative transit technology that cater to the needs of a wide range of communities, from urban areas to underserved regions. Her work in the public sector has focused on primarily meeting the needs of rural communities throughout Central Oregon, improving the customer experience, and ensuring sustainability through thoughtful planning and operations.

SELECTIVE PROJECT EXPERIENCE

- **Short Range Transit Plan for Ventura County | Integration Strategies Support** – Developed countywide demand response integration and implementation strategies for seven transit operations across Ventura County
- **Comprehensive Operational Analysis of Imperial Valley Transit | Demand Response Planning Consultant** - Currently leading the existing conditions analysis for demand response properties in rural Imperial County
- **Riverside County's Public Transit-Human Services Transportation Coordination Plan** | Developed demographics analyses, provider inventories, survey analysis and project strategies
- **Central Oregon's Council of Governments | Transportation Director** – Led Cascades East Transit's first Transit Master Plan and Mobility Hub Feasibility Study
- **Central Oregon's First Employer Vanpool Program | Transportation Director** – Collaborated with State DOT and local TMA to generate over 60 employer vanpools throughout Central Oregon
- **Tufts University Shuttle Program and Parking Services | Assistant Director of Transportation** – Developed safe and effective late-night student shuttle service across four university campuses
- **Princeton University's Transportation Demand Management Program | Coordinator**– Developed first TDM program to reduce parking and traffic throughout the campuses, as well as lower emissions and meet sustainability goals



EXPERTISE

- Demand response and fixed-route operations
- Grant writing
- Federal and State audit requirements
- Transit Technology
- Call Center/Dispatch Operations

EDUCATION

Masters in Urban and Regional Planning – Rutgers University

Bachelor of Science, Economics – University of Dayton



Elea Carey resume

Elea Carey

elea@transithappy.com

415-941-1477

Expertise

I am a longtime communications and marketing consultant with experience in launching new ideas and initiatives.

Education and Training

Master of Fine Arts in English, Pacific Lutheran University, 2008

Bachelor of Arts in English, San Francisco State University, 1989

Experience

Founder, Transit Happy, San Francisco (August 2020 to present)

I founded Transit Happy during the COVID 19 pandemic to support an industry I love. I work with transit agencies on creative campaigns and communications strategies to increase ridership and raise the profile of this vital public service.

Recent work

- San Bernardino County Transportation Authority: Creative development, media strategy, media buying and management to raise awareness and increase ridership for multiple transit agencies in America's largest county; developed and implemented comprehensive, network-wide conduct and awareness campaigns; promoted community engagement efforts.
- National Rural Transit Assistance Program: Revised and developed a complete online marketing education and implementation resource for National RTAP, the resource library for small urban and rural transit systems.
- Butte County Association of Governments: Developed and implemented stakeholder and community outreach campaigns and conducted onboard interviews. Launched an expanded public relations program to engage stakeholders and the community and to build ridership in Butte County, CA.
- El Dorado Transit: Researched and wrote three-year marketing plan as a part of 2023 SRTP update; conducted stakeholder outreach and community interviews.
- King County Metro Transit: Led two regional ad campaigns aimed at recruiting operators and tradespeople; led marketing for the launch of the first Metro BRT in nine years; worked with community engagement leads to develop marketing plans sensitive to community concerns.
- Bluegrass Community Action Partnership: Creative consultation, three-year

marketing plan, media strategy, and public relations for a rebrand and transit system upgrade.

Founder, Zero to 1, San Francisco (January 2014-August 2020)

I worked with tech startup founders in multiple verticals and with their investors.

Co-founder, Women's Startup Lab, Menlo Park (2013)

Having supported multiple male tech startup founders, I co-founded WSL to provide female entrepreneurs much-needed support and access to Silicon Valley investors.

Vice President of Content, Milsal+McCaull/Now Labs, San Francisco (2010-2013)

I worked with early-stage tech startup founders to bring their ideas to life and market them to investors and customers.

Founder, Milagro Marketing, Albuquerque (1996-1998)

I founded Milagro Marketing to produce bilingual communications materials with a team of subcontractors in translation and design.

Vice President, National Marketing Director, Towery Publishing, Memphis (1991-1996)

The youngest vice president in the history of this multi-faceted business publications group, I oversaw marketing and communications for 100 regional publications. Towery was one of the first digital publishing companies in the world and helped launch web development for clients in early 1995

Resume

SELENA BARLOW

Transit Marketing

www.transitmarketing.com



Expertise

Ms. Barlow has more than 30 years of experience marketing public transportation services. She works exclusively within the public transportation industry and has clients throughout the US. Additional details regarding her experience can be found at www.transitmarketing.com. Ms. Barlow's areas of expertise include:

- Marketing Plan Development
- Market Research
- Branding and System Identity Development
- Design and Production of Passenger Information Materials
- Creation of Promotional and Collateral Materials
- Development of General and Targeted Ridership Campaigns
- Community Involvement in Support of Transit Planning Efforts

Education and Training

Master of Business Administration, Concentration: Marketing, University of Arizona, May 1988

Bachelor of Science, School of Journalism, Major: Advertising, University of Florida, June 1977

Relevant Experience

Owner, Transit Marketing, (1988-present)

Provides marketing and market research consultation and services exclusively to public transportation agencies. Has worked for more than a hundred transit systems since 1988. Services include marketing plan development, market research coordination and analysis, community outreach and engagement, development of marketing programs and materials. Certified WBE.

Transit Marketing Instructor/Trainer (1988-present)

University of the Pacific, Transit/Paratransit Management Certificate Program, (1997- 2012)

CTAA, CalACT, New Mexico Public Transit Association, AzTA and other organizations (on-going)

Teaches a one day course in Community Transportation Marketing, as well as targeted courses in market research, passenger information tools and public speaking.

Chief of Marketing, Metro-Dade Transit Agency, Miami, FL (1985-87)

Headed a comprehensive marketing division which included advertising, promotion, public affairs, community services and passenger information branches. Responsible for all marketing activities for a tri-modal transit system (rail, bus and people-mover).

Director of Marketing, Sun Tran, Tucson, AZ (1982-85)

Responsible for all aspects of marketing for a 150-bus system, including advertising, promotion, market research, media relations, community outreach and customer service/information. Involved in short-range planning, development and implementation of new services and major capital projects.

Recent Transit Marketing Plans and Campaigns

- **City of Sedona, AZ (in progress)**

Participated in research and development of an implementation plan for a new transit system targeting tourists in Sedona. Developed marketing and branding plan and currently working with City of Sedona introduction of microtransit.

- **Verde Shuttle, Cottonwood, AZ**

Developed updated branding and marketing campaign for the Verde Shuttle which connects Cottonwood and Sedona. Campaign includes passenger information tools, print and radio advertising, a marketing toolkit for use by employers, promotional video and social media imagery.

- **Calaveras Connect, CA (2019-on-going)**

Subsequent to rebranding the transit system, developed a comprehensive passenger information program and promotional campaign to launch the identity. Continue to work with agency to provide on-going marketing support.

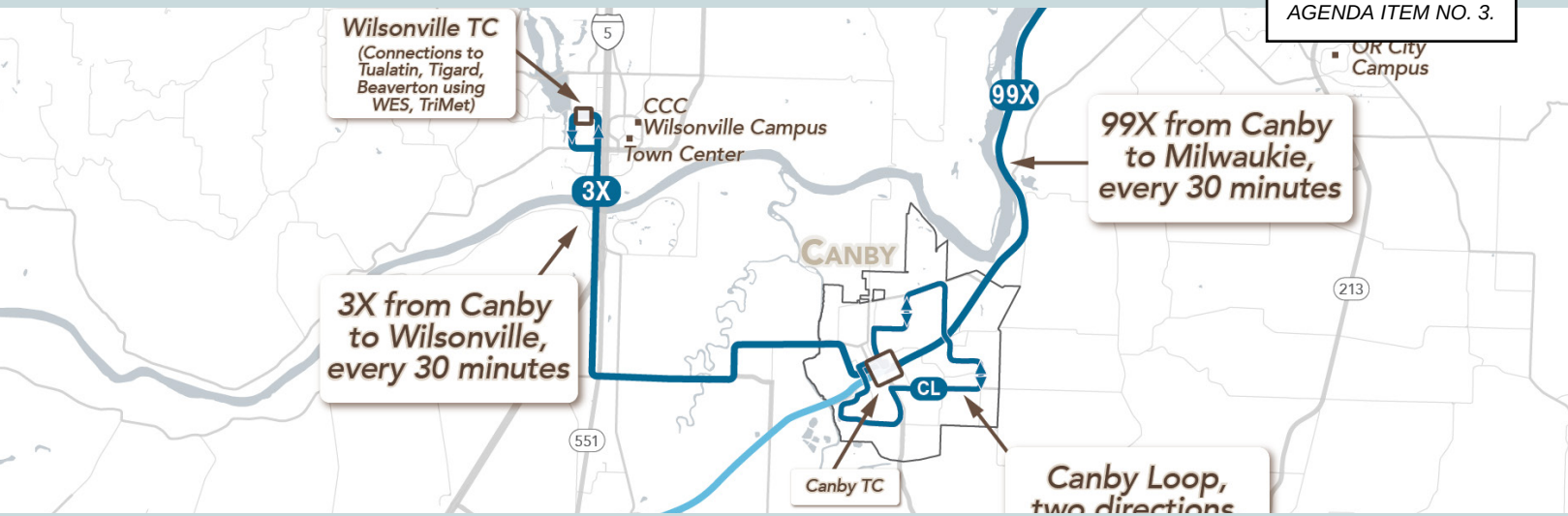
- **San Bernardino County Transportation Agency (2019)**

Design and implementation of ridership campaigns for four transit agencies in San Bernardino County – Victor Valley Transit Authority, Mountain Transit, Morongo Basin Transit Authority and Needles Area Transit. On-going work to facilitate collaborative marketing efforts by six transit agencies operating in San Bernardino County.

Sample Branding Projects

- CAT and MST, Concord, NH
- Calaveras Connect, San Andreas, CA
- Sedona Shuttle, Sedona, AZ
- El Dorado Transit, CA
- Stanislaus CTSA, CA
- Capital Transit, Helena, MT
- Kern Transit, Bakersfield, CA
- Sage Stage, Modoc County, CA
- Douglas Rides, Roseville, OR
- Mountain Transit. Big Bear, CA
- Durango Transit, Durango, CO
- e-tran, Elk Grove, CA

Firm Qualifications



Canby, Oregon

Canby - Transit Master Plan Update

Canby Area Transit (CAT) provides fixed-route and demand response transit service to the public within the Canby Urban Growth Boundary (UGB). CAT operates the 99X, a bus service along the Highway 99E corridor from Oregon City to Woodburn. The second fixed route is the Canby Loop, a circulator operating inside the Canby city limits with stops near schools, city facilities and businesses. In late 2023, CAT hired Jarrett Walker + Associates (JWA) to lead the consultant team on updating the Transit Master Plan (TMP).

JWA evaluated the existing conditions and transit planning choices facing Canby. The public was then asked for input on key transit trade-offs, such as: investment in local vs. regional service, increasing frequency vs. adding new routes, and more weekday service vs weekend service. JWA and Envirolssues utilized a blend of data-driven methods and public and stakeholder outreach to assess over arching issues with CAT service and the community's priorities for change. Various outreach methods were employed, included online and on-board public surveys, interviews with a wide range of stakeholder organizations, tabling events.

Based on the public input JWA developed a set of improvements and implementation phases to expand the local and regional destinations Canby residents can travel to within a reasonable amount of time:

- Maintaining the local coverage while extending hours Weekdays and Saturdays.
- Improving connections between Canby and neighboring cities: Wilsonville, Woodburn, and Oregon City.
- Improving travel times beyond CAT's service area by facilitating connections with TriMet.

The Transit Master Plan is completed and was adopted by the City Council by the end of November 2024.

In preparation for some service changes, JWA worked with the agency to design new public-facing network and route brochures for the public.

Status

TMP adoption in Nov 2024.

Cost

\$199,925 (total budget)
\$119,951 (JWA contribution)

Dates

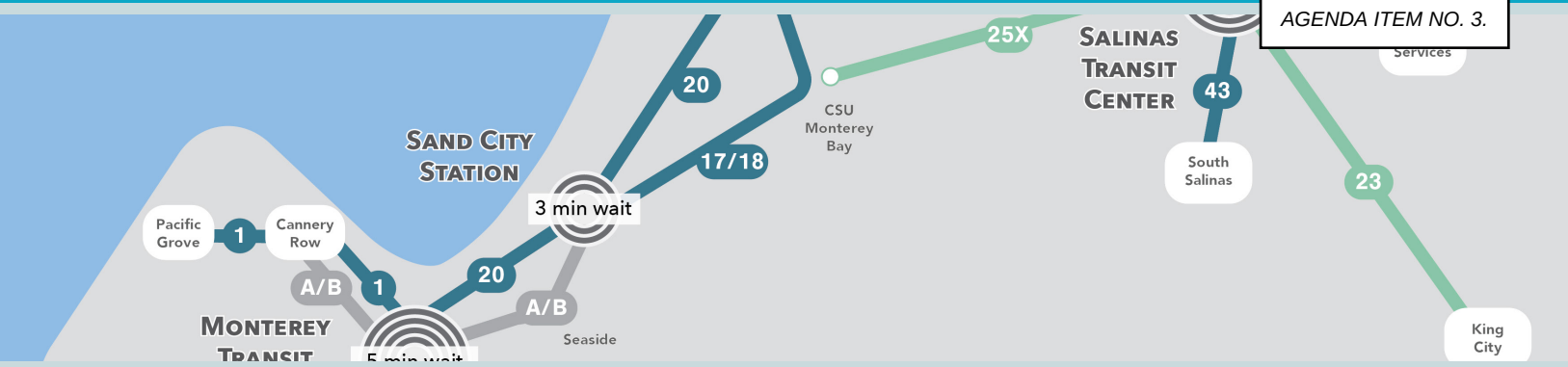
December 2023 - present

Key Staff

Michelle Poyourow, Lead Planner
Álvaro Caviedes, Project Manager
Shreya Jain, Lead Analyst

Reference

Todd Wood
Canby Area Transit
Transit, Fleet and IT Director
WoodT@canbyoregon.gov
(503) 266-0751



Monterey County, CA

MST Comprehensive Operational Analysis

In 2019 and 2020, Monterey-Salinas Transit (MST) experienced a series of setbacks. The U.S. Department of Defense, which had funded over 20% of fixed-route service, stopped doing so in 2019. This was followed in 2020 by the COVID-19 pandemic, which temporarily shut down much of the local civilian economy. These events compelled MST to reevaluate its network from the ground up for the first time in twenty years. MST hired Jarrett Walker + Associates (JWA) to lead the consultant team on this project.

JWA and its partners at AMMA Transit Planning and Dan Boyle & Associates used data-based approaches to identify big-picture issues and constraint, and led extensive outreach to understand the community's priorities. Outreach included focus groups with English- and Spanish-speaking riders, conversations with stakeholder organizations, and a phone survey of county residents.

The team used the information gathered to help MST focus on key issues like the increasing distance between new development and existing activity centers; inequitable distribution of service between different parts of the county, and simplifying an extremely complex network of mostly infrequent routes. JWA and MST then developed a Draft Network Plan that would significantly reduce rider travel times, by:

- Focusing on consistent all-day service patterns connecting many people and jobs, with minimal deviations.
- Maintaining coverage to more isolated low-income areas and key public service facilities.
- Shifting more service to Salinas and South County, growing areas that are mostly Latino and low-income.
- Creating a system of timed transfers enabling seamless cross-town and cross-county trips.

The Draft Network Plan received very positive community feedback, and required very few changes to become the Final Network Plan adopted by MST's Board of Directors in February 2022. The JWA team has since assisted MST with identifying new bus stop locations, proposing updated Title VI service standards, and developing customer-facing tools like an updated system map and a before vs. after trip comparison web tool.

Status

Final Plan Adopted, February 2022

Cost

\$349,033

Dates

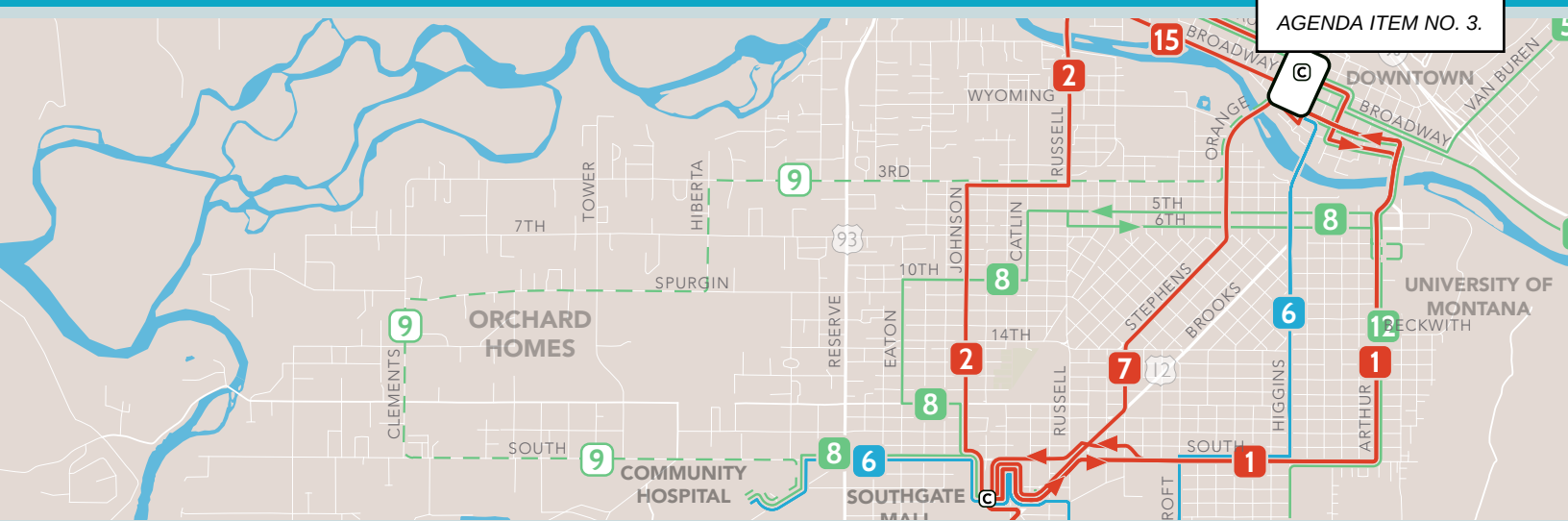
November 2020 - November 2022

Key Staff

Jarrett Walker, Lead Planner
Daniel Costantino, Project Manager
Álvaro Caviedes, Lead Analyst

Reference

Michelle Overmeyer
Monterey-Salinas Transit
Director of Planning & Innovation
movermeyer@mst.org
(831) 264-5877



Missoula, Montana

Strategic Transit Plan

In 2017, the Missoula Urban Transportation District (Mountain Line), hired JWA to develop a new Strategic Plan, including short- and long-range elements. Missoula is a small but fast-growing city in Montana and home to a major university.

Also in 2017, the City and MPO adopted an ambitious Long-Range Transportation Plan aiming to triple transit's mode share while cutting in half the percentage of trips made by driving by 2045.

The transit agency had recently completed several phases of its last transit plan, including investing in 15-minute all-day frequency on two core routes, longer evening hours of service and a fare-free program. Combined, these investments caused a 70 percent growth in ridership between 2015 and 2017. With that recent success under their belts, and ambitious new regional mode share goals, Mountain Line needed to refresh its blueprint for the future.

Working with local partner DJ&A and with Mountain Line staff, JWA led a planning process focused on public and stakeholder input. JWA facilitated two phases of public consultation including stakeholder workshops, web surveys and public meetings, to gather actionable input on service investment priorities.

JWA produced a detailed phasing plan for the implementation of a short-term network, and a long-term network that responds to zoning and planned growth. The Plan was adopted by the Missoula Urban Transportation District Board of Directors in August of 2018.

In 2020, Mountain Line used the Strategic Plan to create a clear and compelling ballot measure for voters, who voted 60% in favor of additional tax funding for transit.

Cost

\$151,834/ Team
\$140,824/ JWA

Dates

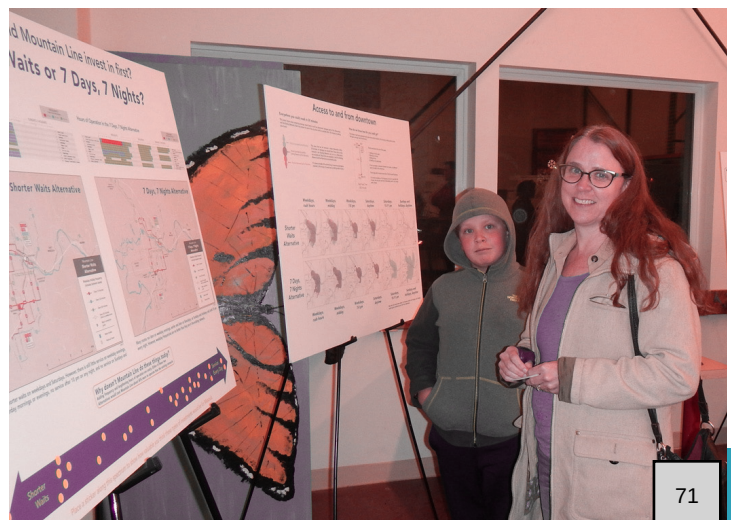
2017 – 2018

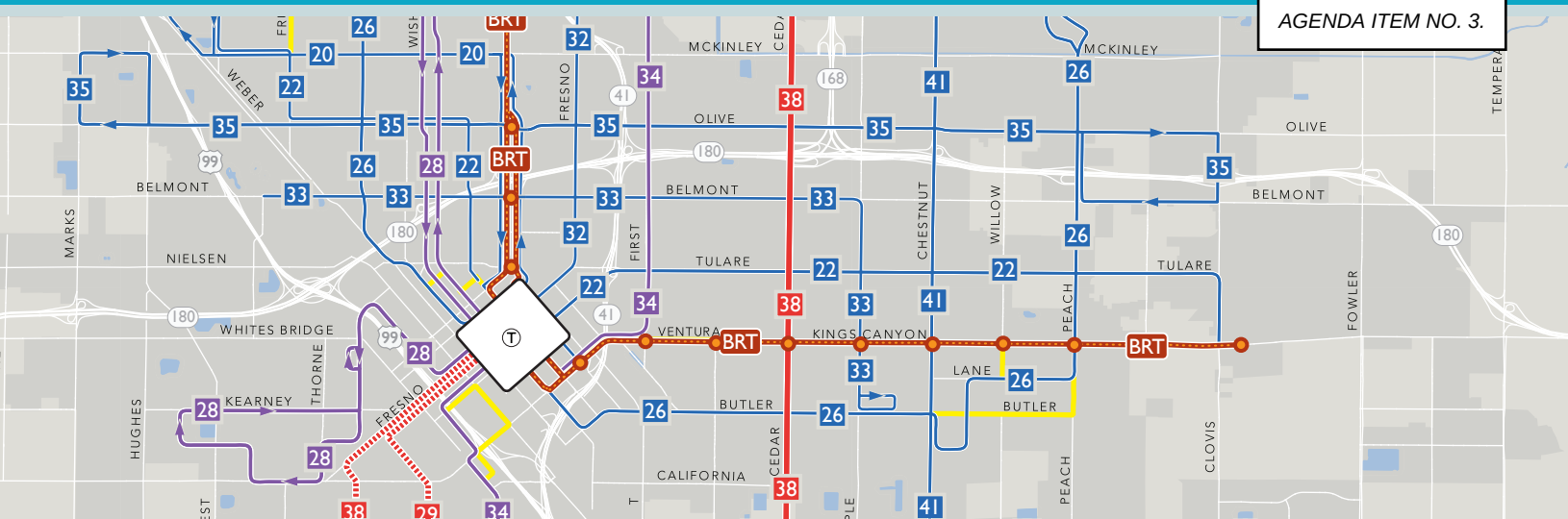
Key Staff

Michelle Poyourow, Project Manager
Jarrett Walker, Project Director
Daniel Costantino, Lead Planner
Evan Landman, Lead Analyst

Reference

Corey Aldridge
Then-CEO of Mountain Line
Now CEO of Santa Cruz Metro
caldridge@scmetro.org
406-370-9208





Fresno, California

FAX Strategic Transit Plan

Starting in 2013, Jarrett Walker + Associates supported Parsons Brinckerhoff in a Strategic Transit Plan for Fresno Area Express (FAX), the public transit operator of Fresno, CA. Fresno is a metro area of one million people in the agricultural heart of the state. Fresno achieves high transit ridership on a very minimal network.

JWA led all tasks pertaining to bus network design and policy, including stakeholder engagement. This included the development of several contrasting network scenarios showing how the network could look if designed to achieve different goals. Following public outreach and surveying on these scenarios, JWA led the development of a single draft service plan including several new high-frequency bus services. JWA also handled City Council presentations and numerous briefings with senior staff and elected officials.

After the original project completed the short-term network plan in 2015, JWA continued to assist FAX in refining these changes as part of a team led by VRPA Technologies. In this phase of work, JWA helped make subsequent adjustments to the plan, and conducted Title VI service equity analyses.

In 2018, FAX implemented the short-term network plan designed by JWA, alongside their first Bus Rapid Transit line.

Status

Implemented 2018.

Cost

\$85,000 (both contracts)

Dates

2013-2018

Key Staff

Jarrett Walker, Project Manager
Evan Landman, Lead Analyst

References

Bruce Rudd, City Manager
City of Fresno, Room 2064
2600 Fresno St., Fresno CA 93721
Bruce.Rudd@fresno.gov
(559) 621-7770

Fresno County Gap Analysis and Coordination Plan (2013-14)

Client: Fresno Area Express

2223 "G" Street, Fresno, CA 93706

Reference for Mobility Planners, Transit Marketing & AMMA Transit Planning

Jeff Long

(559) 621-1436

Jeff.Long@fresno.gov

Project Description:

Mobility Planners, a team consisting of Transit Marketing and AMMA Transit Planning, was contracted by FAX to conduct a countywide transit gap analysis, to quantify the needs of transportation for disadvantaged populations, and to update the County's Coordinated Public Transit-Human Services Transportation Plan. To accomplish this, our team conducted an extensive, multi-faceted market research and outreach effort that provided both qualitative and quantitative data on which to develop actionable coordination strategies. Elements of the data collection effort included:

- Demographic analysis of Fresno County residents with focus on older adults, persons with disabilities and persons of low-income.
- In-depth personal interviews with 45 stakeholders representing 28 organizations that work with transportation disadvantaged populations. The interviews collected information about needs, gaps in service, subsidized fares and specialized services being provided.
- An e-survey of social service providers that collected information from more than 600 front-line staff about the transportation habits and needs of their clients.
- An intercept survey of 573 individuals who are transportation disadvantaged due to age, disability or low-income.
- Focus groups with transportation disadvantaged populations, including Indigenous people, veterans, Spanish-speaking adults from rural communities, and low-income residents of target neighborhoods.
- Inventory of public transportation and human service agency transportation services.

The findings of the study were used to develop a set of objectives and targeted strategies for closing transportation gaps and enhancing mobility for residents throughout Fresno County. A Mobility Enhancement Workshop brought together 30 key stakeholders who had provided

On-Call Staff Support on Transit Programs and Functions

SBCTA, San Bernardino, CA Nancy Strickert, Transit Manager (909) 884-80276
NStrickert@GoSBCTA.com

AMMA has assisted SBCTA with its transit programs since 1991, providing on-call technical assistance and planning support to the Authority, to its two large urbanized area transit providers and three smaller rural systems, and to two dozen specialized transportation providers. Assistance includes: continuing technical support on transit, ADA, unmet transit needs hearing process; regional grant solicitation efforts; public outreach and engagement; transit operator financial reviews; and staffing PASTACC, the Public and Specialized Transportation Advisory and Coordination Council.

With the goal of improving mobility across the County, recent projects include:

- Conduct of a public safety/ sexual harassment outreach effort to identify strategies to improve riders' perception and experience of safety on public transit;
- 2026 & 2020 Update to the Coordinated Public Transit-Human Services Transportation Plan for San Bernardino County;
- Assessment, monitoring of operator revenues and expense, through TransTrack and recurring preparation of the San Bernardino County Quarterly Transportation Performance Report;
- 2023 and 2015 Needles Short Range Transit Plan Development;
- 2017 Needles Title VI Program Update and 2014 Program Development;
- Multiple 5310 grantees' Title VI Program technical assistance;
- Veterans Transportation and Community Living Initiative One Call/One-Click Project: Grant Development, Technical Support and Staffing the Steering Committee;
- Vanpool 5309 Discretionary Grant Coordination;
- Rural Operator Short Range Transit Plan updates
- Annual assistance in conducting the annual Transportation Development Act Unmet Transit Needs Public Hearings and supporting staff with all associated activities.
- Ongoing assistance in the administration of the Section 5310 capital grant program, overseeing SBCTA's hybrid urbanized area Call for Projects and supporting Caltrans rural areas Call for Projects; grant development assistance to nonprofit agencies and public operators as needed

Other on-call transit planning functions have included:

- Quarterly reports to document transit operating and functional performance, as well as ongoing initiatives to grow ridership in San Bernardino County
- Schedule assessments of Omnitrans' Ontario Airport to Metrolink shuttle and downtown San Bernardino circulator;
- Ridership growth campaigns in support of SBCTA's Multi-Modal Working Group on public campaigns and group projects;
- Victor Valley Corridor Commuter Services Feasibility Study Plan [staffing support role];
- Non-Emergency Medical Needs Study;
- Title VI Program Development and implementation assistance for SBCTA and San Bernardino County rural operators (MBTA and Needles Area Transit)
- Ongoing ADA technical assistance to ensure compliance, monitoring legal issues and any proposed regulatory changes for San Bernardino County rural operators.
- Ongoing staffing support to PASTACC [Public and Specialized Transportation Advisory and Coordination Council] quarterly meetings.

Santa Cruz METRO Reimagining Project (2023)

Client: Santa Cruz METRO

920 Pacific Ave, Santa Cruz, CA 95060

Reference: John Urgo, Santa Cruz METRO, jurgo@scmtd.com. (831) 420-2537

Project Description:

Selena Barlow, as an AMMA team member, served as Outreach Lead for this JWA project. An extensive outreach effort explored the needs of existing riders, the views and perceptions of stakeholders, and the desires of Santa Cruz County's diverse population. Selena planned and orchestrated the overall effort, was the facilitator for stakeholder groups and focus groups and led the survey effort. She also organized and oversaw the online public meetings that were conducted by JWA.

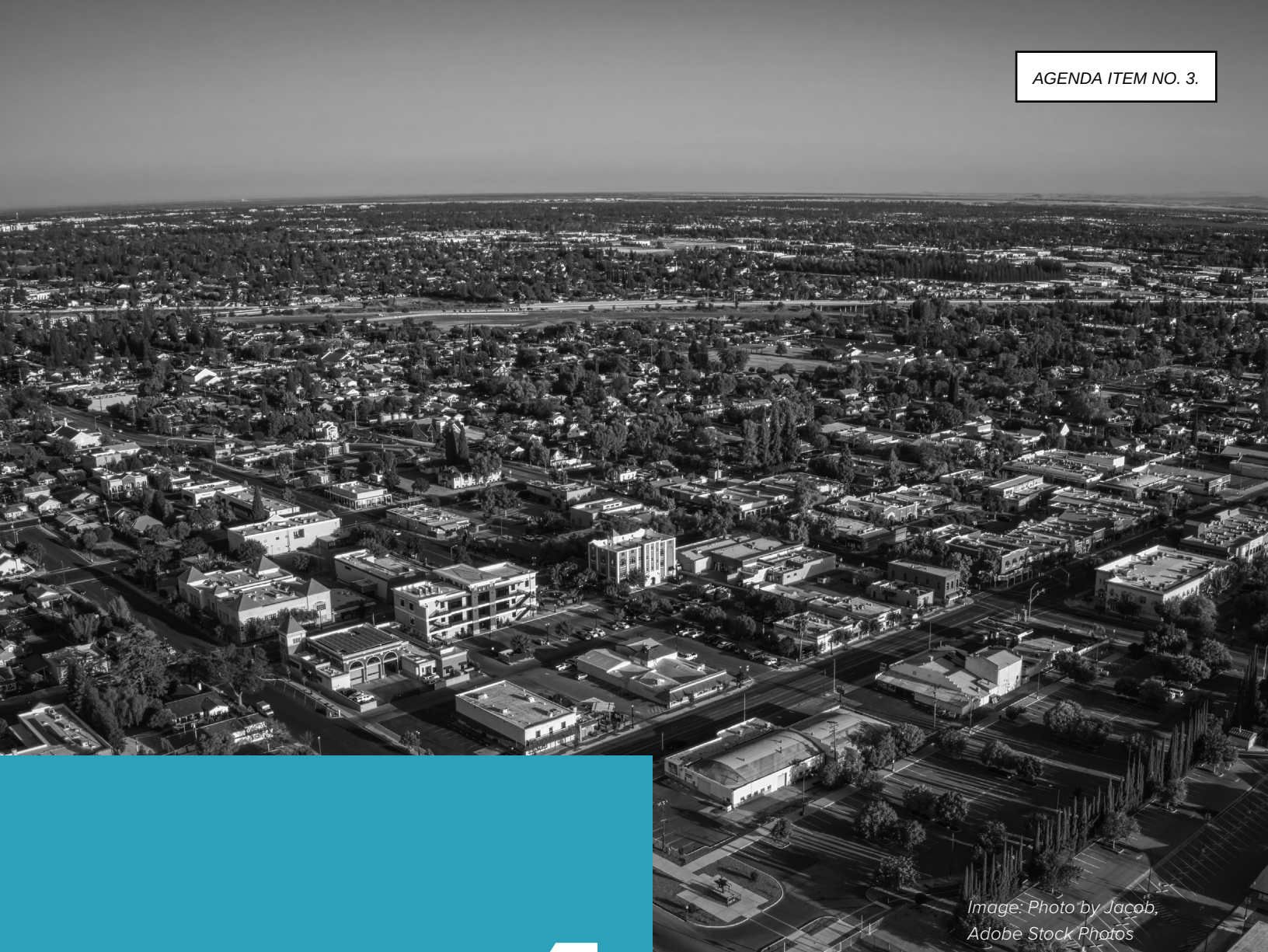
Phase 1 of the outreach effort was conducted at the start of the planning process to understand awareness and usage of, and satisfaction with existing services. This phase included:

- Stakeholder List Development: Extensive research by the outreach team produced a list of 100 stakeholders representing Social Services, Education, Medical Services, Employment, Advocacy, and Jurisdictions within Santa Cruz County.
- Stakeholder Groups: Nineteen small group discussions were held with stakeholders representing 33 organizations.
- Online Public Meeting: A community-wide public meeting was held to share early findings and invite further input. There were more than 75 participants.
- Rider E-Survey and Focus Groups: An e-survey of more than 600 riders was conducted and used to recruit focus groups of riders representing the diversity of METRO's user base. In addition, informal intercept-interviews were conducted at Transit Centers.

Phase 2 of the outreach effort was conducted to secure rider, stakeholder and public feedback on short-term alternatives for service changes. This phase included:

- Online Community Survey: The survey of 800 respondents was promoted via social media, stakeholder communications, news coverage and contacts with prior participants.
- Stakeholder Workshops: Alternatives were presented in detail and representatives of 20 organizations provided feedback.
- Rider Focus Groups. Riders from the original focus groups were invited back to review the alternatives and provide feedback.
- To increase participation by the Latinx community, targeted outreach was conducted at the Watsonville Farmers Market and Watsonville Night-Out Community Event.

In a third phase of outreach the project website and community-wide online public meetings were used to preview the draft mid-range plan and invite feedback from diverse audiences, including all prior participants in the outreach effort.



*Image: Photo by Jacob,
Adobe Stock Photos*

4

Project Approach and Work Plan

Project Understanding

Clovis Transit was awarded a Sustainable Transportation Planning grant by Caltrans for the creation and adoption of a Strategic Operations Plan (SOP) at a moment of great change, learning and opportunity:

- The pandemic has brought new awareness of which trips and workers are truly essential to the functioning of our economy. Meanwhile, some workers will be able to commute less, or not at all, therefore changing geographic and temporal patterns of demand for transportation.
- Policy shift to clean energy and emission reductions, moving towards zero emission vehicles/ New clean air regulations such as the California Air Resources Board Innovative Clean Transit.
- Better technologies for customers and agencies have made possible a revolution in demand response transit (“microtransit”) as well as car-, bike- and scooter-share services.

Our team of experienced planners can help Clovis Transit and its stakeholders think through the implications of these changes, and more.

Improving Air Quality

Goal #1 of the City of Clovis General Plan and this SOP is to improve air quality for the city, county, and region. Clovis Transit has already made significant progress toward this goal on the technology front, notably through the Zero-Emission Bus (ZEB) Rollout Plan and the Electrification Feasibility Study. These initiatives lay the foundation for a cleaner, zero-emission fleet that aligns with the city’s environmental objectives.

While electric buses reduce emissions per vehicle, there is another opportunity to improve air quality lies in reducing the number of cars on the road and that requires a useful and convenient transit service people want to use.

A useful transit system gives people a viable alternative to driving. It offers service that is frequent, direct, and reliable, connecting people

to jobs, education, healthcare, and daily needs. When transit is designed to be useful, more people choose to ride it, which in turn reduces car dependence and harmful emissions.

At JWA, we approach this challenge through a ridership-oriented lens. A ridership-oriented network focuses on high-frequency routes that serve densely populated or high-demand corridors. These routes are designed to be simple, fast, and easy to understand, traits that make them competitive with driving. In practice, this means investing more frequency and longer service hours where the most people are likely to ride.

But every transit system must also consider coverage. Coverage-oriented service spreads transit thinly across a larger area to ensure basic access, even in low-density or hard-to-serve areas. These routes may only run a few times a day, but they provide a lifeline to those who depend on transit the most, often older adults, people with disabilities, or those without access to a car.

This brings us to a key concept in transit planning: the ridership–coverage trade-off. Clovis, like most communities, does not have unlimited transit resources. Every dollar spent on high-frequency routes is a dollar not spent covering low-demand areas, and vice versa. Moving toward a ridership model can lead to significant gains in air quality and mode shift, but it also requires honest conversations about priorities and values.

Throughout this process, we will work closely with the City of Clovis Departments, Clovis Transit, and the community to explore these trade-offs transparently. We are proposing a first phase of engagement where we ask the stakeholders and the community:

- Where do we invest to generate the most riders?
- Should Clovis Transit cover areas that are not covered today, or offer more service to the areas that are currently served?

- Where do we maintain service to ensure equitable access?
- What are the implications of leaving some areas with little or no fixed-route service?

We will support these conversations with clear analysis, community engagement, and mapping tools that make these trade-offs easy to understand. Our goal is to help Clovis build a more useful, equitable, and sustainable transit system that supports both the city's climate goals and its residents' mobility needs.

Service Planning for a Zero-Emissions Fleet

As part of this planning effort, we will help Clovis Transit think strategically about where and how to add service in alignment with the goals of the Zero-Emission Bus (ZEB) Plan. Transitioning to a ZEB fleet introduces important operational constraints—particularly around charging requirements, range limitations, and vehicle availability. Fortunately, most of Clovis Transit's existing routes are relatively short, which makes them well-suited for electrification from a range and charging standpoint. However, these routes also operate at moderate-to-high frequency, which increases overall energy demand and requires thoughtful planning around charging schedules and vehicle rotation. If additional service is introduced, whether through longer spans, new routes, or increased frequency, we will consider how these changes affect the feasibility of a fully zero emission network. We will support the Clovis Transit in designing for service growth that is both useful and practical to operate with electric buses, identifying routes that are easier to transition due to their shorter lengths, layover opportunities, or proximity to charging infrastructure, and opportunities to look at other technologies like Hybrid.

Local Service

Clovis Transit plays a vital role in meeting the transportation needs of Clovis residents by offering local fixed-route and

demand-response services. Clovis Transit provides service coverage to most of the city, offering residents broad access to many destinations. Several segments of the routes operate as one-way loops, which can be an efficient way to serve low-density areas. However, there is an opportunity to enhance the rider experience by exploring options for more direct or bi-directional travel, especially for those making time-sensitive or return trips. Additionally, extending service hours, particularly on Saturdays and Sundays, could significantly improve access for evening workers, students with late classes, and residents running errands or enjoying leisure activities, helping to make transit a more flexible and reliable option for a wider range of needs.

One of the first steps we envision is engaging riders and stakeholders in a conversation about service span, particularly the need for later evening service and the potential for Sunday service. In addition to span, we will explore how well the current routes connect key destinations such as Sierra Vista Mall, Old Town Clovis, Clovis Community Medical Center, Fresno State University, and major residential neighborhoods. At the same time, we will invite the community to weigh in on the ridership vs. coverage tradeoff, an important conversation to have as the City's vision is pursuing better air quality. Should Clovis Transit focus on more

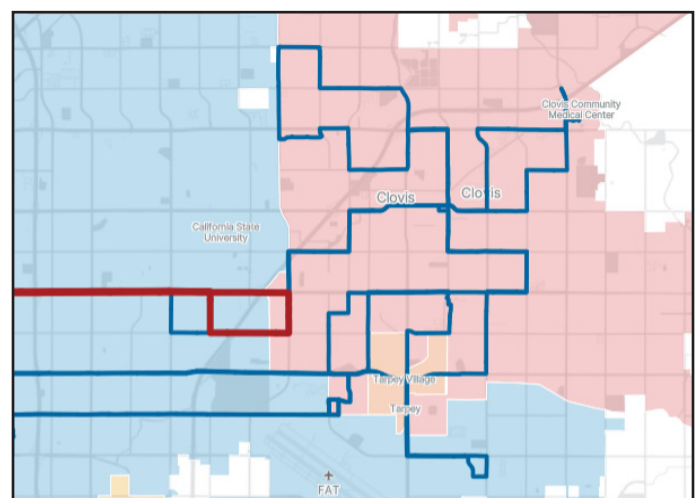


Figure 1: Clovis Transit Network, with FAX routes. Source: Remix

frequent service along major corridors where ridership is likely to be highest, or should it also provide coverage service to areas that currently have little or no access with fixed routes or demand response service, such as the eastern parts of the city? These are important questions that involve tradeoffs, and community input will be essential in identifying the right balance between frequency, reach, and equity.

Clovis Transit has also recently completed a route redesign, scheduled for implementation in late 2025. This work presents a strong foundation for long-range planning. As part of the SOP, our team can evaluate the projected equity and access benefits of the redesign, assess ridership potential, and identify how the redesign positions the agency for future growth

and how does it support long-term goals around sustainability, regional connectivity, and equitable access.

Regional Service

By working collaboratively with FAX and other regional providers (FCRTA), the SOP can help ensure seamless, multi modal access across city boundaries. There is an opportunity to enhance these regional connections through better transfer coordination, shared mobility hubs, and aligned service standards.

An essential part of this planning process will be engaging the public and key stakeholders in a collaborative and forward-looking dialogue about the role and priorities of local and

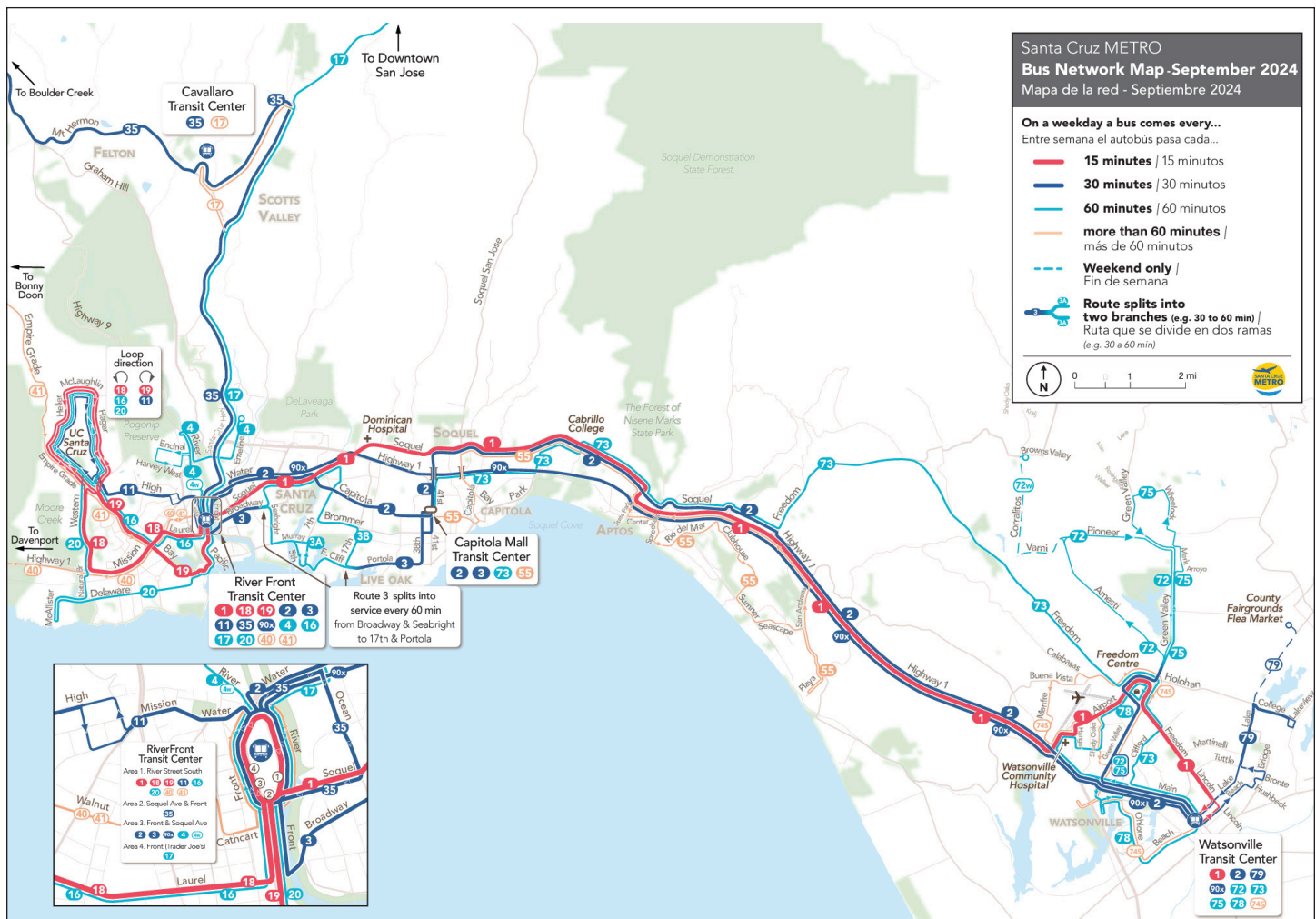


Figure 2: Map of the existing transit network in Santa Cruz, CA. Our network maps use color to highlight frequency so people can see network structure and the distribution of investment. Our maps are drawn manually to ensure clarity, so that client staff, decision makers, stakeholders and the public have the information necessary to understand exactly what changes to the transit network are proposed or illustrated in a network planning study.

regional transit service. While the Strategic Operations Plan will explore exciting long-term possibilities, it will also be grounded in realistic financial considerations, ensuring that recommended improvements are both impactful and achievable. With thoughtful community input, we'll explore how to prioritize local enhancements vs improved regional connectivity with smoother transfers to other agencies routes (FAX, FCRTA).

These conversations will help clarify which improvements are most valued by the community and which investments will deliver the greatest benefit. We will develop outreach tools that communicate service costs and operational implications in a transparent, accessible way, allowing the public to make informed choices. The insights gathered will directly inform the vision, goals, and strategies of the SOP, ensuring that the plan reflects the lived experiences and evolving mobility needs of Clovis residents while setting a clear and achievable direction for the next decade.

Putting it all together

The JWA approach to a project like this is distinctive because it focuses on narrative and conversation. What story does Clovis Transit want to tell about itself? What data and analysis are needed to support that story? What kind of conversation can be sparked amongst the public? And what questions need to be answered to continue the process of network improvement?

The team we have assembled for this project brings together some of the best in the business at crafting that sort of narrative, delivering an inclusive public process, and supporting it with a deep bench of technical expertise in transit planning, scheduling, and shared mobility.

Keys to Our Approach

Focus on the Public Conversation

JWA's approach to network planning is distinctive in that we place great importance on public engagement.

A technically sound plan is useless if it cannot be approved and implemented. Approval and implementation require agency officials and staff to persevere in the face of all the difficulties associated with change among the public and within the agency.

Without new resources, all changes, by definition, will disturb someone's existing travel patterns. When additional resources are available, it's easier to make improvements without impacting existing riders, but disruption is inevitable.

For an ambitious plan to be worth implementing, decision-makers and opinion leaders must believe that the benefits are worth it.

Our plans have been successful not just because we provide clear and thoughtful technical work, but because we are thinking about the approval and implementation challenges throughout the process. At every step we think about:

- When, during the process, public input can have the biggest impact on the plan.
- How to communicate the plan's big questions and ideas.
- What graphics and media can engage and enlighten a broad audience.
- How to build trust, understanding and confidence among transit stakeholders.

We've designed the proposed Work Plan to integrate all of the planning decisions with earnest public engagement. We'll do preliminary assessments of the transit system so that we anticipate the questions about the future that need to be answered, and identify difficulties Clovis Transit will need to overcome. This helps the riders and members of the public give us actionable input that directly affects the recommendations of the

Plan.

We seek to educate stakeholders so they become better advocates for their interests and better partners with their transit agency. We focus peoples' attention when they are able to have the most influence over the big decisions. We encourage actionable public input that represents the diversity of transit stakeholders.

Our team is united in our belief that planning is, fundamentally, a conversation with the public about values. The most important part of the Clovis Transit's Strategic Operations Plan (SOP) will be public engagement.

Earnest, purposeful, culturally-specific public engagement takes a lot of effort and skill, but it is worth it. It makes a Plan implementable and resilient over time, and it builds trust within a city and a community.

We would collaborate with Clovis Transit's staff to reach current riders, potential riders, and historically under-served communities in English and Spanish, delivering robust public involvement that centers on equity. In our communications, we will clearly explain challenges and opportunities, in ways that each audience can relate to, so that people can develop their own opinions about how Clovis Transit could be improved.

Clear, consistent communication throughout this process is key to building trust and momentum with the public, key stakeholders, and existing riders. Though talking points may change as the planning work progresses, the Plan's purpose and the public's valued input would remain a steady foundation.

We would also demonstrate to the public how their input was used to inform and shape the Plan. This feedback loop is key to ensuring continued engagement and excitement, and buy-in for the Plan's implementation.

We understand planning to be a process of co-creation. Rather than coming in as experts who write a plan, we see our role as that of conveners, facilitators, and curators. Planning processes are opportunities to strengthen existing community partnerships and relationships, as well as initiate or repair these relationships.

Through meaningful engagement rooted in partnership and collaboration, community leaders and individual residents understand their roles in seeing plans through to implementation. The burden cannot be on the service boards or the transit agency alone, and our process includes discovery of the integration and collaboration needed by all stakeholders to achieve their vision.

Learning from COVID

The COVID-19 pandemic has reshaped public participation and has disproportionately impacted lower-income, minority and immigrant communities. It also shone a light on how significantly our society depends on the successful commutes of lower-wage workers. This is already changing the debates in large and small cities alike about what type of transit service is truly essential, and a top priority for investment.

Throughout the pandemic, we have successfully used online open houses, virtual community meetings, webinars, videos, project websites, email updates, social media, digital surveys and other digital tools to engage the public in planning choices. While not everyone has a phone or a computer to use to join a virtual meeting, it is beneficial that more people can join in a virtual setting than in a physical one.

In addition to learning more public engagement techniques from COVID, there is also a great deal to learn about how people's travel has changed, both geographically and temporarily. We have been using anonymized data on cell phone movements to understand how travel demand has changed as remote work becomes more common, identify new travel patterns, and assess how service changes could make transit more useful in a community. It also gives us an idea of the change of trips before and after the pandemic, giving us an idea how many employees are working remotely and no longer commuting.

One big advantage of this data source, as a supplement to Census data on homes and jobs, is that it shows where people are traveling to shop, to visit friends, to reach services, and for all of the other trip purposes besides just the trips to school or work.

This was always important, even before the pandemic, when trips to work across the U.S. accounted for only about 20% of all trips. But the reduction in office commuting since COVID has given many agencies permission to shift their focus from traditional commutes to the wide variety of trips that people make, for which transit can be relevant, important, and even in some cases very efficient.

Explain at Every Step

We believe that **good explanation is good planning**. At every step, we ask not just “Is this right?” but also “How do we make this clear to an interested member of the public?”

To that end, we see data analysis as more than a technical tool. The best analyses help build narratives that clarify how different facts relate to each other, and what outcomes could change.

When we report data, we use compelling visuals that engage people's curiosity about how public transit works and help them truly understand the consequences of public transit design choices. These include maps and illustrations that can be understood at many levels of detail.

Our goal is not just to write a report or make a recommendation. We build understanding, so that when a final plan is adopted, stakeholders and elected officials understand the network, including what choices had to be made and what outcomes can be expected.

Modern Equity Measures

JWA has been responsible for pushing the envelope on measures of equity in transit plans. In the industry-wide conversations among academics, advocates, planners and civic leaders, we've contributed certain innovations that are now widespread.

In the past, limits of technology and data made it hard to measure with much sophistication how a transit proposal would affect a certain demographic group. Simple measures – like the percentage of people within 1/4 mile of some kind of transit service – had to suffice. Now, we use equity measures that speak to:

- How the Plan would affect existing riders.

- The diverse reasons people care about transit in their communities.
- Transit's potential to give people access to freedom and opportunities, beyond the trips they can make today.

An important element of some of these measures is **access**. For an individual person, access describes the places someone can go in a reasonable amount of time, and therefore the places they could work, study, visit, shop, or do anything that makes their life complete. For an entire city, access measures of a transit proposal can describe:

- How the average resident's access to jobs or schools would change, and how equitably those benefits would be shared among people of different races or incomes.
- Whether average travel times to jobs would change, and how travel times for lower-income residents to low- or medium-wage jobs would be affected.
- How easily zones intended for employment, retail or service use could be reached by residents, by transit, and by which residents.

Not only access but every measure we use includes equity. No benefit or impact of a transit change should be considered without an understanding of how it would affect Title VI-protected groups and other vulnerable people.

Back it up with top quality analysis, maps and visualization

At JWA we are constantly developing tools that help people see transit more clearly. A technological revolution has made it possible to show more transit data than ever before, and we use these tools to create visual displays that reward people's curiosity without overwhelming them.

Cartography. Without clear maps, it is hard to understand how a transit network works. Our maps are grounded in cartographic best practices, and refined through our work on service branding and customer information. Their immediate purpose is to support clear conversations about the plan, but they can often be re-purposed to create public-facing maps after the plan is finished. The map below is an example of some of the high-quality map design JWA routinely executes, both in planning studies and in standalone cartography projects.

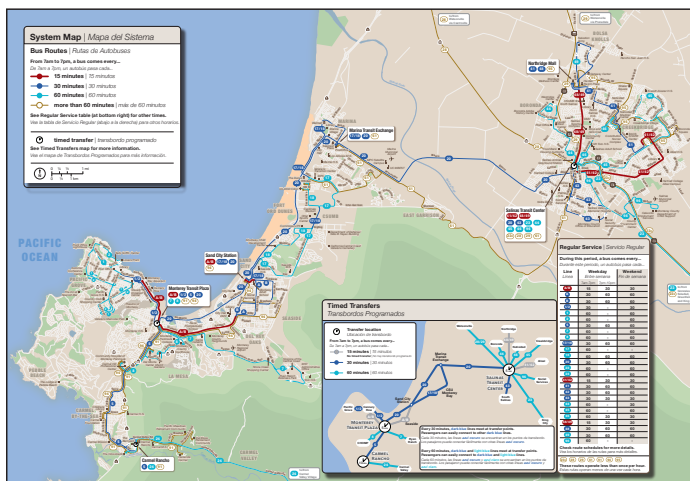


Figure 3: Public-facing map of the new Monterey-Salinas Transit Better Bus Network, released in late 2022 as part of preparations for implementation of the new network

Replica. We use Replica to understand recent travel patterns, remote workers' travel patterns, mode share, and traffic and demographic data. The understanding we gain from our use of this tool can inform the local and regional service ideas that we develop for the service implementation plans.

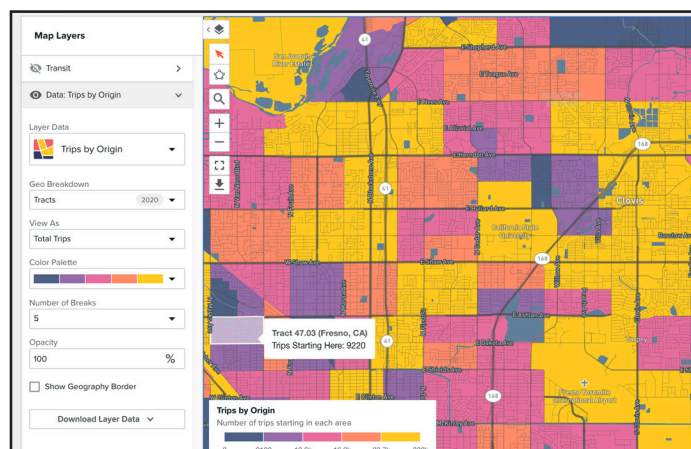


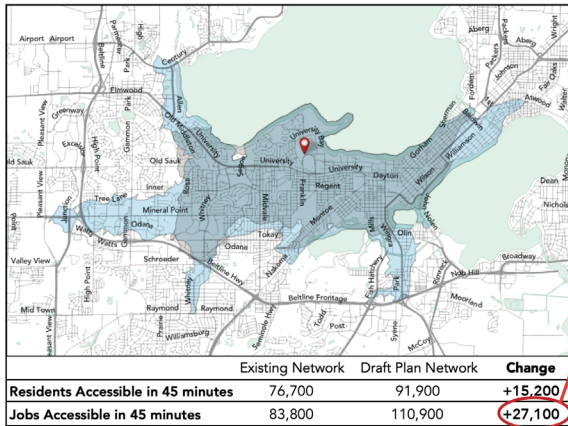
Figure 4: In this example, the Replica dashboard shows the number of trips between that started in Clovis on a typical day during the Fall of 2024. This data is going to be key to understand transit demand, commute trips, and remote work.

Isochrones. One of the best tools for explaining the mobility outcomes of a transit change is a map showing the area a person can go in a given amount of time, based on a known starting point. Isochrones show freedom in an immediate way: "here is where you can go." In doing this, isochrones measure how transit can contribute to opportunities, like going to a certain school or holding a certain job. And because isochrones can show the local benefits of a service change in any place, they can be responsive to a city councilor, neighborhood, or local business.

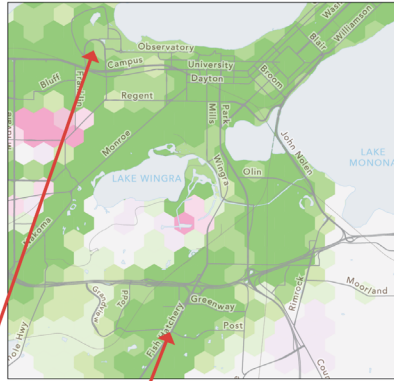
Access Analysis Mapping. We create our access analyses by generating isochrones for hundreds of points, and calculating how many people and jobs are in each isochrone, comparing existing service and the scenario under consideration. This tool highlights the trade-offs that come from pursuing different goals, and makes the big-picture consequences of any network change immediately visible.

Evaluating Change in Access to Destinations Citywide

Step 1: Access from specific locations



Step 2: Repeat throughout city



Step 3: Adjust for population density

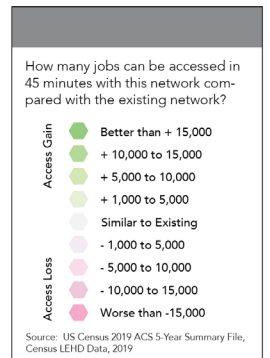
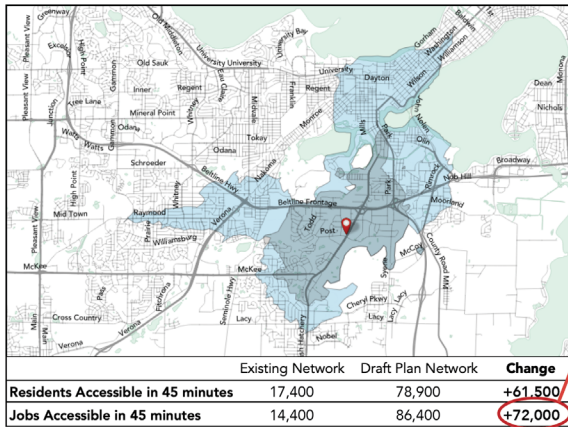
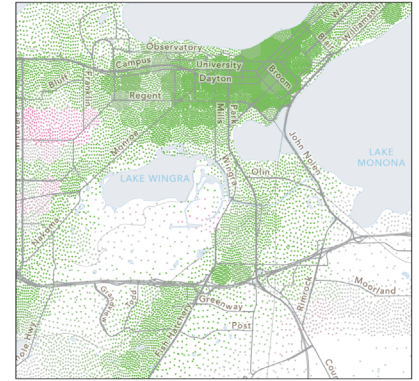


Figure 3: Isochrones (left, step 1) are maps of access outcomes starting from a particular location. By running isochrone analysis throughout a whole city or county, we can map the degree to which access to destinations improves or deteriorates in different areas (step 2). We can then weigh those outcomes against population density, to demonstrate whether more people are positively or negatively affected.

Interactive Data Viewers. We create certain visualizations specifically for the project and agency staff. This includes an interactive data viewer that we prepare in advance of each Core Design Retreat. The data viewer is an online mapping tool that allows project staff to visualize and overlay key data about the network, demographics, ridership, and other operating characteristics relevant to network design.

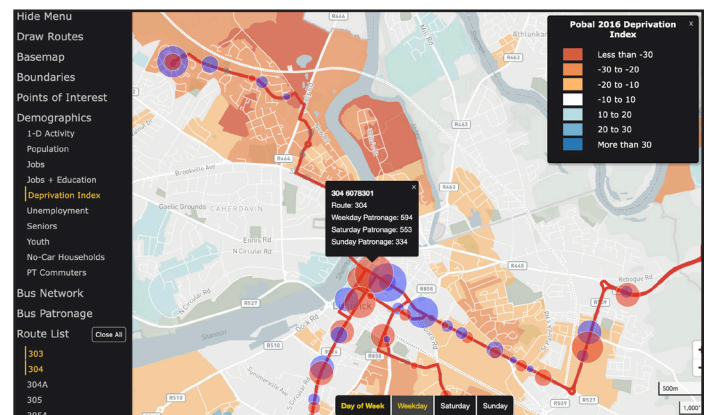


Figure 4: Screenshot from an Interactive data viewer prepared for network design in Limerick, Ireland. This shows an overlay of high-poverty areas (orange) with the paths and observed boardings on the two most frequent routes in current service.

Leverage Staff Expertise through Collaborative Design

How do we design the network concepts, and later, refine them into the implementation plans? **Whenever possible, JWA develops new network ideas in collaboration with local staff.** We call this a Core Design Retreat. This is an intensive workshop, where consultants and staff work together to develop network design ideas. We call this a “retreat” because it should feel like an event: calendars cleared, phones off, and no interruptions.

Planning collaboratively in a Core Design Retreat:

- Ensures we have the benefit of lived experience and knowledge, not just data.
- Ensures key staff are fully engaged in and have ownership of the ideas after we leave.
- Produces better network designs than any consultant could create on their own.

Who should attend this retreat? At minimum, Clovis Transit planning staff and people familiar with operations and scheduling, as well as staff engaged in the planning and design of Clovis Transit’s rapid transit program and approach to shared mobility. We also recommend inviting land use and traffic staff. These groups can add insights about their own plans and learn how the transit plan’s success depends on matters under their control.

JWA puts a lot of thought and work into the design and preparation for these retreats. Crucial data will be carefully deployed on basemaps and in our online data viewer. Google Maps and Street View are also consulted whenever the group needs to see a particular street or intersection.

While they require a big investment of valuable staff time, **Core Design Retreats result in durable ideas that staff can own and explain and have a better chance of political and organizational acceptance.** Agency staff sometimes tell us that the Retreat was one of the most rewarding experiences of their transit career.

Not everyone can afford the time, however. That’s why each retreat day ends with a “4 pm check-in.” This is a time when a larger group of



Figure 5: A Core Design Retreat we held in Sacramento. JWA's collaborative workshops can bring together transit agency and city staff, as well as neighboring jurisdictions and other key stakeholders at critical points in the design process.

invited professionals and agency executives can view the work in progress and can comment while it is still easy to revise.

While lots of tweaking and revision is common after the rush of the Core Design Retreat, we have found in every case that developing the bulk of the network concept or plan collaboratively, with many people involved, results in a better product reflecting that collective knowledge and expertise.

Work Plan

Task 0. Project Management

Project Management Plan

Before the project kickoff, JWA will develop a draft Project Management Plan (PMP) with milestones and deliverables. The PMP establishes the overall workplan, organizational chart, staff assignments and responsibilities, task lists and descriptions, and schedule. This plan will be refined during kickoff, and updated throughout the project if changes are needed. We are estimating we can accomplish this work in 16 months starting in August 18th (assuming contract is ready in August 15th as stipulated in the pre bid meeting).

Project Virtual Kickoff

JWA organizes the kickoff as a series of meetings over one to two days, covering topics critical to carrying out the project.

Some of the most important discussions and decisions we would address at kickoff include:

- Reviewing the Project Management Plan with staff and refining it to fit the project schedule, especially regarding key decision dates involving policymakers (e.g., Board of Directors).
- Clarifying overall goals of the project and how this project can integrate with other relevant studies and planning initiatives; identifying the main challenges facing Clovis Transit in their service area.
- Discussing the objectives and key elements of the Public and Internal Outreach and Engagement Plans.
- Establishing a schedule for bi-weekly project-management calls throughout the project.
- Establishing data needs and channels of communications between agency and consultant technical staff.

We expect each meeting during the kickoff would include consultant staff relevant to that meeting. JWA's Project Manager would likely attend all meetings, while other JWA staff would

attend meetings relevant to their topics.

We are proposing to have this meeting virtually, to save resources for in-person events, for a field visit and in person public engagement, soon after the kick off meeting.

Ongoing Project Management

Following kickoff, we plan on holding a project management call every two weeks for the anticipated 16-month duration of the project. This meeting would be consistently attended by JWA's Project Manager, with other consultant team staff attending as needed. JWA will also provide agenda and meeting materials to attendees before the meeting and summary notes after the meeting.

Project Status

JWA will provide monthly progress reports as part of its regular invoicing. These invoices will include a record of hours worked by team member, direct expenses, subcontractor costs, as well as a table tracking the amounts spent and budgeted for each task. In addition, the JWA Project Manager will include a progress report as part of the invoice that provides a written description of the work JWA and the consultant team engaged in during the period of the invoice.

Deliverables for Task 0

- Kickoff meeting
- Refined Project Management Plan and Schedule
- Bi weekly update meetings
- Monthly project status as part of the invoice

Task 1. Review Existing Conditions

Immediately following the kickoff meeting and establishment of the Project Management Plan, and in preparation for asking the community to help guide this SOP, we will educate ourselves about existing conditions for Clovis Transit

current service and markets, and what choices most need to be addressed in this process.

JWA's approach to this task is about more than just offering a tour of the relevant information about the existing system; instead, we will use Task 1 to explain how the travel market context and existing system set up the network planning trade-offs that will be presented to the public and stakeholders.

By visualizing and explaining the strengths, weaknesses, opportunities and challenges present in the existing system (and later in the 2026 redesign network), and understanding of service performance at the route and network levels, we can create a report that informs the remainder of the project and serves as an important resource for the project team, decision makers, and the public.

Our goal with this type of document is to provide a deep but accessible narrative that helps people understand where Clovis Transit is today, how it got there, and what decisions it will face in the near future as it carries out service planning.

Current Service Network

One of the most important goals of this task is to develop a detailed assessment of the current state of the network. The JWA team will analyze a wide range of available data on Clovis Transit routes to support a narrative that explains the current design of the system, its strengths, and any challenges or opportunities to make improvements that have the potential to benefit riders or the agency.

One challenge we anticipate in analyzing the transit network is that Clovis Transit is planning to implement a major redesign by the end of 2025. As a result, there will be limited data available on ridership and productivity for the new system. We propose to analyze the existing network service, usefulness and performance during the first months of this project. We are also including in our timeline 5 to 6 months of data collection on the redesigned routes to analyze, just before we begin developing ideas for the SOP's 10-year project horizon.

This assessment will encompass at least the following avenues of inquiry into the current

system:

- **Route-by-Route Performance.** Analysis of ridership, productivity, frequency, connectivity, and usability of Clovis Transit routes. This will include insights gained at the network, route-by-route and stop level. Exact paths of investigation will be defined through data exploration and in conversation with staff during kickoff and in subsequent meetings. JWA will develop a route profile document summarizing the transit performance indicators.
- **Operational Analysis.** Review of available speed, on-time-performance, and reliability data. Identification and analysis of relevant issues. We will also analyze how Clovis Transit is connecting to other bus networks, and how easy rider transfers are between systems.
- **Proximity and Access Analysis.** One of the most powerful tools to evaluate the performance of the existing network and new network concepts is access analysis. Access analysis refers to methods that help us understand where people can go on transit, which jobs are within reach, which educational opportunities they can access, what range of choices they can use transit to reach in terms of shopping, medical and other destinations. We will conduct an access analysis that will set the baseline for the mobility outcomes the existing network delivers for people in the service area at various time horizons (e.g., 45 or 60 minutes), broken down for different areas and ethnic, racial or socioeconomic groups. In Task 6 we will then compare outcomes with the Network developed in the Draft Plan to those produced by the existing system.
- **Budget Analysis.** During Task 1, we will schedule meetings with relevant staff to begin to establish a clearer sense of the future operating resources likely to be available for SOP 10 year horizon. We will review all available information and projections to date on how key cost drivers are changing in the post-COVID period, and ultimately propose a "design budget" that represents the total amount of service that should be

allocated in the Draft Plan process.

This task will also involve visiting the city and riding transit there, and interviewing Clovis Transit staff (planners, schedulers, drivers). We will pay attention to both local and regional service, including the connections made among the transit providers in other cities. We will use up-to-date information about services and connections where all of these services touch one another (whether they make a good connection or not!).

Travel Market Assessment and Demographic and Socioeconomic Profiles

Any transit planning project must begin with a clear understanding of the existing context of travel demand and market potential for transit. In Task 1, we will bring together a wide array of data to provide a multifaceted account of Clovis Transit current and potential market. This will include:

- Analysis of existing 2020 Census and 2024 ACS demographic and socioeconomic data. As the only public, comprehensive data source for the entire US, our travel market assessment always begins with the production of a clear set of maps highlighting key demographic factors, including population density, race and ethnicity, commuting data, income and poverty, and language proficiency. Census helps set a baseline that we can then enrich and extend as we integrate other sources.
- Analysis of all existing applicable data available on Clovis Transit customers, including any available analyses and surveying.
- Mapping and analysis of access to key transit destinations, including major commercial, medical, and educational facilities.
- Analysis on how travel demand has changed as remote work becomes more common. We will use Replica data to understand the following items but not limited to: travel patterns by mode and time of day, origin and destination flow maps, travel purposes, and local vs. regional mobility.

- JWA with Clovis Transit will reach out to other City departments to gather plans and data related to how the City will grow in the future. The existing conditions phase would also include an assessment of all relevant data on future land use and travel flows information. This would include mapping and other visualizations showing where demand is expected to change due to the City's expected growth, and new locations for new residential and commercial developments, which would serve as an important guide for the development of the SOP network.

We will also publish an [online, interactive reference map](#), as a tool for consultants and staff and, if desired, for use by the public.

Once we have improved the Existing Conditions Report based on staff comments and corrections, we will adapt the content to the project website and prepare the report for the public. Some of the information in the report, and the key choices we establish with Clovis Transit staff, will guide our development of the surveys and other public engagement tools.

A sample existing conditions report can be found in the Appendix, page 64. This report illustrates the analysis and narrative we use to communicate to stakeholders and the community.

Deliverables for Task 1

- Analyses of existing conditions as described above.
- An online map showing demographic, land use and transit data.
- An internal-draft Existing Conditions Report, and a final draft for publication.
- Trip # 1: Field Trip (plus activities Task 4 and 5)

Task 2. Research and Analysis

The SOP is not a blank-slate approach to service plan development. Instead, it rests on a deep framework of past plans and processes. Task 2 is an opportunity to review these documents and identify any major themes or mandates that should inform Clovis Transit's long-term planning.

In Task 2, JWA will identify and review relevant planning documents at the federal, state, regional and local levels, for guidance on key directive, policy priorities and expectations applicable to Clovis Transit.

As part of this process, JWA will also identify and highlight any federal, state, or county policies that may conflict with local policies and guidance documents in the City of Clovis. Identifying these potential policy misalignments early will help clarify where adjustments or coordination may be necessary to ensure consistency across planning frameworks. This step will be particularly valuable in preparing for the visioning and goal-setting phase, as it will allow the project team and stakeholders to address any conflicts proactively and establish a foundation of aligned policy direction before moving forward with long-term strategies.

JWA will highlight sections relevant to service planning, capital improvements, performance metrics, environmental considerations, and funding strategies and prepare a written summary that synthesizes the key findings from each document. We will submit the draft research summary to Clovis Transit staff for feedback and incorporate revisions and finalize the deliverable for internal use or future planning documents.

Deliverables for Task 2

- Research Summary on planning documents with noted reference sections and expectations
- This summary will be included as a chapter in the Existing Conditions Report

Task 3. Visioning Process

After the existing conditions report is ready, and we have heard from the public, stakeholders and City leaders about their priorities for service improvements, we will present that input to Clovis Transit staff and start a discussion about how the service improvements can reflect those priorities. JWA will start discussing with staff the vision, goals and strategies for the transition of Clovis Transit into a new generation of transit

JWA will meet with Clovis Transit staff to present

the key takeaways from the Existing Conditions Report and the first phase of public engagement. This discussion will focus on how these findings can inform the development of a shared vision to guide the SOP. AMMA will participate in these meetings to help translate public feedback into actionable goals and strategies that reflect community needs and priorities.

In parallel, JWA will conduct separate meetings with staff from other City departments—including Planning and Development, Public Utilities, and Housing and Facilities—to gather input on the draft vision, goals, and strategies. These cross-departmental conversations will ensure the SOP is aligned with broader City priorities and initiatives. We also recommend inviting City staff to participate in the first stakeholder workshop (as described in Task 4). This workshop will serve as an opportunity for internal stakeholders to gain a deeper understanding of transit operations, challenges, and trade-offs faced by Clovis Transit.

Once the vision, goals, strategies, and core principles of the SOP have been established, we propose hosting a collaborative workshop (we call it Core Design) with Clovis Transit staff and key stakeholders to co-develop a set of network service improvements. These improvements will reflect the SOP vision and help guide the agency's service investments over the next 10 years.

During this phase, we recommend working closely with Clovis Transit to define the scale and nature of future service growth, including potential expansion of service hours, days of operation, and the modification or addition of routes. This process can be carried out in one in-depth, in-person session where routes and service concepts are sketched collaboratively, or through a series of rapid virtual iterations where ideas are refined over multiple Zoom meetings. We will coordinate with Clovis Transit to determine the level of future investment being considered for fixed-route service and tailor our planning process accordingly. After the end of the Core Design Day, we recommend inviting City leaders, key stakeholders, planners from other agencies e.g. FAX, Fresno County RTA) to the check in hour at 4 pm to learn about the changes we are proposing and gather any relevant feedback.

After developing the service recommendations, we will map and analyze them. Our analysis will measure impacts and improvements for all residents and workers, as well as for existing riders, lower-income residents, minority residents, seniors, young people and local businesses.

We propose to pay particular attention to the following measures:

- Proximity. Residents, jobs and key destinations within walking distance of various kinds of service, including low-income and minority residents.
- Changes in the number of people who can access key destinations.
- Analysis of overall access change by geography, and by demographic group.
- Equity, i.e., who and where would be advantaged or disadvantaged compared to existing service, and how that relates to patterns of income.
- Example Trips. Illustrations showing how Clovis residents and workers would use the conceptual networks compared to the existing network.

Deliverables for Task 3

- Vision, Goals and Strategies for the SOP
- Meetings with City departments to gather feedback about the Vision, Goals and Strategies
- Core Design Workshop
- SOP 10 Year Network and service improvements
- Equity and Performance Analysis of 10 Year Network
- Trip # 2: Core Design

Task 4. Stakeholder Committee

In addition to technical network planning, JWA excels at engaging the public and stakeholders, in ways that provide policy-makers with actionable feedback in setting policy goals.

Our public and stakeholder involvement

processes don't just generate competing "wish lists" from constituent groups that we, or our clients, have to reconcile. Instead, they generate thoughtful public input on the real, hard choices that transit agencies must make.

We propose to conduct the stakeholder engagement in three phases:

Phase 1

At the beginning of the project, JWA, AMMA and Clovis Transit will agree on the stakeholders that will be involved from start to finish of the project through scheduled meetings.

The first meeting we would like to hold is an intensive half-day or evening workshop in January 2026 with a group of people chosen by Clovis Transit and your trusted partners who represent key organizations with a stake in transit and/or an important role to play in the public conversation about the SOP. This workshop would feature a fun and interactive Transit board game so participants can develop an intuitive sense of how transit planning works, while also presenting the ways in which the Productivity/Coverage trade-off might express itself concretely in the City of Clovis. This workshop will also include live polling, a briefing presentation by the consultants, and discussions among stakeholders. During this workshop we would also like to invite City staff from other departments as their involvement since phase 1 will be key throughout the whole project.

The AMMA team will facilitate meeting logistics including securing location and room rental (with Clovis Transit guidance); make arrangements for set-up and breakdown, refreshments, food, and audio-visual needs. The Clovis Transit Project Manager must approve the meeting logistics, meeting format, subject matter, our team member attendance, and presentation materials prior to finalization of the meetings. We will produce sign-in sheets, agendas, comment cards, meeting displays, and assist with content and design, as directed, of the PowerPoint presentation.

Phase 2

JWA and AMMA will host a virtual stakeholder presentation to share and discuss the vision, goals, and strategies identified in Task 3. The

presentation will also highlight key findings from the Existing Conditions Report (Task 1) and summarize community input gathered during Phase 1 of Task 5. In addition to sharing these updates, the session will provide an opportunity for stakeholders to offer feedback and insights before development of the Draft Plan begins. This engagement will help ensure the plan reflects both technical analysis and community and stakeholder priorities.

Phase 3

Finally, once the Draft Plan is complete, JWA and AMMA will host a final virtual meeting with stakeholders to present its key elements, including proposed service strategies, implementation timelines, and funding considerations. This meeting will serve as a critical checkpoint to ensure the plan aligns with stakeholder expectations and community needs. Stakeholders will have the opportunity to provide feedback, ask questions, and suggest refinements before the plan is finalized. Input gathered during this session will be incorporated, as appropriate, into the plan before it is formally presented to the Clovis Transit Board for review and adoption.

Deliverables for Task 4

- Stakeholder list
- Invitations to events
- Event #1 Stakeholder in person workshop
- Event #2 Vision, goals and strategies virtual presentation
- Event #2 Draft Plan virtual presentation
- Agendas, PowerPoint Presentations and meeting minutes and summaries for the three stakeholder events.
- Trip # 1: Stakeholder workshop (plus activities Task 1 and 5)

Task 5. Community Outreach and Engagement

AMMA will lead our engagement efforts and will also be integrating into the goal-setting and service-planning steps that follow. Public

engagement will be divided into two main phases:

- Phase 1: Informing the public of this process to the public, and listening to the community about travel needs
- Phase 2: Outreach on the Draft Plan

JWA will shape the overall conversation with the public and foster the conversations needed to gather actionable input. Since we will work closely with AMMA, everything we hear from the public through surveys, tabling events, workshops, interviews, and other outreach efforts will feed directly into our service planning process.

JWA has proposed a Hispanic project manager (Álvaro) who can perform work in both English and Spanish, without the need to relay communication through a translator.

We know that many of our public engagement successes will be thanks to local organizations who are already knowledgeable, connected and trusted in the community. If we can get a fast start we may, for example, be able to lean on some of these organizations to allow us to do outreach at their events. The Library and schools may also be helpful organizations and good venues for reaching diverse residents who care about transit.

Phase 1

During this phase, we will run several activities to inform the community about this project and also use both on-board and online surveys to understand who is currently using the Clovis Transit system and to garner feedback on community priorities related to transit service. Throughout this phase of engagement we will listen to the community about what is important to them, what currently adds value and what could add value to Clovis Transit service. This is the time when we would ask them about the trade offs of more ridership service that aligns with the City's goals of reducing harmful emissions, vs adding coverage service in more areas with limited service.

We will work with the Clovis Transit team to conduct an initial assessment of audiences, to plan and design engagement based on Clovis' unique profile, preferences and expectations.

Understanding our audience is critical to developing engagement that will meet your objectives, reach a broad range of riders and community members, solicit meaningful and inclusive feedback, and inform your decision-making.

At the kickoff meeting, AMMA will start developing an Engagement Plan that emphasizes equity. They will establish clear public involvement goals, opportunities for engagement, key messages and guidelines for how consultants and Clovis Transit will incorporate public input into the new SOP.

In this phase, AMMA, with support from JWA, will develop a community survey to be distributed both online and in print, in English and Spanish, ensuring accessibility to a broad cross-section of Clovis residents. The survey will be administered online, on-board routes, at the first pop-up event, and distributed through Clovis Transit and partner community organizations to increase reach and response rates.

AMMA will conduct a pop-up event in a locations with a diverse range of potential participants, potential options are:

- Clovis Transit Center
- Clovis Regional Library and the Clovis Civic Center
- Clovis Community College
- Saturday morning Farmers' Market
- WalktoberFest Oct 19
- Spooktacular Oct 26
- Old Town Flea Nov 1-2
- Two-Cities Marathon Nov 3

In addition to the pop-up, AMMA and JWA will either attend an existing community event or host a dedicated open house. Whenever possible, we recommend aligning with an existing community event—such as a farmer's market, neighborhood festival, or school function—because these events already attract a diverse and engaged audience. Tagging along an existing event reduces the burden of outreach, increases visibility and participation, and helps build trust by meeting community members

where they already gather. This approach creates a more natural and welcoming environment for conversations, leading to richer, more representative input. At the event, AMMA and JWA will share information about the Short-Range Operations Plan (SOP), answer questions, and gather community feedback through the survey and informal in-person dialogue.

Input from this phase 1 of engagement will inform the Visioning Process and a summary will be included as a chapter in the Existing Conditions Report.

Deliverables for Task 5 - Phase 1

- Public Outreach Plan
- Community Survey Development and Analysis (online and on board)
- Public Engagement Outreach Material (bus shelter postings, bus interior postings, social media and website posts)
- Distribution of the survey online, on-board buses, email and in key community locations.
- 1 Community meeting or open house
- 1 Tabling event/pop-up activity
- Community engagement summary
- Trip # 1: Community outreach phase 1 events (plus activities Task 1 and 4)
- Trip # 3 Community outreach phase 2 events

Phase 2

The second round of consultant-led public engagement will focus on presenting the Draft Plan to the public and seeking to hear about what works and what doesn't. Activities in this phase of outreach will include:

- Post the Draft Plan as part of the final **project website update**. Work with Clovis Transit staff and stakeholders to publicize the Plan's availability.

- Design and implement another **general public e-survey** to provide feedback on the network scenarios Provide Clovis Transit staff and all stakeholders with appropriate tools for promoting the survey.
- Conduct a **rider and stakeholder forum** inviting all participants previously contacted to preview and comment upon the network scenarios. This would allow us to present the alternatives to a group of people with deep connections and the ability to amplify the message to generate more public input and survey responses.
- **One pop-up event** to talk to the community, discuss the plan and gather feedback through the survey

We would also email the project list and reach out to key stakeholders and local community groups, to invite comments on the Draft Report.

Once the public comment period has closed, we would then meet with staff to discuss how to improve the Draft Plan in response to the comments, before preparing the Final Report for the Board of Directors' adoption.

Deliverables for Task 5 - Phase 2

- Community Survey Development and Analysis (online)
- Public Engagement Outreach Material (bus shelter postings, bus interior postings, social media and website posts)
- Distribution of the survey online, on-board buses, email and in key community locations.
- 1 Community meeting or open house
- 1 Tabling event/pop-up activity
- Community engagement summary

Task 6. Draft and Final Plan

One we have worked with Clovis Transit to set the over arching goals and policies for the SOP, we will develop draft service proposals. These proposals will address fixed route and demand

response, at the local and regional scales.

We will analyze service proposals to measure impacts and improvements for existing riders, lower-income residents, minority residents, seniors, young people, employers, and potential future riders.

These proposed enhancements and innovations will be delivered to staff in an internal report, including, the existing conditions report, vision, goals, strategies, summaries of stakeholder and community outreach process and feedback, implementation plan and any maps of proposed new services. Once we have improved the proposals based on staff comments, we will move on to planning for the operational, programmatic investments and steps to implementation that are required by the proposed services.

This is intended to be a readable, friendly document, that anyone can use to understand Clovis Transit's current situation and future plans. Technical material that is unlikely to be interesting to the general public will be kept in appendices. We will also prepare a Draft Executive Summary of the SOP.

Clovis Transit staff will be asked to review an internal draft of the Draft SOP, after which we will prepare it for publication.

Once the public comment period has closed, we would summarize comments on the SOP and organize them for staff's review. We would then meet with staff to discuss how to change the SOP in response to the public and stakeholder comments, before preparing the third and Final SOP document for Board consideration.

A sample of Final reports are in the Appendix page 217. The first report is a Transit Master Plan for the City of Canby, and the second report is the Final Comprehensive Operational Analysis and Network Plan for Monterey Salinas.

Deliverables for Task 6

- Draft Plan
- Summary of comments from the public and stakeholders
- Final Plan, including list steps to implementation

Task 7. Presentation, Board Review and Approval

To ensure transparency, involvement, and informed decision-making throughout the planning process, we recommend presenting to the Clovis Transit Board of Directors at two key milestones. These presentations will provide updates on progress, incorporate input from both the Board and the public, and help build support for the final SOP.

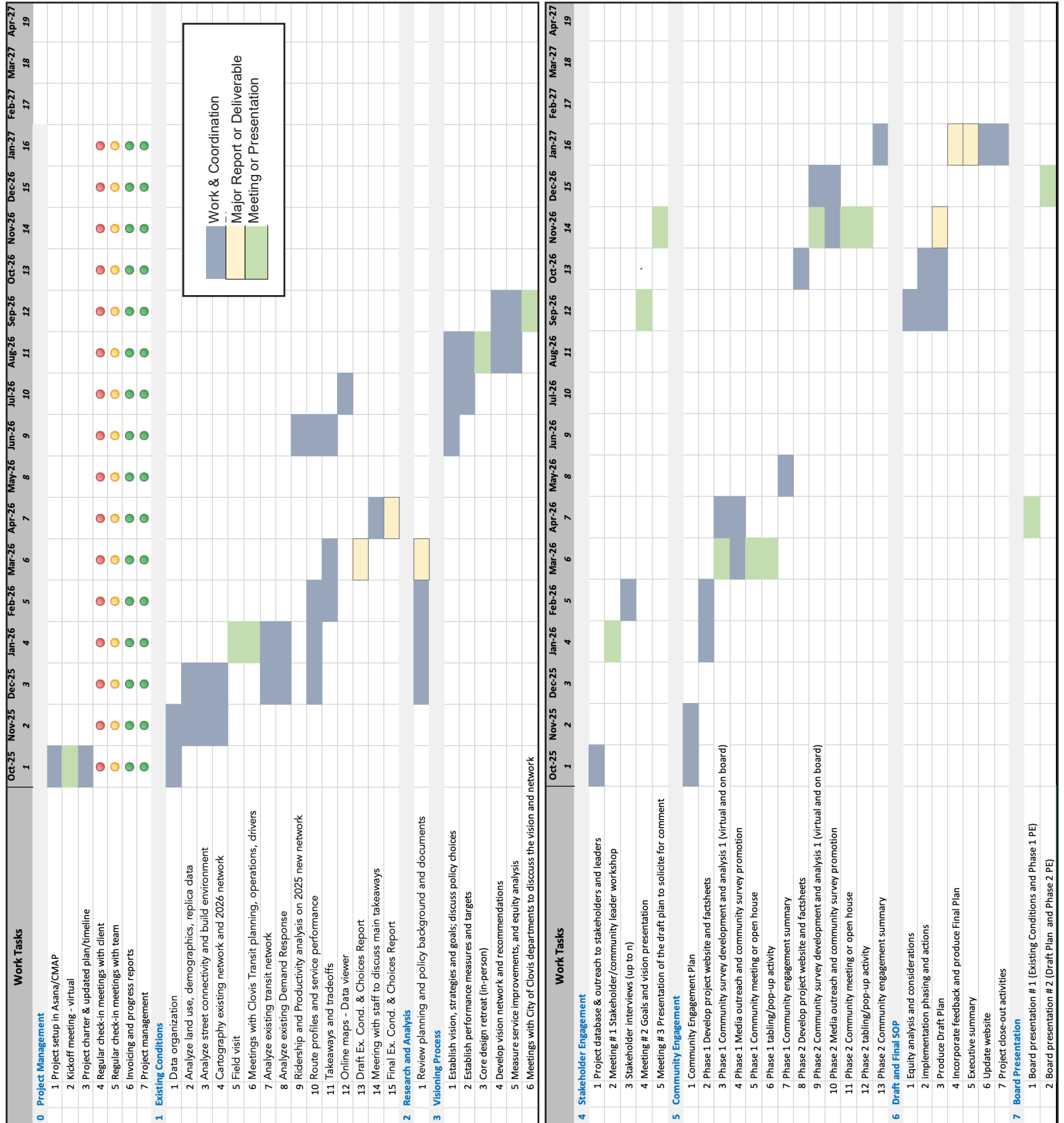
The first presentation will take place during Phase 1 of public engagement. During this session, we will brief the Board on key insights from the Existing Conditions Report, outline the goals of the community outreach phase, and invite their input on additional community contacts or engagement opportunities. We will also ask for their help in spreading awareness about the project and encouraging public participation.

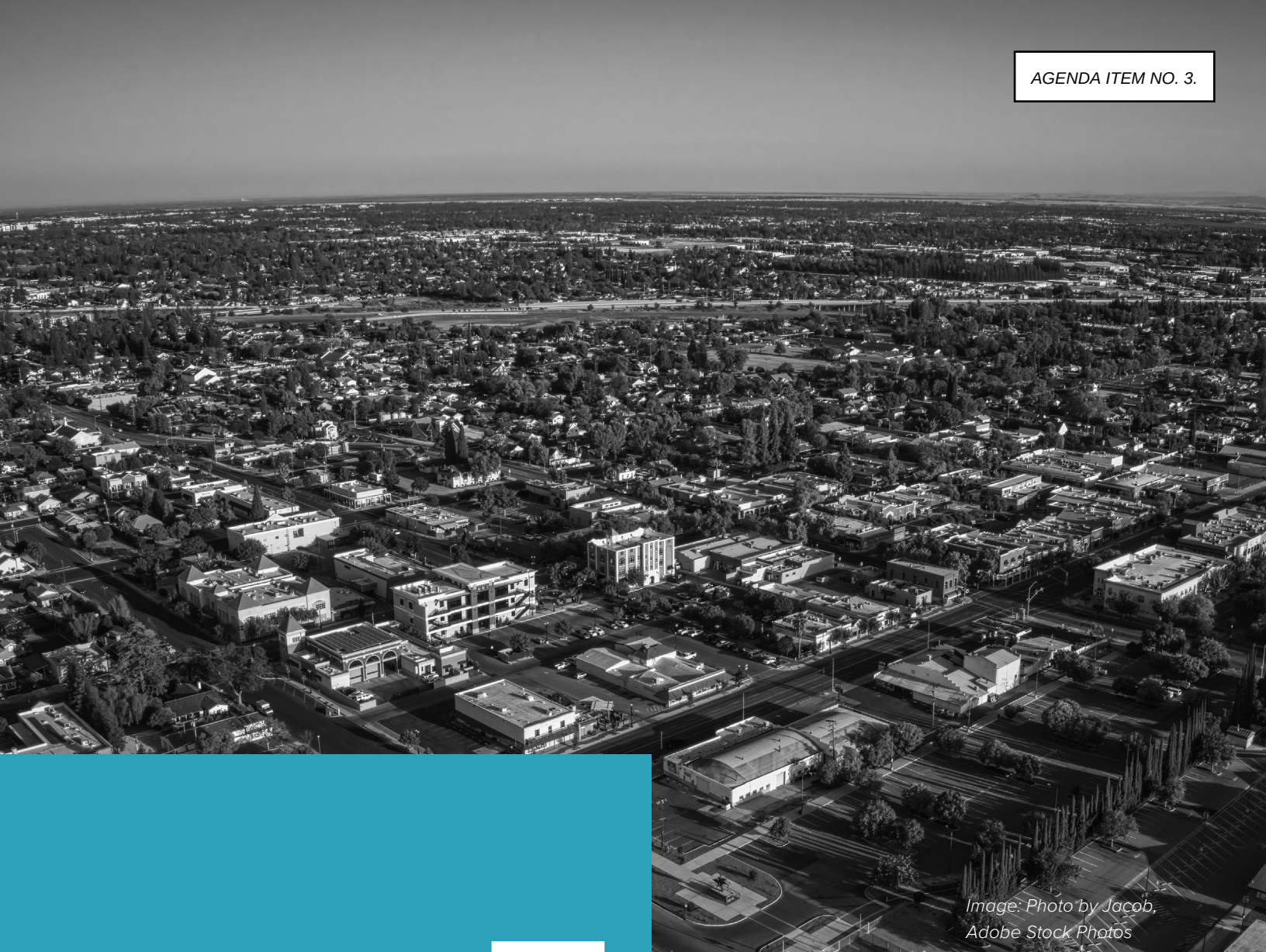
The second presentation will take place once the Draft SOP is complete and has been reviewed by the public and key stakeholders. At this stage, the principal, Jarrett Walker, will deliver an in-person PowerPoint presentation summarizing the plan's recommendations, community feedback, and implementation strategy, while also gathering feedback from the Board to make any final changes to the SOP. Depending on the budget, we may also include the project manager, Alvaro Caviedes, in this presentation once the community outreach process is complete.

Deliverables for Task 7

- Presentation to the Board at the beginning of the project
- Presentation to deliver the Draft Plan to the board and gather feedback for the Final Plan.
- PowerPoint presentation materials
- Trip #4 Board Presentation

The tables on this page (rotated vertically in order to fit) describe the timeline our work plans would follow within 16 months.



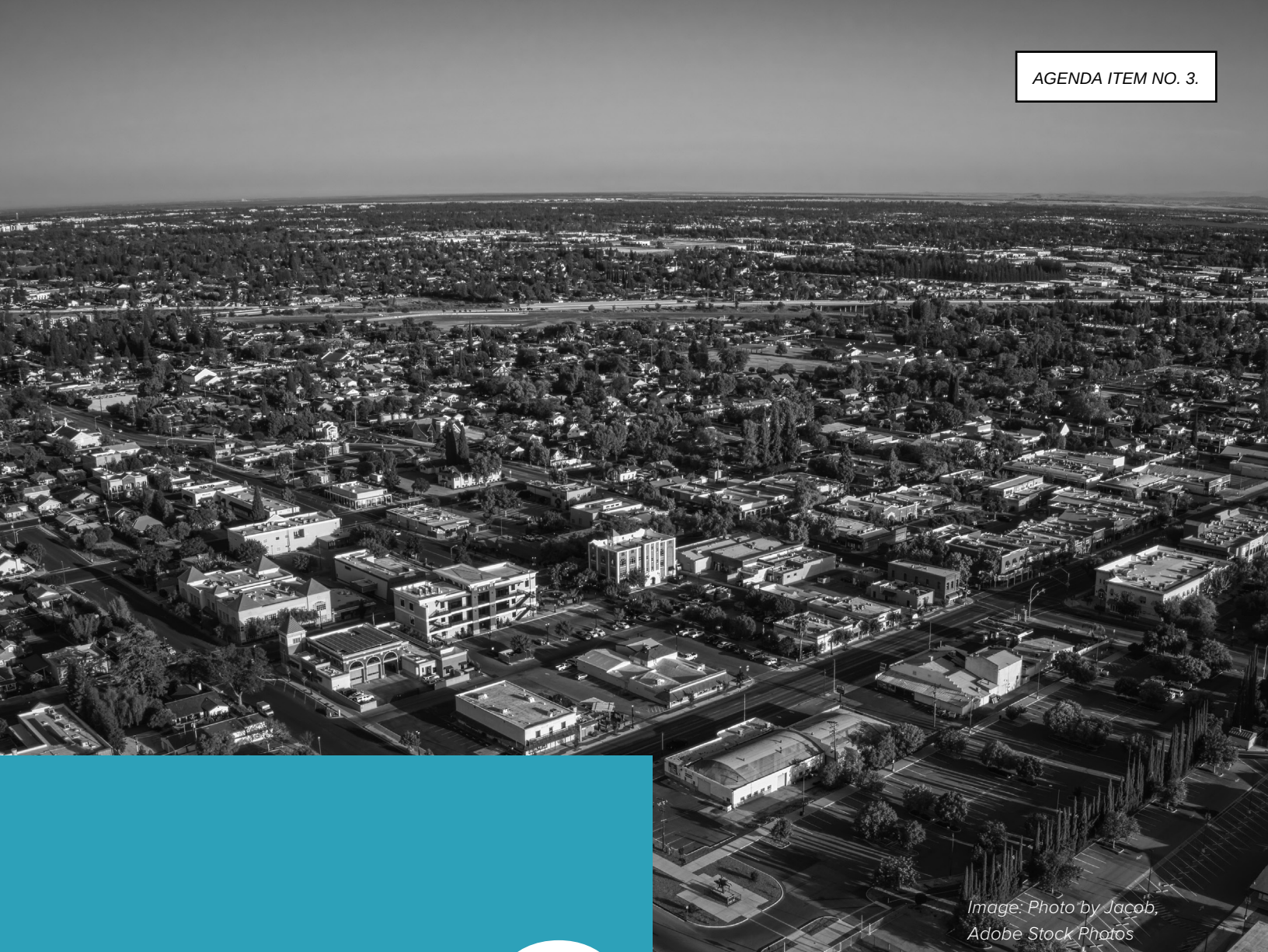


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5

Cost Proposal

Proposed Tasks	JWA		AMMA		Subtotal Cost
	Subtotal (Hours)	Subtotal Labor (\$)	Subtotal (Hours)	Subtotal Labor (\$)	
0. Overall Project Management	Kickoff Preparation	5 \$ 806		\$ -	AGENDA ITEM NO. 3.
	Kick-off Meetings with staff, team	5 \$ 806	8	\$ 1,177	
	Refined project schedule and Asana	3 \$ 497		\$ -	
	Data request list	3 \$ 414		\$ -	
	On-going Team project management	32 \$ 4,850		\$ -	
	Monthly update internal meetings	45 \$ 6,521	12	\$ 1,728	
	Bi-weekly project team calls	34 \$ 5,385	36	\$ 5,138	
		127 \$ 19,279	56	\$ 8,043	
1. Review Existing Conditions	Data organization	14 \$ 1,990		\$ -	
	Replica license	\$ 2,000			
	Analyze land use, demographics, replica data	44 \$ 5,630		\$ -	
	Analyze street connectivity and build environment	11 \$ 1,361		\$ -	
	Cartography existing and 2026 network	14 \$ 1,711		\$ -	
	Field visit	32 \$ 7,161		\$ -	
	Analyze existing transit network	40 \$ 5,193		\$ -	
	Analyze existing Demand Response	12 \$ 1,772		\$ -	
	Route profiles and service perf. Analysis	18 \$ 2,170		\$ -	
	Ridership Analysis on 2026 network	8 \$ 918		\$ -	
	Online maps - Data viewer	8 \$ 1,104		\$ -	
	Draft Ex. Cond. & Choices Report	24 \$ 3,826		\$ -	
	Final Ex. Cond. & Choices Report	13 \$ 2,195		\$ -	
		238 \$ 37,030		\$ -	
2 Research and Analysis	Research on planning documents	20 \$ 3,222	26	\$ 3,658	
	Summary of documents with noted reference sections and expect.	10 \$ 1,611		\$ -	
		30 \$ 4,833	26	\$ 3,658	
3. Visioning Process	Establish vision, strategies and goals; discuss policy choices, draft doc	22 \$ 3,952	4	\$ 600	
	Meetings with City Departments	12 \$ 1,945		\$ -	
	Summary of Information, and suggestions by cit deparments				
	Core Design retreat	26 \$ 8,524		\$ -	
	Refine Networks based on staff feedback	11 \$ 1,745		\$ -	
	Fix Remix + Costing	10 \$ 1,438		\$ -	
	Proximity analysis	12 \$ 1,528		\$ -	
	Isochrones and access analysis	18 \$ 2,449		\$ -	
	Maps and frequency tables	18 \$ 2,170		\$ -	
	Demand response recommendations	2 \$ 334	2	\$ 271	
		\$ -		\$ -	
4. Stakeholder Committee		131 \$ 24,085	6	\$ 271	
	Project database & outreach to stakeholders and leaders	2 \$ 334		\$ -	
	Stakeholder Workshop (1/2 day or eve with dinner)	12 \$ 1,979	34	\$ 5,097	
	Stakeholder interviews	1 \$ 167	80	\$ 9,677	
	Meeting # 2 Goals and vision presentation	1 \$ 167		\$ -	
	Meeting # 3 Presentation of the draft plan to solicite for comment	1 \$ 167		\$ -	
	Agendas, PowerPoint Presentatins, meeting notes, summaries	14 \$ 2,128		\$ -	
5. Community Outreach and Engagement		31 \$ 4,941	114	\$ 14,773	
	Community engagement plan, event list	1 \$ 167	16	\$ 2,317	
	Printing for events and materials (flyers, posters, surveys, snacks)			\$ 1,250	
	Travel AMMA events			\$ 5,300	
	City of Clovis webpage content and announcements, social media	2 \$ 334	8	\$ 1,080	
	Survey (x2)	18 \$ 2,378	24	\$ 3,433	
	Pop up events (x2)	6 \$ 886	32	\$ 4,467	
	Open houses or community events (x2)	8 \$ 1,231	36	\$ 5,007	
	Analysis of survey input (x2)	14 \$ 1,815	22	\$ 3,151	
	Memo summarizing input and community feedback (x2)	6 \$ 793	11	\$ 1,545	
6. Draft and Final Plan		55 \$ 7,603	149	\$ 27,549	
	Internal draft SOP document	36 \$ 6,339		\$ -	
	Internal draft SOP Exec Summary	4 \$ 667		\$ -	
	External ADA Draft SOP document including Credits to Caltrans	16 \$ 2,324		\$ -	
	External ADA Draft SOP Exec Summary including Credits to Caltrans	4 \$ 610		\$ -	
	Meeting with staff to decide on changes	4 \$ 610	2	\$ 271	
	Final ADA SOP for Board consideration including Credits to Caltrans	10 \$ 1,611		\$ -	
7. Presentation, Board Review and Approval	Final ADA SOP after Board adoption including Credits to Caltrans	12 \$ 2,526		\$ -	
		86 \$ 14,687	2	\$ 271	
				\$ -	
	Presentation #1 to the Board (including PowerPoint file)	5 \$ 2,080		\$ -	
	Presentaiton # 2 to the Board (including PowerPoint file)	5 \$ 806		\$ -	
		10 \$ 2,886		\$ -	2,886
Total		708 \$ 115,343	353	\$ 54,565	\$169,907.97



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Check List

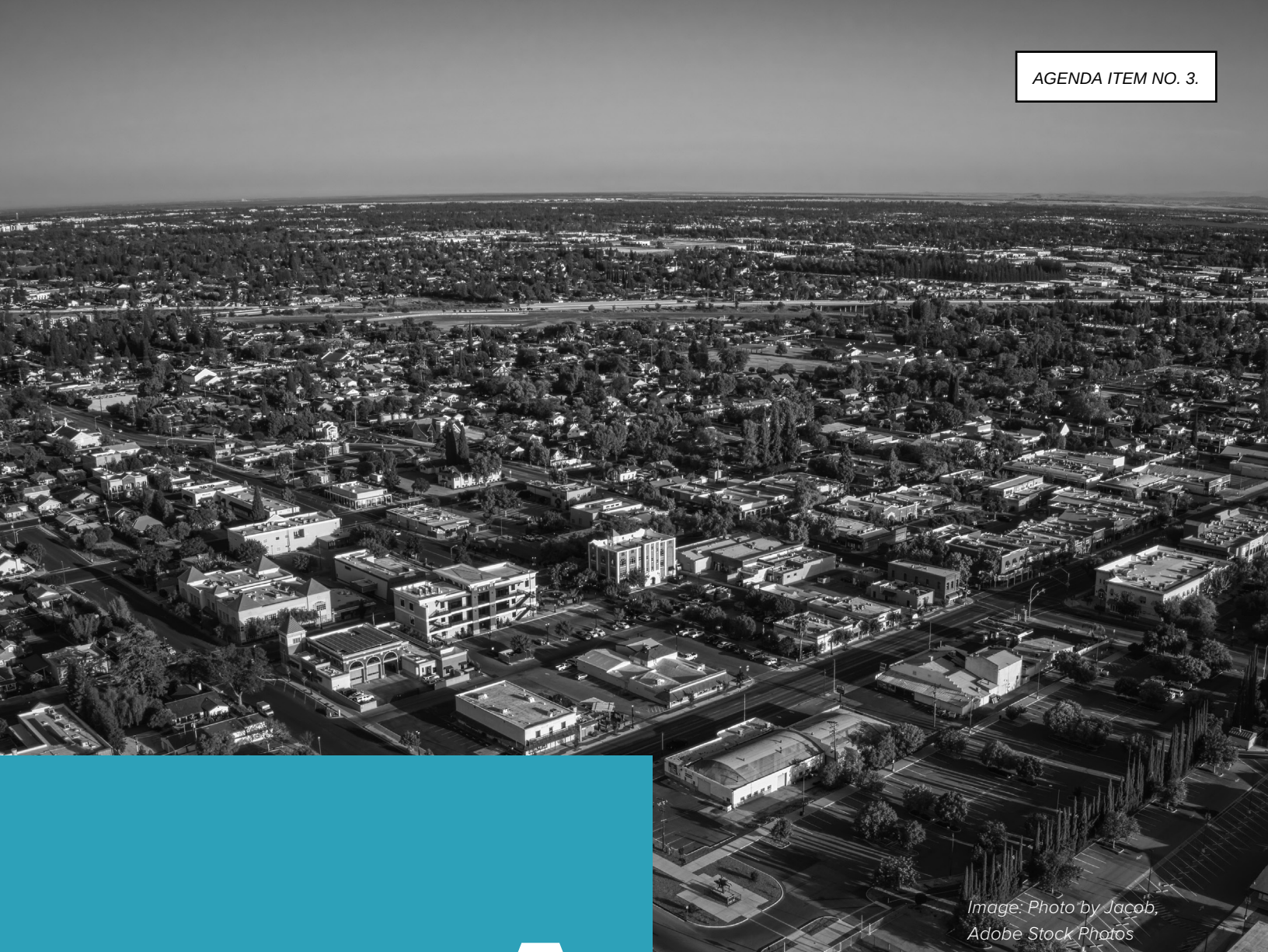
CHECKLIST

This Checklist is provided to assist vendors in preparing their RFP responses. Included are important requirements the Contractor is responsible for submitting with the RFP package to make the RFP compliant.

Check off each of the following (*if applicable*):

1. X Signed cover page of Request for Proposal (RFP).
Check <https://vendors.planetbids.com/portal/14742/bo/bo-detail/131198> for any addenda.
2. X
3. X Signed cover page of each Addendum.
4. X Provide a Conflict of Interest Statement.
Signed *Trade Secret Form* as provided with this RFP (Trade Secret Information, if provided, must be electronically submitted in a separate PDF file and marked as Confidential).
5. X
6. X Signed *Debarment and Suspension Certification* as provided with this RFP.
7. X Signed *Tax Liability Certification* as provided with this RFP.
8. X Signed *Participation Form* as provided with this RFP.
9. X Completed the *Reference List* as provided with this RFP.
10. X Signed *Lobbying Restrictions Form* (Exhibit D)
11. X Indicate all of Contractor exceptions to the City's requirements, conditions and specifications as stated within this RFP.
12. X Contractor's proposal, in PDF format, electronically submitted to the Bid Page on Planet Bids.

Return the Checklist with your RFP response



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Adobe Stock Photos*

A

Appendix

Sample Reports



Comprehensive Operational Analysis Choices Report

"Advocating and delivering quality public transportation as a leader within our community and industry."



MAY 27, 2020

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Appendix A

A Survey of The General Adult Public in Monterey County, California, 2021, for MST

1 Introduction

MST provides local and regional public transit in Monterey County.

MST Services

Monterey-Salinas Transit District (MST) is the public transit agency for Monterey County. MST's services include:

- **Fixed-route transit.** This includes all MST's numbered bus lines (1 to 95), as well as the JAZZ A and B. MST divides its fixed route services into:
 - **Local lines** provide service in the greater Monterey and Salinas urban areas. They account for about 2/3 of MST's fixed-line service and ridership.
 - **Regional lines** run longer-distance trips between Salinas, Monterey, cities in southern Monterey County, Watsonville and other destinations.
- **Demand-response** services, where people reserve a ride in advance. This includes:
 - **Paratransit** provided to passengers eligible under the Americans with Disabilities Act (ADA).
 - **On-call** service in Marina, Gonzales, Soledad, Greenfield and King City. This minibus service is available to the general public and allows for local rides within the on-call area and transfers to the nearest fixed route.

MST also operates a wide variety of specialized fixed and demand-responsive services, including the Monterey Trolley, Del Rey Oaks Shuttle, long-distance medical trips to the Bay Area, and a taxi voucher program for seniors and veterans.

Nonetheless, **most people experience MST service as fixed-route buses.** These account for about **75% of MST's in-service hours and 95% of ridership.**

MST's regional role

MST's county-wide scope and governance structure both tend to emphasize service to many communities over a large area.

This is reinforced by local geography: the Monterey Bay and Salinas Valley have historically developed as a string of small to mid-sized cities following Highway 1 and Highway 101. These communities have overlapping retail, social services and employment markets resulting in large amounts of intercity travel.

Furthermore, there has long been a gap in commercial long-distance bus service between Paso Robles and Salinas, reflecting the relatively "empty quarter" of California's central coast.

As a result, MST has carved out a relatively unique role as a public agency that handles both local and long-distance services, with service extending as far as Paso Robles to the south and San Jose to the north.

As of early 2021, several of MST's intercity lines have been suspended due to COVID-related service shifts. This includes long-distance services to San Jose and Santa Cruz, as well as secondary intercity lines like Marina-to-Watsonville.

MST Operations

As of 2019, approximately 60% of MST service is directly operated. The remaining 40%, including paratransit, on-call and most small-bus fixed routes were operated under contract by MV Transportation.

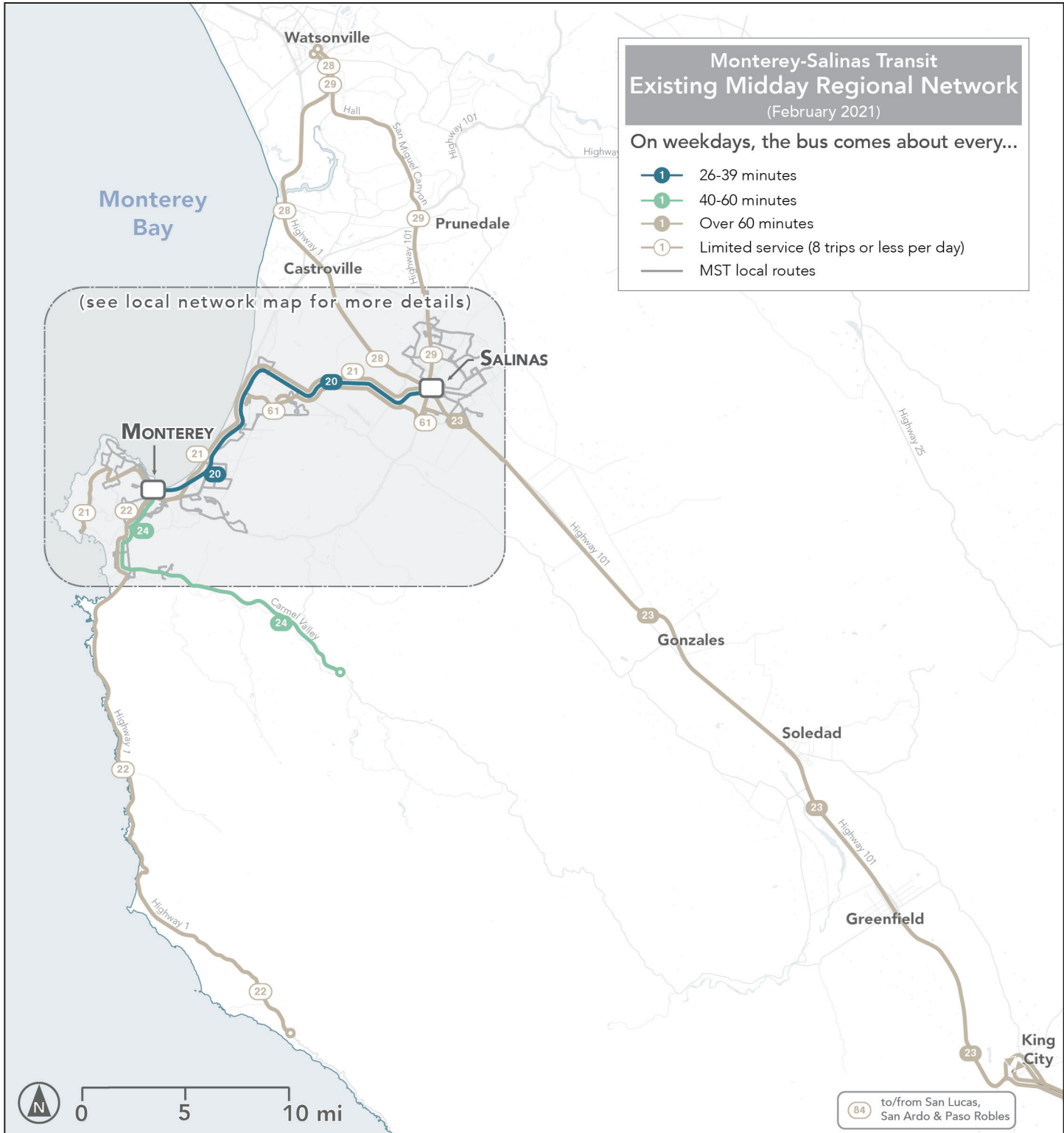


Figure 1: Map of MST's regional network in early 2021, with lines color-coded by frequency. Local lines are shown in gray.

Most of MST's network is in the Monterey and Salinas areas.

The MST fixed-route network in the greater Monterey and Salinas areas¹ is represented in Figure 2. Together, these areas account for about:

- **5% of the county land area**
- **65% of the county population**

Because so much of Monterey County's population is concentrated in this relatively small area, this is where buses have the most potential to connect many people to many destinations at relatively low cost to the public.

Accordingly this is where most of MST's service is provided and where the most people ride. As of 2019, the greater Monterey and Salinas areas accounted for about:

- **85% of MST service**
- **90% of MST ridership.**

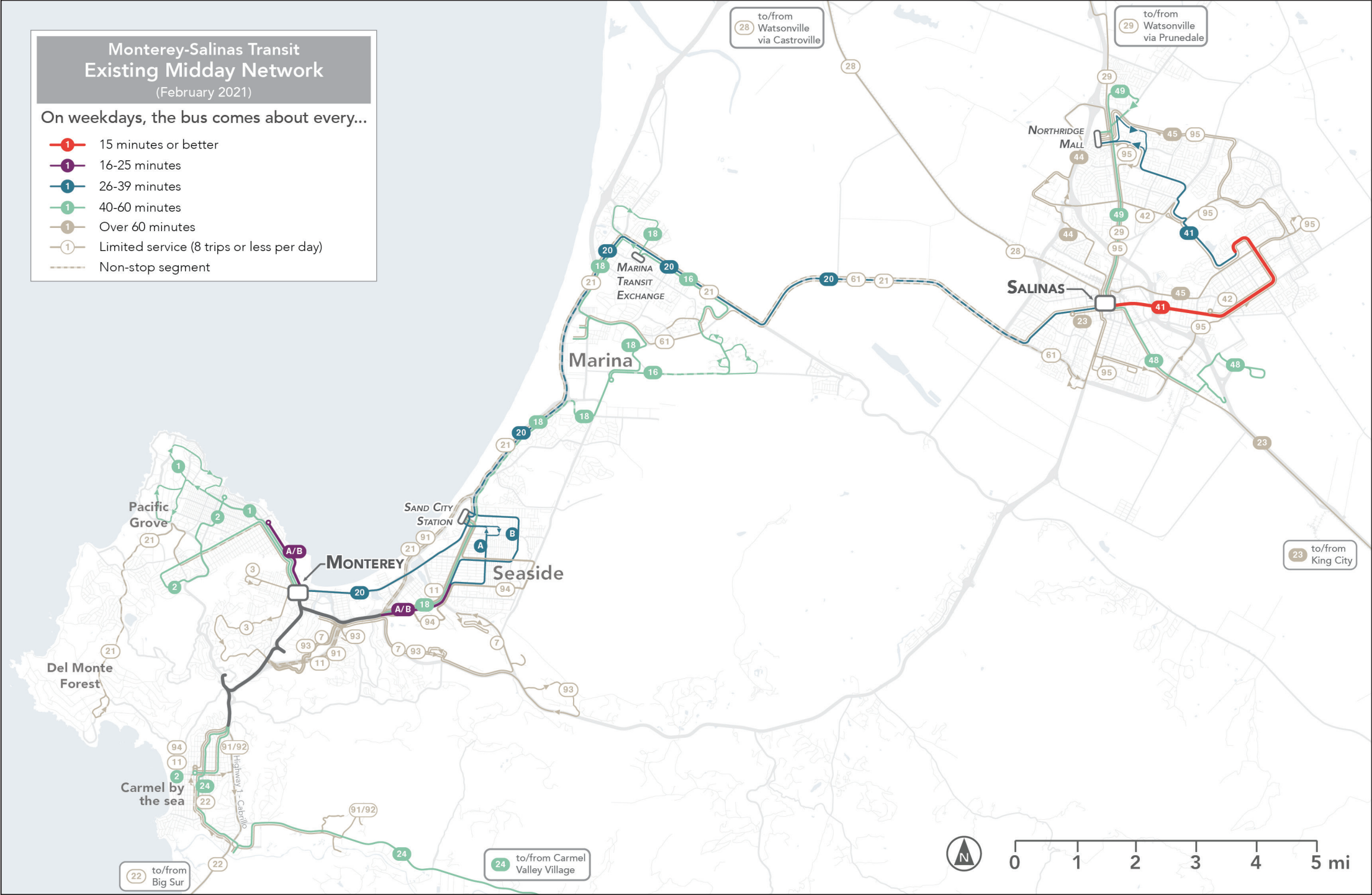


Figure 2: Map of MST's fixed-route network in the greater Salinas and Monterey areas in early 2021, with lines color-coded by frequency.

¹ Including Carmel-by-the-Sea, Del Monte Forest, Pacific Grove, Monterey, Seaside, Del Rey Oaks, Sand City, Marina, Salinas, Boronda and adjacent developed area.

Why does the MST network need a redesign?

This document is the first step in MST's Comprehensive Operational Analysis (COA).

The COA is an opportunity to review MST's array of public transportation services, evaluate their performance, and help set a direction for the future.

Based on our initial assessment of the network, there are good reasons to envision a blank-slate redesign.

1. The last full system review was over two decades ago.

Many transit agencies review their entire network every five to ten years, to make sure service matches the community's needs. The last time MST undertook such a comprehensive study was in the late 1990s.

Since then, MST has conducted several sub-area studies¹, launched the JAZZ line, and responded to many community requests for shifts in service.

Many of these changes have taken place without a consistent policy on where and how much service to provide. In this context, responding to individual requests meets well-identified needs but does not always contribute to a more effective network for everyone.

The result is a network of many overlapping lines, each doing something that someone requested, but mostly running too infrequently to be worth the wait for anyone else travelling in the same direction.

2. Most lines operate at very low frequencies.

Only two MST lines consistently run every 30 minutes or better on weekdays: Line 41 in Salinas, and Line 20 from Monterey to Salinas. Almost everything else runs once an hour or less².

In fact, nearly half of MST lines operate just a few times a day³, connecting very small numbers of people to specific buildings or facilities. These specialized and very infrequent services tend to overlap with other lines for most of their run, resulting in a very complex web of bus lines.

This is especially pronounced in the Monterey and Seaside area shown in Figure 3.

Many of the lines on this map operate less than once an hour, and have very short unique segments. **Because each line has to operate on its own schedule, overlapping lines don't result in high combined frequency.**

For example, there may be four direct buses per hour between Monterey Transit Plaza and Del Monte Center on weekdays from 7 AM to 6 PM, but there is a 30-minute gap between southbound buses at least 9 times in that time period.

² There are two main exceptions: (a) the JAZZ A and B, which each run every 36 minutes on weekdays, and combine to every 18 minutes on Fremont Blvd, and (b) Line 24 from Monterey to Carmel Valley, which operates every 40 minutes on weekdays.

³ As of early 2021, 14 of the 32 MST lines currently in operation run 8 times per day or less.

¹ Including reviews of service in the Peninsula (2006), Marina (2009), South County (2010; 2019) and Salinas (2005 and 2012).

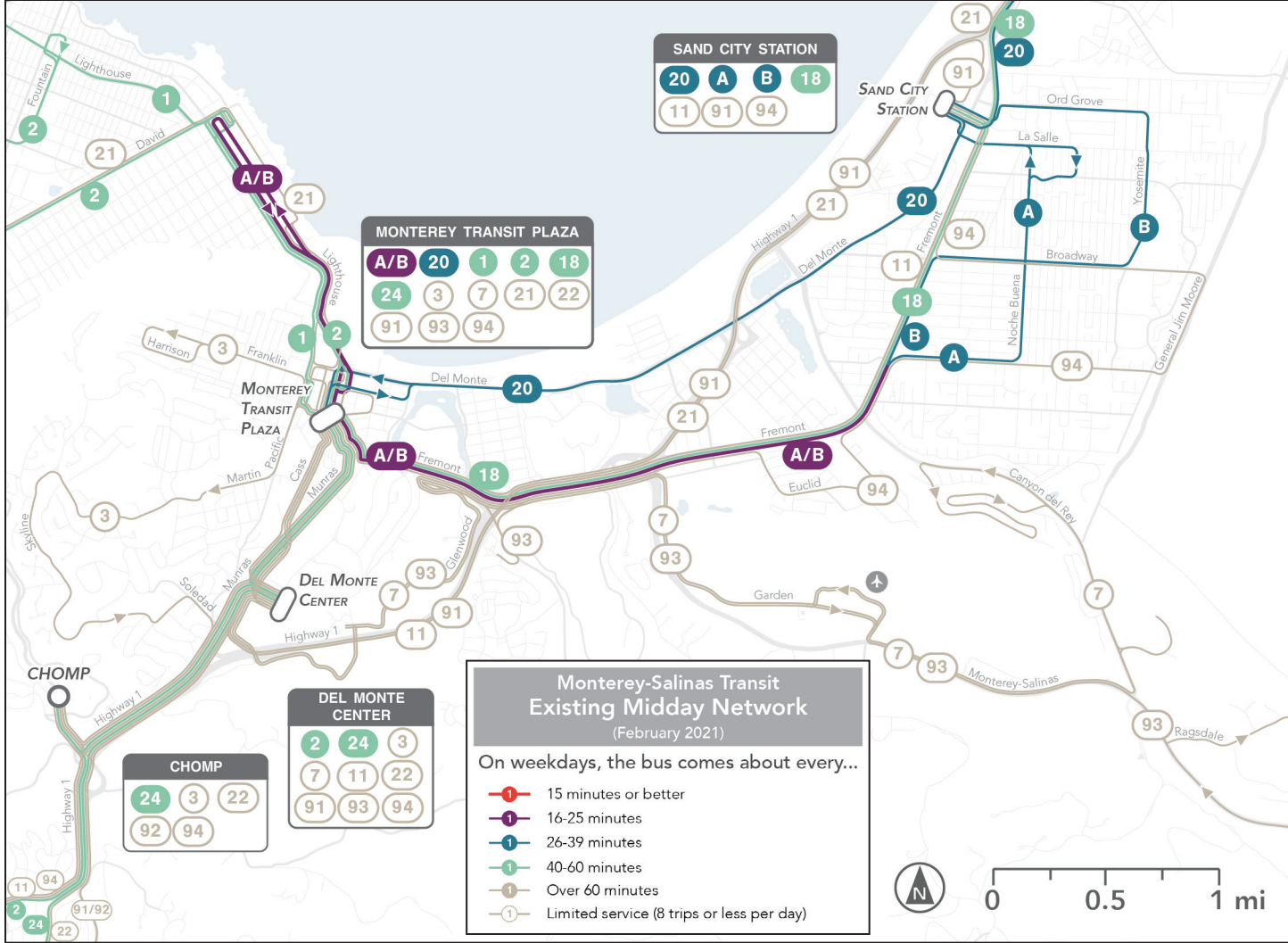


Figure 3: Map of MST's fixed-route network in Monterey and Seaside, with lines color-coded by frequency.

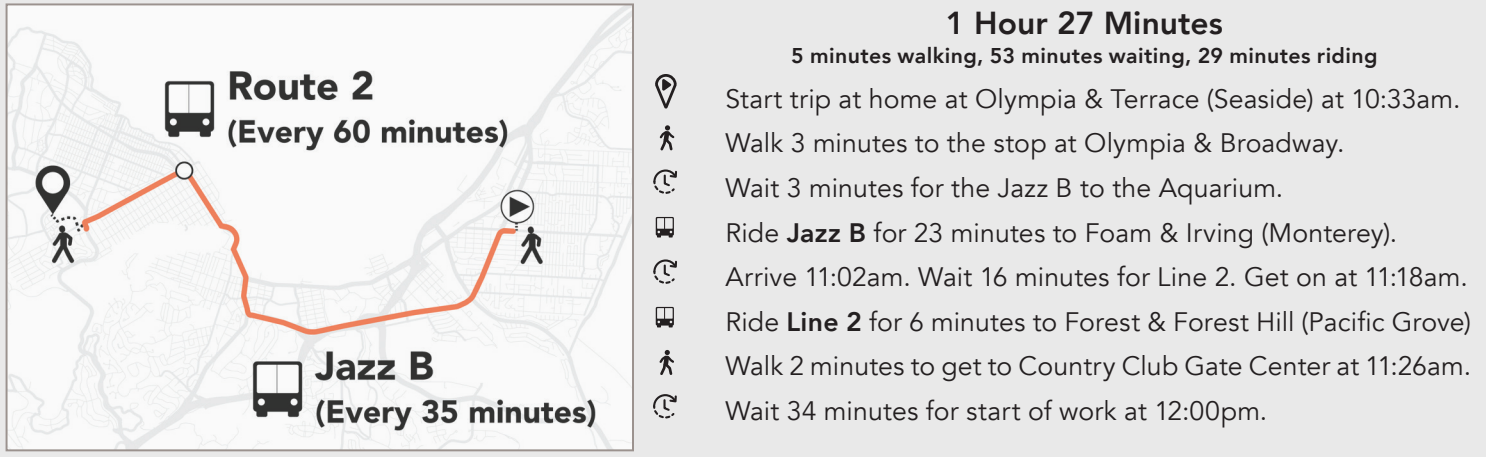
A number of MST lines operate just a few times per day, connecting small numbers of people to specific buildings or facilities.

3. It can take a very long time to get from A to B, even when those places are nearby.

Transit is useful to people when it extends the range of places they can go. But **low frequencies on the existing network mean that few people can use transit to get anywhere in a reasonable amount of time.** This is true even when travelling relatively short distances between relatively prominent locations, as in the following examples.

Example no. 1: How do you get from Seaside to Pacific Grove?

Let’s imagine you are a retail worker living in the center of Seaside, and you need to reach your job at Country Club Gate Center in Pacific Grove (6 miles away) and your shift starts at noon on weekdays. Here’s what you would need to do:

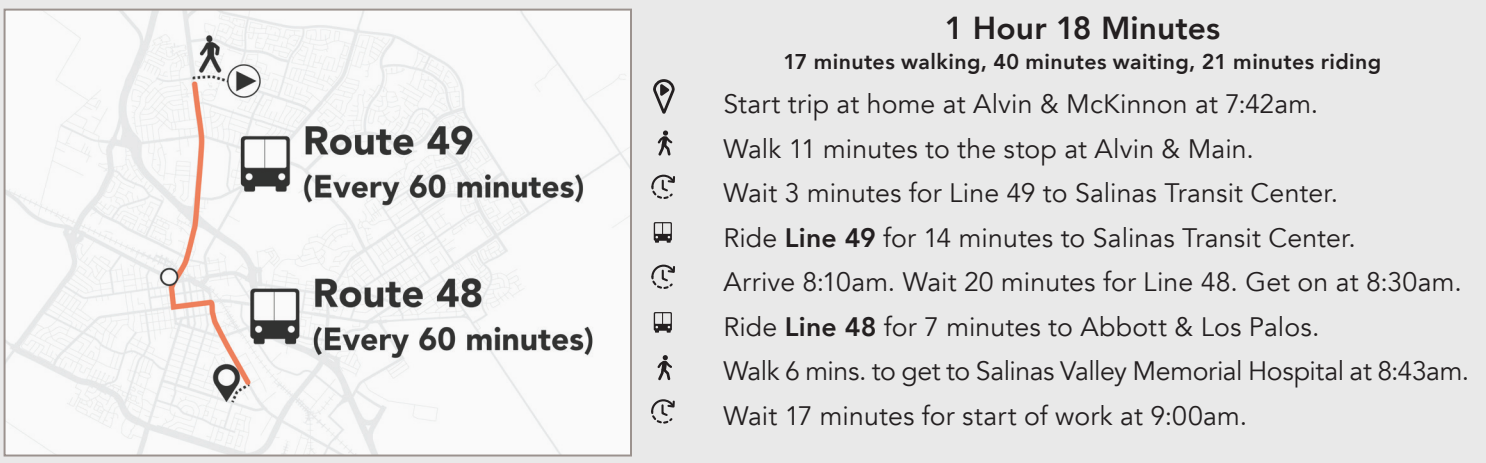


Notice that this trip only includes a total of 29 minutes actually riding the bus, and that *you would spend more time waiting at your destination than you would getting there.*

The key problem in this example is the low frequency of Line 2. If Line 2 came every 30 minutes instead of once an hour, this could halve the length of the trip. In that case, you could catch a later Jazz B at 11:15, wait only 10 minutes in Monterey to connect to Line 2 at 11:48, and wait only 6 minutes at the end, for a total of 48 minutes.

Example no. 2: How do you get from North Salinas to South Salinas?

Let’s imagine you are a hospital worker living near North Salinas High School, you need to reach your job at Salinas Valley Memorial Hospital (4.5 miles away) and your shift starts at 9am on weekdays. Here’s what you would need to do:



Notice that this trip only includes a total of 21 minutes actually riding the bus, and that *you would spend more time waiting at Salinas Transit Center than on either bus.* A healthy adult could walk from Salinas Transit Center starting at 8:10 and arrive at the hospital and arrive at the same time as someone who had waited for Line 48.

The key problem in this example is both low frequencies and the lack of a timed transfer at Salinas Transit Center. If Lines 48 and 49 were timed to arrive together at Salinas Transit Center at 8:25am and leave together at 8:30, you could leave home 15 minutes later. If they both came every half hour and were timed to leave Salinas Transit Center at 8:15 and 8:45, you could leave home 30 minutes later, for a 48 minute trip.

These are just two of many possible examples. Many prominent destinations are served once an hour or less, and people traveling to them by transit would have similar or even longer trips.

4. Where people live and work has changed.

The last 25 years have seen important shifts in where people live and work. Since the late 1990s:

- The population of the greater Monterey area and rural areas of the North County have stagnated.
- Marina experienced a significant decline in the 2000s, but has had the strongest growth of any community in the 2010s and continues to have the largest number of ongoing residential development projects.
- Salinas has grown slightly but unevenly. The population has grown significantly in North Salinas, while it has tended to decline or stagnated in East and South Salinas.
- Cities in the Highway 101 corridor south of Salinas grew strongly in the 2000s, but that growth slowed down significantly in the 2010s.
- The prominence of the military as a source of economic development has decreased following the closure of Fort Ord.
- The agriculture, retail, service, hospital-ity and higher education sectors have all become correspondingly more important.

Although some cities on the Monterey Peninsula are now showing renewed interest in growth and development, **the structure of existing water rights means that future growth will likely be concentrated in the the Highway 101 corridor south of Salinas.**

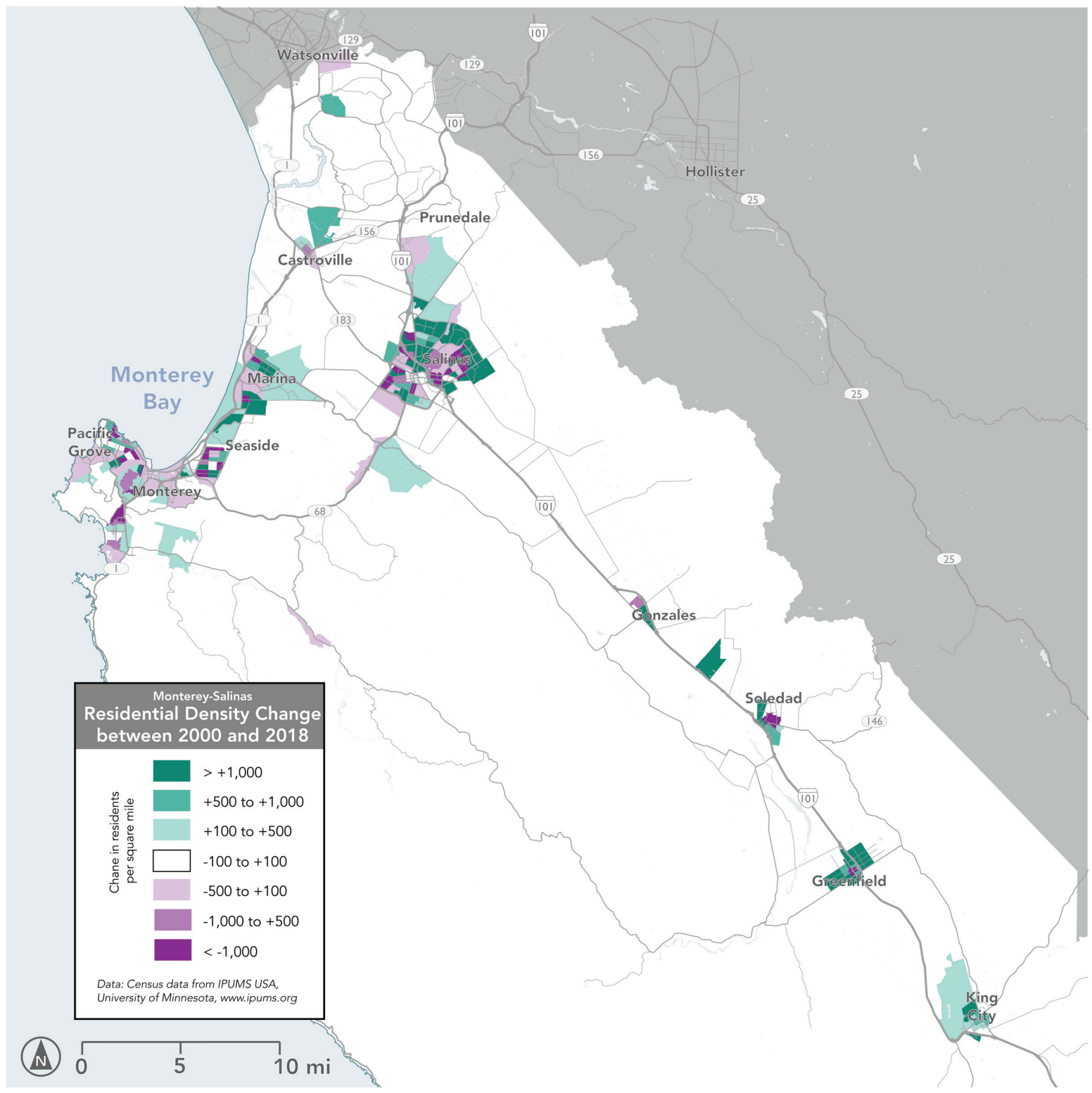


Figure 4: Regional map of change in population density. Growth has largely been concentrated in the outer neighborhoods of Salinas and in the cities of Gonzales, Soledad, Greenfield and King City.

5. There is unmet demand for service in Salinas.

Salinas is the largest population and job center in Monterey County, accounting for 36% of the population and 30% of jobs. And there are good reasons to think many of the trips that happen in Salinas could be served by transit.

For one, Salinas is relatively compact and dense. The entire city of 155,000 people fits in a 5x5 mile area, and a large share of its jobs are located either Downtown or on long, straight main streets. As a result:

- Most bus stops in Salinas are located within a 1/2-mile of several thousand residents.
- Many of the places people need to go can be reached in a relatively short trip, that could be effectively served by frequent transit.

Salinas also has a relatively high poverty rate, implying that many people are in need of public services, including transportation. Many people in Salinas live in large households, where there are often fewer cars than people who need to go places.

Despite this, large parts of the city are served by lines that operate once an hour or less. With such infrequent service, an able bodied adult can walk most of the way across Salinas in the time it takes before the next bus comes. But very few people have the time to do that.

6. The pandemic has altered everyone’s reality. This is a good time to reassess MST’s future role.

The impacts of the pandemic on MST’s ridership and services are described in more detail in the following pages.

	Population	Jobs	% MST Service <i>(Fall 2020)</i>	% MST Ridership <i>(Fall 2020)</i>
Monterey Bay and Peninsula <i>(includes Carmel, Del Monte Forest, Pacific Grove, Monterey, Del Rey Oaks, Seaside, Marina)</i>	27% <i>(115,000)</i>	28% <i>(48,000)</i>	52% <i>(2,000 hours/week)</i>	45% <i>(13,000/week)</i>
Salinas <i>(includes Salinas, Boronda)</i>	36% <i>(157,000)</i>	30% <i>(51,000)</i>	35% <i>(1,350 hours/week)</i>	42% <i>(12,200/week)</i>

Figure 5: Table comparing the population and ridership in the Monterey and Salinas areas to the amount of MST weekly scheduled in-service hours.

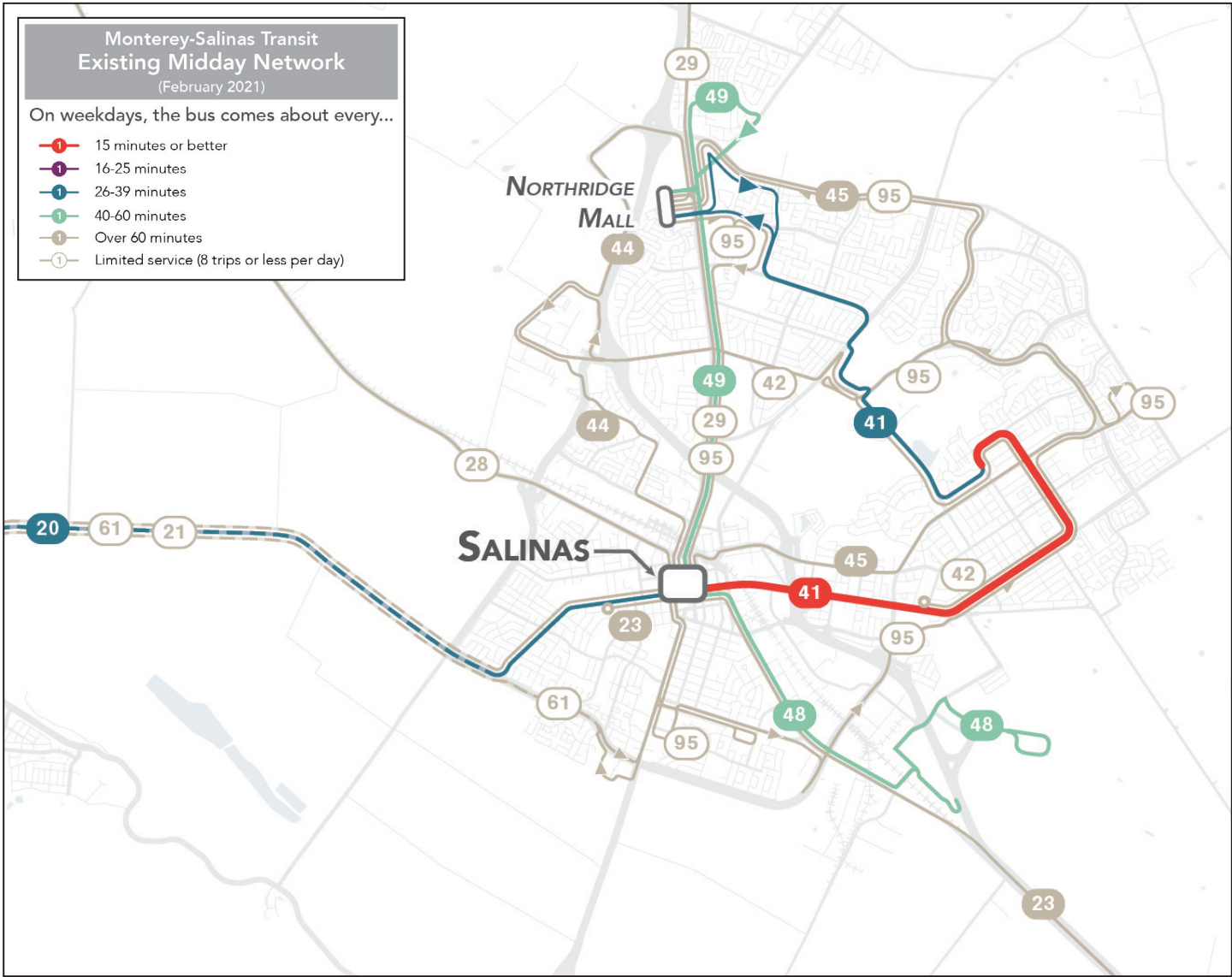


Figure 6: Map of MST’s fixed-route network in Salinas, with lines color-coded by frequency. All but two lines (20 and 41) operate once an hour or less.

How has the pandemic impacted MST service and ridership?

The COVID-19 pandemic has presented MST with many significant short-term challenges, and establishing the way out of pandemic-era planning is another key reason for this study.

Fall 2020 patterns of ridership suggest that **most pandemic-era transit users are likely essential workers with daytime hours, and people on non-work trips.** These riders are using transit despite much lower service levels. In response to reduced ridership and reduced driver availability, **MST reduced service by over 30% in 2020.**

As the pandemic recedes, transit ridership will likely increase and may return to pre-pandemic levels. But it will remain important to understand the needs of the people who rely most on transit, and whose travel purposes are so essential to society that they continue even in a public health emergency.

Ridership is way down.

As shown in Figure 7, comparing Fall 2019 to Fall 2020:

- **Weekday ridership is almost 75% lower,** from over 13,500 to less than 3,700 boardings per day on fixed routes.
- **Weekend ridership is about 60% lower, and at par with weekdays.** On weekends, boardings went from about 9,000 boarding per day to just under 3,500 per day.

Rush hour is nearly gone.

Prior to March 2020, MST experienced significantly higher ridership on weekdays between 7 and 8 AM and between 2 and 5 PM, and provided a higher level of service in response.

As schools, offices, and many hospitality businesses have either closed or significantly reduced their operations, rush hour ridership has come down to midday levels. Figure 8 shows that **MST now experiences about the same level of ridership from 7 AM to 6 PM,** and no longer provides additional service at peak hours.

MST ridership by day of the week, 2019 vs. 2020

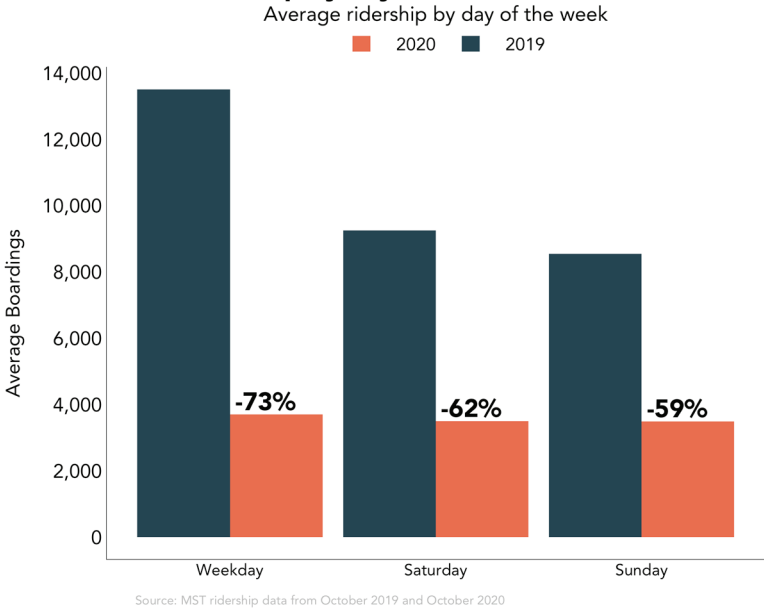
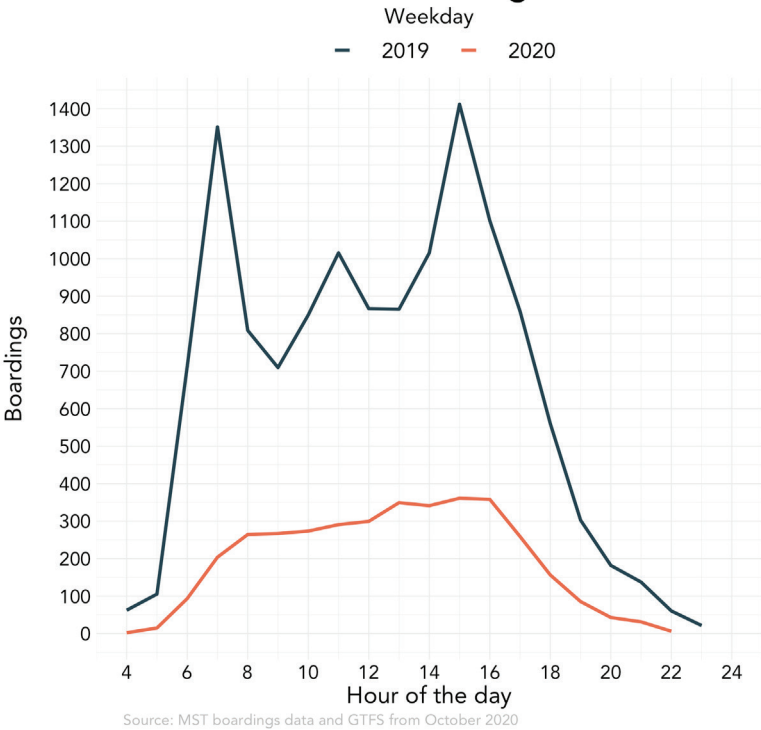


Figure 7: How MST ridership changed from Fall 2019 to Fall 2020, by day of the week.

MST Boardings



MST Bus trips

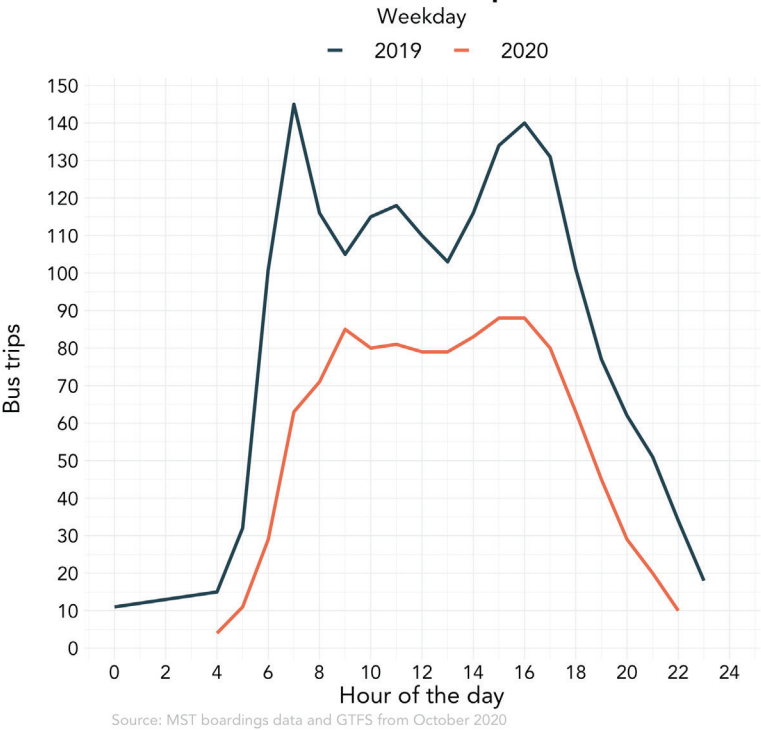


Figure 8: How MST boardings (left) and total bus departures (right) per hour on weekdays changed from Fall 2019 to Fall 2020.

Ridership change has been unequal

The chart in Figure 9 shows how ridership has changed by area. The maps in Figure 10 and Figure 11 give us further context for what we observe. Specifically:

- **Ridership has dropped the least in low-income areas and communities of color.** This reflects the areas that are most likely to house many essential workers, and where people are most likely to lack alternatives to transit for their mobility needs.
- **During the pandemic, college-related ridership has dropped the most.** The stops that experienced the largest drops
- in ridership directly serve Hartnell College, California State University - Monterey Bay (CSUMB), and Monterey Peninsula College (MPC). This can be explained by the prevalence of remote learning, and the cancellation of college-specific lines.
- **Military ridership also largely disappeared in 2020, but this is due to events that occurred just before the pandemic.** Up to late 2019, local military bases had funded 11 MST lines, 7 of which served the Presidio of Monterey. Budget shortfalls and changes in base command led to the cancellation of those services.

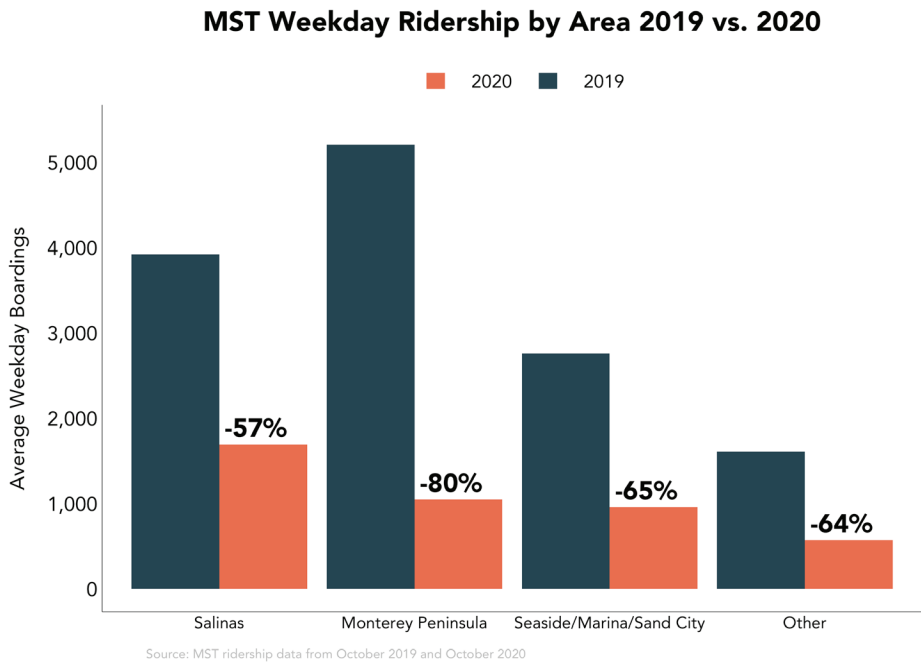


Figure 9: How MST ridership changed from Fall 2019 to Fall 2020, by area of Monterey County.

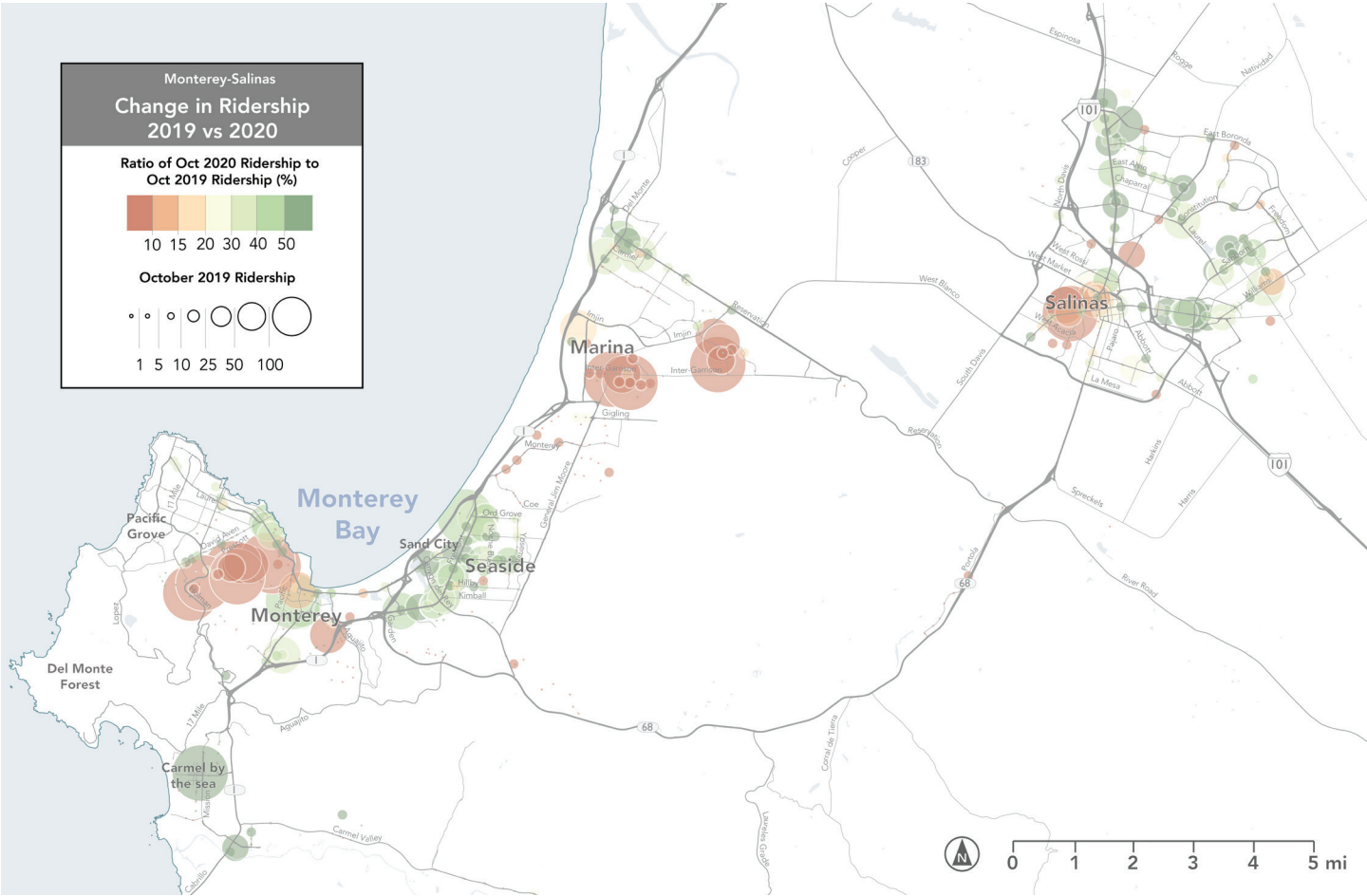


Figure 10: How MST ridership changed from Fall 2019 to Fall 2020, by bus stop. The size of each dot on this map indicates weekday boardings in 2019. Red dots are stops where ridership fell the most. Green dots are where ridership fell the least.

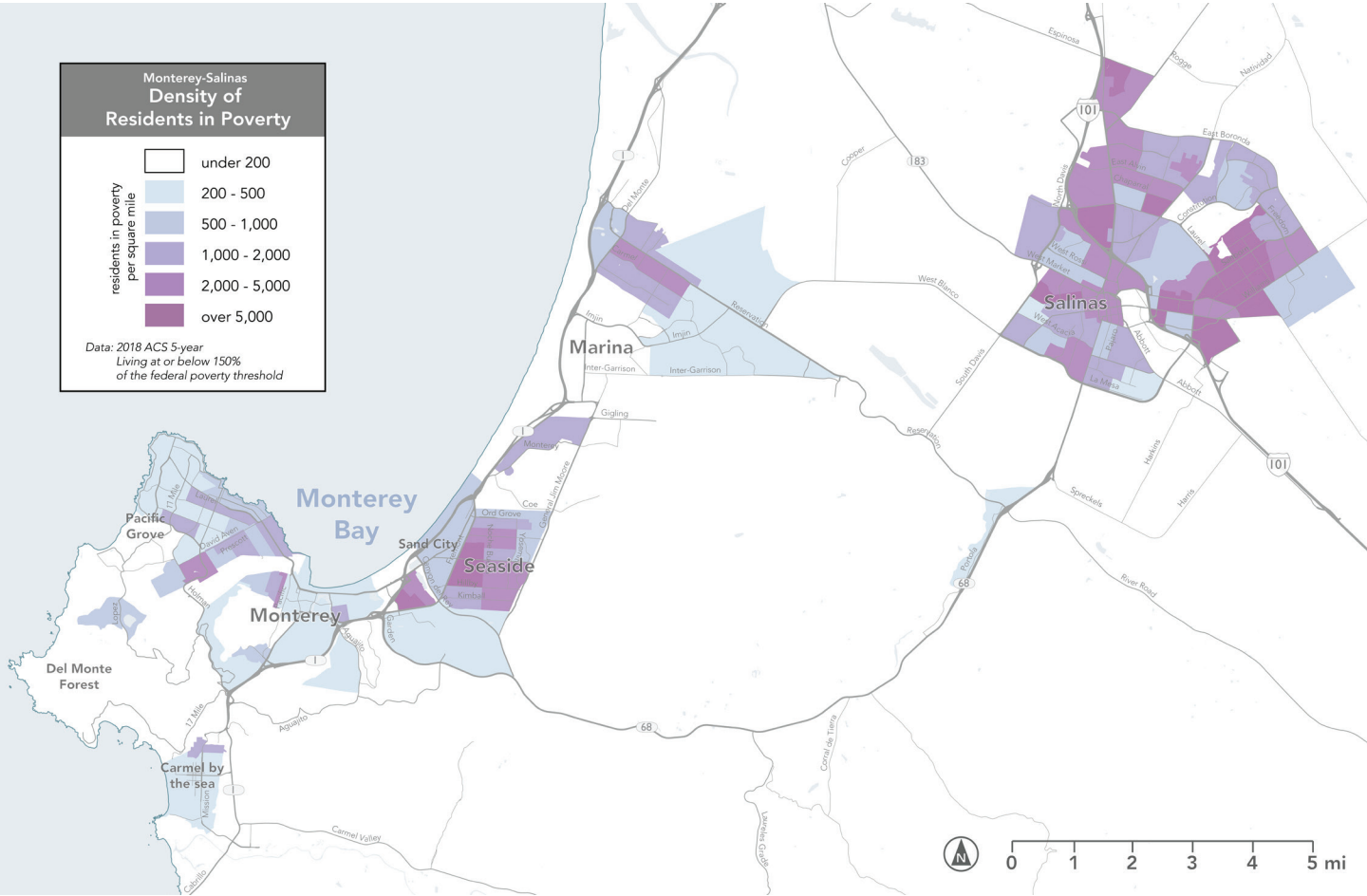


Figure 11: Density of residents living in households below 150% of the federal poverty line. The darker and more purple the area on this map, the more people in poverty are concentrated in that area.

The Challenge of Planning a Good Transit Network in Monterey County

1. Relatively few people live in cities.

Fixed-route transit relies on the ability and willingness of strangers to share a vehicle. To make this possible, several people along any bus line need to be interested in going to places the bus is going. To achieve high ridership, you must have many people near bus lines going to many destinations.

There are people and jobs throughout Monterey County. But **there are very few places where many people live in close proximity, or where many jobs are located in a small area.**

Almost all of those places appear shaded in color on the map in Figure 12, and all of MST's most productive lines (in ridership terms) focus on these areas:

- JAZZ A/B: Monterey-Seaside-Sand City.
- Line 18: Monterey-Seaside-Marina
- Line 20: Salinas-Marina-Sand City-Seaside-Monterey
- Line 41: East Salinas-Downtown Salinas
- Line 49: North Salinas-Downtown Salinas

With few exceptions¹, these are the areas where a well-funded, well-designed and well-operated transit system might be expected to generate high ridership, in the absence of a global pandemic. Taken together, they account for only half the population and jobs of Monterey County.

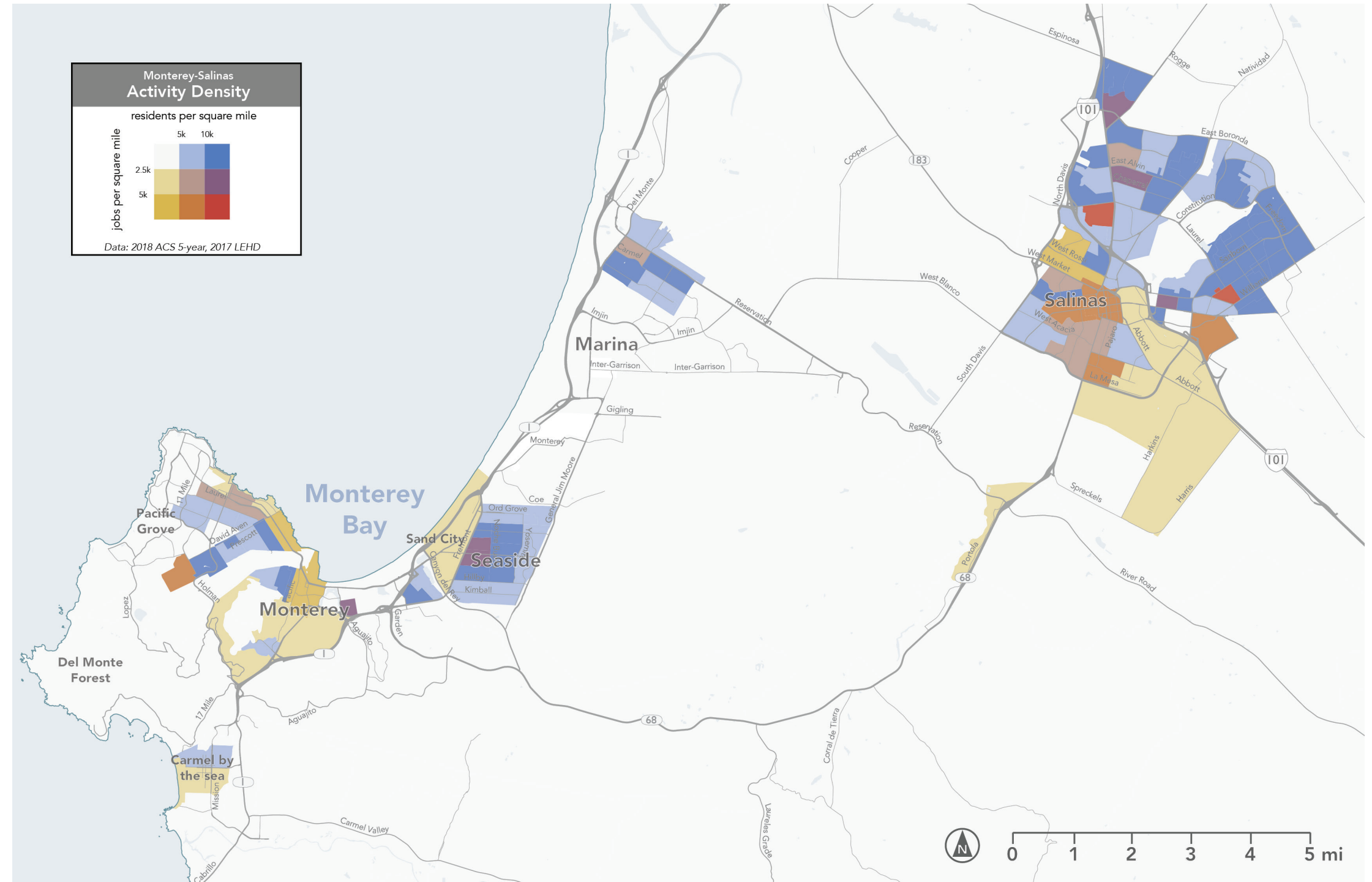


Figure 12: Map of combined population and job density in the greater Monterey and Salinas areas.

¹ Most notably CSUMB, which does not appear in this map but is a large and growing center between Downtown Marina and Seaside.

2. There is no one “Downtown”.

Even in a spread-out community, it may be possible to generate significant transit ridership if there are places where almost everybody needs to go on a regular basis.

We can identify these places on a map, by counting how many jobs are within walking distance of any point. Offices, retail, hotels, restaurants, social services, colleges, hospitals and many other destinations are all places where there are jobs and where people need to go. Places where many such destinations are within walking distance of each other are natural hubs for transit service.

The map in Figure 13 shows us that the largest such centers are in Downtown Monterey and Downtown Salinas. This is why MST builds most of its service around the Monterey Transit Plaza and the Salinas Transit Center.

But the map also shows a major challenge in generating high ridership even with this design: **neither of the county’s two largest centers account for a large share of county-wide jobs¹.**

This reflects what anyone who lives in Monterey County already knows: there’s no one “Downtown” where someone could go for nearly everything they might need.

That means that any successful transit system in Monterey County needs to connect the centers of Monterey and Salinas with a wide variety of smaller destinations that also generate many trips, like colleges, hospitals, smaller town centers and suburban shopping centers.

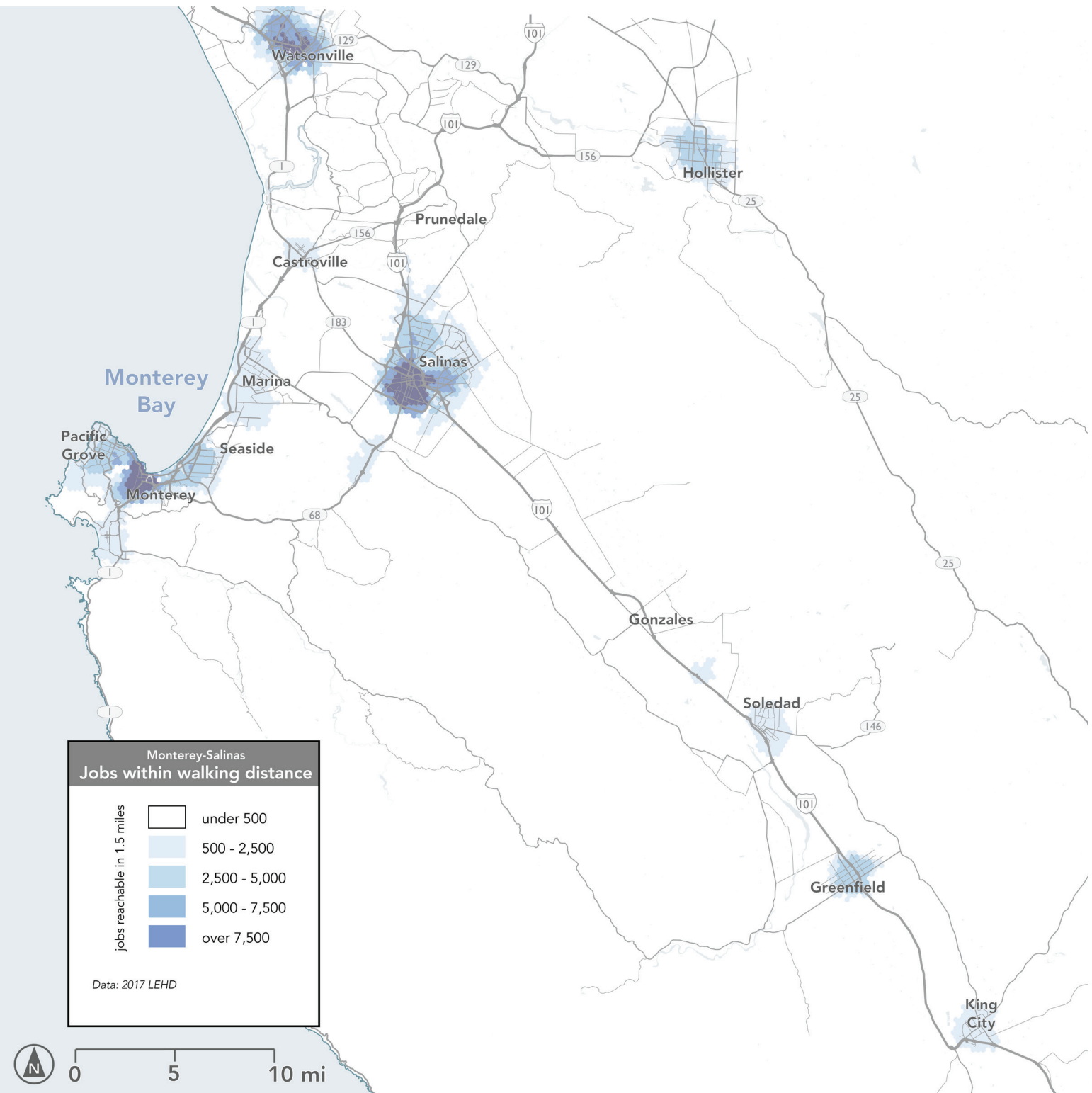


Figure 13: Regional map showing the number of job within walking distance, defined as 1.5 miles, or a 30 minute walk by an able bodied adult.

¹ There were over 170,000 civilian jobs in Monterey County in 2017. The most central point in Downtown Monterey was within 1.5 miles of 9,900 jobs (6%) The most central point in Downtown Salinas was within 1.5 miles of 14,900 jobs (9%).

3. A growing number of people live very far from the places they need to go.

The places that are growing the fastest are the places that are the farthest from significant concentrations of jobs: Marina, and the cities of Gonzales, Soledad, Greenfield and King City.

Even in a future with fast bus service and more rail, **when so many people live so far away from the places they need to go, someone has to pay the price of distance.** Distance must be crossed, which takes time and money that can't be spent towards other things people value.

- More people bear the cost of owning and maintaining more cars, to access opportunities that might be accessible by transit if they lived closer in.
- Those who can't drive or get a ride from a friend spend hours on transit, and hours waiting, to cover that distance.
- To serve these often disadvantaged communities more equitably, MST needs to spend more of its budget on distance, which means less can be spent on high frequencies or long hours of service, undermining ridership potential.
- A long cascade of social, health, economic and environmental problems follow.

This network redesign will examine ways that transit access can be increased despite the high cost of distance. But unless future housing development can be redirected closer to where most people work, shop, and access services, the problems caused by distance will grow worse, and transit alone will not be the savior.

The fastest growing places are far from jobs and services. Unless future housing can be directed closer to where people need to go, the problems caused by distance will grow worse. More MST service to far-flung places can only mitigate this issue, not solve it.

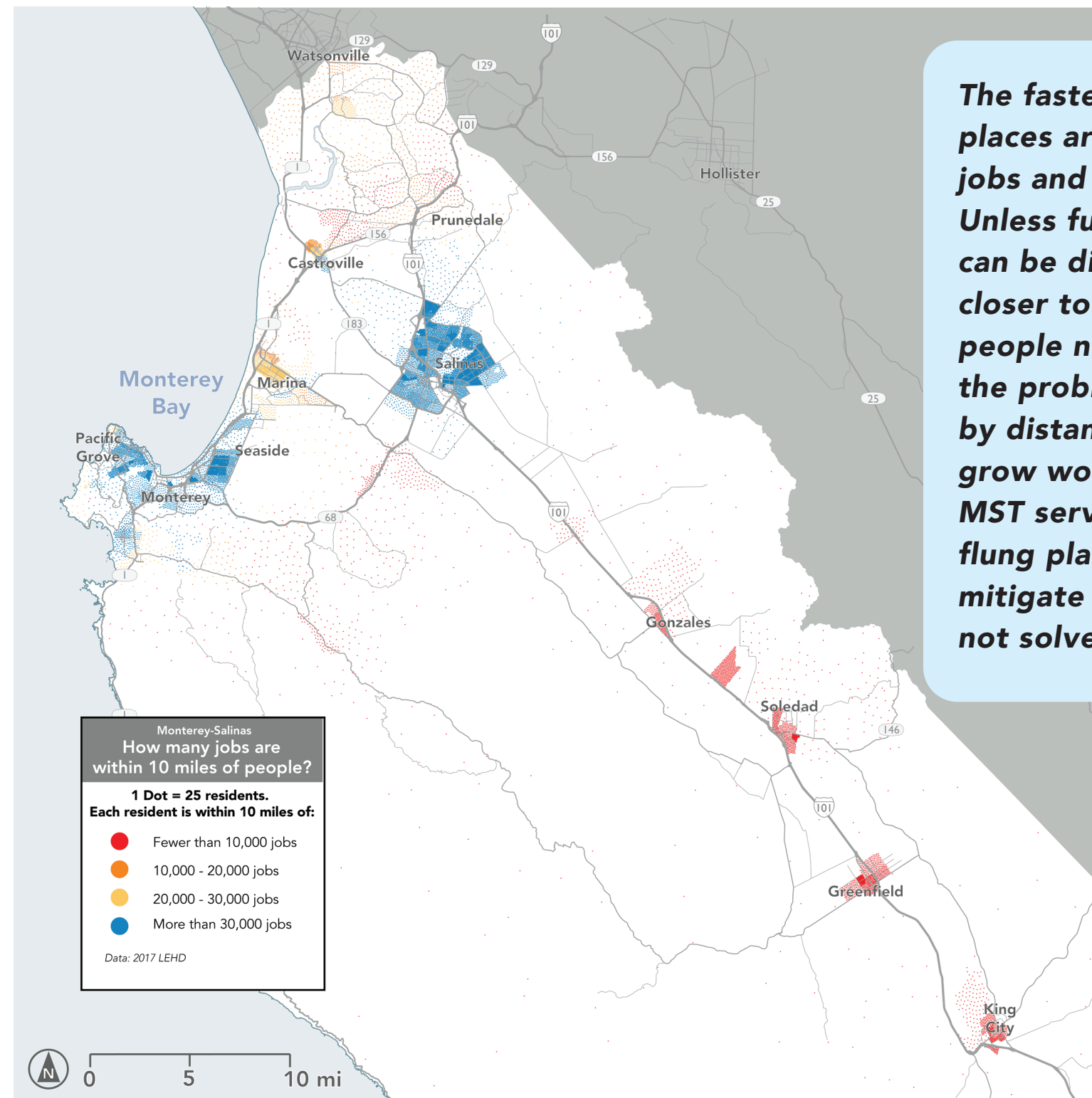


Figure 14: Regional map showing the number of people living in locations that are near many jobs (in blue) vs. in locations that are near very few jobs (in red).

2 What makes transit useful?

What goals should transit serve?

Transit can serve many purposes; which purposes it should serve depends on your values.

Possible Goals for Transit

Transit can serve many different goals. Different people and communities value these goals differently. Understanding which goals matter most in Monterey County is a key step in redesigning the transit network.

Possible goals for transit include:

- **Social Safety Net.** Transit can help meet the needs of people in situations of disadvantage, with access to essential services and jobs.
- **Economic Development.** Transit can give businesses access to more workers; workers access to more jobs; and students more access to education and training.
- **Environmental.** By reducing car trips, transit use can reduce air pollution and greenhouse gas emissions. Frequent transit can also support compact development and help conserve land.
- **Congestion Mitigation.** Because buses carry more people than cars, transit use can mitigate traffic congestion by reducing Vehicle Miles Travelled (VMT). This is especially important in communities with significant jobs-housing imbalances and a preponderance of long commutes.
- **Health.** Transit can support physical activity. This is partly because most riders walk to their bus stop, but also because riders will tend to walk more in between their transit trips.
- **Personal Liberty.** By providing people the ability to reach more places than they otherwise would, a transit system can be a tool for personal liberty, empowering people to make choices and fulfill their individual goals.

Some of these goals are only served if many people use transit. For example, transit can only mitigate congestion and pollution if many people ride the bus rather than drive. We call such goals “ridership goals” because they are achieved through high ridership.

Other goals are served by the simple presence of transit. A bus line through a neighborhood provides residents insurance against isolation. A line may fulfill political or social obligations, for example by getting service close to every taxpayer or into every municipality. We call these types of goals “coverage goals” because they are achieved in large part by covering geographic areas with service, rather than by high ridership.

High ridership is not transit’s only goal

If MST wanted to maximize transit ridership, it would focus service where and when it could be useful to the most potential riders. MST would then be thinking like a business, focusing on places where its service is competitive for a large number of people.

Businesses are under no obligation to operate where they would spend a lot of money to reach few customers. People understand that less populated areas will naturally have fewer stores. We don’t describe this as stores being *unfair* to those areas; they are just acting like a business, maximizing profits.

Transit agencies are not for-profit businesses. Most agencies have some obligation to cover most or all of their service area. The officials who make transit decisions hear their constituents say things like “We pay taxes too” and “If you cut this bus line, I will be stranded”. So they decide that some coverage, even in low-ridership places, is important to provide.

Transit agencies are often accused of failing to maximize ridership, as if that were their only goal. But in many cases, transit agencies are intentionally operating coverage services in areas that are not expected to generate high ridership. Coverage services are sometimes visible to the public as mostly-empty buses.

Agencies must balance the competing goals of high ridership and coverage. The smaller the agency’s budget relative to its service area, the harder the trade-off between those goals.



Figure 15: Is an empty bus failing? It depends why you are running it.

Ridership and coverage goals conflict.

Ridership and coverage goals are both justifiable, but they lead us in opposite directions. Here is an illustration of how ridership and coverage goals conflict with one another, due to geometry and geography.

In the fictional area at top right, the little dots indicate dwellings and commercial buildings and other land uses. The lines indicate roads. Most of the activity is concentrated around a few roads, as in most places.

A transit provider pursuing only a ridership goal would focus service on the streets where there are large numbers of people, where walking to transit stops is easy, and where the lines feel direct and fast to customers. Because service is concentrated onto fewer lines, frequency is high and a bus is always coming soon. This would result in a network like the one at bottom-left.

If the city were pursuing only a coverage goal, on the other hand, it would spread out services so that every street had a bus line, as in the network at bottom-right. As a result, all lines would be infrequent, even those on the main roads.

On a fixed budget, designing transit for both ridership and coverage is a zero-sum game. In the networks at right, each bus that the transit provider runs down a main road, to provide more frequent and competitive service in that market, is not running on the neighborhood streets, providing coverage. **While an agency can pursue ridership and provide coverage within the same budget, it cannot do both with the same dollar. The more it does of one, the less it does of the other.**

These illustrations also show a relationship between coverage and complexity. **Networks offering high coverage are naturally more complex.** In high coverage networks, riders are more likely to use just one or two lines regularly. In high frequency networks, more riders use many lines regularly, because transferring among lines is easier and more reliable thanks to the high frequencies.

In this imaginary place, any person could keep the very simple high frequency network in their head, since it consists of just two lines, running in straight lines. They would not need to consult a schedule to catch a bus because a bus would always be coming soon. The coverage network would be harder to memorize, requiring people to consult a map (to understand the routing) and a schedule (to catch these infrequent services).



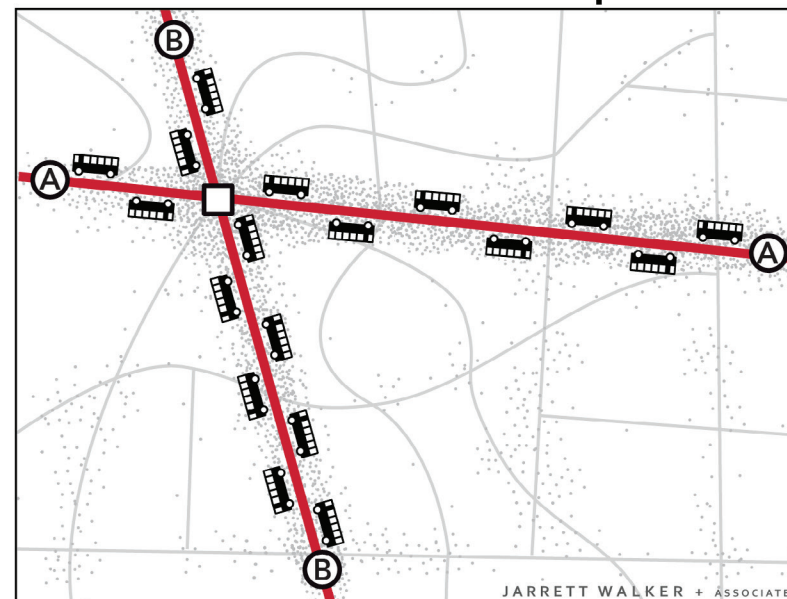
Imagine you are the transit planner working in this fictional neighborhood.

The dots scattered around the map are people and jobs.

The 18 buses are the resources the town has to run transit.

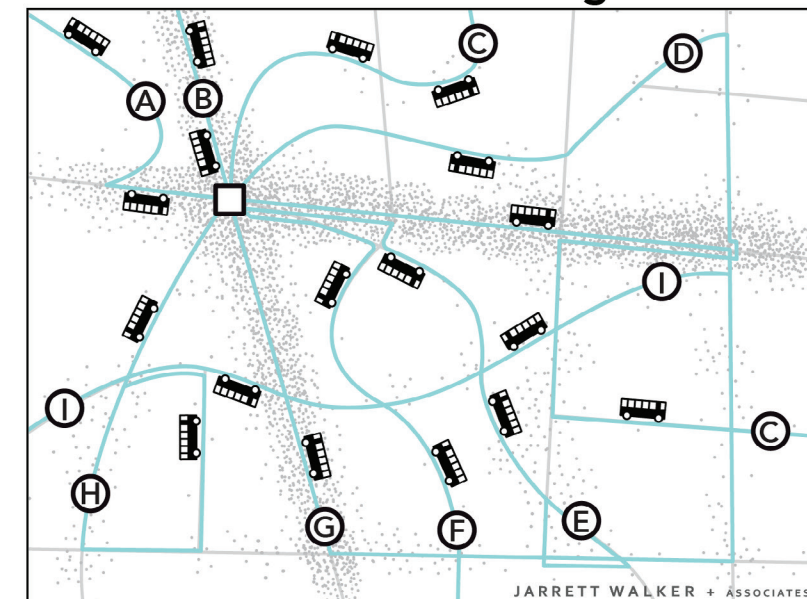
Before you can plan transit routes, you must first decide: What is the purpose of your transit system?

Maximum Ridership



All 18 buses are focused on the busiest area. Waits for service are short but walks to service are longer for people in less populated areas. Frequency and ridership are high, but some places have no service.

Maximum Coverage



The 18 buses are spread around so that there is a route on every street. Everyone lives near a stop, but every route is infrequent, so waits for service are long. Only a few people can bear to wait so long, so ridership is low.

Transit is useful because it expands where people can go.

Access and Freedom

Wherever you are, you can only reach so many places in a reasonable amount of time. These places can be viewed on a map as a blob around your location, as in Figure 16.

You can think of the edges of this blob as a “wall around your life.” Beyond this area are things you can’t do on most days because it simply takes too long to get there. The extent of this area affects your options in life: for employment, school, shopping, or any other places you might want to reach.

The technical term for this is access, but it’s also fair to call it freedom, in the physical sense. If you can go to more places, you have more choices, so in an important sense you are more free.

How Transit Expands Access

Transit provides value when it increases people’s freedom. That happens by increasing the number of useful places people can access in a reasonable amount of time without driving. On transit, the extent of your access is determined by:

- The **network**, including transit lines with their frequency, speed, and duration. These features determine how long it takes to get from any point on the network to anywhere else.
- The **layout of the city**. This determines how many useful destinations can be located near transit stops. For example, where there are more people or useful destinations near a given stop, good access from that point is of value to more people.
- Your **location** determines which lines are close and frequent enough to be useful.

Access and Ridership

On an individual level, access represents convenience and the ability to do the things you need. As such, **the level of access transit provides is part of what determines ridership, but it is also something that many people will see as a worthy goal in itself.**

For example:

- Access to jobs is a key concern for keeping people employed.
- Access to many amenities from a particular location gives that location value. Real estate firms routinely outline where you can get to by car from a particular development parcel, and this is the same analysis for transit. In cities, transit access can be an important factor in overall property value.

If you are deciding where to live based on whether you’ll be able to get to your job, school, or relatives, you are asking a question about access. Access by transit may be a factor in that decision.

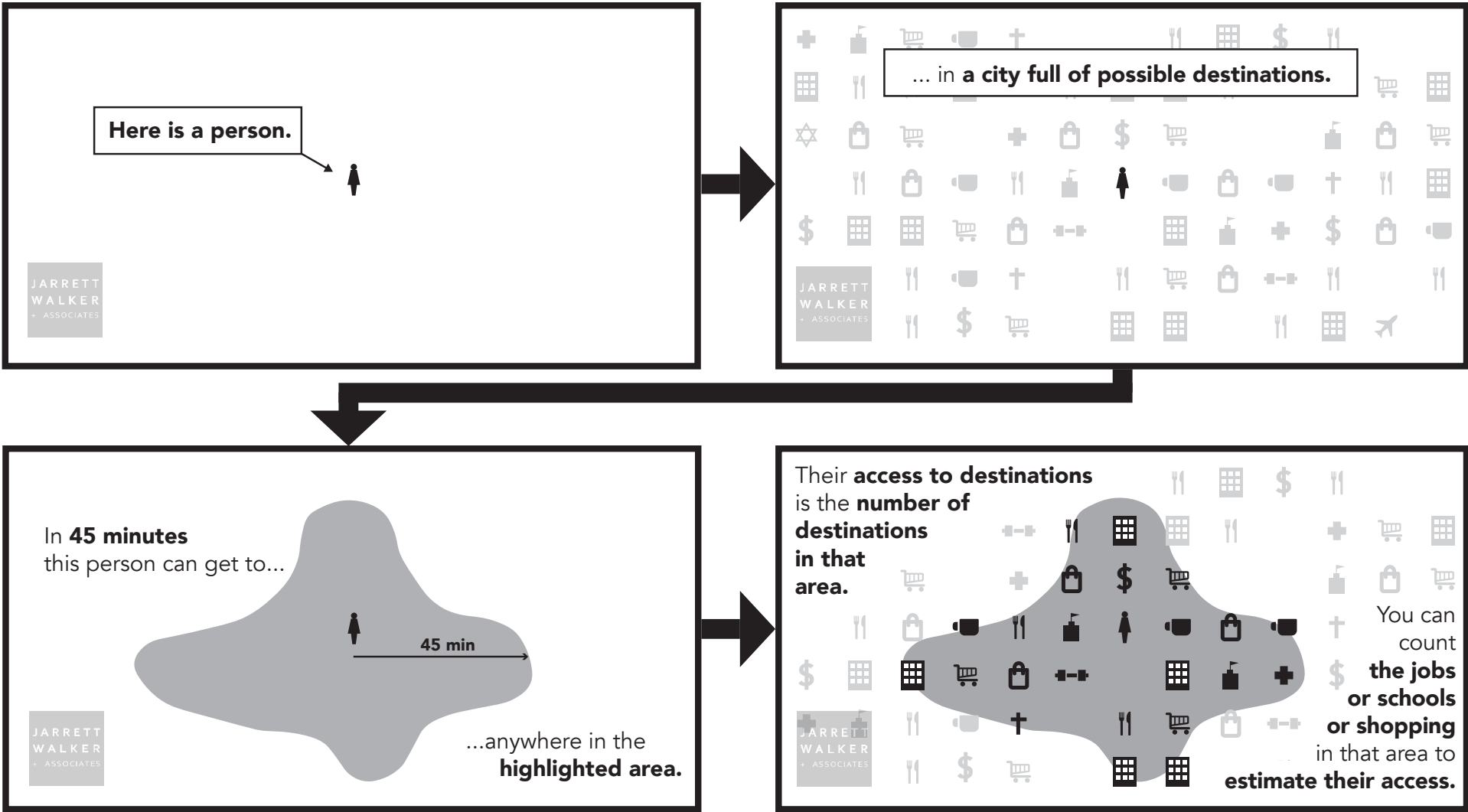


Figure 16: Access is the ability to get from your current location to places you need to go. The more places you can access in a reasonable amount of time, the more freedom you have to live your life in the way you need.

Frequent transit is useful to more people and more trips.

A transit network is a pattern of lines and services, where each line:

- follows a **path**,
- at certain days and times (its **span**),
- at a given average **speed**, and
- buses come every certain number of minutes. This is known as the headway or **frequency**.

Frequency is invisible and easy to forget, and yet on transit it is often the most important factor determining where you can get to in a given amount of time.

Frequency Is Freedom

More frequent service dramatically improves access. High frequency reduces travel time by providing several linked benefits:

- **Shorter Waits.** Unless you plan your life around a bus schedule, the average wait for transit is half the frequency. If a bus comes every 30 minutes, your average wait will be 15 minutes. But if it comes every 15 minutes, your average wait will be 7.5 minutes.
- **Faster Transfers.** To go further than the places on the bus line you happen to be on, you'll need to connect to another line. Frequency makes this easy, because the next bus is always coming soon.
- **Easier Recovery from Disruption.** Frequent service is more reliable, because if a bus breaks down you don't have to wait as long until the next one shows up.
- **Spontaneity and Freedom.** When transit comes every few minutes, there's no need to build your day around a bus schedule. You can turn up at the stop and go, whenever you want.

Frequency and Ridership

The plot in Figure 17 shows all the lines operated by 33 different U.S. transit agencies, at various points in the 2010s.

Each line is located on the plot based on its frequency and its productivity (boardings per service hour). More frequent service is to the left, and more productive service is higher up. The shade of each hexagon indicates the number of lines in that place on the graph.

The plot shows that higher productivity is correlated with higher frequency, even though higher frequencies require more service hours. In other words, **ridership appears to rise exponentially as frequency increases.**

This is a two-way street: transit agencies rarely run high frequency service in places where they expect low ridership. But conversely, if frequency isn't very high, the amount of ridership transit can attract is fundamentally limited.

What is frequent enough?

Frequency is expensive, so it's important to think about just how frequent service needs to be.

A frequency of 15 minutes or better has a good chance of being useful to someone whenever they need to travel, especially if that frequency extends over many hours of the day, every day.

Adequate frequency depends on trip length, because it doesn't make sense to wait long to go a short distance. For many people, it wouldn't make sense to wait 15 minutes to go half a mile, because you could probably walk to your destination in that time. But it might make sense to wait that long to go several miles across town.

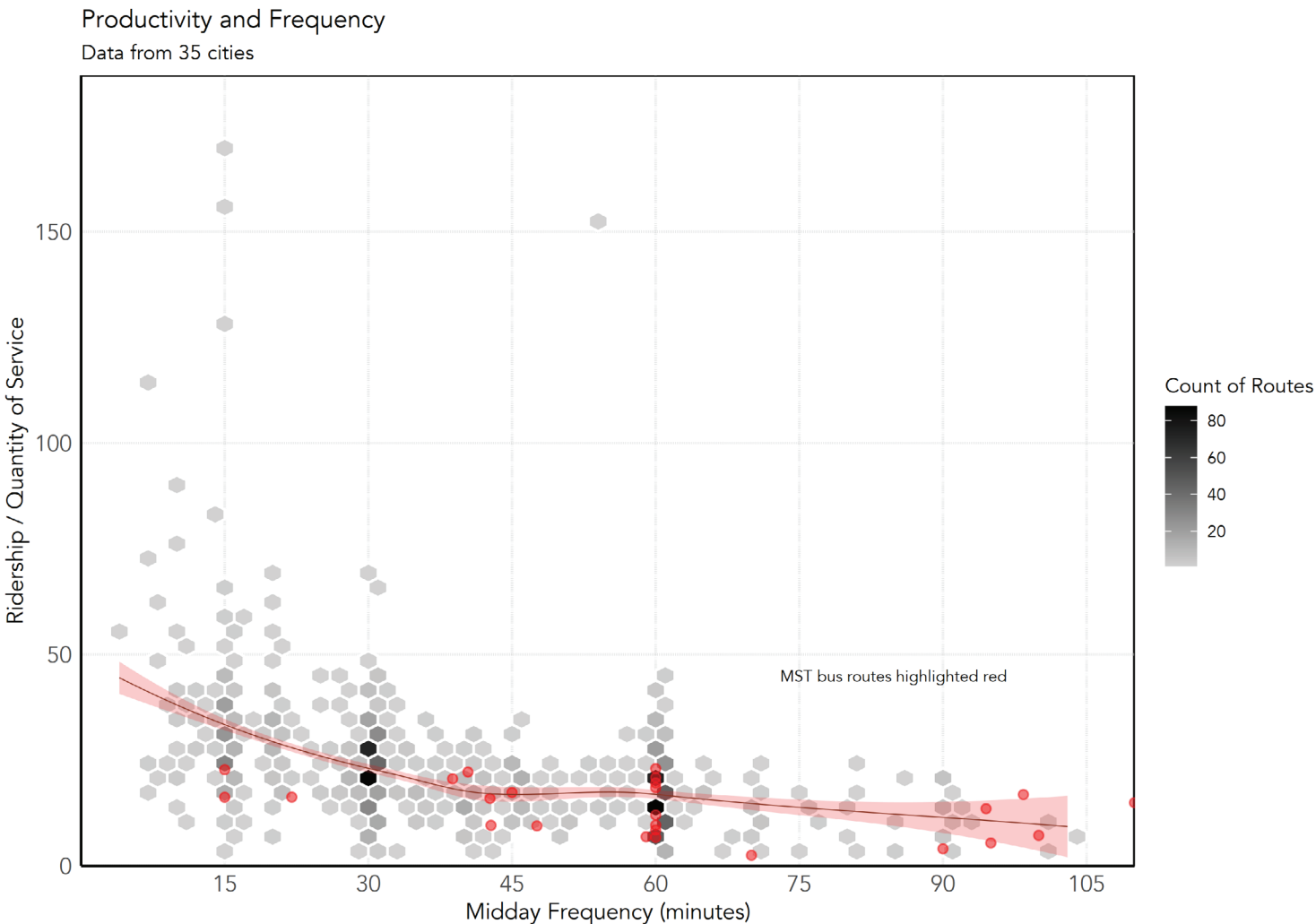


Figure 17: Transit Productivity and Frequency in 34 cities across the USA. Lines that operate more frequently tend to attract a higher number of riders per hour of service. This is because frequency makes transit trips shorter and more reliable.

Transit's ability to expand access depends on the build environment.

Creating a high-access transit network isn't just about faster or more frequent service. Many factors outside the control of MST – such as land use, development, urban design, street networks – affect transit's usefulness. This is why **land use and infrastructure decisions made by the cities and other agencies are an essential part of transit's success.**

The built environment factors shown in Figure 18 are critical to facilitating a broadly useful transit network:

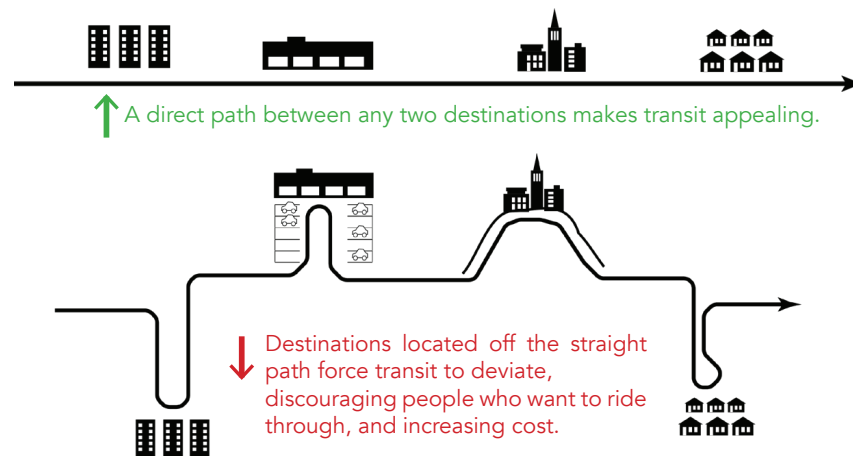
- 1. Density.** Where there are many residents, jobs and activities in an area, there are many places people might want to go.
- 2. Walkability.** An area only becomes accessible by transit if most people can safely and comfortably walk to and from the nearest transit stops.
- 3. Linearity.** Direct paths between many destinations are faster and cheaper for MST to operate. Straight lines are also easier to understand and more appealing to most potential riders.
- 4. Proximity.** The longer the distance between two places to serve, the more expensive it is to connect them. Areas with continuous development are more cost-effective to serve than areas with big gaps.
- 5. Mix of Uses.** When there is a mix of land-uses along a direct path, transit can provide direct access to a broad range of destinations. Mixed-use transit corridors also tend to be very productive, because people ride in both directions at many times of the day.

Regardless of the intricacies of local geography, these five elements determine where transit can be useful for many people, at a relatively low cost.

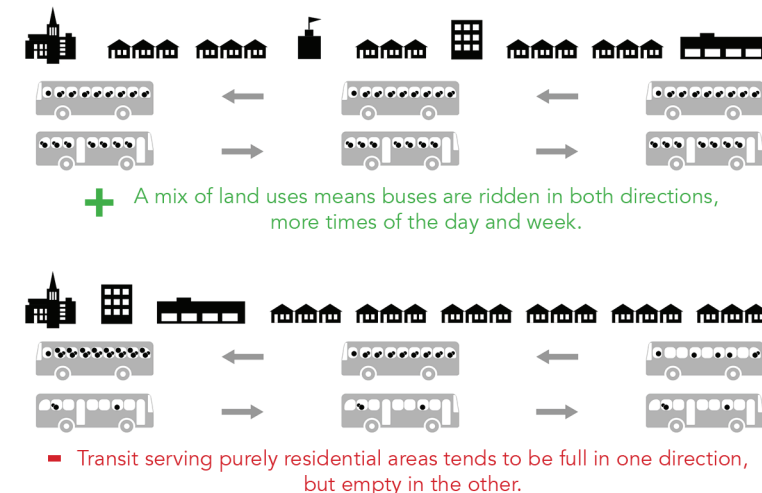
1. DENSITY How many people, jobs, and activities are near each transit stop?



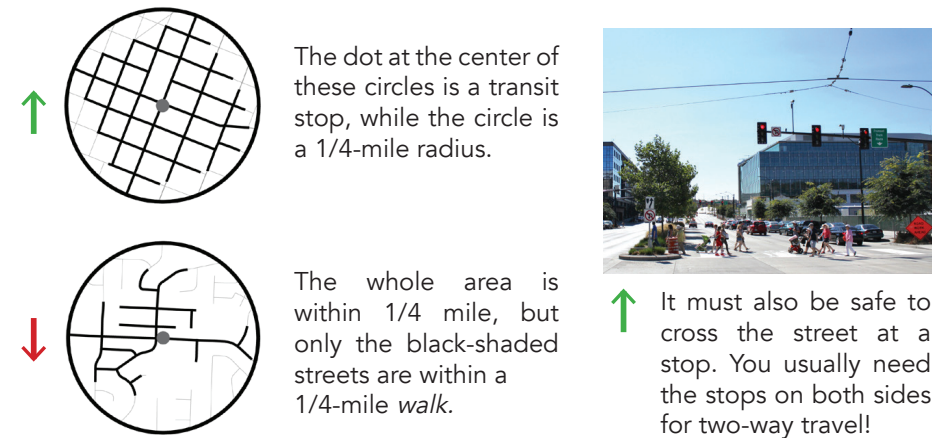
3. LINEARITY Can transit run in reasonably straight lines?



5. MIX OF USES Do people travel in both directions, all day?



2. WALKABILITY Can people walk to and from the stop?



4. PROXIMITY Does transit have to traverse long gaps?

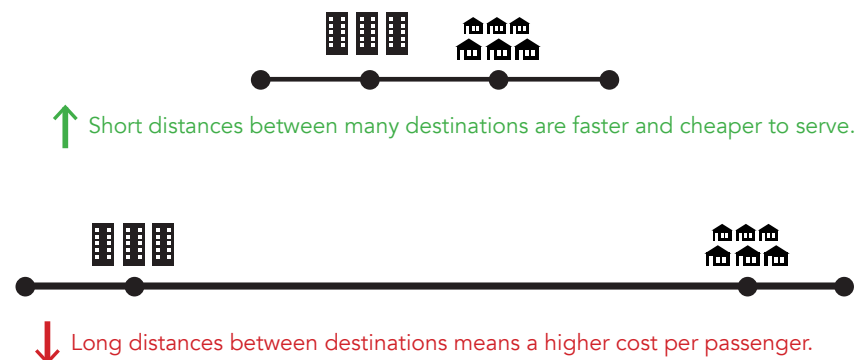


Figure 18: More Freedom, Lower Costs - Five key built environment factors that determine how useful a transit network can be.

These geometric facts pose a difficult political challenge. A transit system focused on cost-effectively providing the most useful service possible tends to serve its constituents unevenly, concentrating service in areas where buses can run straight and demand is high.

Density and Walkability in Monterey County

Because dense areas often support multiple land uses in close proximity, density and walkability often go hand in hand. Nonetheless, there’s nothing inherently walkable about a high-density neighborhood.

These aerial photos at right show three typical mixes of density and walkability in the Monterey County region. Specifically:

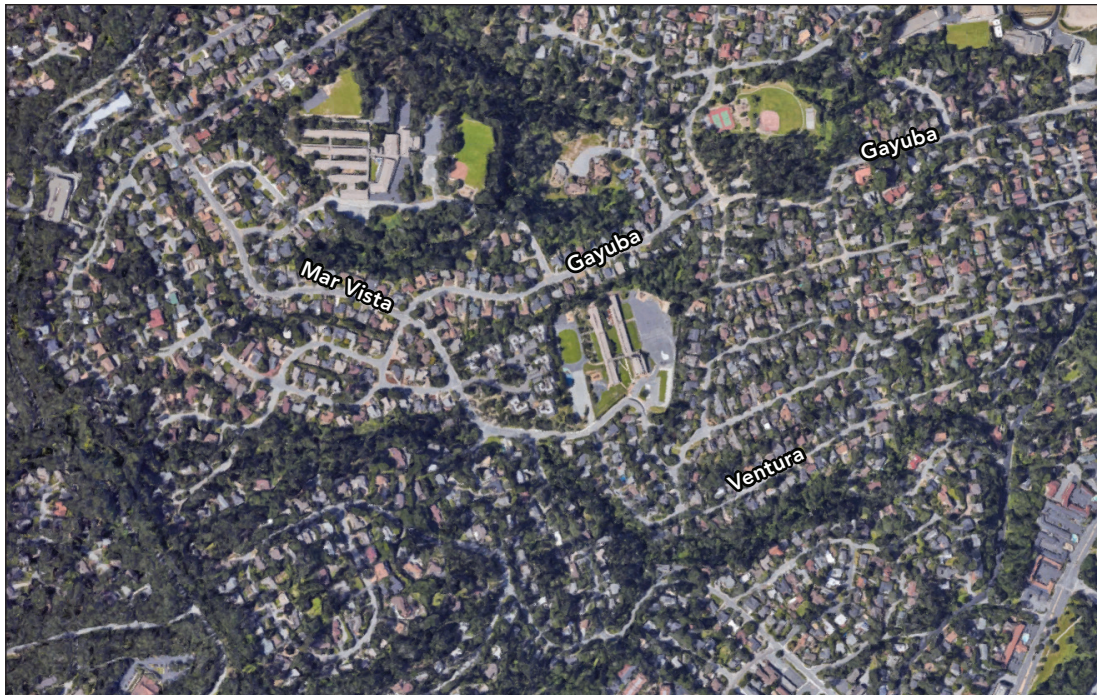
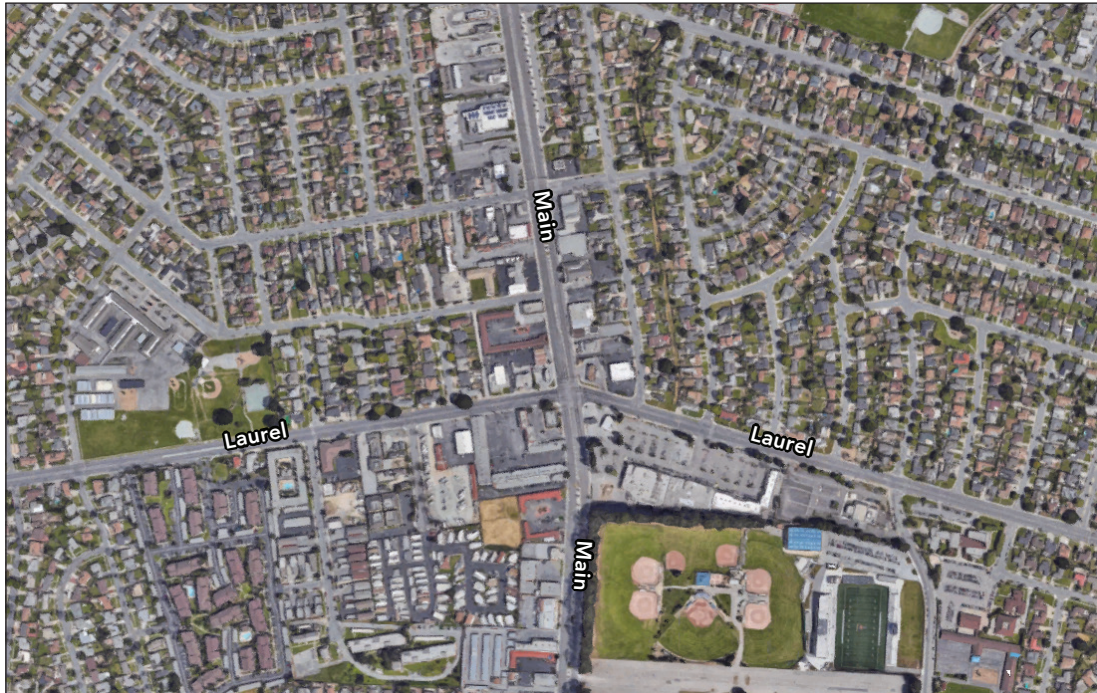
- High density/high walkability-Cannery Row:** This area features one of the densest mixes of commercial and residential uses in the County, although it is worth noting that even here, most buildings don’t exceed three stories. Many features make this area attractive for walking. Sidewalks and paths abound. There are relatively few places like this in Monterey County, and they tend to be economically exclusive.
- High density/low walkability-North Salinas:** This area in North of Salinas has fairly high density, but is much less walkable. A combination of landscaping, extremely wide streets, serpentine roads, and dead-end roads backing into Highway 101 makes it impractical to walk in a straight path. There are several similar areas in Monterey County, particularly in Salinas, Seaside, and Marina. They tend to be disproportionately low-income.
- Low density/low walkability-Monterey Vista:** This area of Monterey includes detached houses on a street network with numerous dead ends. There are no services or shopping destinations to walk to nearby.

Because these three neighborhoods are built very differently, providing the exact same amount of transit service in each area will result in very difficult access and ridership outcomes.

Cannery Row, Monterey
High Density; High Walkability



North Salinas
High Density; Low Walkability



Monterey Vista Neighborhood
Low Density; Low Walkability

Figure 19: Examples of Density and Walkability in Monterey County

Density and Walkability in Monterey County. Who lives near jobs?

Another way to see this is by thinking about how many opportunities (density) are near me in a walking distance (walkability).

The map on the right shows how many jobs are within 1.5 miles (roughly a 30 minute walk for an able-bodied adult) in most of Monterey County. Areas represented with a dark shade of blue have many jobs nearby, while areas in a light shade of blue have few.

Depending on where you live, the likelihood you are able to walk to your job or other places you might need to go is reflected by your neighborhood's shade on this map.

In cities like Salinas and Monterey, as you move farther from Downtown, it becomes harder to walk to jobs, services, recreation, etc.

In some areas, like central Marina and the northeast side of Salinas, there are both relatively high population densities and relatively few places to walk to within 30 minutes walking. These are the kinds of conditions which can create significant demand for transit.

Cities in the South County tend to have connected street grids in a compact area, but they are still not very walkable in that there are not that many jobs and destinations available locally. As a result, South County residents tend to need to travel longer distances to get to the places they need to go. MST can serve some of these long trips, but many of them will inevitably be more practical by other means.

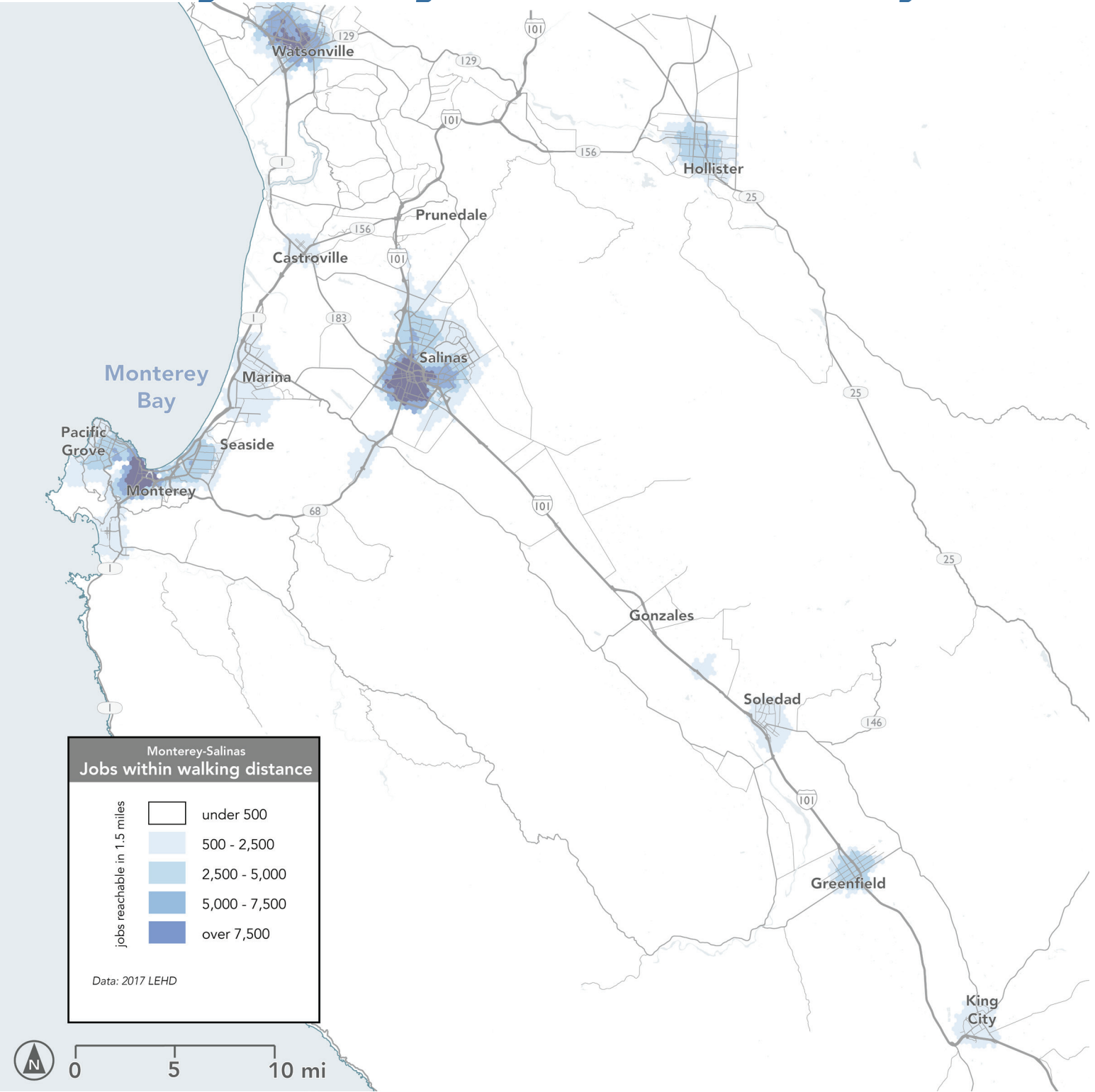


Figure 20: Regional map showing the number of job within walking distance, defined as 1.5 miles, or a 30 minute walk by an able bodied adult.

2 WHAT MAKES TRANSIT USEFUL?

Linearity in Monterey County

The major factor governing transit operating cost is a vehicle and driver's time on the line. Longer distances take more time to drive. So, the more people and destinations a line can serve in a short distance, the less it costs to serve each rider.

Because of the way the cities in the County have developed, some major destinations can be served very directly by transit, while others require the bus to twist and turn off its path. The examples on this page contrast two situations a major destination requires more or less deviation from a straight path:

- Somewhat Linear: Salinas Valley Memorial Hospital.** The hospital is located directly on a reasonable straight street (Romie) with pedestrian facilities that can accommodate people getting on and off a bus. A logical transit line can connect this place in a direct path to other origins and destinations.
- Not Linear: Community Hospital of the Monterey Peninsula (CHOMP).** Similar scale facility, but impossible to serve linearly. Any bus lines serving this hospital must deviate off Highway 1. As a result, anyone travelling between Carmel-by-the-Sea and Monterey on the bus has to sit through the time it takes to pull off of the freeway, drive through the parking lot, and come back. Putting development at the top of a hill or at the end of a long cul-de sac makes it harder to serve conveniently.

To support good transit service, it's important that major destinations locate on the way between other places that support good transit service. A linear street pattern is critical for MST to be able to run straight lines, but beyond that, a linear pattern of density and development is also important.

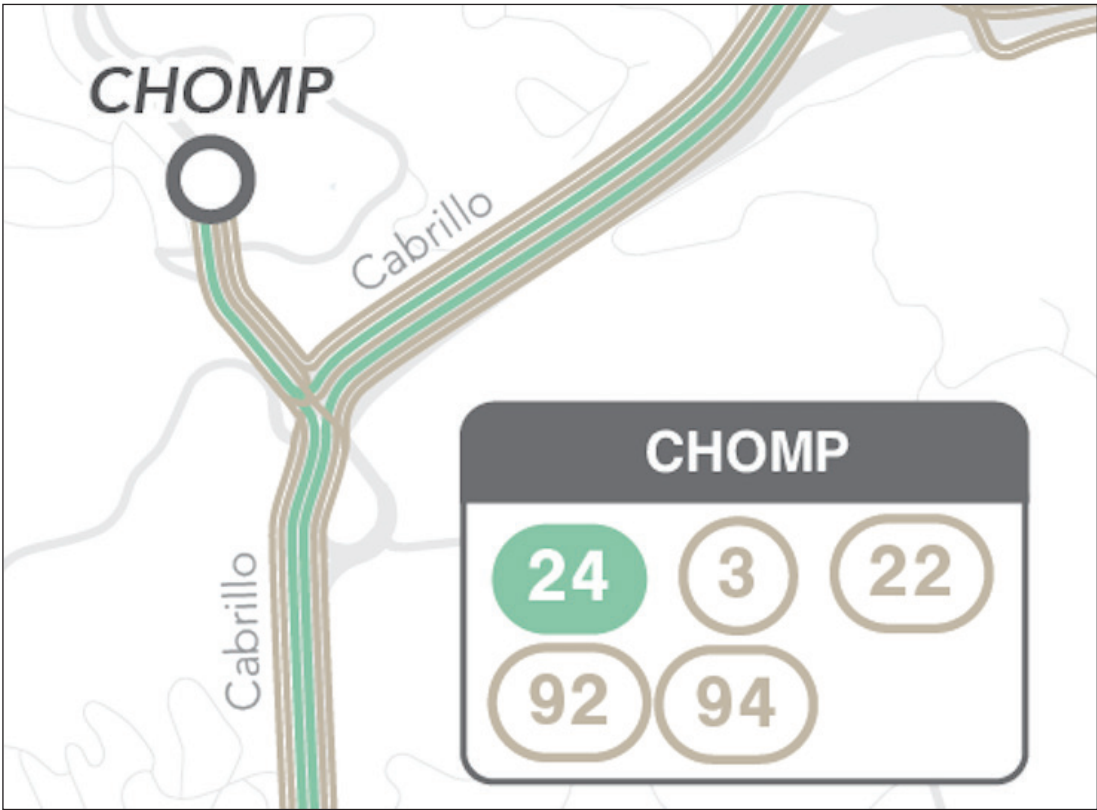
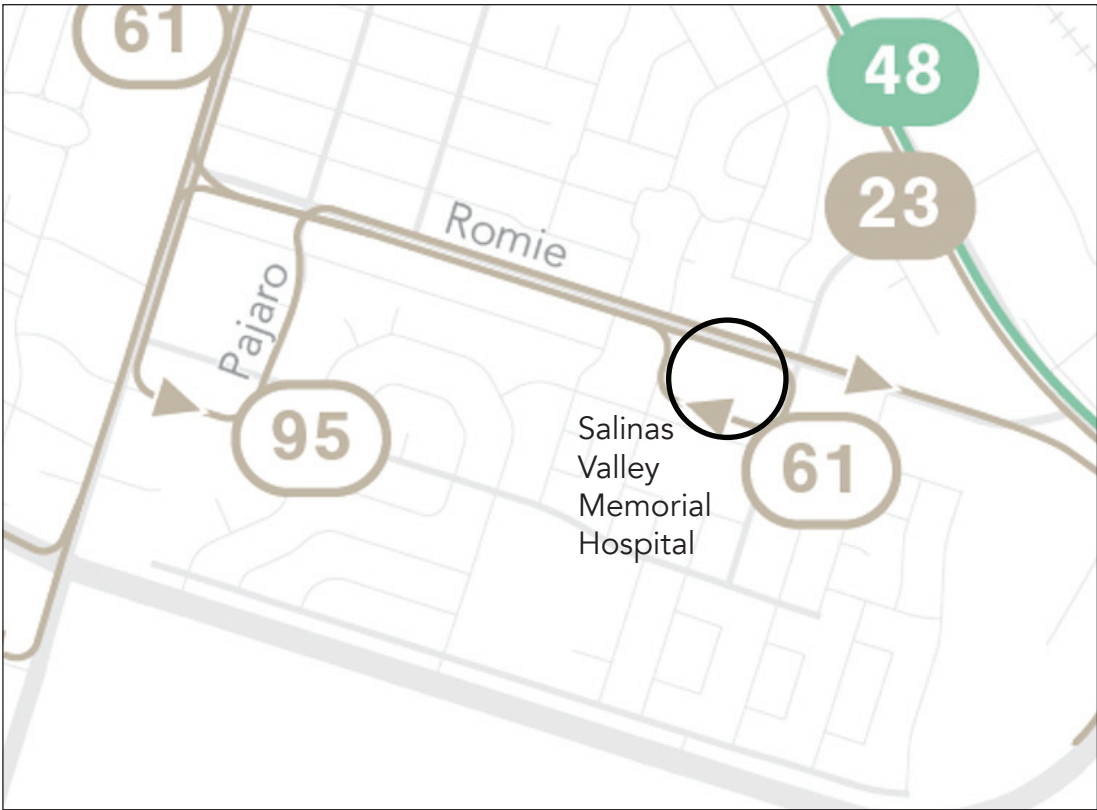


Figure 21: Examples of Linearity in Monterey County

Proximity in Monterey County

MST decides where transit goes, but it has no control over where jobs, housing and opportunities are located. Housing and job locations are decided by cities, counties, state and federal authorities, banks and businesses, but they directly impact MST’s potential to be useful to people.

The map in Figure 22 shows how many civilian jobs are within 10 miles of most locations in Monterey County and adjacent areas. Areas shown in a dark shade of blue have many jobs within 10 miles, and areas in a light shade have few.

10 miles is significant as a distance, because transit tends to be most cost-effective at serving trips that are in the range of 1-15 miles. **Dark blue areas on this map are areas where a bus could in theory take people to many places in a reasonable amount of time.**

People who live in the white and light blue areas in South County need to travel very far to reach economic opportunities. It is possible to serve them with transit, but the cost per rider will inevitably be higher, and the service will inevitably be less effective. People who have no choice but to live far from where they need to go will spend more time than they want travelling, be it on the bus or in a car.

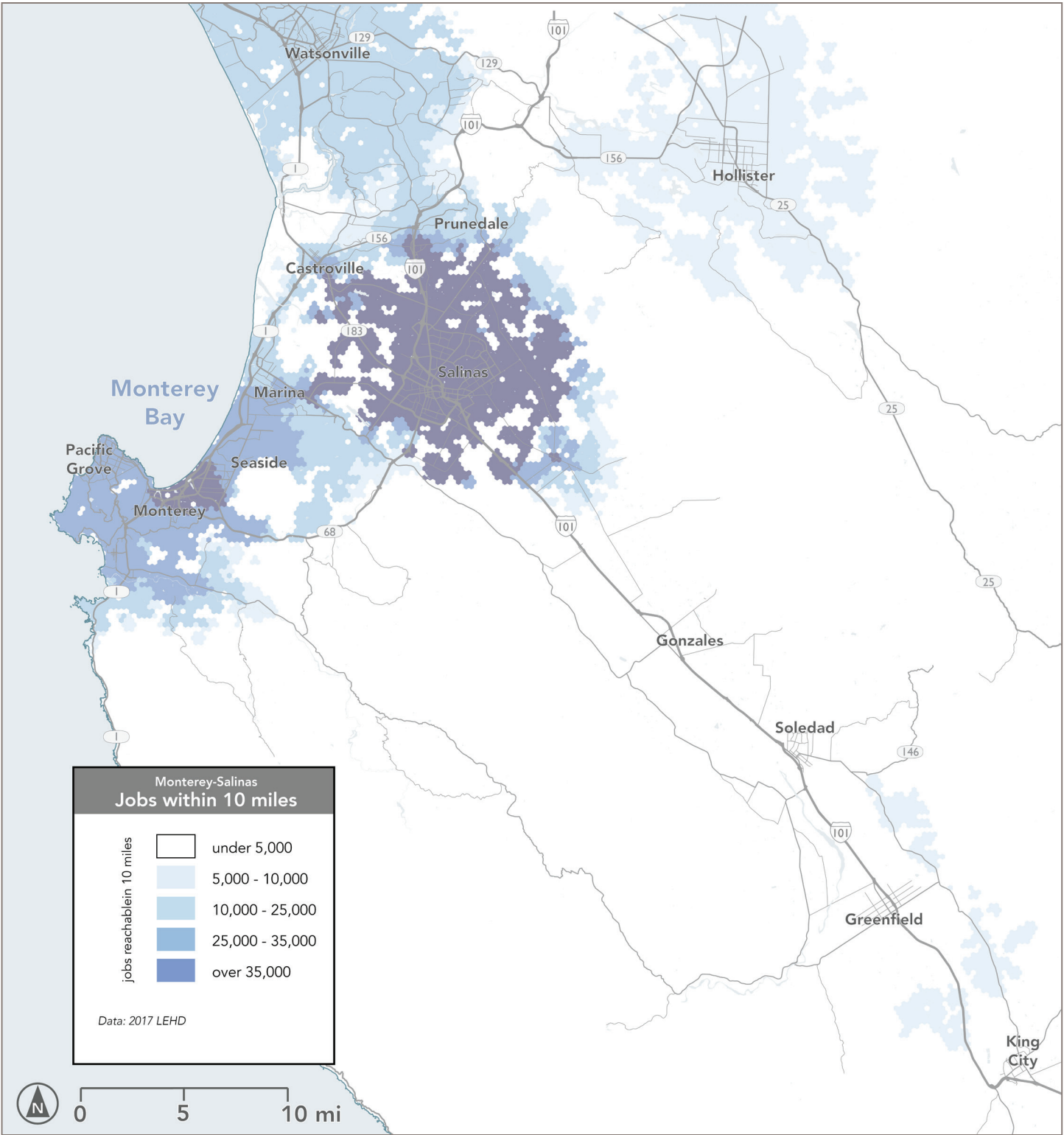


Figure 22: Jobs within a 10 mile distance

3 The Challenges and Opportunities of Monterey County's Geography

The Market and Need for Transit

In this chapter, we present and discuss data that inform two different types of considerations in transit planning:

- **Where are the strongest markets for transit, with potential for high ridership and low operating costs?**
- **Where are there moderate or severe needs for transit, where coverage services may be important even if they do not attract high ridership?**

A “strong transit market” is mostly defined by where people are, and how many of them are there, rather than by who people are. We learn about transit needs mostly by examining *who* people are and what life situation they are in.

Measuring Demand and Need

On the following pages, these maps and diagrams help us visualize potential transit markets and needs¹:

- **Residential density**
- **Job density**
- Activity density (combined residential and jobs)
- Maps of **walkability**
- Pre-pandemic **commute patterns**
- **Zero-Vehicle households**
- **Poverty** density map
- Density of **Residents under age 18** (Youth)
- Density of **senior residents**

¹ The maps in this chapter are based on data from the U.S. Census Bureau (2010 Census and 2018 American Community Survey)

How to Use These Measures

No one measure tells us that a place has high ridership potential or high needs. Rather, we must consider them in combination.

Designing for Ridership

If you asked a transit planner to draw you a very high-ridership bus line, that planner would look mostly at densities of all residents and jobs; at the walkability of streets and neighborhoods; and at the cost of running a bus line long enough to reach them.

Only secondarily would that planner look into the income or age of those residents or workers. However, the “who” attribute that has the strongest influence on transit ridership potential is income. A lower income person is often more likely to choose transit than someone with a higher income. This is especially true in outlying areas where driving and parking cars is so easy, so transit tends to be used mostly by people who don’t have the option to drive.

Designing for Coverage

If you asked a transit planner to draw a line that helped as many people with severe needs as possible, they would look at where low income people, seniors, youth and people with disabilities live and where they need to go.

The densities at which these people live matters, because at higher densities a single bus stop can be useful to more people in need. However, the transit planner might also try to get the line close to small numbers of people. In fact, the more distant and scattered people are, the more isolated they can be and the more critically they might need access to transit.

Civil Rights and Equity

Another important set of maps in this chapter is not strictly related to *need* but rather to civil rights. These maps show **where members of different racial and ethnic groups live**.

Unequal treatment on the basis of race or ethnicity is prohibited by Civil Rights Act of 1964. (Unequal treatment on the basis of other characteristics, including income and age, is also prohibited by law.)

A person’s race or ethnicity does not tell us if they need transit, or if they have a propensity to use transit. However, we know that race and ethnicity are correlated with income.

Providing equitable and supportive levels of service to people of all races and ethnicities, even in areas that are costly to serve or that do not generate much transit ridership, can be an important element of a coverage goal.

Data Limitations

Detailed Census 2020 data is not yet available at the time of publication of this report.

The majority of the maps shown in this chapter are based on 5-year American Community Survey (ACS) data produced by the U.S. Census Bureau for the 2014-2018 period.

As such, they may not reflect very recent changes in population and job distribution that may have occurred in 2019 and 2020, or changes that started after 2014.

While the larger patterns of population distributions and population change shown in the maps likely reflect current reality, there may be deficiencies in specific locations of high growth (or population loss) in the second half of the 2010s.

Indicators of Demand: Residential Density

Anyone who travels makes at least one round-trip from their home each day. This makes residential density an essential consideration when thinking about transit market and where to locate service.

Figure 23 is a map of residential density taking a closer look at Monterey and Salinas, and the adjacent cities. Figure 24 on the next page is a map of the same data, but zoomed out to see the Gonzales, Soledad, Greenfield and King City.

It is important to understand that these maps only represent one side of the overall transit market. The other half is where people go once they leave their homes, such as offices, schools, universities, retail, recreational areas, houses of worship and other gathering places.

This map shows that the areas of highest residential density are located in Seaside and Salinas. Most of the residential density in these cities consists of tightly spaced one to two story house units on small lots.

Density in Seaside is located mostly east of Fremont Blvd, in an almost totally residential area with very little mix of uses.

Salinas in general has the highest density relative to other cities in the County. However, the mostly undeveloped area south and east of Natividad Hospital (around Laurel Drive) splits the areas of high density into two zones: one starting in the core of the city and spreading north, and the other one in the Alisal neighborhood, east of the city.

The highest density pockets in Salinas and Seaside are also located in very walkable streets, making them capable of generating substantial transit demand.

There are other isolated pockets of density in Marina, Monterey, Pacific Grove and

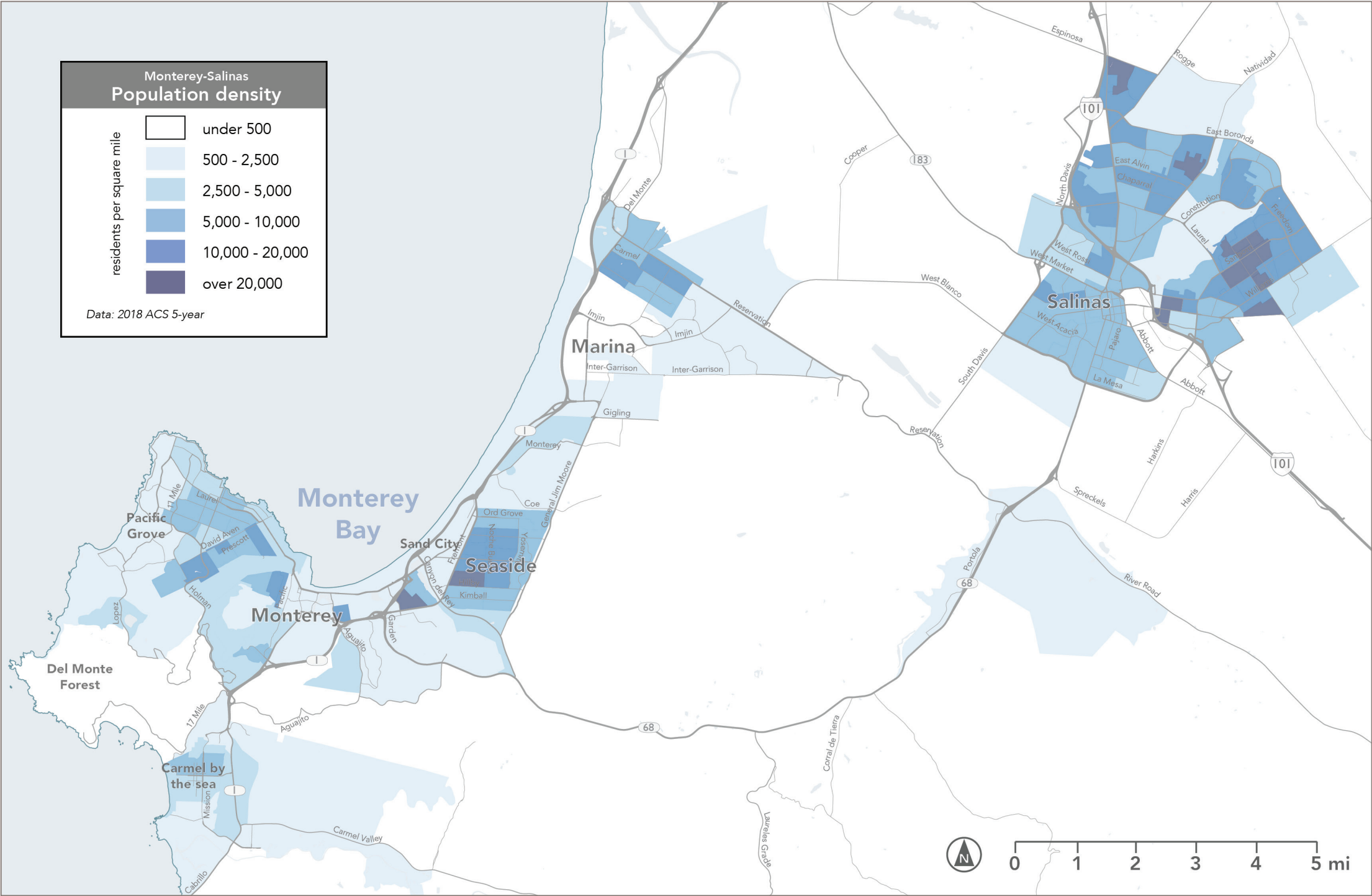


Figure 23: Map of residential density in the Monterey-Salinas area

Indicators of Demand: Residential Density

Castroville. Marina has grown faster than any other community over the last ten years, and it seems likely that similar map prepared five to ten years from now would show significantly higher density in the area around CSUMB.

In the North County, the development pattern of Castroville (a small town) contrasts clearly with Prunedale (a large semi-rural area). But Castroville is too small to be a significant transit market on its own. However, it is on the way to Watsonville, where many people and jobs are located.

In South County, the only pockets of density are the series of small towns around Highway 101.



Figure 25: Housing typology in Salinas.

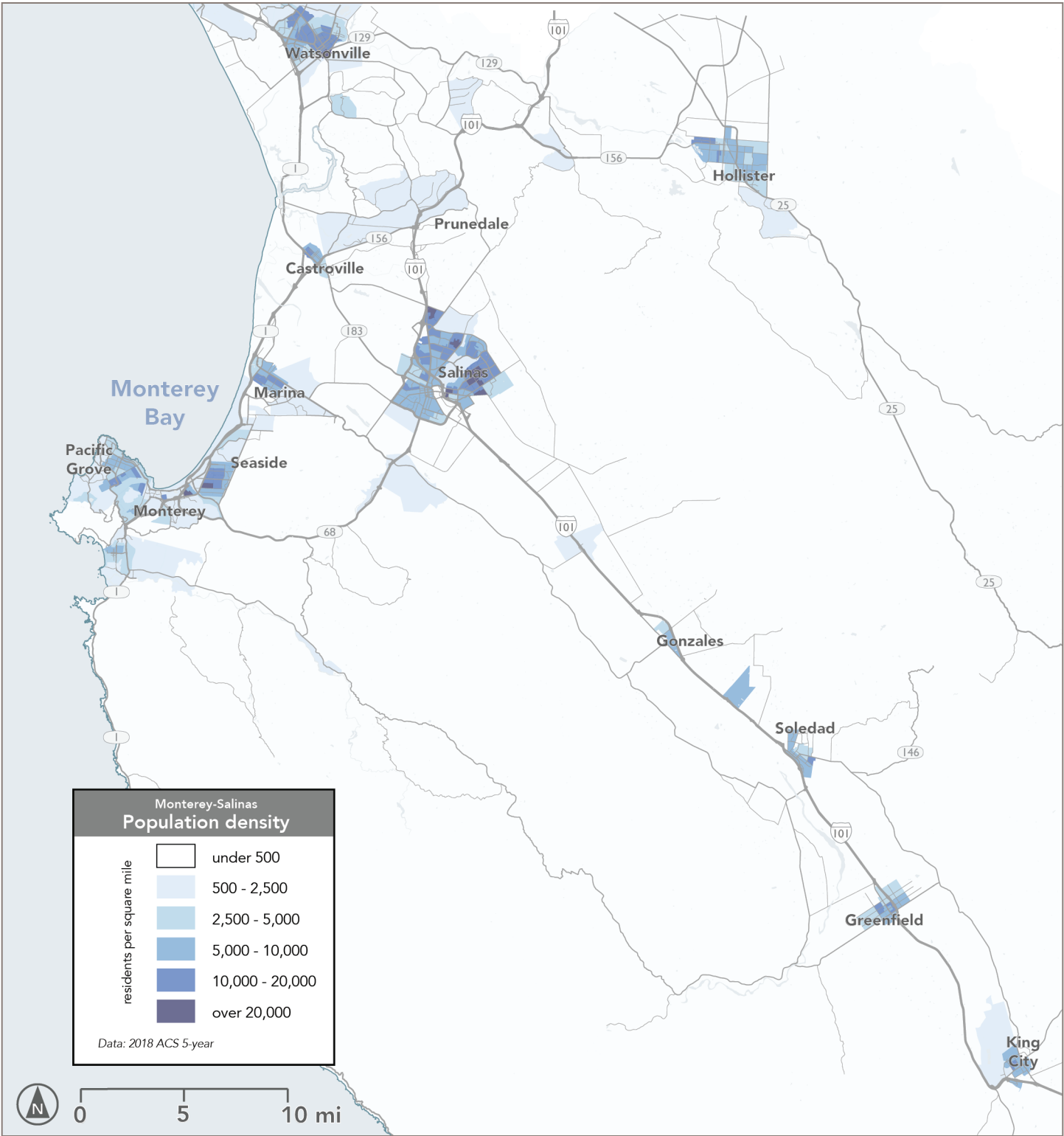


Figure 24: Regional map of residential density.

Indicators of Demand: Job Density

Job density can tell us not just about where people might be going to work, but also about important destinations people travel to: where they go for services, shopping, social life and other activities. Civic and service destinations like hospitals and universities also appear on job density maps because they have so many employees.

Only 5% of people in Monterey County live in areas where job densities exceed 5,000 jobs per square mile. And most of the highest job density in the county is concentrated in a few places in Monterey and Salinas.

Monterey has relatively low residential densities, but the map in Figure 26 shows that it does hold high job densities, especially by the Aquarium (Cannery Row) and Downtown, along the commercial streets of Washington St., Alvarado St., and Munras Ave.

These areas matter not just because they are places where people work, but also places that are likely to have a high density of customers, particularly in the retail and service sectors. Smaller centers of employment and services also appear on this map, in Pacific Grove, Sand City, Marina and Carmel-by-the-Sea.

Salinas also has a high density employment between Blanco Road and Highway 101. A few of the main spots in this area are Downtown Salinas, Salinas Valley Memorial Hospital, and Hartnell College.

One place notably missing on this map is California State University (CSUMB) in Marina. This is mostly due to a quirk of census geography: CSUMB is located in a large census block group and so its job density appears to be low. Nonetheless, MST knows that many people will travel to and from CSUMB for work and school.

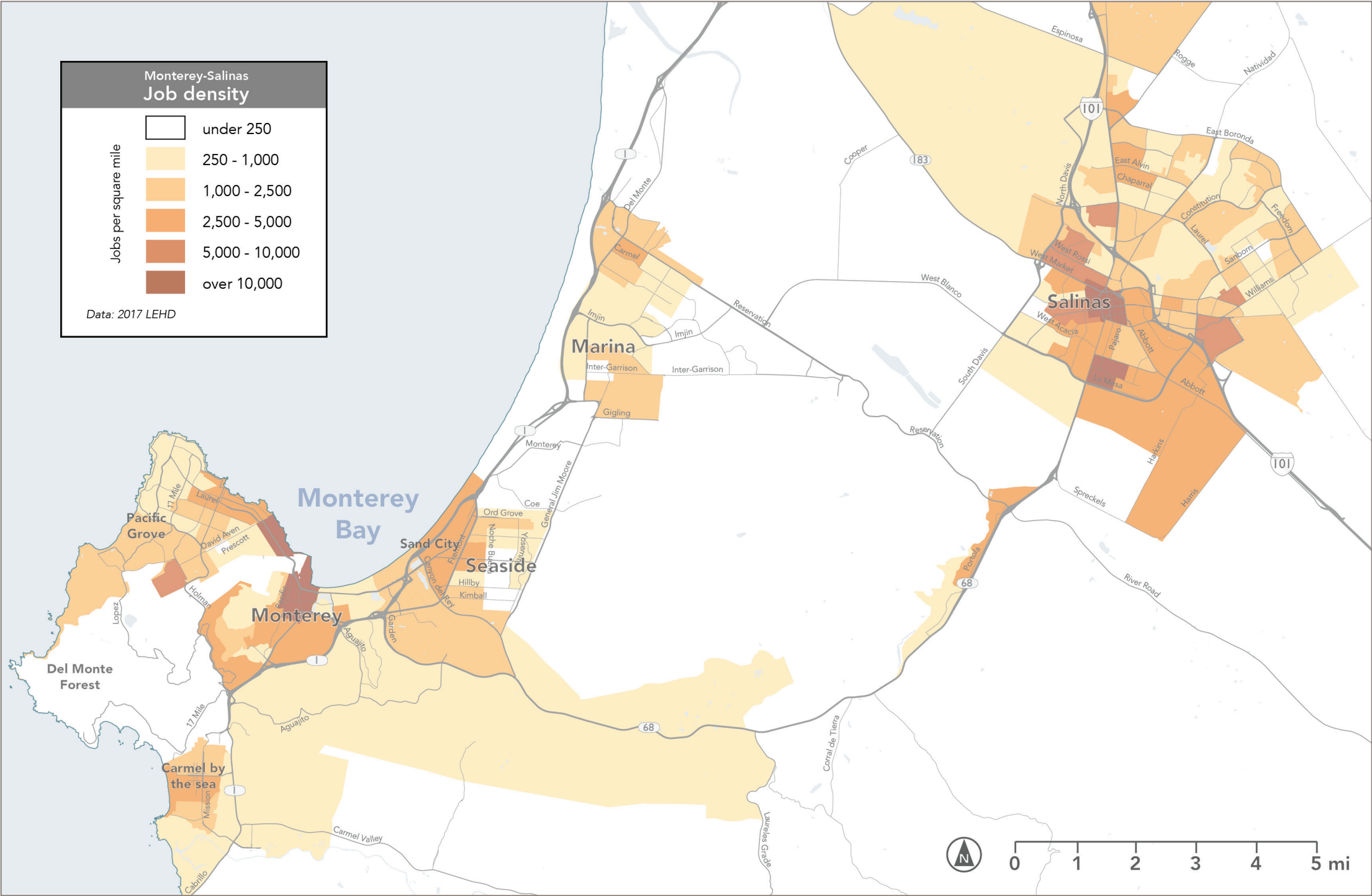


Figure 26: Map of job density in the Monterey-Salinas area

Indicators of Demand: Job Density

Outside of the greater Monterey and Salinas areas, the nearest areas of high employment density are in Watsonville, particularly along highway 129 and Main St.

Areas in the rest of the region tend to have significantly lower job densities, even if they support many jobs. This is particularly true for agricultural jobs, which tend to be spread out over a very large area.

Smaller cities like Soledad, Greenfield and King City have relatively low job densities overall compared to more urban areas, despite the presence of some regionally-significant locations like the Soledad prison complex, Mee Memorial Hospital in King City.

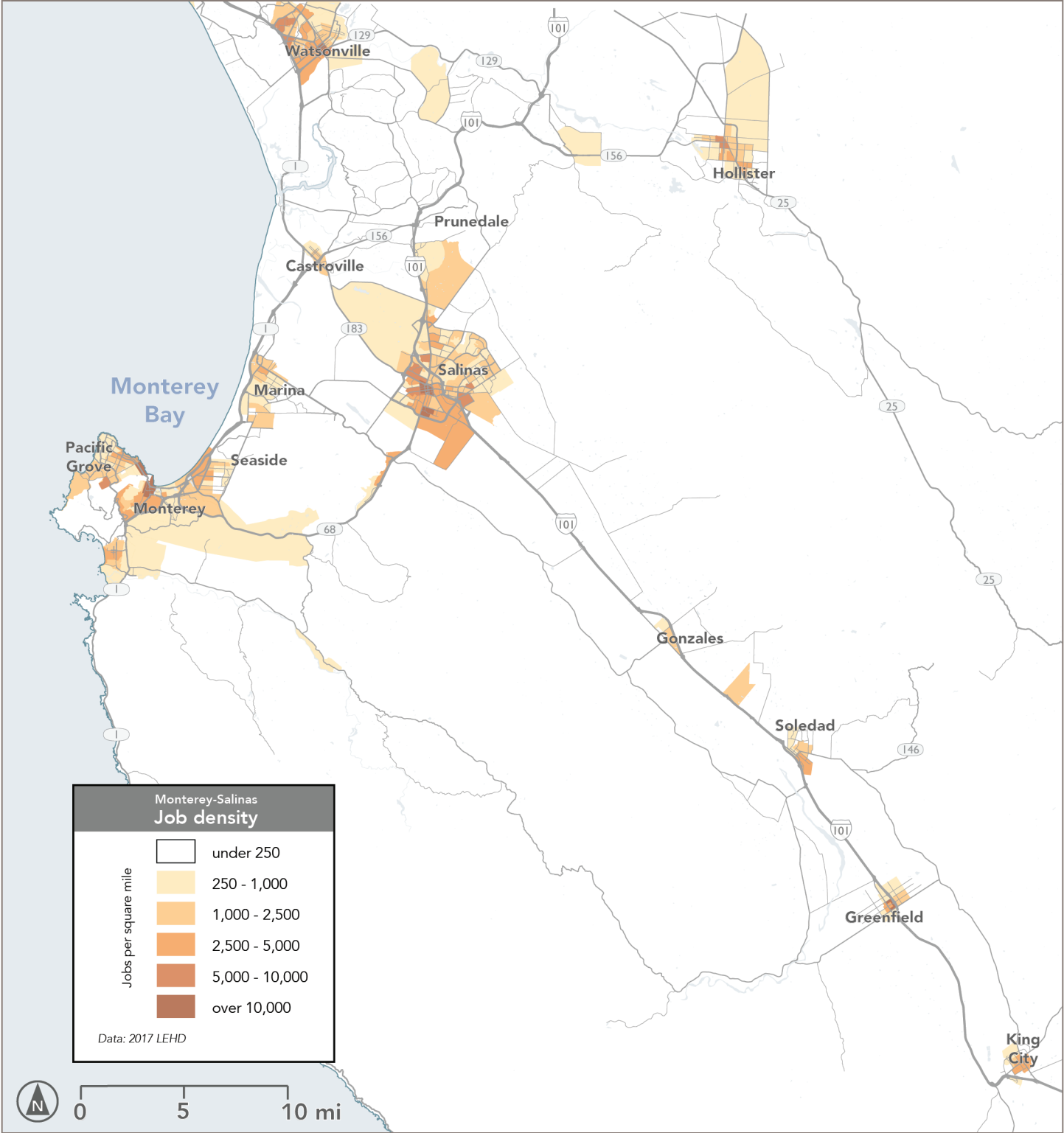


Figure 27: Regional map of job density.

Indicators of Demand: Activity Density

The maps in Figure 28 and Figure 29 allow us to see not only high density, but also the mix of activities in an area, which contributes to ridership potential.

Transit lines serving purely residential neighborhoods tend to be used in only one direction each morning and evening rush hour. In contrast, on corridors where residential, commercial and other uses are mixed, people are traveling in both directions so buses can be full in both directions. Travel demand also goes beyond the weekday rush hours, and is high throughout the midday, evening and weekends, as people move in all directions for work, socializing, shopping and other activities.

These maps use a three-color scale: residential density is shown in shades of blue, job density is shown in shades of yellow, and places where residents and jobs are both present are shown in shades of red. The darker the color, the greater the number of jobs or residents in the area.

Note that some busy places like malls and hospitals are underrepresented on these maps, because only the workers are counted, and not the many visitors. In addition, data from schools and universities counts only employees, not students, even though many students commute every day.

By comparing this map to the map of the existing network on page 6, we can see that many places in Salinas have both relatively high density and a significant mix of uses, and yet are mostly served by infrequent lines. We can also see that all the densest places in the Monterey Peninsula have at least some transit service, but these areas tend to have high residential density or high employment density, not both.

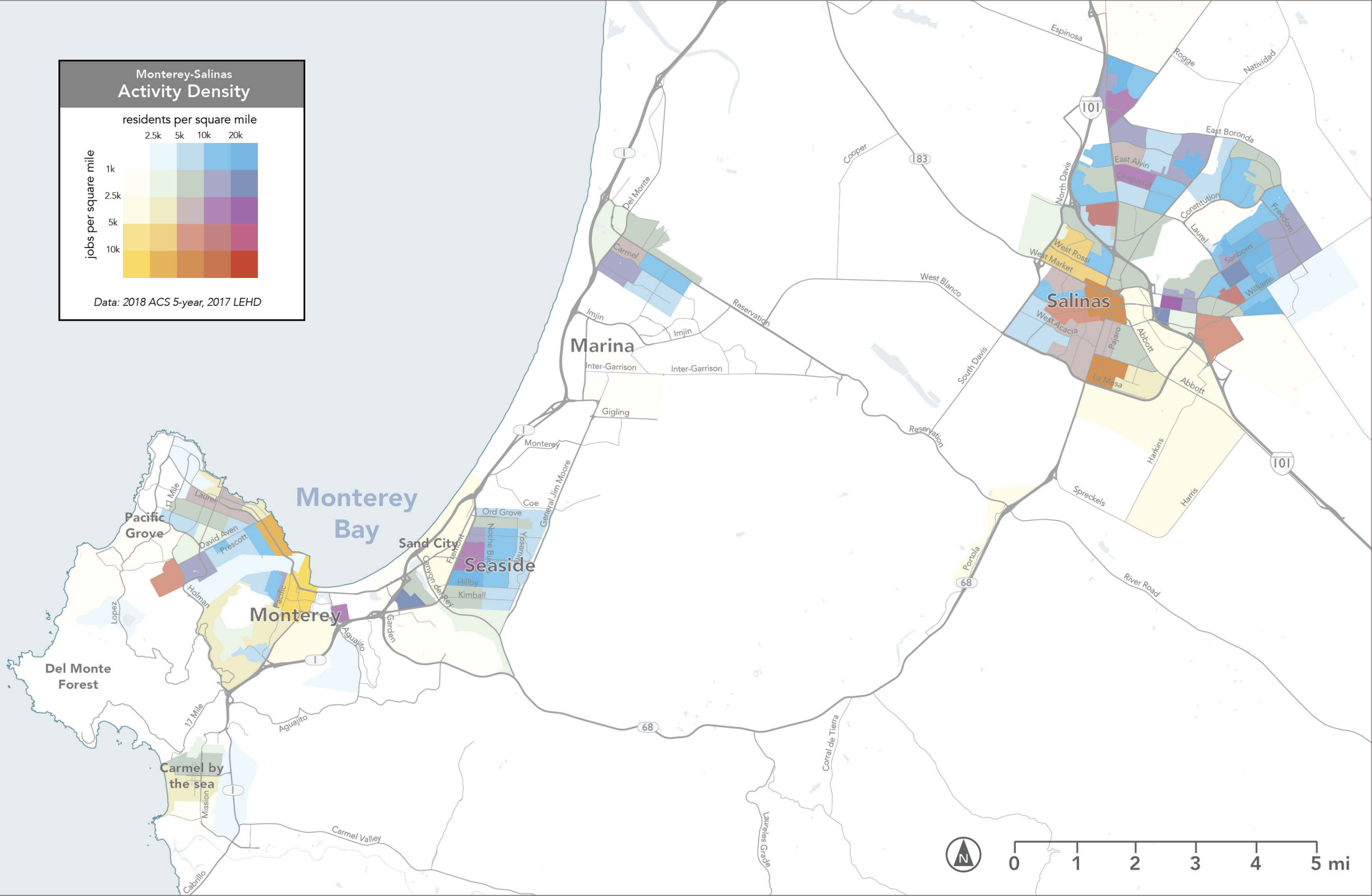


Figure 28: Map of combined population and job density in the Monterey-Salinas area

Indicators of Demand: Activity Density

Ultimately, the activity density maps allow us to see three ingredients in the Ridership Recipe: high **density**, arranged in **linear** patterns, and **proximate** to other dense places.

We can see how some mix dense places like Monterey, Seaside and Salinas are dense and proximate to each other, and others like Soledad, Greenfield and King City are placed along a linear path, but very far from opportunities.

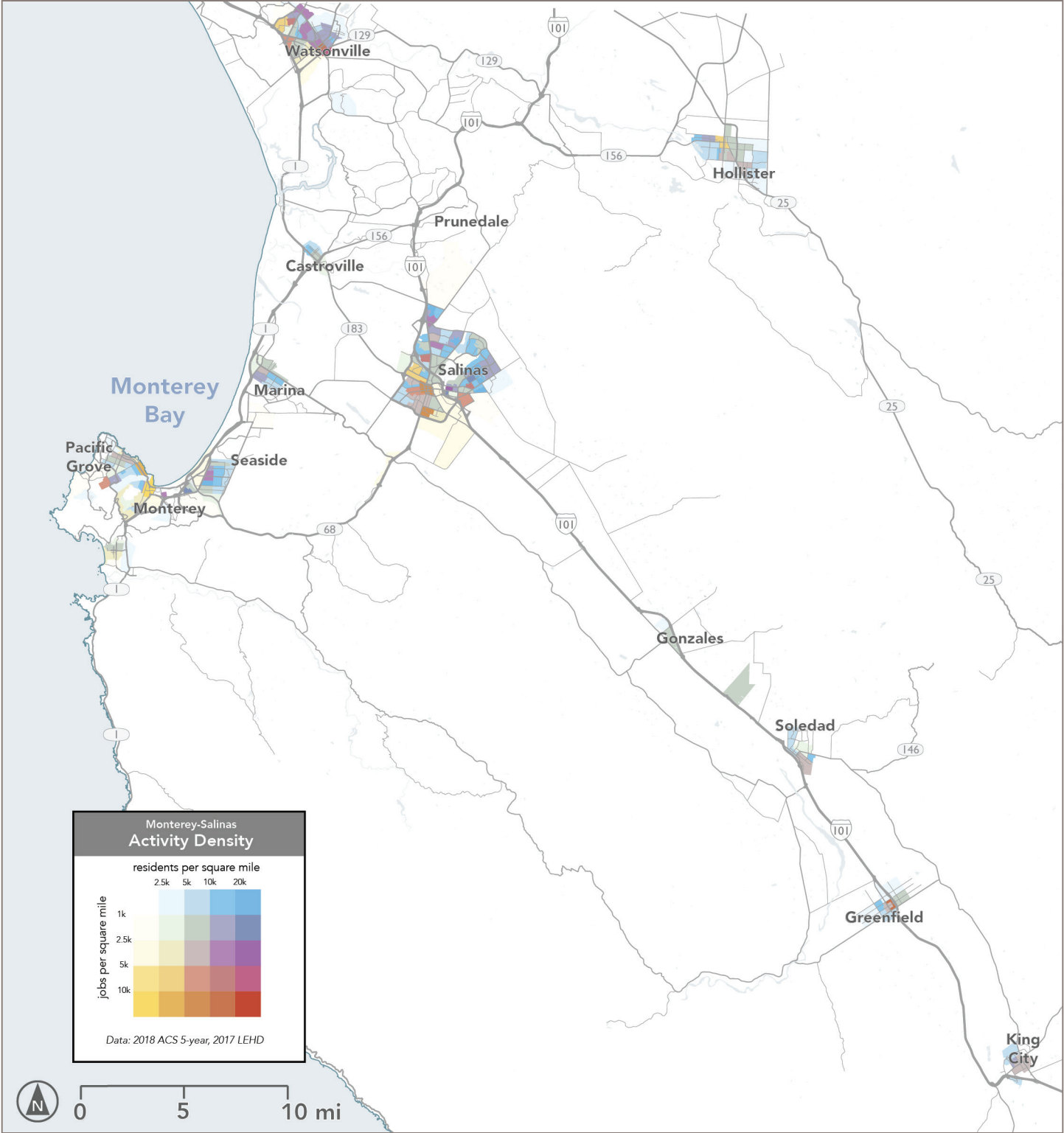


Figure 29: Regional map of combined population and job density.

Indicators of Demand: Walkability

Walkability is the second ingredient in the Ridership Recipe because it governs whether the people nearby can actually reach the transit stop. *How many potential riders nearby can actually reach a transit stop?*

Street connectivity is fundamental to walkability – it governs whether a walking trip is possible at all, and how long it is. It also has influence over how safe and comfortable a walking trip is, because poor street connectivity causes arterial roads to be wider, and safe crossings of those roads to be farther apart.

The map in Figure 30 illustrates how connective the street network is, as a proxy for walkability. Only the street network is considered, so areas lacking in sidewalks, lighting, or safe crossings are generally less walkable than they appear on this map.

In historic neighborhoods that were laid out before the private car was dominant, nearly all transportation was originally done on foot, by bicycle or by transit. A walkable and well-connected street network was therefore of existential importance to the usefulness and value of land, and so neighborhoods built in those times have very high street connectivity. Old town centers in Monterey, Pacific Grove and Salinas epitomize this urban form.

More recent developments can have high street connectivity, even without a traditional grid of streets. However, many newer developments are designed to minimize car traffic past the most valuable real estate. This is done in part with intentionally poor street connectivity, as is evident in some of the more recent developments at the northern edges of Salinas.

Areas adjacent to highways (e.g. Highway 101 in Salinas, or Highway 1) and areas surrounded by big lots and cul-de-sac developments are mostly inaccessible on foot, due to a lack of connections.

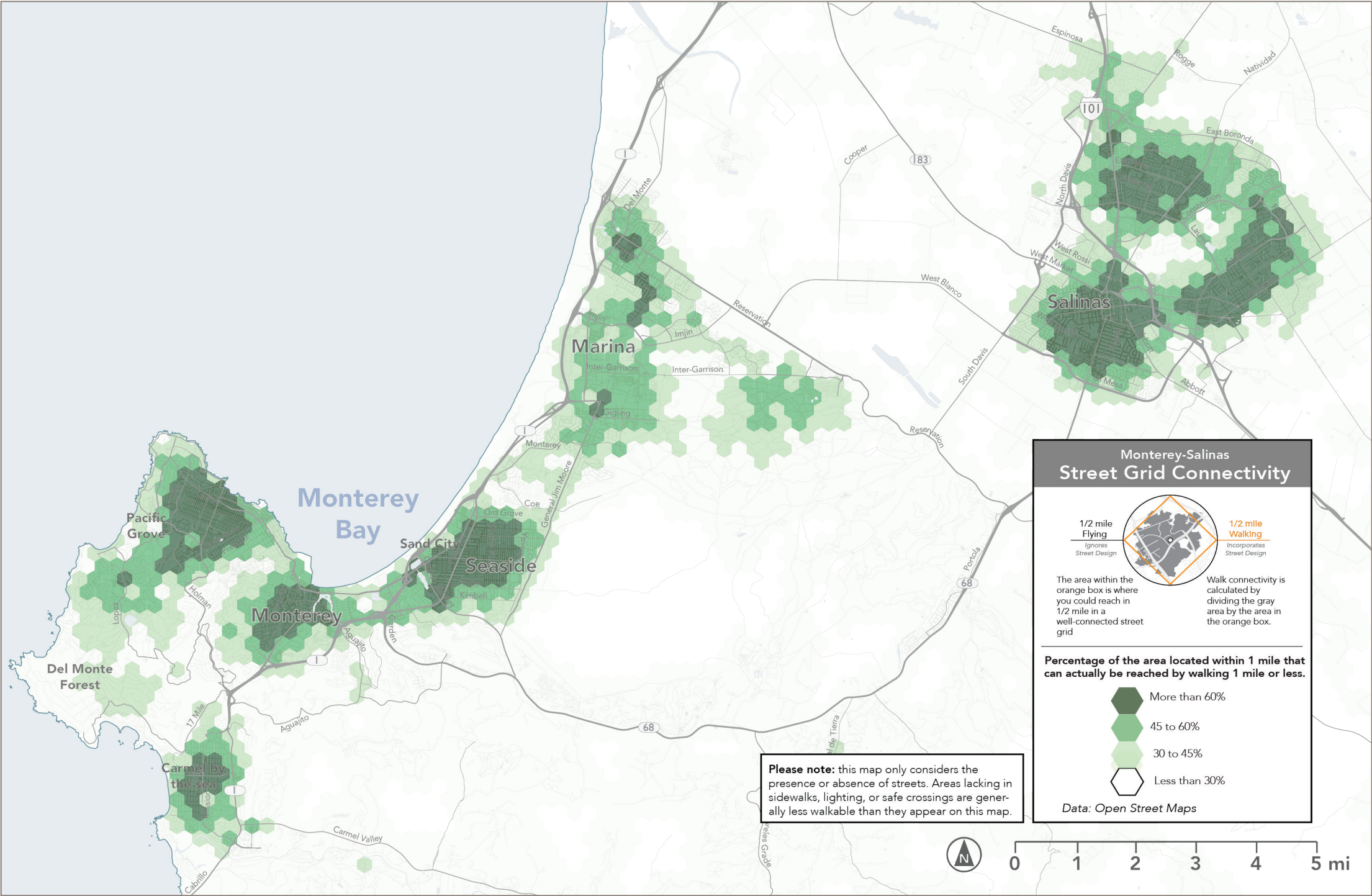


Figure 30: Map of Street Grid Connectivity in the Monterey-Salinas area

Indicators of Demand: Commute Patterns

The map in Figure 31 shows the major pre-pandemic (2017) commute patterns in most of Monterey County. Specifically, this map shows:

- For each community, a dot sized according to the number of people who commute daily within their community. For example, about 25,000 people commuted daily from a home in Salinas to a workplace in Salinas.
- Between communities, arrows that show where people commute to and from. For example, about 3,400 people commuted on a daily basis from Salinas to Monterey.

To make this map more legible, we only show communities with at least 1,000 total commute trips, and flows of at least 1,500 daily commutes between communities.

But there is also a ridership-related rationale to this simplification: transit can only efficiently serve commute flows where many people are going to similar places. So while a few people do commute from, e.g. the Carmel Valley to Del Monte Forest, the numbers are too low to justify designing a ridership-oriented transit service that connect these two areas.

This map tells us two important things:

- Salinas is the largest internal commute market, by far. This is consistent with Salinas' position as the place with the highest population and number of jobs.
- Monterey is the largest attractor of commute trips from other places, but especially from Salinas, Marina, Seaside and Pacific Grove.

The implications of this are clear: **a purely ridership-oriented transit network would concentrate on local lines within Salinas, and on lines connecting Salinas, Marina, Seaside, Monterey and Pacific Grove.**

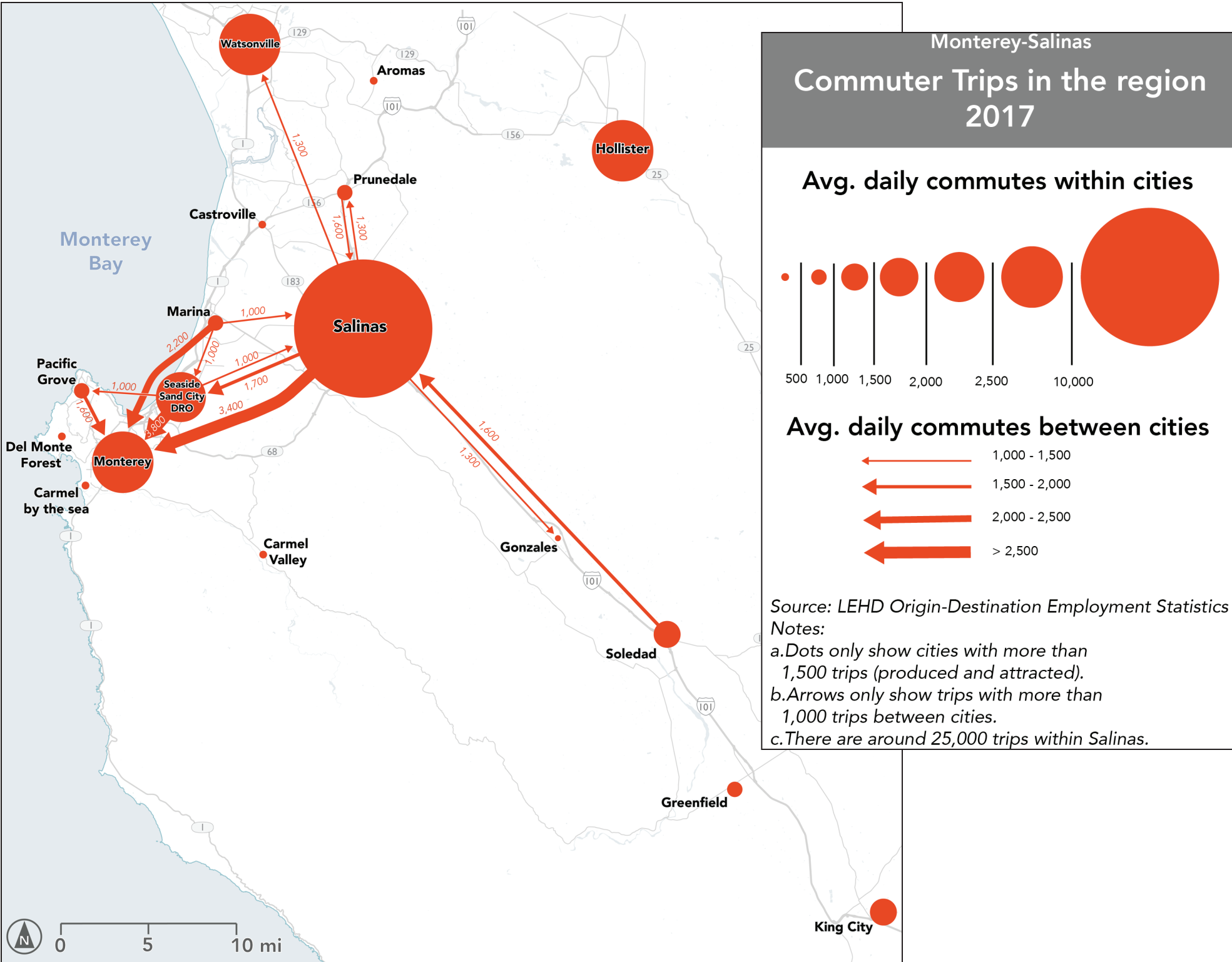


Figure 31: Regional map of major commute patterns.

Indicators of Demand and Need: Zero Vehicle Households

Another factor affecting transit’s competitive-ness in an area is the availability of personal vehicles. The map at right shows the density of households with zero vehicles.

While people who don’t own cars don’t use transit by default, they have fewer options than those people who do have access to personal automobiles. As a result, if transit is a useful method (fast, reliable, available when they need to travel) of reaching the places they need to go, it can be a compelling option.

If transit does not present a realistic travel option, then people without cars will find other ways of reaching the places they need to go, by getting rides from friends or family members, cycling, walking, or using taxis or ridesharing services.

Only 5% of the households in Monterey County don’t have a vehicle. In the Monterey-Salinas area, the highest densities of zero-vehicle households are found in Seaside and Salinas, in many of the same areas that have high densities of residents in poverty. There also appears to be a relationship in some areas (e.g. Pacific Grove) between concentrations of seniors and households with zero vehicles.

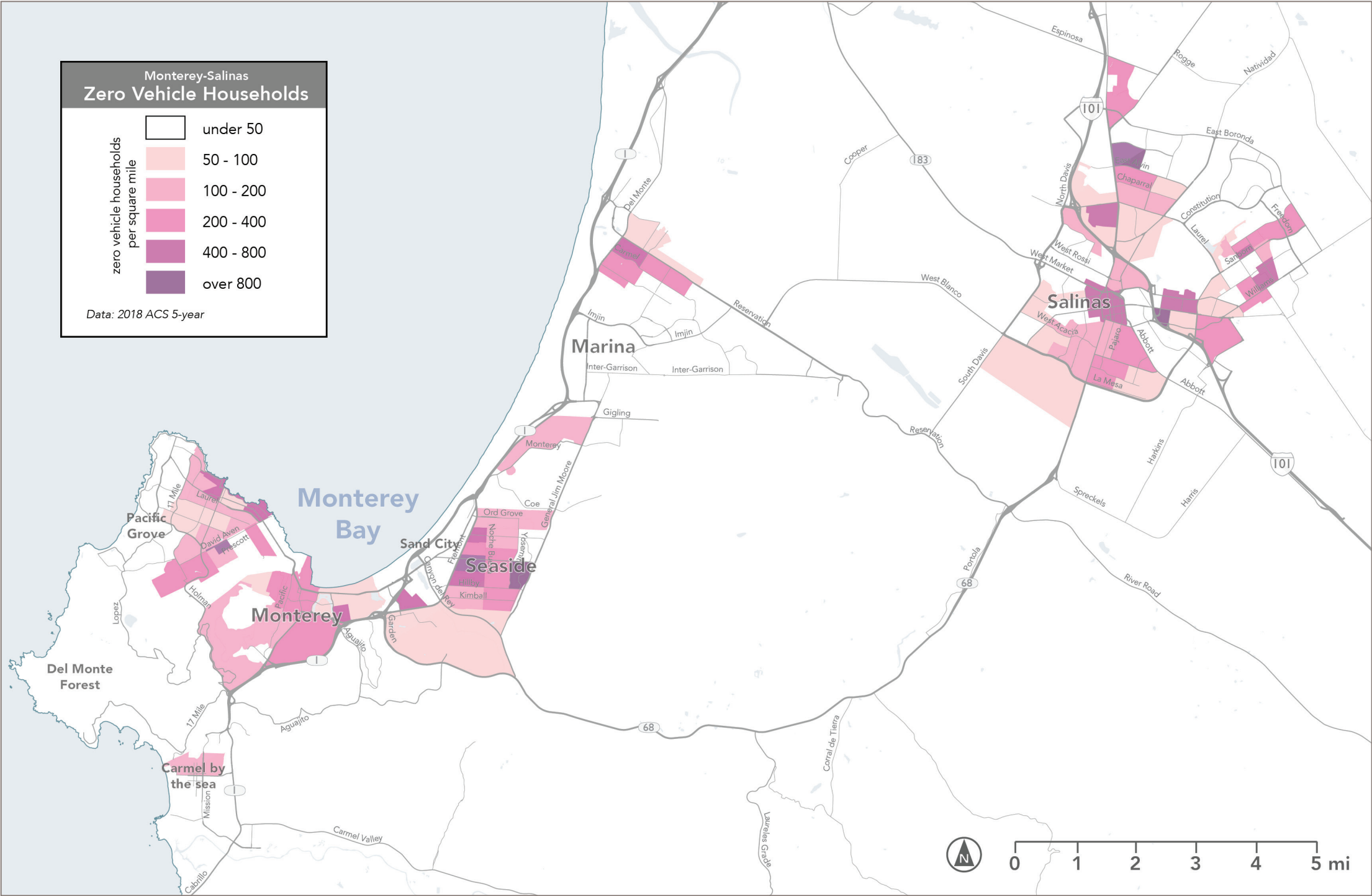


Figure 32: Map of the density of zero-vehicle households in the Monterey-Salinas area

Indicators of Demand and Need: Zero Vehicle Households

Overall, the concentration of households with zero vehicles is low outside the urbanized area. This reflects the higher importance of vehicle ownership when people need to travel very long distances on a regular basis. This is true even though many rural communities have relatively high poverty rates.

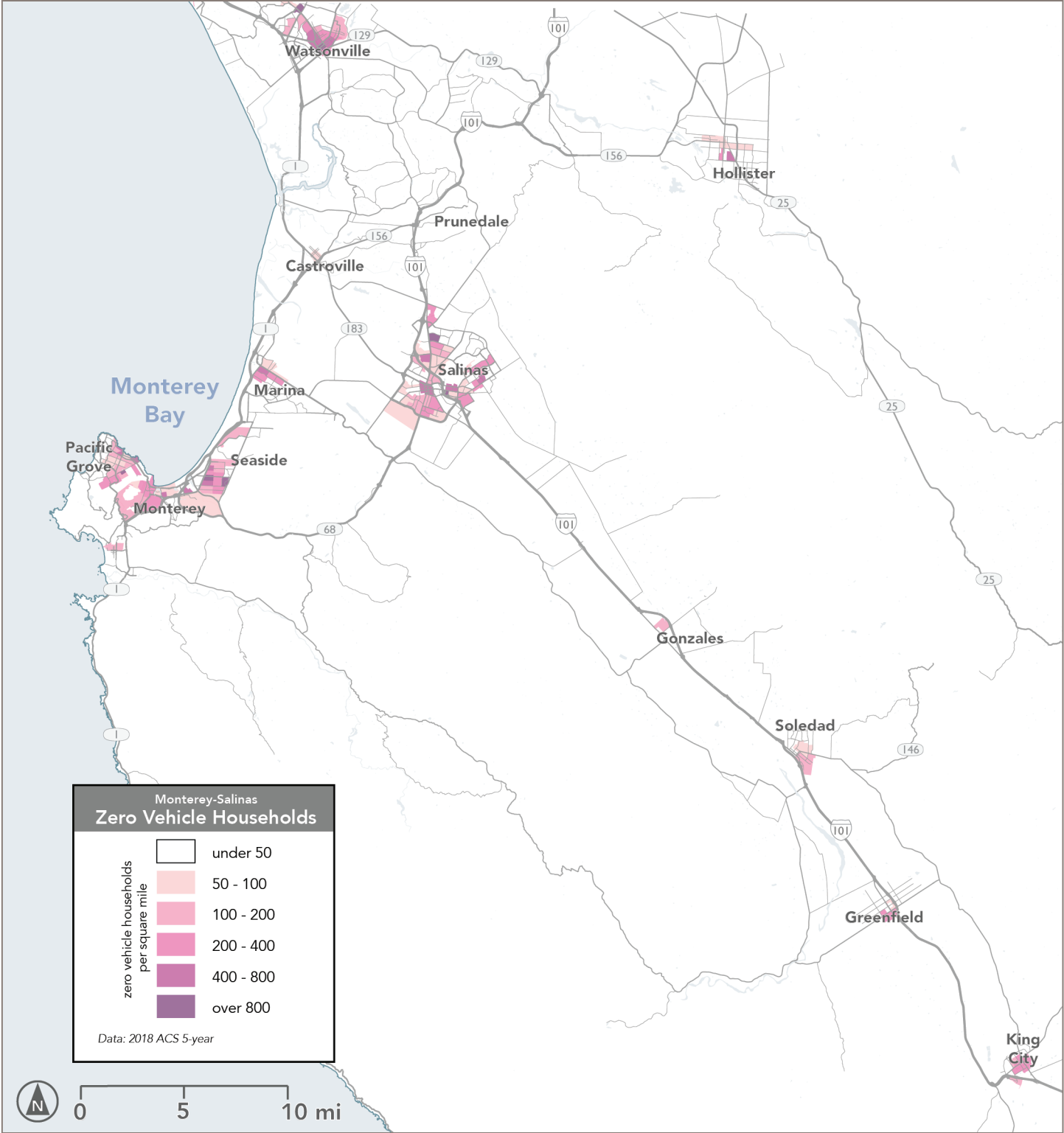


Figure 33: Regional map of the density of zero-vehicle households.

Indicators of Demand and Need: Residents in Poverty

When many people live on low incomes in a given area, this can either suggest a strong market for transit or a significant need for coverage service, depending on the built environment around them.

The more carefully a person must manage their money, the more attractive transit's value proposition may be. This doesn't mean that lower-income people will automatically choose transit because it's the cheapest option.

Transit service must be useful and reliable for the kinds of trips they need to make, to compete for their ridership. For a long time the transit industry has described lower-income people as "dependent" riders and higher-income people as "choice" riders. Yet the drop in ridership over the past decade demonstrates that lower-income people have some choices too!

If transit doesn't actually allow people to make the trips they need in a reasonable amount of time, even lower-income people will not use it. They will seek other options, such as buying a used car or getting a ride from a friend, even if those cause financial or social stress.

The maps in Figure 34 and Figure 35 show the density of people in poverty in the Monterey and Salinas area. Around 25% of residents in Monterey County are under 150% of the federal poverty line.

In Salinas, Seaside and Marina, the densest areas in Salinas tend to also be home to many people in poverty. These three communities together account for about 60% of County residents under 150% of the federal poverty level.

These concentrations of low-income residents in the densest places in the county, relatively close to job opportunities suggest significant



Figure 34: Map of the density of residents below 150% of the Federal Poverty Level in the Monterey-Salinas area

Indicators of Demand and Need: Residents in Poverty

markets for transit service, if it is convenient enough.

On the other hand, areas with high densities of low-income residents in southern Monterey County are not near many opportunities. It is much more costly for MST to serve these areas than similarly disadvantaged neighborhoods in Salinas or Seaside because of the long distances with low demand that MST buses have to traverse.

So although these communities are places that MST might want to serve due to high needs, their isolation should limit any expectations of high ridership on bus lines serving them.

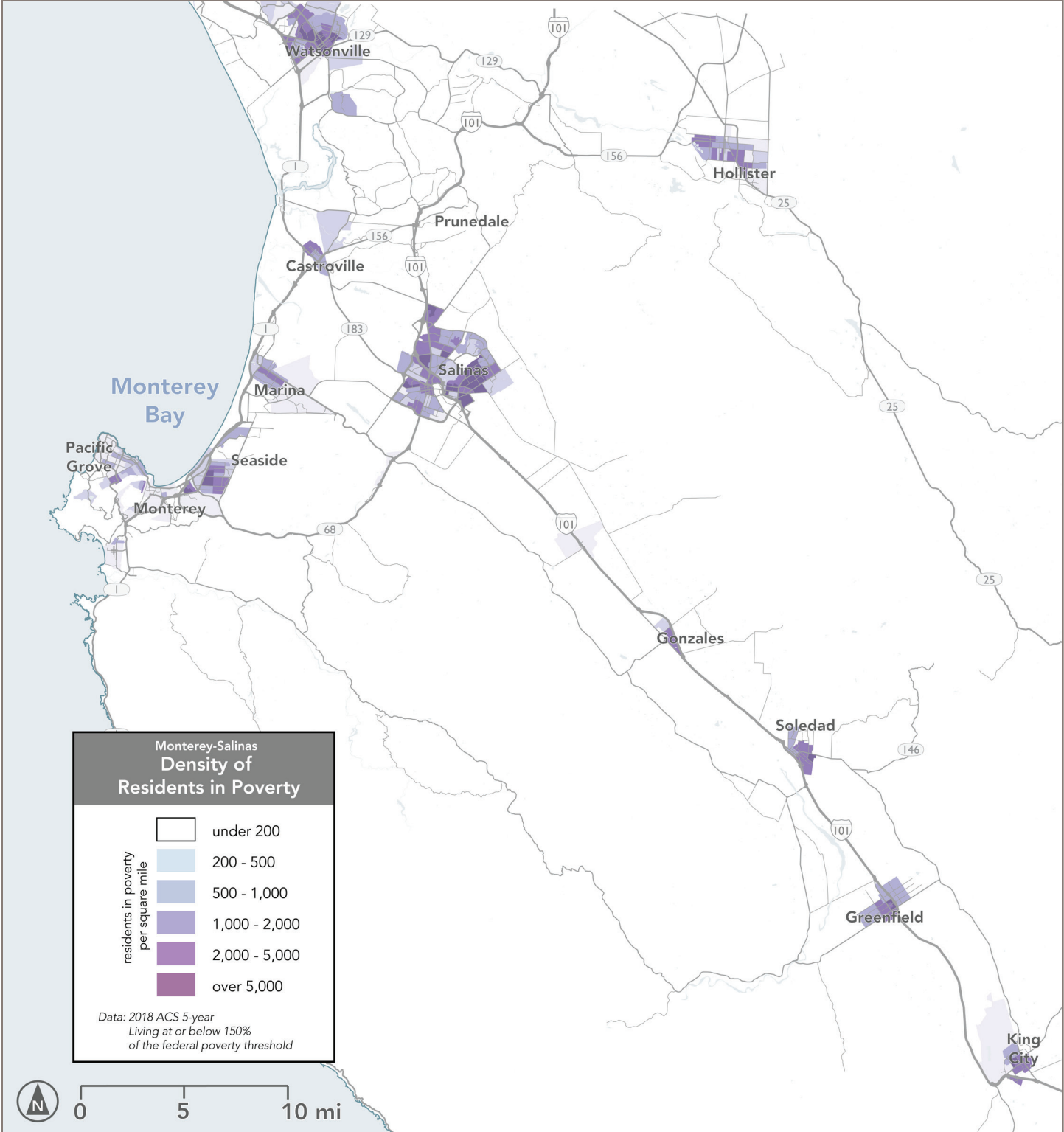


Figure 35: Regional map of the density of residents below 150% of the Federal Poverty Level.

Indicators of Need: Seniors and Youth

The map in Figure 36 show the density of senior residents in the Monterey-Salinas area. Seniors constitute around 13% of the total population of Monterey County.

Seniors tend to be spread out among the general population, and so senior density is similar in many places to overall population density. The main exceptions to this here are the notably high concentrations of seniors in Pacific Grove and parts of Carmel-by-the-Sea, as well as the tendency for seniors to live mostly in outlying neighborhoods in Salinas.

Some seniors cannot drive and may be more likely to use transit. As a group, senior-headed households are less likely to own cars than the general population, an advantage for transit in places where other characteristics for high ridership (such as density, walkability) are present.

But seniors' travel needs and preferences are, on average, different from those of younger people. Seniors tend to be more sensitive to walking distance, because of limits on their physical ability. Seniors also tend to be less sensitive to long waits, because many are retired and have a relatively flexible schedule. For the same reason, seniors are, on average, less likely to be discouraged by slow or indirect lines that take them out of their way.

Because of these factors, **transit service designed primarily to meet the needs of seniors rarely attracts high overall ridership.** Most riders who are employed, in school or caring for kids in school will find service with long waits to be intolerable. Thus, the amount of focus that transit agencies place on meeting the needs of seniors should be carefully balanced with the needs and desires of the broader community.

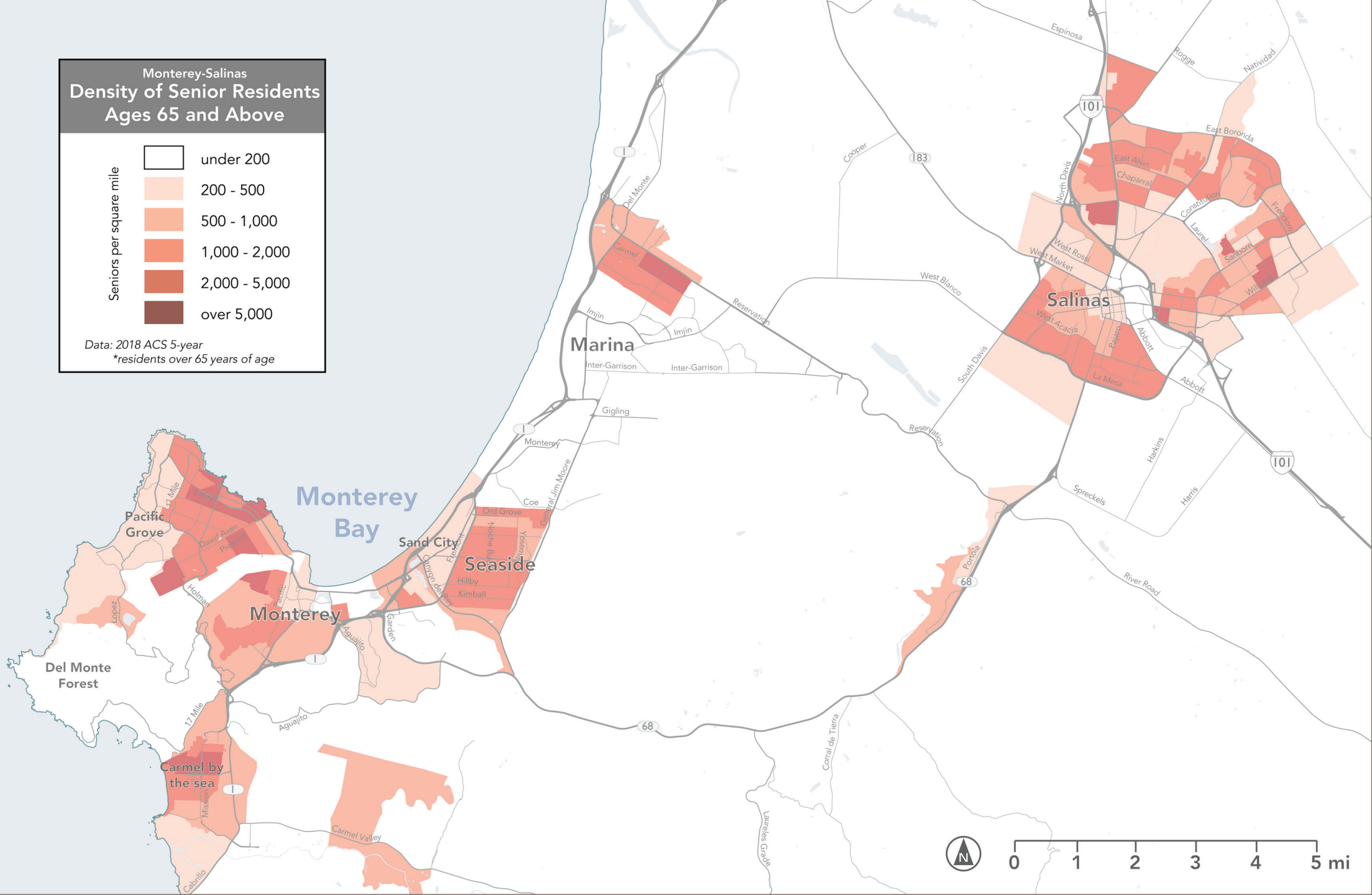


Figure 36: Map of the density of seniors (ages 65 and above) in the Monterey-Salinas area

Indicators of Need: Seniors and Youth

Just as transit coverage can meet the needs of seniors who cannot or choose not to drive, transit coverage can also meet the needs of children and teenagers who are too young to drive.

The map at right shows the density of residents under the age of 18 in each Census block group in the Monterey-Salinas area. Children under the age of 18 constitute around 26% of the total population in the County, or twice as many people as the senior population.

Because low-income households in Monterey County tend to have more children, the highest densities of residents under 18 tend to correlate with higher densities of people in poverty.



Figure 37: Map of the density of youths (ages 18 and under) in the Monterey-Salinas area

Indicators of Need: Seniors and Youth

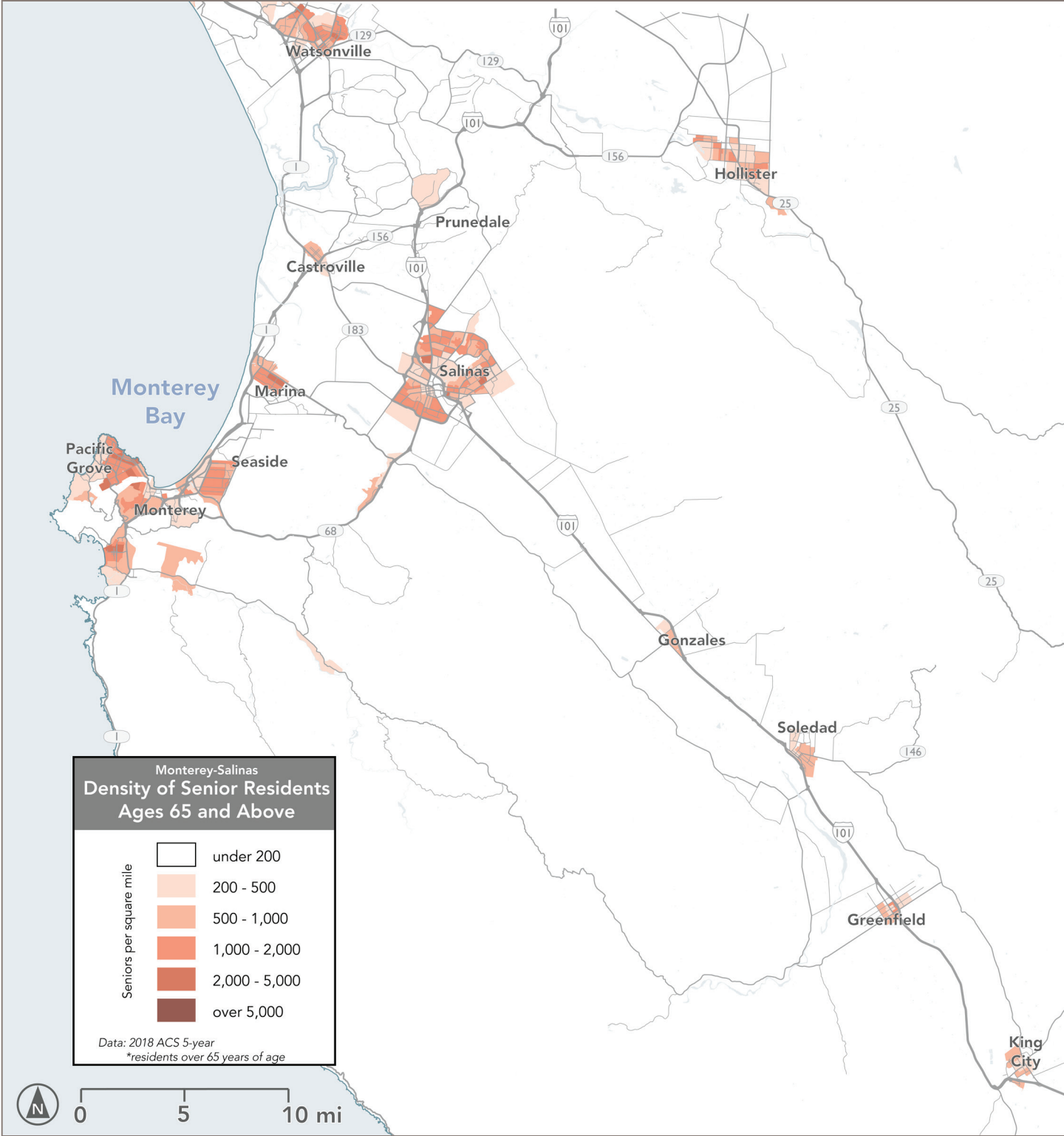


Figure 38: Regional map of the density of seniors (ages 65 and above)

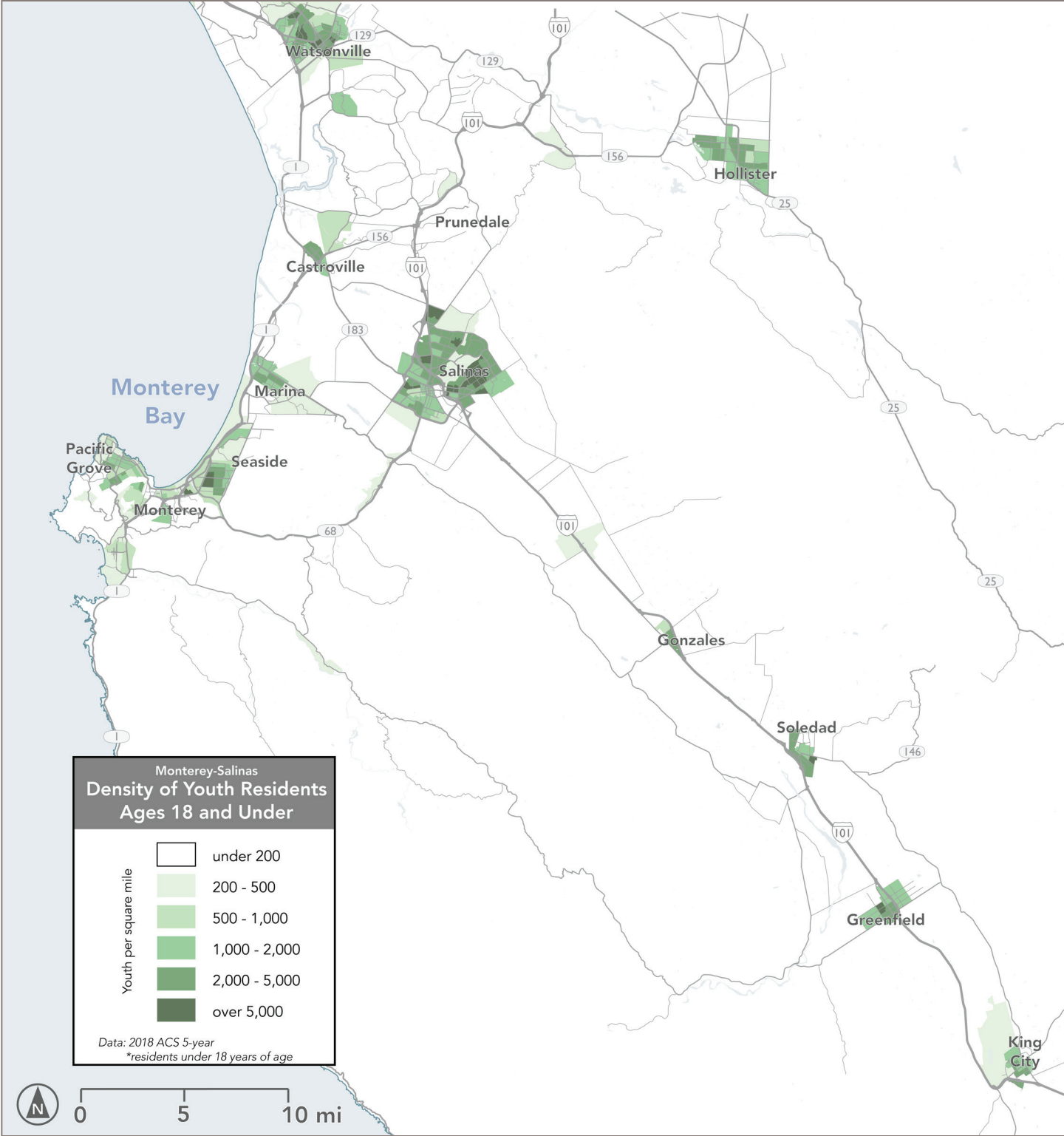


Figure 39: Regional map of the density of youths (ages 18 and under)

Civil Rights: Race and Ethnicity

The map in Figure 40 shows where people of different races and ethnicities live in the Monterey-Salinas Area. Each dot represents 5 residents. Where many dots are very close together, the overall density of residents is higher. Where dots of a single color predominate, people of a particular race or ethnicity make up most of that area's residents.

While information about people's income tells us something about their potential interest in or need for transit, information about ethnicity or race do not alone tell us how likely someone is to use transit. However, **avoiding placing disproportionate burdens on minority people, through transportation decisions, is essential to the transit planning process.**

Transit agency policies that protect minority people from negative impacts are one type of coverage goal, because they pursue an outcome that is valuable regardless of ridership. Such policies might state, for example, that service to high-density and high-minority neighborhoods should be prioritized even if such service would not maximize ridership.

It is important to understand where large numbers of non-white people live, so that public outreach during this project can be sensitive to language and cultural barriers, and so that service changes can be evaluated in light of impacts to protected people.

As of 2018, approximately 70% of the population in Monterey County identified as non-White. The largest group is Latinos, who account for 58% of the population. In Salinas, 80% percent of people are Latino, while they account for 37% of the population in Seaside/Marina/Sand City, and only 13% in the Monterey Peninsula.

Outside of the urbanized areas, cities in the South County and Castroville are all



Figure 40: Map showing where people of different races and ethnicities live in the Monterey-Salinas area

Civil Rights: Race and Ethnicity

predominantly Latino, while Prunedale and the hills south of Monterey and Salinas are predominantly white.

It's important to note that Latinos are most likely to be living in dense neighborhoods where many people have low incomes, and Latinos are also the predominant population in the more isolated high-need communities.

This suggests that all of MST's public-facing communications should be available in both English and Spanish, including messages provided at transit centers and on the buses themselves.

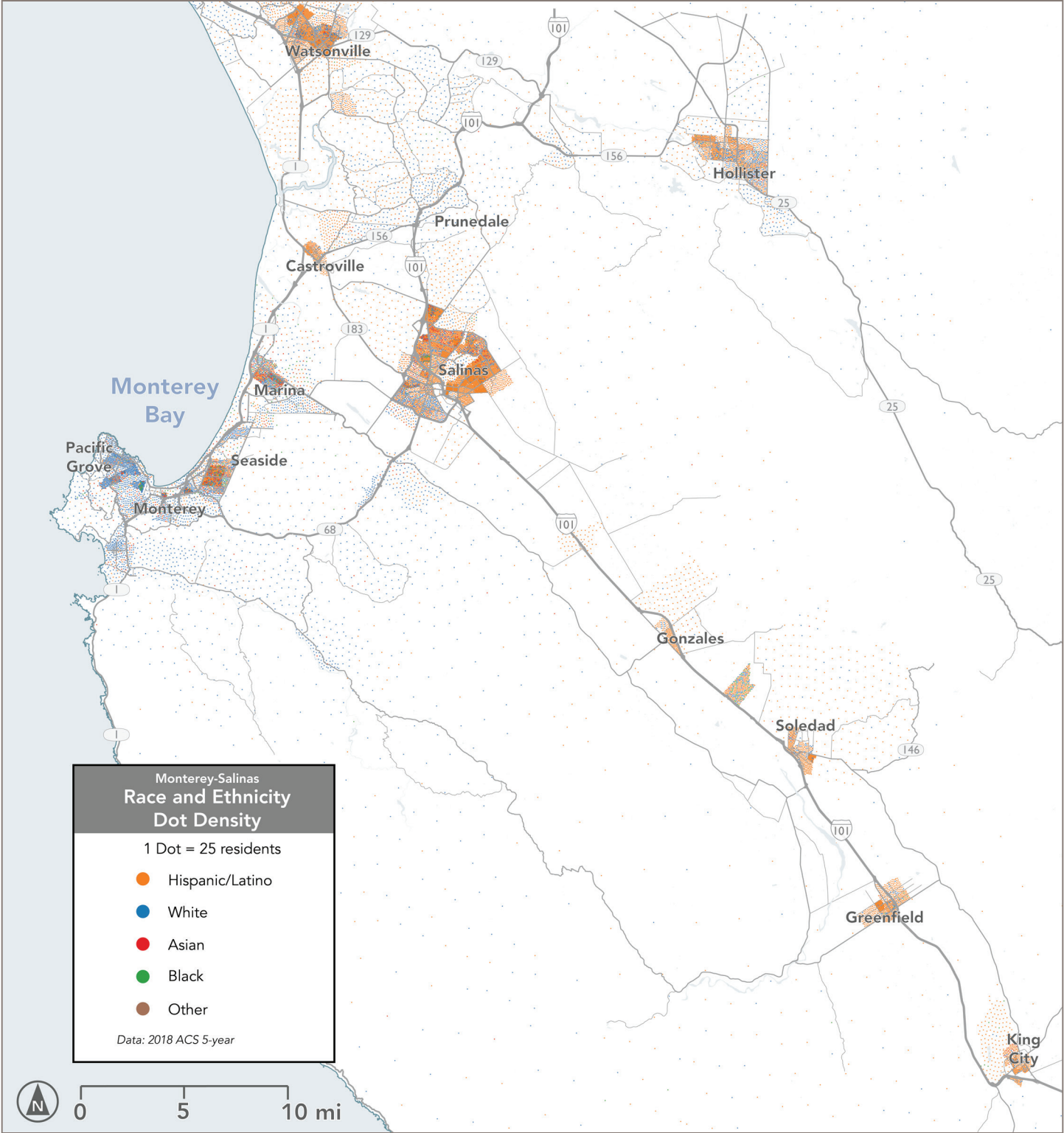


Figure 41: Regional map showing where people of different races and ethnicities live

4 MST's Fixed-Route Network

Regional Network

MST’s regional role

MST’s county-wide scope and governance structure both tend to emphasize service to many communities over a large area.

This is reinforced by local geography: the Monterey Bay and Salinas Valley have historically developed as a string of small to mid-sized cities following Highway 1 and Highway 101. These communities have overlapping retail, social services and employment markets resulting in large amounts of intercity travel.

Furthermore, there has long been a gap in commercial long-distance bus service between Paso Robles and Salinas, reflecting the relatively “empty quarter” of California’s central coast.

As a result, MST has carved out a relatively unique role as a public agency that handles both local and long-distance services, with service extending as far as Paso Robles to the south and San Jose to the north.

As of early 2021, several of MST’s intercity lines have been suspended due to COVID-related service shifts. This includes long-distance services to San Jose and Santa Cruz, as well as secondary intercity lines like Marina-to-Watsonville.

Regional Lines, early 2021

As of early 2021, MST is operating the following regional lines, shown on the map in Figure 42:

- Line 20. Salinas to Monterey.
- Line 21. Salinas to Pebble Beach.
- Line 22. Monterey to Big Sur.
- Line 23. Salinas to King City.
- Line 24. Monterey to Carmel Valley.
- Line 28. Salinas to Watsonville (via Castroville)
- Line 29. Salinas to Watsonville (via Prunedale)

As can be seen on the map, the frequency and distances covered by these lines vary greatly.

- Lines 20 (Salinas-Monterey) and 24 (Carmel Valley) operate all-day at consistent frequencies (every 30 and 40 minutes, respectively).
- Line 23 (King City) operates almost hourly all day, but has extra runs at peak hours, and two 2-hour gaps in the middle of the day.
- Lines 28 and 29 add up to hourly service between Salinas Transit Center and Watsonville, but for anyone on the way, it’s every two hours.
- Line 21 (Salinas-Pebble Beach) is a peak-only extension to Line 20. It runs three times in the morning, and three times in the afternoon.
- Line 22 (Big Sur) runs only three times per day.

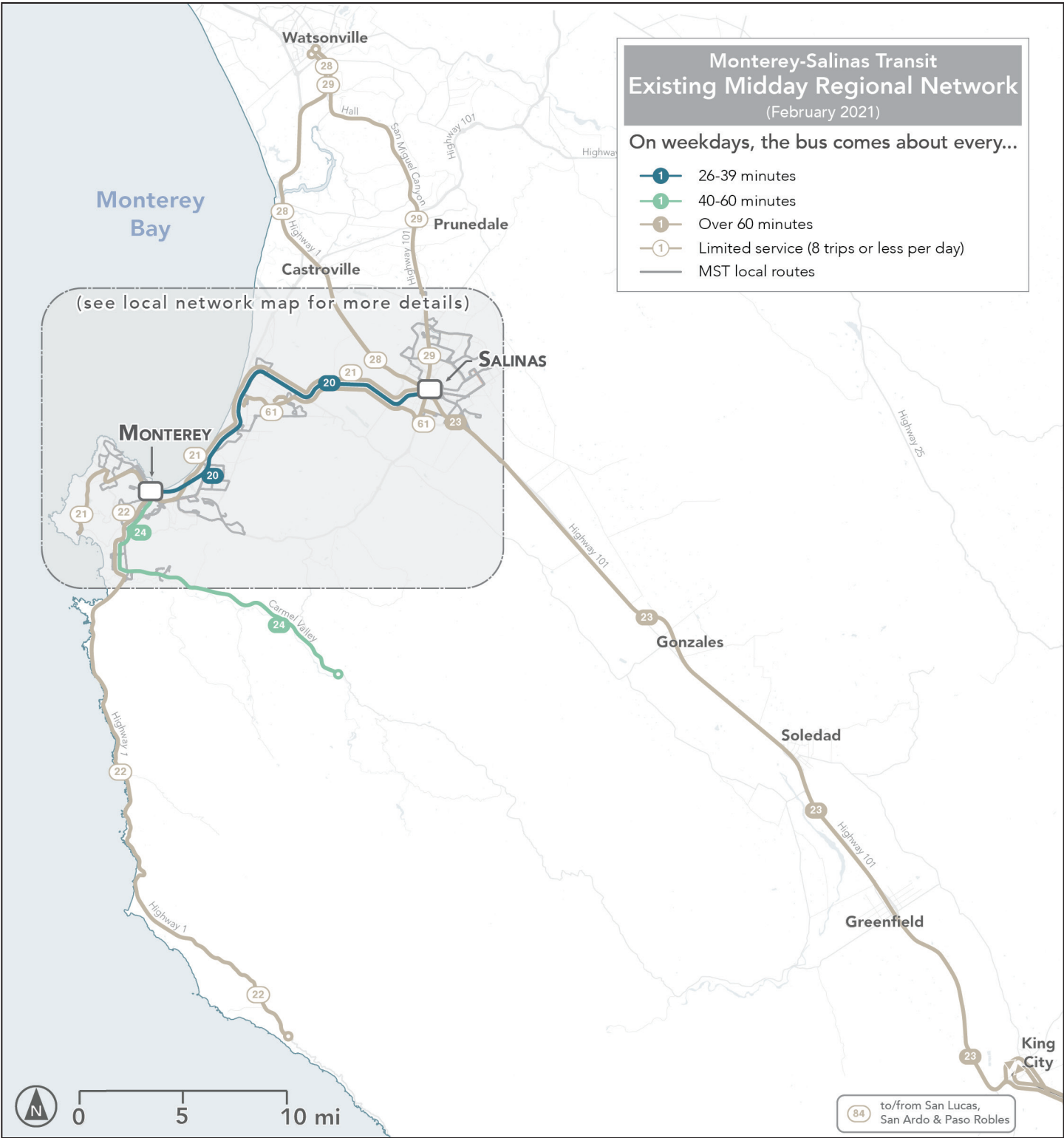


Figure 42: Map of MST’s regional network in early 2021, with lines color-coded by frequency. Local lines are shown in gray.

Core Local Network

The vast majority of MST service (85% of in-service hours¹) is operated in the greater Monterey and Salinas areas, represented on the map in Figure 43.

Some important facts about the MST network can be gleaned from this map:

- The greater Monterey and Salinas areas each have their own local network. Local lines in Salinas are generally numbered in the 40s.
- Three lines stand out in particular:
 - **Line 41 in East Salinas.** This line operates every 15 minutes, seven days a week. **This is MST's only "frequent" line**, in the sense that the bus comes often, and consistently throughout the day and week.
 - The **JAZZ A and JAZZ B**, from the Aquarium to Sand City via Monterey and Seaside. These two lines combine to operate nearly every 15 minutes on weekdays and every 30 minutes on weekends. However, the JAZZ lines' frequency is more variable, largely because the JAZZ A does a long deviation to serve Monterey Peninsula College in the southbound direction.
 - **Line 20** from Salinas to Monterey, MST's primary regional line, which runs every 30 minutes, seven days a week.
- All other lines operate once an hour or less. These lines tend to have long and circuitous routings, intended to maximize the area covered by bus service.

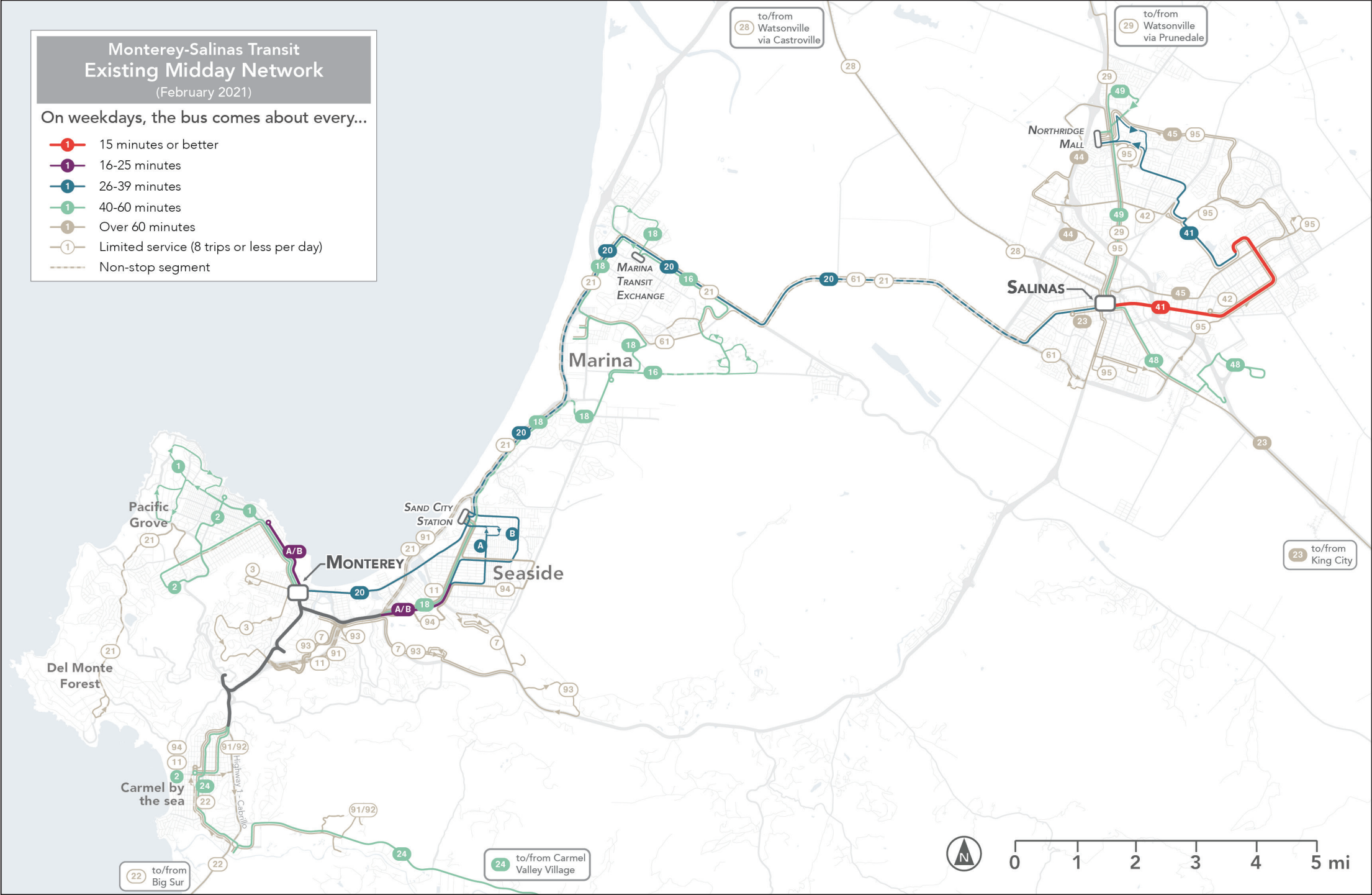


Figure 43: Map of MST's fixed-route network in the greater Salinas and Monterey areas in early 2021, with lines color-coded by frequency.

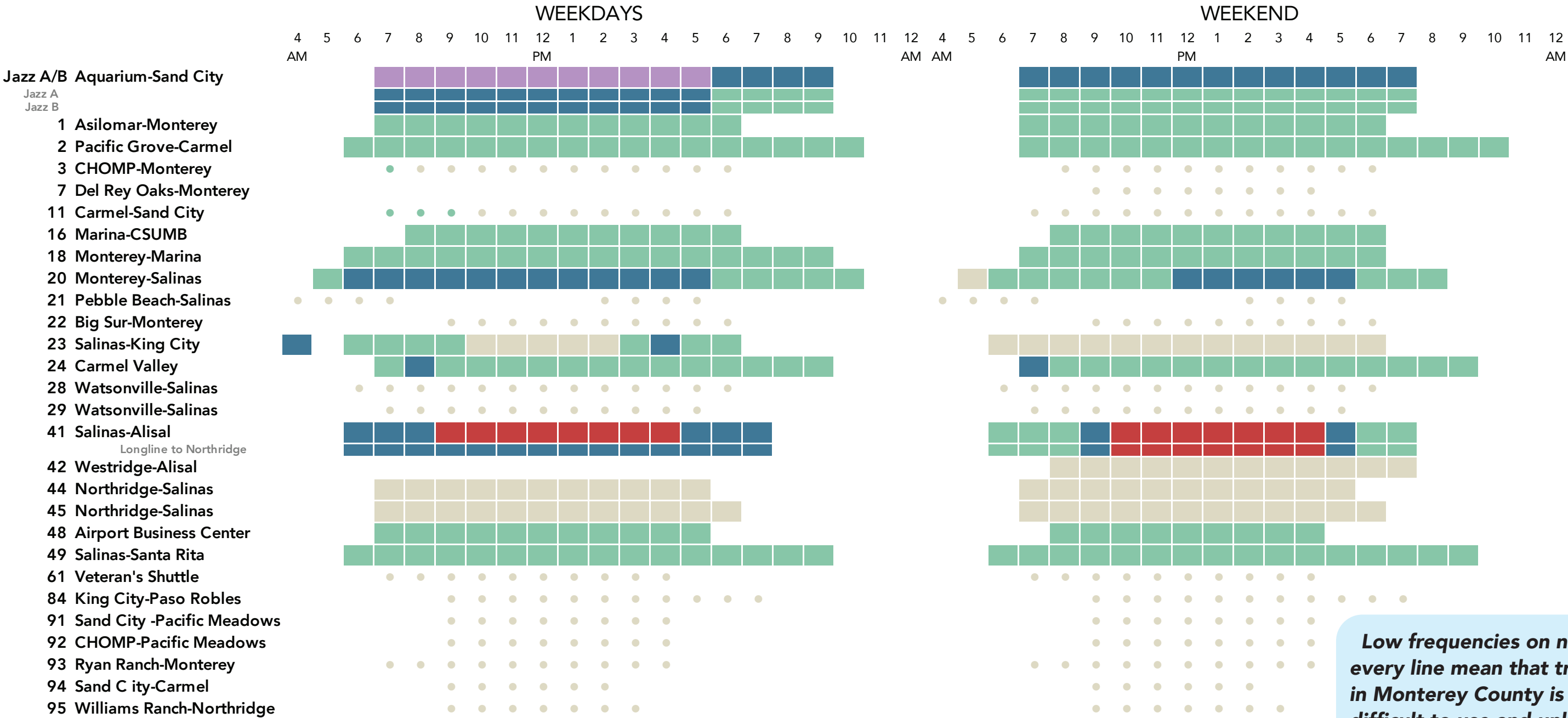
¹ The total number of hours spent by all MST buses on the road and in service.

Service Frequency by Line and Time of Day

Monterey-Salinas Transit 2020 Route Frequencies

The bus comes about every:

- 15 minutes or better
- 16-25 minutes
- 26-39 minutes
- 40-60 minutes
- Over 60 minutes
- Limited (8 trips or less per day)



Low frequencies on nearly every line mean that transit in Monterey County is difficult to use and unlikely to attract new riders.

Figure 44: Frequency table, showing how often buses on MST lines operate, by time and day of the week.

Many bus lines are not currently operating. Some may not come back.

Nearly half of the fixed routes that had been operating until early 2020 (26 out of 55) are no longer in service as of early 2021. Together, these lines accounted for over 30% of MST’s weekly service hours in 2019. These massive service suspensions occurred in response to two separate events.

Pandemic-related cuts

11 lines have been suspended due to pandemic-related considerations. Specifically:

- Lines 4, 8, 27, 46, 55, 56, 86 and the Del Rey Oaks Shuttle were low-ridership lines suspended to allow lines with more riders (such as the 20, 41 and JAZZ) to operate at higher frequency and avoid overcrowding.
- Lines 19, 25, 26 and 47 were suspended because CSUMB and Hartnell College have been operating remotely.
- The Monterey Trolley operated under a special contract with the City of Monterey that was suspended during lockdown and has not yet restarted.

Military-related cuts

Leading up to March 2020, Department of Defense budget cuts led to the loss of MST’s prior contracts with local military facilities. As a result, all of the lines previously targeted to those facilities have been cancelled, although ongoing discussions with base command has led to some very limited MST buses again stopping at the Presidio in June 2020.

What does this mean for the future?

Barring changes to base budgets, the prior military lines are unlikely to be restored, although ongoing discussions with base command may lead to some MST buses again stopping at the Presidio.

College-related lines are likely to return in Fall 2021, if schools are open at that time. They may change slightly in response to this network redesign. The Monterey Trolley is also likely to be restored at some point, as pandemic restrictions ease and pending the City of Monterey’s willingness to restore funding.

The future of general-fund lines that were cut due to low ridership is less clear, and depends in large part on the outcome of this network redesign. If the redesign results in a more ridership-oriented network, it’s unlikely they will be restored.

2019 MST Line not currently operating	Funding source	Why cancelled?	2020 Lines covering the same areas	Areas no longer served
4 Carmel - Carmel Rancho	General	Low ridership	22,91,92	
8 Ryan Ranch - Sand City			Jazz A and B, 7, 94	
12 Monterey - The Dunes	Military Service	No military contract	Jazz B, 11, 20, 21 ,94	General Jim Moore Blvd
14 Monterey - NPS via La Mesa				La Mesa
19 CSUMB-Monterey/DMC	CSUMB	Colleges closed	18, 21,91	
25 Salinas - CSUMB			16, 20	
26 CSUMB - East Campus			16	
27 Watsonville - Marina	General	Low ridership	28	
46 Natividad				Natividad Rd.
47 Hartnell East Alisal - W Alisal		Colleges closed	41	
55 Monterey - San Jose Express	General/Amtrak	Low ridership		San Jose, Gilroy
56 Monterey - Salinas via Hwy 68	General			Highway 68
67 Presidio - Marina	Military Service	No military contract	20, 21	
68 Presidio Shuttle				Presidio
69 Presidio - Del Monte Center			2	
70 Presidio - La Mesa			7	La Mesa
72 Presidio - North Salinas			20	Presidio
74 Presidio - Toro Park			18	
75 Presidio - Marshall Park			18, 20	Presidio
76 Presidio - Stillwell Park			20, 21	
78 Presidio - Santa Cruz				Santa Cruz
82 Salinas - Fort Hunter Liggett			23	Fort Hunter Ligett
85 Fort Hunter Liggett - PASO	General/5311f	Low ridership		
86 San Jose - King City			23	San Jose
920 Del Rey Oaks DRO Shuttle	General		7, 20	
950 Monterey Trolley	Contract	Suspended	Jazz A, Jazz B, 1, 21	

Figure 45: Table of recent MST lines cancelled or suspended as of early 2021.

In the urban areas, most people are near transit but frequencies are low.

We can see that most of the greater Monterey and Salinas areas are served by some form of bus service, just by looking at the map in Figure 43 on page 47.

The charts on this page go deeper, showing us what percentage of actual people and jobs are within walking distance of service, and how frequent that service is on weekdays in the middle of the day.

Based on these charts, we can see that, **within the greater Monterey and Salinas areas:**

- **Most people live near some transit service.**

- o 66% of residents and 69% of jobs are within 1/2-mile of a bus stop.
- o 69% of residents and 64% of job in Seaside/Marina/Sand City are within 1/2-mile of a bus stop.
- o 77% of Salinas residents are within a 1/2-mile of a bus stop, compared to only 62% of jobs. This is likely because there are many agricultural and warehousing jobs at the very edges from Salinas, just beyond reach of the bus network.

- **Proximity to transit is relatively equitable across income and race.**

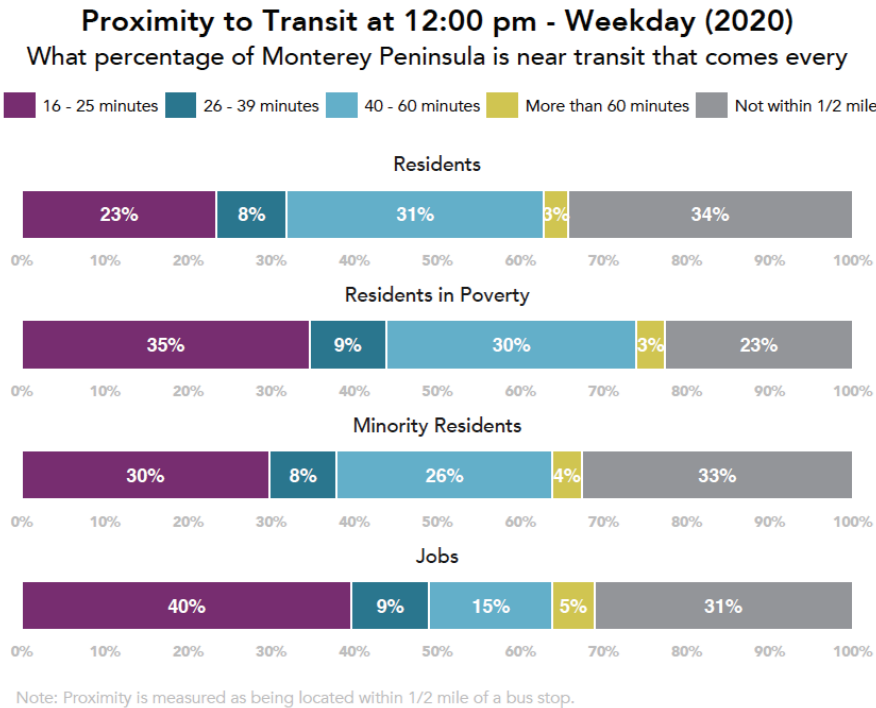
- o Low-income residents are slightly more likely to live close to bus service than all residents.
- o Non-white residents are not more or less likely to live near bus service than all residents.

- **Most people live near very infrequent service, or no service at all.**

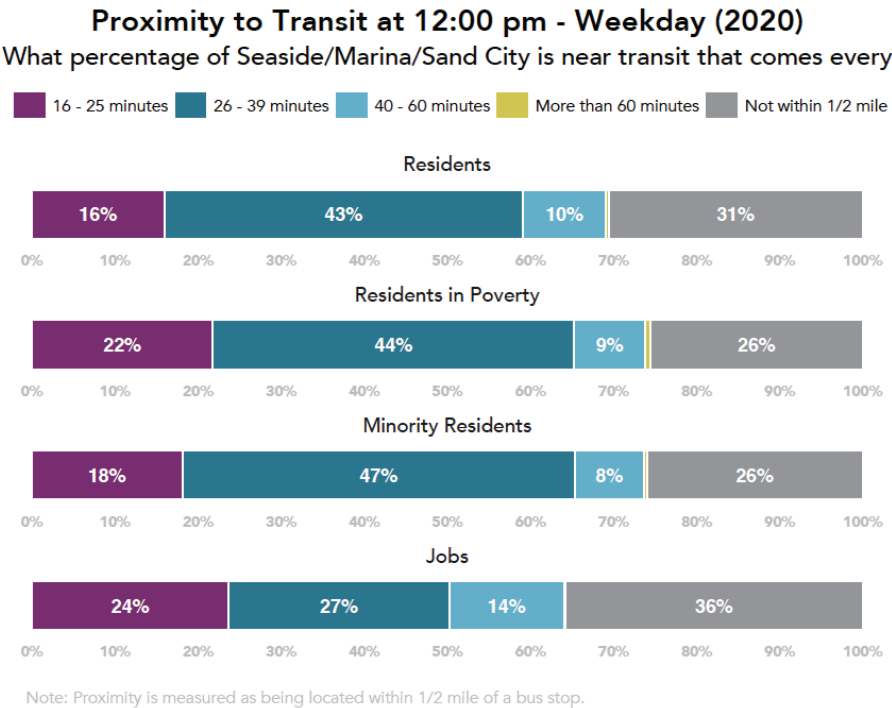
- o Only 50% of Salinas residents, 49% of Seaside residents, and 31% of Monterey Peninsula residents live near service that comes at least every 30 minutes on weekdays.

Figure 46: Charts showing the number of people and jobs within a 1/2-mile walk of a bus stop in the Monterey Peninsula (top left), Seaside/Marina/Sand City (top right), Salinas (bottom center), and in all of Monterey County (lower left).

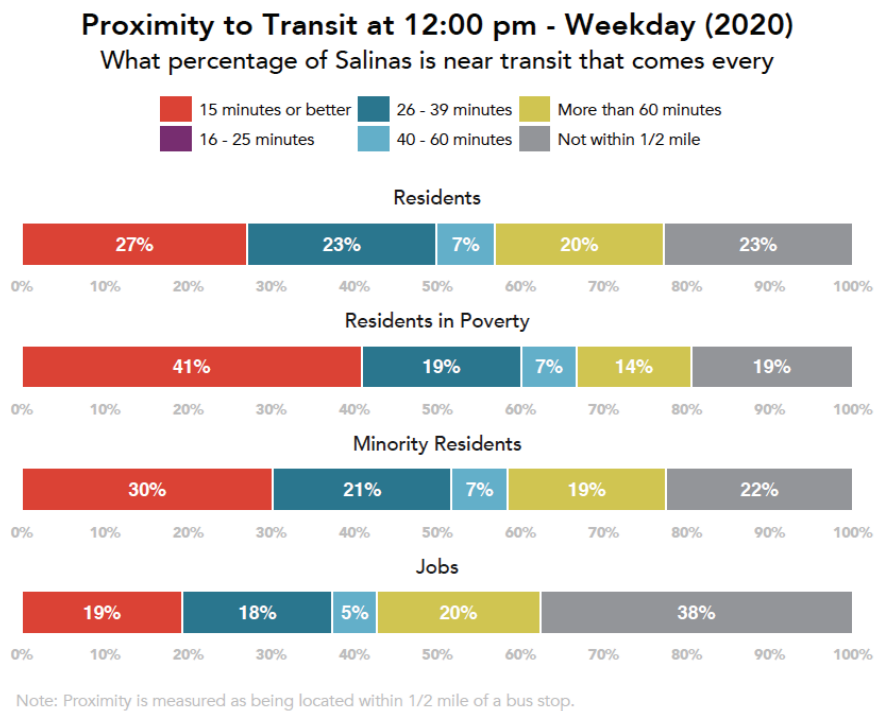
Monterey Peninsula



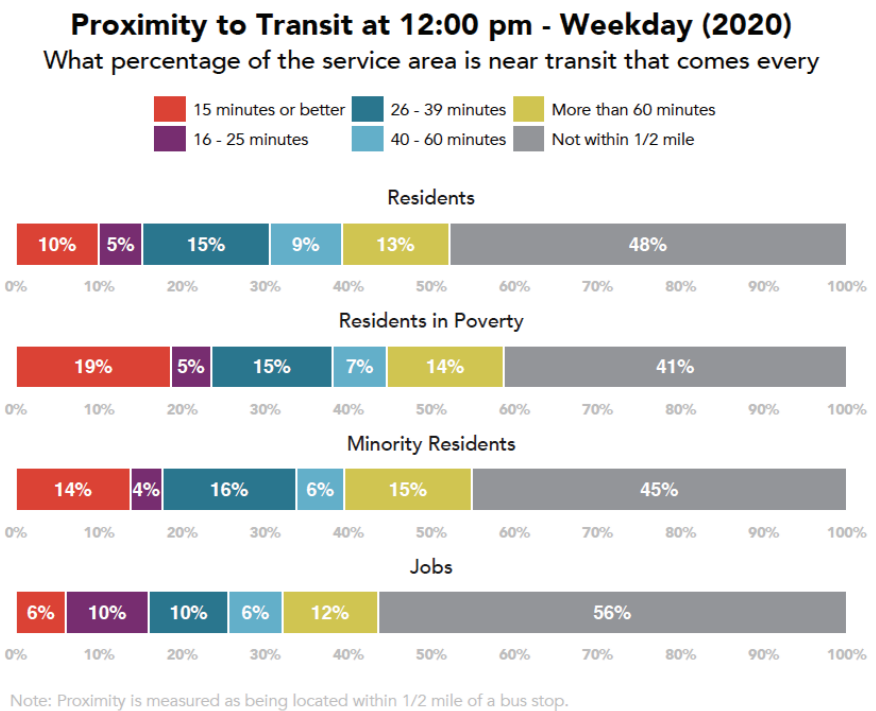
Seaside / Marina / Sand City



Salinas



Countywide



Outside urban areas, most people live far from transit.

In Figure 47, every 25 residents in Monterey County is represented by a dot. If those 25 residents live within 1/2-mile of a bus stop, the dot is blue. If the closest bus stop is farther away, the dot is red. The location of the dots is based on Census population estimates at the block group level, but only in areas located within 100 feet of a road.

This map shows that outside the urbanized area, very few people are near a bus stop. In rural Monterey County, MST fixed route coverage is limited to:

- The centers of the county's small towns: Castroville, Gonzales, Soledad, Greenfield and King City.
- Narrow strips along rural roads in the Carmel Valley, and between Prunedale and Watsonville.

Looking closely at this map, we can also see the kinds of places that are far from service within the urbanized areas. These are either:

- The hilly edges south of Monterey, which are in large part not operable by buses.
- Neighborhoods of Marina and Salinas where poor street connectivity makes walking distances farther than 1/2-mile.

We can also see that many of the people not covered by the transit network live in North County, at densities that are high for rural areas but too low to feel suburban.

It's important to note that some of the residents represented in red dots do have access to MST's on-call service. This service allows people to reserve for point-to-point travel within several cities: Marina, Gonzales, Soledad, Greenfield and King City¹.

¹ Note that On-Call service does not allow for direct travel between cities. However, it is possible to use On-Call service to collect to an MST bus line.

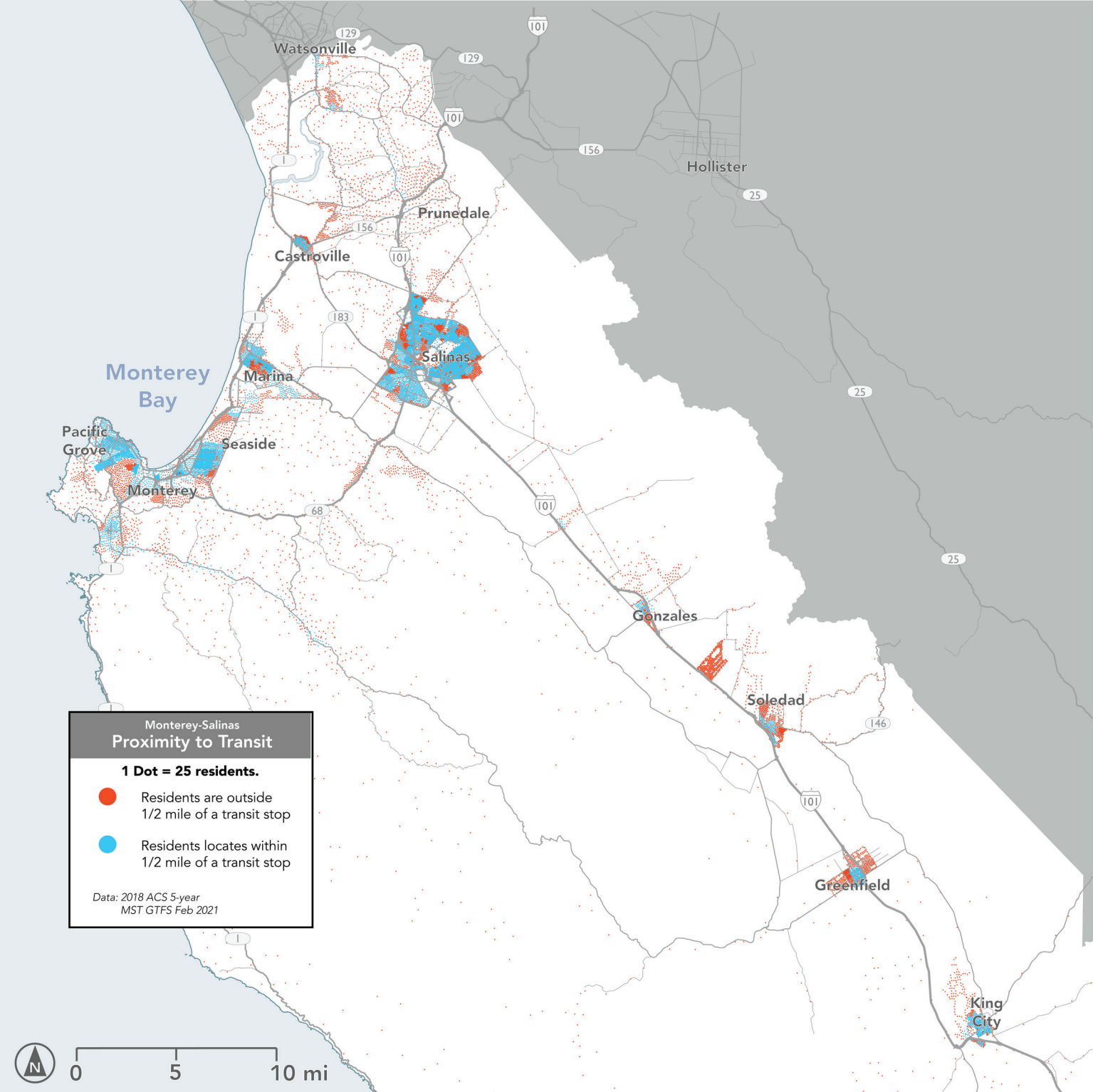


Figure 47: Regional map representing the location of residents within and beyond 1/2-mile from the nearest MST bus stop with weekday service.

In several important corridors, lines overlap but don't produce frequency.

1. Munras/Highway 1 between Monterey and Carmel-by-the-Sea

No fewer than 9 bus lines operate in different parts of this corridor linking Downtown Monterey, CHOMP and Carmel-by-the-Sea.

- Each of these lines is designed individually to meet a particular travel pattern, at a different frequency.
- Some lines deviate off the main path on the way (e.g. Line 3). Only five lines stop at CHOMP; and only five lines continue all the way to Carmel-by-the-Sea (but not exactly the same five that go to CHOMP).

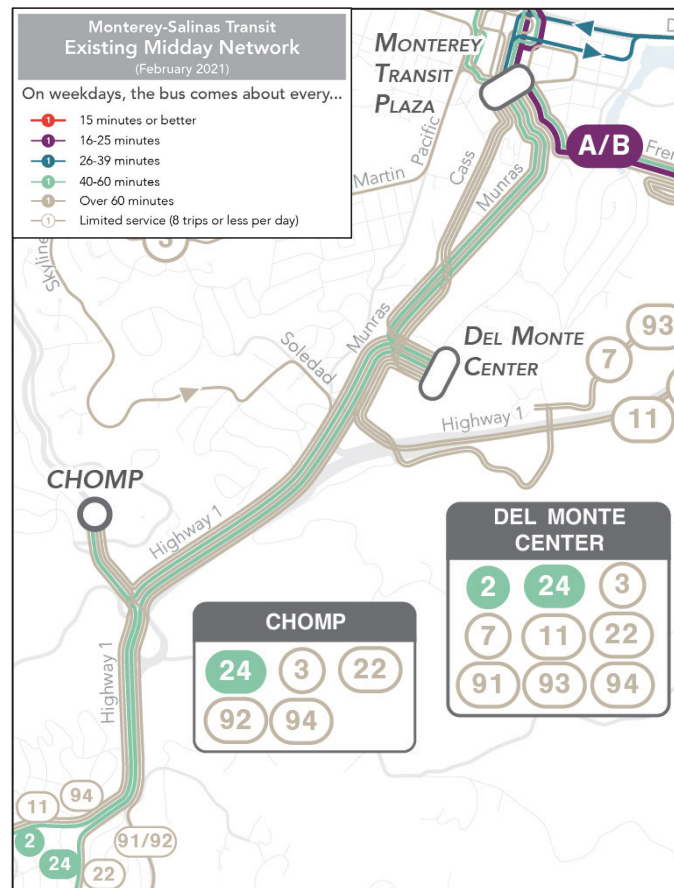


Figure 48: Map of bus lines between Monterey Transit Plaza, Del Monte Center, and CHOMP.

- Coming into Monterey and Carmel-by-the-Sea, lines split into multiple paths.

As a result, the actual frequency between major destinations is completely random from one hour to the next. It would be impossible for a casual customer to understand which line to take to get from A to B without using an app like Google Transit, or poring through multiple schedules. And it's quite likely that existing riders are not taking full advantage of all the service in this corridor, because they can't predict what will happen if they get on a different bus than their usual line.

Even assuming someone had gained perfect knowledge of which bus went where, the effective frequency of service experienced by customer would remain low. Between 7 AM and 6 PM:

- Monterey Transit Plaza -> Del Monte Center. Average of 4 direct buses per hour, but nearly every hour features a 30 minute empty period between two buses.
- Monterey Transit Plaza -> CHOMP. Average of 2 direct buses per hour. Most of the time, the interval between two of these buses is 40 minutes.
- Monterey Transit Plaza -> Downtown Carmel-by-the-Sea. Average of 3 direct buses per hour. Most the time, the interval between two of these buses is about 30 minutes.

In other words, it might be as convenient for most customers if the nine lines and four buses per hour operating in this corridor were simplified to a single line, operating every 30 minutes. It might then be possible to reinvest the remaining service in either higher frequency, or more service elsewhere.

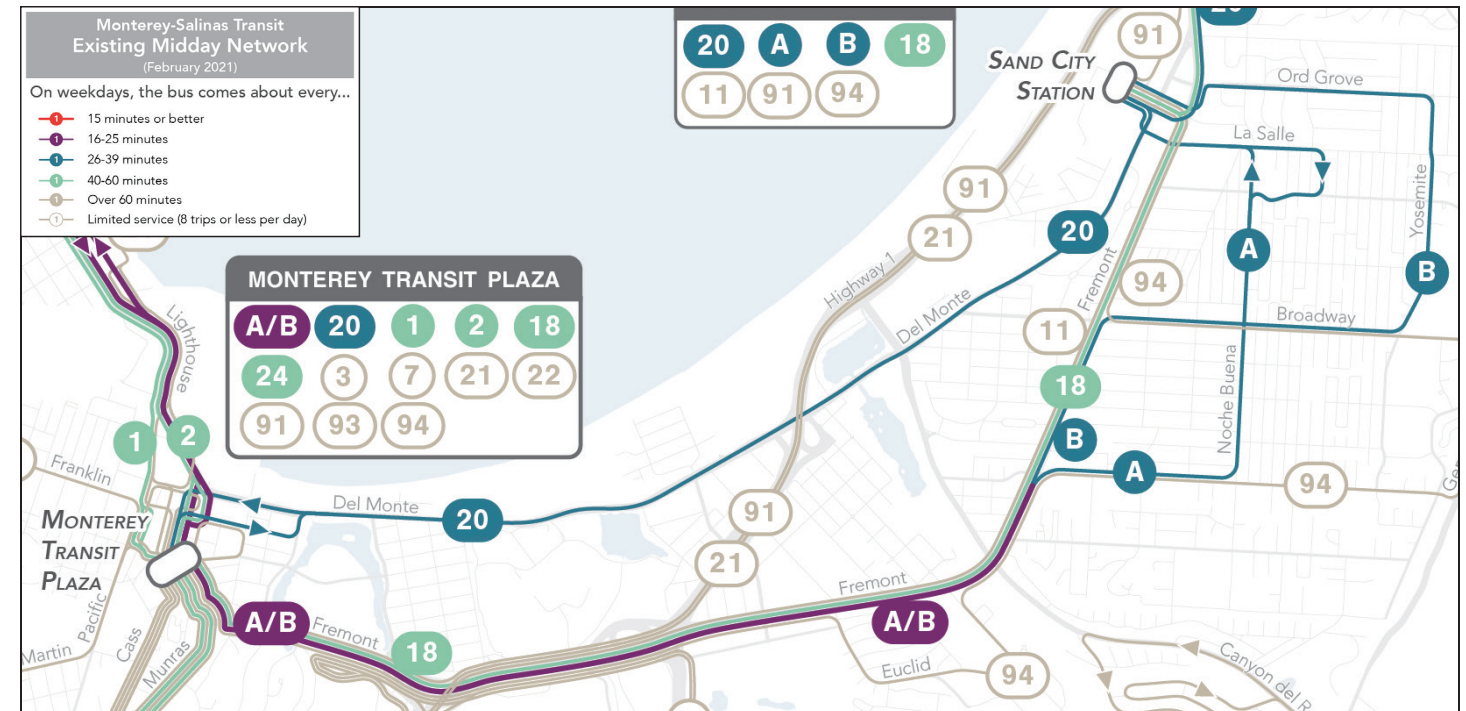


Figure 49: Map of bus lines between Monterey and Sand City..

2. Fremont between Monterey and Sand City

The primary overlap in this corridor is between the JAZZ A, JAZZ B and Line 18. All three lines serve the corridor from Monterey to Sand City, but they split into three distinct patterns in Seaside.

The JAZZ A and B schedules are mostly coordinated, with the goal of achieving a shared high frequency from Monterey Transit Plaza to Seaside. However, because the JAZZ A and JAZZ B are slightly different lengths, the overlapping frequency is imperfect in the southbound direction.

When the JAZZ buses are scheduled to a combined 15 minutes apart northbound, they come every 10 to 20 minutes southbound. When they are scheduled to a combined 18 minutes apart northbound, they come every 13 to 23 minutes southbound.

If the JAZZ lines were the same length (and, in particular, if either both or neither of them deviated into Monterey Peninsula College), the frequency could be scheduled to be the same in both directions.

Line 18 operates only once an hour, and continues from Sand City to CSUMB and Marina. Because of this, it does not add any effective frequency between Monterey and Seaside. Once an hour, a lucky rider may find out that their expected wait is much shorter than usual thanks to a lucky strike, but they cannot count on a regular bus every 12 minutes.

Several other lines operate in various parts of Fremont between Monterey and Seaside (7, 11, 21, 91, 93, 94). However, nearly all of these lines are extremely infrequent, operating just a few times a day. And nearly all of them do not continue to Monterey Transit Plaza directly, but instead go to Del Monte Center first.

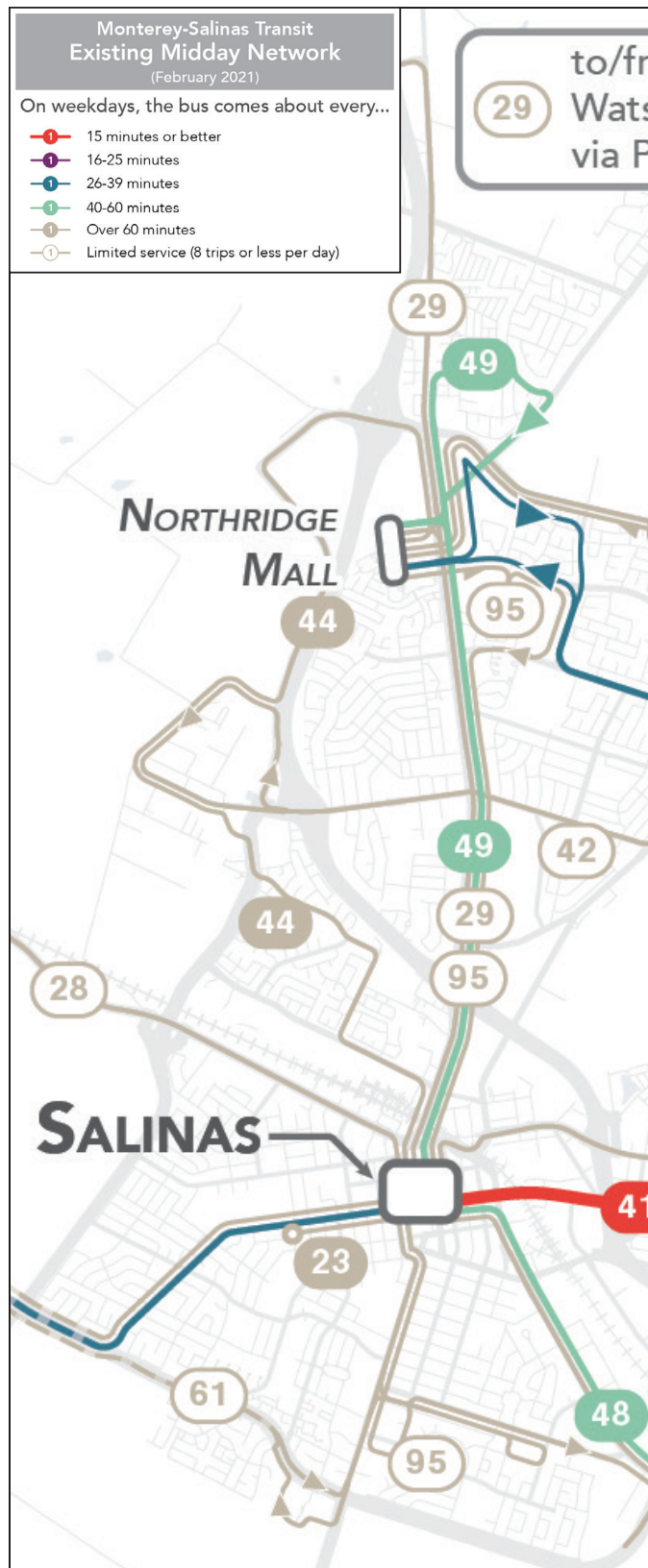


Figure 50: Map of bus lines on and near Main Street in Salinas.

3. Main Street in Salinas

Main Street is the main arterial corridor connecting North, Downtown and South Salinas.

Many important destinations lie on Main Street or within a short walk, including Northridge Mall, Harden Ranch Plaza, North Salinas High School, Salinas DMV, Salinas Sports Complex, Downtown Salinas, Monterey County Social Services, and many other stores and places of employment.

Furthermore, the Salinas Valley Memorial Hospital, while not on Main Street, is on a logical path that a bus coming from Main Street might follow on its way to the government and healthcare offices on Blanco Road.

Despite this, there is relatively little service on North Main Street, even on weekdays in the daytime.

- The vast majority of service on North Main Street is provided by Line 49, which runs only once an hour.
- Line 29 operates every two hours on North Main Street. It is, however, spaced such that every other hour the wait between two buses is reduced to 30 minutes.
- Line 95 operates only four times per day, and only in the southbound direction, as it is part of a much larger one-way loop around nearly every major destination in Salinas.

There is even less service on South Main

Street, which has just Line 95, plus a few runs a day on Line 61, which is actually designed as a regional veterans' medical shuttle from Salinas to the VA outpatient facility in Marina.

In other words, the four lines that operate on different parts of Main Street add up to only hourly service on North Main Street, and less than hourly service on South Main Street.

This contrasts markedly with the high level of service available between Downtown Salinas and Alisal on Line 41, which operates every 15 minutes.

Line productivities are low, reflecting a coverage-oriented system.

Productivity is a measure of how efficient a transit system is at attracting ridership.

It is usually expressed as boardings per hour of service, i.e. the number of people who get on a bus for every hour that bus is out on the road, following a transit line.

For longer distance lines, productivity is sometimes measured in terms of boardings per bus trip. This adjusts for the fact that long-distance buses inevitably spend long amounts of time not picking up more passengers.

As explained in Chapter 2 on page 20, **more frequent lines tend to be more productive.** This is partly because transit becomes exponentially more convenient as it becomes more frequent, so frequent lines attract more riders. The other part is that transit agencies tend to locate more frequent lines in the places where the most people might ride.

The graphs in Figure 51 show that **this relationship doesn't hold for MST's bus network.** These graphs compare frequency and productivity in 2019¹. These graphs show that:

- Productivity averaged about 17 boardings per hour, and under 20 boardings per trip. This is generally very low.
- Lines that come every 2 hours are almost as productive as lines that come every 15 minutes.

These patterns suggest that **MST has generally not invested in high frequency in places where high ridership might be expected in return.** MST has instead preferred to maximize coverage, spreading service out to as many places as possible, even though that results in lower ridership overall.

¹ This is because pandemic ridership conditions are so uniquely low and reflect fast-changing conditions that are not necessarily comparable to the past or the future.

MST Route Frequency and Productivity (October 2019)

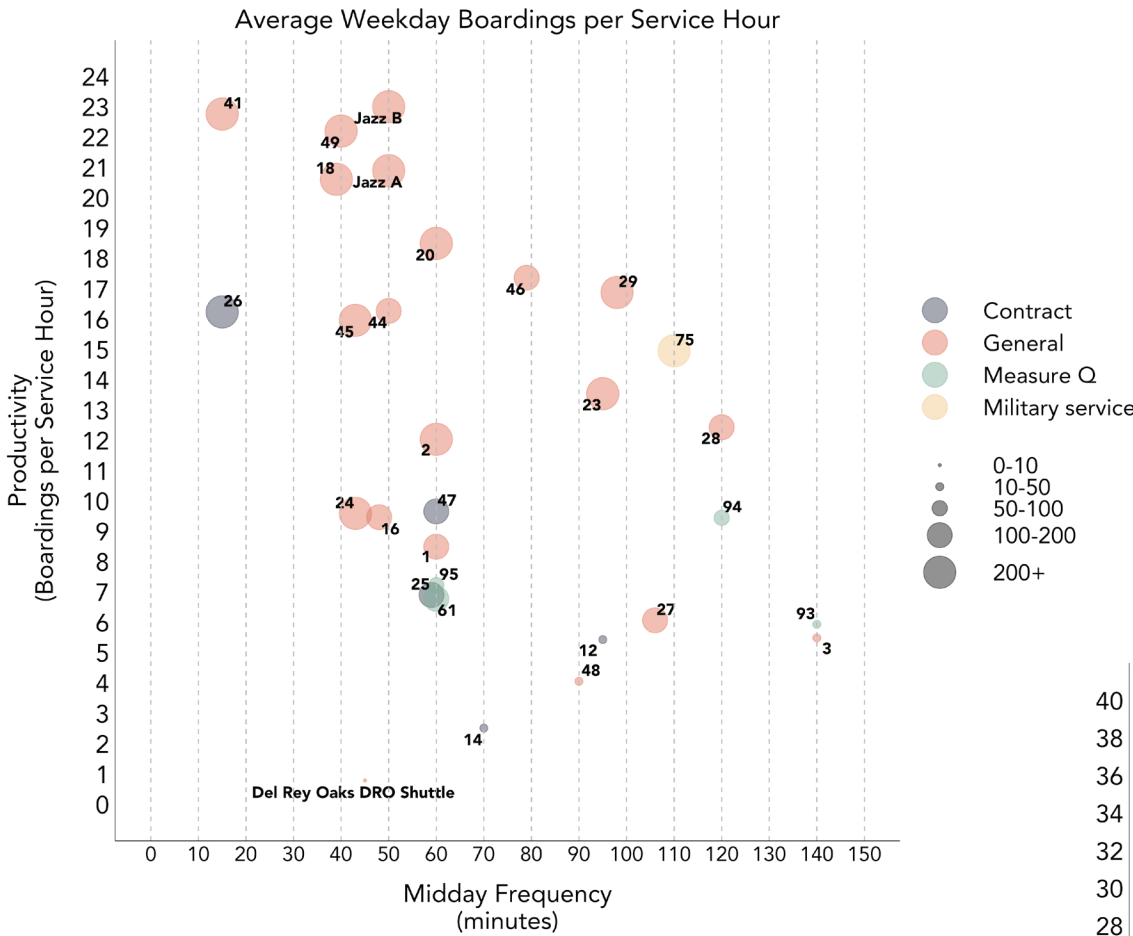
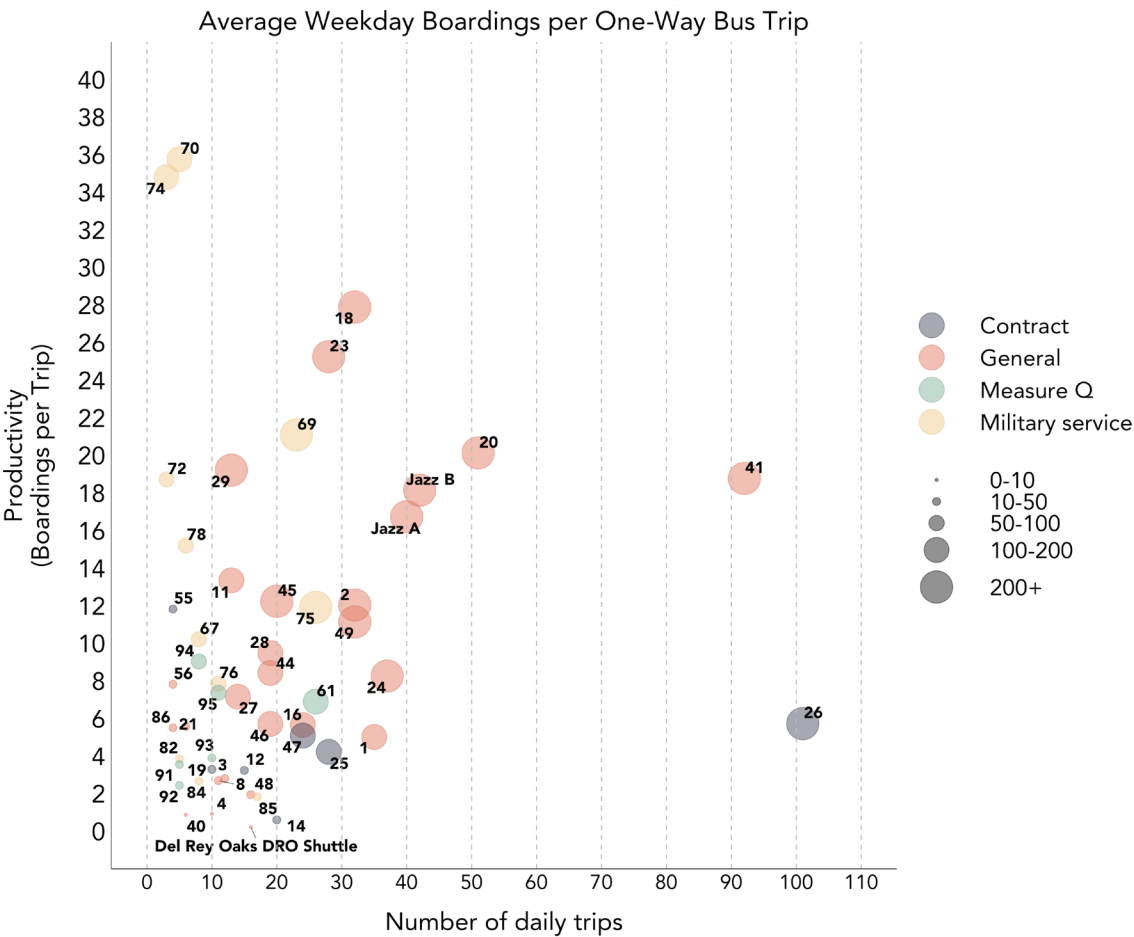


Figure 51: Charts showing the relationship between frequency of service and productivity of different MST bus lines pre-pandemic (2019).



The network is hampered by a lack of consistent timed transfers.

It’s unlikely that all the places you might want to go will be located on the bus line nearest to your house. Transit agencies like MST know this, and organize their system to allow for transfers, or connections between different lines.

Connections allow people to travel in many directions. But the amount of time a transfer takes depends largely on the frequency of the connecting lines.

If you are connecting to a frequent line, you can rely on a short wait, since the next bus is always coming soon. But you could wait a long time to connect to a bus that only comes every hour or two, if the line schedule is not deliberately designed to connect with other lines.

Timed Connections at Transfer Points

To make connections between low-frequency lines more tolerable, many transit networks are often operated with a “pulse” at key locations. To offer a pulse, an agency must design its lines to be a certain length so that buses can all arrive at the central hub at the same time, each hour or half-hour. The buses dwell together for a few minutes, passengers connect among them, and then they depart again. This can happen at any regular interval, though half-hourly and hourly pulses are common in most networks with a timed connections.

Pulses dramatically improve people’s ability to get where they need to go in a reasonable amount of time on infrequent transit networks. Well-functioning pulses tend to increase ridership, through the increased convenience they provide.

Current Situation

The existing MST network features transfer points at Monterey Transit Plaza, Sand City Station, Marina Transit Exchange and Salinas Transit Center. But **because most MST lines operate on unique frequencies, have different lengths, and operate from different start and end points, there are very few timed transfers in the existing network.**

This means customers end up waiting a long time. This is illustrated by the tables in Figure 53, which show how long it would take to connect to and from Line 49 at Salinas Transit Center in the middle of the day on a weekday.

Furthermore, MST customers are discouraged from transferring by the requirement to pay a new full fare every time they change buses. This is discussed further in Chapter 7.

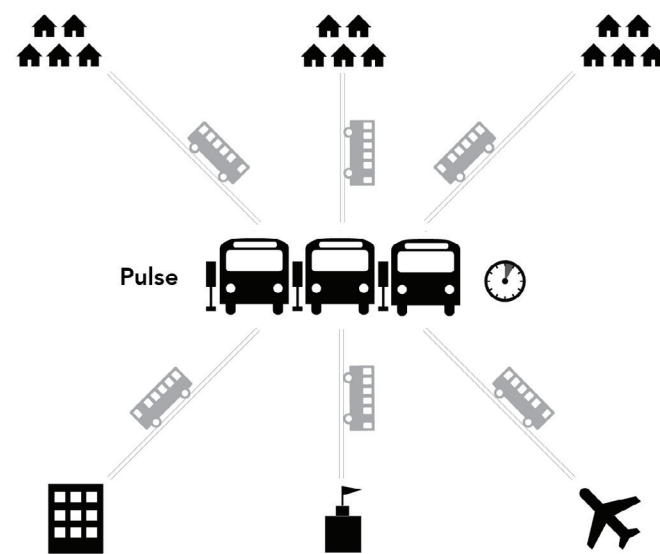


Figure 52: In a “pulse” timed transfer system, multiple low-frequency lines are scheduled to come together regularly, dwell for a few minutes so that passengers may transfer among them, and then depart again.

If you were arriving from North Salinas on Line 49 at 11:10 AM, how long would you wait at Salinas Transit Center?				
You would have to wait...	...to go to...	...leaving at...	...on MST Line...	Why?
5 minutes	Monterey	11:15	20	Consistent timed connection
	South County	11:15	23	Lucky timed connection
	Alisal	11:15	41	Frequent service on Route 41
20 minutes	Salinas Airport	11:30	48	Untimed connection
	Boronda	11:30	44	Unlucky - Frequency mismatch
35 minutes	Watsonville	11:45	29	Untimed connection
45 minutes	South Salinas	11:55	95	Unlucky - Frequency mismatch

If you were trying to go to North Salinas on Line 49 leaving at 12:15 PM how long would you have to wait at Salinas Transit Center?				
You would have to wait...	...coming from...	...arriving at...	...on MST Line...	Why?
7 minutes	Alisal	12:08	41	Frequent service on Route 41
15 minutes	Boronda	12:00	44	Unlucky - Frequency mismatch
32 minutes	Monterey	11:43	20	If you take the bus that arrives at 12:13, you might miss your connection.
36 minutes	Watsonville	11:39	28	Untimed connection
56 minutes	Salinas Airport	11:19	48	Untimed connection
1 hour 28 minutes	South County	10:47	23	Unlucky - Frequency mismatch
1 hour 45 minutes	South Salinas	10:30	61	Unlucky - Frequency mismatch

Figure 53: Tables showing how long you would have to wait if you were trying to connect to or from Line 49 (North Main Street) at Salinas Transit Center, coming from or going to seven other locations. Because most MST lines operate at unique frequencies, there are relatively few opportunities for timed connections in MST’s existing system. People trying to transfer from one line to another often have to wait a very long time.

MST service levels and ridership are low compared to peers.

In preparing this report, the project team compared MST to agencies serving similarly-sized communities. We focused on agencies with a relatively large service area, in mid-sized counties, at the edges or just outside major metro areas. Specifically, we compared MST to:

- San Joaquin RTD in Stockton, CA.
- Gold Coast Transit in Oxnard/Ventura, CA.
- Marin County Transit in Marin County, CA.
- Santa Cruz Metro in Santa Cruz, CA.
- Santa Barbara MTD in Santa Barbara, CA.
- Lane Transit District in Eugene, OR.
- Intercity Transit in Olympia, WA.

This analysis reveals that:

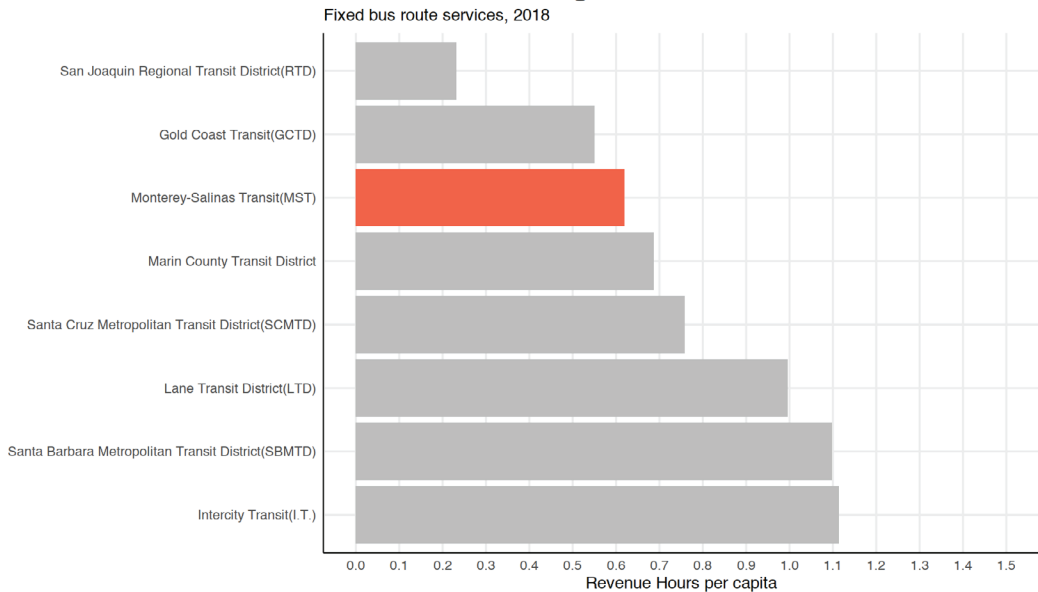
- **MST provides relatively little service.** Only 2 of the 7 peers compared provided less service per capita than MST. And in the case of Gold Coast Transit, this is probably because intercity transit in Ventura County is handled by a different agency.
- **MST ridership is correspondingly low.** Studies comparing many agencies over time show that the single largest contributor to ridership is the amount of service provided. So it is not surprising that, among the agencies we compared, those that provide more service generate more ridership.
- **MST productivity is very low.** We have seen how MST ridership has likely been suppressed by low frequencies. As a result, MST's average productivity has tended to be lower even than other agencies who provide similar total amount of service.

These facts are not permanent, nor are they inevitable. They reflect conditions in pre-pandemic times, and the likely outcomes if not much changes in MST's funding model and service planning practices post-pandemic. But this trajectory can still change.

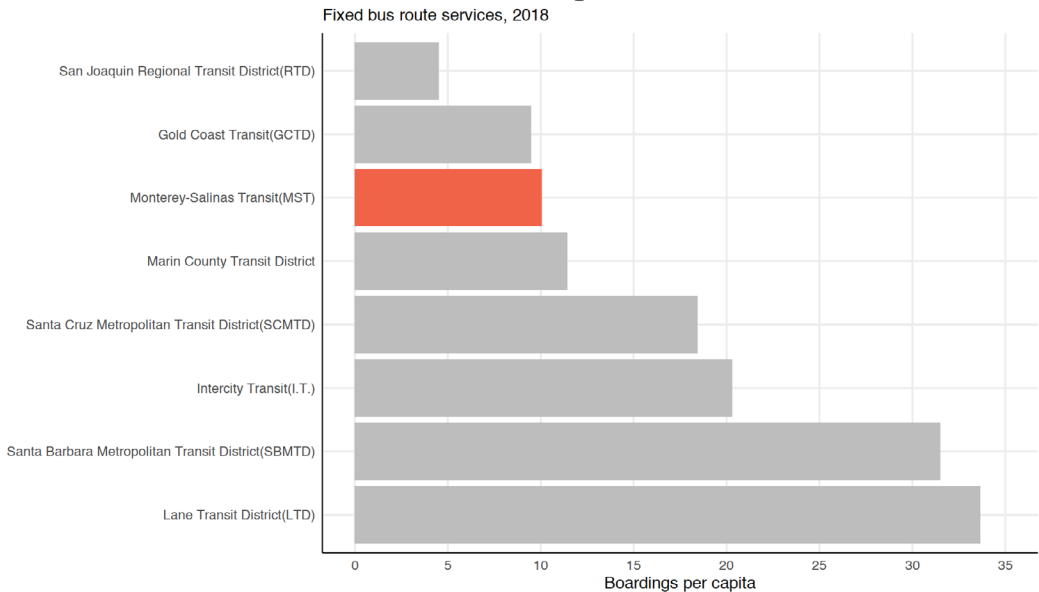
MST provides the amount of service it can afford within existing public funding sources. Monterey County voters could approve more, as they did with Measure Q in 2014.

And MST's relatively low productivity compared to peers could change as a result of a network redesign that more deliberately matched service location and frequency with ridership potential.

MST vs. Peer agencies: Service Investment



MST vs. Peer agencies: Relevance



MST vs. Peer agencies: Productivity

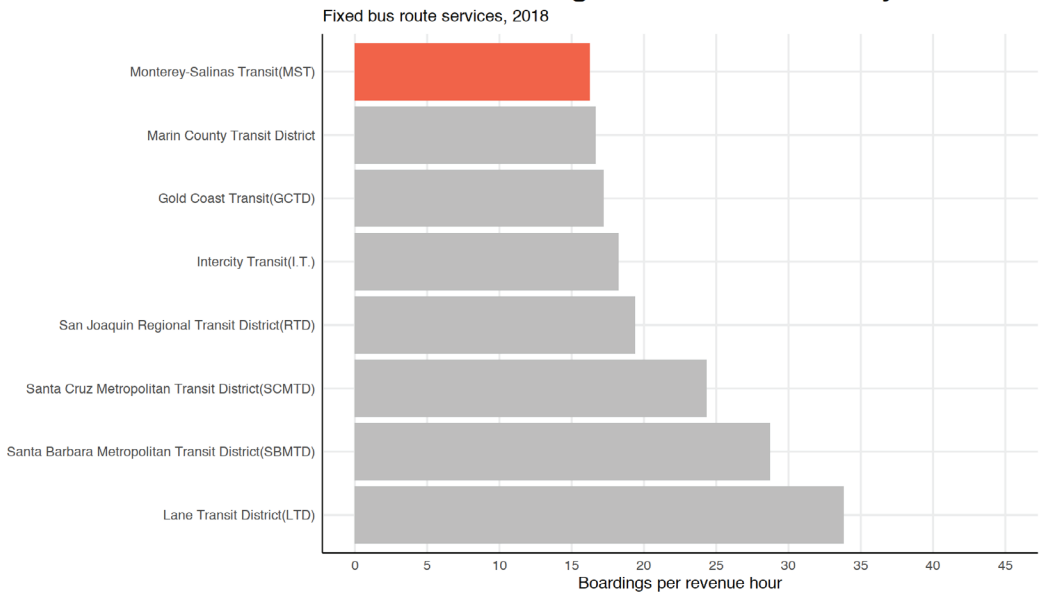


Figure 54: Charts comparing MST to peer agencies on three measures: service investment per capita (top left), relevance in annual boardings per resident (top right), and productivity in boardings per hour (bottom right).

5 MST Paratransit and Specialized Services

MST specialized services include RIDES paratransit and other programs.

MST RIDES is a civil rights obligation.

MST is required by the Americans with Disabilities Act (ADA) of 1990 to provide a complementary paratransit service to persons who are unable to use public transit fixed route services. MST provides this service under the name RIDES.

Two recent Federal and State audits found the MST organization to be in full compliance with relevant Federal ADA regulations. This analysis, therefore, examines selected aspects of the RIDES program to identify opportunities for improved cost efficiency and service effectiveness

Paratransit is Just One Component of the Contractor’s Responsibilities

A private operator operates MST’s RIDES ADA paratransit program and other assigned services under a contract secured through competitive processes conducted every seven years. MV Transportation, MST’s contractor, is responsible for all service operations and uses MST-provided vehicles to do so.

MST RIDES hours comprised 46% of contractor-provided service in FY 2020. The chart in Figure 55 shows the growth in contractor hours, by service type, since 2013. Note that MV Transportation’s contract also extends to some of the fixed routes discussed in Chapter 4.

MST provides other specializes transportation services

In addition to RIDES, MST also provides a general public demand response service, where riders book a trip through an app to secure a shared-ride trip to their destination within that community.

On-Call services operate in Soledad, Gonzales, Greenfield and King City on weekdays and in Marina on weekdays and weekends. Greenfield has shown the highest use levels, as illustrated in Figure 56.

Special Medical Transportation provides non-emergency medical trips to out-of-county facilities, as requested. Use levels are low, less than one round-trip per month.

Non-Vehicle Programs

MST supports several non-vehicle programs oriented to older adults, persons with disabilities and military veterans. Funded with Measure Q tax receipts, these include:

- Taxi Voucher Program – providing taxi coupons to older adults and ADA certified riders at half-off, to subsidize taxi trips -
 - o 48,083 taxi trips provided in FY 2020
- MST’s TRIP Mileage Reimbursement Program – providing a per-mile stipend to volunteer drivers assisting older adults and persons with disabilities –
 - o 4,579 trips provided in FY 2020
- Travel Training – providing one-on-one training assistance to persons who need support in learning to use MST fixed route services
 - o 487 training session in FY 2020

Figure 55: This chart presents revenue hour history by program for contracted services

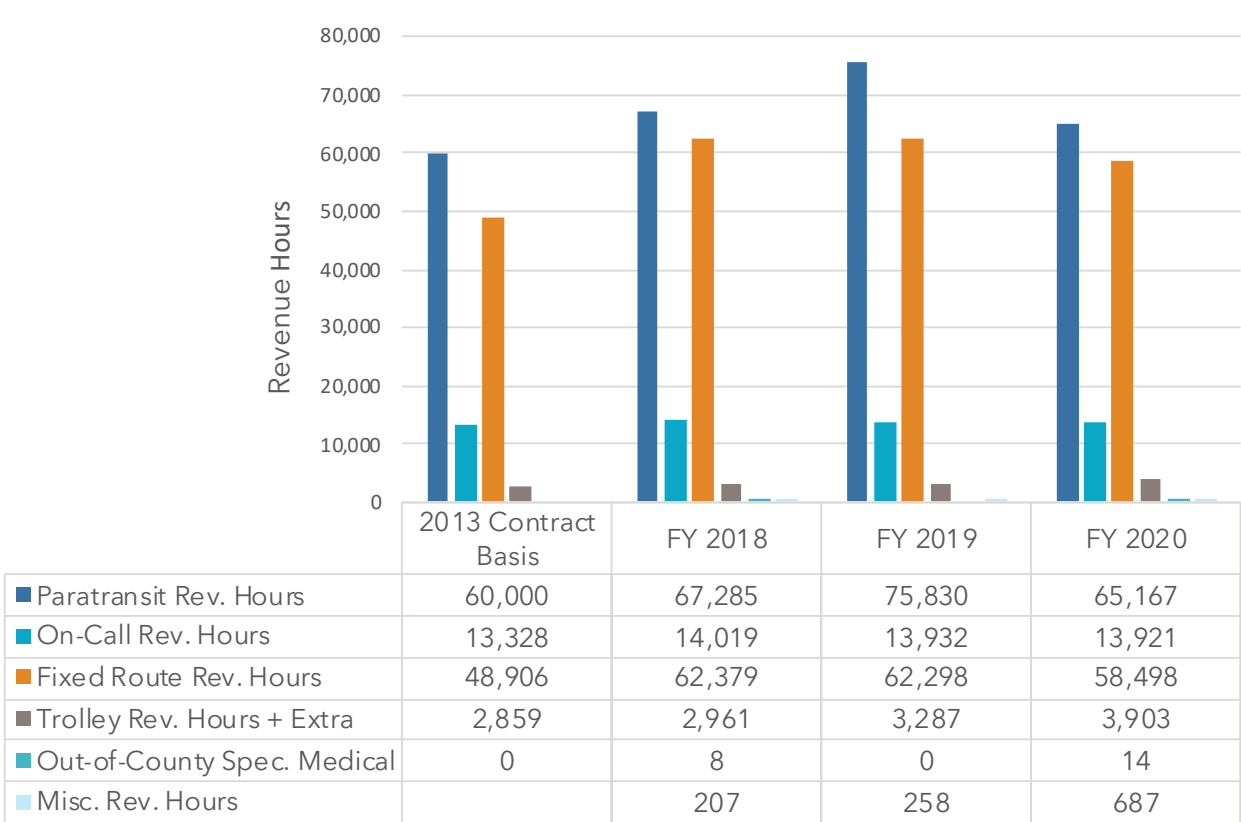
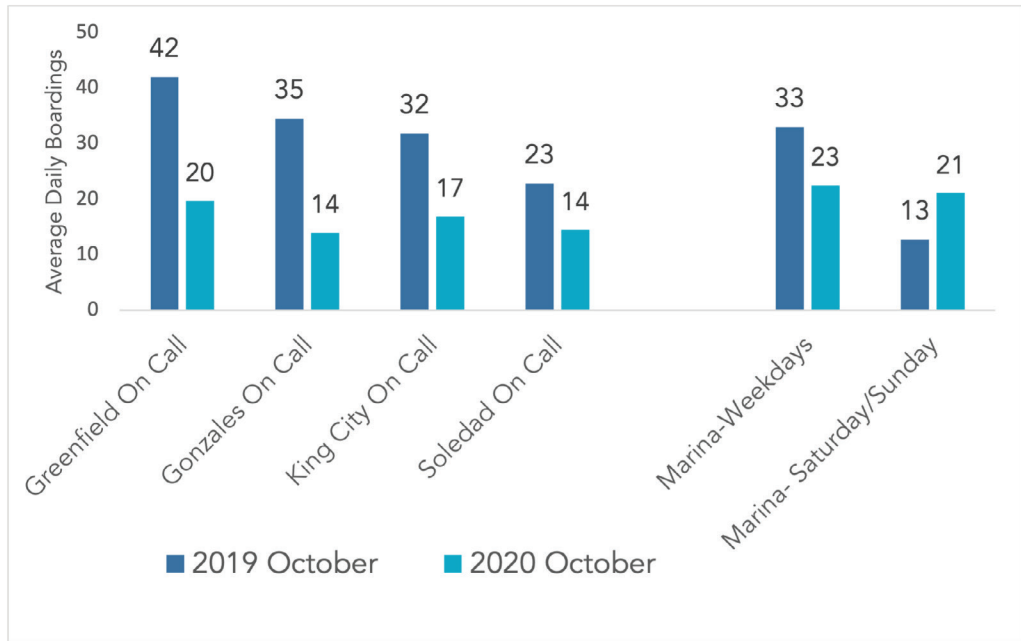
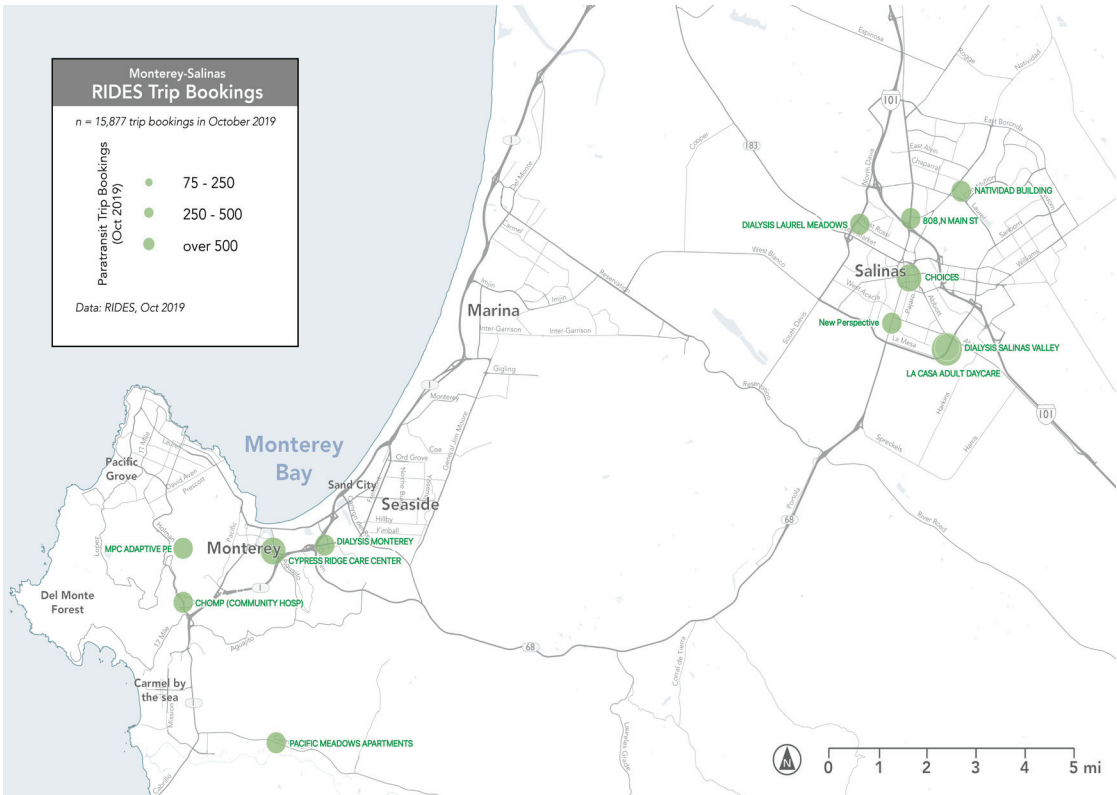
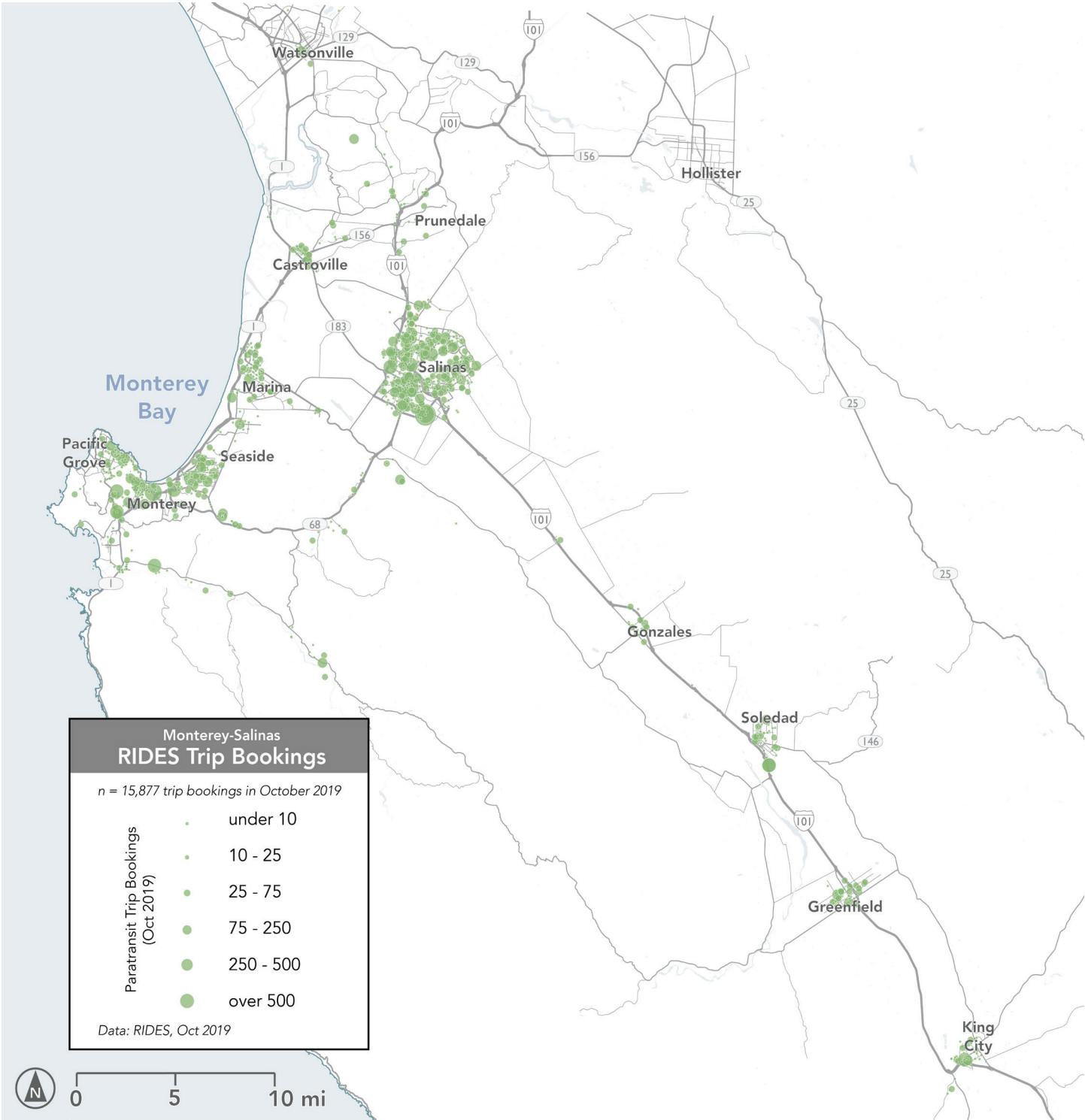


Figure 56: This chart presents MST On-Call ridership by city for October 2019, October 2020



MST RIDES is a comprehensive, countywide program.

Figure 57: These maps present MST RIDES bookings in October 2019. Distribution of these trips was: Salinas area: 55%; Peninsula area: 20%; Marina/Seaside: area: 12%; South County area: 10%; North County area: 3%.



MST received 15,877 trip booking requests in October 2019. Of these, 21% were not completed due to various types of cancellation, with MST providing 12,489 completed trips.

Figure 58 depicts the full set of trip booking origins. These cover the majority of the populated areas in the county, although origin and destination must typically be within 3/4 mile of an MST fixed-route to qualify as ADA complementary paratransit.

Key origins and destinations (with 500+ trips per month) were concentrated in the Monterey and Salinas areas. They included adult day health care programs, sheltered workshops, behavioral health programs, dialysis facilities and Monterey Peninsula College.

RIDES service includes:

ADA Service - RIDES provides complementary paratransit to MST's fixed route services . ADA certified riders can travel within 3/4 mile of an MST line with an advance reservation.

Beyond the ADA - RIDES also serves limited trips outside the ADA service area to ADA certified riders traveling into the service area.

RIDES performance indicators document a solid, responsive program.

Boardings steadily increased Pre-COVID.

RIDES passenger boardings, by ADA certified persons, showed steady increases, prior to COVID-19 impacts which began in the final quarter of FY 19/20. FY 18/19 increased 9% over the prior year and FY 19/20 was on track to increase similarly, until the fourth quarter.

The chart at the right shows ridership for the past three years, illustrating the growth before and decline after the pandemic.

RIDES operates with both dedicated vehicles and taxi back-ups, a best practice employed in many ADA paratransit programs to cost-effectively provide for supplemental taxi service when on-time pick-ups cannot otherwise be achieved. During FY 2020, dedicated MST vehicles provided 85% of trips. Non-dedicated, private taxis provided 15% of trips.

RIDES Unit Costs are Reasonable

Measure Q, passed in 2014, supports transportation for seniors and persons with disabilities, including funding the RIDES program. FY 2019 costs of \$35.66 per passenger boarding¹, were just above the median per trip cost of \$32.45 for a group of 29 public paratransit programs, reported in *TCRP Synthesis 135, Paratransit Service Models (2018)*.

No-Show, Late Cancel and Missed Trips Collectively Run High

Overall, 21% of MST RIDES booked were not completed in October 2019. Most of these (12%) are due to passenger no-shows, late cancellations, or because the vehicle can't connect with the rider. These represent lost resources as the vehicle was dispatched.

Subscription Trips Running High

Subscription trips are recurring reservations, useful to building overall trip manifests. Pre-COVID, 59% of trips were subscription. Managing the proportion of subscription trips to 50% or less, particularly during peak travel times, helps to ensure that riders with single trip requests can also travel.

Productivity Above Contract Standard of 1.9 Trips per Hour

A favorable 1.97 in passenger boardings per hour was documented for 2020, up from 1.91, and well above the median rate of 1.57 documented in *TCRP Synthesis 135, Paratransit Service Models (2018)*. Ensuring that vehicles are efficiently dispatched is critical for demand response services which have overall low productivities in contrast with fixed route services.

High Proportion of Long Trips

About 40% of RIDES trips are between 5 and 10 miles, while a quarter are between 10 and 15 miles and another quarter and greater than 15 miles. Reflecting Monterey County's size, these long trips make it difficult to provide highly productive service and represent substantial deadhead, as vehicles travel empty for significant distances.

On-Time Performance Lags Behind 90% Standard

On-time performance analyzed for a three-month pre-COVID period shows that 79% of trips were provided within the on-time window of 15-minutes before to 15-minutes after the promised time. The demand for trips over the course of the day, trip distances to be covered and congestion on the roadways all impact on-time performance.

Figure 58: This chart presents MST RIDES boardings by month for three years, including supplemental taxi.

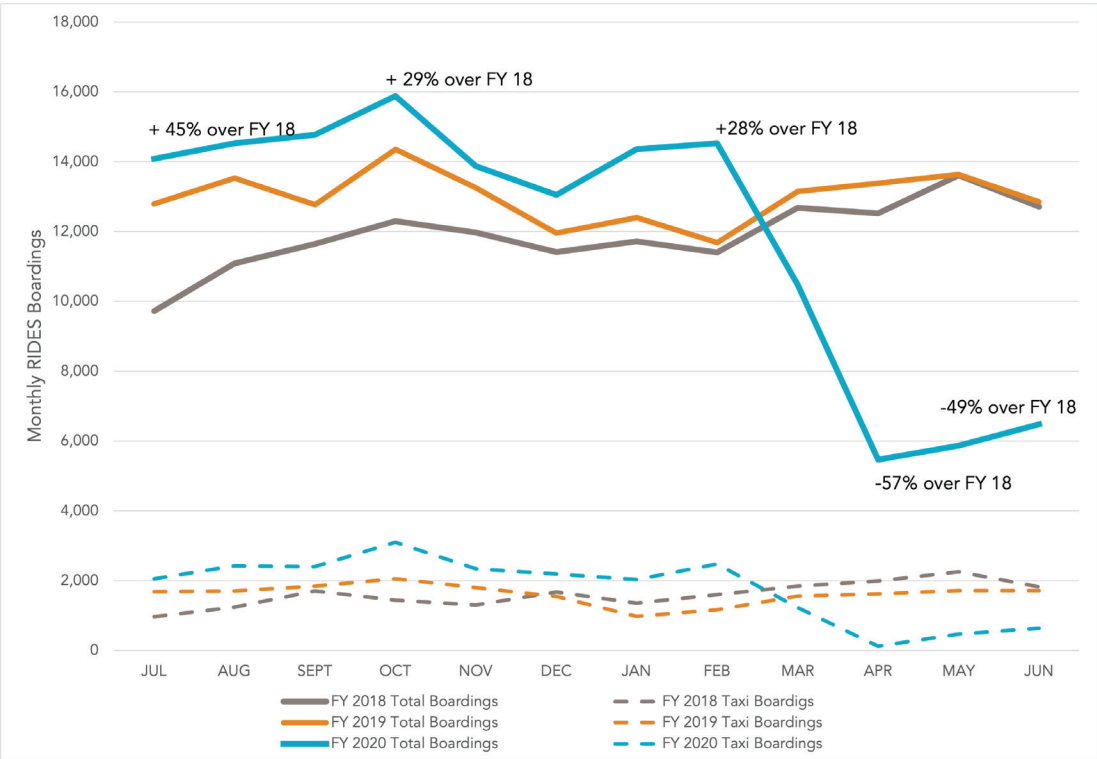
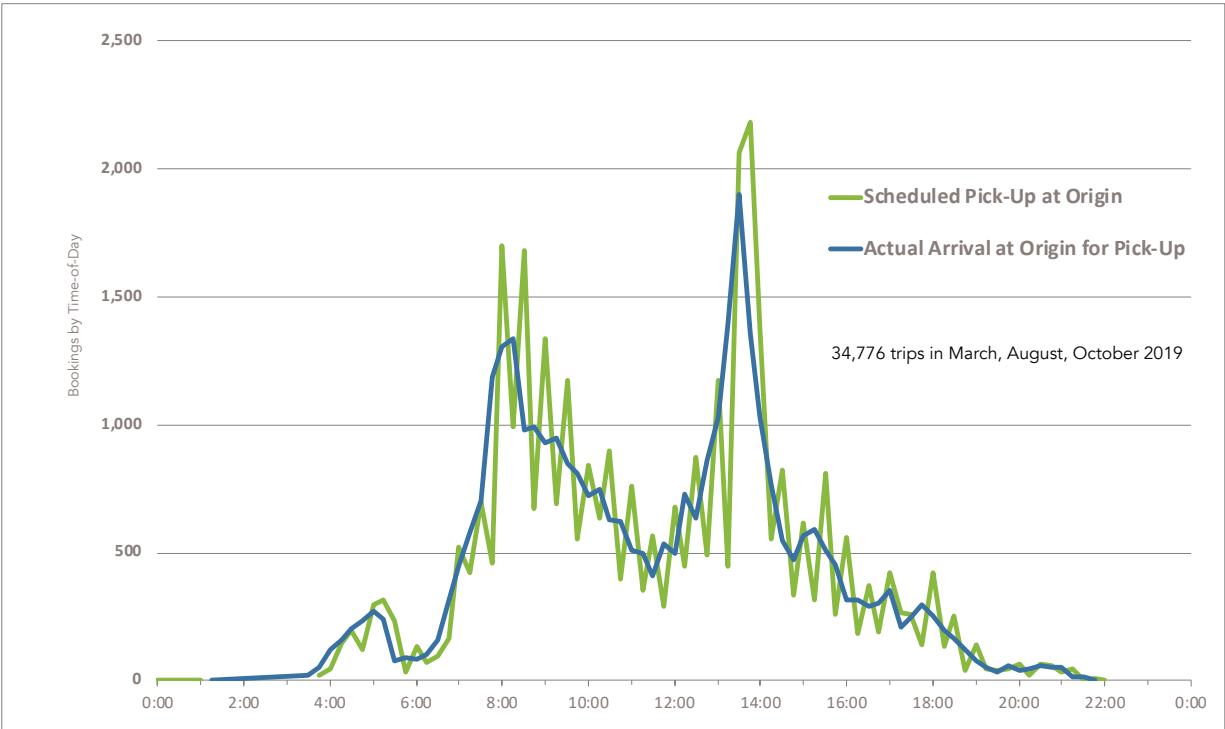


Figure 59: This chart shows MST RIDES trips are highest in the morning and afternoon, peaking at 8am and 2pm.



¹ As reported in the National Transit Database.

RIDES users report very positive experiences.

Customer Experiences

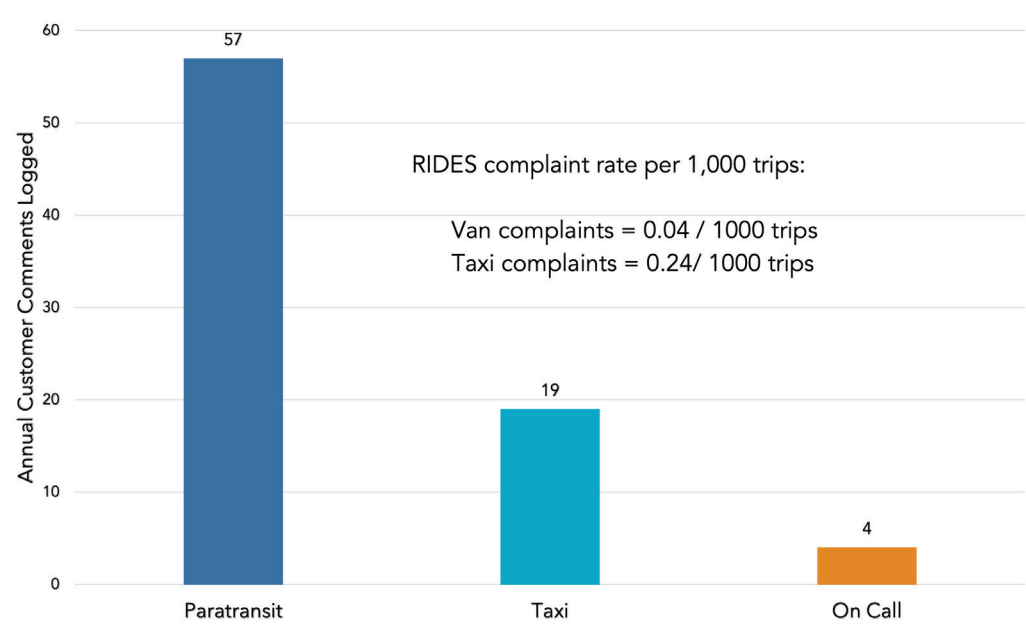
MST riders are certified by MST’s Mobility Services Center as unable to use fixed route public transit some or all of the time. By the end of FY 2020, over 5,000 unique persons had taken 77% of RIDES trips. Among the trips provided, 22% were provided to personal care attendants (PCAs) who can measurably shorten vehicle dwell times at the curb. Just 1% of persons riding during FY 2020 were fare-paying companions.

In the course of preparing this report, the project team interviewed focus group participants representing a range of persons who were substantially disabled by diabetes, liver disease and chronic illness, as well as very frail elderly persons. RIDES users also include persons with cognitive impairments of varying

severity or persons with behavioral disabilities, a wide range of disabilities.

Speaking with eight persons about their RIDES experience (including three in Spanish), each of these users expressed appreciation for the service. Six persons lived alone and reported that RIDES was their primary means of mobility; for some without family in the area, it was their only means of transport. Almost all riders spoke of the helpfulness of drivers with one reporting that his driver called 9-1-1 for transport to the hospital when he’d fallen into a diabetic coma while on the MST vehicle.

Figure 60: FY 2020 customer service reports received by MST



Rider Suggestions

Riders offered just a few areas of concerns:

- Communication difficulties with dispatch were described by one rider who noted that she calls frequently to determine when her vehicle is arriving for a regular, recurring trip.
- Two riders described missed trips that occurred when waiting for a vehicle in one location while the driver went to a different location to pick them up. Both were living in larger residential communities with multiple buildings.
- Two riders described negative experiences with taxi drivers, contrasting these with very favorable experiences with MST van drivers.

Low Level of Complaints

Customer service reports (CSRs) are received by the contractor (MV Transportation), whose managers document, address and report these to MST. The rate of customer complaints received was at 0.04 per 1,000 trips for FY 2020 for van trips, and higher at 0.24 for taxi trips.

Call Center Performing Above Standards

Customers interact with MST’s Call Center to book RIDES trips or ask follow-up questions. The call center received 30,000 to 34,000 calls monthly pre-pandemic. Despite this, call wait times were favorably low: highest on Mondays, averaging 1-minute 48 seconds, less than one minute on other days, and well below MST’s 2-minute wait-time standard. Abandoned calls, where individuals do not connect with a dispatcher, are around 9% of calls, rising to 10% of calls on Saturdays and Sundays.

Figure 61: MST’s state-of-the-art Mobility Services Center



"I feel well taken care of by the RIDES program."

- Anna Maria

"I am really thankful for the MST RIDES service that is provided and is key to my life. I am glad MST took the time to hear my input and experiences using MST RIDES."

- Charles

"MST is fantastic."

- Bridgette

"Drivers are wonderful."

- Patricia

Opportunities for Improvement

Providing ADA complementary paratransit is a complicated and expensive effort, but it is critical to those who need it. This analysis identified seven areas to address, to improve the RIDES' program cost-efficiency or its service effectiveness.

1. Reduce deadhead miles with a South County garaging location.

Reducing demand response deadhead miles is strongly advised, and may become potentially feasible if MST can allow MV Transportation to garage some demand response vehicles at the new South County facility in King City. About 20% of RIDES trips start or end in the Highway 101 corridor south of Salinas, and about 25% of RIDES trips are 15 miles or longer.

Although MST may not pay for deadhead time directly in its contract, the costs associated with deadhead end up being paid indirectly through higher overhead rates. Deadhead miles add to the wear and tear on MST-owned vehicles and can erode on-time performance.

2. Improve on-time performance with trip scheduling and trip negotiation modifications.

MST's contractor uses a sophisticated scheduling program, Trapeze. This tool must be carefully calibrated to local conditions to achieve maximum effectiveness, and improve on-time performance.

On-time performance can be improved by greater use of Trip Negotiation in the reservations process. Analysis revealed high proportions of trips scheduled on the hour and half-hour. Moving some of those trips even fifteen minutes can contribute to improved operational efficiencies by spreading demand peaks and softening their impacts.

Recommendations include:

- Adjust Trapeze parameters to reflect congested travel times and ensure that Trapeze provides call takers optimal pick-up times that push for greater efficiency, requiring call takers to formally negotiate with riders.
- Employ trip optimization functions, to adjust schedules in real-time to accommodate cancellations.
- *Require on-going scheduling software training for contractor staff, and include MST staff, to ensure effective use of most recent software functions and modifications.*

3. Reduce call volumes through use of scheduling software.

Implementing an automatic call-back on the day before scheduled trips and while the vehicle is on the way has been shown to significantly reduce call volumes into dispatch. These time-consuming calls are common among an anxious and dependent ridership population.

The PASS Web module "Where's My Ride" was successfully implemented in 2019 by LA Access, OCTA and Omnitrans in Southern California to provide arrival times to riders. LA Access documented a 30% reduction in calls to dispatch. Automated call-backs help by:

- Reminding passengers to cancel in advance, if needed;
- Reassuring riders that their trip is on the manifest for the next day;
- Advising riders, in real-time, of imminent vehicle arrival;
- Reducing vehicle dwell time at the beginning of the trip. Passengers are more likely to begin moving toward the curb, a process that takes time for many RIDES users.

4. Actively develop Demand Management opportunities.

Focusing increased attention on demand management would help manage RIDES' trip growth rates, which were very high pre-pandemic. An active demand management program would include expanded travel training opportunities, to introduce existing and potential ADA riders to fixed-route travel opportunities and to build confidence in using the bus¹.

Program components of an enhanced Travel Training program could incorporate those successfully implemented by Riverside Transit Agency that focused on selected, existing riders, as well as young persons leaving the public school systems.

5. Revisit supplemental programs to improve effectiveness or terminate.

The data indicate extremely low utilization of the Special Medical Trips program. Such out-of-county non-emergency medical transportation services are important and can be well utilized. But they need to be understandable to consumers, predictable and promoted. It is not clear that the program provides enough value to continue in its current form.

The Taxi Voucher program, in contrast, has considerably higher use levels. However, there was some confusion among focus group participants as to when they were taking a taxi under the voucher program and when a supplemental taxi was dispatched as a RIDES trip. Clarifying rider expectations and improving communications around this, particularly on the website, will be useful.

¹ See *Transportation Research Record #2419 "Americans with Disabilities Act Cost Savings and Increased Fixed-Route Ridership through Transit Agency Travel Training"*, H. Menninger, V. Werly. Washington, DC, 2014, pp. 88-89.

6. Develop performance-based reporting structures for the RIDES program and beyond.

The RIDES contractor provides a considerable amount of reporting on a monthly basis. However, this reporting is not readily helpful in tracking service delivery trends. MST should consider using performance reporting software, such as TransTrack, for two purposes:

- To compile operations and performance data at the program level or route level; and to also compile it at the mode level and at the system level, allowing MST to track both aggregated and disaggregated experiences;
- To present operations and performance information in relation to standards for performance. As one example, "Late Trips" currently detailed by trip, can be categorized, as groups, by minutes past appointment time.

Strategic Goal: Provide Quality Transit and Mobility Management Services

The data suggest MST is largely meeting this goal, with certain avenues of improvement possible.

6 MST's Financial Outlook

Operating costs are growing

MST’s systemwide operating expenses have been increasing over the past four years, with a slight decline experienced in FY 19/20 during the COVID-19 pandemic (see Figure 62). The main drivers for increase in operating expense are attributed to:

- A 13% rise in salaries and benefits between FY 2017 and FY 2018
- A 35% increase in purchased transportation between FY 2017 and FY 2019.
- Insurance expense more than doubled in FY 19, from \$700,000 to over \$1,500,000 (see Figure 63).

At the same time, operating expenses in total only declined by 2% in FY 2020, while many services were suspended or experienced low utilization. This may be due to increased unit operating costs during the pandemic (e.g. cleaning and disinfecting), combined with a higher rate of excused driver absences for sickness, or to take care of loved ones.

In the short term, coming out of the pandemic, MST must find a way to bring unit operating costs back to their pre-pandemic levels.

What major expense categories can be controlled?

In FY 2018, MST hired four new staff members, made a significant contribution to the Public Employees Retirement System (PERS) account and had an increase in Workers Compensation expense. This resulted in a \$3 million increase in salaries and benefits.

At the same time, the cost of contracted operations is increasing at rates that are not sustainable, growing from \$8 million in FY 18 to almost \$10. 7 million in FY 19.

- Purchased transportation, including MST RIDES and Measure Q service costs are the main drivers for the increase in contractor costs.
- Paratransit service hours increased by 12.1% in FY 2018 and continued to grow in FY 2019. **MST’s financial health in the medium-term depends on finding ways to reduce the rate of growth of these trips.**

Figure 62: Chart showing systemwide financial trends, FY 2017 to FY 2020.

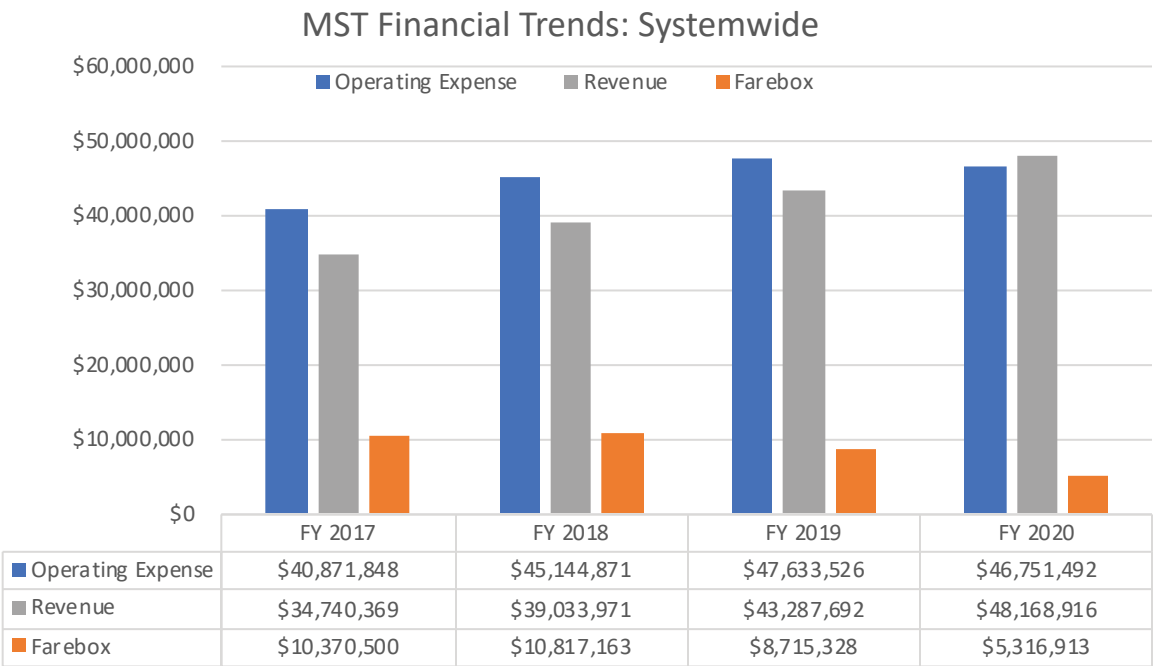
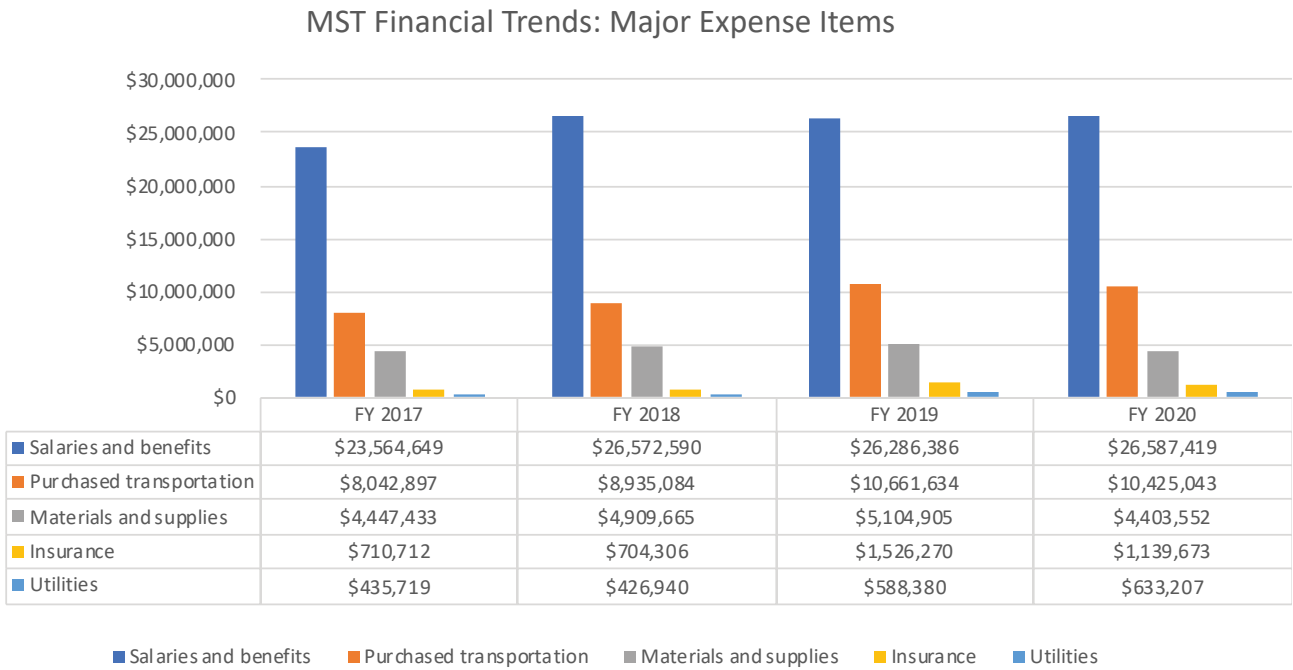


Figure 63: Chart showing major MST expense items, FY 2017 to FY 2020



Revenue Trends

The trends so far have been positive.

Revenue from federal, state and local sources increased year-over-year from FY 2017 through FY 2020, growing by a total of 39%.

Local and state funding account for approximately half of non-fare revenue¹.

Federal assistance grew modestly until FY 2020 where the addition of CARES Act funding related to COVID-19 recovery was introduced. This funding has been bolstered by subsequent stimulus packages.

Sales tax revenue increased by 15% in FY 19 then declined in FY 20.

¹ Note: MST’s classification of fare revenues includes not only fares and passes but also revenues associated with service contracts, e.g. with the military, CSUMB, Amtrak etc.

Can revenue streams continue to keep pace with rising operating costs?

The events of 2020 presented challenges and opportunities for both sides of the ledger. Low ridership generated less fare revenue and state funding declined after its peak in FY 19. At the same time, funding from the CARES Act and subsequent stimulus packages has helped to make up the difference.

But can MST maintain current service levels when all recovery funding has been expended and if sales tax generated revenues decrease?

MST also lost its military contracts and other contract services were suspended in early 2020. Can lost partner funding agreements be reinstated?

Figure 64: Chart showing operating assistance received by MST, FY 2017 to FY 2020

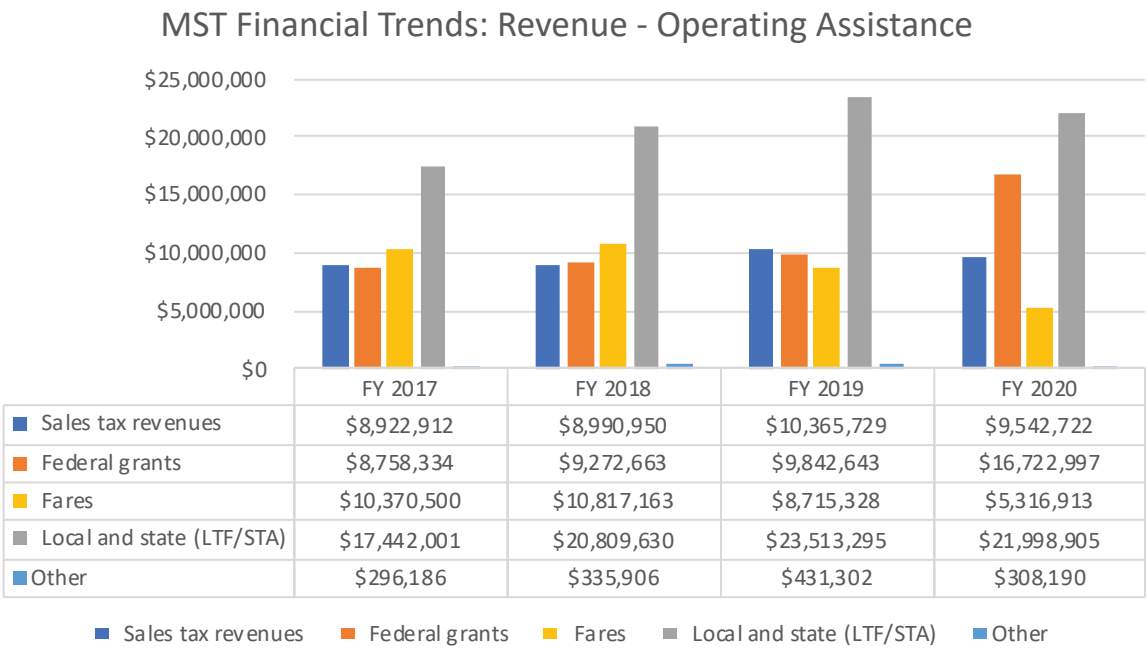
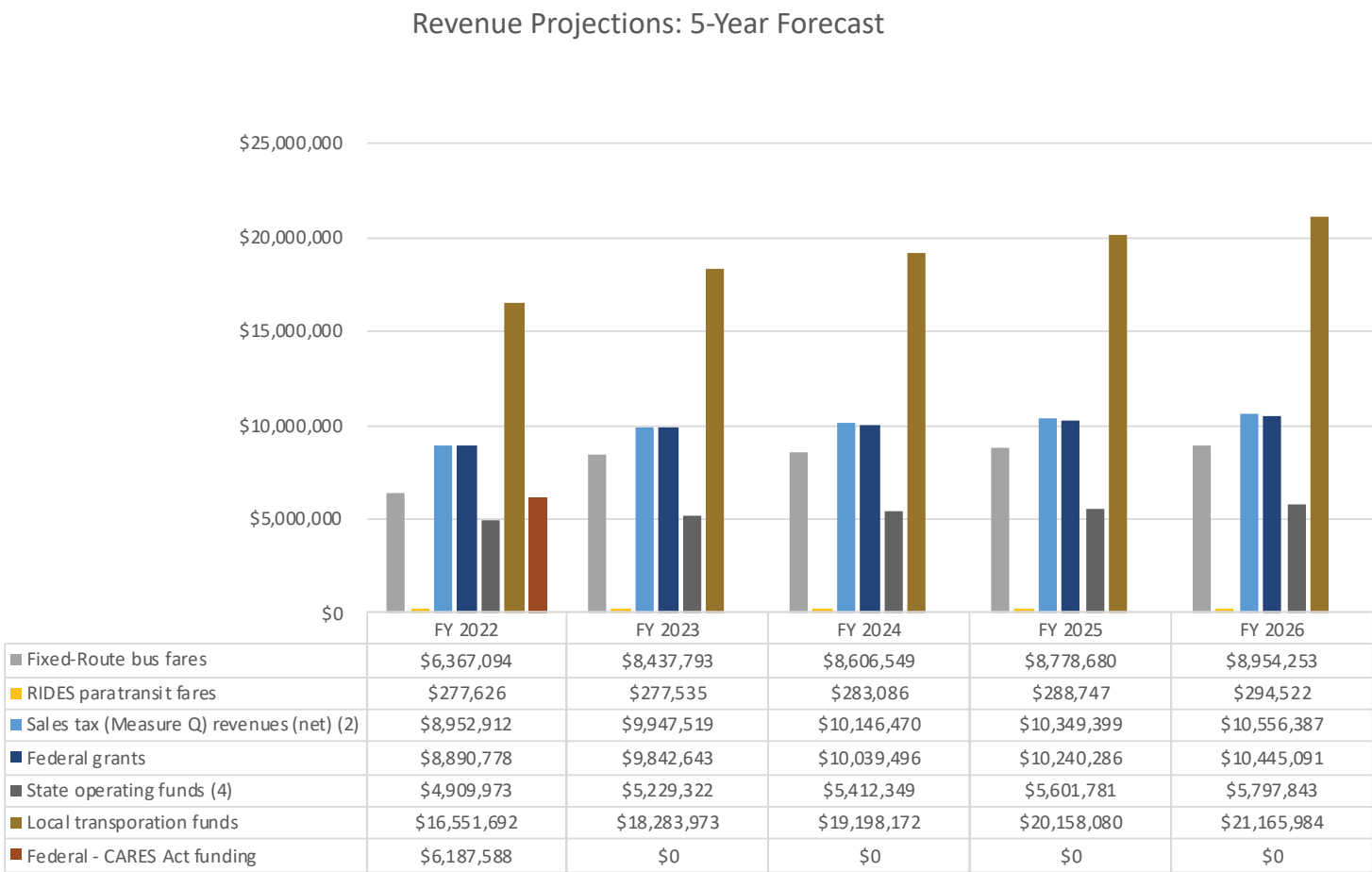


Figure 65: Chart showing MST’s five-year revenue forecast, FY 2022 to FY 2026



Please note: MST anticipates an additional \$22.4 million in recovery funds from the Coronavirus Response and Relief Supplemental Appropriations Act (CRRSAA) and the American Rescue Plan (ARP), beginning in FY 2022. As of the publication of this report, it is not yet clear how this amount will be distributed from one year to another, so those funds are not included in the chart above.

MST has budgeted conservatively.

MST has planned balanced budgets. Revenues have consistently exceeded expectations while expenses have come in lower.

Annual Budget and Actual Performance

In FY 2018 and FY 2019, the variance between budgeted expenses and actual expenses was in the range of -2% to -2.6%, where actual expenses were lower than what was expected.

The budget variance grew to -10.6% in FY 2020 due to the COVID-19 pandemic, where actual expenses were much lower than expected.

The variance between budgeted and actual revenue was greater than the variance in expense, ranging between +6.9% and +10.6% over a 3-year period.

- MST has brought in more revenue than expected. This reflects a conservative approach, where **MST has been careful not to overestimate the amount of forthcoming state and federal operating assistance.**
- Expense estimates have been fairly accurate and MST has managed actual costs effectively. To the extent expense have been lower than planned for, this is largely because **MST has made cautious assumptions about payroll and material costs, particularly fuel costs.**
- Budgeting during the pandemic is challenging due to difficulty estimating the wide variety of unknowns in the future. It remains unclear how FY 2021 and FY 2022 budgets will compare to actual performance.

Figure 66: Chart comparing expected budget and actual expenses, FY 2018 to FY 2020.

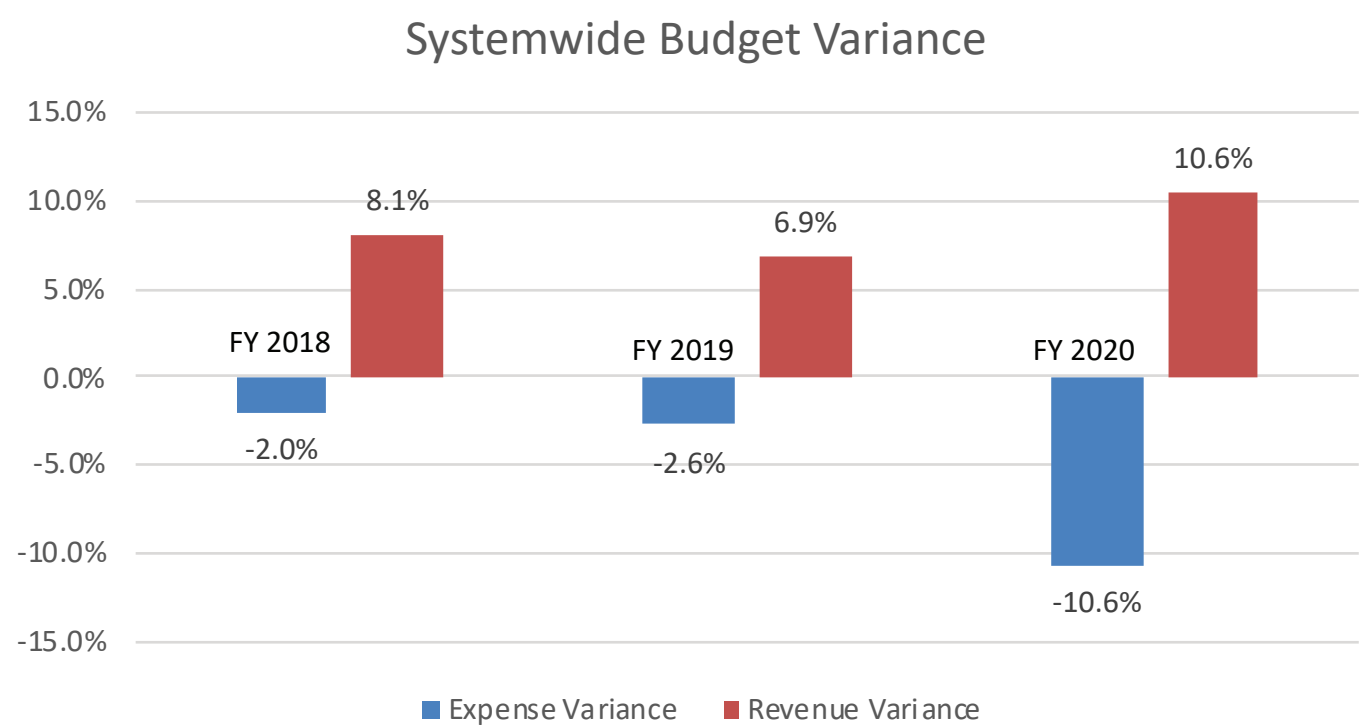


Figure 67: Table comparing expected budget to actual expenses, FY 2018 to FY 2020.

Systemwide	FY 2018	FY 2019	FY 2020
Budgeted Expenses	46,541,112.00	49,560,852.00	52,961,712.00
Actual Expenses	45,625,367.44	48,259,200.20	47,334,849.08
Budgeted Revenue	46,541,112.00	49,560,852.00	43,823,496.00
Actual Revenue	50,300,147.85	52,988,768.64	48,460,682.58
Expense Variance	-2.0%	-2.6%	-10.6%
Revenue Variance	8.1%	6.9%	10.6%

7 Insights from Preliminary Community Outreach

MST's strategic focus on customer satisfaction is evident.

Strategic Goal: Provide Quality Transit and Mobility Management Services

Both rider focus group participants and community stakeholders were highly complimentary of MST's customer service and community engagement.

In interviews with well over a hundred stakeholders and riders, we heard virtually no "complaints" about MST service quality.

While stakeholders recognized the limitations of MST's services, they described the agency as proactive, responsive to community needs and willing to partner with other organizations to serve their constituents.

While they described a network that is confusing and takes a long time to get places, riders had high praise for the quality of service. Multiple riders described drivers as "awesome," in that they are courteous, helpful and look out for the safety of riders. They were also very appreciative of the cleaning and safety efforts put into place to combat the spread of Covid 19.

Comments about late or early buses arose, but most riders said that's only the case about 10% of the time. They can generally count on MST to operate as scheduled.

Effective Communications Have Enhanced Customer Satisfaction

Gatekeepers for key target populations repeatedly mentioned MST's outreach staff and how helpful they were in educating constituents about the services. Several stakeholders mentioned the effectiveness of working through trusted messengers to reach "hard-to-reach" populations such as Indigenous Groups.

Strategic Goal: Educate the Public on MST Services

MST's outreach and marketing efforts appear to be highly effective.

Riders have embraced the Transit App and Google Maps to help navigate a network of lines that is otherwise confusing. In Salinas, the apps allow riders to see which of multiple low-frequency lines is available at the time they need a ride.

The website and text for schedule functions are also used, though less frequently. Spanish speaking riders noted that they previously used the bilingual printed guide, but now rely on the website or signage at the bus stop. Due to the language barrier, they are often unable to use drivers as a source of information, something that is important to other riders.



Spanish Language Communications are Critically Important

Stakeholders stressed the importance of providing all passenger information and conducting promotional efforts in Spanish.

This need was also reflected in the focus groups where 17 out of 40 participants spoke Spanish, though only eight were fully monolingual.

In the county wide telephone survey, nearly 4 out of 10 respondents completed the interview in Spanish and 59% indicated they were of Hispanic origin.

"MST is responsive to community needs. They authentically want to serve."

We heard from Stakeholders

Small group interviews were conducted with over 80 community stakeholders to secure their input regarding transit needs and priorities. Participants included representatives of:

- Jurisdictions served by MST
- Social Service Agencies
- Medical Facilities
- Seniors and Persons with Disabilities
- Employers
- Hospitality Industry
- Schools, Colleges and CSUMB
- Military Programs
- Non-English-Speaking Populations

We talked to MST Riders

Nine focus groups were conducted with English and Spanish speaking MST riders to explore their experiences with and priorities for the MST service network.

We surveyed the Community

A random survey of 500 households throughout Monterey County was conducted via telephone. The survey provided input as to how the general population believes MST should prioritize its various roles and allocate its resources within the County.

Intercity service is key to jobs access. Local transit is a priority in Salinas.

Generally, stakeholders and riders perceived service between communities as most critical because of the disparity between where potential transit users live and work.

For example, most hospitality and service sector jobs are located on the Monterey Peninsula, while these workers reside in Seaside, Marina and Salinas. Similarly, CSUMB, Monterey Peninsula College and Hartnell College attract students from throughout the County.

Inter-community transit is also important because many services are only available in Salinas, such as social services, courts, community health services and methadone clinics.

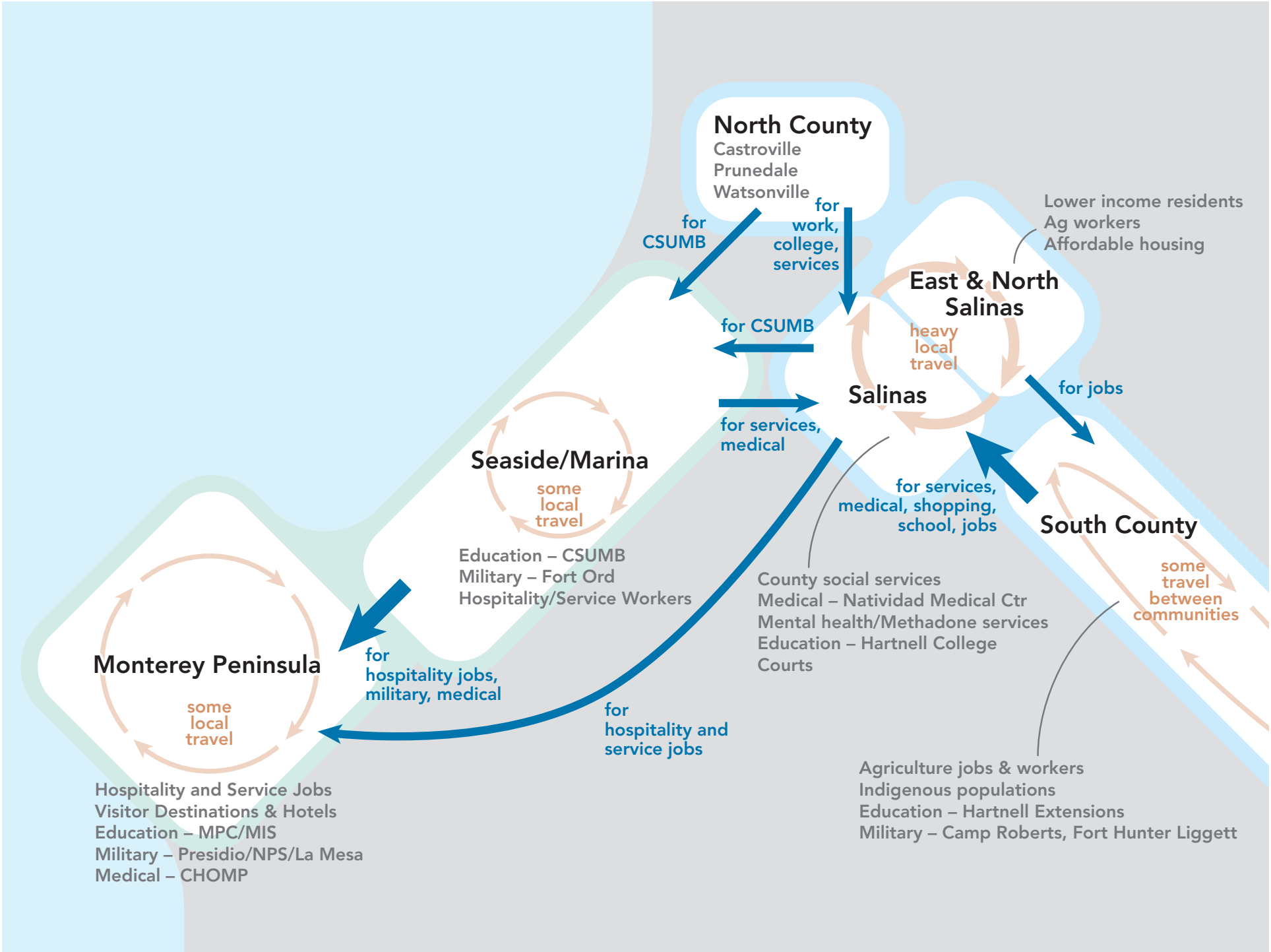
Several riders noted that within their community they have travel options – walking, biking or calling a rideshare service - but these alternatives are not practical for longer intra-community trips to work or school.

The one community where local transit is as important as inter-community service is within Salinas. The larger size of the city and the fact that more residents rely on transit as their primary travel mode make local transit critical. Several riders in the focus group used the bus almost exclusively within Salinas, for work, college, shopping, medical appointments, and recreation.

Local circulation within Salinas is also important for South County residents and others who come to Salinas for work, college, or services.

Smaller markets for local travel exist within the Monterey area and around the CSUMB campus.

Figure 68: Within Monterey County, there are a wide variety of travel patterns, both local and inter-community. This graphic illustrates some of the key transit trip needs voiced by stakeholders and riders.



MST fares are high and often do not reflect the relative value of the trip.

During outreach, the most frequent “complaint” heard from both riders and stakeholders related to fares and fare payment.

Fares are high relative to the incomes of many riders. A one-way ride within Salinas can cost \$5.00 while inter-community rides can be more. Dissatisfaction with fares was expressed in several ways.

- **Monthly passes, priced at \$95.00 to \$190.00 are not affordable for many riders.** For working riders it takes “a big chunk of your earnings.”

- **The lack of free transfers means that trips requiring two or three buses cost much more.** “Not only do you have to wait, you have to pay again.”
- **The fact that fares are based on the line used, rather than the distance traveled,** means that riders making short trips often pay high fares relative to the length of their trip. One example given was that a trip between King City and Greenfield costs the same amount as a trip all the way to Salinas.

Figure 69: Fares for common trips calculated using the Google Trip Planner.

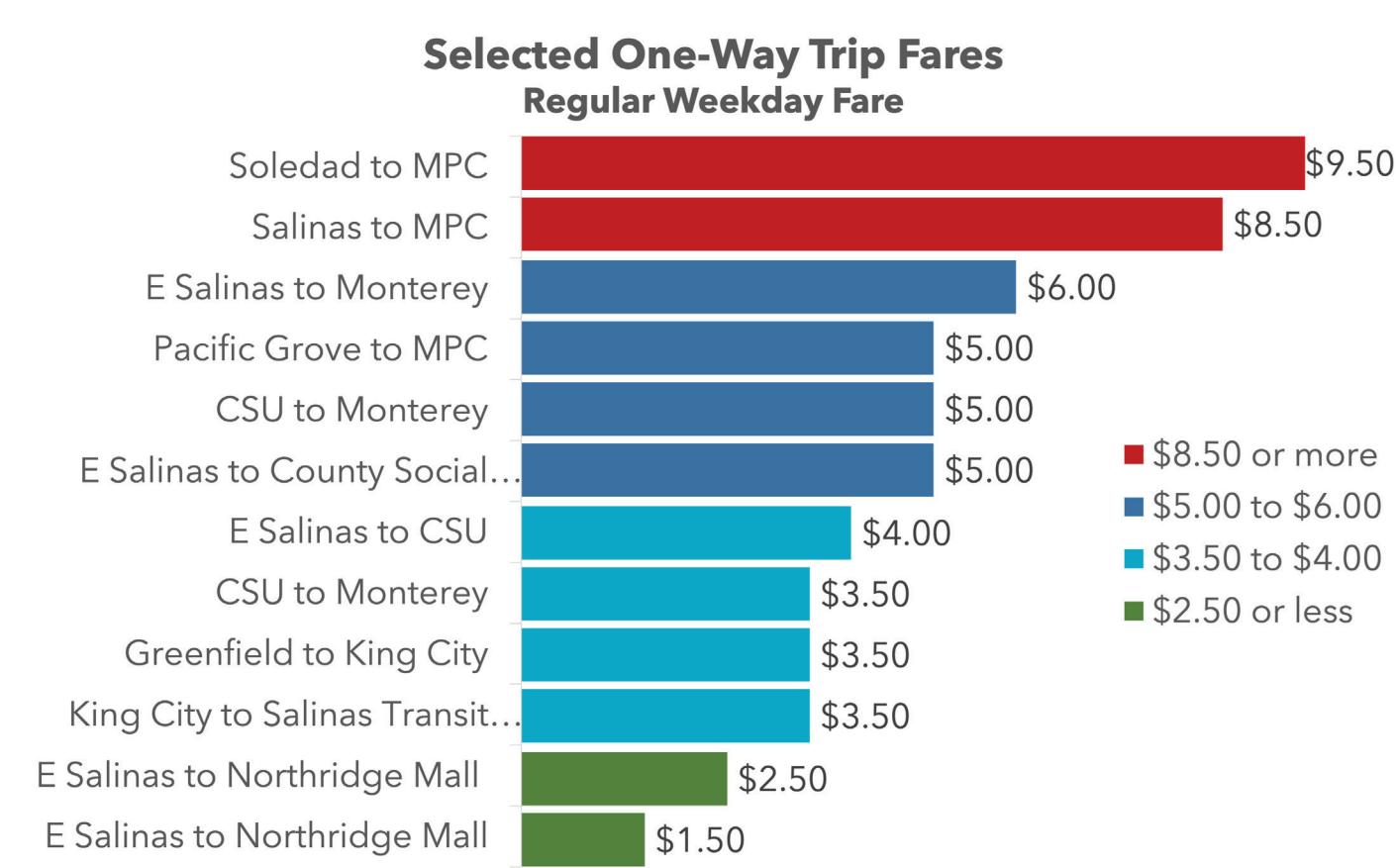
One-Way Trip	Route(s) Used	Miles	Wkday Fare
E Salinas to Northridge Mall	95	6	\$1.50
E Salinas to Northridge Mall	41	6	\$2.50
King City to Salinas Transit Center	23	48	\$3.50
Greenfield to King City	23	13	\$3.50
CSU to Monterey	20	8	\$3.50
E Salinas to CSU	41-61	11	\$4.00
E Salinas to County Social Services	41-48	3	\$5.00
CSU to Monterey	16-18	8	\$5.00
Pacific Grove to MPC	1-Jazz	3	\$5.00
E Salinas to Monterey	41-20	21	\$6.00
Salinas to MPC	45-20-Jazz	22	\$8.50
Soledad to MPC	23-20-Jazz	43	\$9.50

GoCard Reloads

Riders appreciate the discount given when they load cash on their GoCard, however we heard repeated requests for a way to add value on-line or on their phone. Having to go to the transit center often means making an extra trip or stop which adds time and cost¹.

¹ Note: MST has now launched a 6-month demonstration project for a contactless fare payment system that allows riders to pay by distance traveled and pay with certain credit cards and mobile wallets. More information at <https://mst.org/fares/contactless-payment/>.

Figure 70: Fares for common trips calculated using the Google Trip Planner.



8 Key Choice and Next Steps

Key Choice: Ridership vs. Coverage

Should MST focus more on the services likely to generate the highest ridership, or continue to focus on covering as many places as possible?

The MST COA is a unique opportunity to rethink the purpose of Monterey County's transit system. The most basic choice is the degree to which the transit system should be pursuing ridership or coverage.

What is planning for High Ridership?

Designing a network for **high ridership** serves several popular goals, including:

- Enabling people to use transit to easily get to many jobs and services.
- Minimizing pollution and climate impact by replacing car trips with transit trips.
- Limiting the growth of congestion.
- Supporting dense and walkable development.

Prioritizing ridership means buses come more often and are convenient for more trips (higher frequency, longer hours) **but are available only in places where many people, jobs and destinations are located.**

What is planning for High Coverage?

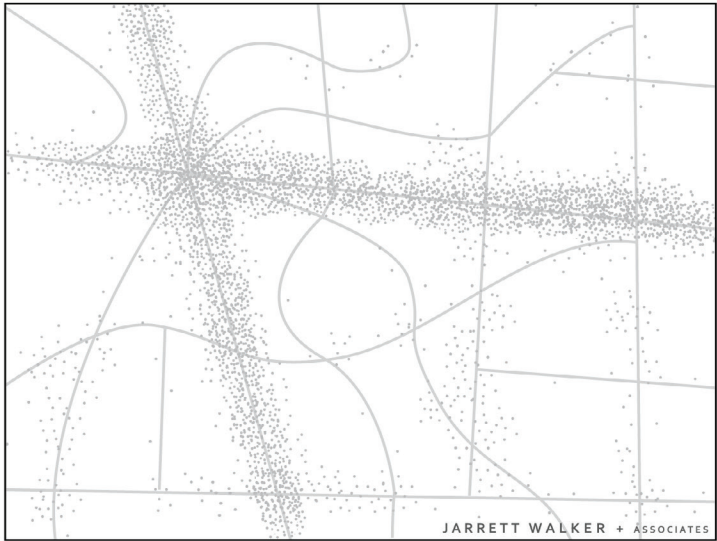
Designing a transit system for **high coverage** serves different popular goals:

- Ensuring that as many people as possible have insurance against isolation through access to some transit service, no matter where they live.
- Ensuring that every community in the county has some service, even if relatively few people live and work there.

Prioritizing coverage means buses serve as many places as possible, but because they are spread out they don't come often (once an hour or less) **and aren't convenient for many trips.**

Why can't MST do both?

MST can pursue high ridership and extensive coverage at the same time, but the more it pursues one, the less it can provide of the other. Every dollar that is spent providing high frequency along a dense corridor is a dollar that cannot be spent bringing transit closer to each person's home.



Imagine you are the transit planner working in this fictional neighborhood.

The dots scattered around the map are people and jobs.

The 18 buses are the resources the town has to run transit.

Before you can plan transit routes, you must first decide: What is the purpose of your transit system?

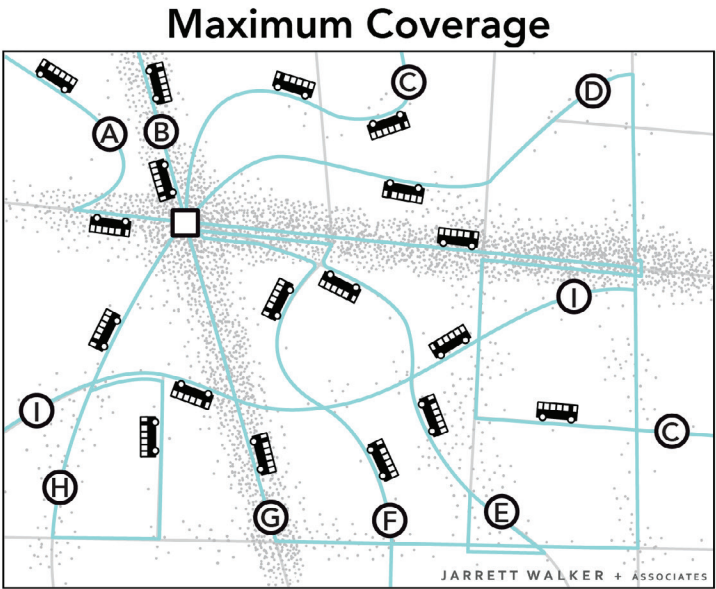
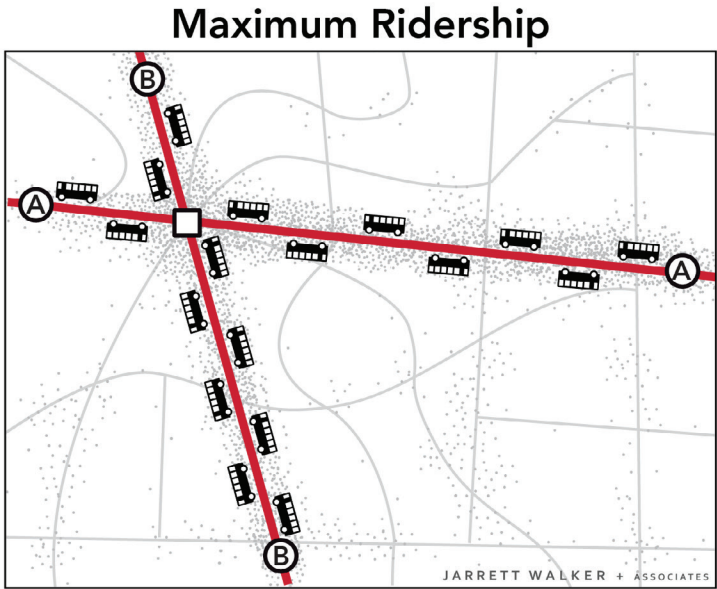


Figure 71: Comparing an imaginary town where transit is run with the goal of maximizing frequency and ridership (left) vs. the same town where transit is run with the goal of providing a little service near everyone (right). The maximum ridership (left) network has very frequent service, but only on the roads where the most people live and work. The maximum coverage network has service on every road, but it doesn't come very often.

Local vs. Regional Service

Because MST is the transit agency for all of Monterey County, there will always be a tension in deciding how much transit service should be provided for:

- Local trips, mostly in the greater Monterey and Salinas areas.
- Regional trips connecting all parts of the county to Salinas, Monterey, Watsonville and points beyond.

This tension is inevitably bound up in the rider-ship vs. coverage trade-off, because:

- Longer lines cost more to operate at the same frequency than shorter lines.
- Longer lines cross large areas where no one gets on the bus, so they serve fewer riders for every hour the bus runs.

This means that regional bus service tends to be more expensive to operate, while serving fewer passengers, than local lines.

This is especially true for MST’s longest lines, like Line 23 (Salinas to King City); Line 84 (King City to Paso Robles); or the pre-pandemic lines to San Jose and Santa Cruz.

The more MST spends on regional service, the fewer resources are available to provide lower-cost, higher-ridership lines in urbanized areas. But if MST did not provide regional lines to the small towns in southern and northern Monterey County, it is unlikely anyone else would step in.

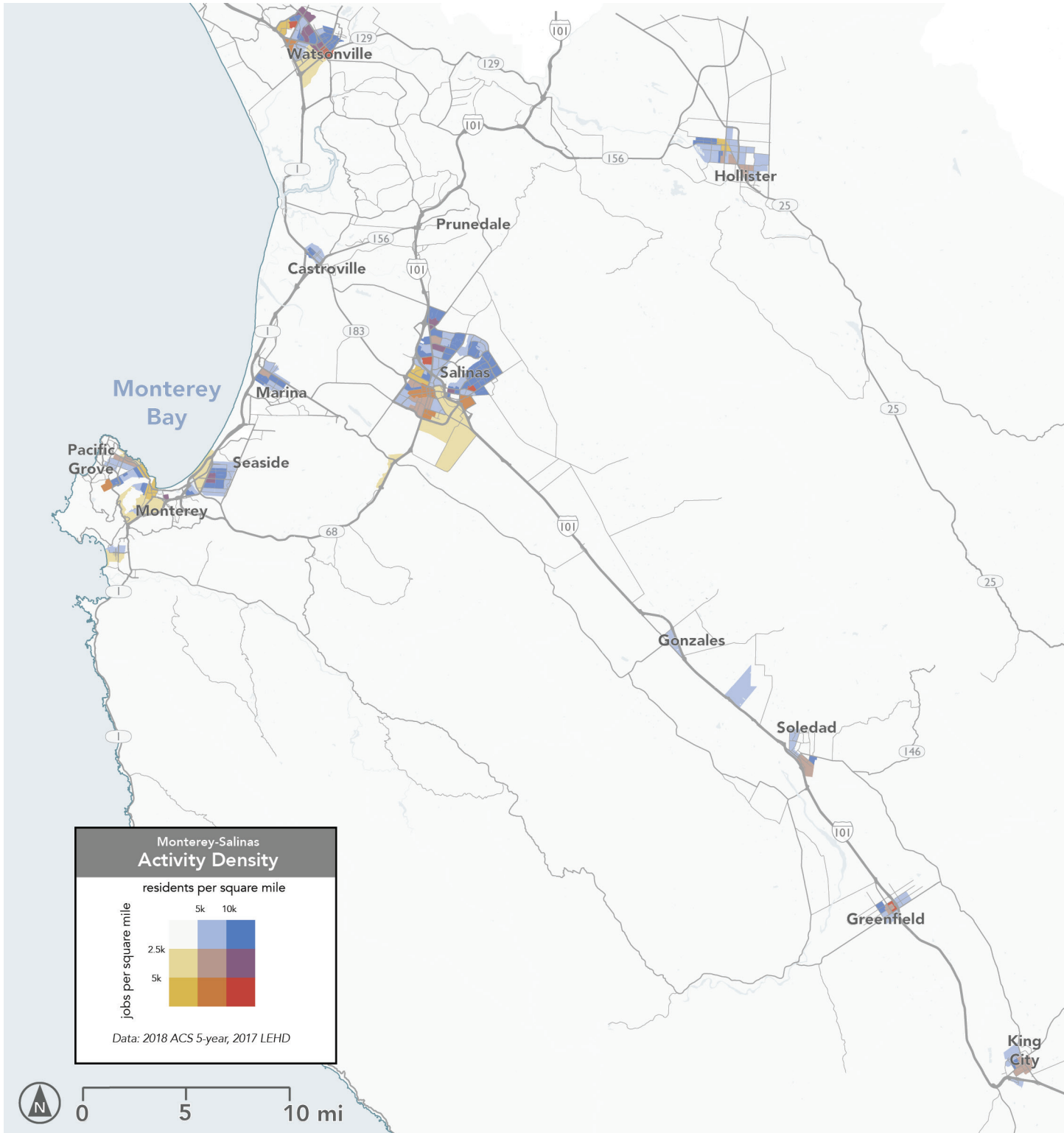


Figure 72: Regional map of combined population and job density.

Key Choice: Needs-Based vs. Population-Based

Should MST focus mostly on the travel needs of disadvantaged communities, or consider all travel demand equally regardless of people's circumstances?

Almost everybody needs to go to various places on a regular basis. But some people have more choices than others about how to get around.

- **People who don't own cars** can't drive their car to get around. But this does not necessarily mean they strongly need transit. Many people without cars choose to live in a location where they can walk or bike to the places they need to go. They may use transit only occasionally, and even then they may have other options like a taxi or ridehailing service like Uber and Lyft.
- Some **seniors and people with disabilities** can't drive, and so they are more likely to need to use transit to get around. Many of the people who fit this description will also have difficulty using transit and may require ADA complementary paratransit.
- **People with low incomes** generally have fewer choices about where to live, and whether or not that place is near the places they need to go. They are less likely to own a reliable car, and more likely to live in a household with fewer cars than drivers. These factors make it more likely that a low-income person might need to use transit. But if transit isn't available or convenient enough, they are more likely to rely on friends and family to give them rides, or to walk or bike very long distances.

In 2014, Monterey County voters decided to explicitly support the transit needs of seniors, veterans and people with disabilities. Measure Q collects an 1/8 cent sales tax that goes to funding 6 fixed bus lines and most of the county's paratransit trips.

But **there has been no explicit funding commitment** (by county voters or otherwise) to **prioritize needs of people with low incomes**, who tend to have the fewest choices about where they need to go and how to get there.

MST does not currently have the funding tools to make a commitment comparable to Measure Q. But MST could decide to prioritize low-income communities in planning its general-public services.

Would that be the right decision? It depends on your values.

If you are most interested in universal coverage with basic transit service, you might not want to see service to some communities prioritized over others. If you are most interested in a system that maximizes ridership, you might not want to prioritize service to far-flung and isolated low-income areas.

But the initial outreach suggests that such "purist" views about the ridership vs. coverage trade-off are rare. Local opinion somewhat favors a stronger focus on ridership, but overwhelmingly favors prioritizing the needs of disadvantaged people and communities in designing transit service.

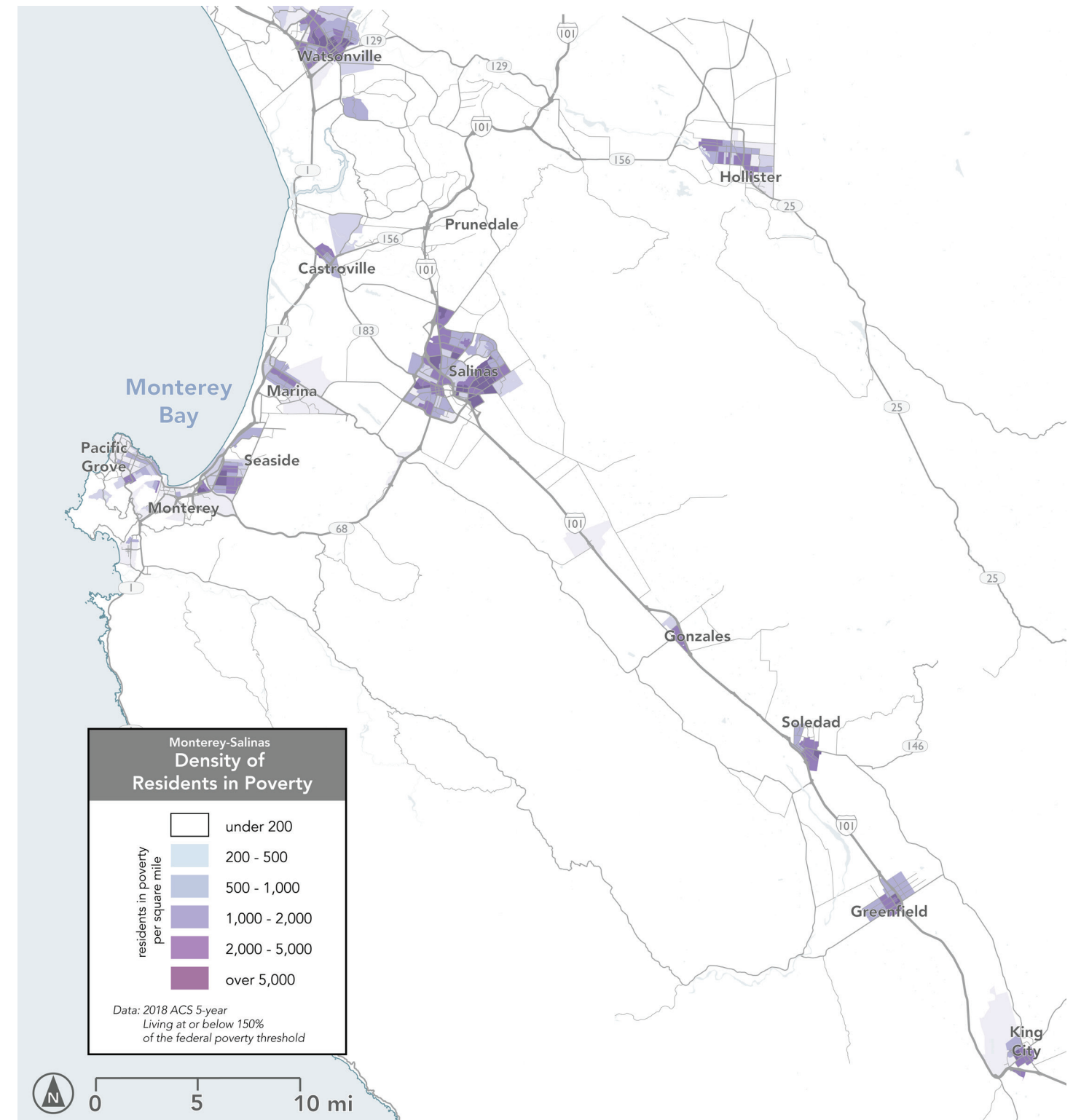


Figure 73: Regional map of the density of people living in households below 150% of the federal poverty line.

What we've heard from the public.

Outreach Process

In preparing this report, MST and the consultant team conducted outreach to hear the community's opinion on the key choices for the transit network.

We heard from stakeholder groups. Small group interviews were conducted with over 80 community stakeholders to secure their input regarding transit needs and priorities. Participants included representatives of:

- Jurisdictions served by MST
- Social Service Agencies
- Medical Facilities
- Seniors and Persons with Disabilities
- Employers
- Hospitality Industry
- Schools, Colleges and CSUMB
- Military Programs
- Non-English-Speaking Populations

We talked to regular MST riders. Nine focus groups were conducted with English and Spanish speaking MST riders to explore their experiences with and priorities for the transit network.

We surveyed the general public. A representative survey of 500 households throughout Monterey County was conducted via telephone. The survey provided input on how the general population believes MST should prioritize services and allocate resources. *For further details on the survey, please refer to Appendix A to this report, "A Survey of the General Adult Public in Monterey County, California, 2021, for MST".*

The community values transit for ethical and practical purposes.

When asked to rate how important it would be for MST to focus on any of twelve aspects of service design, the great majority of survey respondents considered all of them to be either "extremely" or "very" important. Very few consider any of them unimportant.

Simply put: People value public transit. Also, they are decisive about this: almost everyone expressed an opinion. Very few answered "Not sure."

Differences of opinion regarding the importance of transit priorities are matters of degree. The service design aspects with the greatest percentages rating them as "extremely important" are of two types:

- Empathetic: Ethically, **people feel it is important to serve those in need because of age, disability, or lack of a personal vehicle.** These factors were rated as extremely important by the largest numbers of respondents.
- Instrumental: As a practical matter, **service is important as a means to an end.** Specifically, this includes **getting people to jobs, to school, to shopping, and reducing pollution/greenhouse gases.** Thus, for example, only 15% consider it extremely important to increase the overall amount of MST service (i.e. service increase with no specific objective), but 26% feel as strongly that MST should help reduce pollution and greenhouse gases, and get workers to places where most jobs are located. In other words, transit is important not so much as an end in itself, but as a means to valued ends.

Factors least highly valued are special services for tourists and service to all corners of Monterey County even in places where few people would use it.

How important is it for MST to provide....

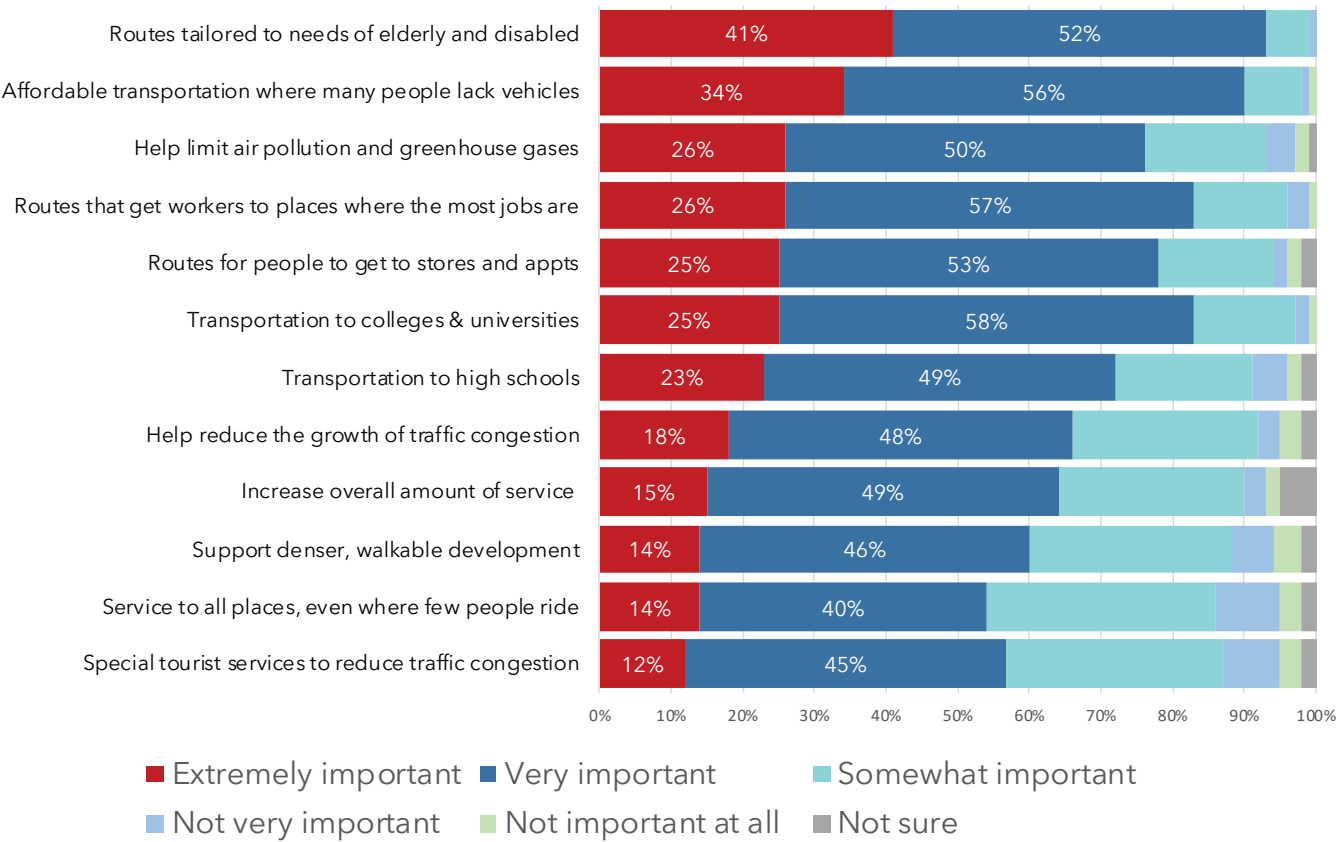


Figure 74: How Monterey County residents rated the importance of different possible priorities for MST transit service in a phone survey.

Frequency is more valued than coverage. Serving those who need it matters most.

In discussing the choice between ridership and coverage with the public, the project team specifically referred to the most tangible elements of the trade-off:

- Whether they were most interested in high frequency or service to many places
- Whether they valued high frequency so much that they would be willing to sacrifice coverage in return.

Broadly speaking, **people in Monterey County appear willing to invest more in high-frequency services, but only if the remaining coverage resources are invested on meeting the needs of high-need groups.**

Stakeholder Interviews

Most interviewed stakeholders expressed a desire for more frequent transit, for reasons such as:

- “Service workers often have multiple jobs and need more frequency to make transit a viable option.”
- “Lack of frequency is a barrier to use. People would rather get a ride because transit takes too long.”
- “Frequent transit would open up opportunities for affordable housing grants.”

However, other stakeholders noted that enhanced convenience for some should not outweigh access for those who lack transportation options.

Rider Focus Groups

Among riders, there was broad belief that if lines ran more often, more people would ride and that current riders would ride more often: “People want to ride the bus, if it’s good enough.”

When asked if they would trade reduced coverage for increased frequency, many riders had difficulty choosing frequency unconditionally and offered “hybrid” solutions to avoid the choice.

- “Frequency on a few well-planned routes would be better, but please focus on people who really need the service.”
- “Increase frequency but offer special services for seniors and persons with disabilities.”
- “Frequency, but not if it is inequitable.”

These views are mirrored in what we heard from the general public. When asked directly about the key trade-offs, phone survey respondents:

- **Favored frequent, high-ridership service (64%) over extensive coverage (35%).**
- Favored focusing first on disadvantaged communities (69%) over treating all communities equally (30%).

The strength of feeling in favor of service for those who need it most was even more evident in questions about which types of service MST should prioritize.

Over 90% of respondents thought that “routes tailored to the need of the elderly and disabled” and “affordable transportation where many people lack vehicles” were either “extremely” or “very” important.

Telephone Survey Tradeoffs: Should MST...

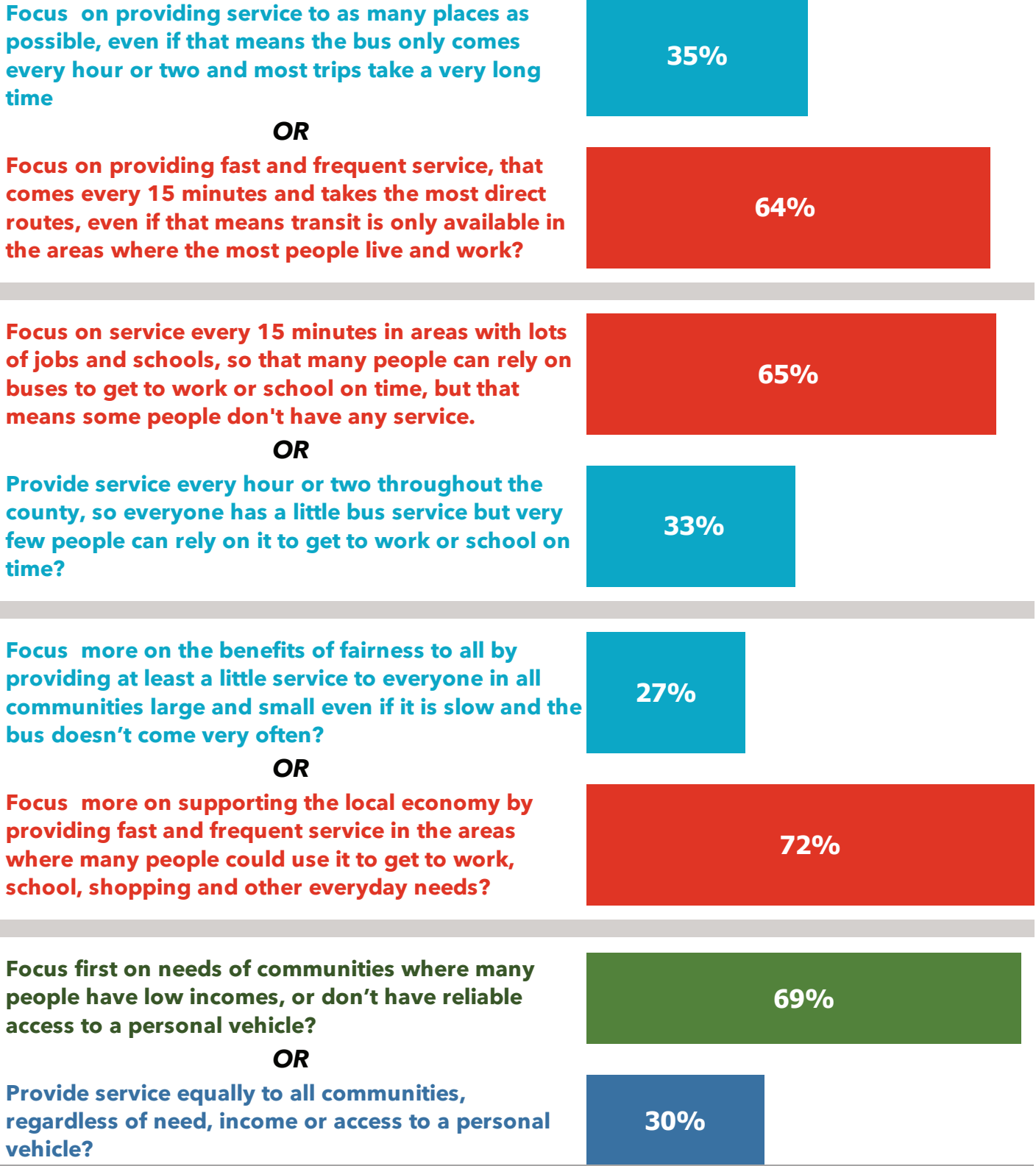


Figure 75: How Monterey County residents responded to key trade-offs in a phone survey.

Next Steps

Project Timeline

The Monterey-Salinas Transit COA is combining technical analysis and broad-based community input to develop a post-pandemic transit network. This will include the following steps:

- **May 2021: Choices Report.** This report provides facts about the existing network, and describes the key choices for future service. It has been developed through a combination of technical and broad-based community input.
- **May 2021: Committee Direction.** The MST Board of Directors' Operations Committee will provide the project team with direction on the key trade-offs, based on input from the public and policymakers.
- **June-August 2021: Develop a Draft Network Plan.** The project team will develop a draft of a redesigned bus network, and any recommendations for changes to paratransit and specialized services.
- **September-October 2021: Public Review of Draft Plan.** The Draft Plan will be presented to the public. There will be multiple venues for input, including an online survey.
- **December 2021: Final Plan.** The project team will make changes to the Draft Plan, taking into account public input.
- MST is targeting **implementation in the second half of 2022.**

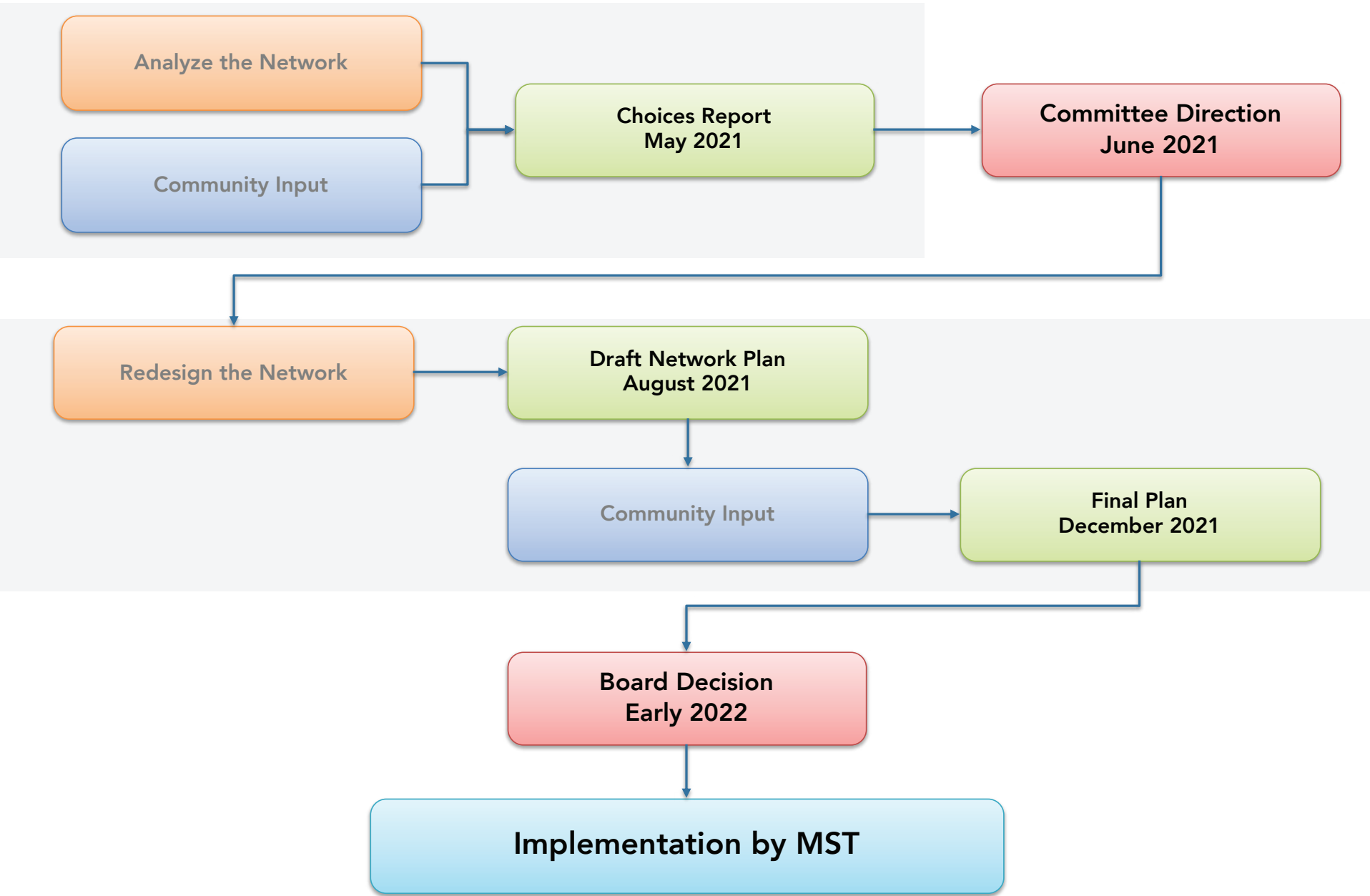


Figure 76: Project timeline.

Canby Area Transit

TRANSIT MASTER PLAN

Prepared by JARRETT WALKER + ASSOCIATES

NOVEMBER 2024

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Anytime you see a symbol like **A** or **B** in this document, look for the same symbol in a nearby map or image.

Acknowledgments

The Transit Master Plan for the City of Canby was completed in 2024, with contributions from the following people.

City Council

Brian Hodson, Mayor

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Jason Padden, Councilor

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Herman Maldonado, Councilor

City Staff

Todd Wood, Transit & Fleet Director

Heidi Muller, Transit Operations Manager

Consultants



1. Introduction

Why is Canby Area Transit updating the Master Plan?

Canby Area Transit (CAT) operates public transit for the city and its residents, moving people within and outside of Canby's Urban Growth Boundary (UGB).

The Transit Master Plan (TMP) lays out a set of improvements to Canby's public transit system that respond to residents' travel needs, the City's goals for mobility, economic opportunity and the environment, and priorities expressed throughout public outreach conducted in 2024. These improvements could be implemented over the next 3-5 years.

CAT went through a Transit Master Plan process in 2017. This effort generated ideas for route structures based on extensive analysis and conversations with the community. Most of these ideas have been the source of service improvements that have been made since then. CAT is now looking at how to improve service in the next 5 years.

In the past few years, the region has experienced sudden and potentially lasting lifestyle and economic shifts, prompting CAT to reassess its priorities. Looking ahead, we considered three significant changes:

- Changes in Need and Demand
- Changes in Financial Resources
- Changes in Goals and Priorities

The Transit Master Plan has been an opportunity to have conversations with the community about how the agency's service should change in the face of these questions.

Changes in Need and Demand

The past two years have presented major challenges for all transit agencies. Ridership declined substantially for virtually all US transit operators, and many were forced to make major service cuts as a result of either financial instability or driver shortages. CAT has been one of the few agencies that has bounced back from the pandemic.

Figure 1 shows that after the pandemic, ridership started to decline but CAT kept service constant. In 2021, the Canby Loop service was implemented and ridership started to grow. This means that CAT's service planning can now focus on network improvements, rather than restoring service cuts from the past few years.

While major disruptions in daily life due to the pandemic are past, some of the changes introduced over the last two years and people's mobility patterns are likely to persist, creating new demands and expectations of transit providers. As more people can work from home, commuter trips are decreasing and more

CAT Ridership and Service 2015-2022

Dial-A-Ride and Fixed-Route Service

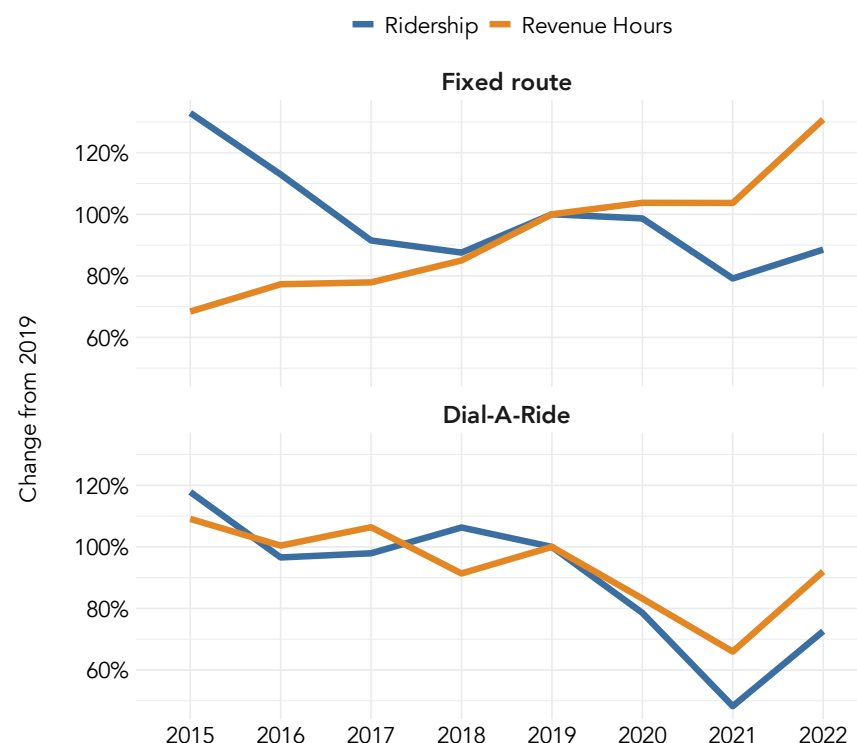


Figure 1: CAT Ridership and Service change since 2015.

Why is Canby Area Transit updating the Master Plan?

multipurpose trips are spread out throughout the whole day, as shown in **Figure 2**.

This chart shows that the majority of trips originating in Canby are happening in the afternoon (from 12 to 4PM). It also shows that there is similar travel demand on Saturdays, only without the morning rush hour present on weekdays.

One part of this planning process was to determine what direction the community wanted CAT to go in the future. This conversation included changes to **when** transit is offered, as well as **where** transit is offered.

While CAT worked on the Transit Master Plan update there was a parallel process happening: **the Comprehensive Plan Update**. This effort will give direction on where the city will grow and by how much. Throughout this process we worked with the City to inform this plan. New neighborhoods, commercial zones and communities are places where transit service may be appropriate and needed in the future.

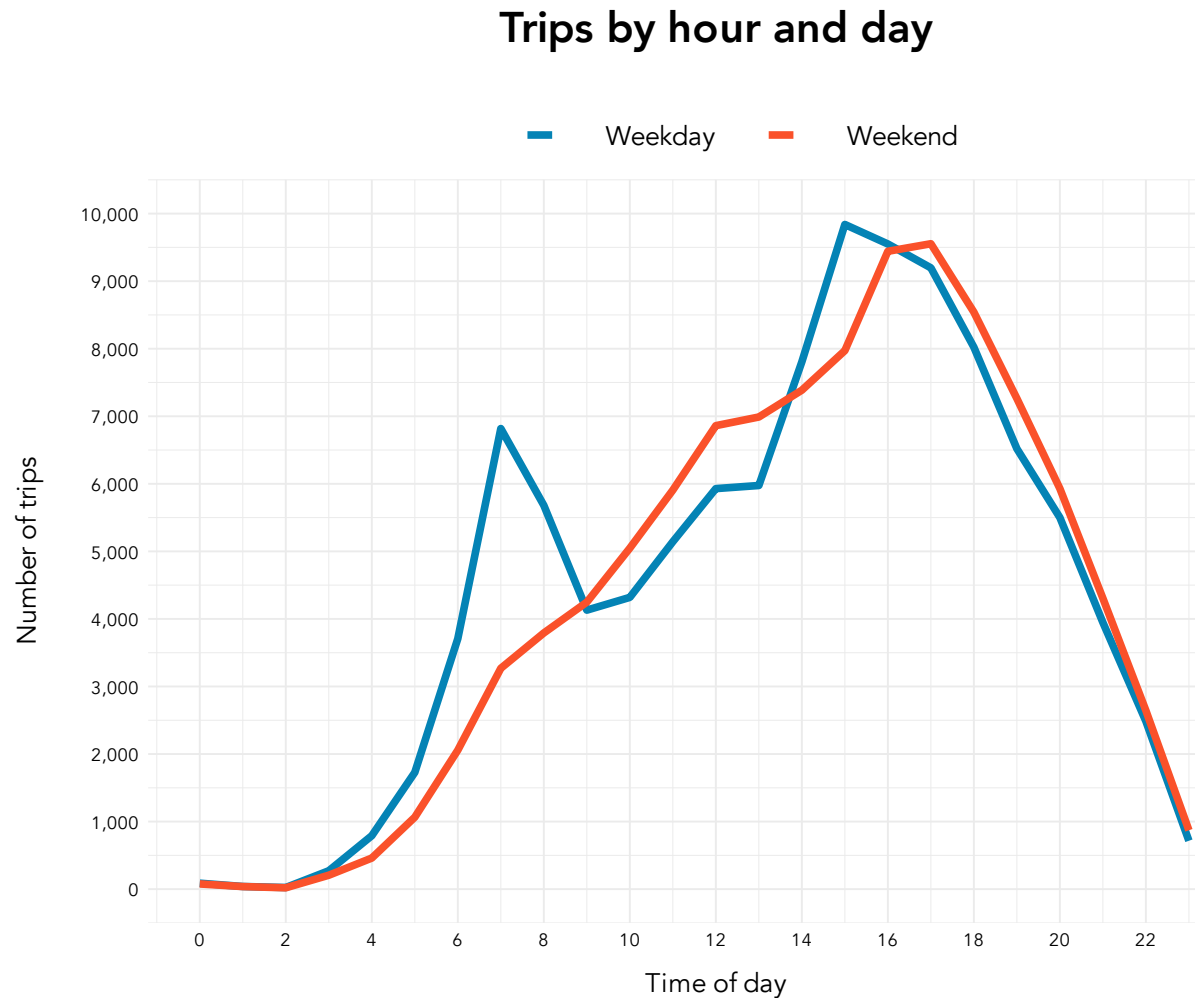


Figure 2: Canby trips by hour and day of the week. Source: Replica data 2023.

Changes in financial resources

This Master Plan Update provides recommendations based on realistic financial growth in state and local funding.

Transit agencies in the US have been experiencing devastating service cuts due to a shortage of bus drivers. Drivers are quitting or retiring early much faster than agencies can replace them. A successful strategy to keep existing drivers or hire new ones is to provide better wages, which is costly for agencies.

CAT currently contracts-out operations (which includes driving and supervision) through a third party provider. This cost will likely go up due to driver retention issues. The agency is also considering the idea of hiring drivers directly. Regardless of the direction CAT takes, a portion of any increase in resources will go towards keeping drivers to operate its existing service.

The revenue level assumed in the Master Plan update is not a statement about how much transit service Canby needs or should have; it's a description of what CAT anticipates it can afford, given the current funding sources.

What have we heard from the public?

The foundation of this effort is the need to update our priorities. Transit plays a central role in many issues that people care about, including urban development, social equity, racial justice, traffic, safety, and climate change. Each of these issues suggests certain priorities for CAT, but they can each push the transit system in different directions.

We asked the community to help CAT determine what priorities the agency should follow in the next five years.

Since early 2024, the project team has gathered input from hundreds of Canby residents and organizations. This has included conversations with stakeholder focus groups, online and on board surveys, and outreach at community events. Chapter 2 describes the engagement process and findings. Based on this work, CAT has identified issues with existing services and a clear set of priorities for improvement. These include:

- **Additional local service in the City of Canby.** We asked the community what additional service meant to them, and we heard that their preference is having the Canby Loop operate in two directions as it would shorten their local trips.
- **Additional service on Sundays.** In the first survey and stakeholder

workshop, we heard that adding service on Sunday is a priority as people don't have any service today. In the second survey, we asked the public again about this in relation to the other improvements and taking into account the very high cost of adding Sunday service. With that additional context, Sunday service didn't emerge as respondents' first priority. Other improvements to local service and regional connections were more important to respondents in the second survey.

- **Better weekend and evening service.** People's lives don't end at 6 PM, and many essential activities take place on Saturdays and Sundays. This is especially true for many low-wage and essential workers, who often bear the brunt of worse weekend and evening frequencies, or services that stop running before their work shifts end.
- **More regional service.** Many people rely on CAT for all-day travel between Canby, Oregon City and Woodburn. One of the most important priorities we heard from the community was improving connections to neighboring cities, especially to Oregon City, downtown Portland, Wilsonville, Clackamas and Woodburn.

Highlights of this Transit Master Plan

The Transit Master Plan is a document to rethink how transit should work in Canby. Key goals include:

- How do the transit routes work today?
- What are the community values in relation to CAT's service, and how can CAT work to serve these values?
- What should CAT do in the following five years and how will it get there?

This plan recommends enhancing CAT's fixed routes by adding new routes to additional locations and improving existing services.

Some of the key improvements for the next five years that would improve local and regional trips include:

- **Better frequency.** The Canby Loop and part of Route 99X would run every 30 minutes consistently throughout the whole day.
- **Better local service.** The Canby Loop would run in two directions every 30 minutes.
- **Better service on Saturdays.** Route 99X (from Canby to Oregon City) would have 30 minute service on Saturday, twice as much as today.

- **Better regional connections.** Route 99X would provide service to downtown Woodburn about every 60 minutes. Route 99X would provide service to Oregon City, and Milwaukie, connecting to the Milwaukie/Main Street MAX Orange Line Station. CAT would also provide additional service to Wilsonville's SMART Route 3X, resulting in a bus coming every 30 minutes.

Document guide

The document is organized into 7 chapters:

- **Chapter 2** provides a summary of public engagement in this plan and how the public informed the Plan.
- **Chapter 3** provides a summary of the Existing Conditions Report. This report is also available in "Appendix D: Existing Conditions Report".
- **Chapter 4** describes the 2029 Recommended Network.
- **Chapter 5** provides a description of what will happen with Dial a Ride Service in the next years.
- **Chapter 6** provides a description of this plan cost, and potential funding sources.

- **Chapter 7** focuses on the assessment and recommendations for CAT's fleet of vehicles, bus stops, and its current technology systems.
- **Chapter 8** outlines policy findings and recommendations for the City of Canby to make that will help create transit-supportive infrastructure.

2. Public Engagement Overview

Overview

CAT and the consulting team led an inclusive process to engage a diverse group of existing and potential transit users, including historically underserved communities, seniors, people with disabilities, and others who live in Canby and travel to population centers for appointments, shopping, or visiting family and friends.

Goals of engagement

The goals for engagement included:

- Collaborating with key stakeholders throughout the project to understand constraints and identify potential solutions for future transit service in Canby and connected cities.
- Gathering input directly from potential users and current riders regarding transit service, travel preferences, and preferred destinations.
- Collecting feedback from the public on the Draft Network.
- Communicating the engagement process and informing the public when their input would have the greatest impact, allowing for actionable feedback that influences the Plan’s recommendations.
- Providing consistent, reliable, and accessible information with a

designated CAT contact person.

- Sharing information on the Canby Area Transit webpage.

Our outreach approaches included:

- Developing a **Public Involvement Plan** to guide the community involvement process. Special consideration was given to senior facilities, apartment complexes, schools, lower-income residents and workers, and people who predominantly speak Spanish to reach underrepresented groups.
- Conducting four **stakeholder interviews** with stakeholders identified by CAT.
- Hosting a **stakeholder workshop** on March 28th, where project staff guided participants through the service planning decisions being considered in the Plan update. Staff invited around 150 participants by email or phone, and a total of 10 people attended the workshop.
- **Administering a community survey, both online and in person (onboard buses).** The first survey, launched from March 11 to April 15, asked the community about their transit needs and priorities for the Transit Master Plan. The survey received 87 responses, including 7 in Spanish.

- Conducting a **second online survey** focused on potential network improvements, launched from June 6th to July 8th. A total of 102 responses were collected, with 11 in Spanish.
- **Tabling at community events.** During the Spring and Summer of 2024, CAT and the project team attended two community events to invite participation in the Plan update. They collected feedback by asking people to take the surveys and mark a map with their thoughts on route improvements.
- Sending email blasts to an Interested Parties List to keep people informed about the project.
- Providing updates to the Transit Advisory Committee and City Council.

The engagement process started at the beginning in Spring 2024. This chapter summarizes the process and what we heard from the community.

Stakeholder workshop

On March 28th, CAT held a workshop to address key questions regarding the planning of future transit within and around Canby. The workshop took place from 5:00 to 7:30 pm in the public meeting space of the Police Department building. Staff and consultants reached out to 150 stakeholders, with a total of 10 participants attending the event.

Participants included multiple members of the Transit Advisory Committee, Planning Commission, City of Canby employees, and representatives from the Canby Adult Center and Hope Village.

The workshop included:

- **Presentation:** The project team provided an overview of CAT's routes and presented the key findings from the existing conditions analysis.
- **Interactive Transit Planning Game:** Participants engaged in a game that introduced the trade-offs and service considerations for transit in and around Canby. They were divided into small groups to create transit maps for the City of Canby, incorporating both local and regional services. Each group had to weigh the trade-offs of operating at various distances and frequencies throughout the region.
- **Live Polling:** Participants were invited to

respond to key questions through live polling.

- **Questions and Discussion:** An open forum for participants to ask questions and engage in discussions with the project team.

Interactive game

The project team assisted participants and engaged in discussions about the types of trips and services they hope to see in future CAT offerings. Some general sentiments were:

- Participants acknowledged the

challenges of planning a transit system that works for everyone.

- They noted the difficulty in choosing between higher frequency service and service that covers more areas.
- Many participants, who were not regular riders, expressed a desire to better understand the needs of current riders.
- During the service exercise, participants made minimal changes to the Loop but concentrated on updating regional service. Improving the connection to Wilsonville was a common theme across groups.
- Participants explored how transit planning intersects with future needs, such as multifamily residential developments and the impact of tolling on I-5 for accessing Wilsonville.
- Overall, participants said they gained an understanding of the trade-offs between providing frequency or service coverage.



Figure 3: Networks created by stakeholder workshop participants.

Stakeholder workshop

Polling

Participants responded to a set of polling questions. During this stage of the workshop, there was also an open discussion where participants could elaborate on their answers or ask additional questions.

The images on this page show the results of each polling question. Please note that while we had 10 participants at the event, only a few responded to the questions.

If you could add hours or days of service, what would you add first?

Currently, service on the Canby Loop ends at 8 pm and there is no service on Sunday. The frequency of the Loop and the 99X also decreases on Saturdays.

Stakeholders indicated that extending service hours on weekdays and Saturdays was a priority.

Adding service on Sundays was considered less important due to the additional costs it would incur (requiring more drivers, supervisors and maintenance staff). Extending Saturday service is less costly since CAT already offers service and the

basic staffing structure is in place.

In general, which do you think is better for service INSIDE of Canby?

When considering improvements to local service, specifically the Canby Loop, the transit agency faces a trade-off. Should the service be closer to more people, allowing them to reach a bus stop with a short walk, even if this means the bus comes less frequently? Or should the bus come more frequently, but with bus stops farther away, requiring a longer walk? The majority of participants favored shorter walks, even if it meant longer wait times and a longer ride around town to reach their destination.

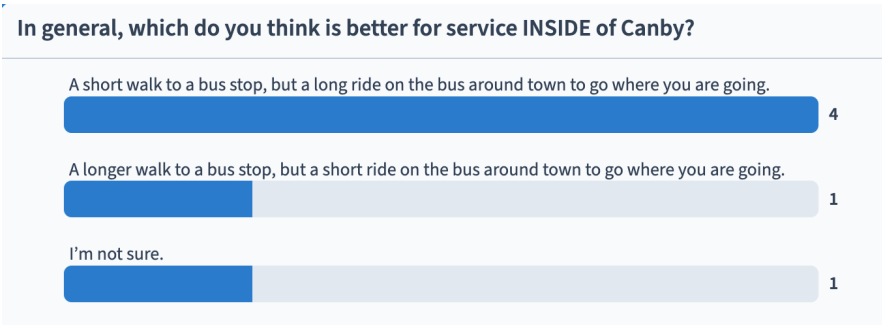


Figure 4: Preferences for service inside of Canby.

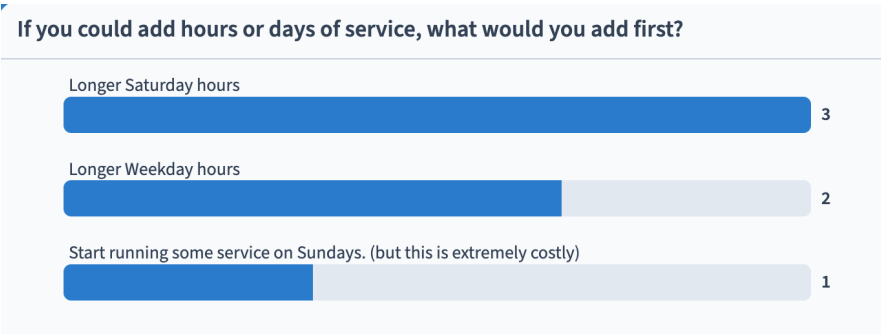


Figure 5: Preferences for where additional service hours could go.

Stakeholder workshop

Which is the most important place that you think people should be able to easily reach by transit, from Canby?

Stakeholders identified Wilsonville, Tualatin, and Oregon City as the most important locations to connect to. While there is existing transit service from Canby to Wilsonville (with a connection to the 2X for Tualatin) and Oregon City, these services are currently infrequent.

During the discussion respondents emphasized the importance of improving service to Wilsonville, where there are many opportunities and destinations currently not reachable in a reasonable travel time by transit.

How happy would you be if the 99X was extended to end at the downtown Woodburn Transit Center, instead of Bi-Mart on 99E?

The current 99X route only goes as far as Bi-Mart on 99E, where riders can transfer to local Woodburn routes for travel within Woodburn, reaching key destinations such as downtown and the Outlet Mall, or to the Cherriots 10X, which goes to Salem.

Most participants were neutral to very satisfied with the idea of extending the route to downtown Woodburn. This change would not remove any existing connections but would allow people to travel directly to

downtown without needing to transfer. The participant who expressed concerns about this extension was worried about losing access to Legacy Urgent Care, currently served by the Bi-Mart stop. However, after further discussion, it was clarified that the Bi-Mart stop would be moved to 99E, ensuring this destination remains accessible.

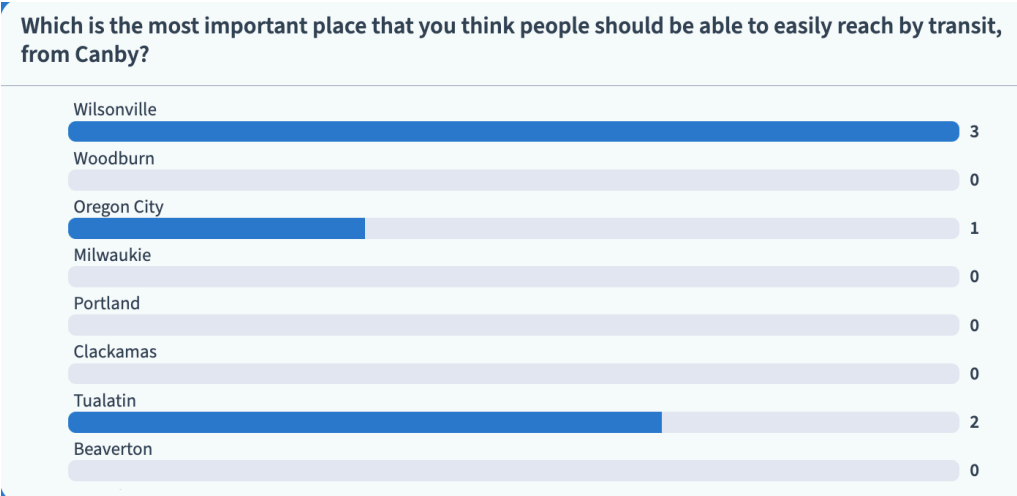


Figure 6: Top transit destinations for stakeholder workshop participants.

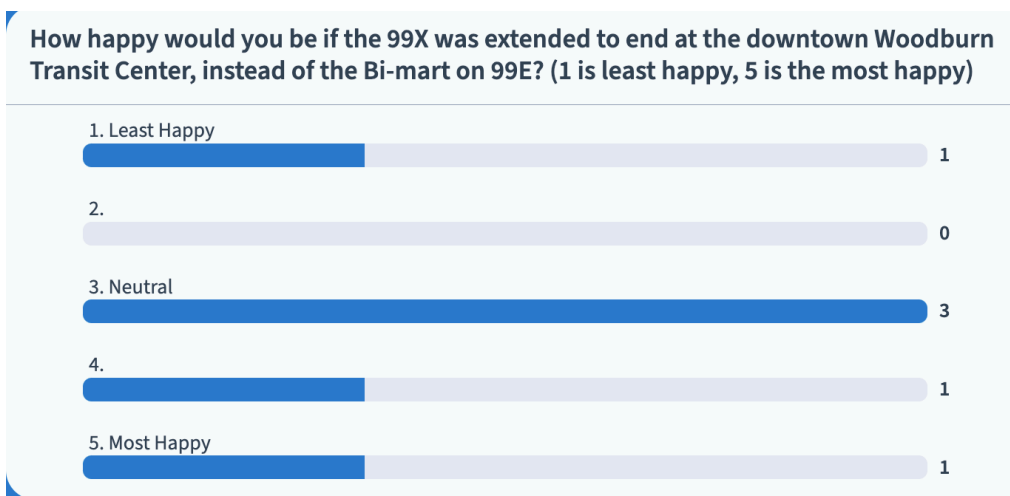


Figure 7: Preferences on service to Downtown Woodburn.

Stakeholder interviews

We engaged with stakeholders representing various interest groups around Canby to understand their communities' transportation needs and to inform recommendations for the Transportation Master Plan. We reached out to:

- Canby school district representatives
- Canby Chamber of Commerce
- Canby Center and Canby Adult Center
- Hope Village and Casa Verde senior centers
- Bridging Cultures

We sought feedback from stakeholders based on their experiences and asked them to identify improvements that would be most beneficial for themselves, the people they know, and others in their communities. Our questions included:

- What are their community or group's top three priorities for transit improvements in Canby?
- What types of improvements would they like to see in the Transit Master Plan? Such as more frequency in existing routes, new routes going to new areas, more service on Saturday, more service in the evening, new service on Sunday.
- What would make the Transit Master

Plan successful to their community?
What about CAT's service can be improved?

- What is CAT doing especially well that can continue or expand?

One-on-one discussions were held virtually on Teams or phone calls, in-person, or through email depending on what was easiest for interviewees.

Key Feedback:

Most of the feedback related to improvements to service and facilities.

Some key points include:

- Prioritize enabling Canby residents to access transit near their homes at **any time of day**.
- Prioritize providing Canby residents with **access to shopping areas and appointments outside of Canby in locations such as Wilsonville, Woodburn, Salem, Tigard, Tualatin, and Portland**.
- **Add more stops** and increase the frequency of stops in all business areas in Canby.
- **Start earlier service on the Canby Loop**.

- **Riders are not deterred by having to transfer at Canby Transit Center to reach Milwaukie.**

- Regarding the proposed recommendations, reducing service to Woodburn would negatively impact the community, while increasing service to Milwaukee/Happy Valley would have a positive impact. **There is a strong preference for access to Milwaukie/MAX over the Woodburn Mall or Wilsonville.**

- **Removing the Woodburn bus stop at the Bi-Mart parking lot would eliminate the closest stop to medical services** in that area.

- **Improve the advertisement of services and schedules**, and include promotions for tourist-friendly bus routes.

Please go to "Appendix A: Public Engagement" for a more detailed summary of the interviews.

Community Survey # 1

At the beginning of the project we launched a survey asking the community what should be the goals and priorities for CAT. The purpose was to start a discussion and build an understanding of balancing competing priorities like improving the frequency and hours of service versus adding new routes to new areas, or adding more local service versus regional routes.

An informative and brief survey posed questions on the key trade-offs for CAT to consider in service development, including:

- Their travel patterns
- How CAT can improve service to better fit the needs of residents and visitors in Canby
- Locations that are important for CAT to serve
- Regional destinations that CAT should prioritize

The survey was launched March 11 – April 15. The survey received 87 responses, including 7 Spanish surveys. The consulting team also spent two days conducting surveys onboard the 99X and Canby Loop.

Demographics

The table in this page provides a summary of the respondents’ demographics. Note that respondents were given the option to answer the demographics questions, but not all of them did.

Key facts about the respondents

- Of the 87 respondents, 60% ride CAT once a week or a few times a month.
- 72.7% of respondents had ridden the 99X Fixed Route in the past year and 65.2% of respondents rode the local Canby loop.
- Most riders begin their trip on the 99X in Oregon City (28%) and Canby (40%), and 18% of riders begin their trips in Woodburn. Most riders end their trip in Oregon City (48%).

Figure 8: Survey #1
Demographic summary

Total Survey Responses		
Completed Survey Count	78	
Demographics Response Count	69	
Connection to Canby?		
Resident	49	54%
Worker	19	21%
Visitor	20	22%
Other	3	3%
Age		
Under 18	4	6%
18 to 25	12	16%
25 to 44	17	23%
45 to 64	23	32%
65 and above	16	23%
Race		
People of Color	31	43%
White	41	56%
Language spoken at home		
English	60	83%
Spanish	12	17%
Gender		
Female	28	41%
Male	36	52%
Non-binary	2	3%
Transgender	3	4%
Income		
Less than \$25,000	14	27%
\$25,000 - \$49,999	15	29%
\$50,000 - \$74,999	7	13%
\$75,000 - \$99,999	6	11%
\$100,000 or more	10	20%

Community Survey # 1

Results

If CAT had additional resources for transit service, what should they spend it on?

One of the key goals of this Transit Master Plan is identifying where CAT should go in the next years. We asked the public this question to understand what should CAT do. The top responses we heard were:

- Additional service on Sunday (16%)

- Covering new places (15%)
- Longer hours of service (14%)
- More regional service (13%)

Adding more service on Sunday would mean more than a driver and bus on the road. It would also mean staff working in maintenance, operations, the call center and ADA paratransit service. Since this would be a major cost for the agency, we asked about this again in Community Survey #2.

If CAT had additional resources for transit service, what should they spend it on?

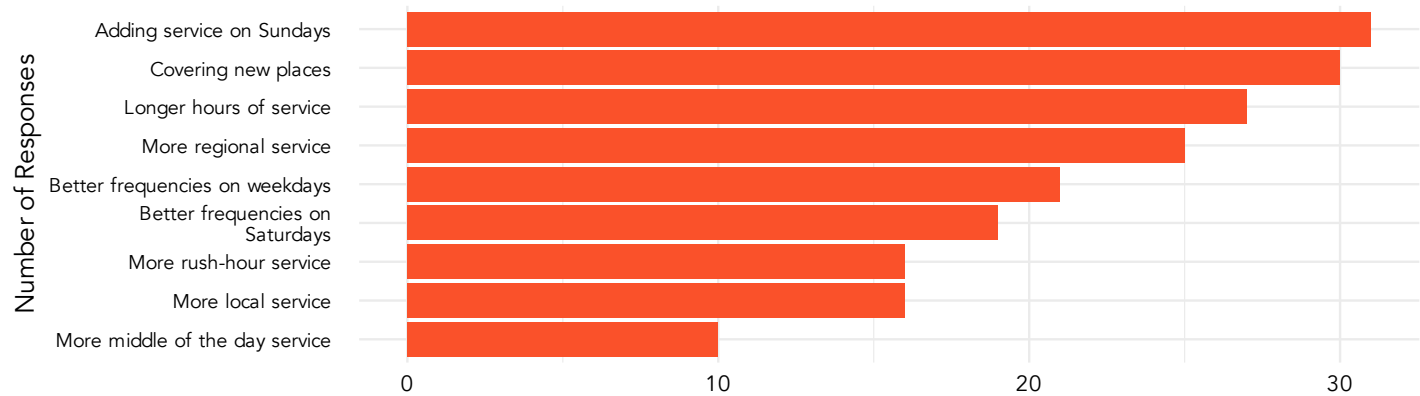


Figure 9: What should CAT do with additional resources?

Community survey # 1

Results

Most important places that you think people should be able to easily reach by transit, from Canby?

The top five most important places to reach by transit from Canby were:

- Oregon City (17%)
- Portland downtown (13%)
- Wilsonville (13%)
- Clackamas (13%)

- Woodburn (13%)

Oregon City, Woodburn and Wilsonville have service today, although it is not very frequent. CAT couldn't serve Portland or Clackamas with a single route because it would be too expensive. But what they can do is improving the connections at Oregon City, or extending to Milwaukie to reduce the number of transfers from two to one.

Most important places that you think people should be able to easily reach by transit, from Canby?

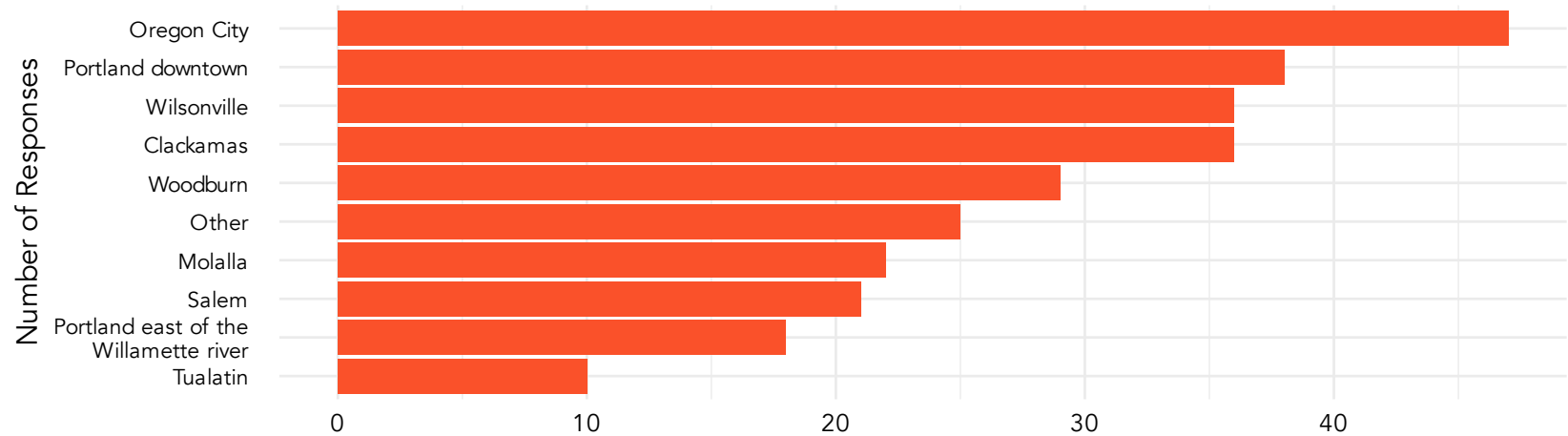


Figure 10: Most important regional destinations

Community Survey # 1

Results

In general, which do you think is better for service INSIDE of Canby?

This questions focused participants on their priorities when using local transit within Canby.

85% of respondents would prefer a short walk to a stop, but a long ride on the bus (because it would be more circuitous and infrequent in order to be closer to more people).

In general, which do you think is better for service INSIDE of Canby?

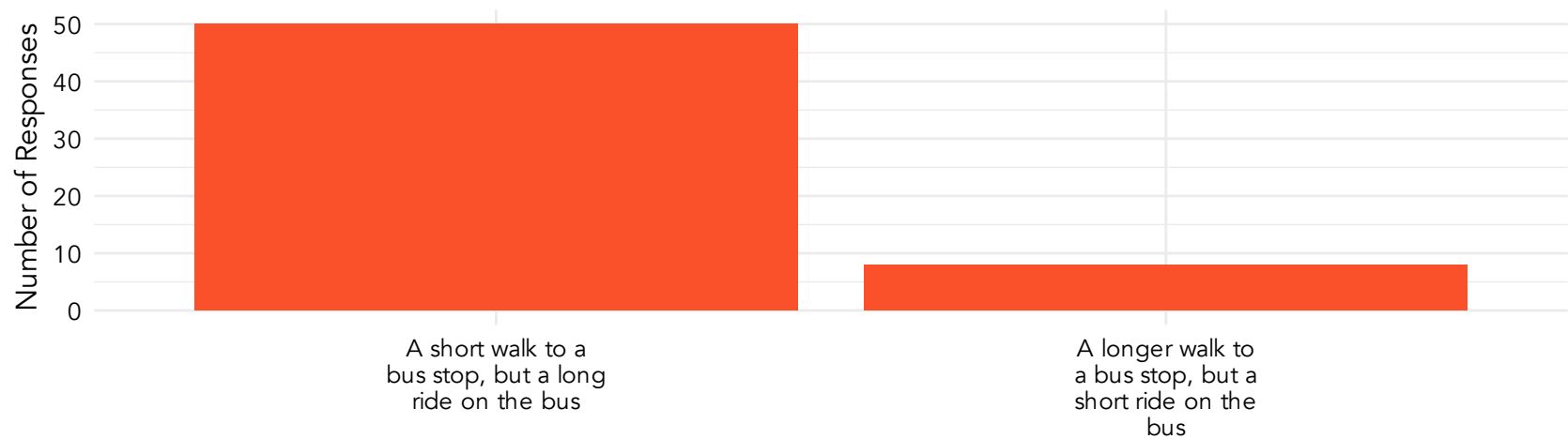


Figure 11: What to do with the service within Canby

Community Survey # 2

During the second phase of engagement, we engaged the community to obtain feedback on the Draft Plan proposed service changes. We created and conducted a second online survey to obtain input on the Draft plan related to:

- Whether the Draft Plan is better than the Existing Network
- Which priorities are most important to include in the Draft Plan
- What service improvements are preferred for the Canby Loop
- Additional changes to consider for the Draft Plan

The survey was launched from June 6 to July 8. The survey received 102 responses, including 11 Spanish surveys. The survey was promoted in Woodburn as well.

Demographics

The table in this page provides a summary of the respondents' demographics. Note that respondents were given the option to answer the demographics questions, but not all of them did.

Key facts about the respondents

- Most of the respondents live, work or visit Canby (97%).
- 48% of the respondents identify as People of Color. 20% of them live in a home where Spanish is the primary language spoken.
- 64% of respondents identify as female.
- 63% of respondents have a working vehicle available at their household.

Total Survey Responses		102
Completed Survey Count	62	
Demographics Response Count	53	
Connection to Canby?		
Resident	36	58%
Worker	9	14%
Visitor	15	24%
Other	2	4%
Age		
Under 18	7	13%
18 to 25	6	11%
25 to 44	20	36%
45 to 64	14	26%
65 and above	8	14%
Race		
People of Color	33	48%
White	29	52%
Language spoken at home		
English	43	80%
Spanish	11	20%
Gender		
Female	34	64%
Male	17	32%
Non-binary	2	4%
Transgender	0	0%
Income		
Less than \$25,000	9	21%
\$25,000 - \$49,999	14	32%
\$50,000 - \$74,999	10	23%
\$75,000 - \$99,999	4	9%
\$100,000 or more	7	15%

Figure 12: Survey 2
Demographic summary

Community survey # 2

Results

The survey asked respondents to share their views on a variety of future priorities for the development of CAT’s network.

Compared to the Existing Network, the Draft Plan would be better for the region overall.

We asked the public to compare the Draft Plan network with the existing network. We asked how the Draft Plan would affect them, their friends and family, and the region as a whole.

Over 95% of respondents agreed that the route improvements would be better for the region than existing routes.

Compared to the Existing Network, the Draft Plan would be better for the region overall.

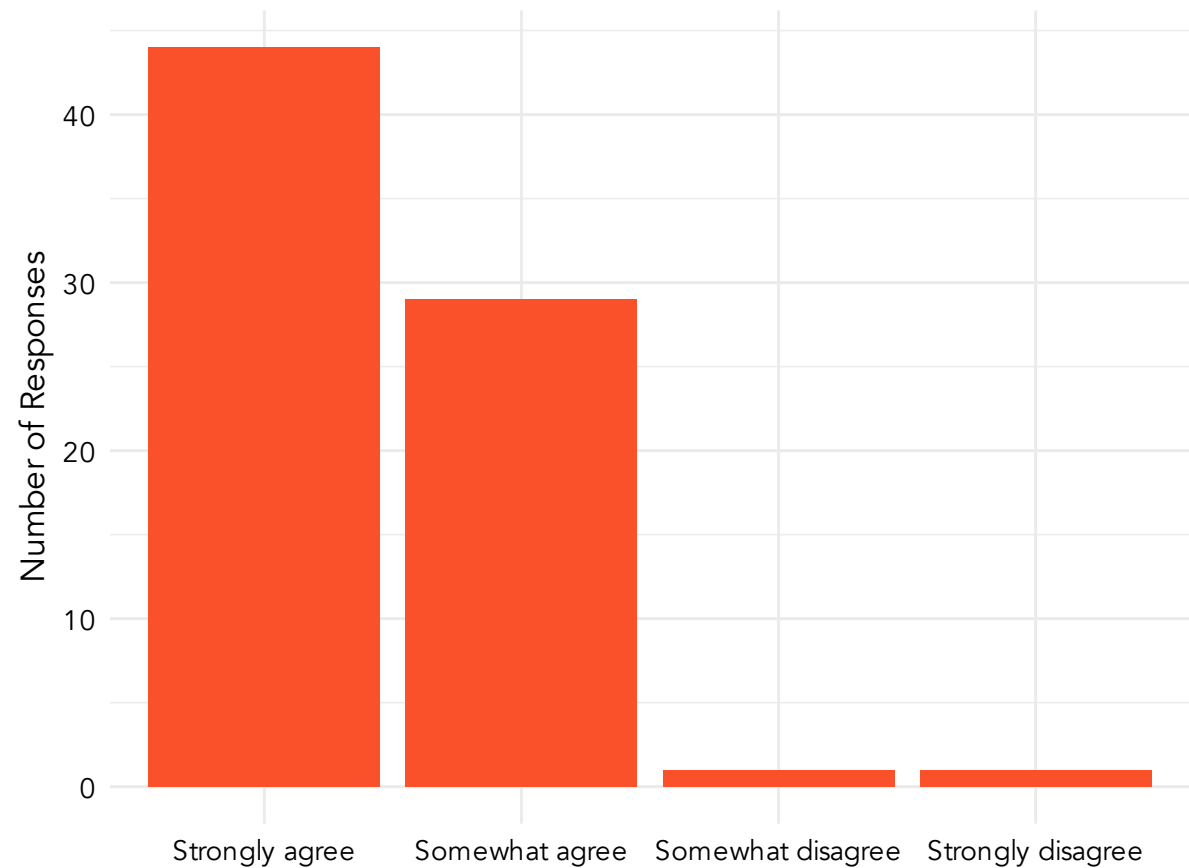


Figure 13: Is the Draft Plan better for the region than the existing network?

Community survey # 2

CAT cannot implement all these changes at once and needs to understand which are the most important priorities.

There are several improvements CAT could achieve in the next five years, but resources are limited. We asked the public to help identify which priorities CAT should focus on in the coming years.

Most respondents prioritized extending the 99X to Milwaukie and downtown Woodburn, understanding that this would require new resources and would require splitting the route at the Canby Transit Center.

The next priorities were: increasing service on the Canby Loop, providing evening service and adding more buses to Wilsonville. Adding Sunday service was the lowest priority for participants.

If you could improve service on the Canby Loop, what would you do?

Adding extra service to the Loop would mean two things:

- Run the Canby Loop in two directions, with the bus in each direction coming every 30 minutes.

- Improve the frequency to have a bus coming every 15 minutes, but keep the loop running clockwise only

54% of respondents answered that having the loop in two directions should be the priority.

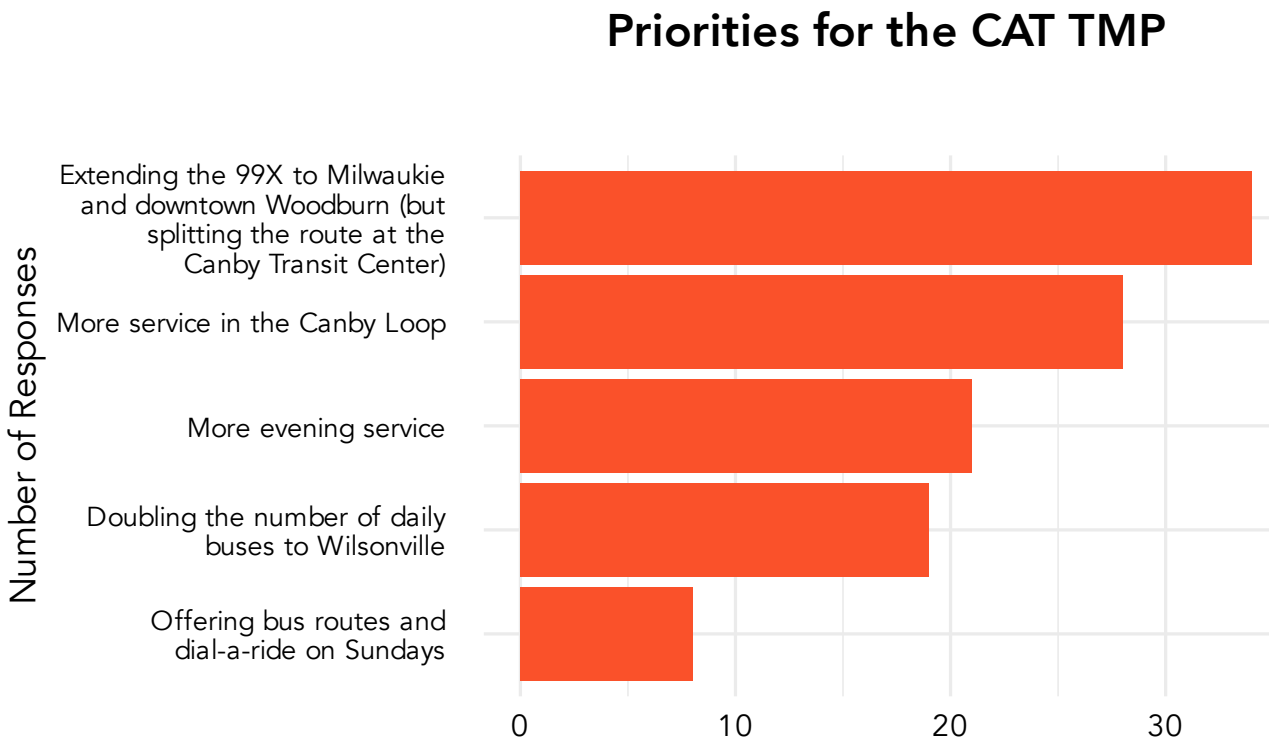


Figure 14: What should CAT do first with their limited resources?

Tabling Events

CAT and the consultant team attended two community events in summer 2024 to promote the proposed service changes, talk to the community about their thoughts, and collect survey responses:

- *First Thursday* on June 6
- Bridging Cultures's *Saturday in the Park* on June 22

First Thursday is a monthly event held by the City of Canby on a closed off portion of NW 2nd Avenue in Canby's downtown. Many of the local businesses stay open late for the event and there are tables lining the street for local vendors to sell crafts, promote businesses & nonprofits, as well as many food carts, live music, and kids activities.

Bridging Cultures' Saturday in the Park is a series of events throughout the summer in various parks around Canby. The events always include free food, live music, kids' activities and tables from local businesses and non-profits.

The Saturday in the Park on June 22 was in Wait Park and coincided with the Canby Farmer's Market just a block away. This Saturday's free food was provided by the Zion Mennonite Church of Canby who they often partner with for their goal of strengthening the community by Bridging Cultures through mutually transformative

relationships.

CAT's table included posters showing the current service map and the proposed service map to compare, iPads for attendees to take the surveys, various route maps, schedules, and dial-ride applications, and a prize wheel to give out CAT branded swag like bags, mugs, magnets and more.

We received from over 50 people at both events. Some common comments were:

- General interest in learning about how to ride CAT such as cost, hours, and current routes.
- Interest in the proposed service changes by comparing the current and proposed future maps.
- Suggestions to move existing bus stops to be more convenient for residents.
- Interest in more service to Wilsonville.



Figure 15: Tabling Event

3. Existing Conditions Overview

Existing 2024 CAT Routes

The map on this and the following pages introduce a style throughout this report in which route colors represent frequency in the middle of the day.

Dark blue represent routes that come every 30 minutes, while light blue represent routes that come every 45 to 60 minutes in the middle of the day.

CAT's service is comprised of two routes that cover most of the city. The Canby Loop provides local service almost every 30 minutes at midday, and Route 99X provides service connecting Canby to Oregon City and Woodburn almost every 45 to 60 minutes at midday.

Route 99X is the more productive of the two routes. It attracts an average of 200 daily passengers, resulting in a productivity of 14 passengers per vehicle per hour. The productivity of the Loop is around 7 passengers per vehicle per hour.

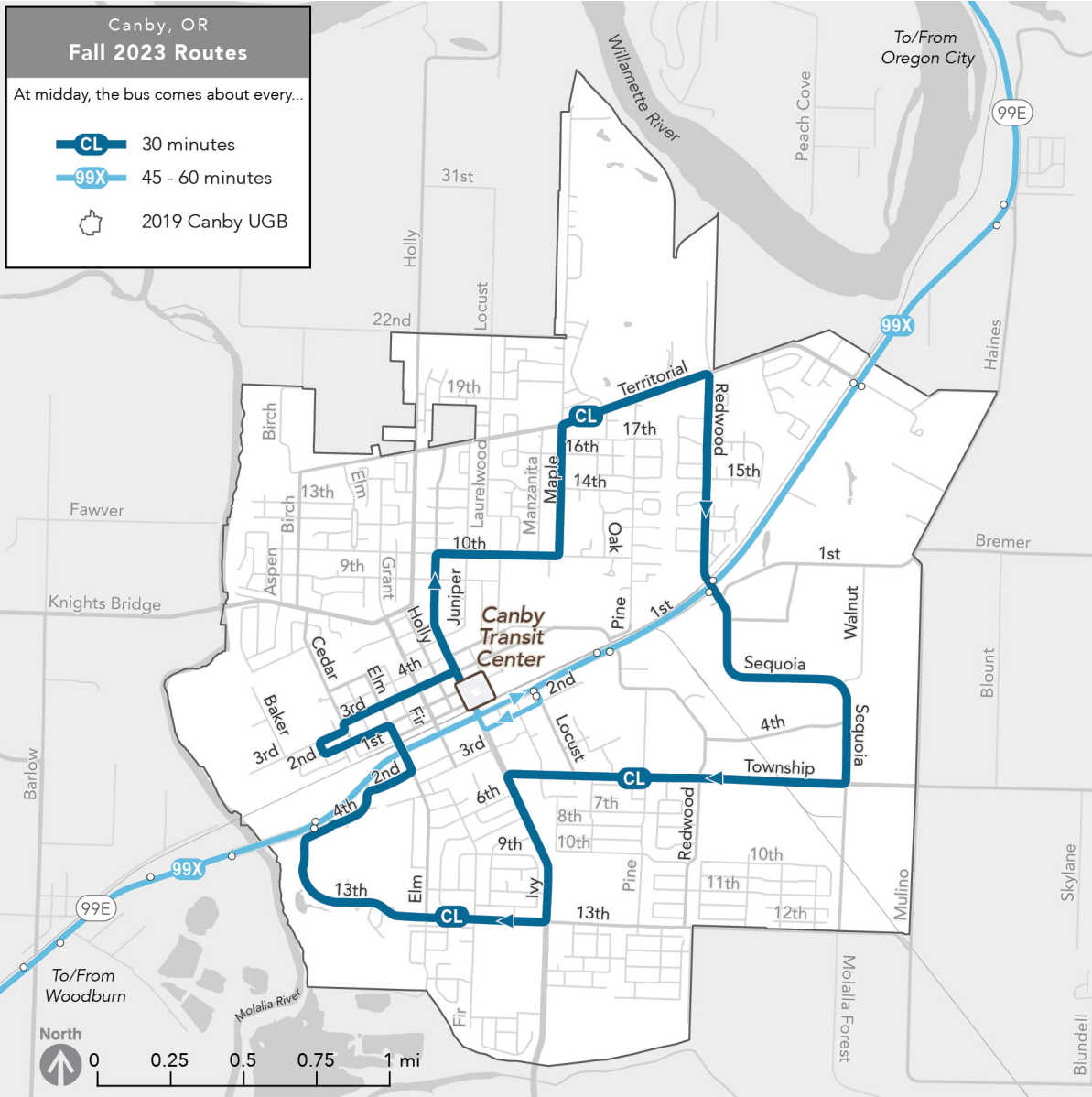


Figure 16: Fall 2023 CAT Routes

2024 Service Frequency by Route and Time of Day

On weekdays, the Canby Loop operates from 6 am to 8 pm, while on Saturdays it starts later at 8 am and goes longer in the night, up to around 10 pm. CAT doesn't offer service on Sunday.

CAT would like to offer a consistent 30-minute frequency throughout the day on the loop. However, due to the necessity of providing driver breaks this frequency cannot be consistent without additional resources.

Route 99X service is split into two segments, Canby to Woodburn and Canby to Oregon City. In general the route is more frequent on its northern segment, to Oregon City, especially on Saturdays. Frequency on the 99X is also affected by lack of resources and driver breaks, so users don't experience a consistent frequency throughout the weekday.

Canby Loop
Canby / Woodburn
Canby / Oregon City

Canby Loop
Canby / Woodburn
Canby / Oregon City

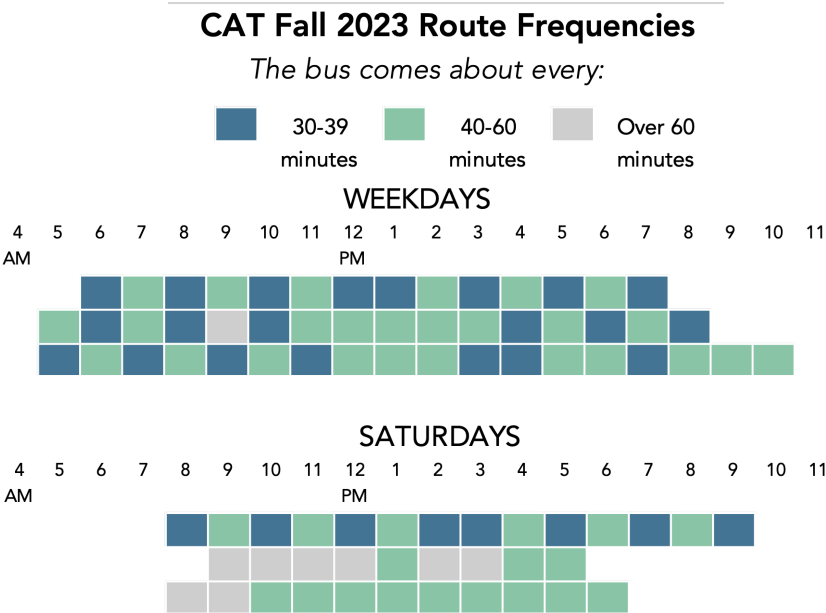


Figure 17: CAT Fall 2023 route frequencies.

What did we find in the Existing Conditions Report?

At the beginning of 2024, we compiled the Existing Conditions report. This document reviewed CAT's public transportation services, evaluated their performance, and analyzed the transit market in Canby and its neighboring cities. For more details, please refer to "Appendix D: Existing Conditions Report".

Some of the key observations that guided the Transit Master Plan process are:

- The Canby Loop operates with approximately 30-minute frequency during the middle of the day and only travels in a clockwise direction. One-way loops like this present two main challenges. First, the route from point A to point B is entirely different from the route back from point B to point A, which can be confusing for new riders. Second, loops often involve numerous deviations, taking passengers out of their way to reach their destinations. By design, one-way loops lead riders in a circular route, which for many trips is longer than a direct path between where they are and where they want to go.
- **The Canby Loop service is conveniently located near most residents,** connecting various neighborhoods, including all the dense ones, to major destinations such as downtown, the Adult Center, the Community Park, grocery stores, and most schools.
- Canby benefits from its proximity to multiple neighboring cities, which expands the range of opportunities accessible within a reasonable time frame beyond the city. **Excluding walking trips, about 58% of people travel within Canby on weekdays, while 42% make trips to other cities in the region.**
- From all the places people are going, the most common regional destinations are **Wilsonville, Portland, Oregon City, Tualatin, Woodburn, and Molalla.**
- The connection between Wilsonville and Canby is important as there are approximately 5,000 daily trips between the cities. It is also a transit "gateway" to Tualatin, Tigard and places further west. Wilsonville's transit agency, **SMART, offers a route that connects Wilsonville and Canby. This route is not very useful as it comes every 90 minutes in the middle of the day and once an hour during the AM peak.**
- **Oregon City is also a key destination for Canby residents as it provides a "gateway" to other busy places like Gladstone, Milwaukie, and Portland.** Multiple important destinations like Clackamas Community College and the closest hospital from Canby (Providence Willamette Falls Medical Center) are in Oregon City. On a typical day there are around 5,000 trips between Canby and Oregon City.
- Canby residents can use **CAT's Route 99X to reach Woodburn, but they get off the bus at Mt Hood Ave and 99E, near the Bi-Mart.** From there it is a long walk to downtown (or an additional transfer to a Woodburn Transit route) and other key parts of Woodburn, and even farther to the newer developments around I-5 and the Outlet Mall.
- **Regional trips take a long time.** Route 99X is an important link in the regional network but the trips take a long time because neighboring cities are far away from Canby, and the 99X is very infrequent for most of the day. Frequency, speed and the number of transfers all affect people's travel time across the region.
- The City of Canby is **updating its Comprehensive Plan** to guide growth over the next 20 years. The City plans to expand its Urban Growth Boundary, which will influence future CAT routes. However, this anticipated development is not expected to occur within the next 5 years, which is beyond the scope of this Transit Master Plan.

4. Transit Recommendations

Recommended 2029 Transit Network

The Transit Master Plan lays out a network of future services oriented around the top priorities from public input and what we found in the Existing Conditions Report: Make transit service more relevant to the community's local and regional needs.

The Transit Master Plan outlines a map to utilize new funding and driver recruitment to expand service over the next 5 years. This future network will be referred to as the 2029 Network in the rest of the document. The 2029 Network is going to be built from the current structure, but would offer better frequency, spans and connections to other transit systems:

- The Canby Loop would provide local service every 30 minutes in **two directions**.
- Route 99X would provide **service to downtown Woodburn** once an hour, and **30 minute service to Oregon City, and Milwaukie**, connecting to the MAX Orange Line.
 - Route 99X would have the **same level of service Monday to Saturday**.
- CAT would provide **additional service to Wilsonville along SMART's Route 3X, resulting in a bus coming every 30 minutes**.

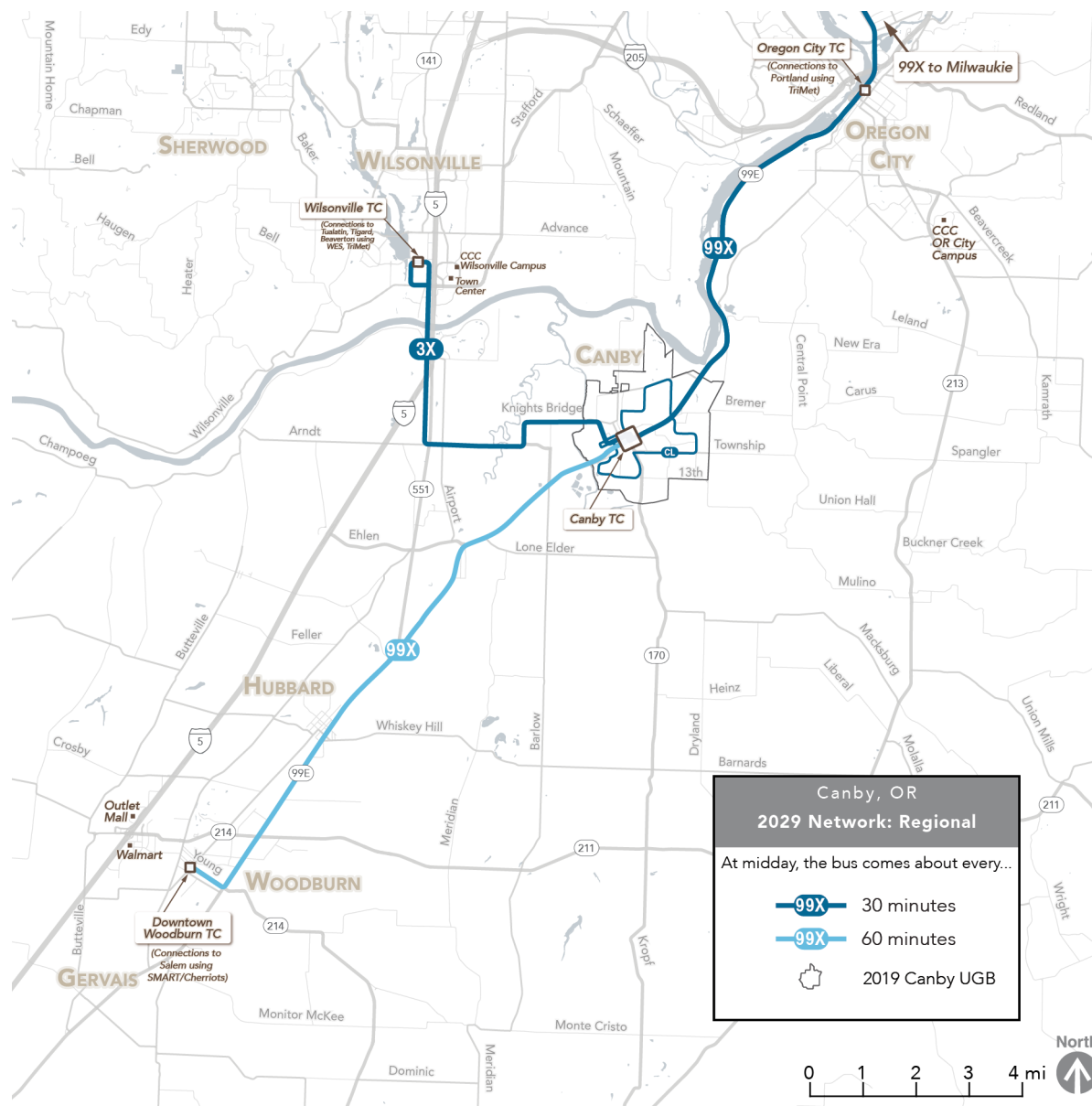


Figure 18: 2029 Network.

2029 Service Frequency by Route and Time of Day

The 2029 Network would have consistent 30 minute frequency on the Canby Loop and Route 99X from Canby to Oregon City and Milwaukie. Currently, the Canby Loop is the only route that runs approximately every 30 minutes throughout the day. In contrast, Route 99X and SMART’s Route 3X buses operate hourly or less frequently, with many having gaps in their schedules during midday, resulting in longer actual wait times.

A 30-minute frequency throughout the day allows for more convenient transit options for trips to and from Canby, making transit a more viable choice for many kinds of trips.

In the 2029 Network, additional routes would feature 30-minute service. Figure 19 illustrates the frequency for each hour of the day for the 2029 routes.

- The segment of Route 99X from Canby to Oregon City and Milwaukie would run every 30 minutes throughout the day.
- The segment of Route 99X from Canby to Woodburn would operate hourly, similar to current service, but without the additional rush-hour frequency.
- CAT would enhance SMART’s 3X route by adding an extra bus, resulting in a 30-minute frequency to Wilsonville.

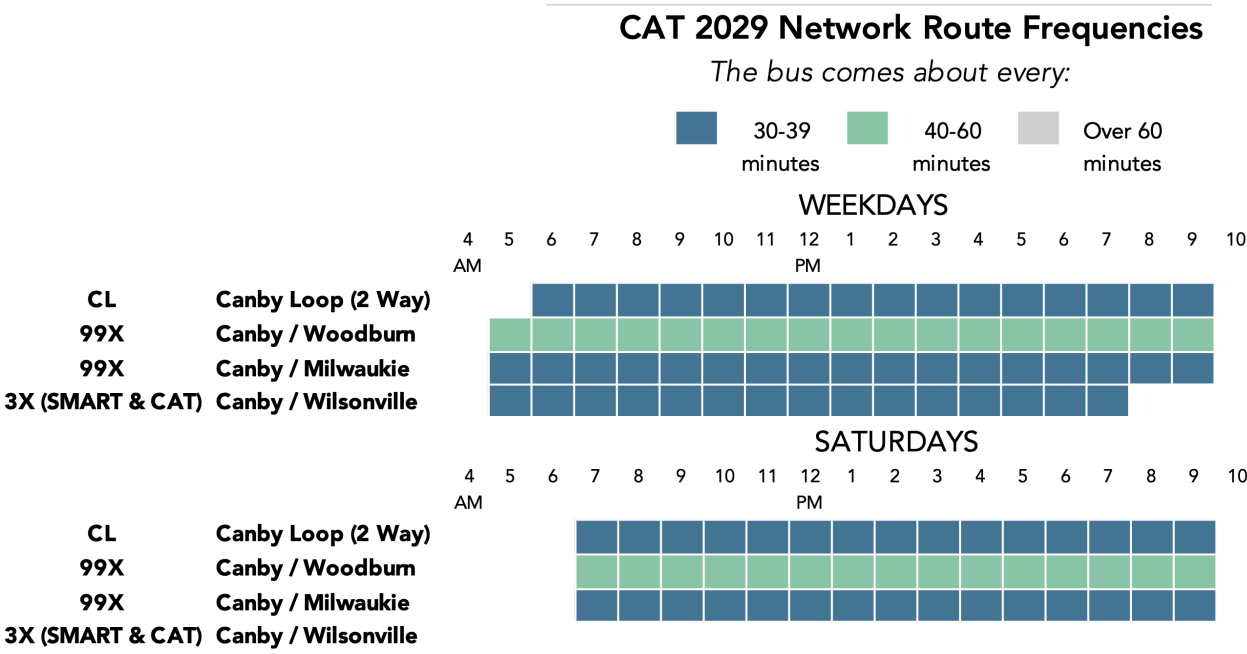


Figure 19: 2029 Network route frequencies.

Route 3X would only run from Monday to Friday.

- Saturday service would match the Monday-to-Friday service levels (except for Route 3X).

4. TRANSIT RECOMMENDATION

Availability of Service on Weekdays

By counting the number of people and jobs near service, we can estimate how well the 2029 Network would serve Canby's residents.

The maps on this page show the frequency of service available at different times on weekdays. The charts show the percentage of people and jobs within a 1/2 mile walk (10 minutes walk) to these services. The distinction is important because frequent service is most liberating for people and generally attracts the highest ridership.

CAT's 2029 Network would operate most of its routes coming every 30 minutes throughout the day.

- **More people would live near service that comes every 30 minutes.** 85% of residents and 82% of jobs would be within 1/2 mile of a bus stop for most of the day.
- **Proximity to transit would still be equitable across income and race.** Low income residents and people of

color are slightly more likely to live close to bus service than all residents.

- **More people near transit in the evening as the Canby Loop and the 99X would operate for longer hours.** Around 80% of residents would be within walking distance from a 30 minute route at night. Only 27% of residents are near 60 minute service today.

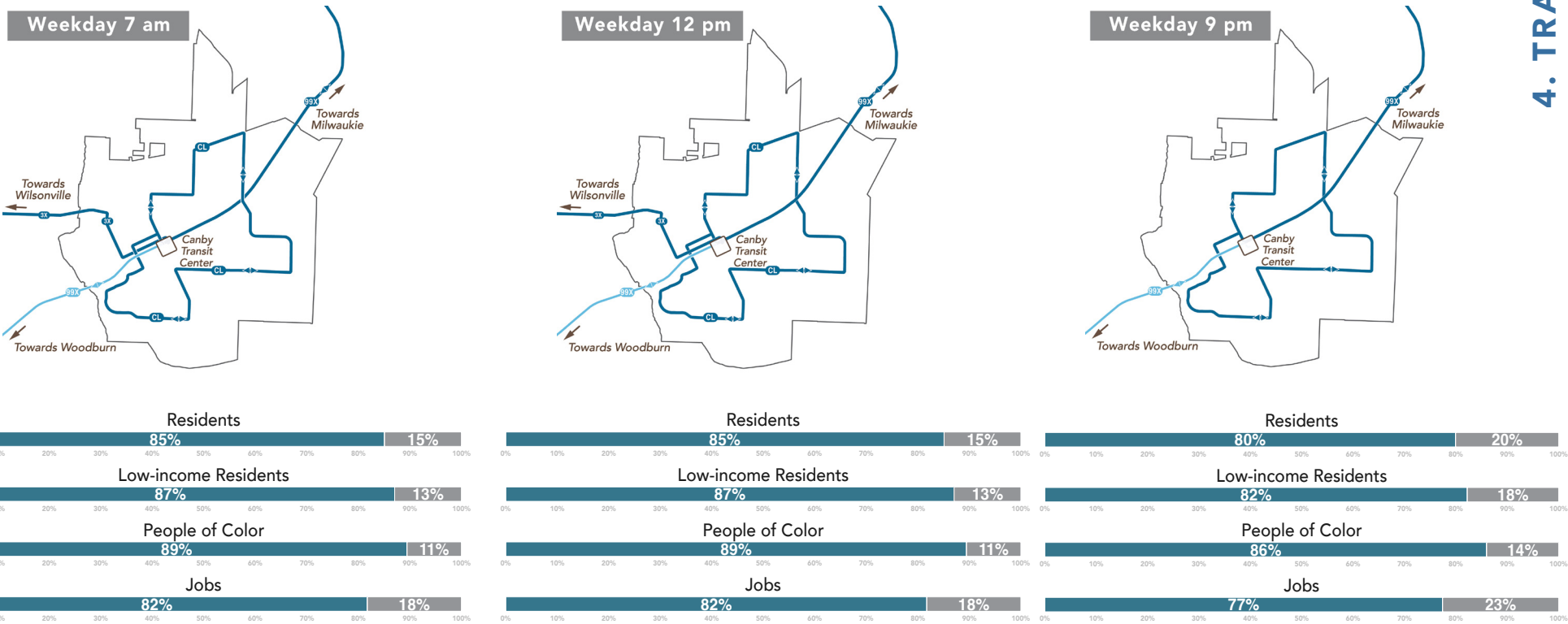


Figure 20: Service availability throughout weekdays in the 2029 Network.

Availability of Service on Saturday

The maps and the charts in this page show the availability of service on Saturday and the percentage of jobs and people within 1/2 mile walk from it.

- **The Canby Loop and the 99X would operate with the same frequency and during the same times as during the week days.** 80% of residents and 77% of jobs would be within 1/2 mile of a bus stop for most of the day. This is slightly lower than during the week because Route 3X connecting

Wilsonville won't operate during the weekend.

- **There is local and regional transit service into the evening.** 80% of people would be near 30 minute service, as the Canby Loop and 99X operate until 10 pm.
- **There won't be service on Sunday for now.** Given CAT's limited resources, we asked the community to identify which priorities the agency should focus on

first. Due to the high costs associated with adding Sunday service, the public favored other improvements for the coming years.

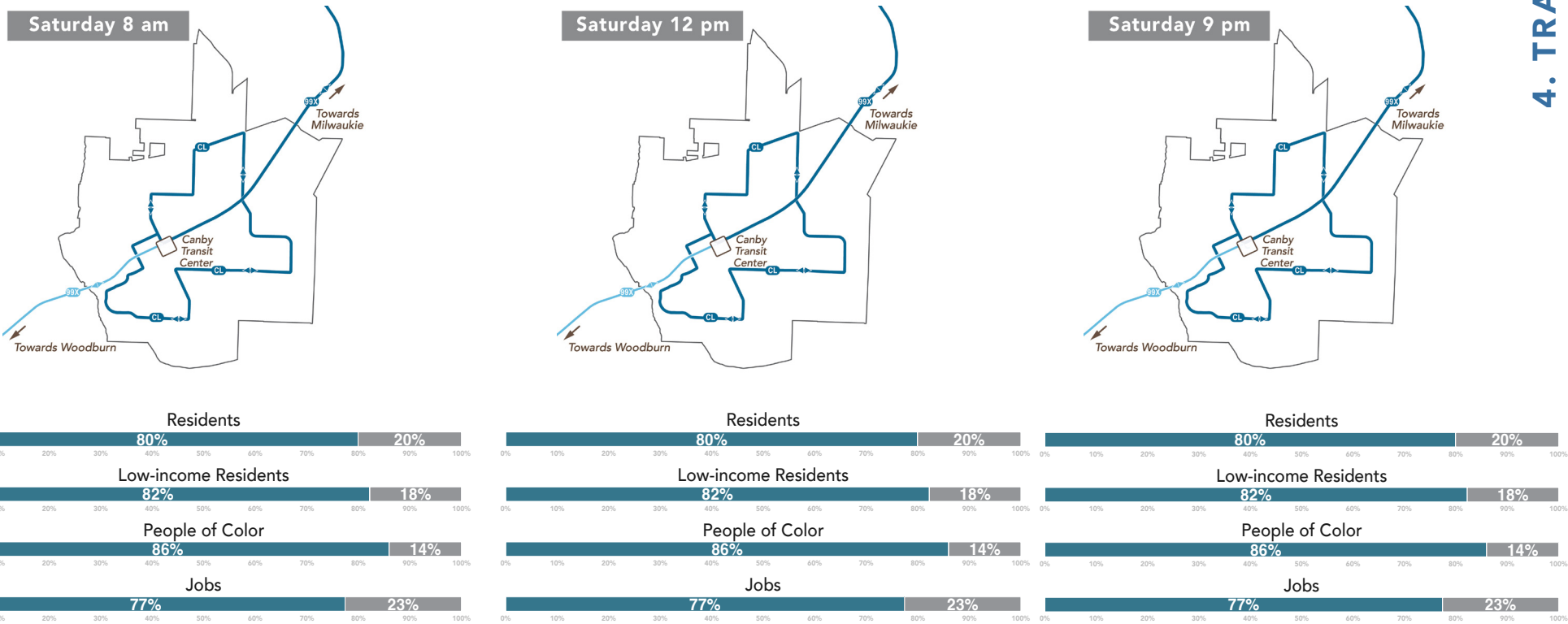


Figure 21: Service availability throughout Saturdays in the 2029 Network.

The Canby Loop in the 2029 Network would have three major changes that would improve the travel times for people making trips within Canby:

- [illegible]

JARRETT WALKER + ASSOCIATES

With the recommended two-way loop, travelers can enjoy a more direct route to the Canby Adult Center and back home, improving overall travel efficiency.

 Time riding the bus: 20 minutes
Routes used: Canby Loop (one-way)

 Time riding the bus: 13 minutes
Routes used: Canby Loop (two-way)

214

2029 Regional Connections

Through our analysis and our conversations with the public, we heard that Route 99X plays a vital role as it is an important link and connector in the regional network. The 2029 Network would maintain the existing connections provided by Route 99X and would add major improvements and regional connections.

The 2029 Network includes:

- Improvements on Route 99X.
Consistent 30 minute service from Canby to Oregon City, and then non stop to the Milwaukie/ Main Street MAX Station. People going to Portland would be able to transfer to TriMet's MAX Orange Line in Milwaukie.
- Extension of Route 99X to downtown Woodburn.
- Additional service to complement SMART's route 3X, which connects Canby to Wilsonville.

Figure 24 shows how the 2029 routes would fit in the regional network. Red lines represent routes coming every 15 minutes, dark blue lines are every 30 minutes, light blue lines are every 40 to 60 minutes, and pink lines have more than 60 minutes between buses. Marked in black text next to each line is the ride time between locations.

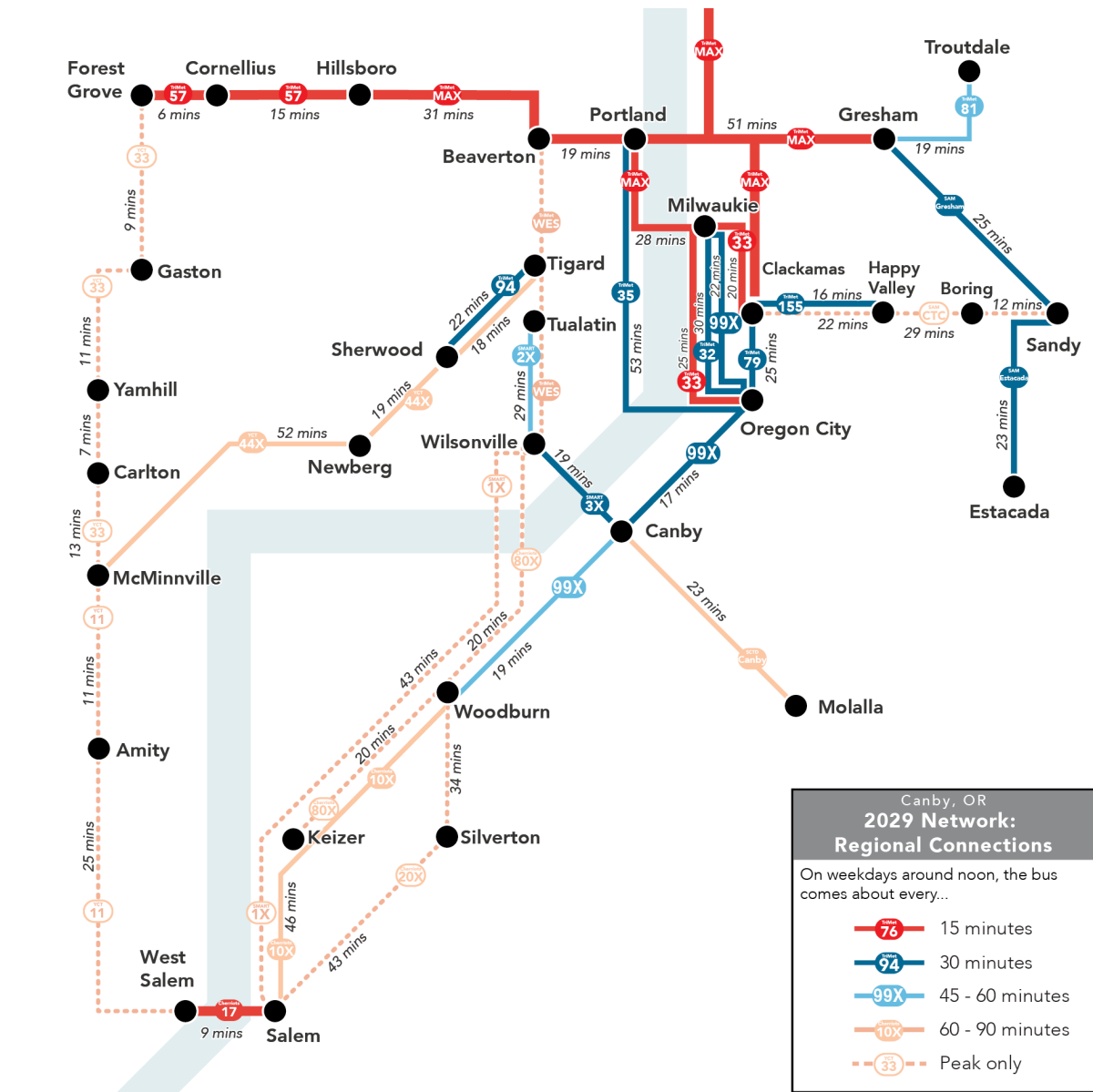


Figure 24: Regional Connections and the 2029 Network.

2029 Regional Connections

By making these improvements, the 2029 Network would connect Canby to the main regional destinations people are traveling to today.

Figure 25 shows the major trip patterns from and to Canby, and the chart shows the percentage of trips from Canby going to other cities on a typical weekday (source: Replica Data Spring 2023). The most common places people are going are Wilsonville, Portland, Oregon City, Tualatin, and Woodburn.

- **Direct connections:** Route 99X would connect directly with Oregon City, Milwaukie and Woodburn. Improvements on Route 3X would improve the connection to Wilsonville, the largest regional destination for Canby.
- **Indirect connections:** Route 99X would go to Oregon City and Milwaukie, where people can transfer to continue on to Portland, the second largest regional destination. Route 99X would also connect with Woodburn local routes, and with Cherriots' 10X route to Salem. Route 3X would also connect people to WES and regional SMART routes, taking people onwards to Tualatin, Tigard and Beaverton.

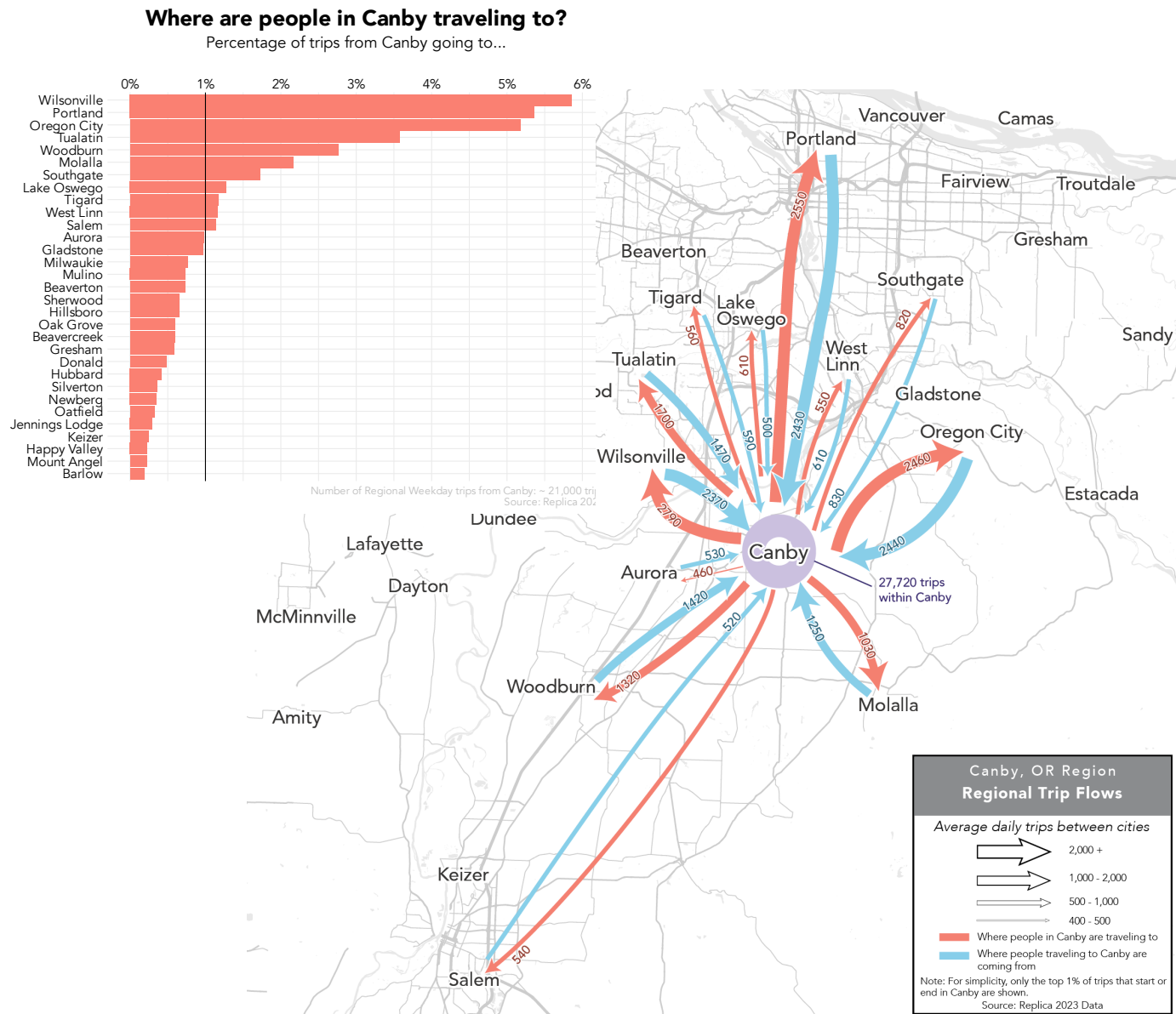


Figure 25: Top trip patterns to and from Canby.

Recommended Route: 99X going North

The structure of the Route 99X route would remain largely unchanged from its current configuration, but there would be significant improvements in the northern and southern segments of the route.

For the northern segment of the 99X, the recommended improvements include:

- **Extension to Milwaukie:** The route would extend to the Milwaukie/Main Street MAX Station, allowing connections to the MAX Orange Line and other TriMet routes. This extension would shorten the trip for Canby residents and reduce the need for multiple transfers to reach various destinations in Portland.
- **Consistent 30-Minute Service:** Route 99X would operate every 30 minutes throughout the day, improving connectivity with TriMet services at Oregon City and Milwaukie.
- **Increased Saturday Service:** The 99X would also run every 30 minutes on Saturdays, doubling the current service frequency.

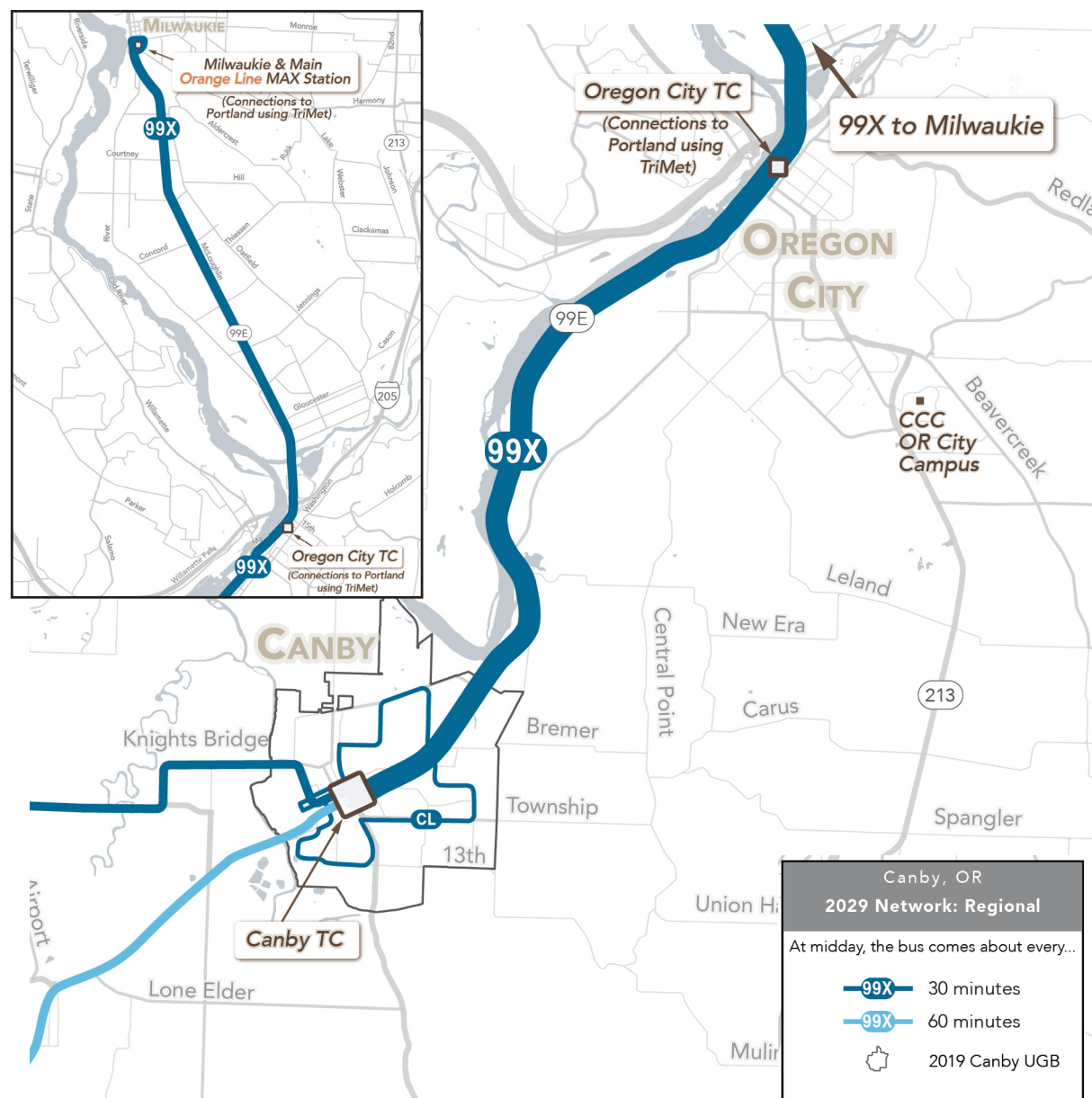


Figure 26: 2029 Network between Canby and Milwaukie.

Trip to Portland

This example demonstrates a trip from Canby to Portland State University (PSU). Traveling to PSU (or any location in downtown Portland) from Canby by transit is challenging due to the long distance and the need for multiple transfers.

In this example, you would start your trip in Canby, transfer to TriMet’s Route 33 in Oregon City, and then switch to the MAX Orange Line in Milwaukie. This involves considerable travel time and two vehicle transfers.

While CAT cannot change the location of major destinations like PSU, it can streamline transfers and reduce travel time. The recommended Route 99X would extend from Canby to Milwaukie, with the segment between Oregon City and the Milwaukie/Main Street MAX Station running express. This extension would connect passengers to the MAX Orange Line and other TriMet routes, making the trip more efficient.

On the 2024 Existing Network, what is the trip like from Canby Transit Center to Portland State University at noon on a weekday?



12:00 - 1:49 pm
Total travel time: 109 mins

- Walk time: 8 minutes
- Wait time: 22 mins (average wait)
45 mins (maximum wait)
- Transfer time: 15 mins (average)
30 mins (max transfer time)
- Time riding transit: 64 minutes
Routes used: 99X, TriMet Route 33, MAX Orange Line

On the 2029 Network, what is the trip like from Canby Transit Center to Portland State University at noon on a weekday?



12:00 - 1:32 pm
Total travel time: 92 mins

- Walk time: 8 minutes
- Wait time: 15 mins (average wait)
30 mins (maximum wait)
- Transfer time: 8 mins (average)
15 mins (max transfer time)
- Time riding transit: 61 minutes
Routes used: 99X, TriMet MAX Orange Line

4. TRANSIT RECOMMENDATION

Figure 27: Trip to PSU using 2024 and 2029 Networks.

Recommended Route: 99X going South

The segment of Route 99X from Canby to Woodburn would undergo the following changes:

- **Hourly Service:** The segment would operate every hour throughout the day, without additional service during rush hours.
- **Extension to Downtown Woodburn:** The route would extend to the downtown Woodburn Transit Center, replacing the Bi-Mart stop. This change allows for a direct ride from Canby to downtown Woodburn. Although Bi-Mart and the Legacy Urgent Care facility would no longer be directly served, they would still be accessible via a stop on 99E, within walking distance. Passengers would be able to connect to the Woodburn circulators and Cherriots 10X at the downtown Woodburn Transit Center.
- **Route Split at Canby Transit Center:** To implement these changes, CAT would split Route 99X at the Canby Transit Center. Passengers traveling between Woodburn and Oregon City would need to transfer at the Canby Transit Center. Passengers traveling from Woodburn to Portland would not make additional transfers; their transfer point would move from Oregon City to Canby. Canby residents going to Portland would make one transfer (at Milwaukie), instead of two.

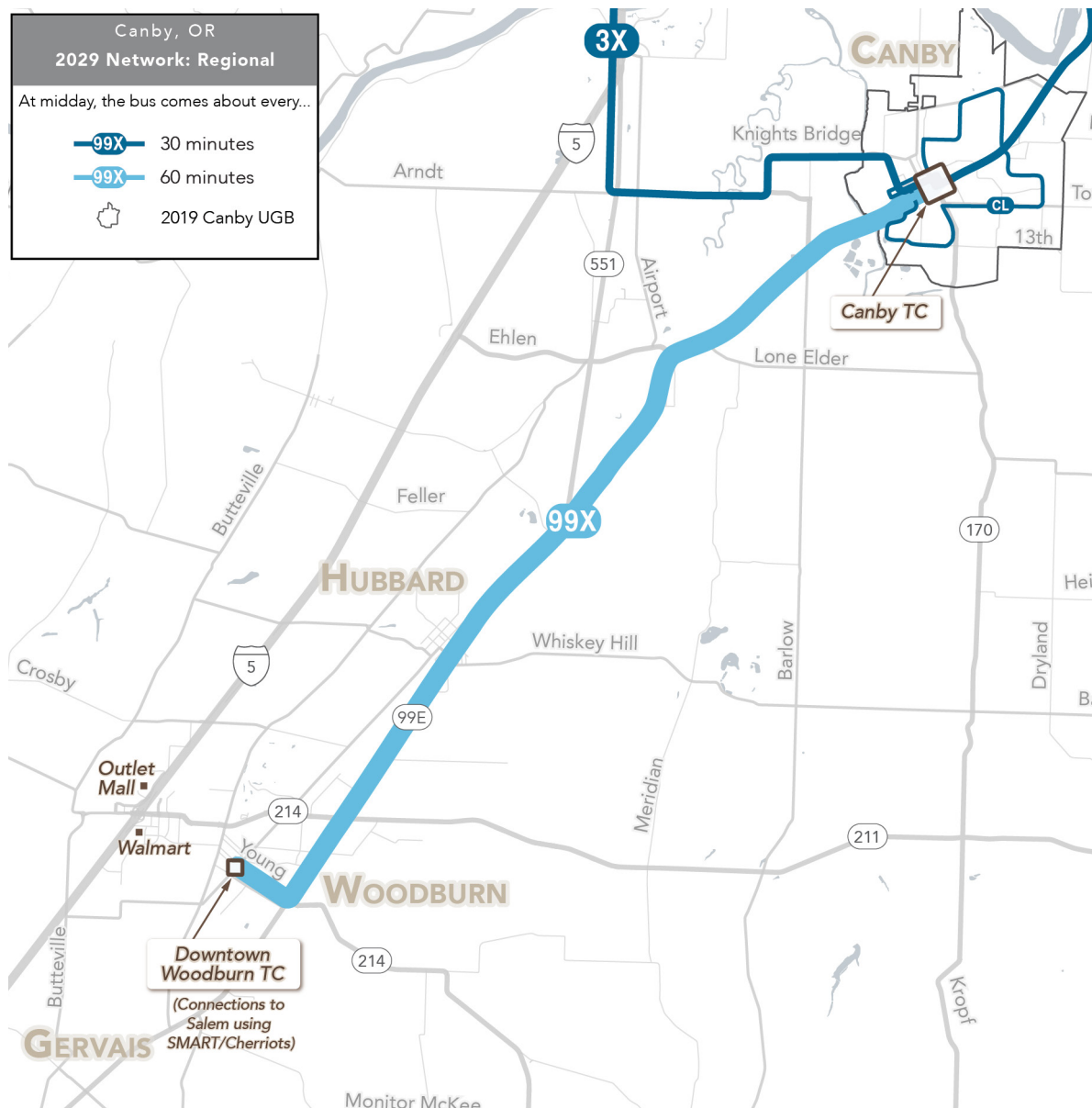


Figure 28: 2029 Network between Canby and Woodburn.

Trip to Woodburn

This example demonstrates a trip from Canby to downtown Woodburn. Currently, travelers must use Route 99X and then transfer at Bi-Mart to use local Woodburn Transit routes, which can be time-consuming.

With the recommended changes, Route 99X would extend to downtown Woodburn. This would allow passengers to reach their destinations in this area more quickly and still connect to local Woodburn routes at the downtown Woodburn Transit Center.

On the 2024 Existing Network, what is the trip like from the Canby Library to the Downtown Woodburn Transit Center at noon on a weekday?



- 12:00 - 1:28 pm**
Total travel time: 88 mins
- Walk time: 2 minutes
 - Wait time: 22 mins (average wait)
45 mins (maximum wait)
 - Transfer time: 30 mins (average)
60 mins (max transfer time)
 - Time riding the buses: 34 minutes
Routes used: 99X and Woodburn Express Loop

On the 2029 Network, what is the trip like from the Canby Library to the Downtown Woodburn Transit Center at noon on a weekday?



- 12:00 - 12:58 pm**
Total travel time: 58 mins
- Walk time: 2 minutes
 - Wait time: 30 mins (average wait)
60 mins (maximum wait)
 - Time riding the bus: 26 minutes
Routes used: 99X

4. TRANSIT RECOMMENDATION

Figure 29: Trip to Woodburn using 2024 and 2029 Networks.

Recommended Route: 3X

Currently, Wilsonville transit agency, SMART, operates Route 3X, connecting Wilsonville and Canby with 8 trips per day. This commuter-focused service follows an hourly schedule with a mid-day break.

This connection is vital, as approximately 5,000 daily trips occur between these cities, and it serves as a transit gateway to Tualatin, Tigard, and destinations further west.

We recommend that CAT add an additional bus to Route 3X to complement SMART’s existing service. By coordinating with SMART, this addition would increase service frequency to every 30 minutes throughout the day, providing twice as many opportunities to travel to Wilsonville compared to the current schedule.

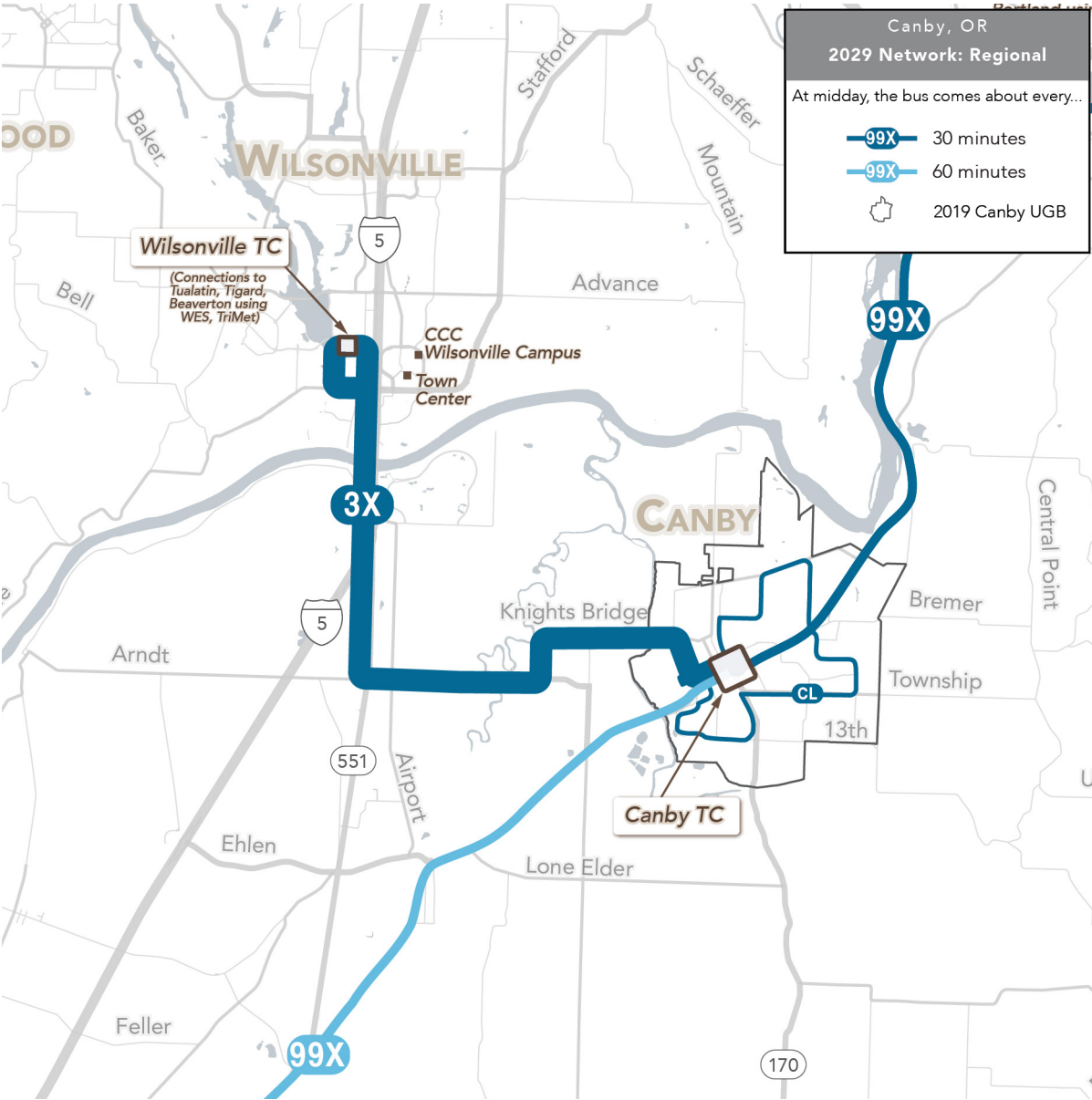


Figure 30: 2029 Network between Canby and Wilsonville.

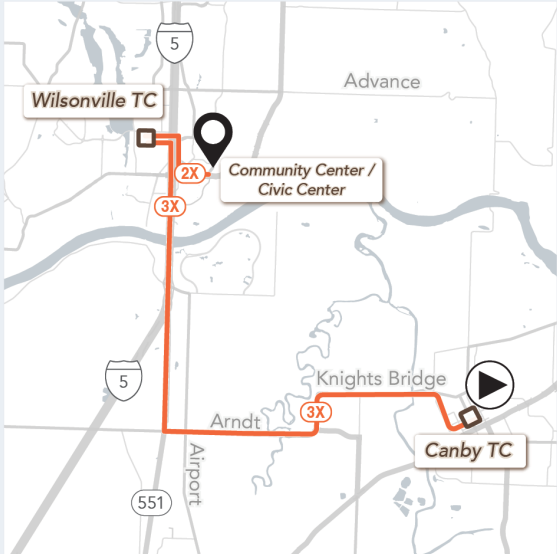
4. TRANSIT RECOMMENDATION

Trip to Wilsonville

This example illustrates a trip from Canby to the Wilsonville Community Center. Currently, travelers can expect an average wait time of 45 minutes of to use Route 3X in the middle of the day.

With the frequency improvement in the 2029 Network, the average wait time to use Route 3X would be 15 minutes on average. This would greatly shorten the overall travel time between Canby and Wilsonville.

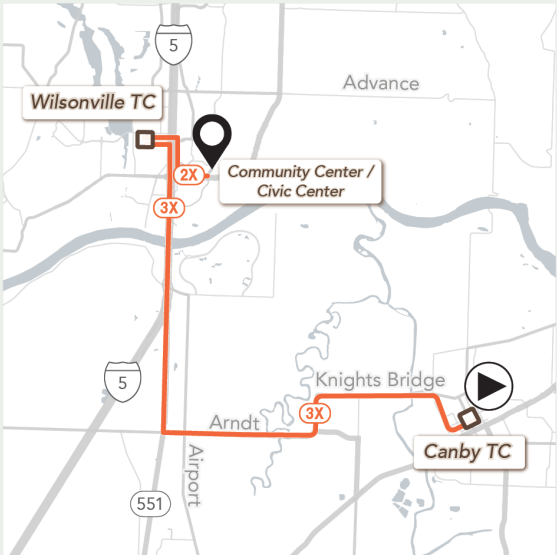
On the 2024 Existing Network, what is the trip like from the Canby Library to Wilsonville Town Center at noon on a weekday?



12:00 - 1:42 pm
Total travel time: 102 mins

- Walk time: 3 minutes
- Wait time: 45 mins (average wait)
90 mins (maximum wait)
- Transfer time: 30 mins (average)
60 mins (max transfer time)
- Time riding the buses: 24 minutes
Routes used: 3X and 2X

On the 2029 Network, what is the trip like from the Canby Library to Wilsonville Town Center at noon on a weekday?



12:00 - 1:12 pm
Total travel time: 72 mins

- Walk time: 3 minutes
- Wait time: 15 mins (average wait)
30 mins (maximum wait)
- Transfer time: 30 mins (average)
60 mins (max transfer time)
- Time riding the buses: 24 minutes
Routes used: 3X and 2X

4. TRANSIT RECOMMENDATION

Figure 31: Trip to Wilsonville using 2024 and 2029 Networks.

Public comments on the Draft Transit Master Plan

During the third phase of engagement, we engaged the public to obtain feedback on the Draft TMP after a round of edits based on the second phase of engagement. We created and conducted an online survey to ensure that the public were satisfied with the Draft TMP. We reached out about the survey via social media, emails/ads, and in-person at community events. We received 105 survey responses, including 15 in Spanish. In addition to outreach about the survey, we held an Open House hosted at the Transportation Advisory Committee meeting. The meeting was an opportunity for the public and committee members to ask questions about the major improvements recommended for the next five years.

Tabling Events

On August 23, we tabled at **Canby Big Night Out**, a community event held in downtown Canby with food and live music. We encouraged eventgoers to take the survey and explained the major improvement recommendations. We also offered general transit information like bus schedules, route maps, and application forms for the Dial-a-Ride program. Plus, attendees could spin a prize wheel to win a transportation-themed prize from CAT.

During the event, we engaged with 217 people.

On August 24, we tabled at **Bridging Cultures' Saturday in the Park**, a bilingual community event held in Maple Street Park with food, live music and dancing. We encouraged eventgoers to take the survey and explained the major improvement recommendations. We also offered general transit information like bus schedules, route maps, and application forms for the Dial-a-Ride program. Plus, attendees could spin a prize wheel to win a transportation-themed prize from CAT.

Feedback:

- Many commented that they were happy about improved service to Wilsonville and increased service to Wilsonville.
- Many commented that they were excited about the loop running in both directions.
- Some asked questions about CAT's funding and if service improvements would mean increased taxes.

City Council Work Session

On October 2, CAT Staff attended a City Council Work Session to share the Draft

plan and engagement to date and get feedback from council members.

Feedback:

- The Council asked questions about the purpose of the demographic questions in the survey and report. (We ask that to make sure we are getting a representative number of responses to the survey to ensure that changes made are not affecting one group disproportionately and it is required by law.)
- The Council provided positive feedback on the engagement and direction of the plan.



Figure 32: Tabling Event at the Canby Night Out

Public comments on the Draft Transit Master Plan

Transportation Advisory Committee Open House

On September 26, CAT Staff attended a Transportation Advisory Committee meeting to share the Draft TMP. There were 6 committee members present.

Feedback:

- There were questions about the function of a TMP and how it affects day to day operations:
- Does the TMP include policy on fares? (No, fares are a part of the master fee schedule, and it is up to the City Council to change. There are no plans of changing the fare from the current dollar/free for the loop).
- The Transportation Advisory Committee was curious to hear what has been heard from the public so far.
- There were questions about the methodology of the public engagement report:
- What “low-income” threshold was considered when studying the impacts of the TMP? (150% of federal poverty line in order to capture more).
- Is the point of including race in the demographic questions to increase ridership for people of color? (No, we

ask that to make sure we are getting a representative number of responses to the survey to ensure that changes made are not affecting one group disproportionately. Also, the majority of riders are Hispanic).

- The committee’s goal is to make sure riding transit is not seen as a last resort. They want people to want to take the bus, not because they have to. This means capturing “affluent” riders who have cars as much as riders who rely on transit.
- The committee is satisfied with the wide range of engagement. They feel

that the plan is heading in the right direction.

- The committee would like to see better alignment with the High School buses. It is a well-known issue with the High School’s change of schedule. Schedules are now not synced between the Middle School, High School, and the Loop, and construction does not help.

4. TRANSIT RECOMMENDATION

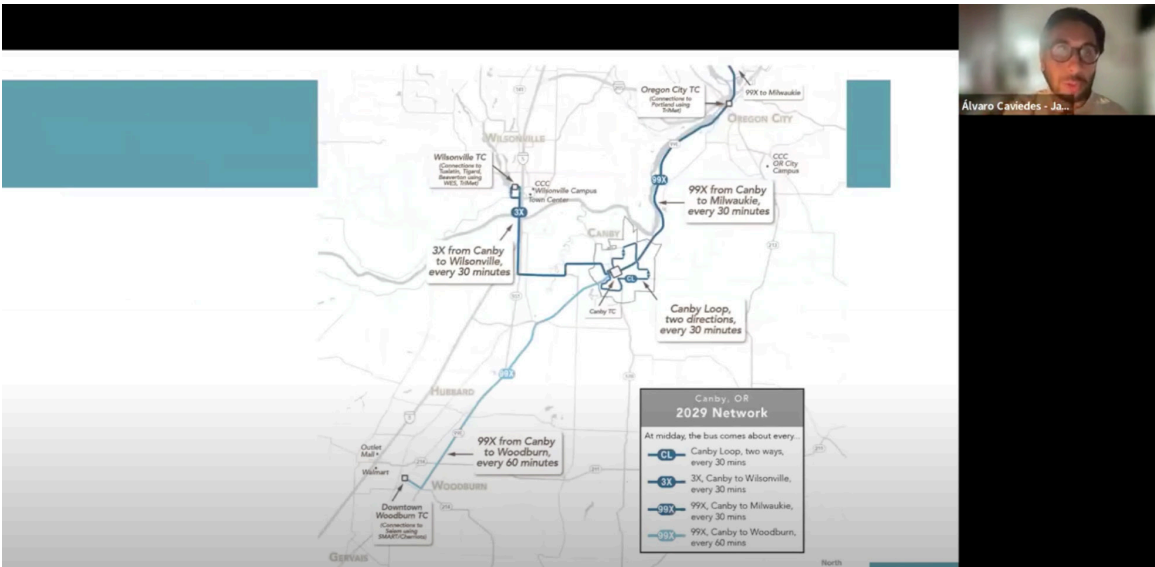


Figure 33: Presentation during the Open House

Community Survey # 3

The final survey posed questions about what we heard in prior rounds of engagement and if this sounded like the right path forward. The survey outlined the major improvements recommended for the next five years based on the priorities from prior engagement:

- **Better frequency.** The Canby Loop and part of Route 99X would offer a consistent 30-minute frequency throughout the whole day
- **Better local service.** The Canby Loop would run in both directions every 30 minutes.
- **Better service on Saturdays.** Route 99X (from Canby to Oregon City) would offer 30-minute frequency on Saturday, which is twice as much as today.
- **Better regional connections.** Route 99X would provide service to downtown Woodburn about every hour. Route 99X would provide service to Oregon City and Milwaukie, all the way to the Milwaukie/Main Street MAX Orange Line Station. CAT would also add service to SMART Route 3X, resulting in a bus every 30 minutes between Wilsonville and Canby.

The survey was launched August 23 through September 27 and was available

in English & Spanish. The survey received 105 responses, including 15 Spanish surveys. We also provided paper copies to the Canby Senior Center and Bridging Cultures.

Demographics

The table in this page provides a summary of the respondents' demographics. Note that respondents were given the option to answer the demographics questions, but not all of them did.

Key facts about the respondents

- Most of the respondents live, work or visit Canby (97%).
- 48% of the respondents identify as People of Color. 17% of them live in a home where Spanish is the primary language spoken.
- 63% of respondents identify as female.
- 71% of respondents have a working vehicle available at their household.

Total Survey Responses		105
Completed Survey Count	103	
Demographics Response Count	81	
Connection to Canby?		
Resident	63	62%
Worker	11	11%
Visitor	18	18%
Other	10	9%
Age		
Under 18	12	15%
18 to 25	4	5%
25 to 44	33	41%
45 to 64	21	26%
65 and above	11	13%
Race		
People of Color	33	48%
White	37	52%
Language spoken at home		
English	67	83%
Spanish	13	17%
Gender		
Female	49	63%
Male	28	37%
Non-binary	0	0%
Transgender	0	0%
Income		
Less than \$25,000	11	19%
\$25,000 - \$49,999	9	16%
\$50,000 - \$74,999	10	18%
\$75,000 - \$99,999	13	22%
\$100,000 or more	16	25%

Figure 34: Survey 3
Demographic summary

Community survey # 3

Results

Overall, do you feel like the Draft Transit Master Plan is headed in the right direction?

We asked the public this question to get a sense of how the Plan reflects what we heard from the public throughout the public engagement process and what we found in our analysis.

82% of respondents strongly agree or agree with the direction of the route improvements. Only 5% (6 responses) disagreed with the changes.

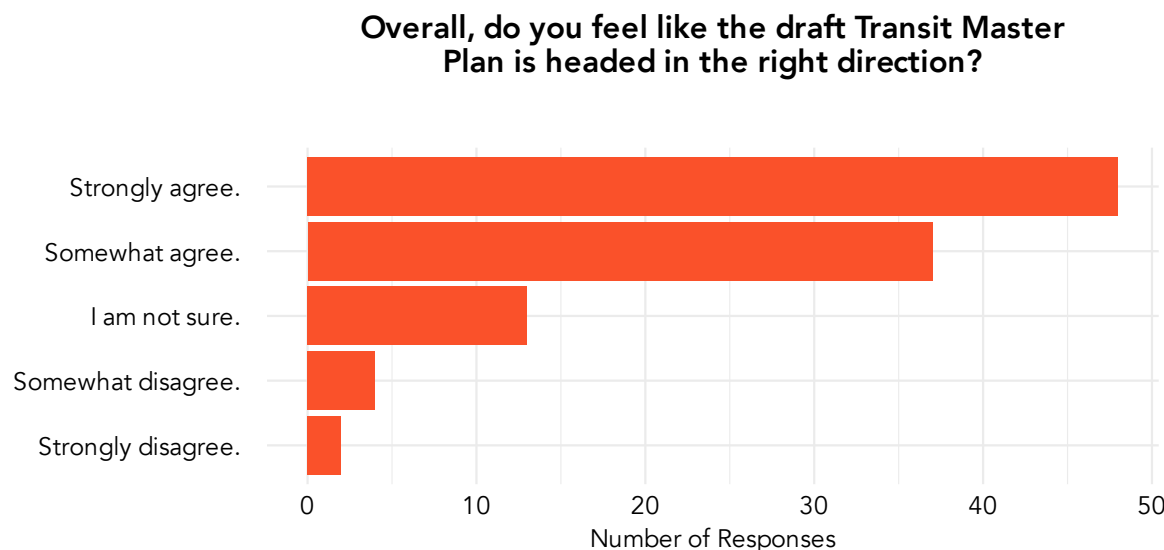


Figure 35: Overall, do you feel like the Draft TMP is headed in the right direction?

Will the proposed service changes help you get around Canby, or make connections to other regions, without driving?

The majority of respondents (~76%) also agreed that the proposed changes would improve their mobility inside Canby, and regionally. 15% of respondents were not sure if their trips would improve.

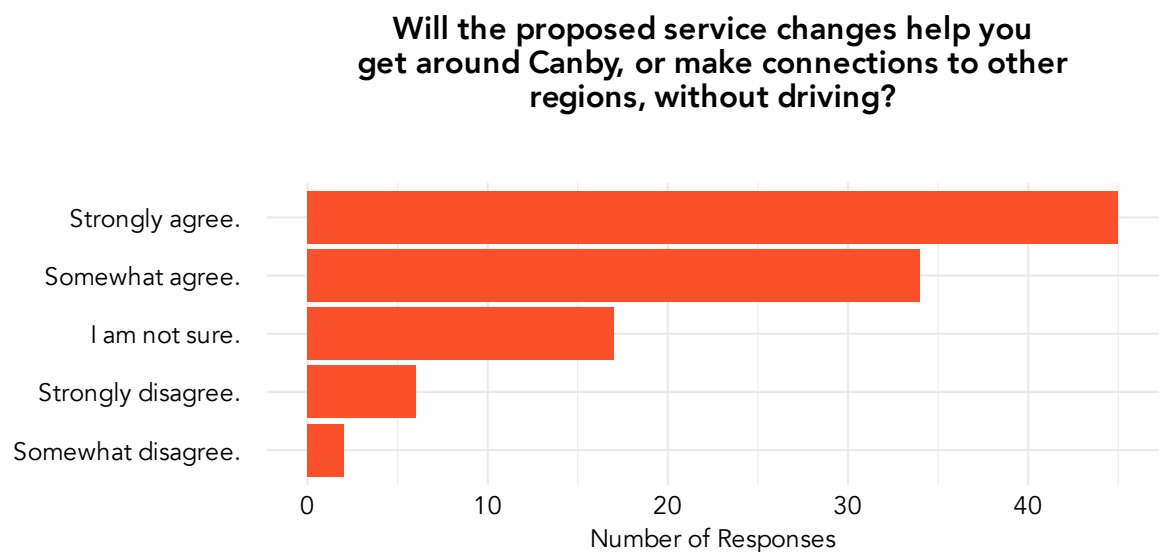


Figure 36: Will the proposed changes help you get around Canby, or make connections to other regions, without driving?

Community survey # 3

Results

Of the changes described in the bus network of the draft Transit Master Plan, what are your main priorities? Choose up to 3.

We asked the public this question to understand which improvements CAT should prioritize in the coming years. The agency doesn't have the resources to address everything at once, so they will need to decide what to tackle first. Public opinion is crucial in determining what is most important.

- More than 50% of respondents indicated that having the Canby Loop operate in two directions is the top priority.
- The second priority, with 32% of responses, is additional service to Wilsonville.
- The third priority is extended service hours on Saturdays for the regional route 99X.
- While the extensions of route 99X to Milwaukie and Woodburn was less important compared to other options, past surveys and community events have shown that these are still key improvements to consider for the future.

Of the changes described in the bus network of the draft Transit Master Plan, what are your main priorities? Choose up to 3.

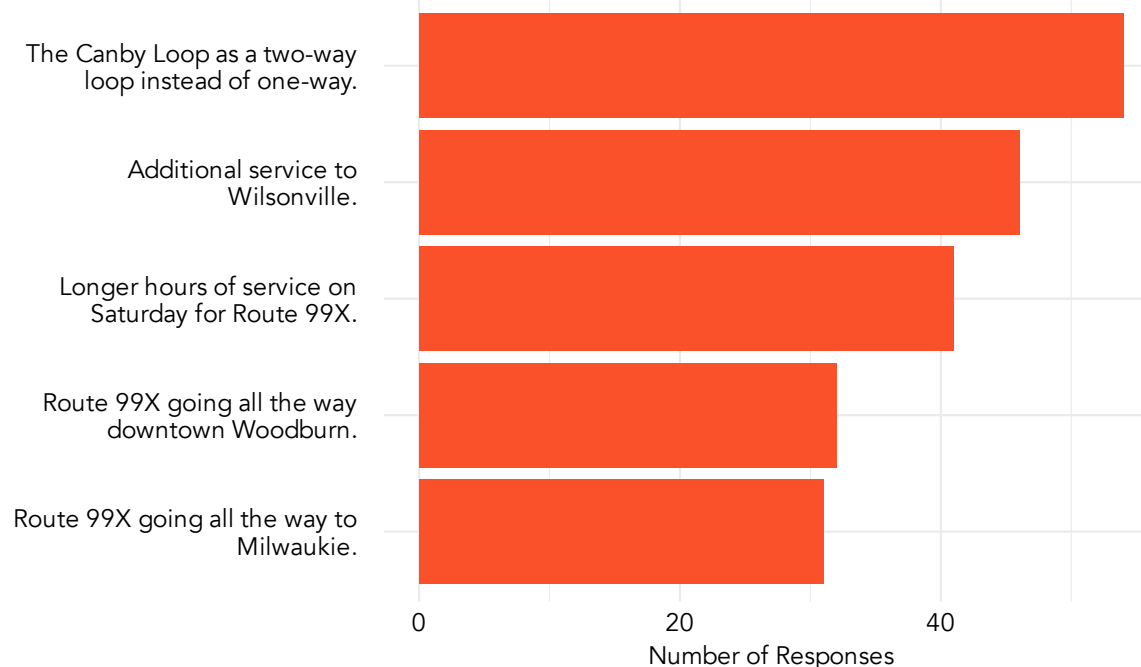


Figure 37: What should CAT prioritize?

5. Dial a Ride Service

Background

CAT is required by the Americans with Disabilities Act (ADA) of 1990 to provide a complementary paratransit service to eligible users. CAT provides this service under:

- **Complementary Paratransit Service (CPS) Dial-A-Ride.**
- **General Public Dial-A-Ride.**

In the Existing Conditions report, we found that:

- The introduction of the Loop reduced Dial-A-Ride and ADA paratransit ridership, by attracting some of the ADA riders. The Loop provides mobility at a much lower cost per ride, and with fewer vehicles, than the demand response services.
- The total ADA operational costs have been increasing since 2020 due to labor costs.
- More than 90% of trips were provided within the on-time window of 10 minutes before to 10 minutes after the promised time. CAT has an excellent track of not canceling trips. More than 80% of the trips have been completed, around 10% have been canceled by the user, and under 5% have been users that don't show up at the pick up time.

	Dial-A-Ride	Dial-A-Ride: Transferless service to Oregon City	General Public
Description	Door to door service within the Canby UGB.	Service to and from destinations within Oregon City's limits. At Oregon City users can connect with TriMet's LIFT to travel to the rest of the Metro area.	Service to anyone traveling within the Canby UGB The GP service is designed to utilize unused capacity on CAT's Paratransit Service.
Eligibility	Priority is given to Americans with Disabilities Act (ADA) eligible customers.	Americans with Disabilities Act (ADA) eligible customers.	Anyone, but priority is given to Americans with Disabilities Act (ADA) eligible customers. Rides are provided on a first come, first served space available basis. A sign-up form is required from customers prior to service.
Cost	Monday to Friday: \$1 Saturday: Free	Monday to Friday: \$1 Saturday: Free	Monday to Friday: \$1 Saturday: Free
Hours of Operation	Mon to Fri: 5 am to 8 pm Sat: 8 am to 6:30 pm	Mon to Fri: 5 am to 8 pm Sat: 8 am to 6:30 pm	Mon to Sat: 8:00 am to 6:00 pm.
Trips Restrictions	None	Limited to medical, dental, education, employment, legal and social service appointments.	None
% of ADA ridership	~73%	~18%	~9%
% of CAT weekday ridership	~14%		~1%

Figure 38: Overview of Paratransit Services

Service expansion into Clackamas County

CAT is required by federal regulations to provide paratransit service within 3/4 mile of a local fixed-route line during the hours of operation. Currently, CAT exceeds this requirement by offering paratransit service throughout the entire Urban Growth Boundary (UGB).

CAT will continue to provide this service for eligible users traveling within the Canby UGB and to destinations within Oregon City limits.

CAT has recently reached an agreement with Clackamas County to expand demand response transit services beyond Canby's UGB. As a result, eligible residents within the red boundary shown in **Figure 39** will also be able to use the paratransit service.

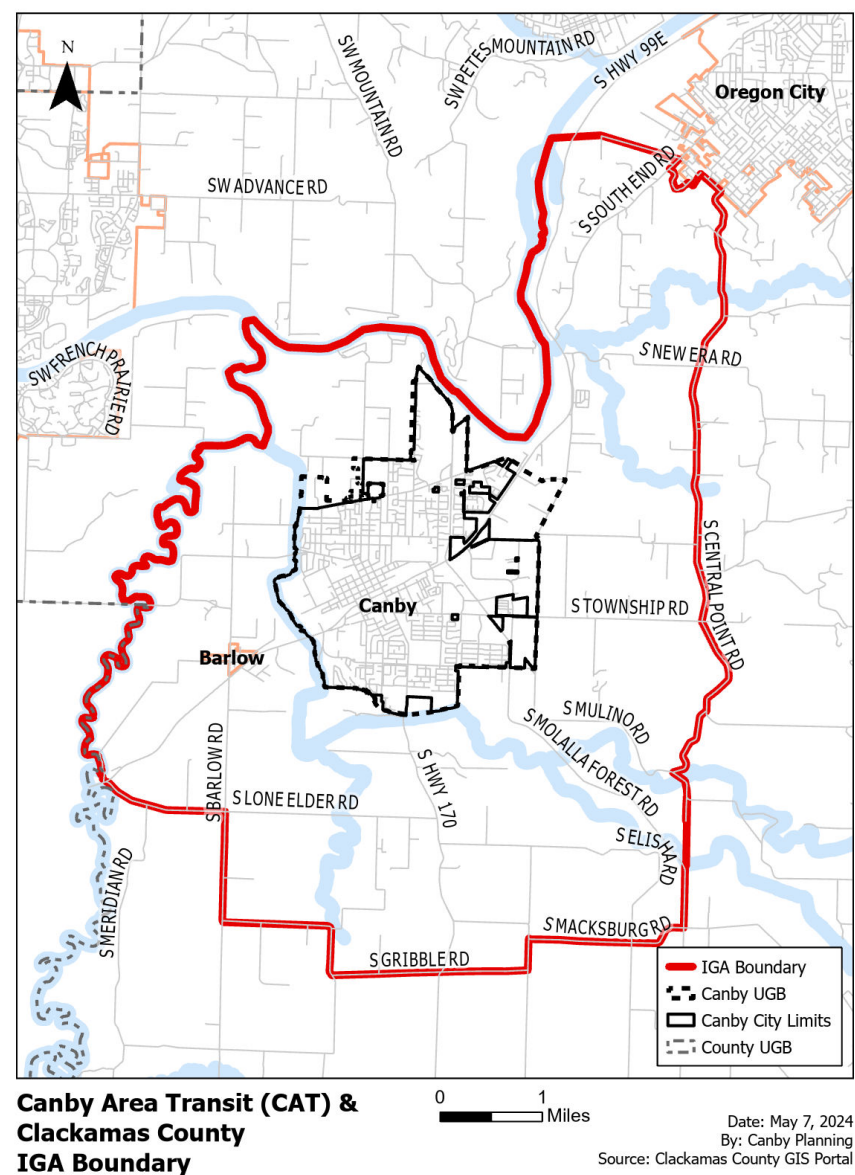


Figure 39: Canby Urban Growth Boundary and CAT’s IGA boundary.

6. Costs and Funding

Fixed Route Operating Costs

Based on the frequencies, spans, lengths, and assumed speeds of each proposed route, we can estimate the number of vehicles and drivers required in service, as well as the number of vehicle hours needed for each route. Additionally, we can calculate the total miles that vehicles will travel to deliver each route. These elements form the core of operating costs: Revenue Hours in service, Revenue Miles in service, and Peak Vehicles.

Revenue hour refers to one hour when a bus and driver are on the road, providing service to passengers.

Revenue mile is a mile driven on a route while in service.

Peak vehicles represent the maximum number of vehicles needed simultaneously to deliver service during the busiest times of the week, typically rush hours.

These three parameters are the primary factors defining an agency's costs for transit.

The 2029 Network is a substantial increase in service compared to what is provided today. It is not achievable with the current resources and would also require additional drivers and buses.

Fixed Route Operating Costs

During the week, CAT would need to allocate twice as many resources to operate the enhanced service compared to the current level:

- **Canby Loop:** To provide service in both directions, CAT would need an additional vehicle, effectively doubling the service compared to today.
- **Route 99X Extensions:** Extending the route to downtown Woodburn and Milwaukie would require 1.6 additional vehicles. However, since the segment from Canby to Woodburn would run once an hour without peak hour

service, only one extra vehicle would be needed.

- **Route 3X:** Operating every 30 minutes would require 2 buses, but only one of these would be operated by CAT; the other would be provided by SMART. Costs are calculated based on the vehicle operated by CAT alone, assuming an agreement between the two cities.
- **Saturday Service:** The most significant cost increase would be for Saturday service, which would be nearly four times the current level, mainly due to

Route 99X running every 30 minutes between Canby and Milwaukie.

Route		Frequency		Two way length (miles)	Round-trip cycle time with layover (min)	Weekday revenue hours	Saturday revenue hours	Annual revenue hours	Annual revenue miles	Peak vehicles required
		a.m. peak	midday							
Canby Loop	Local	30	30	16	30	16	16	4,912	104,622	2
99X	Canby - Woodburn	60	60	57	120	70	70	21,490	472,780	4
99X	Canby - Oregon City- Milwaukie	30	30							
3X	Wilsonville	30	30	17	60	15	0	3,825	48,871	1
			Total recommended 2029 fixed routes			101	86	30,227	626,273	7
			Total - 2024 fixed routes			55	25	14,050	313,636	4
						+84%	+244%	+115%	+100%	+3

Figure 40: CAT Fixed Route Operating Costs.

Transit Grant Funding Sources and Opportunities

As part of this Transit Master Plan, we examined CAT's current funding situation and potential feasible local, State and Federal funding sources with regard to their relative certainty of future availability.

A full list of grants is located on the following pages in **Figure 41**. This table includes information such as the program name, description, relevance to CAT, eligible improvements, grant status, annual award amount available, match requirement, and program webpage for more information.

Potential priority grants are grants that align with the recommendations for bus stop and access improvements for CAT. These grants are marked in Table 1 under the column, "Potential Priority Grant". These grants are:

- State Transit Network Program
- Many funds are based on information listed in the United States Code for Transportation, Title 49, Chapter 53 – Public Transportation. More information on that code can be found [here](#).

- Rural and Tribal Assistance Pilot Program
- Grants for Buses and Bus Facilities Competitive Program
- Enhanced Mobility of Seniors & Individuals with Disabilities - Section 5310
- Vehicle Replacement Discretionary Program
- Bus and Bus Facilities Discretionary Program – 5339

Transit Funding Opportunities Summary

6. COSTS AND FUNDING

Program Name (and grant source)	Potential Priority Grant	Program Description from Grant Source	Relevance to Canby Area Transit	Eligible improvements for CAT				Status as of July 2024	Grant Source Total Amount Available	Cost Sharing or Matching Requirement	Program URL
				Access/ Infrastructure	Vehicles/ Facilities	Service/ staff	Maintenance				
Rural and Tribal Assistance Pilot Program (Federal)	X	The Rural and Tribal Assistance Pilot Program is intended advance transportation infrastructure projects in rural and Tribal communities by supporting development-phase activities for projects reasonably expected to be eligible for certain DOT credit and grant programs. Grants will fund financial, technical, and legal assistance to states and rural and Tribal communities. The grants are intended to increase organizational capacity in communities that may not have resources available to evaluate and develop projects that qualify for federal funding and financing programs. Grants reimburse expenses incurred to hire staff or procure third-party advisory firms to assist with project development.	Grant could provide CAT with temporary capacity-building assistance to strive for additional grants. Capacity-building could include hiring staff or funding design and engineering services for recommended infrastructure improvements. Grant could be leveraged to apply for additional federal grants.			X		Closed	\$10,000 to \$360,000	No	https://www.transportation.gov/rural/grant-toolkit/rural-and-tribal-assistance-pilot-program
Grants for Buses and Bus Facilities	X	The purpose of the Buses and Bus Facilities Competitive Program is to	This flexible funding source could be applied to financing buses and facilities capital projects. Grant also	X	X	X		Closed; potential	\$447 Million to \$490 Million per	Yes	https://www.transportation.gov/rural/grant-

Program Name (and grant source)	Potential Priority Grant	Program Description from Grant Source	Relevance to Canby Area Transit	Eligible improvements for CAT				Status as of July 2024	Grant Source Total Amount Available	Cost Sharing or Matching Requirement	Program URL
				Access/ Infrastructure	Vehicles/ Facilities	Service/ staff	Maintenance				
Competitive Program (Federal)		assist in the financing of buses and bus facilities capital projects, including replacing, rehabilitating, purchasing or leasing buses or related equipment, and rehabilitating, purchasing, constructing or leasing bus-related facilities.	funds workforce development activities and trainings, including trainings on zero-emission vehicles.					to reopen Jan 2025	year for FY 2022-2026 - authorized amount		toolkit/grants-buses-and-bus-facilities-competitive-program
Enhanced Mobility of Seniors & Individuals with Disabilities - Section 5310 (State)	X	Eligible projects include vehicle purchases, passenger shelters, purchased services, preventive maintenance, travel training, marketing programs, development of centralized call centers, and equipment that supports transportation to meet the special needs of seniors and individuals with disabilities. Projects must be derived from a local Coordinated Public Transit-Human Services Transportation Plan.	CAT and 99X services rural areas with Census blocks of people over 64 years old (EJScreen), including Aurora, Hubbard, and parts of Woodburn. Upgrades could include bus stop facilities, ADA curb ramps, accessible pathways to bus stops, including sidewalks, accessible pedestrian signals, or other accessible features.		X		X	Discretionary Program: closed. Non-discretionary program: open; applications due Nov 20, 2024, to ODOT. Funds awarded every 2 years.	Varies	Yes, 20% local share/80%	ODOT: https://www.oregon.gov/ODOT/RPTD/Pages/Funding-Opportunities.aspx FTA: https://www.transit.dot.gov/funding/grants/advanced-mobility-seniors-individuals-disabilities-section-5310

Program Name (and grant source)	Potential Priority Grant	Program Description from Grant Source	Relevance to Canby Area Transit	Eligible improvements for CAT				Status as of July 2024	Grant Source Total Amount Available	Cost Sharing or Matching Requirement	Program URL
				Access/ Infrastructure	Vehicles/ Facilities	Service/ staff	Maintenance				
Vehicle Replacement Discretionary Program (State)	X	The purpose of this program is to fund the replacement or right-sizing of vehicles that have met or exceeded their useful life standards.	CAT could use funds to purchase new vehicles.		X			Closed; potential to reopen March 2025.	\$9 million (4 million for Section 5307; (\$5 million for Sec. 5310 and 5311 projects, and pending funding availability, Section 5307 projects)	Yes; 10.27% local; 89.73% federal.	https://www.oregon.gov/ODOT/RPTD/Pages/Funding-Opportunities.aspx
5339 Bus and Bus Facilities Discretionary Program (State)	X	This program funds the replacement and purchase of buses, bus equipment, and bus-related facilities for transportation providers in small urban and rural areas with population of 199,999 or less.	This flexible fund provides resources for bus replacement, maintenance and administrative facilities, transfer facilities, a variety of station/facility types, passenger amenities (including shelters and stop signs), introduction of new technology, bicycle facilities, and other resources. Many recommendations about transit access and improvements could be funded through this discretionary program.	X	X		X	Closed; potential to reopen March 2025.	Varies	Yes, varies. Local match is 10-20%	https://www.oregon.gov/ODOT/RPTD/Pages/Funding-Opportunities.aspx

Program Name (and grant source)	Potential Priority Grant	Program Description from Grant Source	Relevance to Canby Area Transit	Eligible improvements for CAT				Status as of July 2024	Grant Source Total Amount Available	Cost Sharing or Matching Requirement	Program URL
				Access/ Infrastructure	Vehicles/ Facilities	Service/ staff	Maintenance				
State Transit Network Program (State)	X	This solicitation is for two separate competitive statewide solicitations; the STIF Discretionary Fund and the Statewide Transit Network Program. Review the STIF Discretionary and Statewide Network Program Guidance and Grant Application Instructions document in the Application section.	CAT could use funds for variety of projects, either for technical improvements (vehicles, facility improvements, technology, etc.) or for planning work (planning, management, research). Funds may also be used for projects that improve bicycle or pedestrian access to transit.	X	X	X	X	Open; applications due Sept 5, 2024.	n/a	Yes, varies. Local match between 10%-50% depending on project type.	https://www.oregon.gov/ODOT/RPTD/Pages/Funding-Opportunities.aspx Link to Guidebook
Public Works Program (Federal)		The Economic Development Administration's (EDA) Public Works program funds physical infrastructure revitalization, expansion, and improvement projects among distressed communities to improve economic conditions, including business and job growth.	Grant focus is on revitalization through physical infrastructure for economic purposes. CAT could align improvements to stops near employment centers with grant purpose.	X		X		Open	\$600,000 - \$3,000,000	Yes	https://www.transportation.gov/rural/grant-toolkit/public-works-program

Program Name (and grant source)	Potential Priority Grant	Program Description from Grant Source	Relevance to Canby Area Transit	Eligible improvements for CAT				Status as of July 2024	Grant Source Total Amount Available	Cost Sharing or Matching Requirement	Program URL
				Access/ Infrastructure	Vehicles/ Facilities	Service/ staff	Maintenance				
Rebuilding American Infrastructure with Sustainability and Equity (RAISE) (Federal)		Under the Bipartisan Infrastructure Law (BIL), the Rebuilding American Infrastructure with Sustainability and Equity (or RAISE) program provides funding for capital investments in surface transportation that will have a significant local or regional impact. A Benefit-Cost Analysis (BCA) is required for this grant program.	Grant can be used for capital investments, including public transportation projects as stated under Chapter 53 of Title 49, United States Code.	X	X			Closed; potential to reopen winter 2024/2025	\$0 - \$25 million. Minimum amount for capital projects in rural areas is \$1 million.	Yes; minimum 20% local	https://www.transportation.gov/rural/grant-toolkit/rebuilding-american-infrastructure-sustainability-and-equity-raise
Low- or No-Emission Grant Program (Federal)		The Low- or No-Emission Grant Program 5339I provides funding to purchase or lease zero-emission and low-emission transit buses and for acquisition, construction, and leasing of required supporting facilities.	Purchasing/leasing low- or no-emissions buses, including constructing or leasing facilities. Grant able to fund workforce development activities and trainings.		X	X		Closed; potential to reopen Jan 2025	\$71-78 Million per year FY22-26	Yes; 10% -15%	https://www.transportation.gov/rural/grant-toolkit/low-or-no-emission-grant-program

Program Name (and grant source)	Potential Priority Grant	Program Description from Grant Source	Relevance to Canby Area Transit	Eligible improvements for CAT				Status as of July 2024	Grant Source Total Amount Available	Cost Sharing or Matching Requirement	Program URL
				Access/ Infrastructure	Vehicles/ Facilities	Service/ staff	Maintenance				
Advanced Transportation Technologies and Innovative Mobility Deployment (Federal)		The Advanced Transportation Technologies and Innovative Mobility Deployment (ATTIMD) program, also known as the Advanced Transportation Technology and Innovation (ATTAIN) program, provides funding to deploy, install, and operate advanced transportation technologies to improve safety, mobility, efficiency, system performance, intermodal connectivity, and infrastructure return on investment.	Partnership required. Must advance public transportation system through technologies, such as improved integration of payment systems, public access to real-time information, improve safety, etc.	X	X			Closed	Up to \$12 million	Yes; 20%	https://www.transportation.gov/rural/grant-toolkit/advanced-transportation-technologies-and-innovative-mobility-deployment
Strengthening Mobility and Revolutionizing Transportation (SMART) Grants (Federal)		The Strengthening Mobility and Revolutionizing Transportation (SMART) Grant program provides funding to eligible public-sector agencies to conduct demonstration projects focused on advanced smart community technologies and systems in order to improve transportation efficiency and	CAT could apply funds to traffic signal improvements for bus prioritization, connecting vehicles, and live bus trackers at stops. Funds are also eligible for planning and construction activities. Grant source is divided into two stages: Planning and Prototyping (Stage 1) and Implementation (Stage 2).	X	X			Closed; potential to reopen spring 2025	\$250,000 - \$2 Million	No match required for Stage 1 grants	https://www.transportation.gov/rural/grant-toolkit/strengthening-mobility-and-revolutionizing-transportation-smart-grants

Program Name (and grant source)	Potential Priority Grant	Program Description from Grant Source	Relevance to Canby Area Transit	Eligible improvements for CAT				Status as of July 2024	Grant Source Total Amount Available	Cost Sharing or Matching Requirement	Program URL
				Access/ Infrastructure	Vehicles/ Facilities	Service/ staff	Maintenance				
		safety, among the other USDOT Innovation Principles. The program seeks to fund purpose-driven innovation and focuses on building data and technology capacity and experience for state, local, and Tribal governments.									https://www.transportation.gov/grants/SMART

Figure 41: Transit Funding Opportunities

7. CAT's Capital Assessment and Recommendations

CAT Vehicle Fleet

This section describes current assets and practices for CAT’s fleet and bus stops. It focuses on an assessment of three key asset areas for the agency: its fleet of vehicles, its inventory of bus stops, and its current technology systems. Through this assessment of infrastructure replacements and upgrades for both upfront and long-term recurring costs, CAT will be better positioned to provide reliable and accessible transit, more accurately forecast financial needs, proactively maintain its vehicles, and more seamlessly meet ADA and policy requirements.

Existing Fleet

As of 2024, CAT operates 16 vehicles in revenue service and has one vehicle reserved for solely administrative use. The fleet, summarized in **Figure 42**, includes multiple vehicle types. The most common are Arboc cutaway buses, which range between 23 and 28 feet in length. Other vehicle types include Gillig buses and Ford and Dodge vans.

The average age of vehicles in revenue service is seven years. Four of the vehicles in the fleet (two Gillig buses, one Chevy cutaway, and the Dodge Caravan) are 11 years or older.

Functionally, these vehicles meet the agency’s needs for its fixed route and

dial-a-ride service. According to staff, crowding on vehicles is rare, and all operators are licensed to drive both the Type A and Type D bus vehicles. However, problems have arisen due to frequent repairs and the long timelines involved in securing necessary parts. These most frequently affect the Gillig buses and the Arboc cutaways. According to staff, frequent repair needs come from a variety of vehicle parts, from engine problems to HVAC failures. Repair delays are exacerbated by CAT’s lack of an area to stockpile spare parts such as climate control knobs. These include quality control issues, too, on newer vehicles.

According to CAT staff, vehicles have typically been replaced as they reached their useful life standard, measuring by years rather than mileage. However, this is dependent on grant funding availability. Within the current fleet, two Class A Gillig buses are approaching their minimum useful life standard of 12 years, though

their mileage as of May 2024 is less than the minimum recommended useful life mileage of 500,000 miles¹. Seven additional vehicles – five Arboc cutaways, one Startrans cutaway, and the Dodge Caravan

¹ “Vehicle Descriptions and Useful Life Standards.” Oregon Department of Transportation Rail and Public Transit Division. January 2024. <https://www.oregon.gov/odot/RPTD/RPTD%20Document%20Library/Vehicle-Useful-Life-Benchmarks.pdf>

Make	Years	Type	Number of vehicles
Gillig	2013, 2023	35-foot buses	3
Dodge	2013	19-foot, minivan, Admin or supplemental vehicle for Dial-A-Ride dispatchers	1
Arboc	2016, 2018 (2)	23-foot cutaway buses	3
Arboc	2016 (2)	26-foot cutaway buses	2
Arboc	2018, 2019 (2), 2021 (2)	28-foot cutaway buses	5
Ford	2022	20-foot, van	1
Chevrolet	2004	Sedan, Admin vehicle	1
Chevrolet	2010	22-foot, cutaway	1

Figure 42: CAT Vehicle Inventory

CAT Vehicle Fleet

– have already surpassed their Expected Useful Life (EUL) dates.

Following Oregon Department of Transportation (ODOT) base vehicle price estimates, the cutaway and Dodge replacements (if replaced on a one-to-one basis) would incur a replacement cost of between \$460,000 and \$985,000. The cost to replace the two Gillig buses would be between \$960,000 and \$2,000,000². The two Gillig replacements will reach their EUL in 2026. **Figure 43** shows anticipated replacement costs by year.

Regional Transit Benchmarks

For a transit agency of its size that operates two fixed routes and paratransit service, CAT operates a larger fleet than is typically required. While the agency needs a minimum of seven vehicles on a typical weekday, and approximately nine or ten go into service per day, its revenue service fleet includes a total of 16 vehicles.

One reason for the larger fleet is the frequency of repairs and longer time requirements for maintenance. Older vehicles are kept in the fleet as spares to cover

² "Vehicle Descriptions and Useful Life Standards." Oregon Department of Transportation Rail and Public Transit Division. January 2024. <https://www.oregon.gov/odot/RPTD/RPTD%20Document%20Library/Vehicle-Useful-Life-Benchmarks.pdf>

gaps that occur when newer vehicles are taken out of service for maintenance. No local dealerships within Canby can offer repairs to the 10 Arboc cutaway buses, for example, necessitating longer trips to Sandy, Oregon, for repairs. CAT staff have also indicated that the Gillig buses frequently require repairs, as well.

As a result, CAT's fleet is larger than several neighboring agencies that serve towns in the greater Portland metro area of similar sizes. The City of Sandy, about 20 miles northeast of Canby and 25 miles outside of Portland, operates four fixed-route lines, including regional routes to nearby Clackamas and a circulator shuttle. According to the Federal Transit Administration, as of 2022 Sandy Area Metro (SAM) had 11 vehicles in revenue

service³. This includes vehicle types such as 35-foot Gillig buses and smaller trolley buses.

Wilsonville operates the South Metro Area Regional Transit (SMART) system, a larger agency that provides some indications of future directions for CAT. SMART serves the area to the northwest of Canby as well as connections into Canby. As the agency operates more lines and covers a larger area, it has a larger fleet, more than 35 vehicles in revenue service. These include larger buses such as 40-foot diesel-electric hybrid buses and cutaway buses. In 2019, SMART also added two 35-foot Proterra Catalyst buses to its fleet⁴.

³ "2022 Annual Agency Profile – City of Sandy." Federal Transit Administration. 2022. https://www.transit.dot.gov/sites/fta.dot.gov/files/transit_agency_profile_doc/2022/00389.pdf

⁴ "SMART Awarded \$1.45 Million Grant for New Electric-Powered Buses." Wilsonville, Oregon. <https://www.ci.wilsonville.or.us/administration/page/smart-awarded-145-million-grant-new-electric-powered-buses>

Figure 43: Potential Fleet Replacement Costs

	End of EUL Vehicles	One-to-One Approach	Ford Transit Vans Re-placing Cutaways (assumes E4 class)
Currently Past EUL by date	5 Arboc Cutaways, 1 Startrans Cutaway, 1 Dodge van	\$500,000 -	
\$1,080,000	\$140,000 - \$420,000		
2025	None	N/A	N/A
2026	1 Arboc Cutaway, 2 Gillig 35', 1 Ford TCN	\$554,000 - \$2,149,000	\$1,040,000 - \$2,195,000
2027	2 Arboc Cutaways	\$160,000 - \$340,000	\$40,000 - \$120,000
2028	2 Arboc Cutaways	\$160,000 - \$340,000	\$40,000 - \$120,000

CAT Vehicle Fleet

Expected Growth Needs

CAT’s fleet generally meets the needs and demands of today’s riders. Ridership in recent years has grown with the addition of more revenue service hours through the Canby Loop line described above. A key driver for the size of CAT’s current fleet, rather than ridership and service needs, is the frequency and long timeline for repairs and maintenance detailed above.

The CAT fleet is generally maintained to useful life standards, with some exceptions in the age of older vehicles. The agency is meeting this need currently, but the need will continue into the near future. Six vehicles have surpassed their useful life as tracked through vehicle age, not mileage, and two Gillig buses detailed above are nearing their end of useful life.

CAT staff have indicated a desire to replace some cutaways with Ford Transit vans. But following ODOT capital cost assumptions, the most expensive Class E vans cost approximately 16% more per mile of useful life than the most expensive Class D cutaway buses.

Lastly, the new facility building, in development as of spring 2024, will include electric charging infrastructure. This opens the door to new electric vehicle types

and expands the type of vehicles that can replace current vehicles as they age out. The addition of electric vehicles will require additional training and creation of new standards and best practices.

Recommendations and Replacement Plan

Right-size and optimize the fleet. Currently, a significant number of CAT’s fleet is beyond its useful life or will near its useful life in the next two years. As CAT replaces vehicles, the agency should consider vehicle sizes and types that match the agency’s needs. Current ridership data indicates that the electrification process may provide an opportunity to reconsider vehicle sizing needs.

Further, as a vehicle reaches the end of its useful life, the agency should evaluate if the fleet size can be reduced or if maintenance needs still dictate the current fleet size. A smaller fleet may help save CAT funds, but with minimal maintenance staff and the lack of local garages to supplement them, any reduction in fleet should be carefully considered. It may be necessary to maintain a large number of vehicles as spares or in service rotation until a more efficient repair system may be established.

Lastly, as parts availability and long

maintenance timelines are a recurring constraint on the number of vehicles available in service, repair ease should be a factor considered in the acquisition of new vehicles. Canby has a local Ford dealership, which allows more seamless repair services to smaller Ford vehicles such the Ford Transit van. While Ford discontinued the Transit Connect Van (TCN) in 2023, the slightly larger Ford Transit XL and XLT are still sold by Ford, as are pre-owned TCN vehicles.

Needs related to electric vehicles

The inclusion of electrical charging infrastructure in the new CAT facility will allow for the addition of electric vehicles to the fleet. As they reach the end of their useful lives, older Gillig and Arboc buses may be replaced by electric buses. These will require new standards of maintenance and operator trainings, but also may involve less frequent maintenance due to fewer moving engine parts. According to a survey from the Transit Cooperative Research Program, transit agencies who have added electric vehicles have recommended that agencies use the same vendor for charging infrastructure and for new vehicles¹.

¹ “Electric Vehicle Maintenance Best Practices.” National Rural Transit Assistance Program. November 2022. <https://www.nationalrtap.org/Resources/>

CAT Vehicle Fleet

As of June 2024, CAT has not identified which electric charging devices will be installed in its future maintenance facility. Broadly, electric vehicles that would meet CAT’s needs include electric buses, vans, and cutaways, depending on the vehicle they are replacing. Potential manufacturers and models include:

- **Ford:** The E-Transit series offers several electric cutaway options, beginning at \$51,595 for a chassis cab to be converted into a transit shuttle. Ford does not currently offer an electric passenger Transit Van (only cargo configurations), but other manufacturers such as Lightning eMotors offer electric passenger vans constructed from the Ford Transit Van chassis².
- **GreenPower:** GreenPower produces a range of electric transit vehicles that range from a 19-passenger van, the EV Star, to a 40-foot, 40-passenger bus, the EV350. The most applicable models based on CAT’s current fleet and expressed needs are the EV Star van, EV Star Mobility Plus cutaway, and the EV250 30-foot bus³.

- **BYD:** BYD produces a range of

Best-Practices-Spotlight/Electric-Vehicle-Maintenance
2 “Lightning ZEV3 Transit Passenger Van.”
Lightning eMotors. <https://lightningemotors.com/zev3-transit-passenger-van/> .
3 “EV250 Bus.” GreenPower Motor Company.
<https://greenpowermotor.com/gp-products/ev250-bus/> .

medium-to-large size electric transit vehicles, as well as larger-capacity buses. The 30-foot K7M bus would be most relevant for CAT’s fleet and has a capacity of 22 seated passengers and a range of 158 miles⁴.

Electric transit vehicles have much higher purchase prices than diesel and natural gas vehicles but they offer cost savings over their lifetime. The Oregon Department of Transportation and Natural Resources Defense Council estimate a typical electric transit bus costs \$753,000 in 2019 dollars (\$939,540 in 2024 dollars⁵). This estimate does not reflect smaller transit vans and cutaways.

Data monitoring

Fleet Pro has traditionally been useful in monitoring the fleet status and identifying routine maintenance needs. As described further below, as Fleet Pro largely depends upon manual data entry by operators, additional staff training may assist in standardizing input entered into the system. Accurate mileage and maintenance data will be key for anticipating vehicle replacement needs and covering out-of-service vehicles.

4 K7M – 30’ Electric Bus.” BYD. <https://ride.co/products/k7m/>.
5 “Guide to Transit Electrification.” Oregon Department of Transportation. 2020. <https://www.oregon.gov/odot/RPTD/RPTD%20Document%20Library/Transit-Electrification-Guide.pdf> .

Maintenance

Due to difficulties repairing vehicles locally, CAT should continue to maintain vehicle redundancy to anticipate long repair cycles. This redundancy should focus on the vehicle types that require longer repairs, ensuring that larger vehicles are available to cover peak ridership on the 99X route, for example, when a Gillig bus is taken out of service.

Between repairs, CAT should stockpile parts that are difficult to procure to save time on future repairs. This should be weighed with data on the age of a vehicle and whether the retirement of that vehicle is imminent (data tracked through Fleet Pro). CAT should continue to budget and plan proactively for repairs and preventative maintenance to avoid longer repair cycles.

CAT Bus Stops

CAT's system includes bus stops on the Canby Loop and on the 99X, within and outside of Canby City Limits. There are 32 bus stops on the Canby Loop, 20 bus stops to the north between Canby and Oregon City, and 23 bus stops to the south between Canby and Woodburn. Canby's bus stops include a combination of **Signs** (Large and Small), **Poles** (Including use of light poles), **Shelter and Benches**, and **Trash receptacles**.

Canby Loop

For Canby Loop stops, CAT has more flexibility about stop amenities and placement since they are all located on city streets and therefore under the City's jurisdiction. When CAT was first created, about 20 years ago, Canby staff, including CAT and Public Works staff, rode the route and placed the stops together to set up the initial system. The stops are placed approximately ¼ mile (1,320 feet) to ½ mile (1,760 feet) apart.

A typical stop on the Canby Loop includes a sign and pole on the curb side. Most stops on the Canby Loop have sidewalks adjacent to the roadway without a buffer. Some of the stops have a parking lane leading up to the bus stop location.



99X

CAT has less flexibility to address stop configuration and amenities for the remaining 99X stops because they are located on ODOT's right-of-way and require more coordination and ODOT approval.

Many of the stops along OR-99E do not have a concrete landing area nor sidewalk connection.

For bus stops along OR-99E, as part of the recent ODOT roadway construction project, nine stops were permitted to receive shelters and one stop a bench.

For a detail description of the existing conditions for each bus stop in the system, go to "Appendix B: Bus Stop Inventory"



Figure 44: CAT bus stop locations.

Bus Stop Recommendations

This section provides guidance for the City of Canby to consider when developing standards for the siting and design of bus stops. These guidelines are based on the Oregon Department of Transportation (ODOT) Public Transportation and Guidelines in the ODOT Highway Design Manual and national best practices from the NACTO Transit Street Design Guide¹².

For a detail description of issues and improvement recommendations for each bus stop in the system, go to "Appendix B: Bus Stop Inventory"

Siting

Spacing

- Destinations: place bus stops near major destinations and land uses such as shopping centers, schools, hospitals, and parks to maximize convenience and usage.
- Bus stop spacing: balance accessibility with service efficiency by following general spacing guidelines based on the land use context. When placing stops follow these recommendations

¹ ODOT Traffic-Roadway Section, Highway Design Manual, Part 700 Public Transportation and Guidelines: https://www.oregon.gov/odot/Engineering/Documents_RoadwayEng/HDM-0700.pdf

² Transit Street Design Guide, NACTO: <https://nacto.org/publication/transit-street-design-guide/>

based on urban development and density:

- **In Dense areas** with a lot of activities and good walkability conditions, strive for bus stops every 3 blocks or 780 feet. Stops placed closer together should only occur in special cases, such as for safety or specific stop-by-stop needs. In nonresidential or employment zones, use an equivalent density of 56 persons per acre. Regional Centers, Town Centers, and Main Streets should be included in these dense areas. This placement would allow service to be reliable and fast in dense areas, while concentrating boardings in main stops.
- **In suburban and rural areas**, walking conditions are essential when determining bus stop locations. If stops are too far apart, passengers might face long, unpleasant walks along highways (e.g., Route 99X) or struggle with urban obstacles. In these low-density regions, where buses make fewer stops due to less frequent use, placing stops too far apart to maintain speed would not compensate for the negative impact of poor walking conditions, leading to reduced ridership. Instead, placing

stops closer together in areas with poor walking conditions can prevent difficult walks to the bus stop without significantly affecting the route's speed, given the typically low ridership in these areas. Stops should be placed as needed based on the above criteria but no closer than every 1,000 feet.

Placement

- Prioritize placing stops near intersections. The three big advantages of bus stops near intersections are:
 - Most intersections include crosswalks which allow people to easily cross to and from the stop, improving access from nearby businesses and homes.
 - The overall walking distance from a neighborhood to a stop will be shorter if the stop is located at the intersection of multiple walking routes (in this case, sidewalks).
 - A bus stop is more visible in all directions when it is near a corner.
 - Finally, when two bus routes are on cross streets, locating both of their bus stops near the corners makes it easier for transferring passengers to see the stop they need to walk

Bus Stop Recommendations

to, and makes their walk shorter.

- **Nearside vs. farside stops:** Generally, farside placement is preferred on streets with multiple lanes where motorists may pass the stopped bus. If the street is configured in such a way that motorists may not pass the stopped bus (e.g. only one lane per direction, and the bus is stopped in the lane) nearside placement is appropriate. Farside bus stops at signalized intersections can also improve the bus's operating speed and reliability.
- **Safe crossings:** ensure bus stops are placed near safe pedestrian crossings, such as crosswalks or intersections with traffic signals or stop signs to facilitate safe and easy access for pedestrians.

Design

Bus Stop Zone

- **Deceleration and acceleration:** ensure enough area is provided along the curb for bus deceleration, stopping, and acceleration. At nearside stops a minimum length of 100 feet is appropriate. Minimum of 80 feet at farside stops, and minimum 150 feet at mid-block stops.
- **Bus stop pads:** bus pads are areas of

the roadway surface at bus stops that are usually constructed of thick and/or reinforced concrete slabs to address the common issue of asphalt rutting at bus stops, which increases maintenance costs. Bus pads should be at least 10 feet wide (including gutter pan if present) to accommodate both wheels of a bus. The length of the bus pad should be sufficient to at least extend to include the rear wheels of the bus.

- **Curbs:** the curb alongside the bus stop should be painted red to help prevent motorists from parking within the bus stop zone so that all bus riders can safely access the curb and bus ramps can be deployed. Curb height and design should be informed by local conditions or design standards.
- **Bus pullouts:** consider the pros and cons of bus pullouts where the bus exits the travel lane to drop off and pick up riders. Generally, they are appropriate for high-volume (greater than 250 vehicles/peak hour) and/or high-speed (greater than 40 mph) arterials. Since most ODOT facilities are classified as arterials, they may be the default for ODOT facilities, however, they can be a challenge for transit operations, requiring more time for the bus operator to wait for a break

in traffic to reenter the travel lane. If bus pullouts are used, farside bus stop placement is preferred because traffic control allows breaks in traffic.

Amenities

- Stop amenities should be consistent by a set of bus stop criteria based on ridership and urban development patterns:
 - At lower ridership or physically constrained stops (e.g., narrow sidewalks), the sign may suffice.
 - At higher-ridership, less-constrained stops where multiple routes stop and people make transfers, amenities such as benches and shelters should be pursued. These can help make the waiting experience more pleasant, especially during cold and wet seasons.
 - At stops with known high numbers of elderly or disabled travelers nearby should be prioritized for ADA improvements and shelters.
 - At locations with an adjacent parking lane, CAT and Canby Public Works should work together to ensure that parked cars and parking are not encroaching on the buses' paths to the curb.

Bus Stop Recommendations

- For locations that require a shelter follow these guidelines:
 - Shelters should provide roofs and side panels to protect passengers from weather to the extent possible.
 - Shelters should not block sight distance. Intersections and driveways should still have adequate visibility with shelters installed. Shelters should be located at least 5 feet from the edge of the curb.
 - Shelters should be placed on a smooth, flat surface, such as a concrete platform. Maintain a minimum clear space of 2.5 x 4 feet within the shelter space to allow someone using a typical wheelchair to use the shelter.
 - An accessible route (with a minimum width of 4 feet) should connect the shelter space to the boarding area.
 - In the absence of shelters, site bus stops at locations where vegetation or building shadows provide shade.
- Seating and additional amenities: include space to rest, either a bench or leaning rail, and space for a wheelchair user next to the bench. Consider additional amenities such as garbage cans, bicycle parking, and real-time arrival information.
- Treatments at unsignalized intersections: CAT stops - especially those outside of the city - are not at intersections and therefore there is no legal crosswalk (marked or unmarked) close by.
 - At high ridership stops and destinations, unsignalized intersections should receive enhancements such as high visibility marked crosswalks and warning signs. Quick build elements such as paint and post curb extensions or pedestrian refuge islands can also enhance the crossing experience, shortening the crossing and narrowing the roadway. Treatments such as rectangular rapid flashing beacons, pedestrian hybrid beacons, and signals should be explored when warranted by both pedestrian desire lines and volumes and ability to safely cross traffic volumes on the main roadway. An example of where a signal should be explored is at OR-99E & Haines Rd to provide safe pedestrian access to Canby Regency, a mobile home community. To install more expensive but permanent infrastructure (such as raised crossings

and concrete curb extensions that include a bus loading area) CAT should look for opportunities through: a) Other City or ODOT corridor projects, b) Stop treatment capital construction projects

- Treatments at signalized intersections: Signalized intersections provide an opportunity to improve the pedestrian and transit user experience as well. Nearly all riders will walk across the road on one or both ends of their trip. Collaborate with design projects to include high-visibility crosswalks and leading pedestrian intervals at signalized intersections.

Lighting.

Lighting is a key element in making transit users feel safe, especially while riding after dusk or before dawn. Lighting provided at bus stops can have additional benefits: pedestrians passing through the area can also appreciate the sidewalk or intersection being lit, operators can better see transit users waiting at a stop, and it can help transit users alight the bus more easily.

Bus stops should ideally be located within 50 feet of an overhead light source. In shelters, ensure lighting and clear panels for visibility and safety. Avoid lighting that will backlight people waiting at the bus stop

Bus Stop Recommendations

because it makes it difficult for the bus operators to see people at the stop.

Installing lighting fixtures, such as the LED Cobra Head, to power poles is one of the most cost-effective ways of introducing more lighting without needing new poles and foundations. Where a power pole is not located in a convenient location, a pole and foundation should be installed for the most robust lighting. Areas along OR-99E without formal pedestrian infrastructure should also receive lighting as funding becomes available. Possible lighting solutions may include solar-powered transit lights integrated directly into bus stop poles. One important consideration is that a light's built-in battery have enough capacity to sustain several days' charge in the event that inclement weather prevents the solar cell from recharging. Relevant products for solar lighting affixed to stop poles include:

- Brasco SolStop, which integrates a rider-activated button or sensor on the stop pole with a solar-powered light³.
- UrbanSolar PVStop+, which offers either rider-activated or dusk-to-dawn lighting settings, and can run at least five days between solar battery charges⁴.

³ SolStop. Brasco International. <https://www.brasco.com/products/solstop/solstop/>.

⁴ "Transit Pole Lighting." UrbanSolar. <https://urbansolarcorp.com/transit-lighting/transit-pole-lighting/>.

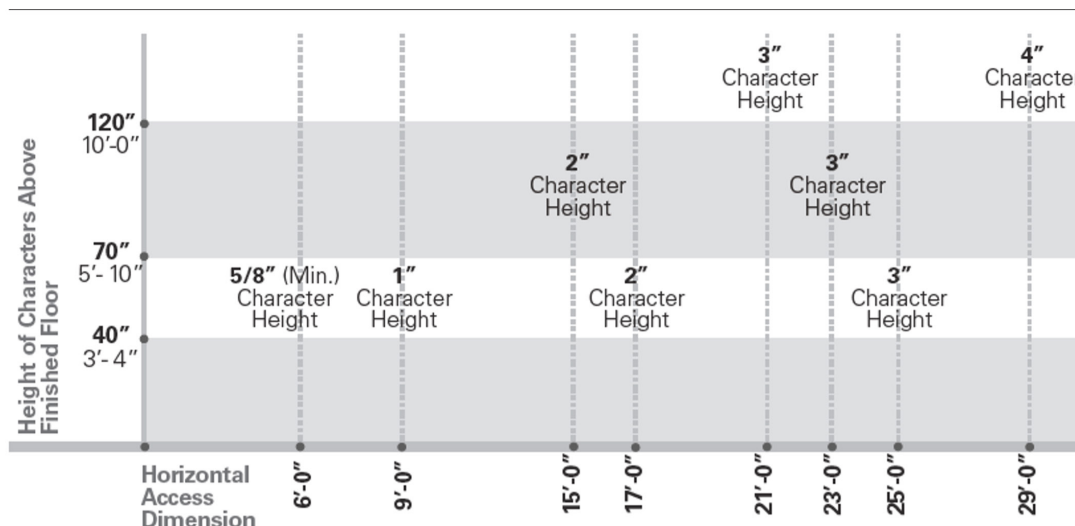


Figure 46: Text sizing for bus stop signage



Figure 45: Examples of effective bus stop signage

Bus Stop Recommendations

- Smart Era Lighting Systems Transit Pole Solar Light, which offers options for dimmer automatic settings that may brighten when users activate the button, and also boasts⁵.
- Solar Illuminations BK10 Bus Stop Lighting System, which offers options to upgrade for additional battery capacity. Package begins at about \$800 per light⁶.

Bus Stop Sign Design

Sign Placement

- APTA recommends that a bus stop sign should be able to be seen from a 300-500-foot distance easily in both directions. The white background of CAT's current sign design makes it blend into the background, especially on cloudy days. CAT should choose colors for the signs so that they don't need to be maintained frequently to retain contrast, even after periods of being exposed the elements.
- Height and offset from curb: place bus stop signs 7-9 feet from the ground

(measured from the bottom of the sign to the top of the sidewalk) for visibility above parked cars and other obstacles. Place bus stop sign poles 2-4 feet offset from the face of curb.

- Exclusive poles: Install bus stop signs their own exclusive pole, as opposed to being affixed to existing sign poles.
- Ensure standard bus stop signs are at least 18 inches wide by 24 inches high.
- Use large, high-contrast fonts (at least 2 inches in height) for readability from a distance.
- CAT has recently gone through a rebranding process. As funding becomes available, CAT should replace signs with new branding, graphics, colors, and text to meet accessibility standards. While tactile signs and braille are not required, many agencies have started to add them to bus stop signs to provide additional accessibility for vision-impaired transit users. Detailed text, such as a schedule, should be located farther down the sign at a smaller font for people standing at the stop can read it.

Stop names and numbers

- Place unique station numbers (such as the Stop IDs) in an easily readable spot

on the sign assembly along with information about how to access schedules and maps (such as a QR code).

- Establish and use consistent stop names across many media (e.g. choosing one of "NW 2nd Ave & N Douglas St" or "2nd & Douglas"). These names appear in online maps, Google Maps, Passio Go! App and transit trip planners' instructions. They should be consistent with the names used by other transit agencies that share stops with CAT, to make it easier to identify and search for a stop.

Service Detours

Temporary Stops

- In the event of potential disruptions to bus routing or stops due to construction or other causes, existing bus stops should remain open and accessible with at least a 4-foot-wide path.
- If it is not feasible to serve the permanent stop, a temporary stop should be provided. The temporary bus stop location should adhere to the guidance above, ensuring the location is safe, visible, and ADA accessible.

⁵ "Transit Pole Solar Light." SELS: Smart Era Lighting System. <https://selsled.com/products/transit-pole-solar-light>

⁶ "BK10 Solar Bus Stop Lighting System." Solar Illuminations. <https://www.solarilluminations.com/solar-bus-shelter-transit-lights/bk10-solar-bus-stop-light>.

Bus Stop Recommendations

Detour Signage

- Rider notice signs with information about the bus stop closure and the location of the temporary bus stop shall be installed at all bus stops with detoured service.
- Post notices to notify transit users and the surrounding community of the temporary bus stop change at least seven days in advance, or as soon as possible to allow frequent weekly riders to be informed of the upcoming change.
- A temporary bus stop should be signed by posting a temporary bus stop sign.
- Signage may be made of laminated paper sheets that are taped or tied to poles and shelters.

ADA accessibility

Accessibility for the most vulnerable populations should be prioritized. This includes:

- Stops near senior or low-income housing. Stops on OR-99E along gravel shoulders for alighting should be prioritized to receive concrete pads to make the stop more permanently accessible.
- ADA landing pad: ensure compliance with ADA by providing an 8-foot by 5-foot landing pad at bus entrances

and exits. A smooth, stable surface (such as concrete) should be used. The landing pad provides a flat space for someone in a wheelchair to board or exit the bus. The pad can be part of an adjacent sidewalk.

- Coordinate with ODOT to make improvements on stops for the 99X route.
- For the Canby Loop, confirm curb ramps accessing bus stop are available and meet ADA requirements.
- When adding amenities such as signs, benches, or shelters to bus stops, a 5-ft ADA pedestrian access route should remain clear around amenities.
- Sidewalks: maintain a continuous clear accessible pedestrian path at bus stop areas. There should be a minimum 4-foot-wide sidewalk that is not encroached by bus stop signage, shelters, benches, and other amenities; however, a 5-foot-wide or greater sidewalk is preferred.
 - CAT should create a list of curb ramps near stops that should receive reconstruction to make them accessible and, over time, work with Canby Public Works to reconstruct non-compliant ramps through other infrastructure

projects.

- Provide a clear and leveled sidewalk or pedestrian path from the bus stop to the nearest intersection which should include curb ramps with tactile strips on each corner.
- Boarding area: provide a level boarding area with a maximum slope of 2.1% (as measured perpendicular to the street)



Figure 47: CAT paratransit van.

Technology Assessment

Internal Operations Software

CAT currently uses three main technologies to track vehicle condition, manage scheduling, and monitor system performance.

- **Fleet Pro:** Fleet Pro tracks vehicle condition and mileage. CAT uses it to schedule annual and preventative maintenance based on mileage and other data. Information is manually entered by operators, which historically has been a point of difficulty, as some data is not entered in consistent formats.
- **Passio:** CAT uses Passio for scheduling and service performance metrics such as on-time performance. Passio has historically been a challenge for CAT staff, but recent changes have smoothed the work process and generated more reliable schedule reports. Passio is also the rider-facing platform described below, allowing riders to track real-time arrivals on the system. The Passio system also provides Route 99X on-board audio announcements of upcoming stops.
- **CTS Software/Trip Master:** Canby employs a program from CTS to manage dial-a-ride paratransit requests. Software crashes have occasionally occurred due to Microsoft

updates, but otherwise the system works well for CAT staff.

Public Information

Rider-facing information is largely made available through two venues: the City of Canby website and through the Passio app. Through the city website, CAT information directs users to information about the Canby Loop and 99X lines, though no overall system map is available.

Links to download the Passio Go app are

provided, and users may also use a browser-based version. **Figure 48** depicts how the Passio Go app shows both real-time route information as well as serve disruption alerts. The website also directs riders to a Ride Clackamas interactive map of routes and a trip planner. The interactive map offers more information about each route and displays connections run by other local agencies. However, CAT staff note that the Ride Clackamas information does not update unless CAT staff prompt changes. As such, CAT currently refers riders to the Passio Go app, which reflects any routing changes.

CAT also publishes a GTFS (General Transit Feed Specification) with their current schedules so that people can get info about CAT through whatever transit app they choose (Google, Apple, Transit App, etc).

Fare Information

Fare information is also available on the website, but no online purchasing option is available for passes. To pay through a computer, users must fill out a PDF order form and submit it via email. Other options are offered at the CAT

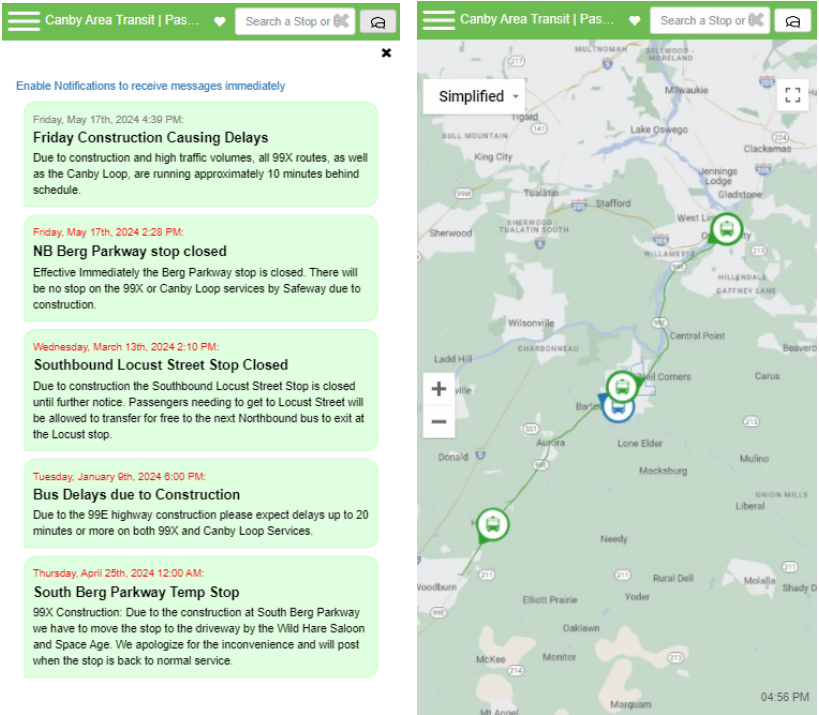


Figure 48: Passio Go app screenshots

Technology Assessment

office, on the bus from an operator, or via phone. Passes are available either as a punch card of 24 rides or a monthly pass.

Regional Technology Comparisons

The City of Wilsonville’s SMART system has similar fare pricing as Canby, with base fares at \$1.60. The agency uses Umo, however, to provide electronic fare payment. The introduction of Umo occurred recently, in August 2023, and SMART no longer offers punch card passes. Fares loaded onto the Umo app may also be used through the Cherriots system operated by the Salem Area Mass Transit District.

SMART directs riders to a custom application, MySMARTbus, for bus arrival and real-time information. As with Passio Go, the information is also available on a browser-based map.

Fare and routing systems offered by Sandy Area Metro are very similar to those of CAT’s. SAM offers a \$1 base fare. SAM riders may purchase passes in person from an operator on a bus, or at a number of public buildings around the city of Sandy. No online options are available.

Provider	Advantages	Considerations
Passio	- Existing system, staff familiarity - Recent progress in working with Passio staff to address problems from setup - Simple browser and app interface, does not require use of phone (can be accessed on desktop)	- Historical performance problems with initial data setup - Limited app capabilities for payment, if CAT desires to pursue app payment
UMO	- UMO rider app includes both tracking and payment capabilities in one place - App-based payment options via partnership with Cubic	- Procurement process required - Data setup and migration required - Emphasis on rider experience, accounts
Swiftly	- Proactive bunching and performance management tools - Emphasis on fleet performance management - Partnership with the Transit app for real-time arrivals, and offers browser-based arrival times map.	- Procurement process required - Data setup and migration required - No dedicated real-time arrival mobile app, but Swiftly provides data API for third party apps, such as Google, Apple or Transit - Swiftly did not bid during the last CAT RFP.

Figure 49: Fare Technology Options

Technology Assessment

CAT should explore alternatives to Passio. While recent changes have improved CAT's experience using Passio, the remaining three years of the Passio contract offer an opportunity to assess its utility for CAT and explore alternatives. Other technologies are available that would provide benefits for riders as well as for CAT's reporting internally. Potential alternatives to Passio are listed in **Figure 49** on page 70.

Review options for onboard displays.

CAT currently uses Passio equipment to provide audio stop announcements on the 99X route. The installation of onboard displays showing the upcoming stop would complement these and improve the accessibility of that onboard information to more riders, especially those who might not hear the announcements or those who have difficulty understanding English place names by ear but can recognize them in writing.

Consider real-time info at stops.

For riders who may not have a phone or have not downloaded the Passio Go app, real-time arrival signs installed at major stops like the Canby Transit Center would offer information on arrivals and service disruption. E-ink products such as SeekInk displays or Vix Technology signs are

weatherproof and require low amounts of electricity, such that they do not require a hardwired power source and are powered by batteries or a solar panel.

Plan for upgraded fare solutions.

The current process to buy fare passes for CAT rides is not intuitive for most riders and involves additional steps and time. CAT should consider how the advent of an app-based fare payment system may be integrated into its system, and what kinds of capital improvements may be needed in the form of onboard readers.

An electronic system could allow CAT to institute new fare types, such as weekly passes or student discounts, more flexibly. It could also allow CAT to share fare systems with a neighboring system such as SMART, improving the riding experience for any rider transferring between the two systems.

8. Policy for Transit-Supportive Infrastructure

Policy assessment and recommendations

This section outlines transit friendly policy recommendations to guide the City in implementing the Transit Master Plan.

We have assessed existing city codes and policies (specifically the Public Works Design Standard) to identify the gaps and barriers to transit-supportive development. This section provides recommendations for code amendments and policy changes that would enhance the transit environment and operations in Canby, based on national best practices. A list of resources that the City may refer to for best practices related to policy and design of transit-supportive infrastructure is in "Appendix C: Summary of Recommended Policies".

Before presenting the recommendations for transit-supportive infrastructure, this section provides an assessment of the existing city codes and policies that are relevant to transit development. Eight chapters in the city code were reviewed, along with the Public Works Design Standards. The codes and policies are organized by chapter number and title and include a summary of their main provisions and implications for transit. Some of the topics covered are:

- Zoning regulations,
- Parking rules,
- Curb management,

- Pedestrian safety,
- Intersection design, and
- Bus stop siting and design.

These codes and policies provide the baseline for identifying potential barriers and opportunities to enhancing the transit environment and operations in Canby.

Policy assessment and recommendations

16.08: General Standards and Procedures

City code section 16.08 outlines various zoning-related rules, including compliance requirements for land use, specifics about zoning maps, and the establishment of zone boundaries. It covers regulations for zoning newly annexed areas, prohibited parking of large vehicles in residential areas, the creation of legally compliant lots, and conditions for reducing area and yard sizes. Additionally, it includes requirements for sidewalks, height allowances for structures, and regulations for temporary and mobile vendors, as well as guidelines for traffic impact studies and transportation improvements.

Relevance to Transit Development

Regulations in this code include requirements for sidewalks with curb ramps in commercial areas, standard transportation improvements (e.g. installation of pathways, fencing, and lighting), and transportation/traffic impact studies. These regulations ensure safe and comfortable environments for pedestrians by mandating adequate sidewalks and clear visibility and sightliness.

Potential Barriers and Opportunities to Support Transit Development

1. While sidewalks are mandated in commercial areas, there is no requirement for other zones which could limit pedestrian safety and access in those areas. **Opportunity:** Consider requiring sidewalks in all zoning areas, including residential, commercial, and overlay zones, ensuring continuous and safe pedestrian pathways to access transit services throughout the city.
2. There is no requirement for curb ramps to have tactile warning strips. **Opportunity:** Consider requiring all new and modified curb ramps in the city include tactile warning strips throughout the city to meet Americans with Disabilities Act (ADA) requirements and best practices¹.
3. Impacts on transit access and operations are not explicit considerations in TIS. **Opportunity:** Consider including potential impacts to transit access and operations as a determinant for when a TIS is required and ensuring that the potential impact on transit access and operations is considered in the scoping checklist.

¹ Public Right-of-Way Accessibility Guidelines (PROWAG), U.S. Access Board: <https://www.access-board.gov/prowag/>

Policy assessment and recommendations

16.10: Off-Street Parking and Loading

City code section 16.10 outlines the requirements and exceptions for off-street parking in the city. It specifies that new buildings, changes in building use, or enlargements must meet the defined parking standards unless exceptions are met. Certain areas, like a specified zone in the C-1 district, are exempt from these requirements. Additionally, the code includes provisions for shared parking, reducing parking spaces under certain conditions, and for bicycle parking (including at transit centers/park-and-rides).

Relevance to Transit Development

Regulation of off-street parking can promote the use of transit by reducing dependency on private automobiles and encouraging other transportation modes. Exemptions for certain areas from parking requirements support mixed-use developments and denser urban environments, which are conducive to transit ridership and transit-friendly communities. Additionally, requiring bicycle parking can support transit riders bicycling to/from transit with a secured place to store their bicycle.

Potential Barriers and Opportunities to Support Transit Development

1. Parking minimums can further dependency on private automobiles, discourage dense mixed-use development, and hinder the ability to create places that have short walking distances between destinations and transit stops. **Opportunity:** Remove parking minimums and establish parking maximums citywide, in more districts, or in proximity to transit stops.
2. Standards needed to allow shared parking may be too limiting for properties to share parking (e.g.: legal documentation) and may lead to more parking capacity in areas that can increase walking distances between destinations and transit stops. **Opportunity:** Consider loosening standards for shared parking spaces.
3. Specifying minimum widths for drive-ways might prioritize vehicle access over pedestrian safety, potentially leading to wider road crossings and reduced walkability in the area. **Opportunity:** Consider specifying maximum widths for driveways and standards for large turning radii, and right-in-right-out.

4. Standards for parking bumpers or wheel stops may not be adequate to prevent cars from encroaching on adjacent pedestrian walkways. **Opportunity:** Consider including decorative fencing to separate parking lots from pedestrian walkways.

Policy assessment and recommendations

16.41: Downtown Canby Overlay Zone

City code section 16.41 aims to encourage intense, pedestrian-friendly development in the core and transitional commercial areas, while allowing more auto-oriented development in the outer highway commercial area. The code sets specific standards for building setbacks, floor area ratios, building heights, and architectural elements to create a vibrant, cohesive downtown environment. It also includes guidelines for creating a pedestrian-oriented environment, enhancing accessibility, and ensuring compatibility among adjacent uses.

Relevance to Transit Development

The “Downtown Canby Overlay (DCO) Zone” supports transit-friendly development by encouraging higher-density and mixed-use projects, which increases ability of transit to service multiple trip types and populations. The code emphasizes pedestrian-oriented design, requiring features like transparent ground-floor windows and direct pedestrian pathways, which enhance walkability to make transit more accessible.

Potential Barriers and Opportunities to Support Transit Development

1. The code does not explicitly mention the integration of transit services within the DCO, not leveraging the benefits of transit access to these amenities and opportunity for improved connectivity through trails. **Opportunity:** Consider amending the code to explicitly ensure all new developments provide direct pedestrian pathways connecting to transit stops and other key neighboring destinations.

16.46: Access Limitations on Project Density

City code section 16.46 establishes guidelines for vehicular access to residential developments, particularly in higher-density areas. It outlines specific standards for the number of units permitted based on the number and type of access points, ingress and egress requirements, joint and cross access, and access connection spacing. The code aims to ensure adequate and safe access for residents and emergency services while promoting efficient traffic flow and minimizing conflicts between vehicles, pedestrians, and

cyclists.

Relevance to Transit Development

By mandating joint and cross access between properties and ensuring safe ingress and egress, the code promotes efficient traffic flow and helps minimize conflicts between motorists and pedestrians. These measures support a well-connected street network, improving accessibility for pedestrians and transit users, and can help contribute to a more transit-friendly environment.

Potential Barriers and Opportunities to Support Transit Development

2. Requirements focus primarily on vehicle access and may not adequately consider the needs of pedestrians, leading to potential conflicts and safety issues. For example, minimum road widths, ingress/egress requirements, and shared access/cross access do not consider pedestrian access. **Opportunity:** Consider strengthening the design standards to adjust minimum road widths, and ensure ingress, egress, and shared/cross access minimize conflicts with pedestrian pathways.

Policy assessment and recommendations

16.49: Site and Design Review

City code section 16.49 outlines the procedures and criteria for the site and design review of new developments and major modifications. The purpose is to ensure high-quality design, aesthetic appeal, and functionality of structures and landscaping in the city. The code establishes a Site and Design Review Board, defines the application process, and sets specific standards for architecture, landscaping, pedestrian and bicycle facilities, and parking.

Relevance to Transit Development

The code supports transit-friendly development by ensuring new projects provide safe and convenient pedestrian and bicycle access, and integrating walkways that could be used to connect transit stops and neighborhood activity centers. The code requires landscaping and parking lot designs that enhance comfort and safety. Additionally, the site and design review process mandates that developers consider the impact of their developments on the overall aesthetic and functional integration with the surrounding environment, which can include transit access and services.

Potential Barriers and Opportunities to Support Transit Development

1. The code does not explicitly require the incorporation of transit infrastructure, such as bus stops and shelters, in new developments. **Opportunity:** Consider requiring new developments to contribute a fee into a fund for new bus stops and other transit amenities, or to dedicate property in lieu of the fee. However, such infrastructure should not be automatically placed adjacent to new developments, but rather should be decided in consultation with CAT staff. There are limits on where transit service can operate, and infrastructure should only be placed where it is very likely to support future service operations.
2. While pedestrian walkways are required, the code does not emphasize their integration with public transit stops or the creation of pedestrian-friendly routes specifically for accessing transit. **Opportunity:** Consider emphasizing developments that create walkways that link directly to existing bus stops abutting the development site.
3. Site and design review does not require specific provisions for evaluation of

potential impacts to transit access and service. **Opportunity:** Include considerations for transit access and service in the proposed site development and site plan compliance review.

4. The Design Review Board, Design Review Commission, and the Planning Commission do not explicitly include someone with transit expertise. **Opportunity:** Consider including someone with transit expertise in the Design Review Board, Design Review Commission, and/or the Planning Commission.

Policy assessment and recommendations

16.64: Subdivision - Design Standards

City code section 16.64 outlines the standards and requirements for the design and development of subdivisions. This chapter covers a wide range of topics, including street layout and design, access requirements, block sizes, easements, lot configurations, public open spaces, grading, and improvements. The standards ensure that subdivisions are designed to promote public safety, accessibility, efficient traffic circulation, and environmental sustainability.

Relevance to Transit Development

By ensuring streets are well-connected, appropriately sized, and equipped with necessary infrastructure like sidewalks and bicycle lanes, the code helps ensure streets provide adequate access and circulation, enhancing the efficiency and accessibility of transit services. It also mandates pedestrian connections in cul-de-sacs and encourages the use of low-impact development practices, supporting a safe, sustainable, and walkable urban environment.

Potential Barriers and Opportunities to Support Transit Development

1. The code specifies a minimum roadway and right-of-way width that follow the Public Works Design Standards, however, roadway width minimum may potentially lead to wider roads that are difficult for pedestrians to cross safely. **Opportunity:** Consider amending the minimum roadway width requirement based on the Public Works Design Standards and Transportation System Plan (TSP) to discourage general-purpose lane widths greater than 11 feet¹.

¹ Urban Street Design Guide, National Association of City Transportation Officials (NACTO): <https://nacto.org/publication/urban-street-design-guide/street-design-elements/lane-width/>

Policy assessment and recommendations

16.86: Street Alignments

City code section 16.86 sets forth regulations to ensure adequate space for the expansion, extension, or realignment of public streets. It aims to promote the efficient layout of streets and minimize impervious surfaces. The code includes provisions for right-of-way widths, street connectivity, and the inclusion of bikeways and pedestrian facilities, aligning with the city's Transportation System Plan and Public Works Design Standards.

Relevance to Transit Development

Promotes a connected grid pattern of streets, which enhances the transit operation efficiency and access to transit stops. The code mandates the inclusion of bikeways and pedestrian facilities, ensuring safe and convenient routes. These measures collectively create a well-connected, accessible urban area that can encourage the use of transit and active transportation.

Potential Barriers and Opportunities to Support Transit Development

1. While curvilinear streets and cul-de-sacs are discouraged and only permitted in cases of extreme topographical challenges, such as excessive slopes, the code does not include provisions that pedestrian pathways still be considered in those cases. Note Code 16.64 (Subdivision – Design Standards) requires pedestrian connectivity in cul-de-sacs. **Opportunity:** Consider including provisions for pedestrian pathways that improve the connectivity of the pedestrian network, in cases where curvilinear streets and cul-de-sacs would otherwise make the connectivity of the street network low.
2. There are few traffic signals located in the city, and even fewer are operated by the City; however, the code has no standards for traffic signals. **Opportunity:** Incorporate best practices for traffic signal design and operation that incorporate pedestrian access and safety with elements that include, accessible pedestrian signals, leading pedestrian intervals, and extended crossing times.

Policy assessment and recommendations

16.120: Parks, Open Space and Recreation Land

City code section 16.120 outlines the requirements and procedures for providing parks, open spaces, and recreational facilities within new developments. The purpose is to ensure the availability of aesthetically pleasing and functional green spaces that meet the recreational needs of Canby's residents. The code mandates land dedication or cash in lieu for park development, sets minimum standards for open space, and provides guidelines for the maintenance and preservation of these areas.

Relevance to Transit Development

The code supports the development of transit-friendly environments by ensuring the provision of parks and open spaces within new developments, which can be strategically located near transit stops. The code promotes walkability and safe, accessible pathways for pedestrians and bicyclists, enhancing the connectivity of green spaces with surrounding neighborhoods. By integrating natural features and greenways, the code can create attractive, pleasant environments that encourage

the use of active transportation facilities for purposes beyond recreation, such as access to transit.

Potential Barriers and Opportunities to Support Transit Development

1. The code does not explicitly mention the integration of parks, open space, natural parks, and trails with transit services, and therefore does not leverage the benefits of transit connectivity to these amenities and the opportunity for improved transit access through trails. **Opportunity:** Consider amending the code to explicitly require consideration of transit infrastructure, access, and services a factor for the City to consider whether to accept land or cash in lieu for parks, open space, and trails.

Policy assessment and recommendations

Public Works Design Standards (December 2019)

The Public Works Design outlines the guidelines and specifications for public infrastructure improvements, including streets, sidewalks, parking, and storm drainage systems. These standards ensure that developments meet safety, accessibility, and sustainability criteria, supporting efficient travel and the integration of public utilities.

Relevance to Transit Development

By specifying requirements for streets, sidewalks, traffic calming, and parking, the standards can help ensure that urban spaces in Canby are safe, accessible, and efficient for all users, including those walking and relying on transit. These standards can promote well-connected, transit- and pedestrian-friendly environments.

Potential Barriers and Opportunities to Support Transit Development

1. The standards do not require a minimum width for sidewalks on local streets and may potentially lead to inadequate sidewalk space in some locations if developers are only required to match the existing width. **Opportunity:** Consider specifying a minimum width for sidewalks on local streets of 5 feet¹.
2. The current standards may not adequately address the need for designated curb zones for transit stops, loading/unloading, and ride-hailing, which can limit the ability for transit access and lead to conflicts and unsafe conditions. **Opportunity:** Consider introducing designated curb zones for transit stops, loading/unloading, and ride-hailing to better manage curb space and reduce conflicts. Include the need to ensure adequate visibility at intersections between motorists and pedestrians.
3. Standard curb radii may not always align with the needs for pedestrian safety at intersections. **Opportunity:** Consider adjusting curb radii standards

¹ Urban Street Design Guide, NACTO: <https://nacto.org/publication/urban-street-design-guide/street-design-elements/sidewalks/>

to 15 to balance motorists' turning speeds with pedestrian safety, ensuring intersections are safe for all users^{2,3}. Larger radii (up to 30 feet) can be used along places where buses are expected to make right turns⁴.

4. While the standards specify allowable traffic calming measures, the requirement that each measure be field tested by Canby Fire District when applied on neighborhood routes/local streets may limit the ability to implement these measures. **Opportunity:** Consider adjusting the standard and providing a list of traffic calming measures with dimensions and specifications that have been tested by Canby Fire District to remove potential ambiguity in the standards.

² FHWA: <https://safety.fhwa.dot.gov/saferjourney1/library/countermeasures/09.htm>

³ Urban Street Design Guide, NACTO: <https://nacto.org/publication/urban-street-design-guide/intersection-design-elements/corner-radii/>

⁴ Transit Street Design Guide, NACTO: <https://nacto.org/publication/transit-street-design-guide/intersections/transit-route-turns/turn-radii/>

Policy Recommendations and Design Guidelines

Amendments to City Code and Policy

The table in “Appendix C: Summary of Recommended Policies” summarizes recommended policies aimed at enhancing pedestrian safety and access, bus stop siting and design, and transit operations in Canby. These recommendations are designed to create a more transit-friendly environment with safe, comfortable, and well-connected pedestrian pathways. Each recommendation addresses potential barriers to transit development based on the review of Canby’s code and is linked to specific sections of the code. Additionally, the recommendations are assigned a priority level indicating the importance at which the city should implement the recommendation to support a more accessible and efficient transit system for all users.

“Appendix C: Summary of Recommended Policies” organizes the recommendations into two primary categories Pedestrian Safety, Circulation, and Access, and Bus Stop and Transit Operations. Under each primary category, there are a set of sub-categories as such:

Pedestrian Safety, Circulation, and Access:

- A. Expand sidewalks and pathways for pedestrian access and circulation.
- B. Promote land use strategies to create a more walkable urban environment.
- C. Ensure pedestrians and motorists’ shared spaces are safe for all users.

Bus Stop and Transit Operations:

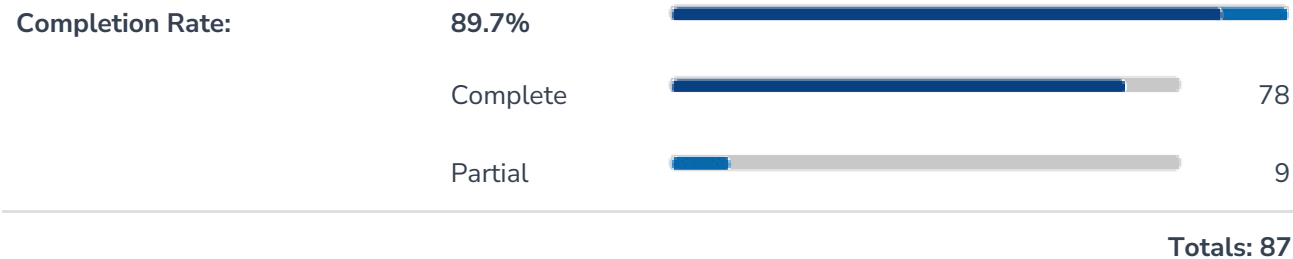
- D. Create development practices that support transit operations.
- E. Standardize curb space for multi-modal uses.

Appendix A: Public Engagement

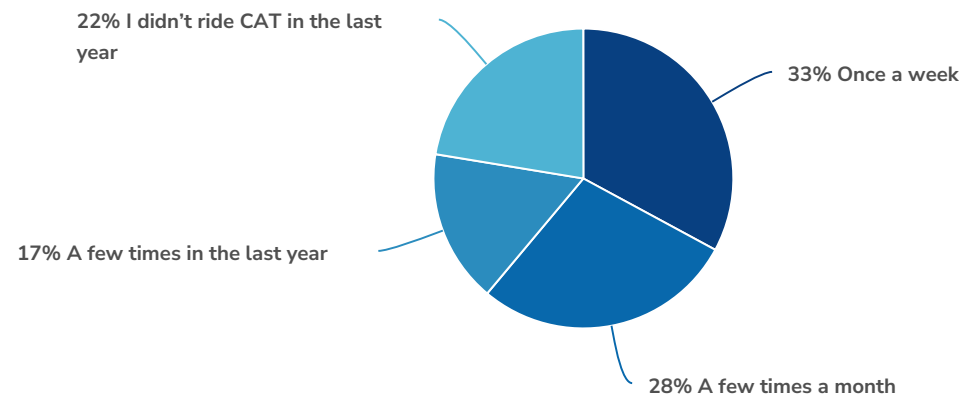
Community Survey #1 - Results

Report for Canby Area Transit TMP Survey #1

Response Counts



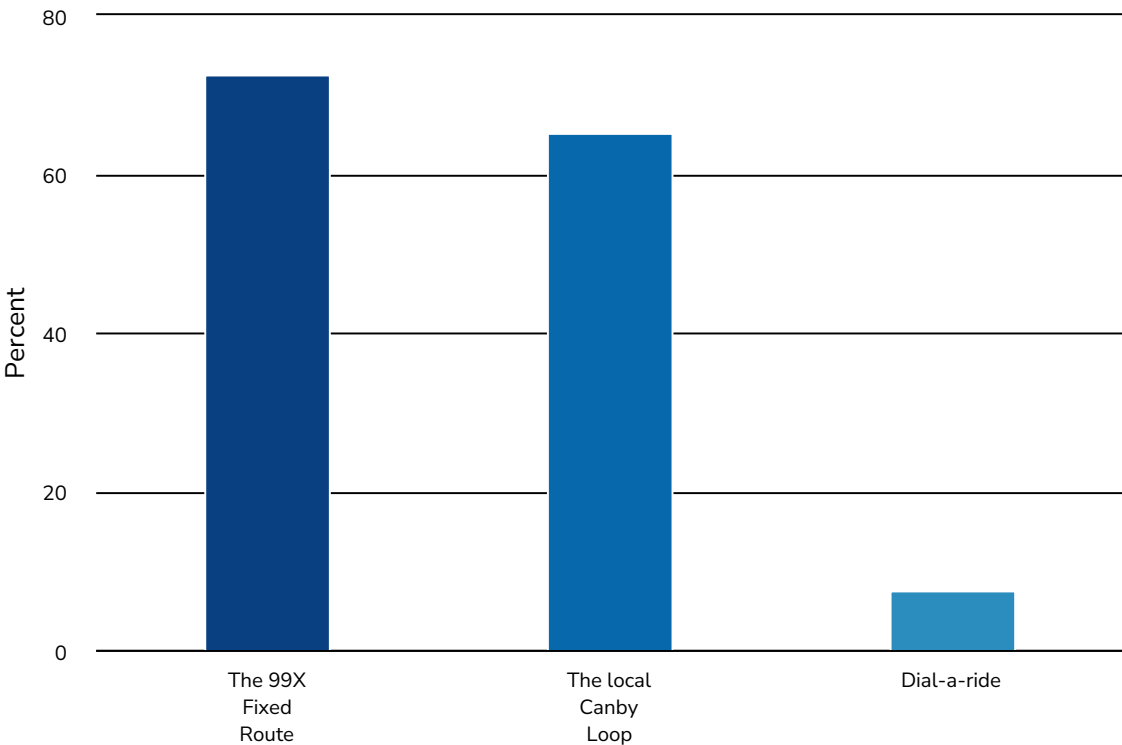
1. On average, how often have you ridden CAT in the last year?



Value	Percent	Responses
Once a week	32.9%	28
A few times a month	28.2%	24
A few times in the last year	16.5%	14
I didn't ride CAT in the last year	22.4%	19

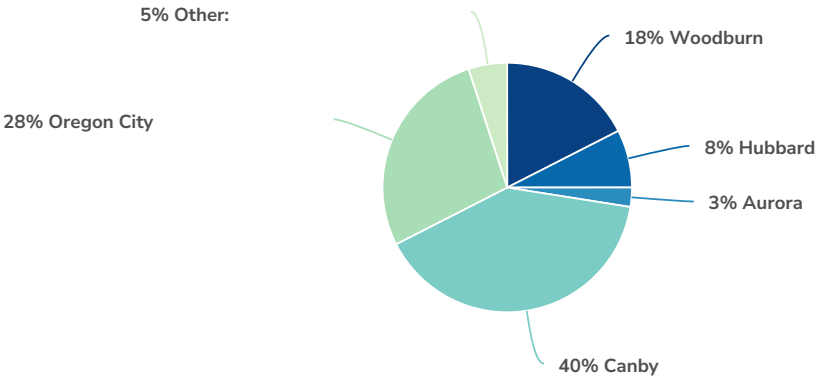
Totals: 85

2. Which CAT services have you ridden in the last year?



Value	Percent	Responses
The 99X Fixed Route	72.7%	48
The local Canby Loop	65.2%	43
Dial-a-ride	7.6%	5

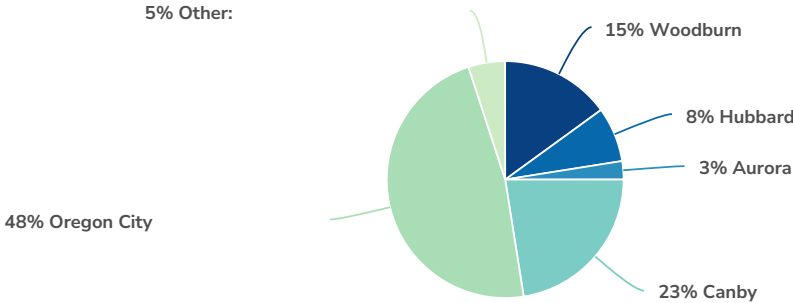
3. When riding the 99X, what is the closet city you usually begin your trip?



Value	Percent	Responses
Woodburn	17.5%	7
Hubbard	7.5%	3
Aurora	2.5%	1
Canby	40.0%	16
Oregon City	27.5%	11
Other:	5.0%	2

Totals: 40

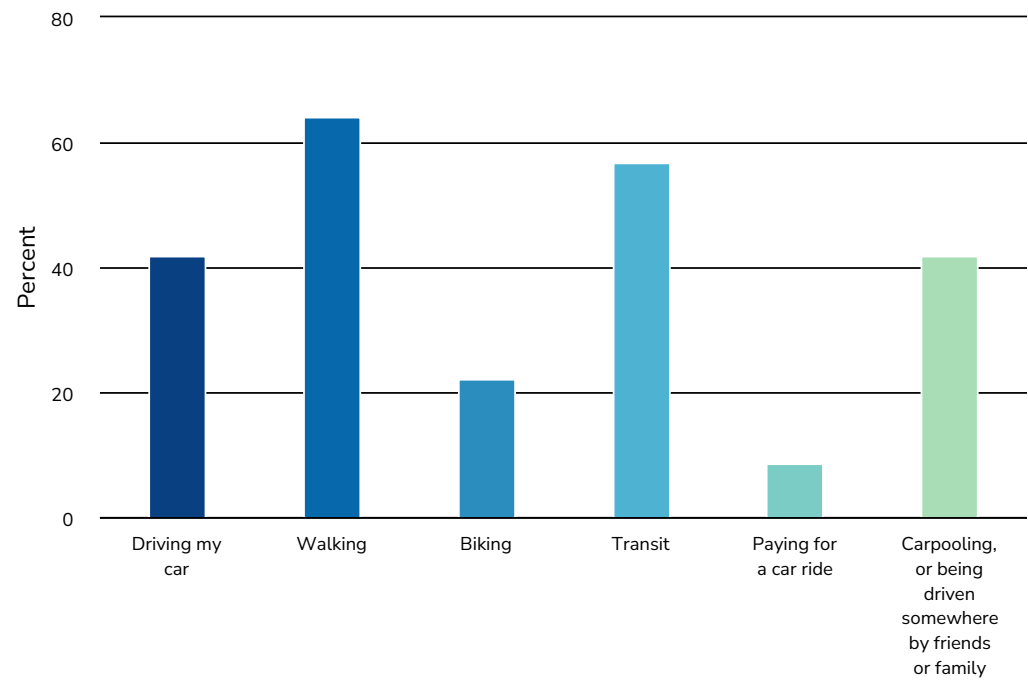
4. When riding the 99X, what is the closet city you usually end your trip?



Value	Percent	Responses
Woodburn	15.0%	6
Hubbard	7.5%	3
Aurora	2.5%	1
Canby	22.5%	9
Oregon City	47.5%	19
Other:	5.0%	2

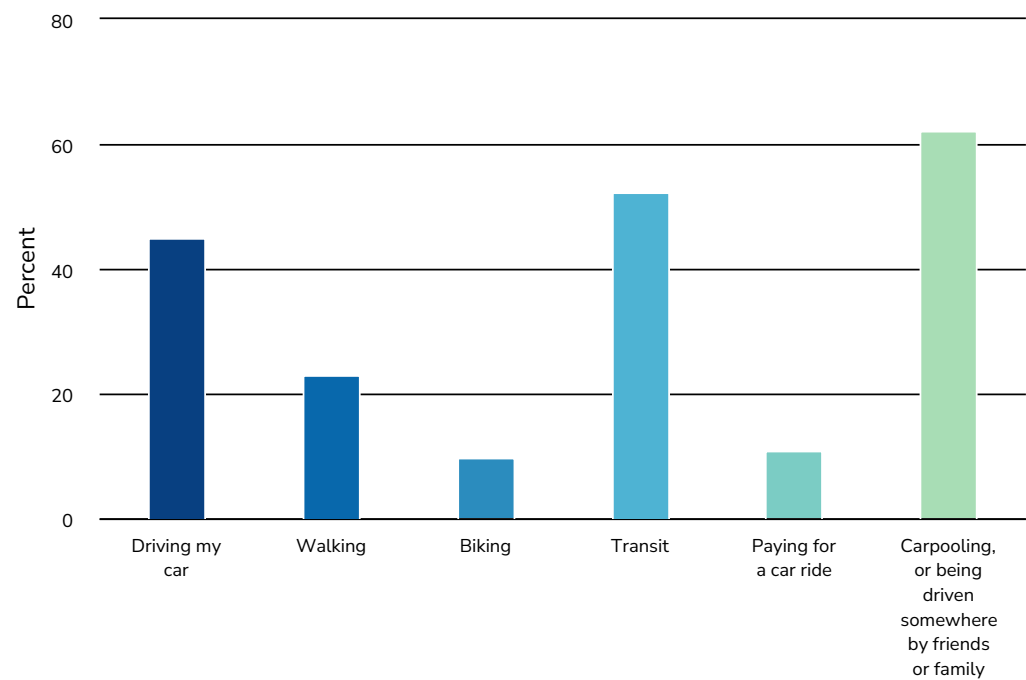
Totals: 40

5. Within the past year, what travel modes have you used for trips WITHIN Canby? Pick all that apply.



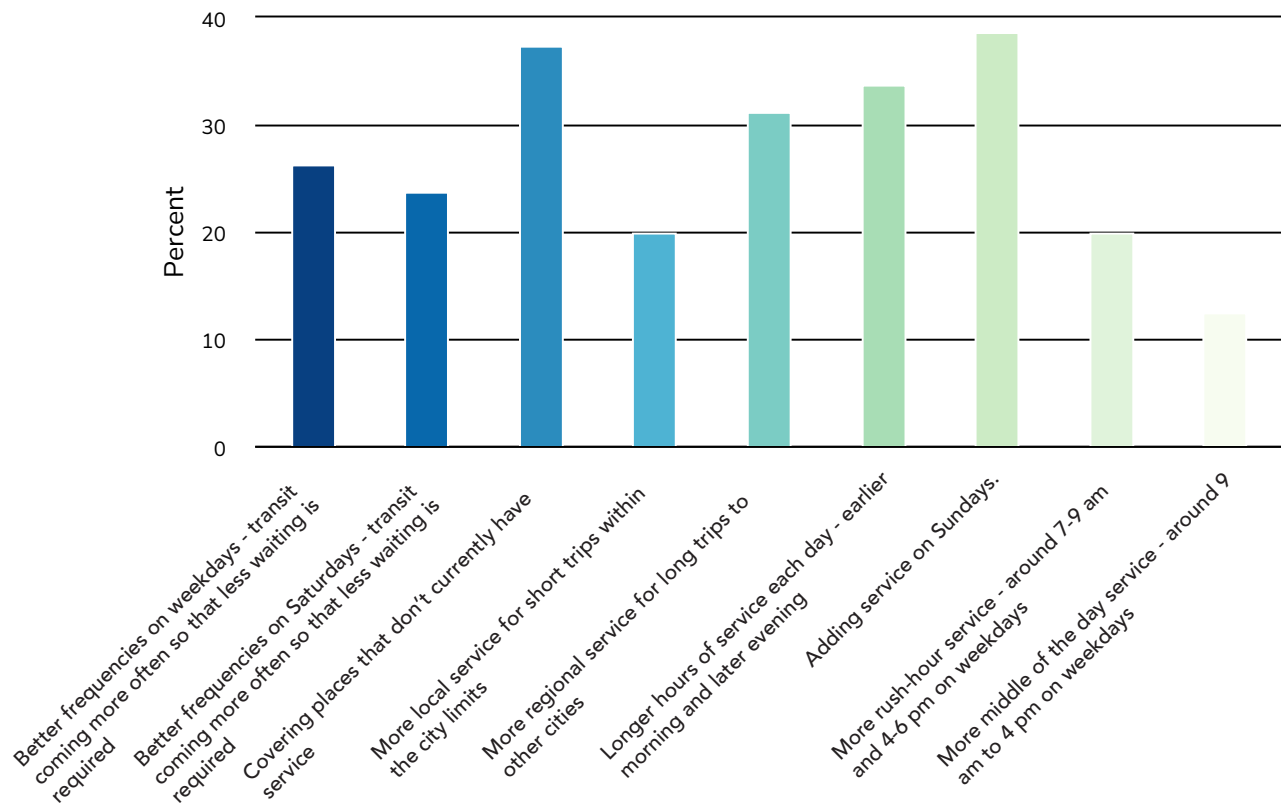
Value	Percent	Responses
Driving my car	42.0%	34
Walking	64.2%	52
Biking	22.2%	18
Transit	56.8%	46
Paying for a car ride	8.6%	7
Carpooling, or being driven somewhere by friends or family	42.0%	34

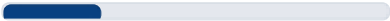
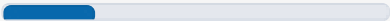
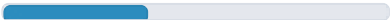
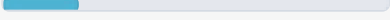
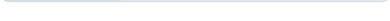
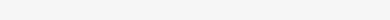
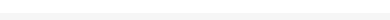
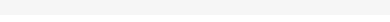
6. Within the past year, what travel modes have you used for trips BEYOND and OUTSIDE OF Canby? Pick all that apply.



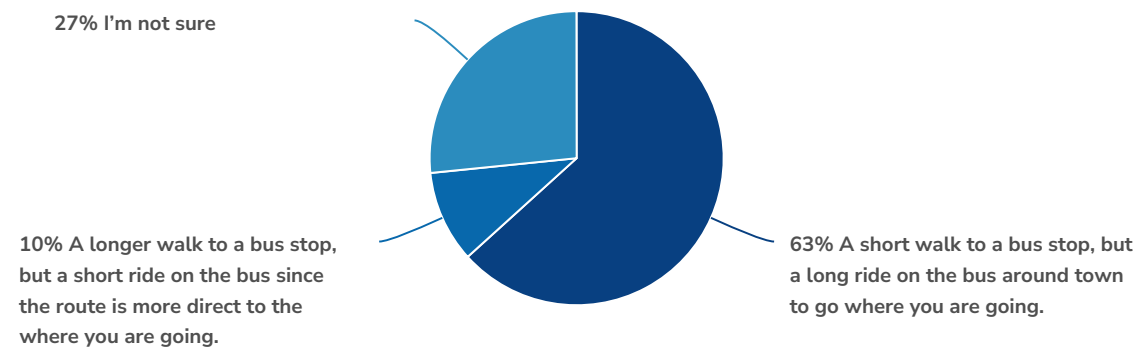
Value	Percent	Responses
Driving my car	45.1%	37
Walking	23.2%	19
Biking	9.8%	8
Transit	52.4%	43
Paying for a car ride	11.0%	9
Carpooling, or being driven somewhere by friends or family	62.2%	51

7. If CAT had additional resources for transit service, what should they spend it on? Please pick up to three answers.



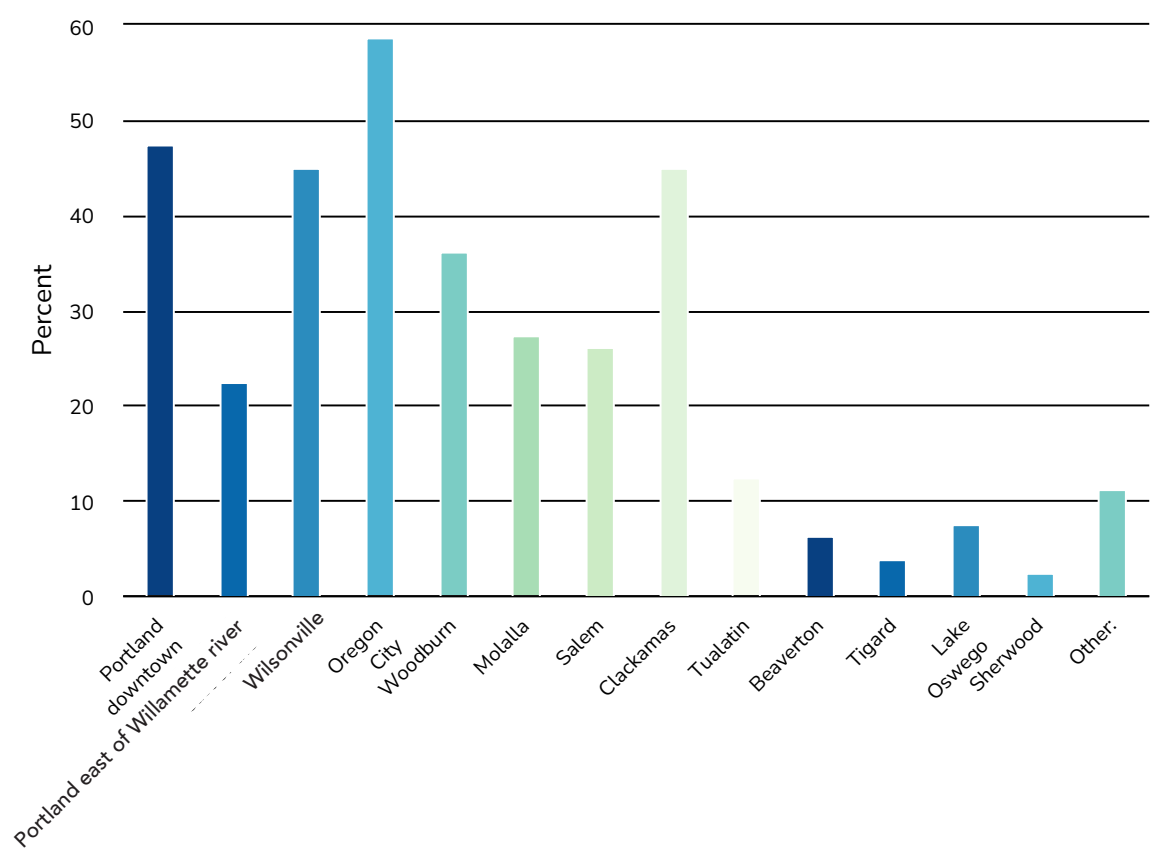
Value	Percent	Responses
Better frequencies on weekdays - transit coming more often so that less waiting is required	26.3% 	21
Better frequencies on Saturdays – transit coming more often so that less waiting is required	23.8% 	19
Covering places that don't currently have service.	37.5% 	30
More local service for short trips within the city limits.	20.0% 	16
More regional service for long trips to other cities.	31.3% 	25
Longer hours of service each day – earlier morning and later evening	33.8% 	27
Adding service on Sundays.	38.8% 	31
More rush-hour service – around 7-9 am and 4-6 pm on weekdays	20.0% 	16
More middle of the day service – around 9 am to 4 pm on weekdays	12.5% 	10

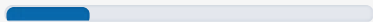
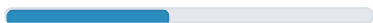
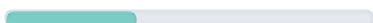
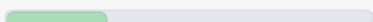
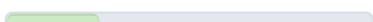
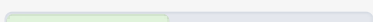
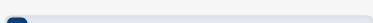
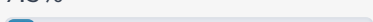
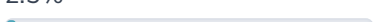
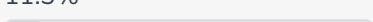
8. In general, which do you think is better for service INSIDE of Canby?



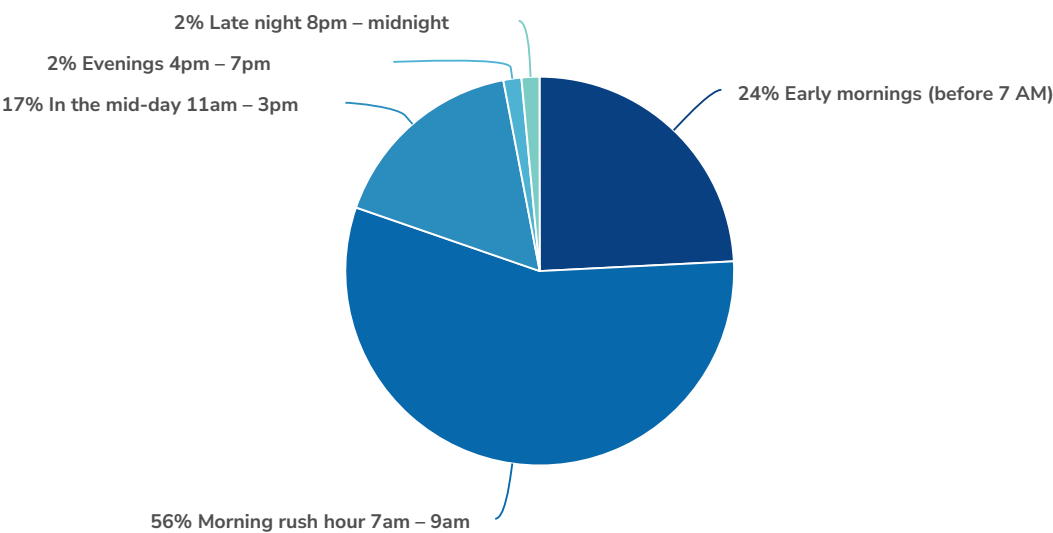
Value	Percent	Responses
A short walk to a bus stop, but a long ride on the bus around town to go where you are going.	63.3%	50
A longer walk to a bus stop, but a short ride on the bus since the route is more direct to the where you are going.	10.1%	8
I'm not sure	26.6%	21
Totals: 79		

9. Which are the most important places that you think people should be able to easily reach by transit, from Canby? Please pick up to five answers.



Value	Percent	Responses
Portland downtown	47.5% 	38
Portland east of the Willamette river	22.5% 	18
Wilsonville	45.0% 	36
Oregon City	58.8% 	47
Woodburn	36.3% 	29
Molalla	27.5% 	22
Salem	26.3% 	21
Clackamas	45.0% 	36
Tualatin	12.5% 	10
Beaverton	6.3% 	5
Tigard	3.8% 	3
Lake Oswego	7.5% 	6
Sherwood	2.5% 	2
Other:	11.3% 	9

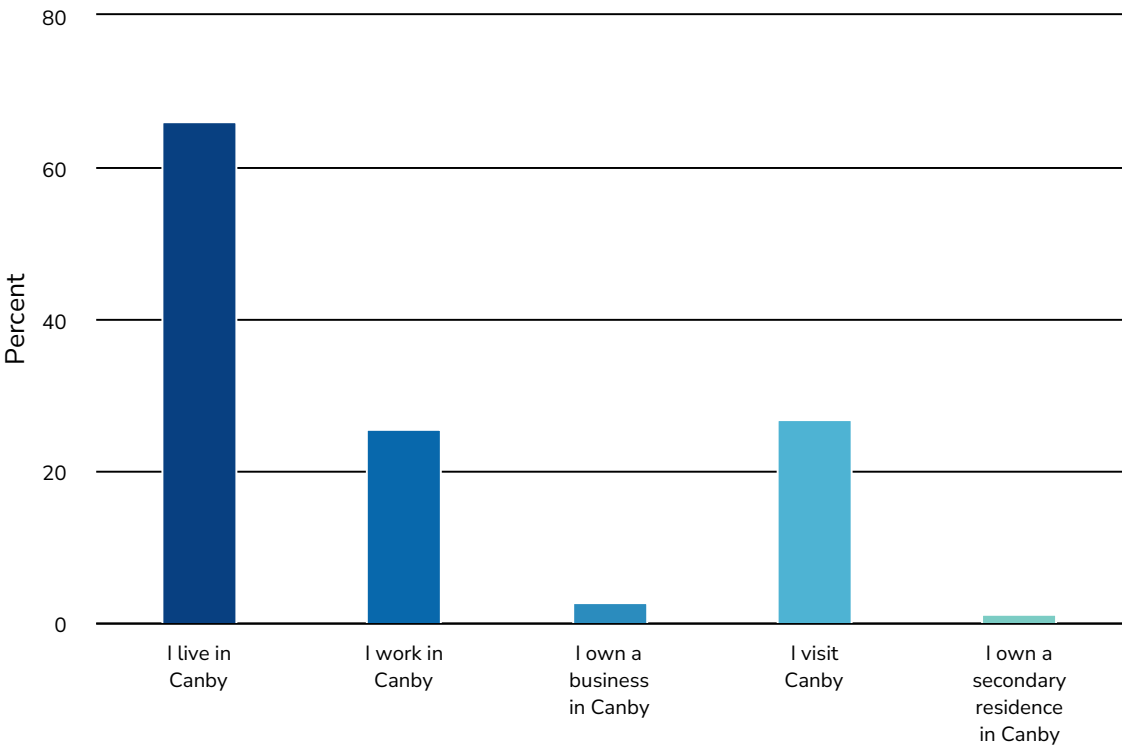
10. When do you usually start work or school?



Value	Percent	Responses
Early mornings (before 7 AM)	24.2%	16
Morning rush hour 7am – 9am	56.1%	37
In the mid-day 11am – 3pm	16.7%	11
Evenings 4pm – 7pm	1.5%	1
Late night 8pm – midnight	1.5%	1

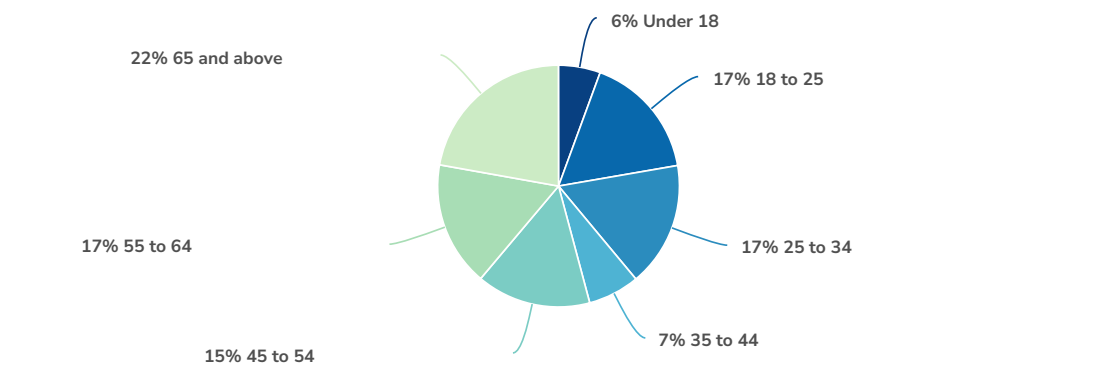
Totals: 66

11. What is your connection to Canby? Choose all that apply.



Value	Percent	Responses
I live in Canby	66.2%	49
I work in Canby	25.7%	19
I own a business in Canby	2.7%	2
I visit Canby	27.0%	20
I own a secondary residence in Canby	1.4%	1

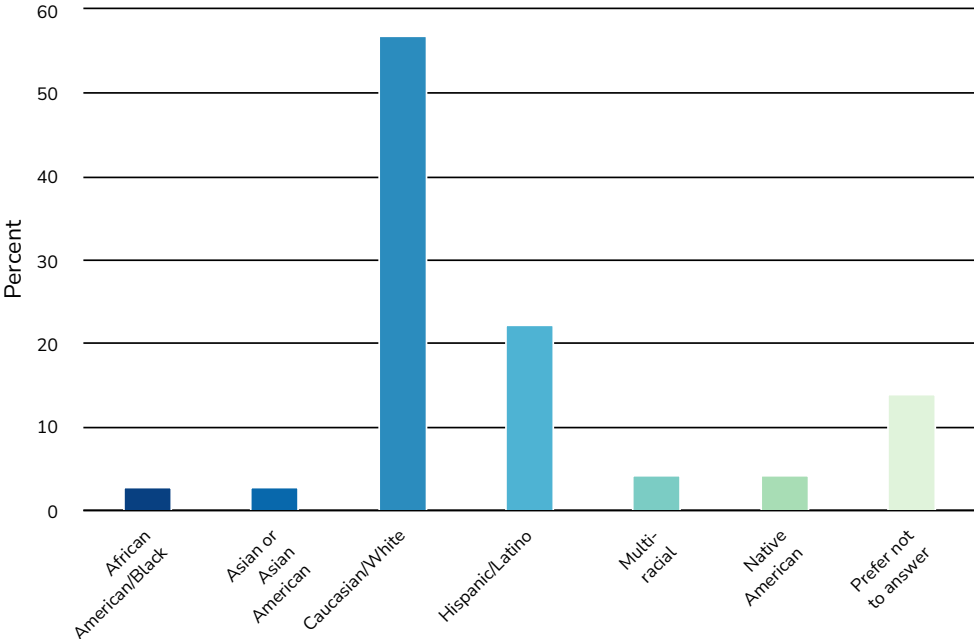
12. What is your age?



Value	Percent	Responses
Under 18	5.6%	4
18 to 25	16.7%	12
25 to 34	16.7%	12
35 to 44	6.9%	5
45 to 54	15.3%	11
55 to 64	16.7%	12
65 and above	22.2%	16

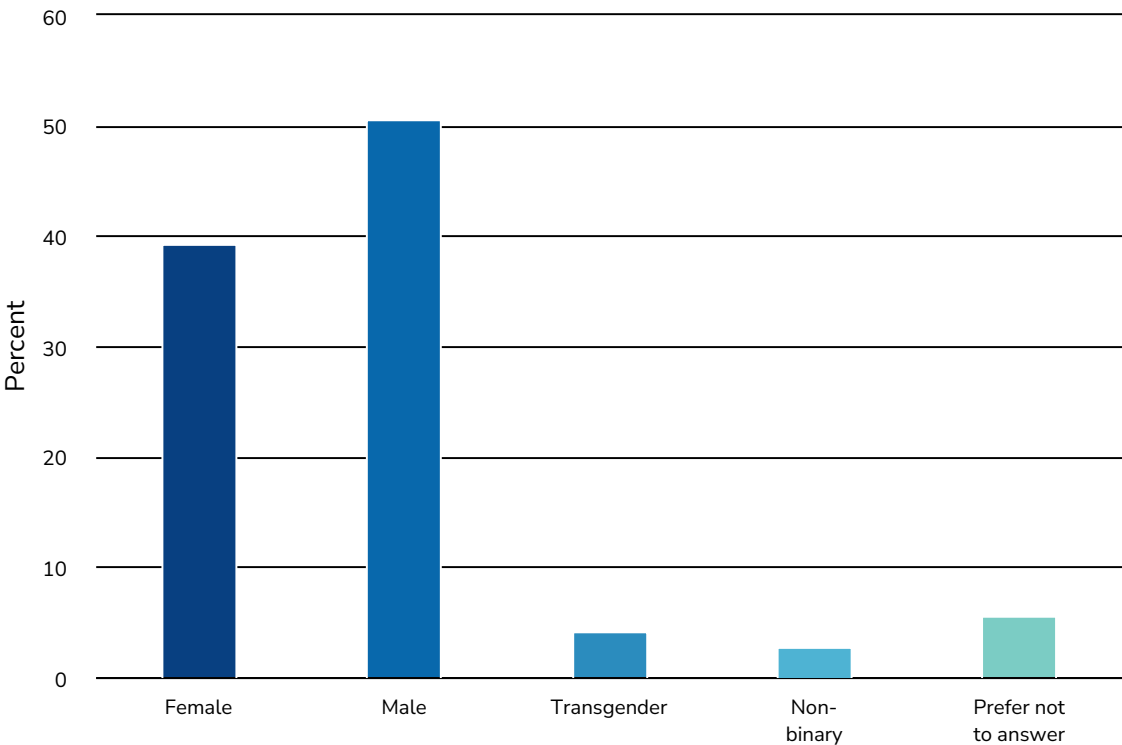
Totals: 72

13. Which ethnic or racial group do you identify yourself? Choose all that apply.



Value	Percent	Responses
African American/Black	2.8%	2
Asian or Asian American	2.8%	2
Caucasian/White	56.9%	41
Hispanic/Latino	22.2%	16
Multi-racial	4.2%	3
Native American	4.2%	3
Prefer not to answer	13.9%	10

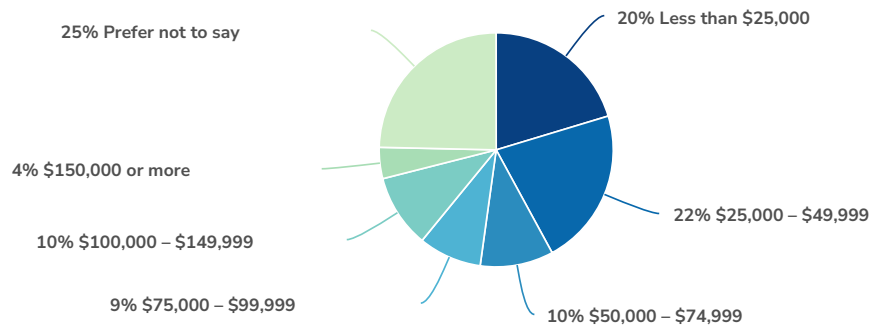
14. Please indicate your gender. Choose all that apply.



Value	Percent	Responses
Female	39.4%	28
Male	50.7%	36
Transgender	4.2%	3
Non-binary	2.8%	2
Prefer not to answer	5.6%	4

15. What is your household income?

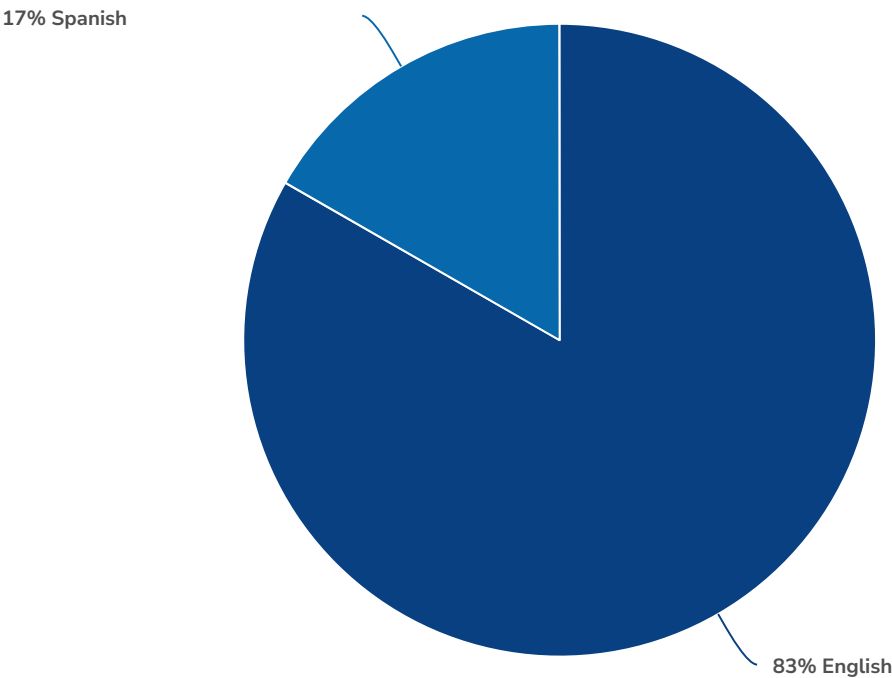
AGENDA ITEM NO. 3.



Value	Percent	Responses
Less than \$25,000	20.3%	14
\$25,000 – \$49,999	21.7%	15
\$50,000 – \$74,999	10.1%	7
\$75,000 – \$99,999	8.7%	6
\$100,000 – \$149,999	10.1%	7
\$150,000 or more	4.3%	3
Prefer not to say	24.6%	17

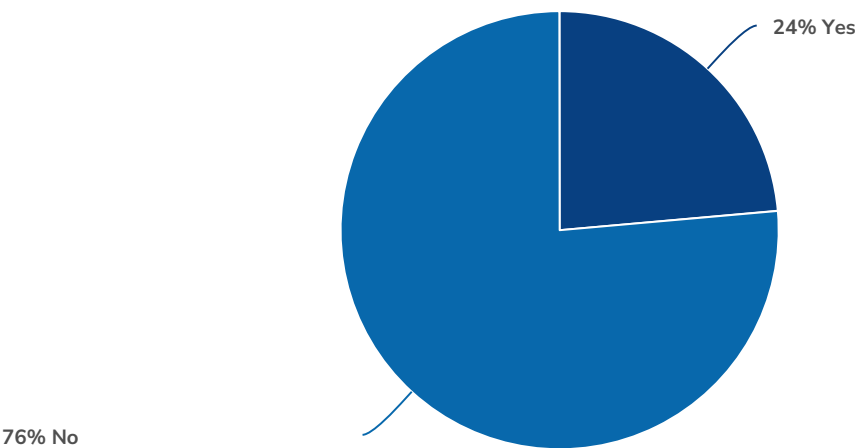
Totals: 69

16. What is the primary language spoken in your home?



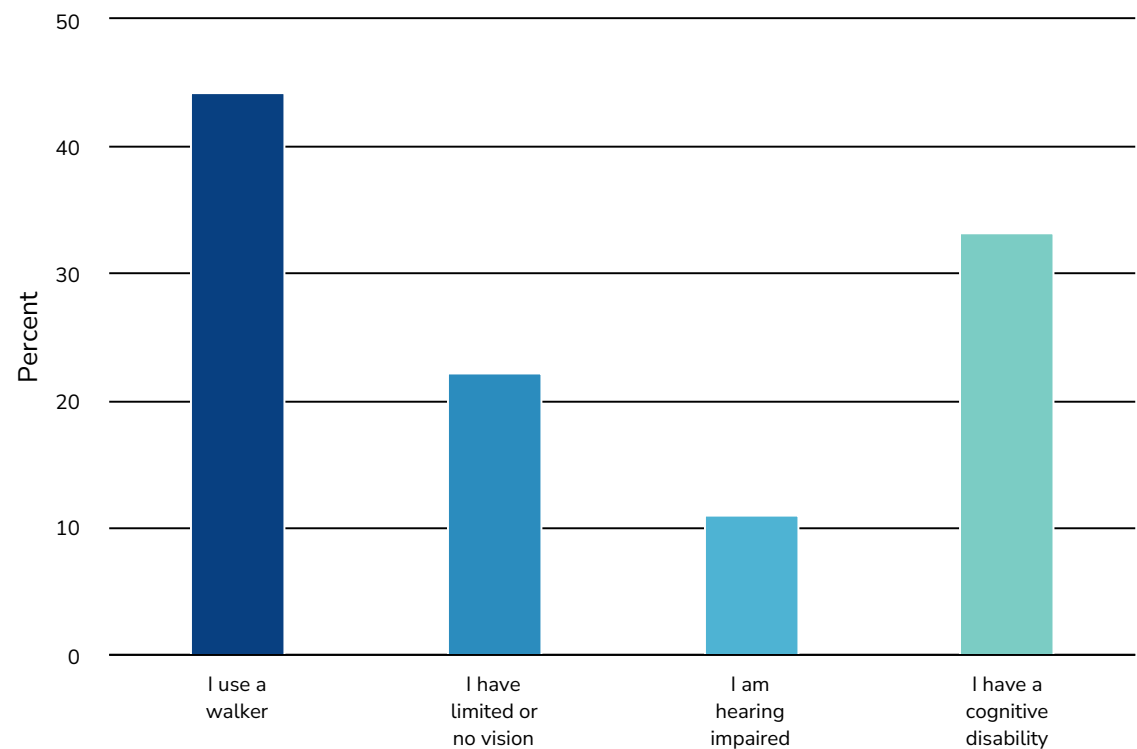
Value	Percent	Responses
English	83.3%	60
Spanish	16.7%	12
Totals: 72		

17. Do you have a disability that limits your mobility?



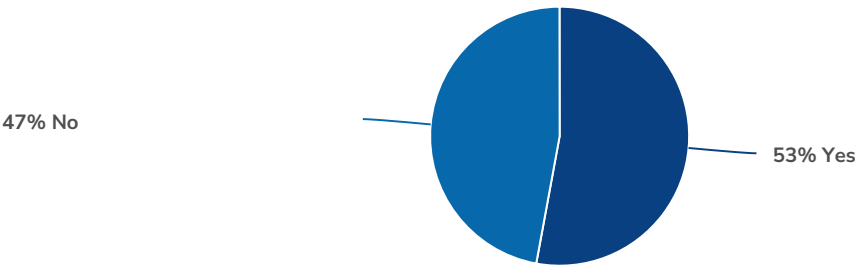
Value	Percent	Responses
Yes	23.6%	17
No	76.4%	55
Totals: 72		

18. Check all that apply to you:



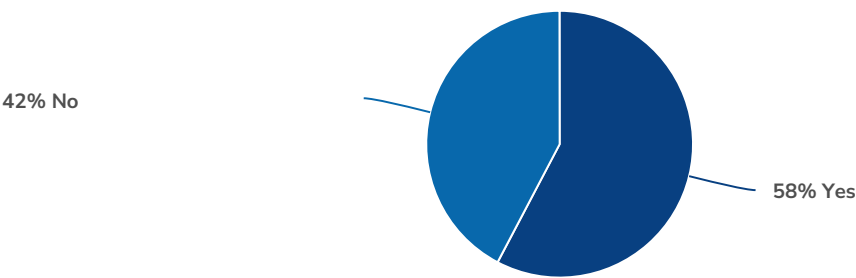
Value	Percent	Responses
I use a walker	44.4%	4
I have limited or no vision	22.2%	2
I am hearing impaired	11.1%	1
I have a cognitive disability	33.3%	3

19. Do you have a valid driver’s license?



Value	Percent	Responses
Yes	52.9%	37
No	47.1%	33
Totals: 70		

20. Is a working vehicle usually available for your use?

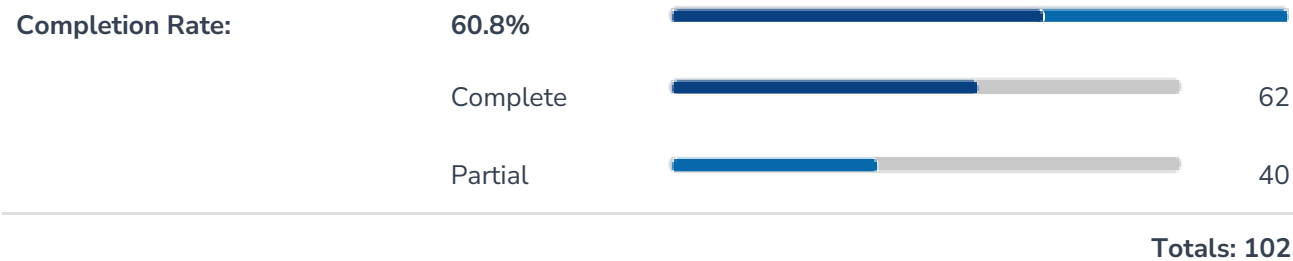


Value	Percent	Responses
Yes	57.7%	41
No	42.3%	30
Totals: 71		

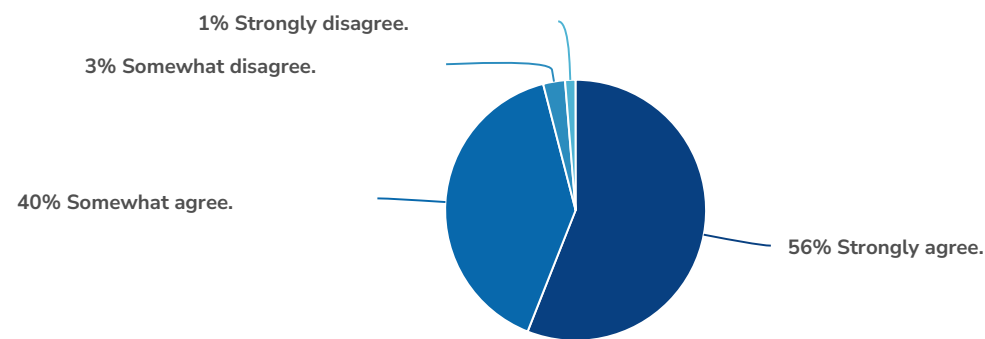
Community Survey #2 - Results

Report for Canby Area Transit TMP Survey #2

Response Counts



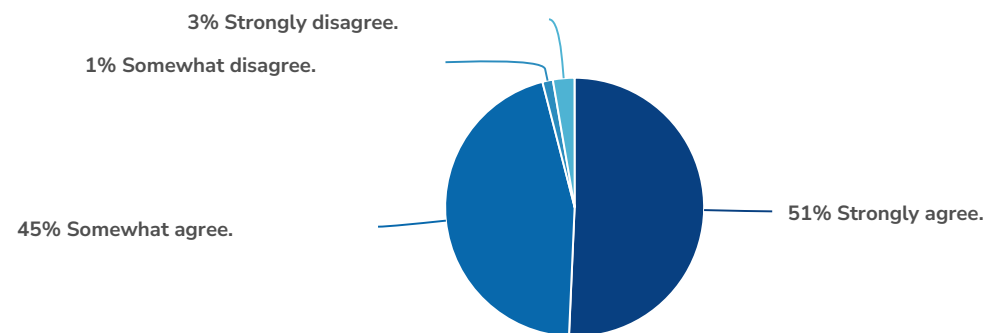
1. Compared to the Existing Network, the Draft Plan would be better for me. (Check only one)



Value	Percent	Responses
Strongly agree.	56.0%	42
Somewhat agree.	40.0%	30
Somewhat disagree.	2.7%	2
Strongly disagree.	1.3%	1

Totals: 75

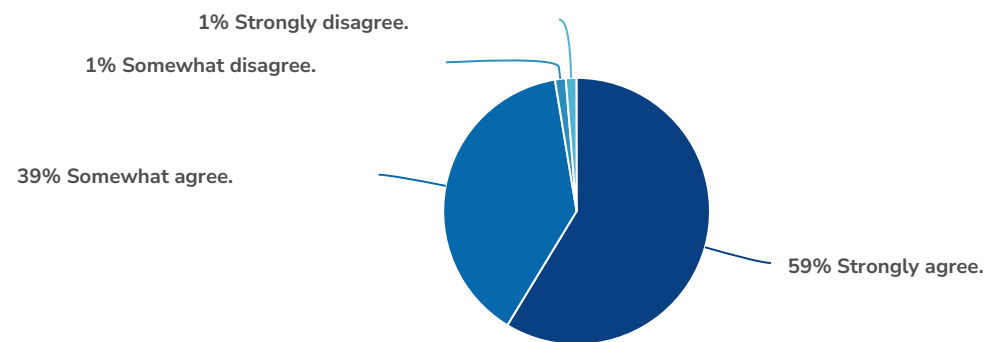
2. Compared to the Existing Network, the Draft Plan would be better for my friends, neighbors, coworkers, or others I know. (Check only one)



Value	Percent	Responses
Strongly agree.	50.7%	38
Somewhat agree.	45.3%	34
Somewhat disagree.	1.3%	1
Strongly disagree.	2.7%	2

Totals: 75

3. Compared to the Existing Network, the Draft Plan would be better for the region overall. (Check only one)



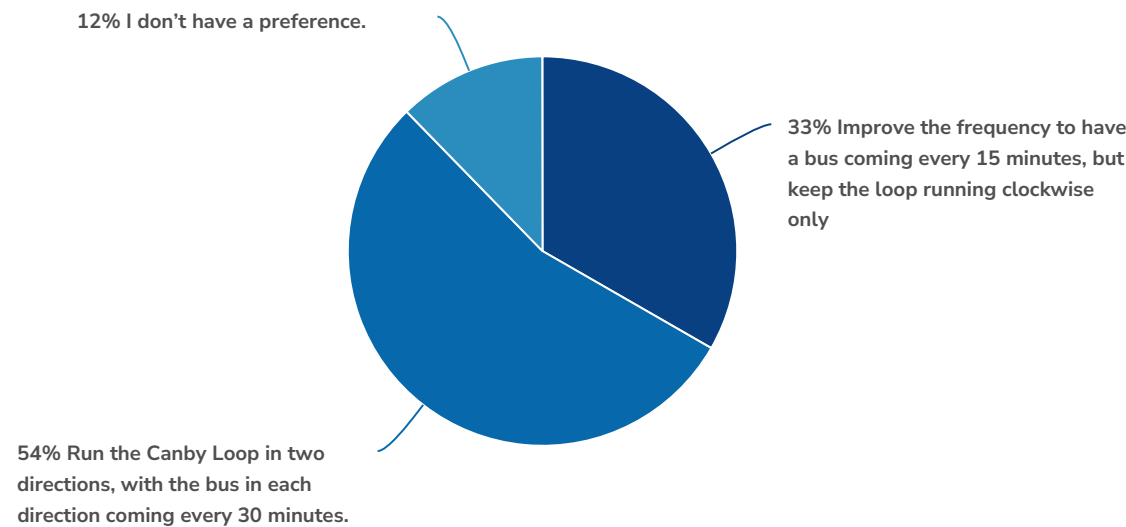
Value	Percent	Responses
Strongly agree.	58.7%	44
Somewhat agree.	38.7%	29
Somewhat disagree.	1.3%	1
Strongly disagree.	1.3%	1

Totals: 75

4. CAT cannot implement all these changes at once and needs to understand which are the most important priorities. Imagine you are in charge of transit for the City and you need to decide how to invest some additional budget in the service improvements described earlier. You have 7 coins to spend, so you can only pay for a few improvements. How would you spend this budget? (it is ok if you still have coins left after paying for your preferred improvements)

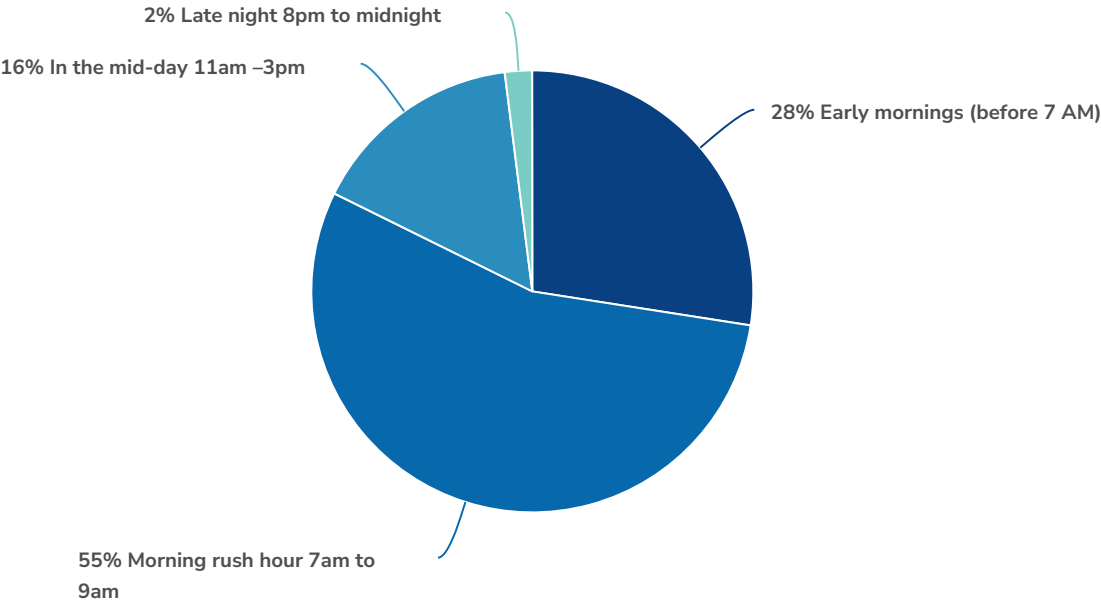
Item	Average	Min	Max	StdDev	Sum	Total Responses
More service in the Canby Loop (cost = 3 coins)	2.8	0.0	3.0	0.8	78.0	28
Extending the 99X to Milwaukie and downtown Woodburn (but splitting the route at the Canby Transit Center) (cost = 4 coins)	3.8	0.0	4.0	0.9	128.0	34
Doubling the number of daily buses to Wilsonville (cost = 2 coins)	1.9	0.0	2.0	0.4	36.0	19
More evening service (cost = 2 coins)	2.0	2.0	2.0	0.0	42.0	21
Offering bus routes and dial-a-ride on Sundays (cost = 5 coins)	3.4	0.0	5.0	2.2	27.0	8

5. If you could improve service in the Canby Loop, what would you do?



Value	Percent	Responses
Improve the frequency to have a bus coming every 15 minutes, but keep the loop running clockwise only	33.3%	19
Run the Canby Loop in two directions, with the bus in each direction coming every 30 minutes.	54.4%	31
I don't have a preference.	12.3%	7
Totals: 57		

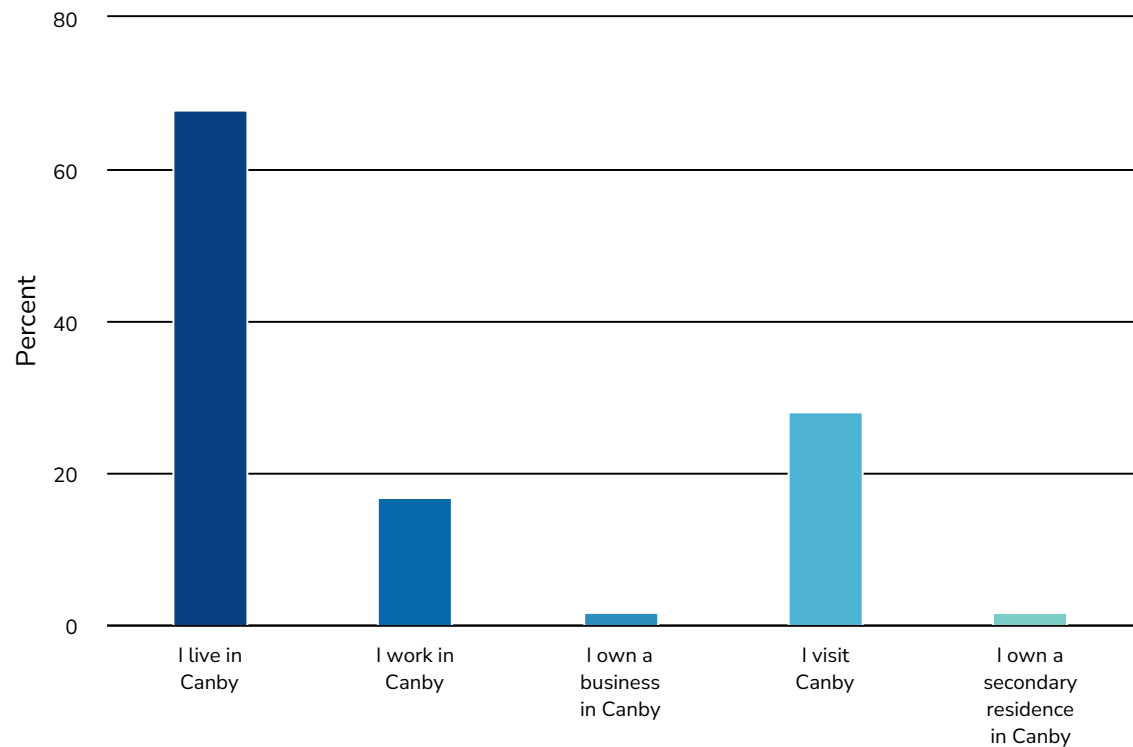
7. When do you usually start work or school?



Value	Percent	Responses
Early mornings (before 7 AM)	27.5%	14
Morning rush hour 7am to 9am	54.9%	28
In the mid-day 11am –3pm	15.7%	8
Late night 8pm to midnight	2.0%	1

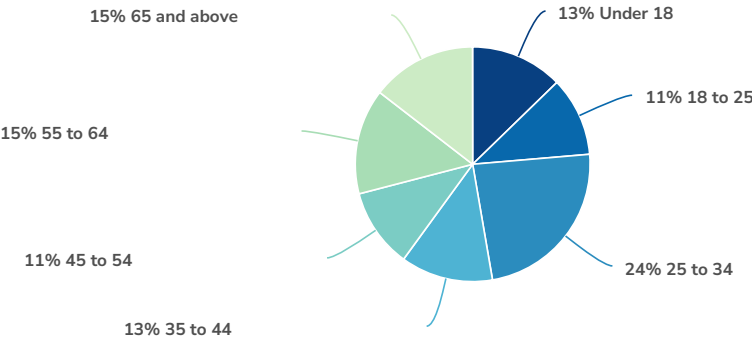
Totals: 51

8. What is your connection to Canby? (choose all that apply)



Value	Percent	Responses
I live in Canby	67.9%	36
I work in Canby	17.0%	9
I own a business in Canby	1.9%	1
I visit Canby	28.3%	15
I own a secondary residence in Canby	1.9%	1

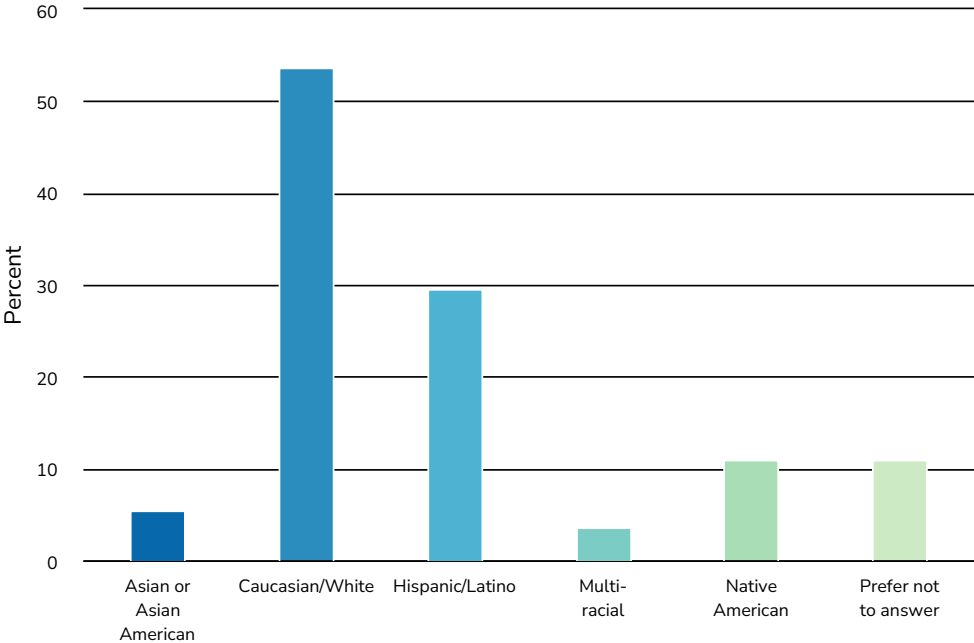
9. What is your age?



Value	Percent	Responses
Under 18	12.7%	7
18 to 25	10.9%	6
25 to 34	23.6%	13
35 to 44	12.7%	7
45 to 54	10.9%	6
55 to 64	14.5%	8
65 and above	14.5%	8

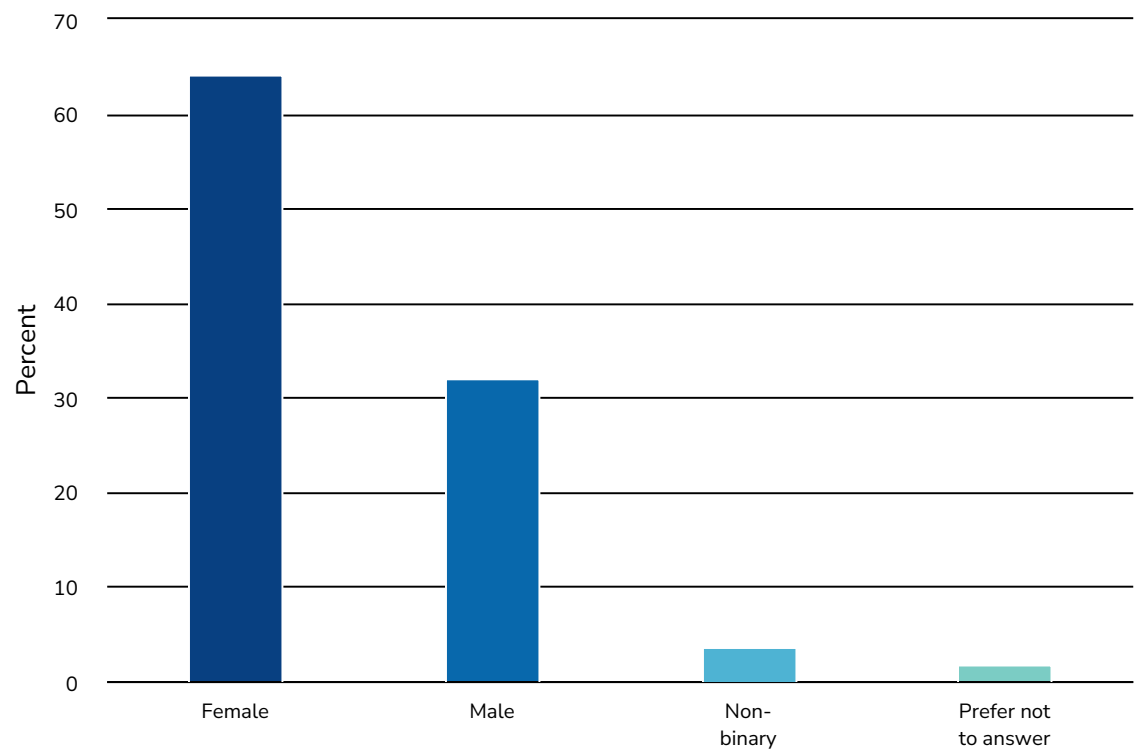
Totals: 55

10. Which ethnic or racial group do you identify yourself? Choose all that apply.



Value	Percent	Responses
Asian or Asian American	5.6%	3
Caucasian/White	53.7%	29
Hispanic/Latino	29.6%	16
Multi-racial	3.7%	2
Native American	11.1%	6
Prefer not to answer	11.1%	6

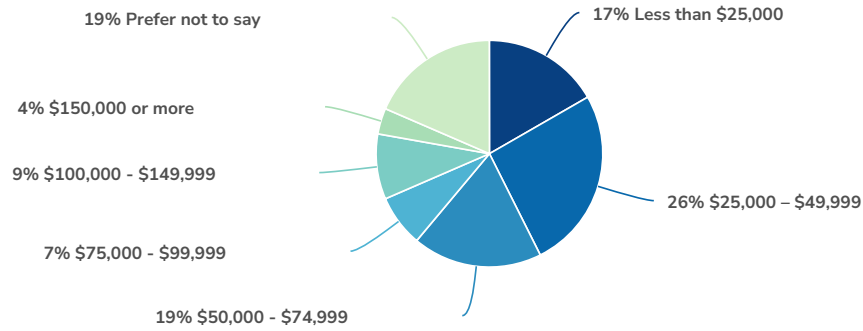
11. Please indicate your gender. Choose all that apply.



Value	Percent	Responses
Female	64.2%	34
Male	32.1%	17
Non-binary	3.8%	2
Prefer not to answer	1.9%	1

12. What is your household income?

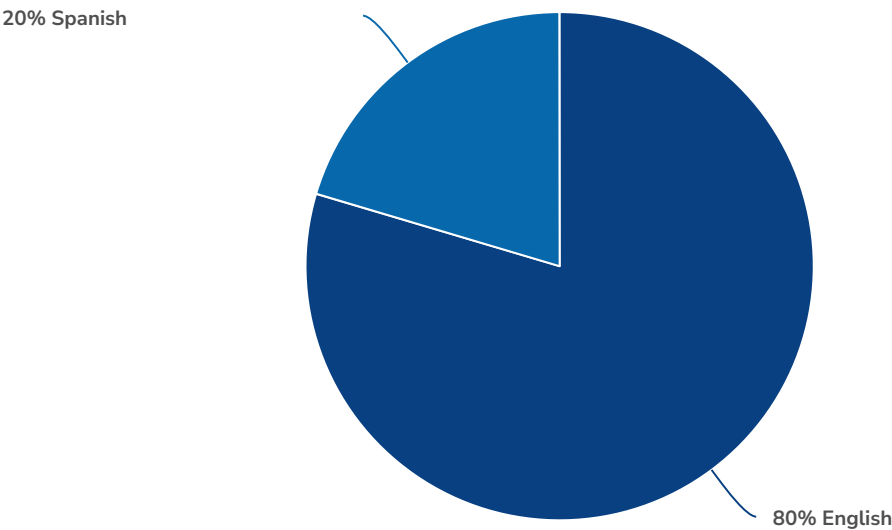
AGENDA ITEM NO. 3.



Value	Percent	Responses
Less than \$25,000	16.7%	9
\$25,000 – \$49,999	25.9%	14
\$50,000 - \$74,999	18.5%	10
\$75,000 - \$99,999	7.4%	4
\$100,000 - \$149,999	9.3%	5
\$150,000 or more	3.7%	2
Prefer not to say	18.5%	10

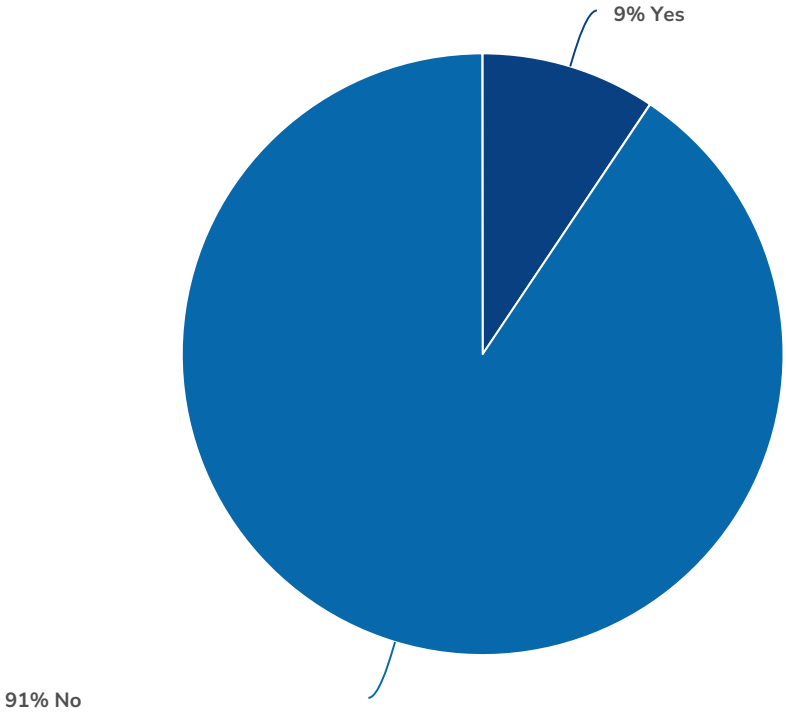
Totals: 54

13. What is the primary language spoken in your home?



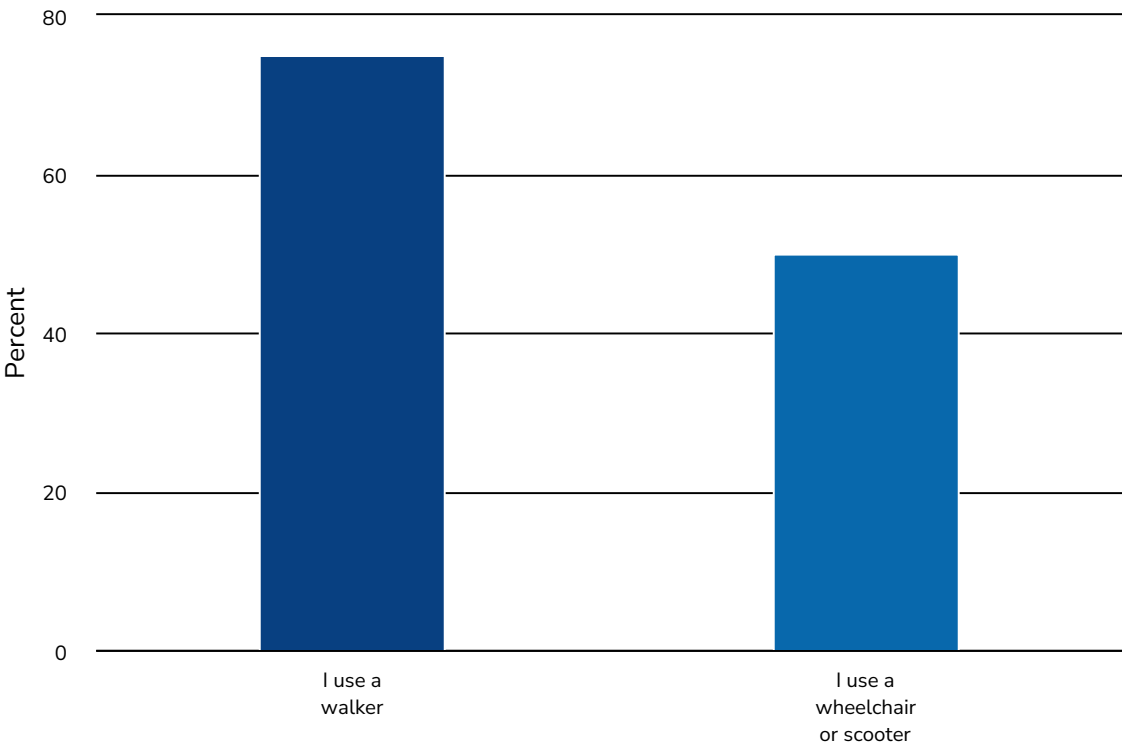
Value	Percent	Responses
English	79.6%	43
Spanish	20.4%	11
Totals: 54		

14. Do you have a disability that limits your mobility?



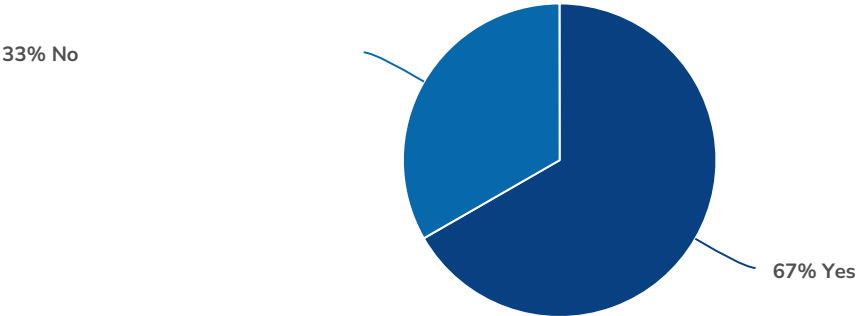
Value	Percent	Responses
Yes	9.4%	5
No	90.6%	48
Totals: 53		

15. Check all that apply to you:



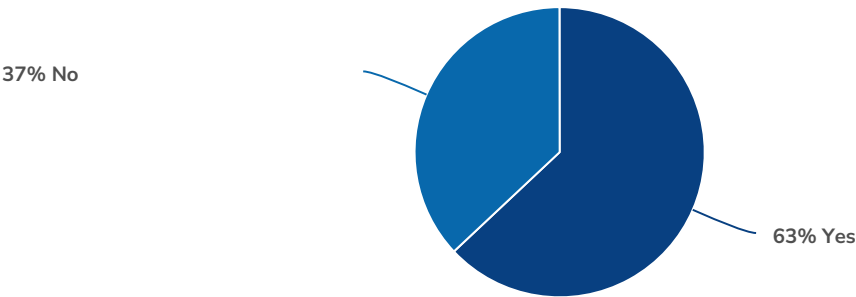
Value	Percent	Responses
I use a walker	75.0%	3
I use a wheelchair or scooter	50.0%	2

16. Do you have a valid driver's license?



Value	Percent	Responses
Yes	66.7%	36
No	33.3%	18
		Totals: 54

17. Is a working vehicle usually available for your use?

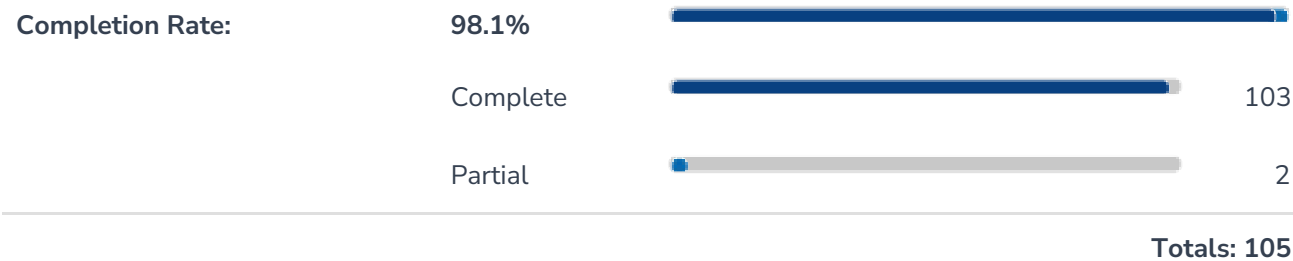


Value	Percent	Responses
Yes	63.0%	34
No	37.0%	20
Totals: 54		

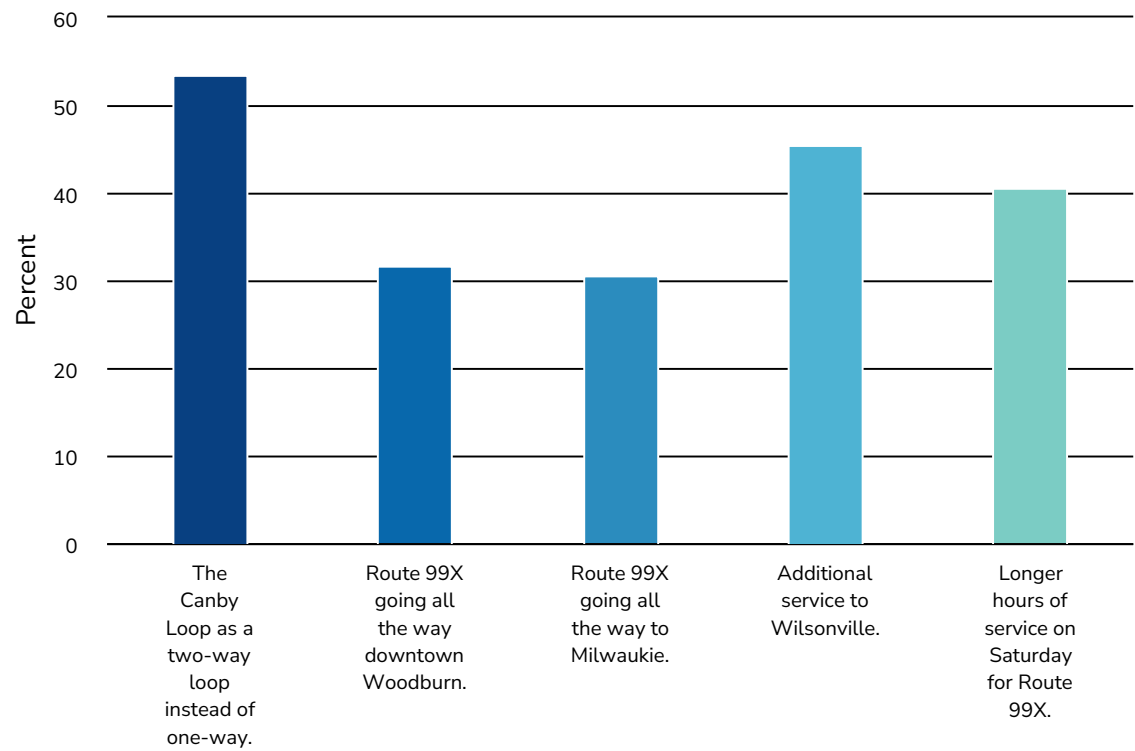
Community Survey #3 - Results

Report for Canby Area Transit TMP Survey
08/23/24

Response Counts

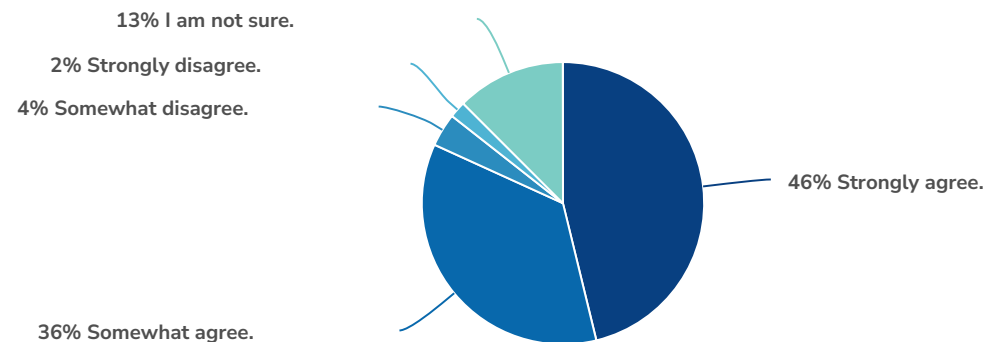


1. Of the changes described in the bus network of the draft Transit Master Plan, what are your main priorities? Choose up to 3.



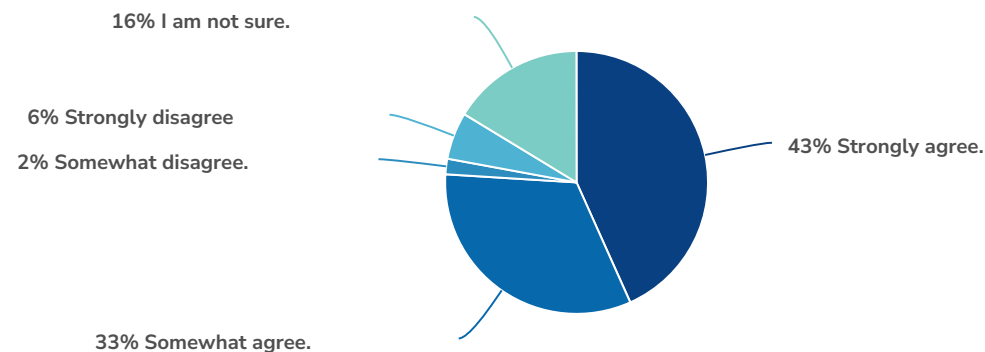
Value	Percent	Responses
The Canby Loop as a two-way loop instead of one-way.	53.5%	54
Route 99X going all the way downtown Woodburn.	31.7%	32
Route 99X going all the way to Milwaukie.	30.7%	31
Additional service to Wilsonville.	45.5%	46
Longer hours of service on Saturday for Route 99X.	40.6%	41

2. Overall, do you feel like the draft Transit Master Plan is headed in the right direction?



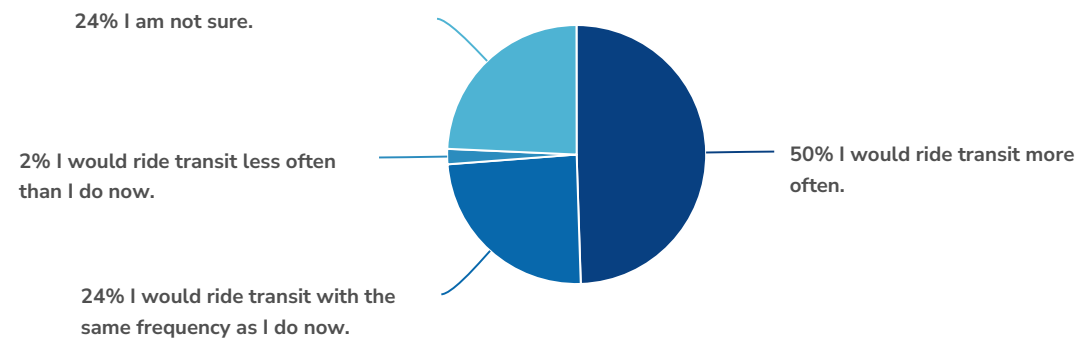
Value	Percent	Responses
Strongly agree.	46.2%	48
Somewhat agree.	35.6%	37
Somewhat disagree.	3.8%	4
Strongly disagree.	1.9%	2
I am not sure.	12.5%	13

3. Will the proposed service changes help you get around Canby, or make connections to other regions, without driving?



Value	Percent	Responses
Strongly agree.	43.3%	45
Somewhat agree.	32.7%	34
Somewhat disagree.	1.9%	2
Strongly disagree	5.8%	6
I am not sure.	16.3%	17

4. Thinking about your own use of CAT's services, what effect would these changes have?



Value	Percent	Responses
I would ride transit more often.	49.5%	51
I would ride transit with the same frequency as I do now.	24.3%	25
I would ride transit less often than I do now.	1.9%	2
I am not sure.	24.3%	25

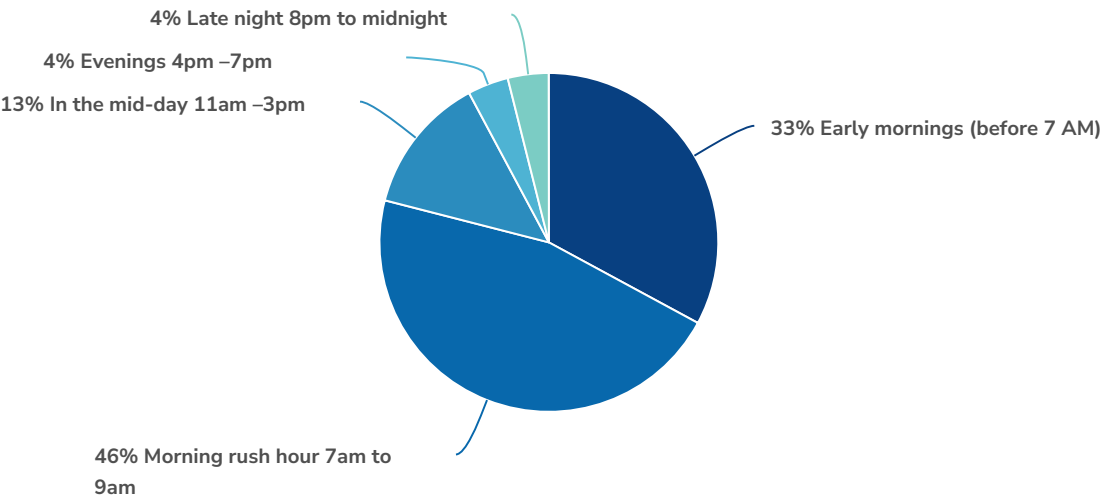
5. Is there any other feedback you'd like to share?

ResponseID	Response
11	Works good for me!
19	I have no feedback
24	No
31	I do not use transit
44	Can I get a ride to Wilsonville?
45	I believe this is a great idea, good luck!
46	No
47	No
58	nomp
59	I love CAT
60	No
63	No
69	Nah
71	We love the Canby loop
72	Love the idea of bridging the gap between Canby and Wilsonville with pubic transit
78	Later service to Wilsonville would be good

81 Are there any plans to expand to Newberg?

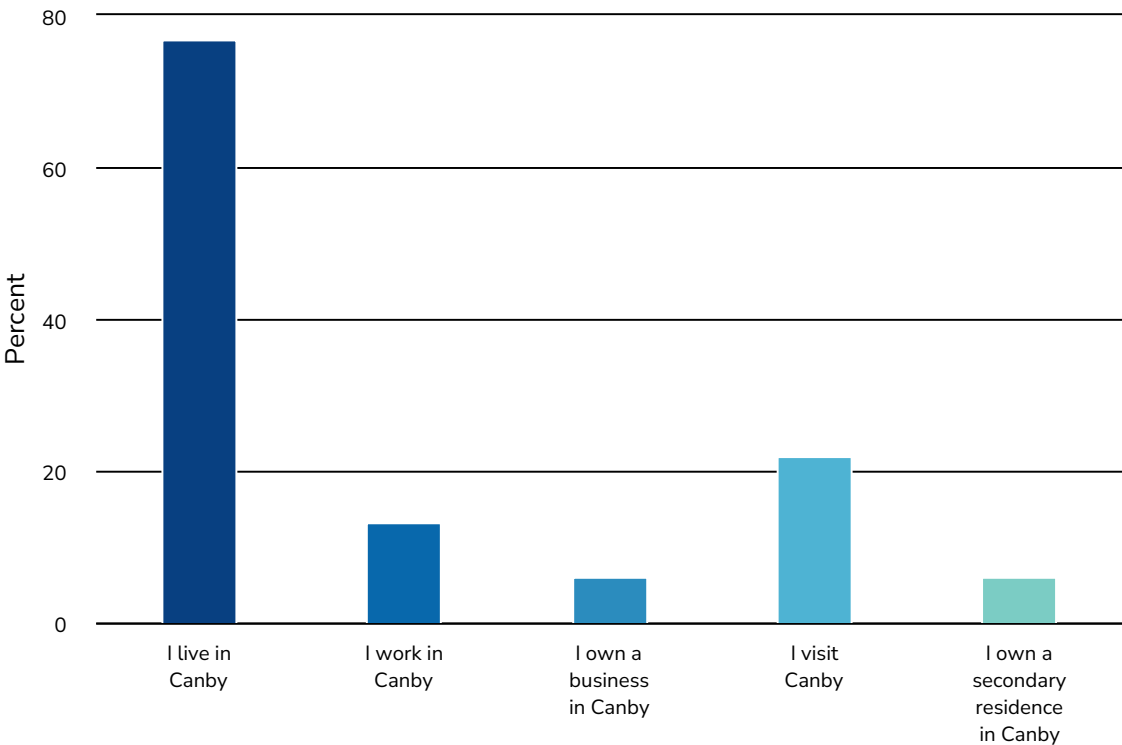
ResponseID	Response
101	No
102	Son Un transporte muy necesario gracias
103	Would like to have service to Woodburn Walmart mon-sat
104	We love the free Loop!
105	Adding services to people w/children under 5 in unsafe areas.
109	None
112	Would like more evening Loop service
116	Only to Max. I suppose that the Wilsonville location is for WES
119	This is a huge waste of money. Buses drive around empty or almost empty all day. The need is clearly not there for expansion.

7. When do you usually start work or school?



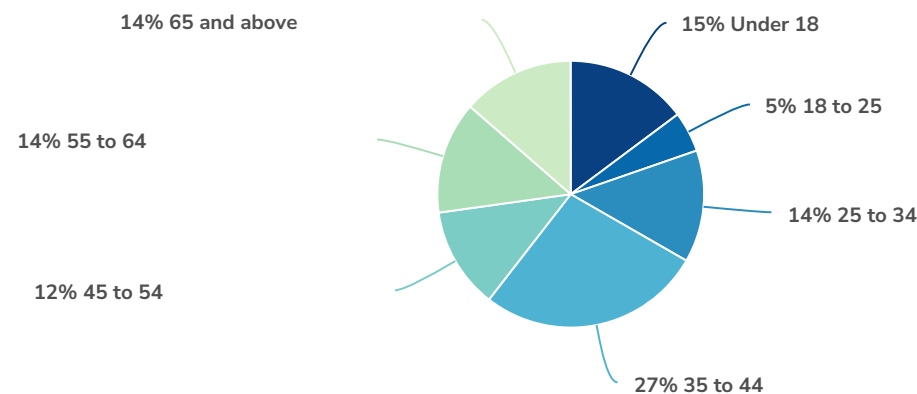
Value	Percent	Responses
Early mornings (before 7 AM)	32.9%	25
Morning rush hour 7am to 9am	46.1%	35
In the mid-day 11am –3pm	13.2%	10
Evenings 4pm –7pm	3.9%	3
Late night 8pm to midnight	3.9%	3

8. What is your connection to Canby? (choose all that apply)



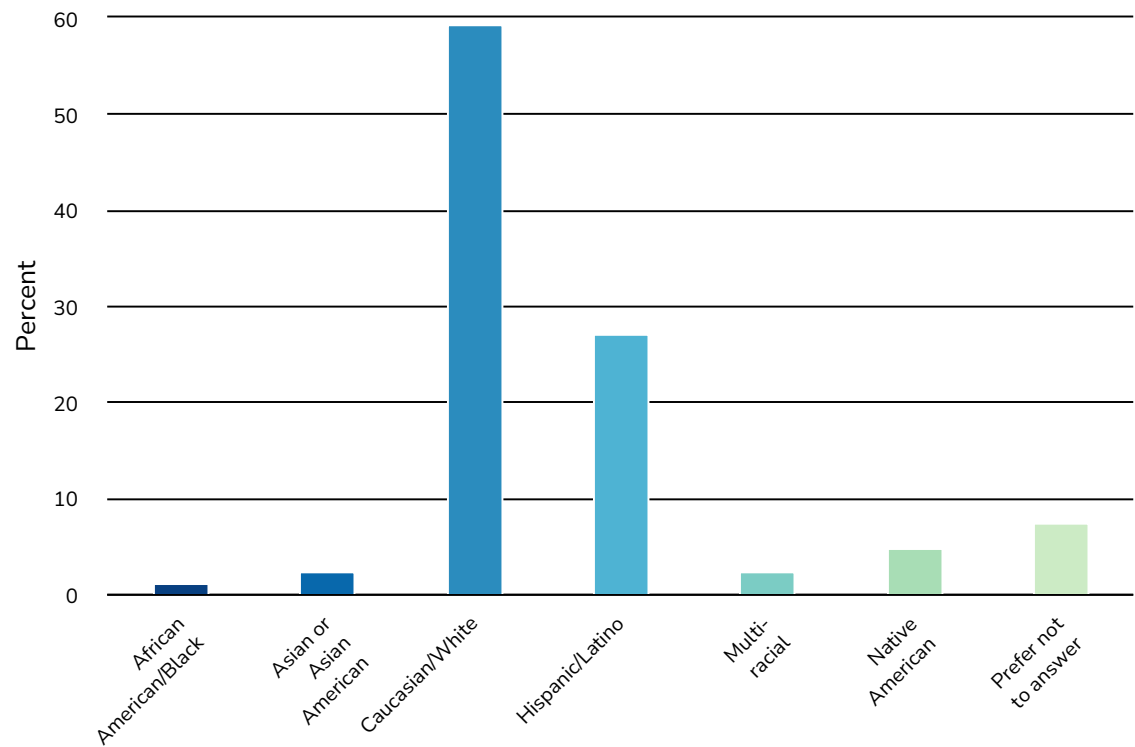
Value	Percent	Responses
I live in Canby	76.8%	63
I work in Canby	13.4%	11
I own a business in Canby	6.1%	5
I visit Canby	22.0%	18
I own a secondary residence in Canby	6.1%	5

9. What is your age?



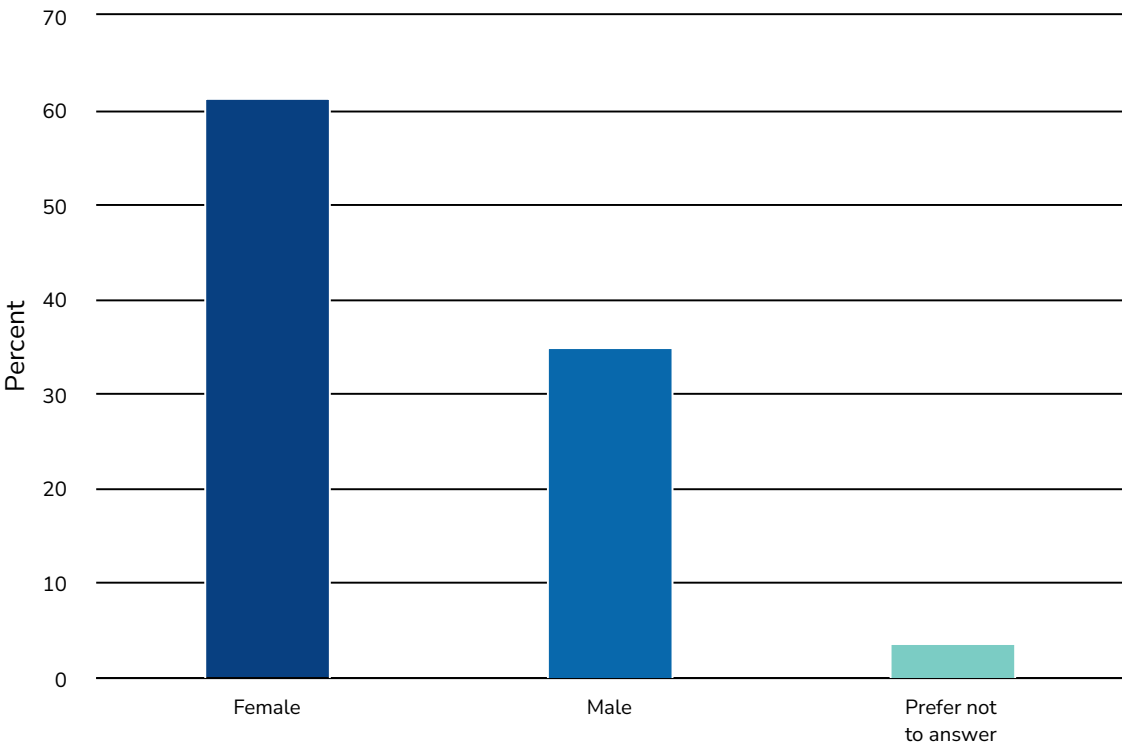
Value	Percent	Responses
Under 18	14.8%	12
18 to 25	4.9%	4
25 to 34	13.6%	11
35 to 44	27.2%	22
45 to 54	12.3%	10
55 to 64	13.6%	11
65 and above	13.6%	11

10. Which ethnic or racial group do you identify yourself? Choose all that apply.



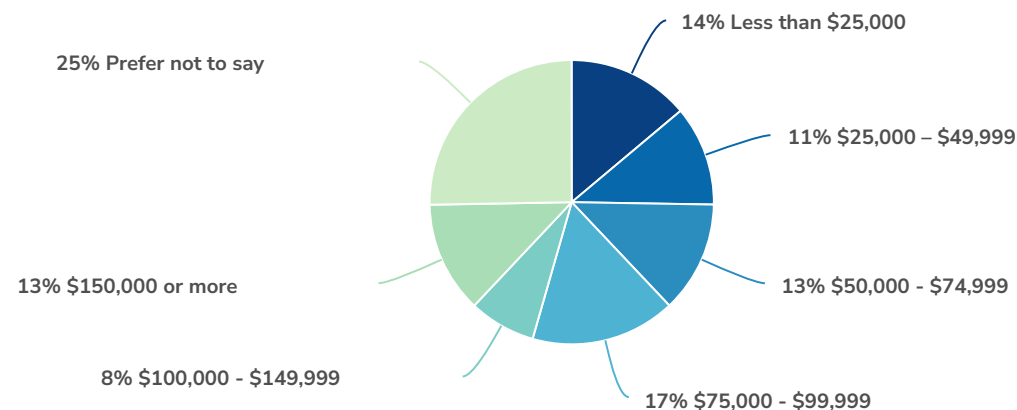
African American/Black	1.2%	1
Asian or Asian American	2.5%	2
Caucasian/White	59.3%	48
Hispanic/Latino	27.2%	22
Multi-racial	2.5%	2
Native American	4.9%	4
Prefer not to answer	7.4%	6

11. Please indicate your gender. Choose all that apply.



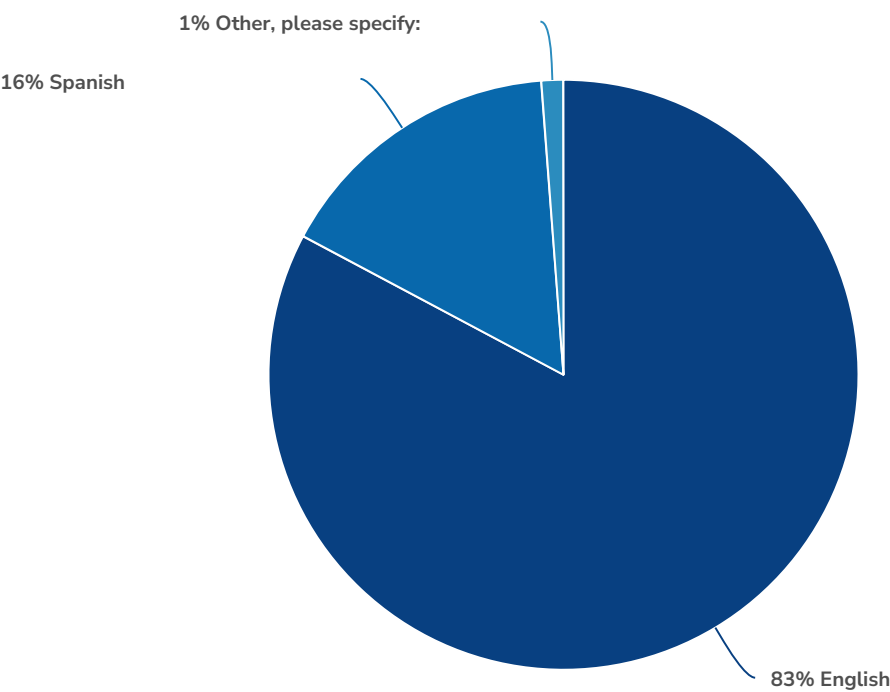
Value	Percent	Responses
Female	61.3%	49
Male	35.0%	28
Prefer not to answer	3.8%	3

12. What is your household income?



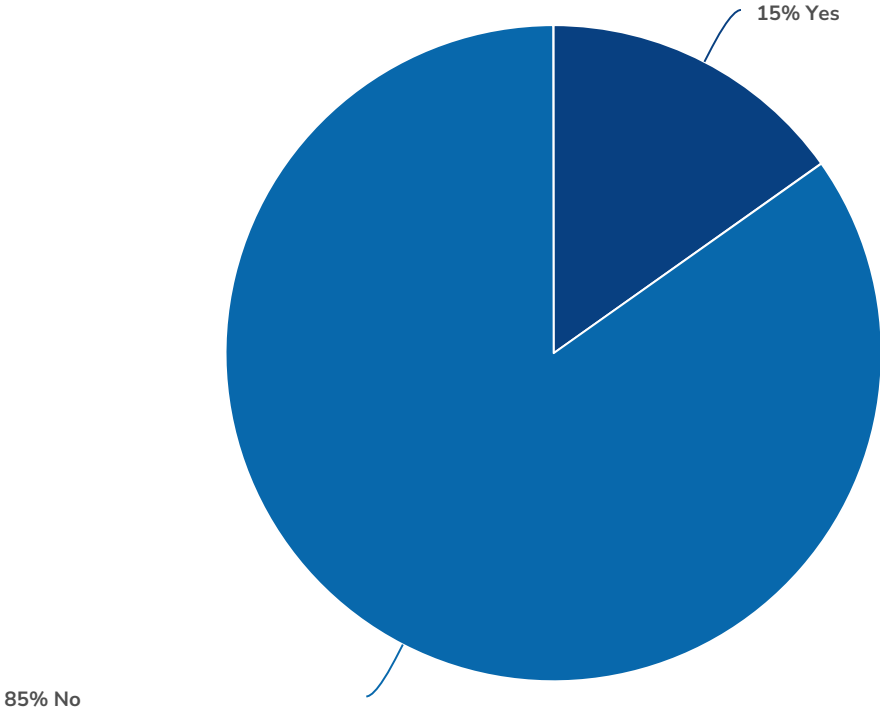
Value	Percent	Responses
Less than \$25,000	13.9%	11
\$25,000 – \$49,999	11.4%	9
\$50,000 - \$74,999	12.7%	10
\$75,000 - \$99,999	16.5%	13
\$100,000 - \$149,999	7.6%	6
\$150,000 or more	12.7%	10
Prefer not to say	25.3%	20

13. What is the primary language spoken in your home?



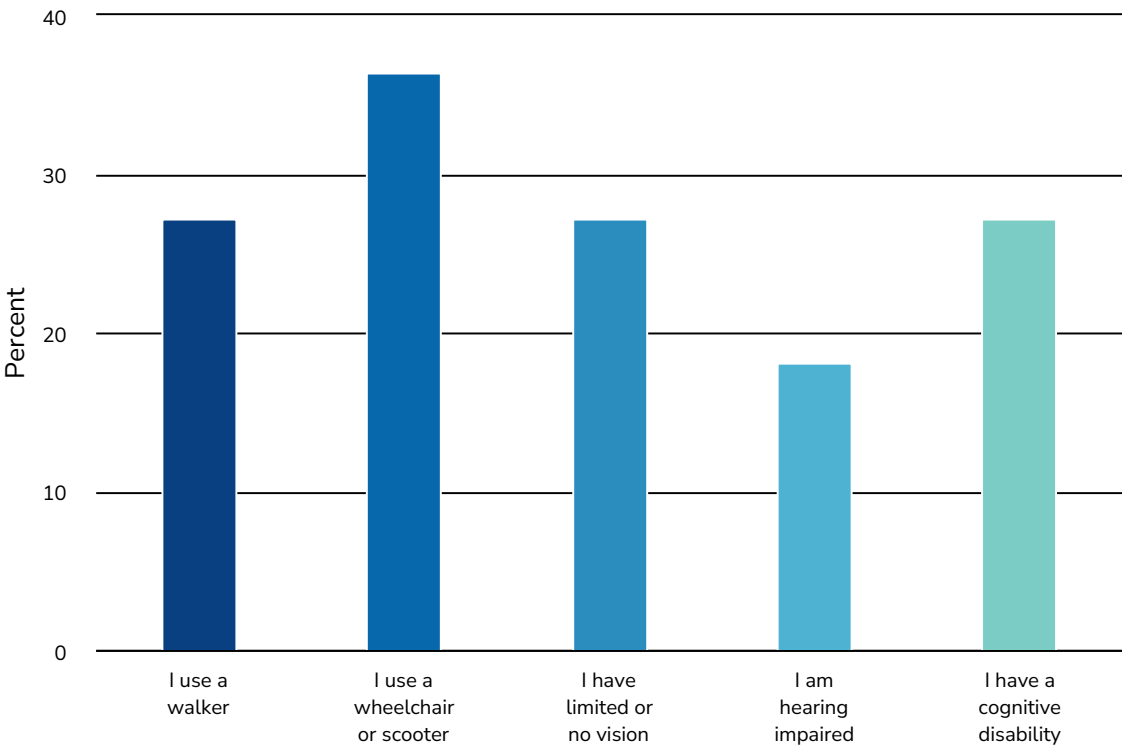
Value	Percent	Responses
English	82.7%	67
Spanish	16.0%	13
Other, please specify:	1.2%	1

14. Do you have a disability that limits your mobility?



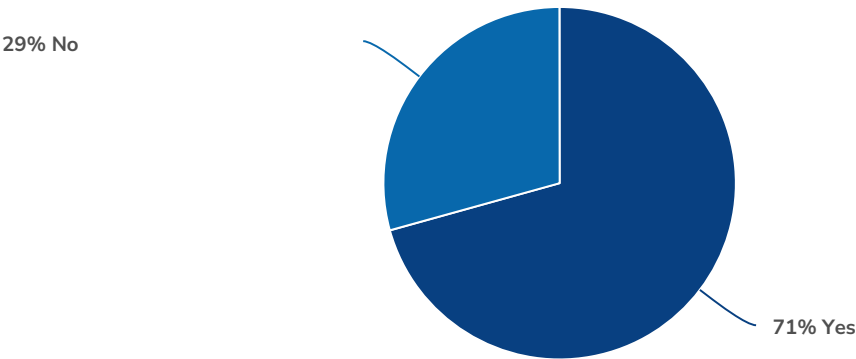
Value	Percent	Responses
Yes	15.2%	12
No	84.8%	67

15. Check all that apply to you:



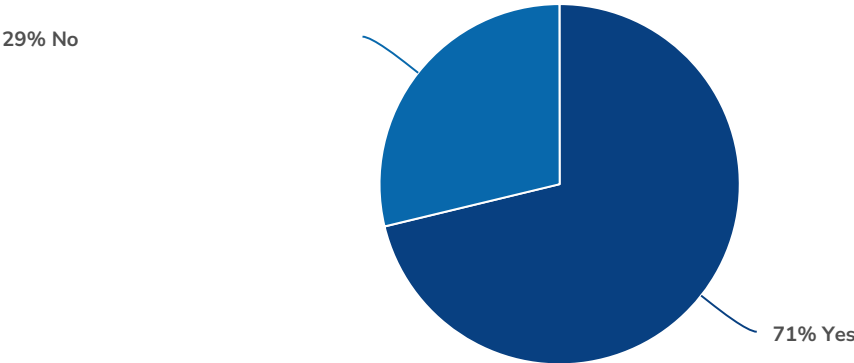
Value	Percent	Responses
I use a walker	27.3%	3
I use a wheelchair or scooter	36.4%	4
I have limited or no vision	27.3%	3
I am hearing impaired	18.2%	2
I have a cognitive disability	27.3%	3

16. Do you have a valid driver's license?



Value	Percent	Responses
Yes	70.7%	58
No	29.3%	24

17. Is a working vehicle usually available for your use?



Value	Percent	Responses
Yes	71.3%	57
No	28.8%	23

Stakeholder Interviews Summary

Purpose

We reached out to stakeholders representing interest groups around Canby to learn about their communities' transportation needs and to inform recommendations for the Transportation Management Plan. During these interviews, we sought feedback from stakeholders' existing experiences and improvements that would be most useful for themselves, people they know of, and others they are aware of by asking:

- What their community groups top three priorities are for transit improvement in Canby
- What would make a Transit Master Plan successful in their community
- What CAT is doing well in terms of service that can continue or expand on

Who We Engaged With

We reached out to:

- Local school district representatives
- Business/industrial park owners and employees
- Non-profit services, like Canby Center or Canby Adult Center
- Senior center, like Hope Village or Casa Verde
- Local organizations, like Bridging Cultures

We heard from:

- Bill Vermillion from Hope Village
- Kristen Wohlers, Canby School District

- Wendy May, Canby Adult Center
- Abdi Lopez, Social Worker at Canby School District

Interview Methods

We conducted three interviews over the phone, one in person and gave interviewees the option to send us email responses to our questions. We provided a brief overview of the project and what kind of feedback we were hoping to receive. Interview questions included:

- What are your community/group top three priorities for transit improvements in Canby?
- What would make the Transit Master Plan successful to your community? What about CAT's service can be improved?
- What is CAT doing especially well in terms of service that can continue or expand?
- Is there anything else you'd like to add or point out that we have not yet asked about to ensure a successful transit system?

If time permitted, we asked the following additional questions to hear stakeholder thoughts on proposed recommendations to the Transportation Management Plan:

- We are considering the idea of adding service to Wilsonville or Milwaukie at the expense of reducing some service to Woodburn. What would you think of that?
- We are exploring the idea of extending the 99X to reach downtown Woodburn (instead of stopping on 99E at the Bi-Mart). We are also exploring the idea of sending it further north into Milwaukie, to connect with the Orange Line train to Portland. But to do those things, the CAT Route 99X might have to be split apart at Canby Transit Center. People riding through Canby might have to change buses or wait while the driver takes a break. What would you think of that?

Findings

Priorities for Transit Improvements in Canby

- At the Canby Adult Center folks currently cross the street to get to the bus and wait at a makeshift bus stop that is just a pole. There was a shelter on the property at Canby Adult Center that used to be used as the bus stop for the Canby Loop. Stakeholders wish CAT can pick up riders at the Canby Adult Center at the shelter on property.
- Adding benches to bus stops. Right now, the bus stop across the street from the Canby Adult Center is just a pole, and riders are forced to stand and wait.
- Prioritize service for a large mobile home community off Highway 99. It is a very underserved area because community members cannot walk up to the highway or cross the highway to the next stop. Currently, neither Dial-A-Ride service or paratransit will go there.
- Prioritize Canby citizens being able to get a ride near their home any time of day.
- Improve advertisement of services and schedule.
- Prioritize Canby citizens being able to easily get to and from shopping areas or appointments outside Canby like Woodburn, Salem, Tualatin, Tigard, and Portland.
- Prioritize service to Wilsonville, and service to Costco.
- Don't forget about the riders who have no other means of transportation and rely on this service.

What would make the Transit Master Plan successful to your community? What about CAT's service can be improved?

- Having a shelter inside the Canby Adult Center that is serviced by the Canby Loop.
- Adding more stops and more frequent stops to all business areas in Canby.
- Advertise tourist-friendly bus routes.

- There is a Denny's breakfast group of regulars who get together from Hope Village that stakeholders wish service ran early enough for folks to get to, as current service hours aren't early enough for when this group meets. He mentioned sometimes people use dial-a-ride to get to the Denny's breakfast group.
- For Hope Village riders, Sunday is not a big priority as people already have rides to church.
- Service to Woodburn, Salud Medical Center.

What is CAT doing especially well in terms of service that can continue or expand?

- Staff are smart, nice, and accommodating. As an example, if folks are ready to go home from the Canby Adult Center early before the bus schedule, staff will call CAT, and the staff are cool about trying to get there early when they can.
- The consistency in scheduling of the Canby Loop is great. It goes all day long, and folks know exactly when they can get a ride.
- Dial-A-Ride is working well, and great for folks with mobility issues.
- Appreciate that a free or cheap option exists for those who otherwise wouldn't be able to get around.

Thoughts on Proposed Recommendations

- Not a lot of people are coming to the Canby Adult Center from Woodburn, but a lot of people call looking for services in Woodburn – they are underserved and do not have an Adult Center in Woodburn. It would have a negative impact and isolate people more to have reduced service to Woodburn.
- Not a lot of people talk about going to Wilsonville but there's now Costco and Target so maybe it would be good to add service there.
- At Hope Village, residents from the cottages and garden homes prefer more Oregon City service and/or access to Milwaukie/MAX over the Woodburn Mall or Wilsonville.
- If service extended to Milwaukee would be outstanding and even to Happy Valley. In Happy Valley, there is the Clackamas County courthouse and medical services, so service to Happy Valley and Milwaukee would be outstanding.
- Having to transfer at Canby Transit Center would not be a deterrent.

- Concern for reducing service to Woodburn because of Salud Medical Center- access is already minimal and many clients (social service clients from Canby School District, primarily low income and Spanish speaking) need to go there.

Anything Else

- Canby has grown and so has Woodburn.
- Good questions!
- Hope Village includes:
 - 100 affordable living apartments
 - 200 cottages & garden homes residences/condos
 - And Assisted living
- Hope Village has a bus but no driver. They can work around CAT service when possible.

Questions for CAT

- Can the bus take a left turn into the parking lot of the Canby Adult Center and then get back on the loop route?
- Why won't Dial-A-Ride take calls from community members from the large mobile home community on Highway 99 right outside of Canby?
- What does CAT's funding look like?
- What is the cost of a ride?
- What care does CAT take to contribute to a healthy environment and decrease air pollution?

Appendix B: Bus Stop Inventory

Bus Stop Inventory

Canby Loop Bus Stops

Stop #	Stop ID	Bus Stop Location	Bus Stop Amenities	Notes and Recommendations
1	1000	Canby Transit Center	2 shelters 3+ benches - Map signage - Sign and pole - Bathrooms - Lighting	Midblock bus pull-out. Canby Transit Center is shared with Wilsonville SMART route 3X, and South Clackamas Transportation District's Molalla to Canby bus route, which use N Ivy St and NW 2 nd Ave to access/depart from the transit center. Shared with 99X.
2	102	N Ivy St & NE 4 th Ave	Sign and pole	Farside. Sign and pole at back of sidewalk. Parking lane and bike lane adjacent. Yellow curb at bus stop. Near-term recommendation to add green bike conflict markings in the bike-lane. Evaluate ridership and bicycle volumes at this stop. Long-term recommendation to extend curb into parking lane and bike lane, add bike ramps and sidewalk-level bike lane behind bus platform to create more waiting space on bus platform at curb and mitigate bus/bike conflict. Evaluate drainage and utility conflicts.

3	104	N Ivy St & NE 10 th Ave	▪ Sign and pole	Nearside. Sign and pole at back of sidewalk. Parking lane and bike lane adjacent. Recommend yellow curb and marked crossings on all four legs of intersection. Near-term recommendation to add green bike conflict markings in the bike-lane. Evaluate ridership and bicycle volumes at this stop. Long-term recommendation to extend curb into parking lane and bike lane, add bike ramps and sidewalk-level bike lane behind bus platform to create more waiting space on bus platform at curb and mitigate bus/bike conflict.
4	108	NE 10 th Ave & N Locust St	▪ Sign and pole	Nearside. Sign and pole at curb of sidewalk. Parking lane adjacent. Mailboxes ~5' from sign and pole. Recommend marked crossings across N Locust St. at north and south legs of intersection. Recommend shifting stop closer to intersection.
5	112	N Maple St & Maple Street Park	▪ Sign and pole	Midblock. Sign and pole at curb of sidewalk. Parking lane adjacent. Parking lot for park behind bus stop. Recommend yellow curb. Recommend repurposing a vehicular parking spot in parking lot for bus shelter and adding walkway across landscaping to access sidewalk.
6	114	N Maple St & NE 16 th Ave	▪ Sign and pole	Farside. Sign and pole at curb of sidewalk. Parking lane adjacent. Recommend yellow curb and marked crossing on east leg of intersection.

7	116	NE Territorial Rd & N Pine St	▪ Sign and pole	Farside. Sign and pole at curb of sidewalk. Parking lane and bike lane adjacent. Yellow curb at bus stop. Recommend marked crossing at N Pine St and shifting stop closer to intersection. Near-term recommendation to add green bike conflict markings in the bike-lane. Evaluate ridership and bicycle volumes at this stop. Long-term recommendation to extend curb into parking lane and bike lane, add bike ramps and sidewalk-level bike lane behind bus platform to create more waiting space on bus platform at curb and mitigate bus/bike conflict.
8	118	N Redwood St & NE 19 th Loop	▪ Sign and pole	Midblock. Sign and pole at curb of sidewalk. Parking lane adjacent. Recommend yellow curb and marked crossing at NE 19th Loop and across N Redwood St. Recommend "No Parking" signs.
9	120	N Redwood St & NE 17 th Ave	▪ Sign and pole	Nearside of tee intersection. Sign and pole at curb of sidewalk. Recommend marked crossings along N Redwood St, on west and east legs of intersection. Recommend yellow curb.
10	122	N Redwood St & NE 11 th Ave	▪ Sign and pole	Farside. Sign and pole at curb of sidewalk. Bike lane adjacent. Short segment of yellow curb from curb return to sign and pole. Recommend marked crossings along Redwood St, on west and east legs of intersection. Recommend shifting stop away from

				intersection to not block curb ramp. Recommend green bike conflict markings.
11	202	Sequoia Pkwy & SE Hazel Dell Way	▪ Sign and pole	Nearside. Sign and pole at curb of sidewalk. Signalized intersection. Right turn lane (and bike lane) adjacent. Recommend bus shelter and seating due to high intersection volumes. Recommend green bike conflict markings for bus merging into through lane.
12	204	301 S Sequoia Pkwy	▪ Sign on light pole	Midblock, farside of driveway. Sign on light pole in grass buffer. Nearby bench and bike rack. Bike lane adjacent. Recommend shifting stop ~50 feet away from driveway to avoid vehicular conflicts. Recommend paved platform for bus shelter and ADA access to bus. Add green bike conflict markings.
13	206	387 S Sequoia Pkwy	▪ Sign and pole	Midblock, at pedestrian path to adjacent building. Sign and pole at curb of concrete buffer area (rest of buffer is grass and trees). Next to mailbox. Bike lane adjacent. Recommend yellow curb. Recommend bus shelter.
14	208	SE Township Rd & Sequoia Pkwy	▪ Sandwich board	Farside. Sandwich board against Speed Limit 30 sign on dirt between fence of cemetery and curb. Parking lane adjacent. Recommend sign and pole, and sidewalk with yellow curb. Evaluate for drainage and utilities. Recommend remarking crosswalks on west leg.

15	210	SE Township Rd across from Baker Prairie Middle School	▪ Sign and pole	Midblock, farside of driveway. Sign and pole at curb of sidewalk. Bike lane adjacent. Recommend bus shelter behind sidewalk. Recommend yellow curb and green bike conflict markings.
16	212	SE Township Rd & S Redwood St	▪ Sign and pole	Farside. Sign and pole at curb of sidewalk. Parking lane and bike lane adjacent. Near-term recommendation to add yellow curb, shift stop close to intersection, and add green bike conflict markings. Evaluate stop for ridership and bicycle volumes. Long-term recommendation to extend curb into parking lane and bike lane, add bike ramps and sidewalk-level bike lane behind bus platform to create more waiting space on platform at curb and mitigate bus/bike conflict. Evaluate drainage and utilities.
17	214	SE Township Rd & S Pine St	▪ Sign and pole	Farside. Sign and pole at curb of sidewalk. Parking lane and bike lane adjacent. Near-term recommendation to add marked crossing on north and south legs, add yellow curb, and add green bike conflict markings. Evaluate stop for ridership numbers and bicycle volumes. Long-term recommendation to extend curb into parking lane and bike

				lane, add bike ramps and sidewalk-level bike lane behind bus platform to create more waiting space on platform at curb and mitigate bus/bike conflict.
18	216	SE Township Rd & S Locust St	▪ Sign and pole	Farside. Sign and pole at curb of sidewalk. Bus pull-out and bike lane adjacent. Trees blocking sign as of July 2023. Near-term recommendation to add green bike conflict markings. Evaluate stop for ridership numbers and bicycle volumes. Long-term recommendation to extend curb into parking lane and bike lane, add bike ramps and sidewalk-level bike lane behind bus platform to create more waiting space on platform at curb and mitigate bus/bike conflict. Evaluate for drainage and utilities.
19	218	SE Township Rd & S Ivy St	▪ Sign and pole	Nearside. Sign and pole at curb of sidewalk. Bike lane adjacent. Trees blocking sign in photo provided by CAT. Recommend yellow curb and green bike conflict markings. Possibility to pave and add bus shelter on church property.
20	220	S Ivy St & SW 8 th Ave	▪ Sign and pole	Nearside. Sign and pole at curb in vegetated area. Trees blocking sign as of July 2023. Recommend marked crossing on southwest leg of intersection, crossing SW 8th Ave. Shift stop sign away from intersection. Recommend adding green bike conflict markings. Evaluate right-of-way (ROW) and consider sidewalk and curb ramp.

21	222	S Ivy St & SW 13 th Ave	▪ Sign and pole	Nearside. Sign and pole at curb of sidewalk. Bike lane adjacent. Recommend yellow curb and green bike conflict markings.
22	224	SW 13 th Ave & S Fir St	▪ Sign and pole	Farside. Sign and pole at curb of sidewalk. Parking lane and bike lane adjacent. Near-term recommendation to add yellow curb and green bike conflict markings. Evaluate stop for ridership and bike volumes. Long-term recommendation to extend curb into parking lane and bike lane, add bike ramps and sidewalk-level bike lane behind bus platform to create more waiting space on platform at curb and to mitigate bus/bike conflicts.
23	226	SW 13 th Ave & S Elm St	▪ Sign and pole	Farside, ~100 ft from intersection, more toward midblock. Sign and pole at curb of sidewalk. Bike lane tapers, parking lane adjacent. Near-term recommendation for yellow curb and adding green bike conflict markings. Evaluate stop for ridership and bike volumes. Long-term recommendation to extend curb into parking lane and bike lane, add bike ramps and sidewalk-level bike lane behind bus platform to create more waiting space on platform at curb and to mitigate bus/bike conflicts.

24	228	SW 13 th Ave at S Aspen Way	Sign and pole	Nearside to dead end street driveway (S Aspen Way). Sign and pole at back of sidewalk. Parking lane and bike lane adjacent. Yellow curb on nearside and farside of S Aspen Way. Shift stop east of Baywood Ct to avoid driveway conflicts. Add painted crossing.
25	230	S Berg Pkwy at Canby Communit y Park	Sign and pole	Midblock. Sign on light pole. Sign lists as temporary bus stop. Bike lane adjacent. Near-term recommendation for yellow curb and adding green bike conflict markings. Evaluate stop for ridership and bike volumes. Long-term recommendation to extend curb into parking lane and bike lane, add bike ramps and sidewalk-level bike lane behind bus platform to create more waiting space on platform at curb and to mitigate bus/bike conflicts. Long-term recommendation to add curb ramps and marked crossing to access park.
26	1030	Hwy OR- 99E & S Berg Pkwy	- Sign and pole - Shelter (recent ODOT project)	Shared bus stop with 99X. Midblock. Sign and pole at curb of sidewalk. No buffer to travel lane. Path to Canby Square Market Center/Safeway parking lot. Recommend adding yellow paint and installing bus-and-turn lane.

27	232	SW 2 nd Ave & S Birch St	▪ Sign and pole	Midblock between Canby High School driveways. Sign and pole at curb of sidewalk. Yellow curb. Re-paint crossing across SW 4 th Ave.
28	234	SW 2 nd Ave & S Elm St	▪ Sign and pole	Nearside. Sign and pole at curb of sidewalk. Parking lane adjacent. Recommend yellow paint. Evaluate right-of-way (ROW) to possibly install bus shelter in mulch area.
29	124	NW 2 nd Ave & N Douglas St	▪ Sign and pole	Nearside. Sign and pole at curb. Parking lane adjacent. Recommend yellow paint.
30	126	NW 3 rd Ave & N Aspen St	▪ Sandwich board	Midblock. Sandwich board sign. No parking bus stop side of street. Roll curb. Recommend yellow paint.
31	128	NW 3 rd Ave & N Elm St	▪ Sign and pole	Nearside. Sign and pole at back of sidewalk. Parking lane adjacent. Recommend yellow paint. Shift bus stop further away from stop sign to not interfere with intersection.
32	132	NW 3 rd Ave between N Holly St	▪ Sign and pole	Midblock. Sign and pole at curb at far side of midblock raised crossing. Front-in angled parking east and west of raised crossing.

and N Grant St

99x Bus Stops

Stop #	Stop ID	Bus Stop Location	Bus Stop Amenities	Notes
1	2000	Oregon City Transit Center (Oregon City)	- Shelter - Benches - Map signage - Sign and pole - Lighting - Trash receptacles	Farside. Oregon City Transit Center is shared with TriMet routes 31, 32, 33, 34, 35, 79, 99, 154, and LIFT. 11 th St/Moss St driveway allows connection between McLoughlin Blvd (OR-99E) and Main St.
2	1003	OR-99E & Jerome St (Oregon City)	Sign and pole	Nearside. Sign and pole at curb of sidewalk. Bike lane adjacent. Trees no longer remain. Near-term recommendation for yellow curb and adding green bike lane conflict markings. Evaluate stop for ridership and bike volumes. Long-term recommendation to partner with Oregon City to extend curb into parking lane and bike lane, add bike ramps and sidewalk-level

				bike lane behind bus platform to create more waiting space on platform and to mitigate bus/bike conflicts.
3	1007	OR-99E at General Trailer (Canby)	▪ Sign and pole	Nearside driveway of General Trailer. Sign and pole on shoulder (gravel and asphalt).
4	1009	OR-99E & Haines Rd (Canby)	▪ Sign and pole	Nearside flashing signal. No pedestrian crossing. Sign and pole on shoulder (asphalt). Recommend lighting.
5	1011	OR-99E & SE Territorial Rd (SB) (Canby)	▪ Sign and pole ▪ Shelter (recent ODOT project)	Farside. Sign and pole on shoulder (asphalt). Flush sidewalk from signalized intersection. Recommend lighting and bus shelter.
6	1013	OR-99E & N Redwood St (SB) (Canby)	▪ Sign and pole ▪ Shelter (recent ODOT project)	Nearside. Sign and pole at back of sidewalk at signalized intersection. Recommend green bike lane conflict markings. Consider shifting stop to farside to improve merging back into travel lane.
7	1017	OR-99E & N Pine St (SB) (Canby)	▪ Sign and pole ▪ Shelter (recent ODOT project)	Farside. Sign and pole on shoulder. No sidewalk to the north ~250 ft to signalized intersection. Recommend shifting stop closer to intersection. Add lighting.

8	1119	S Locust St between OR-99E and SE 2 nd Ave (Canby)	▪ Sign and pole ▪ Bench (recent ODOT project)	Nearside. Sign and pole at back of sidewalk. Yellow curb. Recommend lighting.
9	1000	Canby Transit Center (Canby)	▪ 2 shelters ▪ 3+ benches ▪ Map signage ▪ Sign and pole ▪ Bathrooms ▪ Lighting	Midblock bus pull-out. Canby Transit Center is shared with Wilsonville SMART route 3X, and South Clackamas Transportation District's Molalla to Canby bus route which use N Ivy St and NW 2 nd Ave to access/depart from the transit center. Shared bus stop with Canby Loop.
10	1025	OR-99E & S Berg Parkway (Walgreens) (SB) (Canby)	▪ Sign and pole ▪ Shelter (recent ODOT project)	Midblock. Sign and pole at curb of sidewalk. Recommend shifting bus stop closer to intersection. Recommend bus and right turn lane up to intersection.
11	1027	OR-99E before McLarens Carpet One (Canby)	▪ Sign and pole	Midblock. Sign and pole on shoulder (asphalt). Consider shifting stop east, on farside of entrance to Dick's Canby Ford, to increase proximity with Riverside RV Park 99X bus stop.

12	1029	OR-99E & S Barlow Rd (SB) (Canby)	▪ Sign and pole	Farside. Sign and pole on shoulder (asphalt). Recommend shifting stop east, closer to intersection. Recommend lighting and installing sidewalk to access stop.
13	1033	OR-99E & Liberty St (Aurora)	▪ Sign and pole	Farside. Sign and pole at back of sidewalk. Parking lane and bike lane adjacent. Near-term recommendation for yellow curb and shifting stop to nearside. Coordinate with ODOT on the following improvements: Add green bike lane conflict markings. Adjust signal change to allow for through bus movement to share right turn signal.
14	1035	OR-99E at Ottoway Rd (Aurora)	▪ Sign and pole	Nearside. Sign and pole on shoulder (asphalt). Recommend repainting crosswalk on north and west legs of intersections.
15	1037	OR-99E at AA Storage/U- Haul (Aurora)	▪ Sign and pole	Midblock. Sign and pole on shoulder (gravel). Across from Olds Mobile Park.
16	1039	OR-99E at the Truck Scales (Hubbard)	▪ Sign and pole	Midblock. Sign and pole on shoulder (gravel). Truck scales entrance on opposite side of bus stop. Recommend lighting

17	1041	OR-99E at Advantage Self Storage (Hubbard)	Sign and pole	Midblock. Sign and pole at back of sidewalk. Across OR-99E from residential neighborhood. Recommend bus shelter and marked mid-block crosswalk.
18	1045	OR-99E & G St (SB) (Hubbard)	Sign and pole	Farside. Sign and pole on curb of asphalt sidewalk. Parking lane adjacent. Recommend lighting.
19	1049	OR-99E & Pacific Ct NE (SB) (Hubbard)	Sign and pole	Farside. Sign and pole at back of sidewalk. Bike lane adjacent. Recommend lighting, yellow curb, and green bike lane conflict markings.
20	1061	1600 Mt Hood Ave (Woodburn)	- Sign and pole - Shelter (by others)	In parking lot. Accesses back of transit shelter. Recommend lighting.
21	1004	OR-99E & Carl Rd (NB) (Woodburn)	Sign and pole	Nearside. Sign and pole at back of sidewalk. Bike lane adjacent. Recommend green bike lane conflict markings.
22	1008	OR-99E & G Street (NB) (Hubbard)	Sign and pole	Nearside. Sign and pole on shoulder (gravel). Recommend lighting.

23	1010	OR-99E & Parkway Ave (NB) (Hubbard)	▪ Sign and pole	Midblock. Sign and pole at back of buffer between sidewalk and curb. Parking lane adjacent. Recommend shifting stop north to Rudometkin Dr to utilize existing bus shelter.
24	1012	OR-99E before Truck Scales (Hubbard)	▪ Sign and pole	Nearside of truck scales. Sign and pole on shoulder (asphalt). Recommend lighting.
25	1014	OR-99E at Olds Mobile Home Park (Aurora)	▪ Sign and pole	Nearside to entrance to Olds Mobile Home Park. Sign and pole on shoulder (asphalt). Recommend lighting.
26	1016	OR-99E & Orchard Ave NE (NB) (Aurora)	▪ Sign and pole ▪ Shelter	Midblock. Sign and pole at back of sidewalk. Parking lane adjacent. Recommend shifting stop closer to bus shelter.
27	1018	OR-99E & 3 rd St NE (NB) (Aurora)	▪ Sign and pole ▪ Bench	Nearside. Sign and pole at curb of sidewalk. Parking lane and bike lane adjacent.

				Recommend lighting. Near-term recommendation to add painted yellow curb and green bike lane conflict markings. Install crossing across Pacific Hwy and across 3rd St NE. Evaluate stop for ridership and bike volumes. Long-term recommendation to partner with City of Aurora to extend curb into parking lane and bike lane, add bike ramps and sidewalk-level bike lane behind bus platform to create more waiting space on platform and to mitigate bus/bike conflicts.
28	1024	OR-99E at Barlow House (Canby)	Sign and pole	Midblock between Barlow House driveway entrances. Sign and pole on shoulder (asphalt). Recommend shifting stop closer to intersection. Recommend lighting and sidewalk to access stop.
29	1028	OR-99E at Riverside R-V Park (Canby)	Sign and pole	Midblock. Sign and pole on curb of sidewalk. Recommend lighting.
30	1030	OR-99E & S Berg Pkwy (Canby)	- Sign and pole - Shelter (recent ODOT project)	Shared bus stop with Canby Loop. Sign and pole at curb of sidewalk. No buffer to travel lane. Path to Canby Square Market Center/Safeway parking lot. Recommend adding yellow paint and installing bus-and-turn lane.

31	1038	OR-99E & S Locust St (Canby)	▪ Sign and pole ▪ Shelter (recent ODOT project)	Farside. Sign and pole at back of sidewalk.
32	1040	OR-99E before S Pine St (Canby)	▪ Sign and pole ▪ Shelter (recent ODOT project)	Nearside. Sign and pole on curb of sidewalk. Signalized intersection.
33	1042	OR-99E & Sequoia Pkwy (NB) (Canby)	▪ Sign and pole ▪ Shelter (recent ODOT project)	Nearside. Sign and pole at back of sidewalk. Perpendicular path to Canby Market Center/Fred Meyer. Signalized intersection. Right turn lane and bike lane adjacent.
34	1048	OR-99E & SE Territorial Rd (NB) (Canby)	▪ Sign and pole ▪ Shelter (recent ODOT project)	Nearside. Sign and pole at back of sidewalk (ramping down from signalized intersection). Recommend lighting.
35	1050	OR-99E & Haines Rd (NB) (Canby)	▪ Sign and pole	Nearside. Far from intersection. Sign and pole on shoulder (asphalt). Recommend lighting and shifting stop closer to intersection.
36	1052	OR-99E at Pearson's	▪ Sign and pole	Midblock. Sign and pole on grass beyond shoulder (asphalt).

		Art Gallery (Canby)		Recommend lighting.
37	1054	OR-99E south of Oregon City Marina (Oregon City)	▪ Sign and pole	Midblock. Sign and pole on shoulder (asphalt and gravel). Recommend lighting.
38	1056	OR-99E at Hedges St (Oregon City)	▪ Sign and pole	Farside. Sign and pole on shoulder (asphalt). Recommend lighting.
39	1058	OR-99E at Gerber Collision & Glass (Oregon City)	▪ Sign and pole	Midblock. Sign and pole on shoulder (asphalt). Recommend lighting.
40	1060	OR-99E & Main St (NB) (Oregon City)	▪ Sign and pole	Farside. Sign and pole on curb of sidewalk. Bus pull-in area next to sidewalk/parking lot.

Specific recommendations for bus stop improvements

Stop #	Stop ID	Bus Stop Location	Issues	Recommendations
Canby Loop				
14	208	SE Township Rd & Sequoia Pkwy	Bus stop has no pole or sign. No sidewalk, bus pad, shelter, seating, or lighting. No ADA access.	Move stop closer to intersection. Install pole and sign, install bus shelter and seating. Leverage existing lighting at intersection. Install sidewalk with ADA access from intersection. Re-paint crosswalk markings.
20	220	S Ivy St & SW 8 th Ave	No sidewalk, bus pad, shelter, seating, or lighting. No ADA access.	Install bus shelter, seating, and lighting. Install sidewalk access to stop. Install marked crosswalk across SW 8 th St.
25	230	S Berg Pkwy at Canby Community Park	No bus pad, shelter, or seating. Narrow sidewalk. No crosswalk to park.	Install bus shelter and seating. Install marked crossing with curb ramps, crossing warning signs, advance "Stop Here For Pedestrians" sign and stop line.
32	132	NW 3 rd Ave between N	Stop placed on far side of the midblock raised crossing, which means the	The sign should be moved nearside of the raised crossing at this location.

		Holly St and N Grant St	bus will stop in the crosswalk if it pulls up to the sign and pole.	
99X				
4	1009	OR-99E & Haines Rd (Canby)	No sidewalks and no safe pedestrian crossing across OR-99E to Canby Regency, a mobile home community with high transit ridership.	Add pedestrian infrastructure (sidewalks) from Canby Regency along S New Era Rd to Haines Rd. Coordinate with ODOT on the following improvements: Add a signalized crossing across OR-99E at Haines Rd.
11	1027	OR-99E before McLarens Carpet One (Canby)	No sidewalk, bus pad, shelter, seating, or lighting. Stop is located close to 4-lane roadway with narrow shoulder. Posted speed limit is 50 mph.	Recommend shifting bus stop closer to adjacent stop at Riverside RV Park. Add bus pad, shelter, seating, and lighting. Coordinate with ODOT on the following improvements: Add signalized crossing across OR-99E in proximity to stop ID 1028.
16	1039	OR-99E at the Truck Scales (Hubbard)	No ADA access to bus stop; no marked crossing. Riders must cross truck scales entrance with no infrastructure. Stop is located next to a drainage ditch. No shelter, lighting, or	Add shelter, seating, and lighting. Add ADA access. Coordinate with ODOT on the following improvements: Add marked crossing across truck scales entrance. Add signalized crossing at Shirley Ave NE to improve access to NB bus stop #1012. Consider relocating stop away from truck scales exit.

			seating is available. Stop is located close to road; posted speed limit is 50 mph.	
22	1008	OR-99E & G Street (NB) (Hubbard)	No sidewalk, bus pad, shelter, or lighting. Limited ADA access to stop. No delineated separation between waiting area and auto-businesses. Install marked crossing at G St intersection.	Add shelter, seating, and lighting. Coordinate with ODOT on the following improvements: Install sidewalk from G St to bus stop, with defined edge between travel lane and automotive lot
24	1012	OR-99E before Truck Scales (Hubbard)	No ADA access to stop. No marked crossing. Bust stop located next to ditch. No shelter, lighting, or seating. Stop is located close to road; posted speed limit is 50 mph.	Add shelter, seating, and lighting. Add ADA access. Coordinate with ODOT on the following improvements: Add marked crossing across 99E.
25	1014	OR-99E at Olds Mobile Home Park (Aurora)	No sidewalk, bus pad, shelter, or lighting. No ADA access to stop. Stop is located next to	Add shelter, seating, and lighting. Coordinate with ODOT on the following improvements: Install sidewalk access from Olds Mobile Home Park to stop. Add marked crossing to improve access to bus stop #1037.

			drainage ditch. Posted speed limit is 50 mph.	
28	1024	OR-99E at Barlow House (Canby)	No sidewalk, bus pad, shelter, or lighting. Stop is located next to driveway entrance. Posted speed limit is 50 mph.	Add shelter, seating, and lighting. Shift stop away from driveway.
32	1040	OR-99E before S Pine St (Canby)	No bus pad, shelter, or seating. Stop is located adjacent to 5-lane roadway, no shoulder.	Evaluate right-of-way (ROW). If public ROW, add bus pad, shelter, and seating away from travel lane.
35	1050	OR-99E & Haines Rd (NB) (Canby)	No sidewalk, bus pad, shelter, seating, or lighting. Stop is located adjacent to 4-lane roadway with wide shoulder. Stop is located far from intersection. Posted speed is 50 mph. No crossing to SB bus stop.	Relocated bus stop closer to intersection. Add crossing elements. Add bus shelter, seating, and lighting.

Appendix C: Summary of Recommended Policies

Summary of Recommended Policies

RECOMMENDATION		RELATED CODE OR POLICY	PRIORITY
Pedestrian Safety, Circulation, and Access	A	Expand sidewalks and pathways for pedestrian access and circulation	
	A1	Require sidewalks in all zoning areas, including residential, residential/commercial, and overlay zones, ensuring continuous and safe pedestrian pathways to access transit services throughout the city.	16.08: GENERAL STANDARDS AND PROCEDURES High
	A2	Include provisions that require installing pedestrian pathways when curvilinear streets and cul-de-sacs are necessary so that connectivity for people walking to nearby destinations and streets can be maintained. Note, Code 16.64 (Subdivision – Design Standards) requires pedestrian connectivity in cul-de-sacs	16.64: SUBDIVISION – DESIGN STANDARDS; 16.86: STREET ALIGNMENTS High
	A3	Specify a minimum width of 5 feet for sidewalks on local streets to accommodate mobility devices such as wheelchairs and allow two people to pass comfortably or to walk side by side.	PUBLIC WORKS DESIGN STANDARDS High
	A4	Amend code to explicitly ensure all new developments provide direct pedestrian pathways that connect to transit stops and other key neighboring destinations in the Downtown Canby zone.	16.41: DOWNTOWN CANBY OVERLAY ZONE High
	A5	Require all new and modified sidewalks in commercial, residential, residential/commercial, and overlay zones include tactile paving surfaces at crosswalks to assist individuals with visual impairments.	16.08: GENERAL STANDARDS AND PROCEDURES High
	A6	Emphasize that all developments shall create walkways that link directly to existing bus stops abutting the development site.	16.49: SITE AND DESIGN REVIEW Medium
	A7	Require consideration of transit infrastructure, access, and services as a factor for the City to consider whether to accept land or cash in lieu of parks, open space, and trails.	16.120: PARKS, OPEN SPACE, AND RECREATION LAND Low
	B	Promote land use strategies to create a more walkable urban environment	

RECOMMENDATION		RELATED CODE OR POLICY	PRIORITY
B1	Consider loosening standards for shared parking spaces to encourage more developments to consolidate and share parking.	16.10: OFF-STREET PARKING AND LOADING	High
B2	Remove parking minimums citywide, in specific districts, or in areas proximate to transit stops.	16.10: OFF-STREET PARKING AND LOADING	Medium
B3	Include decorative fencing as a requirement for parking lot design to separate the lots from pedestrian walkways.	16.10: OFF-STREET PARKING AND LOADING	Low
C	Ensure pedestrians and motorists' shared spaces are safe for all users		
C1	Strengthen the design standards to adjust minimum road widths, and ensure ingress, egress, and shared/cross access minimize conflicts with pedestrian pathways.	16.46: ACCESS LIMITATIONS ON PROJECT DENSITY	High
C2	Adjust curb radii standards to 15 to balance motorists' turning speeds with pedestrian safety, ensuring intersections are safe for all users. Larger radii (up to 30 feet) can be used along places where buses are expected to make right turns.	Public Works Design Standards	High
C3	Specify maximum widths for driveways and standards for large turning radii, and right-in-right-out.	16.10: OFF-STREET PARKING AND LOADING	Medium
C4	Amending the minimum roadway width requirement that limits general-purpose lanes to no greater than 11 feet to encourage motorists to drive at safer speeds and reduce pedestrian crossing distances.	16.64: SUBDIVISION – DESIGN STANDARDS; Public Works Design Standards; Transportation System Plan	Medium
C5	Provide a list of traffic calming measures with dimensions and specifications that have been tested by Canby Fire District to remove potential ambiguity in the standards that need to be tested for every application.	Public Works Design Standards	Medium
C6	Include standards for traffic signals design and operation that incorporate pedestrian access and safety with elements that include, accessible pedestrian signals, leading pedestrian intervals, and extended crossing times.	16.86: STREET ALIGNMENTS; Public Works Design Standards	Medium
D	Create development practices that support transit operations		

RECOMMENDATION		RELATED CODE OR POLICY	PRIORITY
D1	Include potential impacts to transit access and operations as a determinant for when a TIS is required and ensure that the potential impact on transit access and operations is considered in the scoping checklist.	16.08: GENERAL STANDARDS AND PROCEDURES	High
D2	Include considerations for transit access and service in the proposed site development and site plan compliance review.	16.49: SITE AND DESIGN REVIEW	Medium
D3	Include someone with transit expertise in the Design Review Board, Design Review Commission, and/or the Planning Commission.	16.49: SITE AND DESIGN REVIEW	Medium
D4	Create standards section for bus stops siting that are near activity centers, follow spacing guidelines, ensure proximity to intersections/crossings, and integrate with pedestrian pathways. See Bus Stop Guidelines section below for more information.	NEW SECTION	Medium
D5	Create standards section for bus stop design that ensure ADA compliance, and clear bus stop zones. Provide shade, seating, lighting, garbage cans, and safe accessible pedestrian paths. See Bus Stop Guidelines section below for more information.	NEW SECTION	Medium
D6	Create standards section for bus stop sign design that ensure proper placement and size of signs that promote visibility and reduce conflicts. See Bus Stop Guidelines section below for more information.	NEW SECTION	Medium
D7	Require new developments help pay for creating new bus stops, concrete pads, shelters, and other transit amenities through a fee and/or dedications of property in lieu of the fee.	16.49: SITE AND DESIGN REVIEW	Low
E	Standardize curb space for safe multimodal uses		
E1	Develop standards for designated curb zones for transit stops, loading/unloading, and ride-hailing to better manage curb space and reduce conflicts.	Public Works Design Standards	Medium
E2	Specify a requirement for clear-sight triangles at all intersections. Curb space should be clear and no obstructions, including parked vehicles, landscaping, or street furniture, should be within the sight triangle.	16.08: GENERAL STANDARDS AND PROCEDURES; Public Works Design Standards	Medium

List of Resources

Improving Safety for Pedestrians and Bicyclists Accessing Transit, 2022, FHWA.

https://safety.fhwa.dot.gov/ped_bike/ped_transit/fhwasa21130_PedBike_Access_to_transit.pdf

Manual on Pedestrian and Bicycle Connections to Transit, 2011, FTA.

<https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/64496/ftareportno0111.pdf>

Pedestrian and Bicycle Funding Opportunities, 2023, USDOT.

https://www.fhwa.dot.gov/environment/bicycle_pedestrian/funding/funding_opportunities.pdf

Pedestrian Safety Guide for Transit Agencies, 2008, FHWA.

https://safety.fhwa.dot.gov/ped_bike/ped_transit/ped_transguide/transit_guide.pdf

Public Right-of-Way Accessibility Guidelines (PROWAG), 2013, U.S. Access Board.

<https://www.access-board.gov/prowag/>

Traffic-Roadway Section, Highway Design Manual, Part 700 Public Transportation and Guidelines, 2024, ODOT:

https://www.oregon.gov/odot/Engineering/Documents_RoadwayEng/HDM-0700.pdf

Transit Street Design Guide, 2016, NACTO.

<https://nacto.org/publication/transit-street-design-guide/>

Urban Street Design Guide, 2013, NACTO.

<https://nacto.org/publication/urban-street-design-guide/>

Improving Safety for Pedestrians and Bicyclists Accessing Transit, 2022, FHWA.

https://safety.fhwa.dot.gov/ped_bike/ped_transit/fhwasa21130_PedBike_Access_to_transit.pdf

Appendix D: Existing Conditions Report



Comprehensive Operational Analysis Final Network Plan

AGENDA ITEM NO. 3.

"Advocating and delivering quality public transportation as a leader within our community and industry."



FEBRUARY 2022

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Appendix A - Summary of Phase 2 Public Outreach Meetings

1 Introduction

Why does MST's network of bus lines need a redesign?

Monterey-Salinas Transit (MST) is considering significant changes to its bus network in the course of this study, the Comprehensive Operational Analysis (COA). These changes are being proposed in response to:

- An initial assessment of the issues faced by the existing network, detailed in the Choices Report¹.
- A consultation with stakeholders and members of the public about their values and priorities for transit; and conversations with bus riders about their experiences with the existing system.
- Direction from the MST Board of Directors' Operations Performance Committee to make changes that respond to the concerns we heard.

The key reasons for change are summarized in this section.

1. The last full system review was over two decades ago.

Many transit agencies review their entire network every five to ten years, to make sure service matches the community's needs. The last time MST undertook such a comprehensive study was in the late 1990s.

Many changes have taken place in and around Monterey County since then. But without consistent policy on where and how much service to provide, MST has responded separately to many individual requests for service. This approach has helped meet well-identified needs, but has not always contributed to more effective service for everyone.

¹ The full Choices Report and other materials related to this study can be consulted on MST's website at <http://mst.org/coa>

2. Most lines operate at very low frequencies.

The result is a network of many overlapping lines, each doing something that someone requested, but mostly running too infrequently to be worth the wait for anyone else travelling in the same direction.

Only two MST lines consistently run every 30 minutes or better on weekdays: Line 41 in Salinas, and Line 20 from Monterey to Salinas. Almost everything else runs once an hour or less².

In fact, nearly half of MST lines operate once an hour or less³, connecting small numbers of people to specific buildings or facilities. These specialized and very infrequent services tend to overlap with other lines, resulting in a very complex web of service. The same trip might require using different routes at different times of day, and take very different amounts of time, regardless of traffic conditions.

This is especially pronounced in the Monterey and Seaside area shown in Figure 1. Many of the lines on this map operate less than once an hour, and have very short unique segments. **Because each line has to operate on its own schedule, overlapping lines don't result in high combined frequency.**

For example, there may be four direct buses per hour between Monterey Transit Plaza and Del Monte Center on weekdays from 7 AM to 6 PM. However, during that eleven hour span, there are at least nine 30-minute gaps between southbound buses.

² There are two main exceptions: (a) the JAZZ A and B, which each run every 36 minutes on weekdays, and combine to every 18 minutes on Fremont Blvd., and (b) Line 24 from Monterey to Carmel Valley, which operated every 40 minutes on weekdays until September 2021..

³ As of early 2021, 14 of the 32 MST lines currently in operation run eight times per day or less.

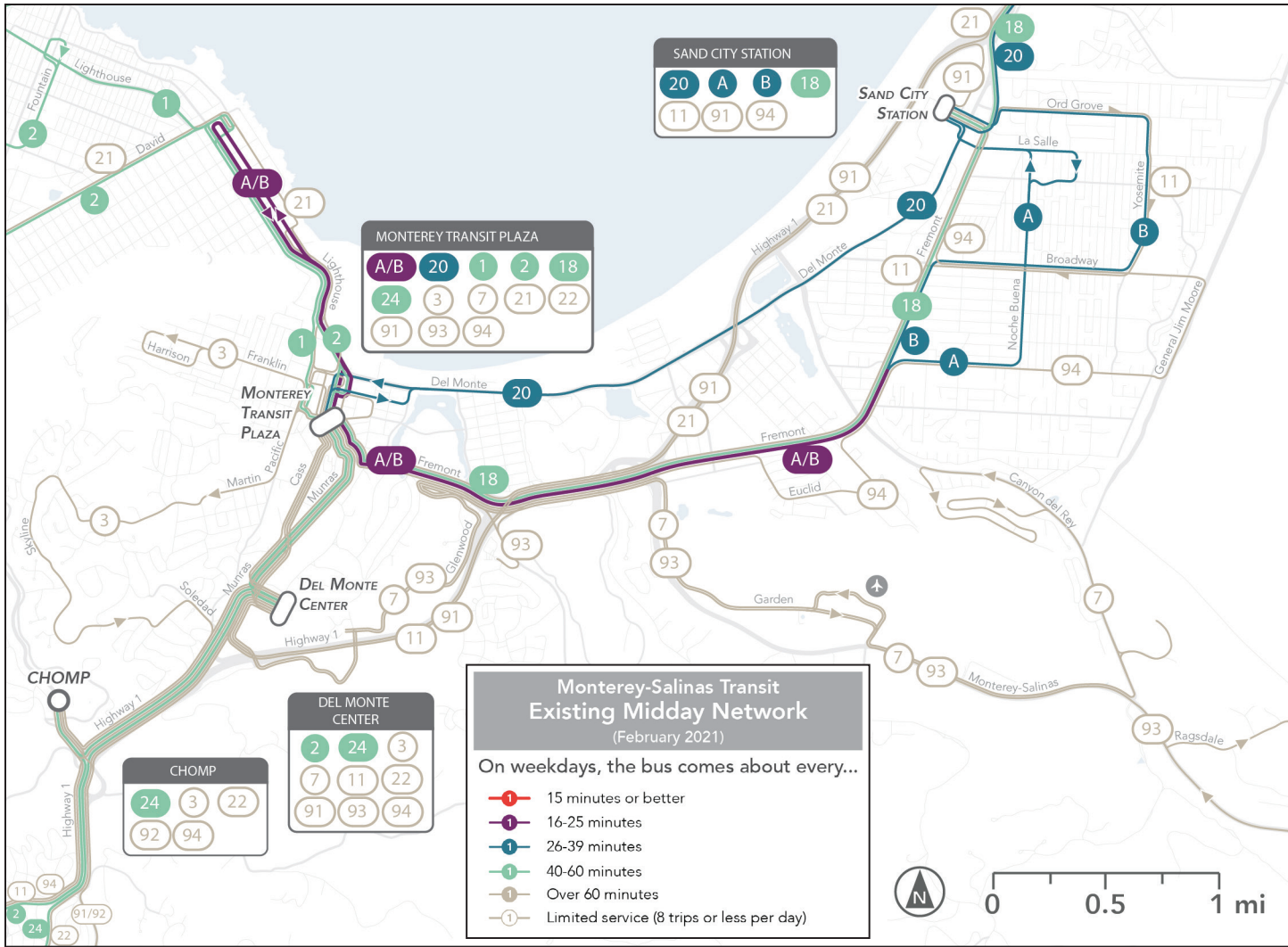


Figure 1: Map of MST's fixed-route network in Monterey and Seaside, with lines color-coded by frequency.

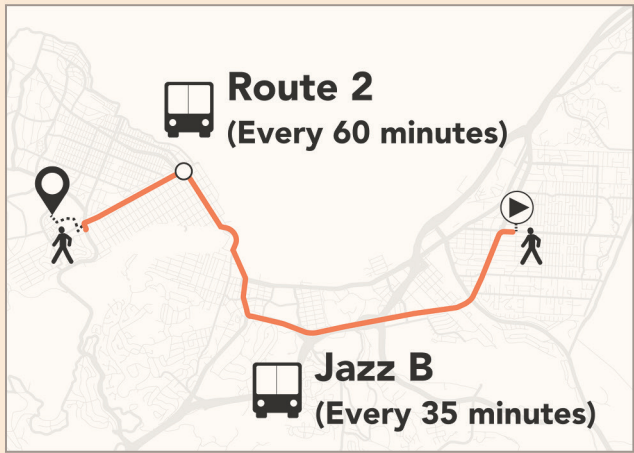
A number of MST lines operate just a few times per day, connecting small numbers of people to specific buildings or facilities.

3. It can take a very long time to get from A to B, even when those places are nearby.

Transit is useful to people when it extends the range of places they can go. But **low frequencies mean that few people can use transit to get anywhere in a reasonable amount of time.** This is true even when travelling relatively short distances, as in the following examples.

Example: How do you get from Seaside to Pacific Grove?

Let’s imagine you are a retail worker living in the center of Seaside, and you need to reach your job at Country Club Gate Center in Pacific Grove (6 miles away) for the start of your shift at noon on week-days. Here’s what you would need to do:



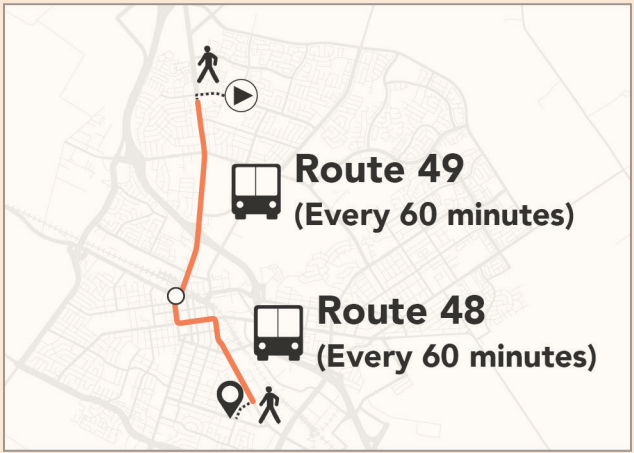
- 1 Hour 29 Minutes**
5 minutes walking, 55 minutes waiting, 29 minutes riding
- Start trip at home at Olympia & Terrace (Seaside) at 10:31am.
 - Walk 3 minutes to the stop at Olympia & Broadway.
 - Wait 5 minutes for Jazz B to the Aquarium.
 - Ride **Jazz B** for 23 minutes to Foam & Irving (Monterey).
 - Arrive 11:02am. Wait 16 minutes for Line 2. Get on at 11:18am.
 - Ride **Line 2** for 6 minutes to Forest & Forest Hill (Pacific Grove).
 - Walk 2 minutes to get to Country Club Gate Center at 11:26am.
 - Wait 34 minutes for start of work at 12:00pm.

Notice that this trip includes a total of only 29 minutes actually riding the bus, and that *you would spend more time waiting at your destination than you would getting there.*

The key problem in this example is the low frequency of Line 2. If Line 2 came every 30 minutes instead of once an hour, this could halve the length of the trip. In that case, you could catch a later Jazz B at 11:15, wait only 10 minutes in Monterey to connect to Line 2 at 11:48, and wait only 6 minutes at the end, for a total of 48 minutes.

Example: How do you get from North Salinas to South Salinas?

Let’s imagine you are a hospital worker living near North Salinas High School. You need to reach your job at Salinas Valley Memorial Hospital (4.5 miles away) for the start of your shift at 9 AM on week-days. Here’s what you would need to do:



- 1 Hour 20 Minutes**
17 minutes walking, 42 minutes waiting, 21 minutes riding
- Start trip at Alvin & McKinnon (Salinas) at 7:40am.
 - Walk 11 minutes to the stop at Main & Alvin.
 - Wait 5 minutes for Line 49 to Salinas.
 - Ride **Line 49** for 14 minutes to Salinas Transit Center.
 - Arrive 8:10am. Wait 20 minutes for Line 48. Get on at 8:30am.
 - Ride **Line 48** for 7 minutes to Abbott & Los Palos.
 - Walk 6 minutes to get to Salinas Valley Memorial Hospital at 8:43am.
 - Wait 17 minutes for start of work at 9:00am.

Notice that this trip includes a total of only 21 minutes actually riding the bus, and that *you would spend more time waiting at Salinas Transit Center than on either bus.* A fit adult could walk from Salinas Transit Center starting at 8:10 AM and arrive at the hospital at the same time as someone who had waited for Line 48. They might even be able to walk the whole way from home.

The key problem in this example is both low frequencies and the lack of a timed transfer at Salinas Transit Center. If Lines 48 and 49 were timed to arrive together at Salinas Transit Center at 8:25 AM and leave together at 8:30 AM, you could leave home 15 minutes later. If they both came every half hour and were timed to leave Salinas Transit Center at 8:15 AM and 8:45 AM, you could leave home 30 minutes later, for a 48 minute trip.

These are just two of many possible examples. Many prominent destinations are served once an hour or less, and people traveling to them by transit would have similar or even longer trips.

4. Where people live and work has changed.

The last 25 years have seen important shifts in where people live and work. Since the late 1990s:

- The population of the greater Monterey area and rural areas of the North County have stagnated.
- Marina experienced a significant decline in the 2000s, but has had the strongest growth of any community in Monterey County in the 2010s and continues to have the largest number of ongoing residential development projects.
- Salinas has grown slightly but unevenly. The population has grown significantly in North Salinas, while it has tended to decline or stagnated in East and South Salinas.
- Cities in the Highway 101 corridor south of Salinas grew strongly in the 2000s, but that growth slowed down significantly in the 2010s.
- The prominence of the military as a source of economic development has decreased following the closure of Fort Ord.
- The agriculture, retail, service, hospital-ity and higher education sectors have all become correspondingly more important.

Although some cities on the Monterey Peninsula are now showing renewed interest in growth and development, **the structure of existing water rights means that future growth will likely be concentrated in the Highway 101 corridor south of Salinas.**

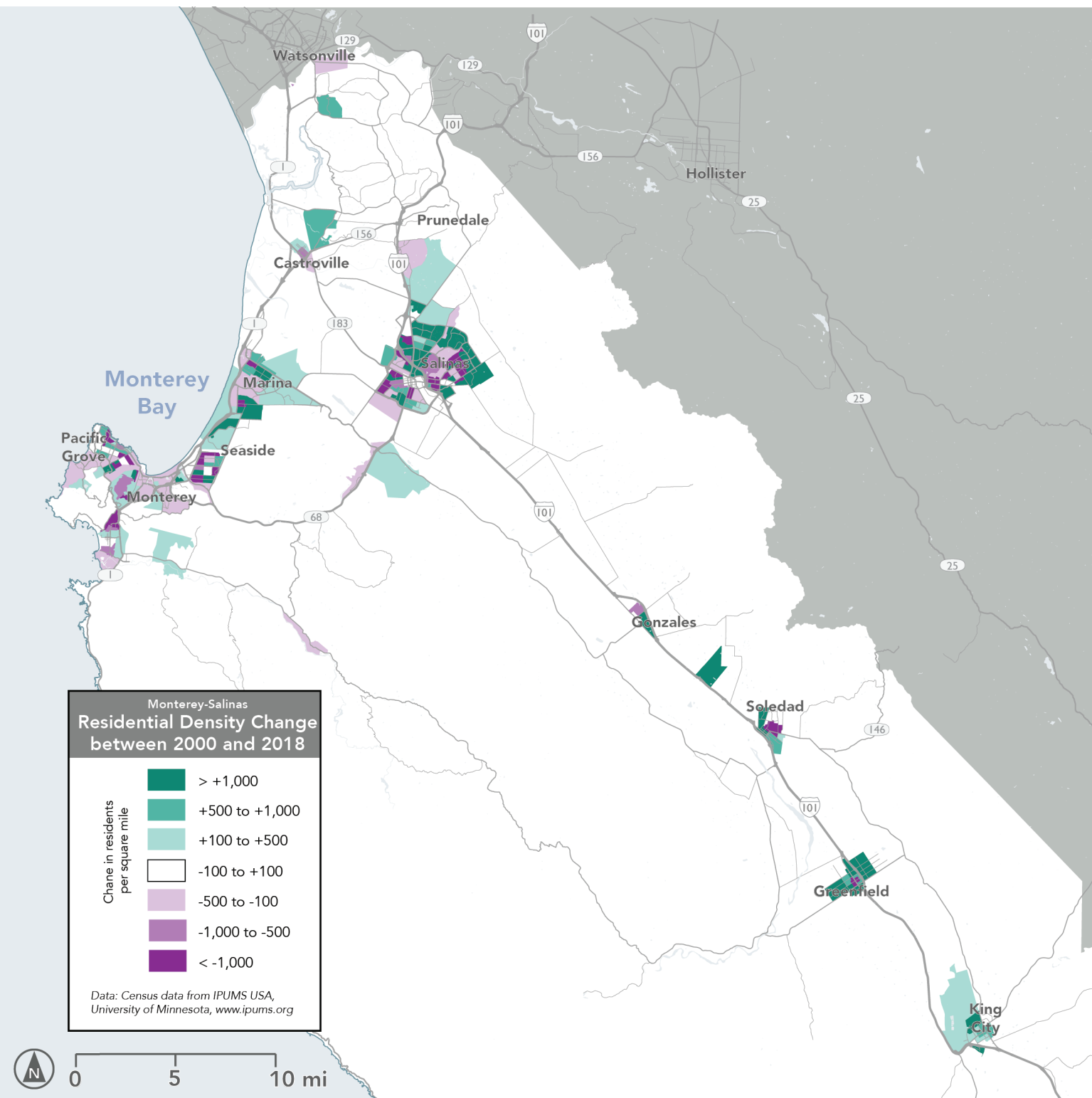


Figure 2: Regional map of change in population density. Growth has largely been concentrated in the outer neighborhoods of Salinas and in the cities of Gonzales, Soledad, Greenfield and King City.

6. The pandemic has brought more focus onto equity issues.

Establishing the way out of pandemic-era planning is another key reason for this study.

During the pandemic, both MST service levels and ridership declined considerably. Comparing Fall 2019 to Fall 2020:

- MST reduced service by over 30%.
- Weekday ridership was almost 75% lower, from over 13,500 to less than 3,700 boardings per day on fixed routes.
- Weekend ridership was about 60% lower, and at par with weekdays. On weekends, boardings went from about 9,000 boardings per day to just under 3,500 per day.

The pandemic especially caused much lower peak-hour demand. Prior to March 2020, MST experienced significantly higher ridership on weekdays between 7:00 AM and 8:00 AM and between 2:00 PM and 5:00 PM, and provided a higher level of service in response.

As schools, offices, and many hospitality businesses either closed or significantly reduced their operations, rush hour ridership came down to midday levels. Figure 6 shows that MST experienced about the same level of ridership from 7:00 AM to 6:00 PM, and no longer provided additional service at peak hours.

In addition, **ridership declines were considerably less steep in areas with many low-income people of color, suggesting that a large share of pandemic-era transit riders have been essential workers.**

This is consistent with trends in transit ridership observed throughout California and nationwide.

As the pandemic evolves and recedes, it will remain important to understand the needs of the people whose travel purposes are so essential that they continued even in a public health emergency.

MST Weekday Ridership by Area 2019 vs. 2020

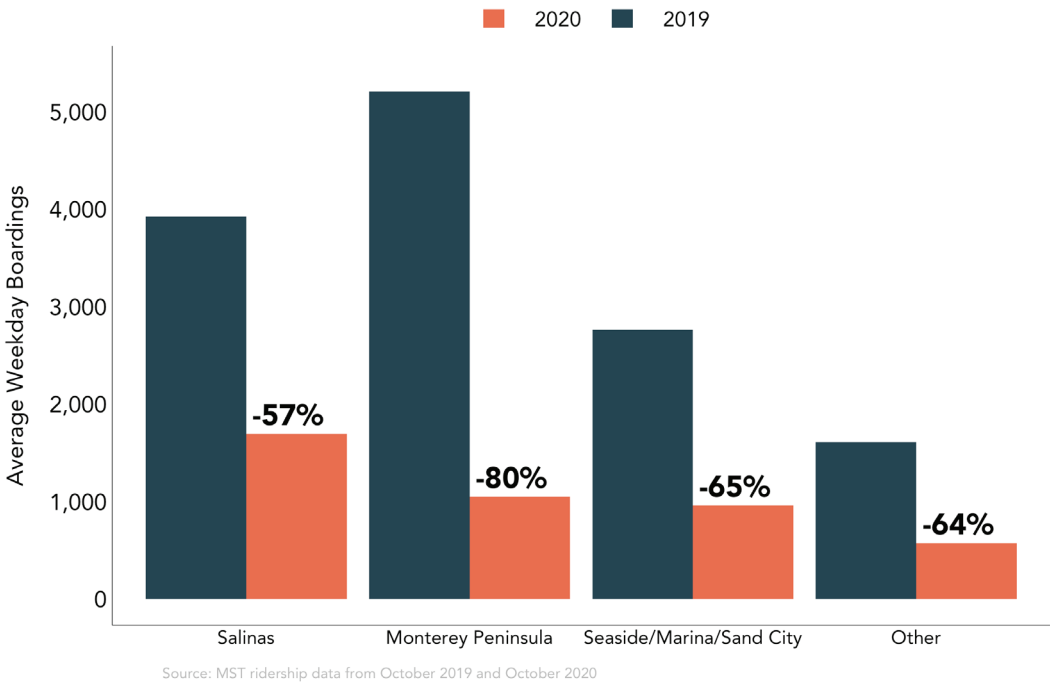
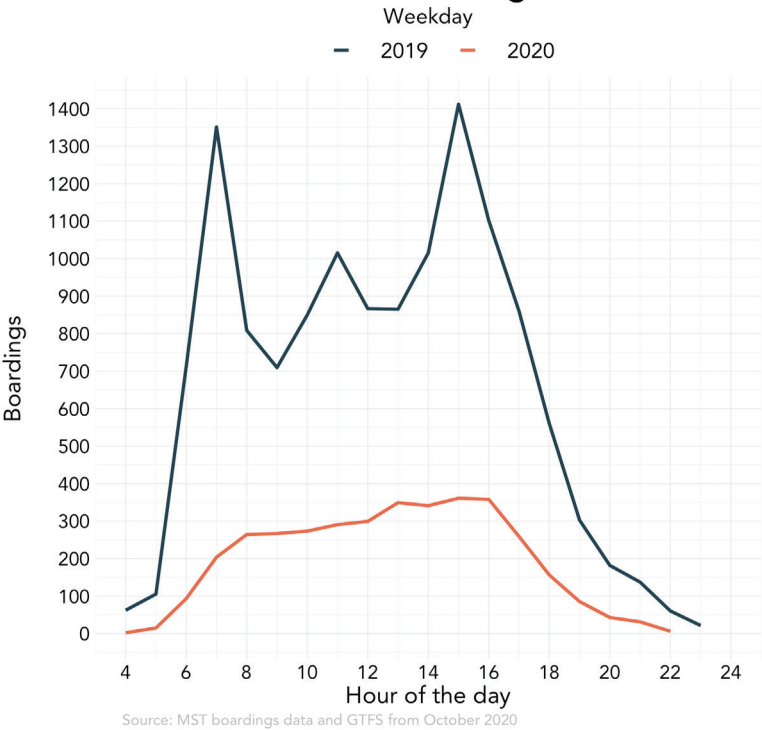


Figure 5: How MST ridership changed from Fall 2019 to Fall 2020, by area of Monterey County.

MST Boardings



MST Bus trips

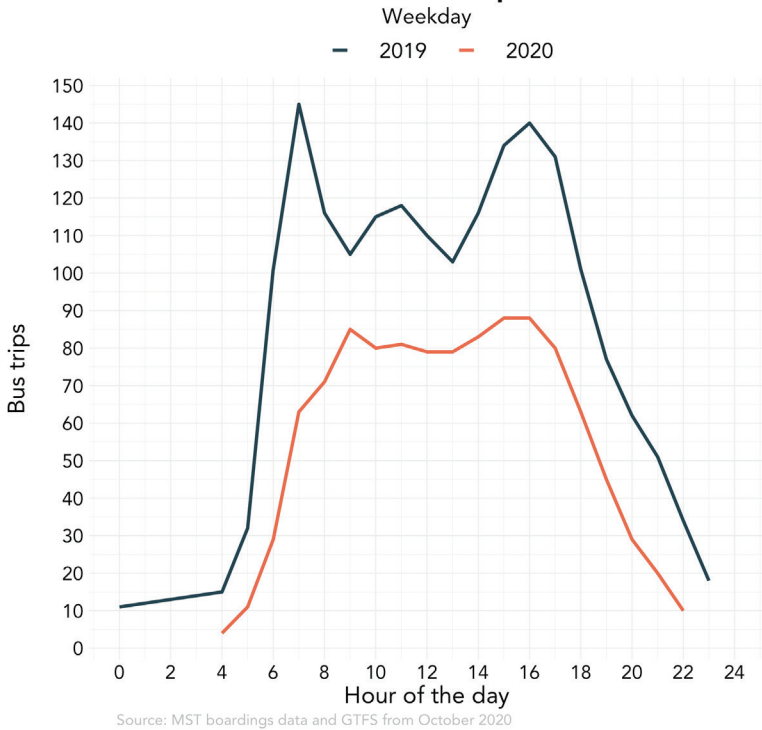


Figure 6: How MST boardings (left) and total bus departures (right) per hour on weekdays changed from Fall 2019 to Fall 2020.

The Challenge of Planning a Good Transit Network in Monterey County

1. Relatively few people live in dense parts of cities.

Fixed-route transit relies on the ability and willingness of strangers to share a vehicle. To make this possible, several people along any bus line need to be interested in going to places the bus is going. To achieve high ridership, you must have many people near bus lines going to many destinations.

There are people and jobs throughout Monterey County. But **there are very few places where many people live in close proximity, or where many jobs are located in a small area.**

Almost all of those places appear shaded in color on the map in Figure 7, and all of MST's most productive lines (in ridership terms) focus on these areas:

- JAZZ A/B: Monterey-Seaside-Sand City.
- Line 18: Monterey-Seaside-Marina
- Line 20: Salinas-Marina-Sand City-Seaside-Monterey
- Line 41: East Salinas-Downtown Salinas
- Line 49: North Salinas-Downtown Salinas

With few exceptions¹, these are the areas where a well-funded, well-designed and well-operated transit system might be expected to generate high ridership, in the absence of a global pandemic. Taken together, they account for only half the population and jobs of Monterey County.

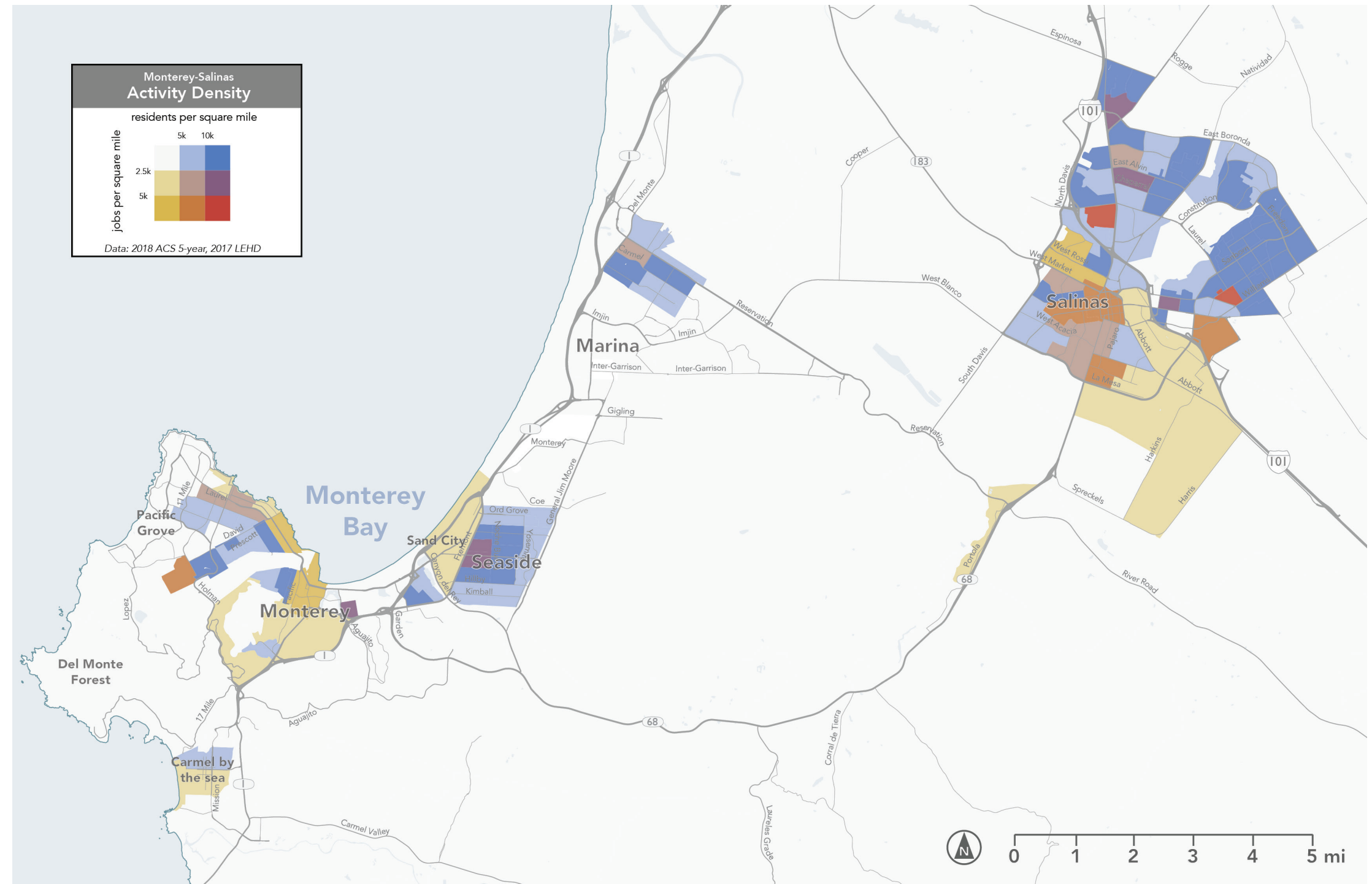


Figure 7: Map of combined population and job density in the greater Monterey and Salinas areas.

¹ Most notably CSUMB, which does not appear in this map but is a large and growing center between Downtown Marina and Seaside.

2. There is no one “Downtown.”

Even in a spread-out community, it may be possible to generate significant transit ridership if there are places where almost everybody needs to go on a regular basis.

We can identify these places on a map, by counting how many jobs are within walking distance of any point. Offices, retail, hotels, restaurants, social services, colleges, hospitals and many other destinations are all places where there are jobs and where people need to go. Places where many such destinations are within walking distance of each other are natural hubs for transit service.

The map in Figure 8 shows us that the largest such centers are in Downtown Monterey and Downtown Salinas. This is why MST builds most of its service around the Monterey Transit Plaza and the Salinas Transit Center.

But the map also shows a major challenge in generating high ridership even with this design: **neither of the county’s two largest centers account for a large share of county-wide jobs¹.**

This reflects what anyone who lives in Monterey County already knows: there’s no one “Downtown” where someone could go for nearly everything they might need.

That means that **any successful transit system in Monterey County needs to connect the centers of Monterey and Salinas with a wide variety of smaller destinations that also generate many trips, like colleges, hospitals, smaller town centers and suburban shopping centers.**

¹ There were over 170,000 civilian jobs in Monterey County in 2017. The most central point in Downtown Monterey was within 1.5 miles of 9,900 jobs (6% of county-wide jobs). The most central point in Downtown Salinas was within 1.5 miles of 14,900 jobs (9% of county-wide jobs).

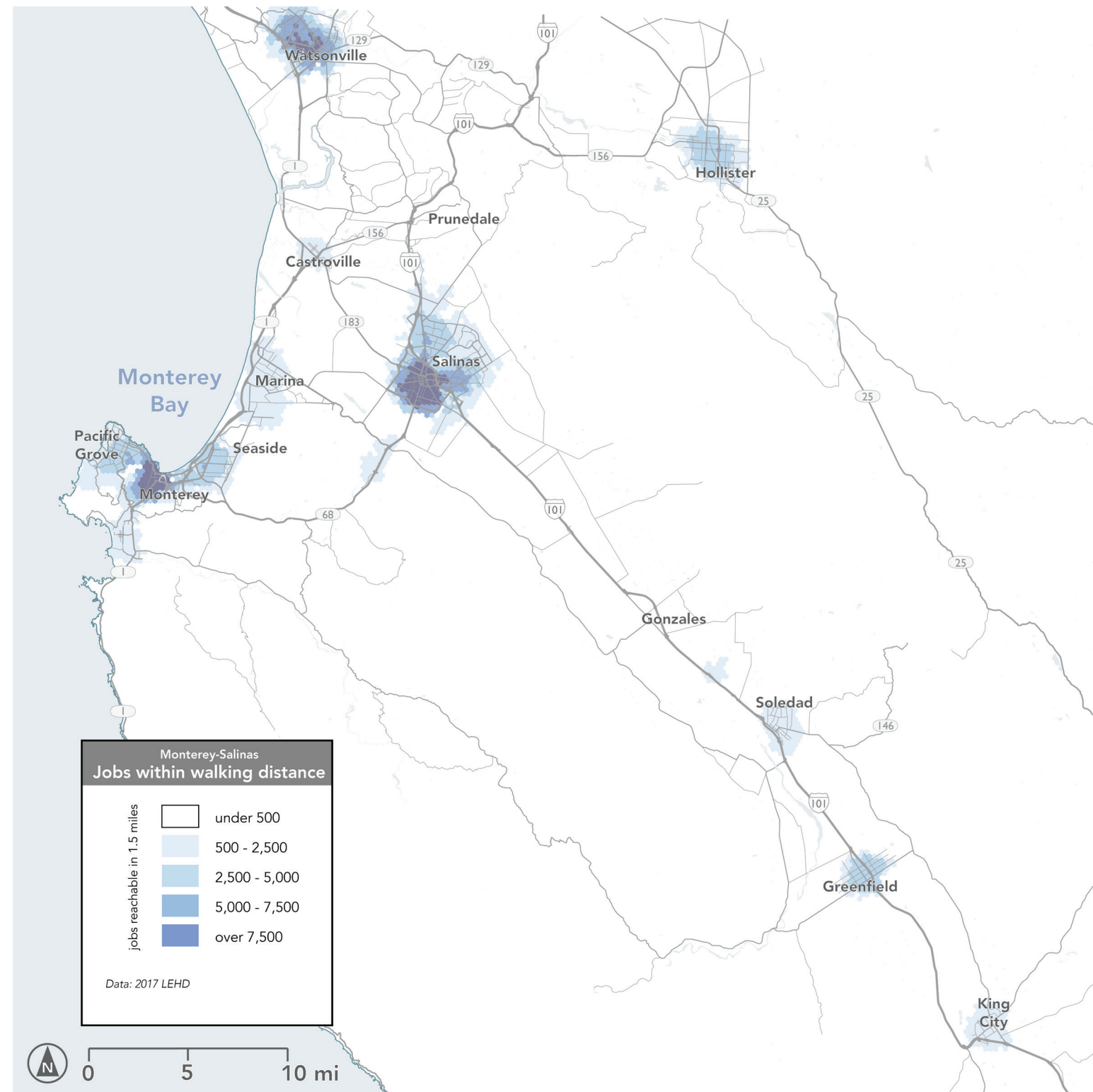


Figure 8: Regional map showing the number of jobs within walking distance, defined as 1.5 miles, or a 30 minute walk by an able-bodied adult.

3. A growing number of people live very far from the places they need to go.

The places that are growing the fastest are the places that are the farthest from significant concentrations of jobs: Marina, and the cities of Gonzales, Soledad, Greenfield and King City.

Even in a future with fast bus service and more rail, **when so many people live so far away from the places they need to go, someone has to pay the price of distance.** Distance must be crossed, which takes time and money that can't be spent towards other things people value. This means:

- More people bear the cost of owning and maintaining more cars, to access opportunities that might be accessible by transit if they lived closer in.
- Those who can't drive or get a ride from a friend spend hours on transit, and hours waiting, to cover that distance.
- To serve these often disadvantaged communities more equitably, MST needs to spend more of its budget on distance, which means less can be spent on high frequencies or long hours of service, undermining ridership potential.
- A long cascade of social, health, economic and environmental problems follow.

This network redesign examines ways that transit access can be increased despite the high cost of distance. But unless future housing development can be redirected closer to where most people work, shop, and access services, the problems caused by distance will grow worse, and transit alone will not be the savior.

The fastest growing places are far from jobs and services. Unless future housing can be directed closer to where people need to go, the problems caused by distance will grow worse. More MST service to far-flung places can only mitigate this issue, not solve it.

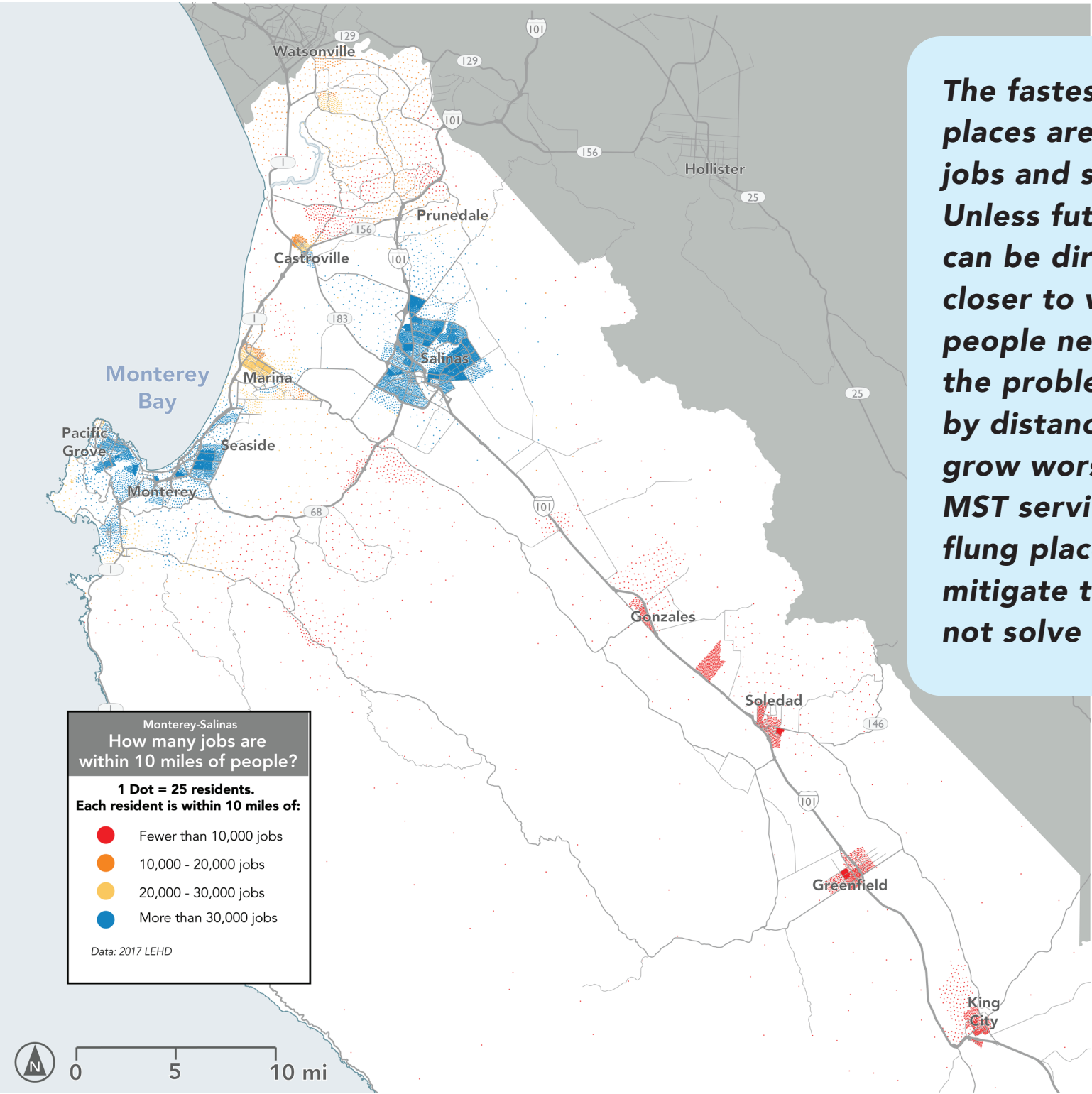


Figure 9: Regional map showing the number of people living in locations that are near many jobs (in blue) vs. in locations that are near very few jobs (in red).

2 Key Choices in Redesigning the Network

Ridership vs. Coverage

The MST COA is a unique opportunity to rethink the purpose of Monterey County’s transit system. The most basic choice is the degree to which the transit system should be pursuing ridership or coverage.

What is planning for High Ridership?

Designing a network for **high ridership** serves several popular goals, including:

- Enabling people to use transit to easily get to many jobs and services.
- Minimizing pollution and climate impact by replacing car trips with transit trips.
- Limiting the growth of congestion.
- Supporting dense and walkable development.

Prioritizing ridership means buses come more often and are convenient for more trips (higher frequency, longer hours) **but are available only in places where many people, jobs and destinations are located.**

What is planning for High Coverage?

Designing a transit system for **high coverage** serves different popular goals:

- Ensuring that as many people as possible have insurance against isolation through access to some transit service, no matter where they live.
- Ensuring that every community in the county has some service, even if relatively few people live and work there.

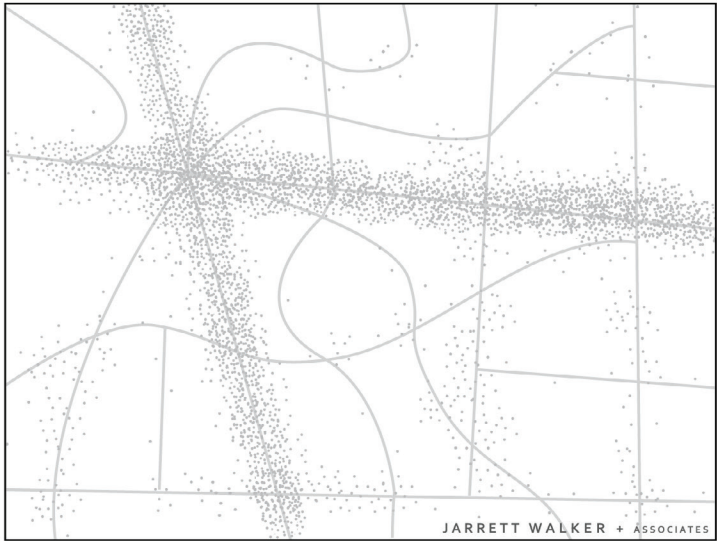
Prioritizing coverage means buses serve as many places as possible, but because they are spread out they don’t come often (once an hour or less) **and aren’t convenient for many trips.**

Why can’t MST do both?

MST can pursue high ridership and extensive coverage at the same time, but the more it pursues one, the less it can provide of the other. Every dollar that is spent providing high frequency along a dense corridor is a dollar that cannot be spent bringing transit closer to each person’s home.

At the moment, about 40% of MST fixed-route service is targeted to maximizing ridership, while the remaining 60% is oriented toward coverage.

Should MST focus more on the services likely to generate the highest ridership, or continue to focus on covering as many places as possible?



Imagine you are the transit planner working in this fictional neighborhood.

The dots scattered around the map are people and jobs.

The 18 buses are the resources the town has to run transit.

Before you can plan transit routes, you must first decide: What is the purpose of your transit system?

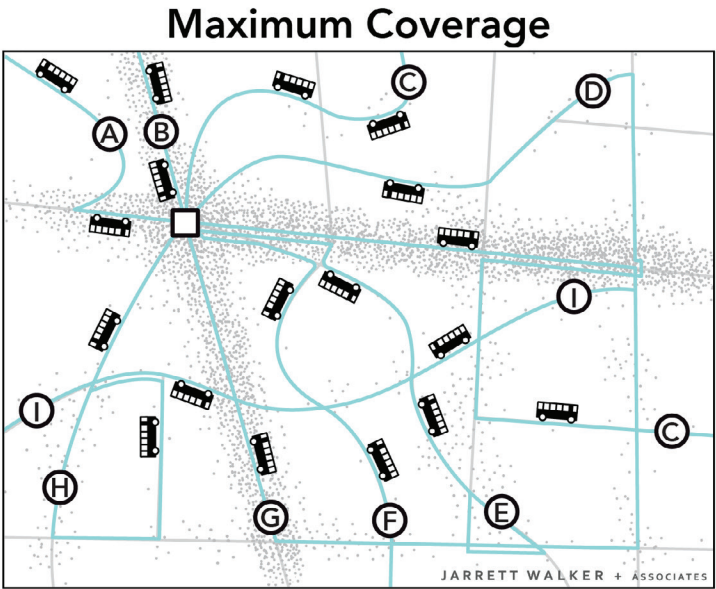
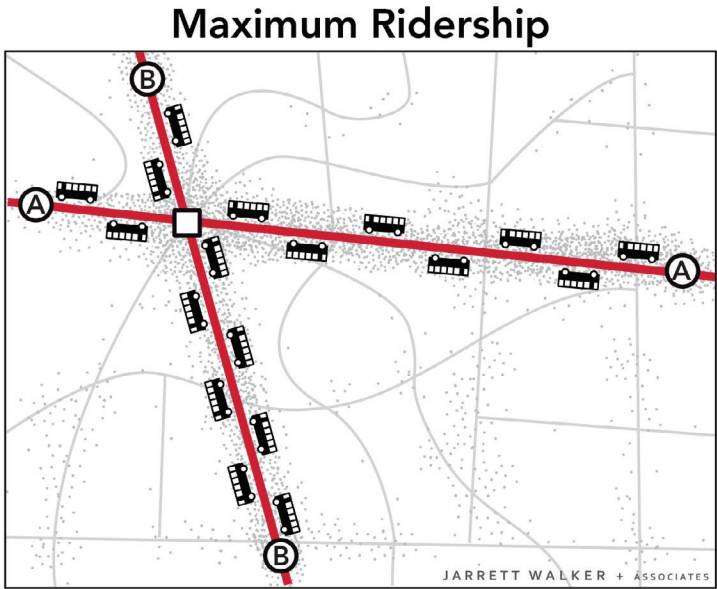


Figure 10: Comparing an imaginary town where transit is run with the goal of maximizing frequency and ridership (left) vs. the same town where transit is run with the goal of providing a little service near everyone (right). The maximum ridership (left) network has very frequent service, but only on the roads where the most people live and work. The maximum coverage network has service on every road, but it doesn’t come very often.

Local vs. Regional Service

Because MST is the transit agency for all of Monterey County, there will always be a tension in deciding how much transit service should be provided for:

- Local trips, mostly in the greater Monterey and Salinas areas.
- Regional trips connecting all parts of the county to Salinas, Monterey, Watsonville and points beyond.

This tension is inevitably bound up in the rider-ship vs. coverage trade-off, because:

- Longer lines cost more to operate at the same frequency than shorter lines.
- Longer lines cross large areas where no one gets on the bus, so they serve fewer riders for every hour the bus runs.

This means that regional bus service tends to be more expensive to operate than local lines, while serving fewer passengers.

This is especially true for MST’s longest lines, like Line 23 (Salinas to King City); Line 84 (King City to Paso Robles); or the pre-pandemic lines to San Jose and Santa Cruz.

The more MST spends on regional service, the fewer resources are available to provide lower-cost, higher-ridership lines in urbanized areas. But if MST did not provide regional lines to the small towns in southern and northern Monterey County, it is unlikely anyone else would step in.

How much of MST’s service should be oriented toward the greater Salinas urban area vs. the greater Seaside-Monterey urban area vs. regional service?

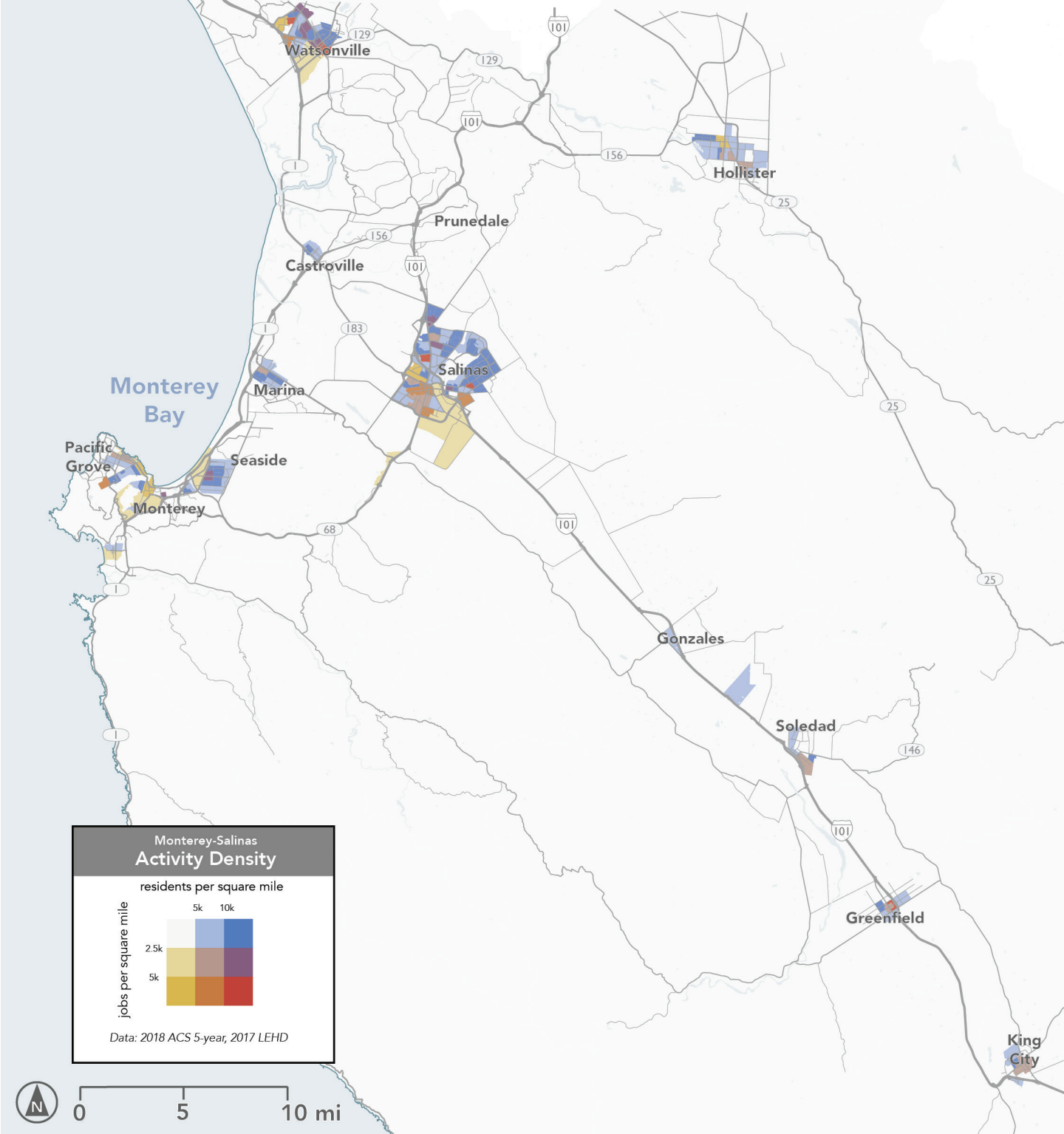


Figure 11: Regional map of combined population and job density.

Equality vs. Equity

Should MST focus mostly on the travel needs of disadvantaged communities, or consider all travel demand equally regardless of people's circumstances?

Almost everybody needs to go places on a regular basis. But some people have fewer choices than others about how to get around.

- **People who don't own cars** can't drive their car to get around. But this does not always mean they need transit. Many people without cars choose to live in a location where they can walk or bike to the places they need to go. They may use transit only occasionally, and even then they may have other options like a taxi or ridehailing service like Uber and Lyft.
- Some **seniors and people with disabilities** can't drive, and so they are more likely to need public transit to get around. Many of the people who fit this description will also have difficulty using transit and may require ADA complementary paratransit (MST RIDES).
- **People with low incomes** generally have fewer choices about where to live, and whether or not that place is near the places they need to go. They are less likely to own a reliable car, and more likely to live in a household with fewer cars than drivers. These factors make it more likely that a low-income person might need to use transit. But if transit isn't available or convenient enough, they are more likely to rely on friends and family to give them rides, or to walk or bike very long distances.

In 2014, Monterey County voters decided to support the transit needs of seniors, veterans

and people with disabilities by paying for extra transit service. Measure Q collects an 1/8-cent sales tax that goes to funding six fixed bus lines and all of the county's paratransit trips.

But **there has been no explicit funding commitment** (by voters or otherwise) **to prioritize needs of people with low incomes**, who tend to have the fewest choices about where they need to go and how to get there.

MST does not currently have the funding tools to make a commitment comparable to Measure Q. But MST could decide to prioritize low-income communities in planning its general-public services, particularly for the portion of services dedicated to coverage.

Would that be the right decision? It depends on your values.

If you are most interested in universal coverage with basic transit service, you might not want to see service to some communities prioritized over others.

If you are most interested in a system that maximizes ridership, you might not want to prioritize service to far-flung and isolated low-income areas.

Public outreach suggests that such "purist" views about the ridership vs. coverage trade-off are rare. Local opinion somewhat favors a stronger focus on ridership, but overwhelmingly favors prioritizing the needs of disadvantaged people and communities in designing transit service.

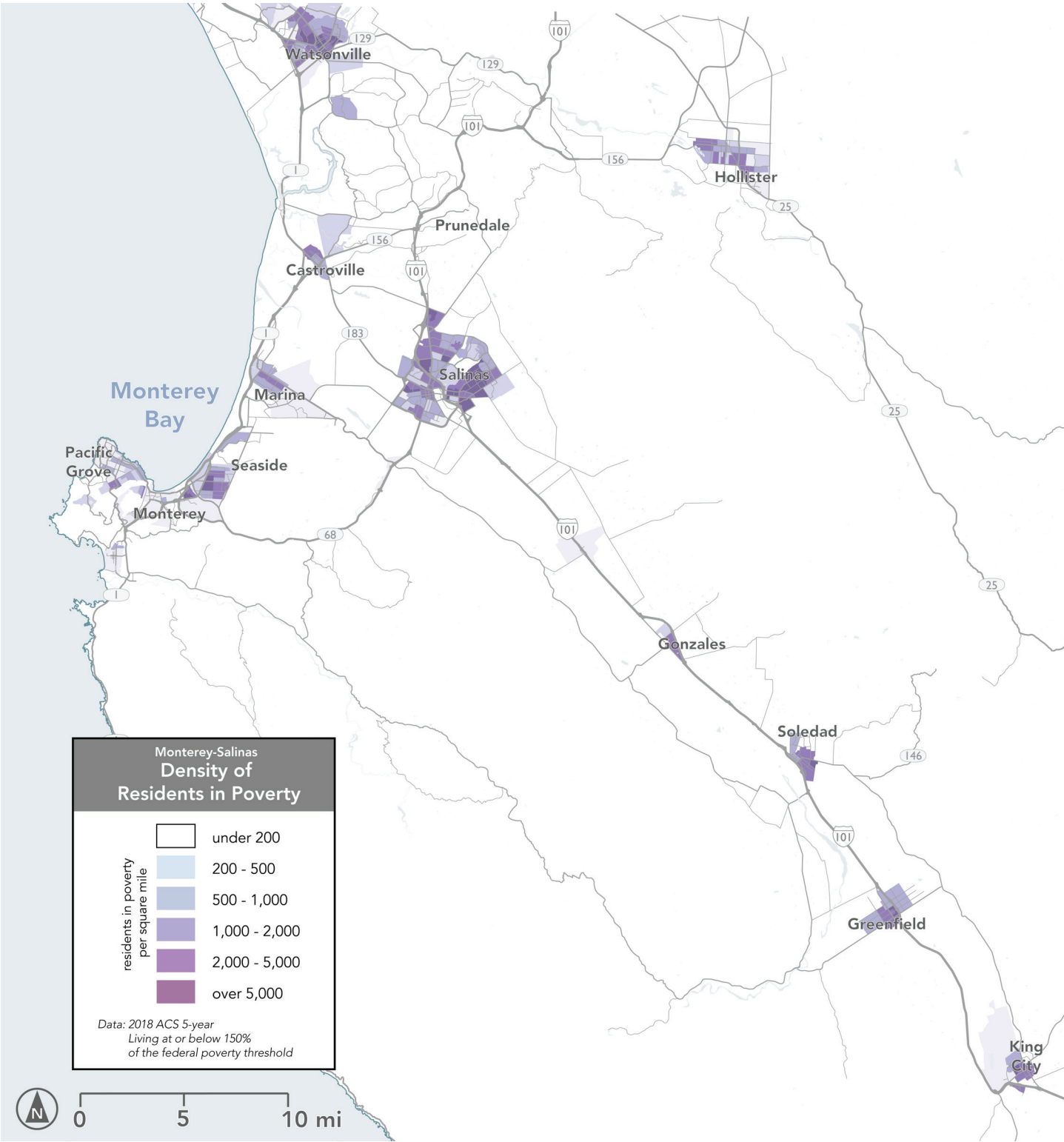


Figure 12: Regional map of the density of people living in households below 150% of the federal poverty line.

3 How Public Input Shaped This Plan

Phase 1: Understanding the Community's Values and Priorities

Initial Outreach Process

In the first half of 2021, MST and the consultant team conducted outreach to hear the community's opinion on the key choices for the transit network. A more complete description of this process is available in the Choices Report and its appendices. Broadly speaking, we heard from:

- **Stakeholder groups.** Small group interviews were conducted with over 80 community groups to secure their input regarding transit needs and priorities.
- **Regular MST riders.** Nine focus groups were conducted with English and Spanish-speaking MST riders to explore their experiences with and priorities for the transit network.
- **Members of the general public.** A statistically representative survey of 500 households throughout Monterey County was conducted via telephone, to assess how the general population believes MST should allocate services and resources.

The community values transit for ethical and practical purposes.

When members of the public were asked to rate how important it would be for MST to focus on any of twelve aspects of service design, a majority considered all of them to be either "extremely" or "very" important. Very few consider any of them unimportant.

Simply put, people value public transit, and differences of opinion are matters of degree. Also, they are decisive: almost everyone expressed an opinion. Very few answered "Not sure."

The service design aspects that the greatest percentages of respondents rated as "extremely important" are of two types:

- **Empathetic.** Ethically, **people feel it is important to serve those in need because of age, disability, or lack of a personal vehicle.** These factors were rated as "extremely important" by the largest numbers of respondents.

- **Instrumental.** As a practical matter, **service is important to the extent it is useful.** Specifically, this includes **getting people to jobs, school, and shopping, as well as reducing pollution/greenhouse gases.**

Factors least highly valued are special services for tourists and service to all corners of Monterey County, including places where few people would use it.

How important is it for MST to provide....

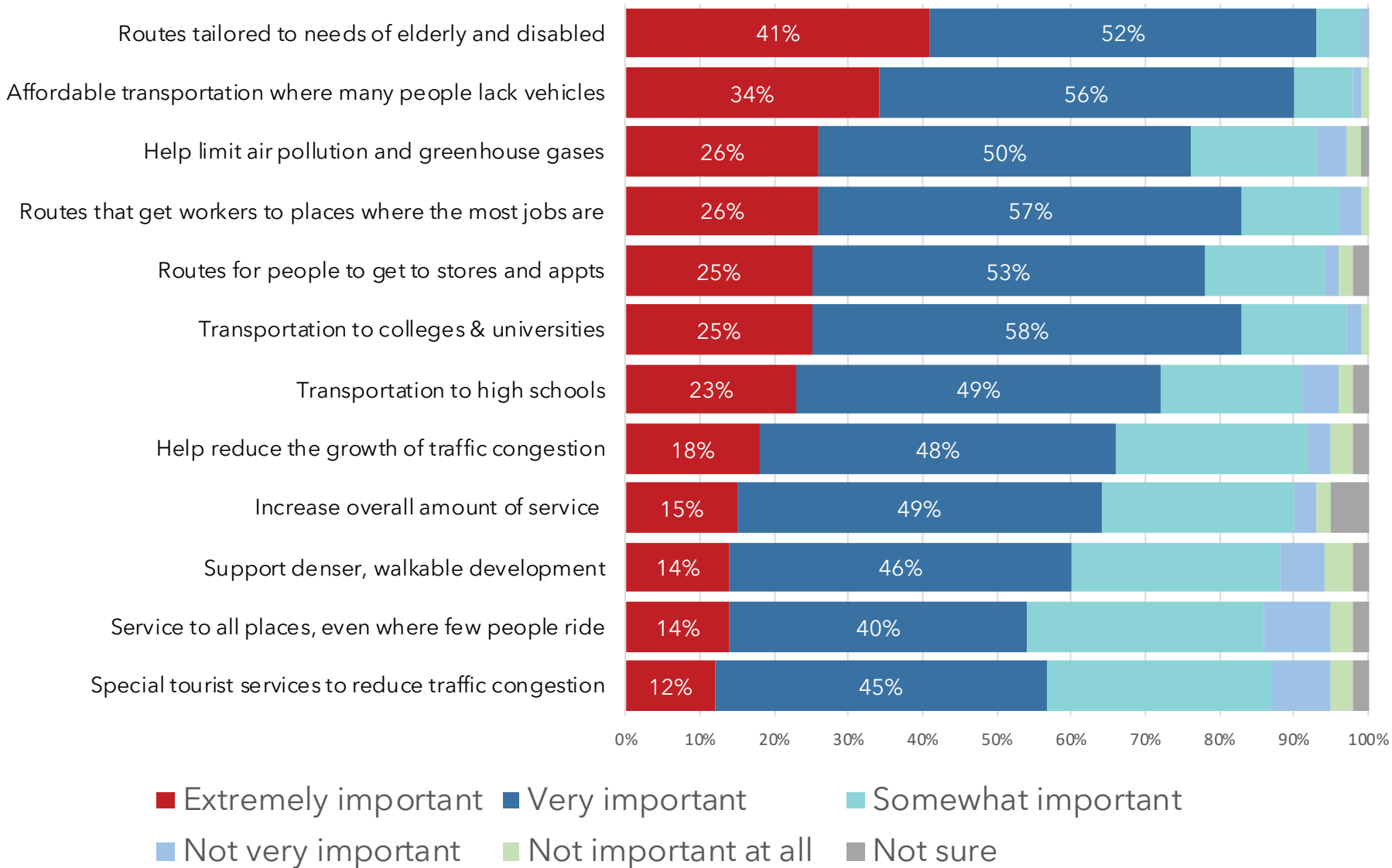


Figure 13: How Monterey County residents rated the importance of different possible priorities for MST transit service in a phone survey.

Frequency is more valued than coverage. Serving those who need it matters most.

Broadly speaking, **people in Monterey County appear willing to invest more in high-frequency services, but only if the remaining coverage resources are invested on meeting the needs of high-need groups.**

Stakeholder Interviews

Most interviewed stakeholders expressed a desire for more frequent transit, for reasons such as:

- “Service workers often have multiple jobs and need more frequency to make transit a viable option.”
- “Lack of frequency is a barrier to use. People would rather get a ride because transit takes too long.”
- “Frequent transit would open up opportunities for affordable housing grants.”

However, other stakeholders noted that enhanced convenience for some should not outweigh access for those who lack transportation options.

Rider Focus Groups

Among riders, there was broad belief that if lines ran more often, more people would ride and that current riders would ride more often: “People want to ride the bus, if it’s good enough.”

When asked if they would trade reduced coverage for increased frequency, many riders had difficulty choosing frequency unconditionally and offered “hybrid” solutions to avoid the choice.

- “Frequency on a few well-planned routes would be better, but please focus on people who really need the service.”
- “Increase frequency but offer special services for seniors and persons with disabilities.”
- “Frequency, but not if it is inequitable.”

Survey Respondents

These views are mirrored in what we heard from the general public. When asked directly about the key trade-offs, phone survey respondents:

- **Favored frequent, high-ridership service (64%) over extensive coverage (35%).**
- Favored focusing first on disadvantaged communities (69%) over treating all communities equally (30%).

The strength of feeling in favor of service for those who need it most was even more evident in questions about which types of service MST should prioritize: **over 90% of respondents thought that “routes tailored to the need of the elderly and disabled” and “affordable transportation where many people lack vehicles” were either “extremely” or “very” important.**

Telephone Survey Tradeoffs: Should MST...

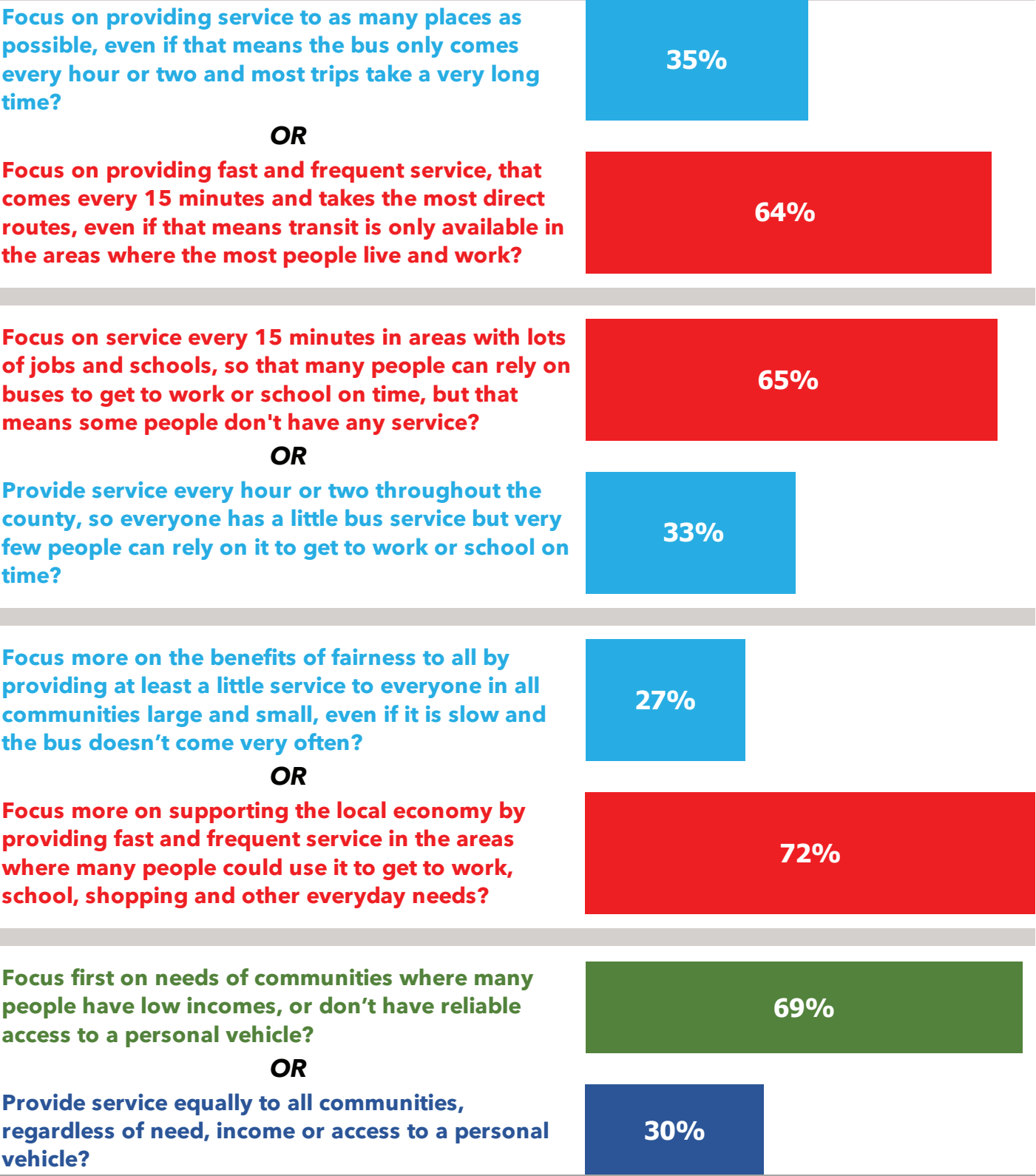


Figure 14: How Monterey County residents responded to key trade-offs in a phone survey.

Phase 2: Input Received on the Draft Plan

Draft Plan Development

The values and priorities expressed by the public in Phase 1, along with a technical assessment of the state of MST’s network and services, were summarized in the [Choices Report](#), released in May 2021.

Based on the assessment presented in that report, the MST Board of Directors Operations Performance Committee directed the project team in June to develop a network plan that would:

- Focus a little more on ridership and frequency, and a little less on coverage to as many places as possible.
- Prioritize the travel needs of people in low-income communities.
- Shift more service to Salinas and regional needs.

The project team, in collaboration with representatives from local governments, developed a [Draft Plan](#) that was released for public comment in early September.

Outreach Process

Over the course of September and October, the team gathered feedback on the Draft Plan by reaching back out to stakeholders, regular riders and members of the public through:

- Virtual public meetings held in [English](#) and [Spanish](#), and available on YouTube.
- Three focus group meetings with MST riders contacted in Phase 1, including two in English (Peninsula, Salinas and South County) and one in Spanish (countywide).
- Four stakeholder group meetings, where we heard from representatives of 30 business, non-profit and government organizations located throughout Monterey County.
- An online community survey on the Draft Plan that received 190 responses. The survey was provided in English and Spanish, and was promoted on MST’s website and social media, through e-mails to stakeholder groups, and with advertisements at transit centers and on the bus.

Key Comments and Concerns

The following are recurring comments received from multiple sources over the course of Phase 2 outreach. A report on all comments received in meetings is in Appendix A to this report.

Positive comments about increased frequency, timed transfers, and shorter travel times.

These elements of the Draft Plan were highly regarded by stakeholders and riders, *if accompanied by reduction or elimination of transfer fares*. We heard comments such as “Timed transfers are an excellent idea,” “The reductions in travel time will be a huge help for Hartnell students, particularly [...] from South County”, and “Increased frequencies will help workers.”

Positive comments about new routes in Salinas.

The proposed routes to Salinas Adult School, Natividad Hospital and South Salinas were very popular in meetings and the survey.

Requests to continue serving Social Service Agencies near Salinas Airport.

This was the strongest concern about the Draft Plan in meetings, and the second most frequent concern in the online survey. Route 48 previously served several County social service departments, including the MCDSS One Stop Center near Salinas Airport. The Draft Plan route would require riders to walk ½ mile or more to reach these facilities.

Desire for restoration of long-distance services, especially to San Jose.

Restoring service to San Jose was raised in several meetings, and was the most common

request in the online survey. While advocates acknowledged that most ridership is very occasional, they saw it as important to provide CSUMB students with a link to the Bay Area, provide access to San Jose airport, connect to VTA and Caltrain, provide access to higher paying jobs, and serve regional medical trips. Other requests for long-distance service included continuing existing service to Big Sur, and restoring pre-COVID service to Santa Cruz.

Desire for later service in the evening.

Survey respondents in several areas requested later service, including in Salinas, Carmel, Pacific Grove and North County.

Some concern about lack of direct route from CSUMB to Monterey.

Staff and students at CSUMB expressed some concern about the lack of a direct route from CSUMB to downtown Monterey. While they understood the timed transfer being proposed, they wondered if it would be reliable.

Concerns about safety and sanitation at transit centers.

The expectation of more transfers heightens the importance of security and sanitation at the transfer centers. Concerns about this were raised in both phases of outreach.

Many questions about how changes will be communicated.

Stakeholders and riders asked how the Final Plan would be communicated by MST. Many stakeholders were eager to help educate their constituents about revised services, but wondered what tools they would have to work with. CSUMB students and staff were concerned about how to make the system “less confusing” for students and how to educate them about MST earlier in their time at CSUMB.

How Comments on the Draft Plan Were Incorporated in the Final Plan

The project team presented the Draft Plan and public comments to the Operations Performance Committee. Based on discussion with the committee, the following actions were taken.

1. Maintain the Draft Plan’s improvements to service

The generally positive reception for the plan motivated the project team to maintain its key and most popular elements.

Keep the increased frequencies in general, timed transfers and added service in Salinas.

These elements are key to all of the positive outcomes generated by the plan, and will make MST service useful to more people on a day-to-day basis. However, the ability to maintain these elements while remaining within MST’s expected financial resources, means that MST would not be able to respond to some requests.

No restored long-distance services (e.g. San Jose).

Within the resources available in the Medium Scenario, restoring long-distance routes would require reducing proposed service somewhere else, most likely in Salinas or South County. Based on the popularity of new routes and higher frequency in Salinas and South County, the project team judged that it would be preferable to maintain these improvements rather than to restore former long-distance routes.

However, as in the Draft Plan, the High Scenario includes a proposed route to Gilroy, connecting to VTA and Caltrain services to the Bay Area.

No change in service hours.

The Final Plan would generally maintain the hours proposed for service in the Draft Plan. Although MST understands the need for more late evening service, current resource constraints mean that improving evening service would have to come at the cost of reducing service levels in the daytime.

Public input received during Phase 1 suggested that this would not be acceptable to most community members. Planning the High Scenario also showed that even with increased funds, it is difficult to justify increases in evening service while providing adequate frequencies for daytime needs.

Keep service from CSUMB to Downtown Monterey more frequent, even if it requires a transfer.

Within the resources available in the Medium Scenario, direct service from CSUMB to Downtown Monterey would only operate every 60 minutes, instead of every 30. Given the popularity of increased frequencies, the team preferred to maintain higher frequency, and to minimize wait time at the first and last bus stop.

However, the issue of transfer reliability shows the importance of correctly scheduling Routes 17, 18 and 20. The project team re-checked that anticipated runtimes would make the timed transfer at Sand City possible. This will required continued attention throughout the implementation phase and once the new network is up and running.

In the High Scenario, Route 20 would operate every 15 minutes, and would connect with a shuttle service every 15 minutes to CSUMB from a stop in Marina. These higher frequencies (which rely on additional resources not currently available) would make transfers convenient even if they are not perfectly timed.

2. Restore the route to Social Services in Salinas

In response to strong feedback from the public and County Social Services employees, the project team proposes restoring the former Line 48 as new Line 96, to allow for continued service to County services at Schilling Place and La Guardia Drive. This is made possible with two changes, compared to the Draft Plan.

Fund new Line 96 with Measure Q resources, replacing old Line 48.

Many of the users with the highest need for the services on this route are seniors, people with disabilities and veterans, so it is appropriate to fund this service with Measure Q funds. However, in an effort to make judicious use of Measure Q, the new Line 96 would operate on weekdays only, at the hours when County social services and most medical services on Abbott Street are open.

For now, maintain existing Line 47 as the shuttle between the Hartnell main campus and Hartnell-Alisal.

In the Draft Plan, Hartnell-Alisal would have been connected to transit with a redesigned Line 48. In the absence of this change, the most practical way to continue service to this location is to maintain the existing Line 47 service between the two Hartnell campuses.

However, Line 47 is included in the Medium Scenario and not the Low Scenario of the Final Plan. This is to indicate that **depending on future resource constraints, MST may not be able to justify continued operation of this route using general funds.** Line 47 serves a very specific campus-to-campus need and is duplicative over much of its path with the more frequent Line 41.

4 Key Elements of the Plan

Policy Direction

After reviewing the trade-offs involved and the input received from the public, the MST Board of Directors' Operations Performance Committee has provided the following direction.

These principles were the basis for proposed changes to the MST bus network in the Draft Network Plan, and have been maintained in the Final Plan.

Ridership vs. Coverage

Direction: Focus a little more on Ridership, and a little less on Coverage.

MST's current balance of service tilts slightly toward coverage. We estimate that about 40% of existing service is ridership-oriented, while 60% is coverage-oriented.

The policy direction is to move MST's future service more toward ridership, and less toward coverage. Accordingly, **this plan would orient about 60% of service toward ridership, and 40% toward coverage.**

In practice, this means:

- **Increasing the number of lines that provide service every 30 minutes or better**, including in some locations every 15 minutes or better.
- **Reducing the number of deviations that MST's bus lines make along the way.** This allows service to be as direct as possible to every destination along the route, but will require some passengers to walk a little bit further to and from their bus stops.
- **Eliminating some of MST's very infrequent lines**, especially if they operate in areas with very low population and jobs nearby.

Despite the reduced share of coverage-oriented service, this plan would provide MST bus service within a half-mile of more people than the existing network. That is largely a result of the ways in which coverage service would be redistributed.

Equality vs. Equity

Direction: Prioritize the travel needs of people in low-income communities.

MST's existing coverage-oriented service consists of routes operating once an hour or less in a mix of suburban, small town and rural areas at all income levels.

The policy direction is to more specifically orient coverage service to meet the needs of low-income communities.

In practice, this means:

- **Ensuring coverage is maintained in low-income areas**, even though the overall share of coverage-related service will decline. The corollary to this is reducing or eliminating coverage in some affluent but very isolated or low-density areas.
- **Maintaining coverage to key public and community services** used by low-income people, even if those are located in areas that are otherwise affluent.
- **Eliminating symbolic coverage** to far-flung areas where the bus can only ever serve extremely small numbers of people.

Local vs. Regional

Direction: Shift more service to Salinas and to regional needs.

MST's existing balance of service provides about:

- 50% of service in the greater Seaside-Monterey urban area.
- 35% in the greater Salinas area.
- 15% in the rest of the county.

The policy direction is to rebalance service to provide about:

- **40% of service in the greater Seaside-Monterey urban area**
- **40% in the greater Salinas area**
- **20% in the rest of the county**

This balance is closer to the share of regional population and jobs, while acknowledging that an MST bus line is not the best tool to serve most isolated rural areas, or most agricultural jobs.

Increased service in Salinas would largely be reflected in higher frequencies, while the increase in regional service would enable service increases in the Highway 101 corridor between Salinas and King City.

Timeline and Funding Scenarios

Timeline: Fall 2022

Following on the release of the Draft Plan, Phase 2 of public input, and the incorporation of feedback into the plan, this project team is proposing this Final Plan for adoption by MST’s Board of Directors in February 2022.

Because this plan would propose substantial changes in service, MST expects it will take several months before it is fully implemented. The current operator shortage in particular poses a barrier to swift implementation of the Medium Scenario. At this time, the expectation is that the redesigned network will be fully operational by late 2022.

Funding Scenarios

As a result, this plan assumes that **the redesigned network is most likely to operate with MST’s resources for Fiscal Year 2023¹**, also called **the Medium Scenario**. Because future circumstances remain uncertain, this plan also includes contingencies for what to do with different resource levels:

- **The Low Scenario is a contingency** to define what might need to be cut if either (a) MST’s funding sources recover more slowly than expected from the pandemic, or (b) MST is not able to hire and retain enough drivers to operate at full capacity².
- **The High Scenario is for future growth.** Funding for this growth could come from a new sales tax similar to Measure Q, or another funding source coming out of new state or federal programs.

¹ MST plans its budget according to fiscal years that start on July 1. FY 2023 starts on July 1, 2022 and ends on June 30, 2023.
² Transit agencies nationwide, including MST, have suffered from driver hiring and retention issues since pre-pandemic times.

MST COA - Three Funding Scenarios			
General Fund Service Only*			
Resource Level	Annual MST Service Hours**	Change from existing (FY21)	Change from pre-pandemic (FY19)***
Low Scenario Assumes either general fund sources recover very slowly from the pandemic, or insufficient workforce available to operate at full capacity, or both.	163,000	- 3.7%	-10.4%
Medium Scenario - Most Likely Matches MST's budget and workforce targets for FY 2022-2023.	176,000	+ 4.0%	-3.3%
High Scenario Assumes voters pass a new sales tax including 1/8-cent for service increases, or another similarly-sized new source of funding appears.	228,000	+ 34.7%	+25.3%

* Includes service funded by local taxpayers through the California Local Transportation Fund (LTF), and other state and federal funding sources. Measure Q services are additional and would continue at similar levels. Services paid for by institutions (e.g. Monterey Trolley, on-campus routes at CSUMB, routes to military bases) are additional and not included in this network study.

** Service hours MST's budget could support if MST directly operated all of its bus lines. MST tends to directly operate routes that require full-sized buses. Routes with smaller buses are often operated by a private contractor at a lower cost. Actual designed levels of service in each scenario are about 10% higher as a result, matching MST's current practice of assigning ~25% of service to the contractor.

*** In addition to the losses in general fund service, about 25% of MST's service prior to 2020 was paid for by the military. Military funding for service is not currently expected to return.

Figure 15: Table detailing expected resources available for bus lines operated with MST general funds in the Low, Medium and High funding scenarios.

Existing vs. Future Network Maps – Existing

The maps on this page represent MST’s existing bus lines. On these maps, each line’s color represents how often the bus operates on weekdays.

The vast majority (~85%) of MST’s fixed-route service is operated in the greater Seaside-Monterey and Salinas area (Figure 17). The remaining ~15% includes MST’s regional lines (Figure 16).

Three lines stand out for their frequency. These are the only services that usually run every 35 minutes or better.

- o Line 41, connecting East Salinas to Downtown Salinas and Northridge.
- o The JAZZ A and JAZZ B, between Monterey and Seaside.
- o Line 20 from Salinas to Monterey.

All of MST’s other lines operate once an hour or less. These tend to have long and circuitous routings, with many deviations, intended to maximize the area covered by bus service.

On some lines, the bus follows a different route at different times of day. Not shown on these maps is the tendency for each line to have a specific timetable, with different starting and ending hours.

Reading the Maps

Throughout this report, **maps show bus lines color-coded by midday frequency on weekdays.**

- **Red lines** run about every 15 minutes.
- **Blue lines** run about every 30 minutes.
- **Green** lines run about once an hour.
- **Gold lines** run less than once an hour.



Figure 16: The existing regional transit network with routes color-coded by midday frequency.

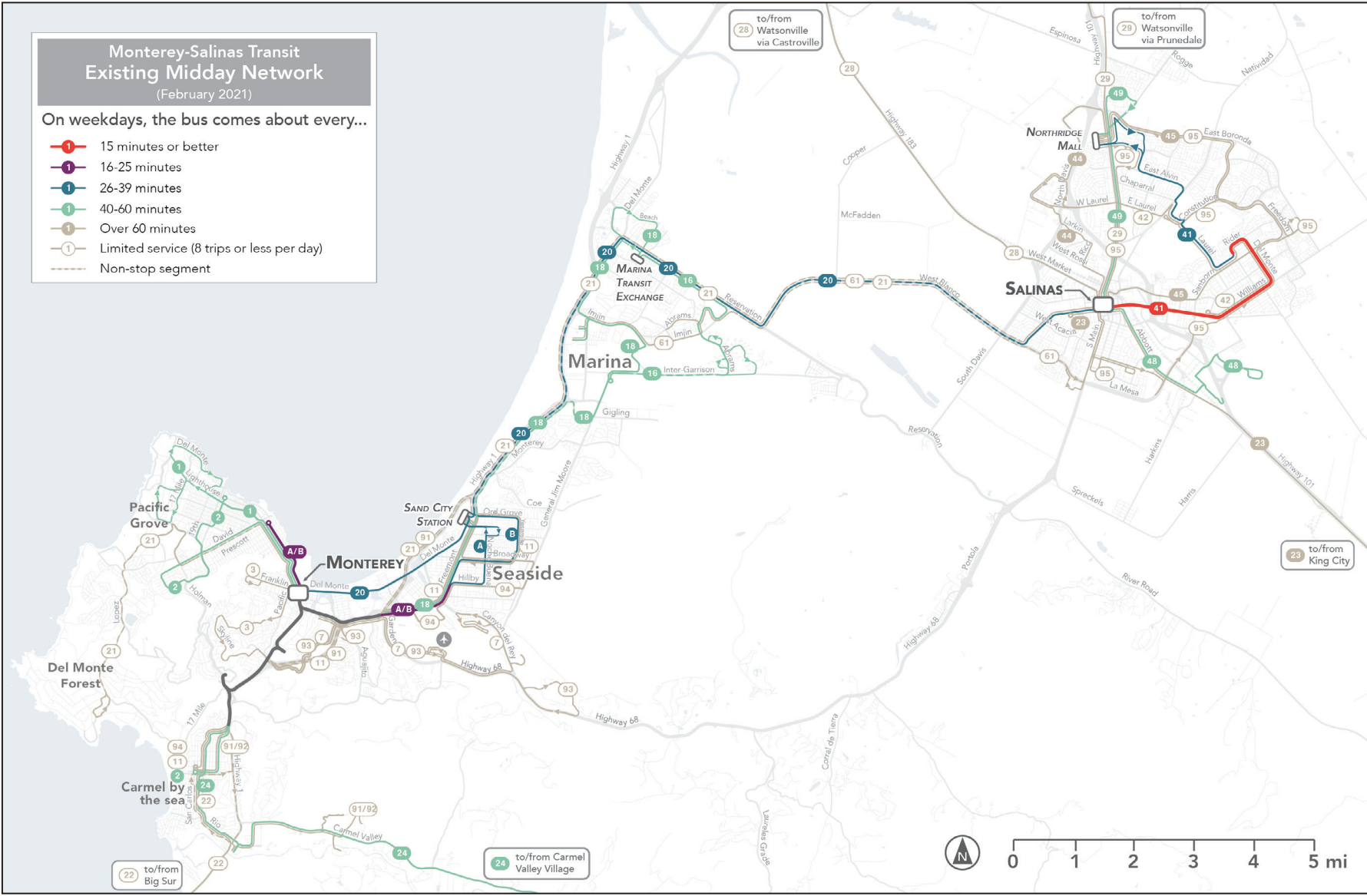


Figure 17: The existing transit network in the Monterey-Salinas area, with routes color-coded by midday frequency.

Existing vs. Future Network Maps – Medium Scenario

The maps on this page reflect the level of service MST expects to operate in 2022 and 2023. In this scenario:

- **Half of MST’s bus lines would run every 15 to 30 minutes.** In addition to Lines 20, 41 and the JAZZ, this would include most of the lines operating in Salinas, and service every 30 minutes to Carmel-by-the-Sea, Downtown Pacific Grove, and CSUMB.

- This is in part because **most of the infrequent bus lines in the Peninsula would be grouped into fewer straighter lines.**
- Increased regional service would mostly be allocated to **service every hour on Line 23 from Salinas to King City.** MST would also replace general public on-call service with local circulators running every 30 minutes in Gonzales, Soledad, Greenfield and King City.
- **Hours of service would be consistent across the system.** Main routes would operate from 6 AM to 10 PM (9 PM on weekends), and most smaller routes from 7 AM to 7 PM, as shown on page 28.
- **Timed transfers would facilitate easy, consistent connections** between routes that run every 30 to 60 minutes at key locations, as shown on page 29.

The Medium Scenario is the most likely scenario. It is in effect “the plan,” barring unforeseen circumstances.

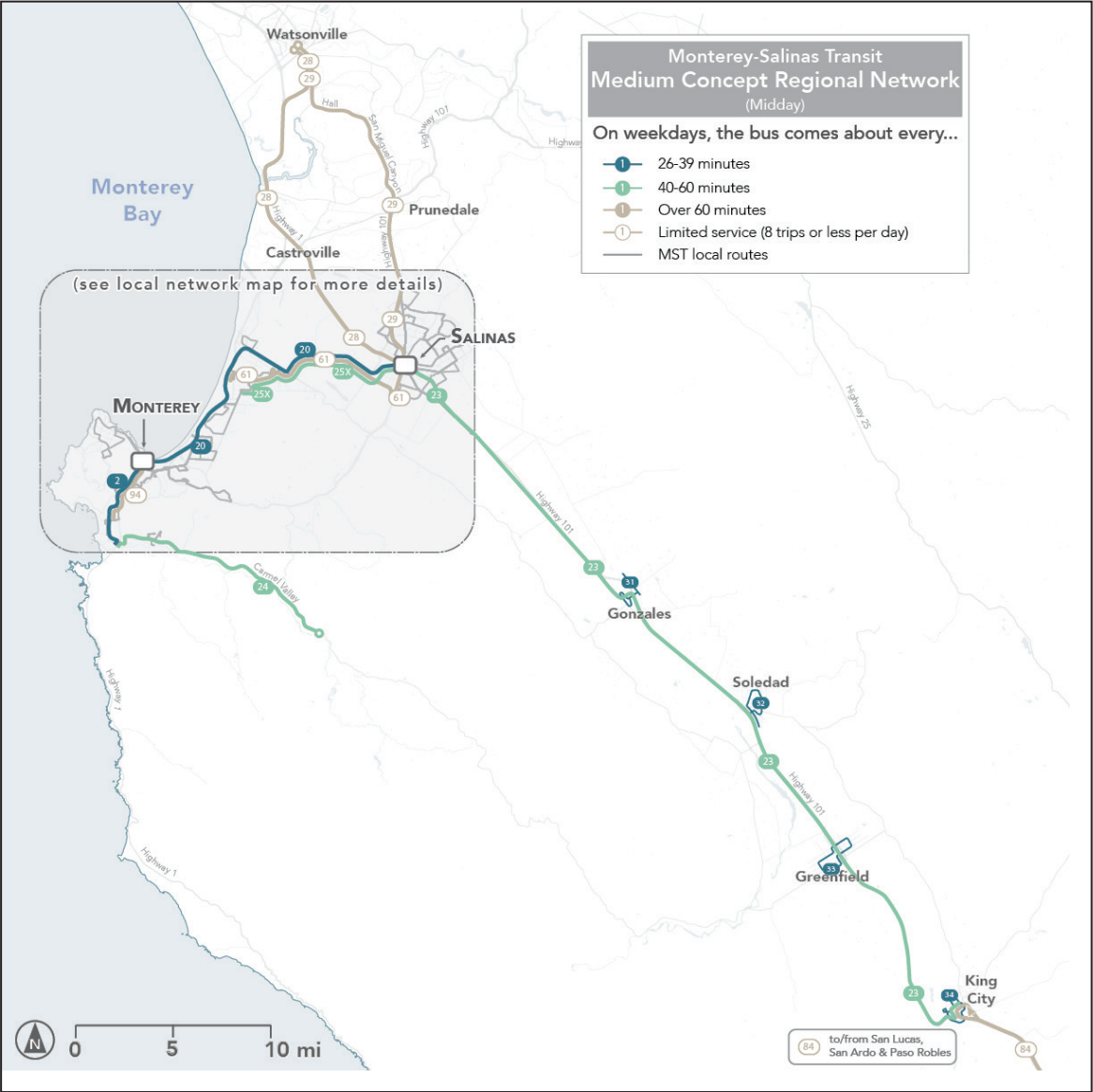


Figure 18: The Medium Scenario regional transit network with routes color-coded by midday frequency.

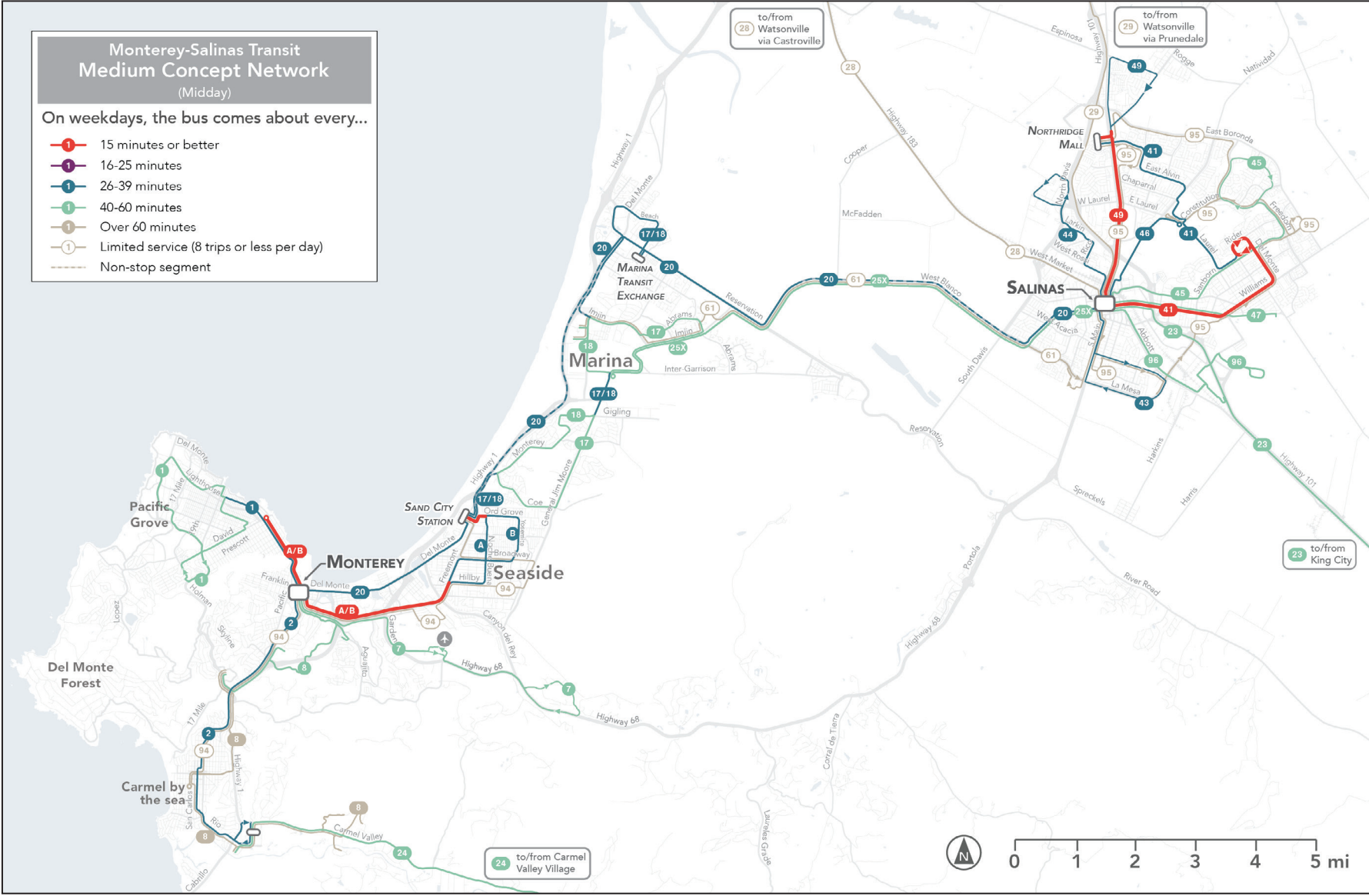


Figure 19: The Medium Scenario transit network in the Monterey-Salinas area, with routes color-coded by midday frequency.

Existing vs. Future Network Maps – Low Scenario

The maps on this page reflect the level of service MST would operate if the agency needed to implement the Final Plan with an 8% reduction in service compared to current expectations. In this scenario:

- In the greater Seaside-Monterey area, service would be similar to the Medium Scenario, but more frequent lines would end service an hour earlier in the evening.

- Service in Salinas would be a mix of routes operating every 15, 30, and 60 minutes. This would only be marginally more frequent than it is today.
- There would be fewer gains and some losses to regional service. There would be no service to the Carmel Valley, and Line 23 would operate every 90 minutes on average during weekdays.

- Timed transfers would facilitate connections between routes that operate every 30 to 60 minutes at Monterey Transit Plaza, Sand City Station and Salinas Transit Center.
- The decision to implement the Low Scenario rather than the Medium Scenario may depend largely on the timing of new operator hiring. MST may need to make a

The Low Scenario is a contingency plan in case MST revenues or bus driver availability were lower than expected.



Figure 20: The Low Scenario regional transit network with routes color-coded by midday frequency.

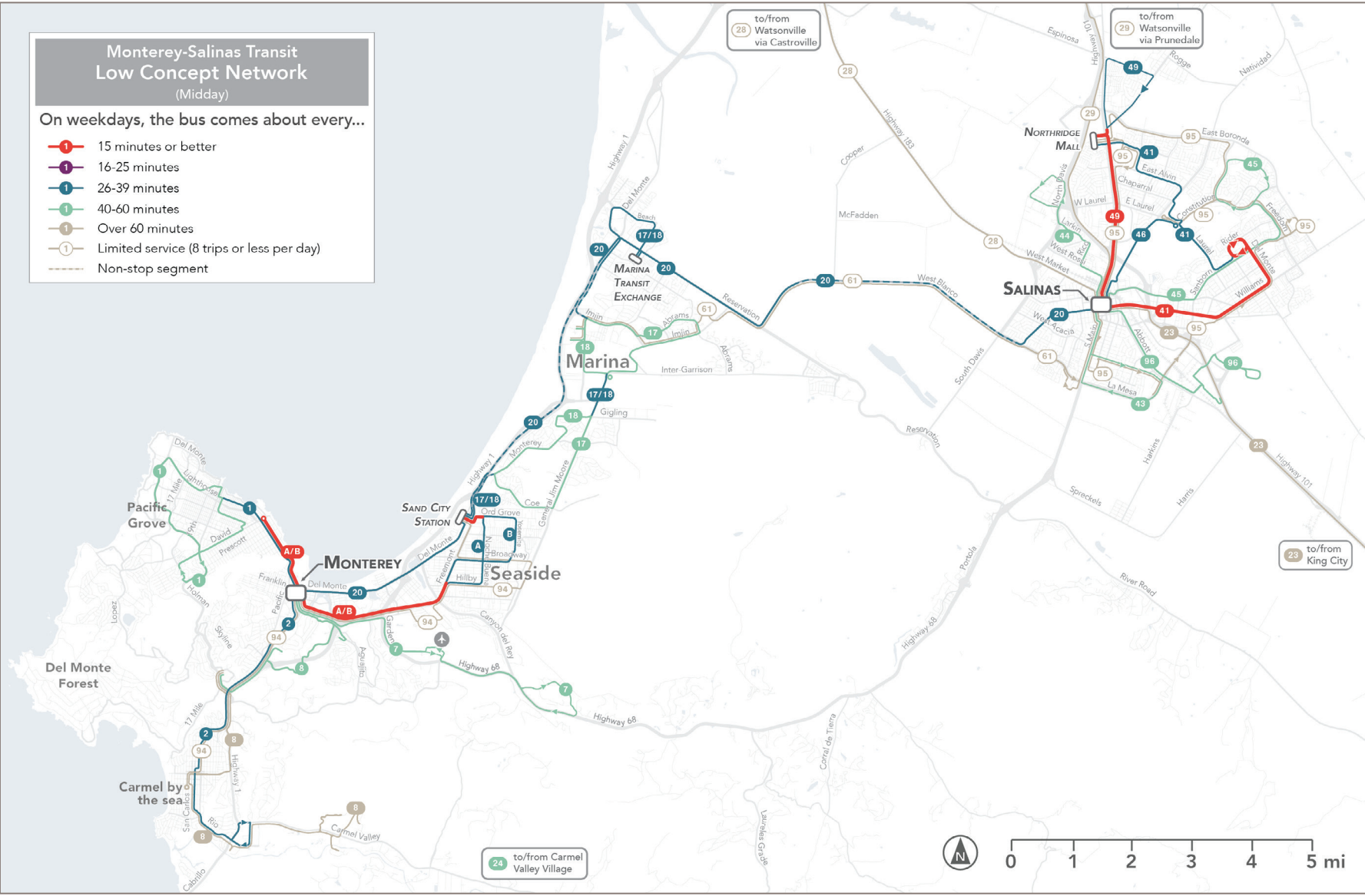


Figure 21: The Low Scenario transit network in the Monterey-Salinas area, with routes color-coded by midday frequency.

Existing vs. Future Network Maps – High Scenario

The maps on this page reflect what MST could provide if it received substantial new funding, equivalent in scale to another 1/8-cent sales tax for increased service. In this scenario:

- **Most of Salinas and much of the greater Seaside-Monterey area would have bus lines operating every 15 minutes or better.** This would include Line 41 (Alisal-Northridge), Line 49 (North Main), and Line

47 (South Main/Romie Ln.) in Salinas; Line 20 connecting Monterey, Seaside, Marina, and Salinas; the shared segments of the JAZZ A and B lines between Monterey and Seaside; and Line 15, a new shuttle between CSUMB and Line 20.

- Regional service would remain as in the Medium Scenario, but with the addition of **a new route to Gilroy, connecting to the**

Bay area via Caltrain and Santa Clara Valley Transportation Authority (VTA) bus lines.

- Timed transfers would remain as in the Medium Scenario for routes operating every 30 to 60 minutes. But the importance of timed transfers would decline, since more trips could rely on frequent connections between routes operating every 15 minutes or better.

The High Scenario represents what MST could do if voters passed an 1/8-cent sales tax for increased general service.

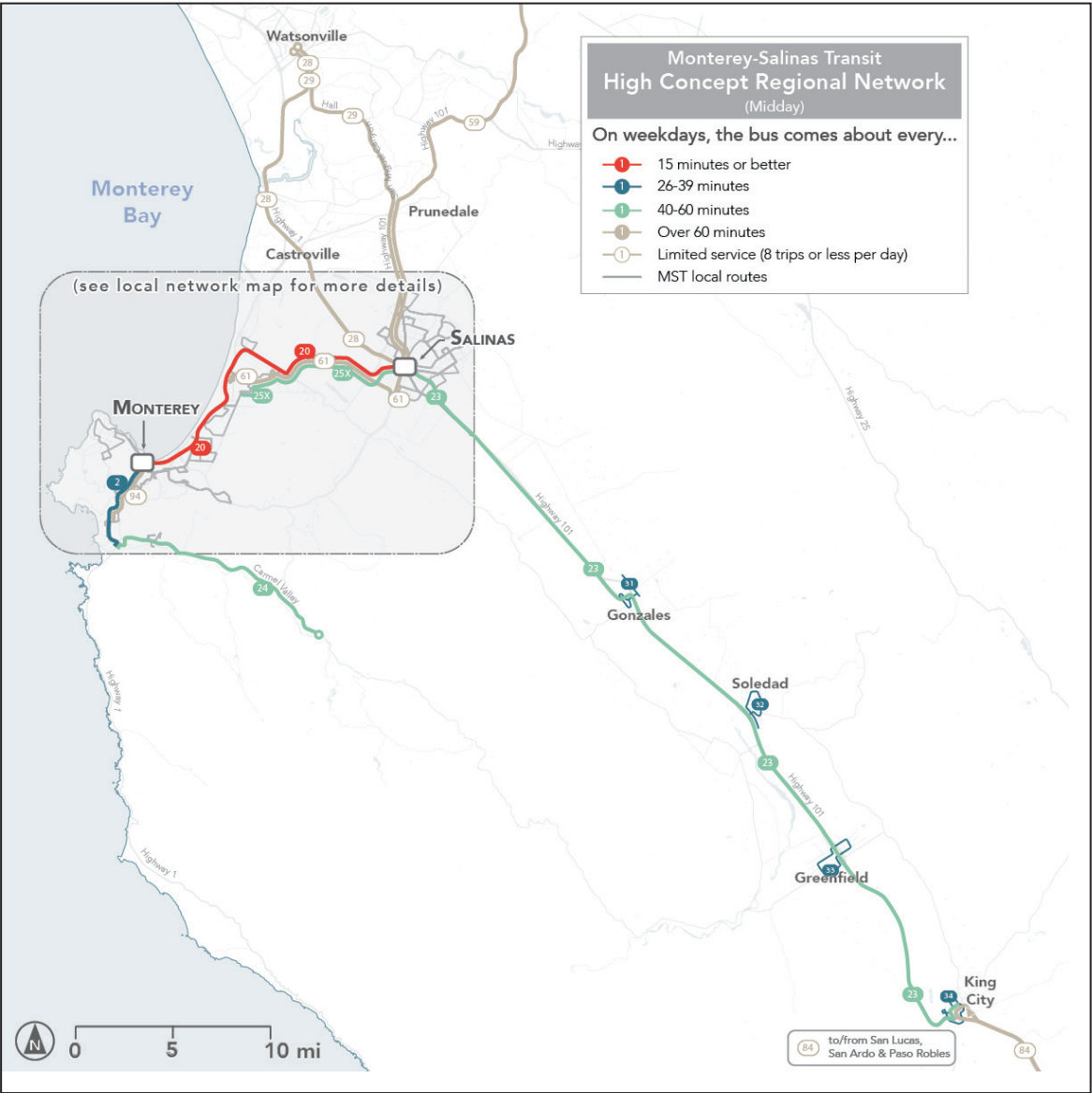


Figure 22: The High Scenario regional transit network with routes color-coded by midday frequency.

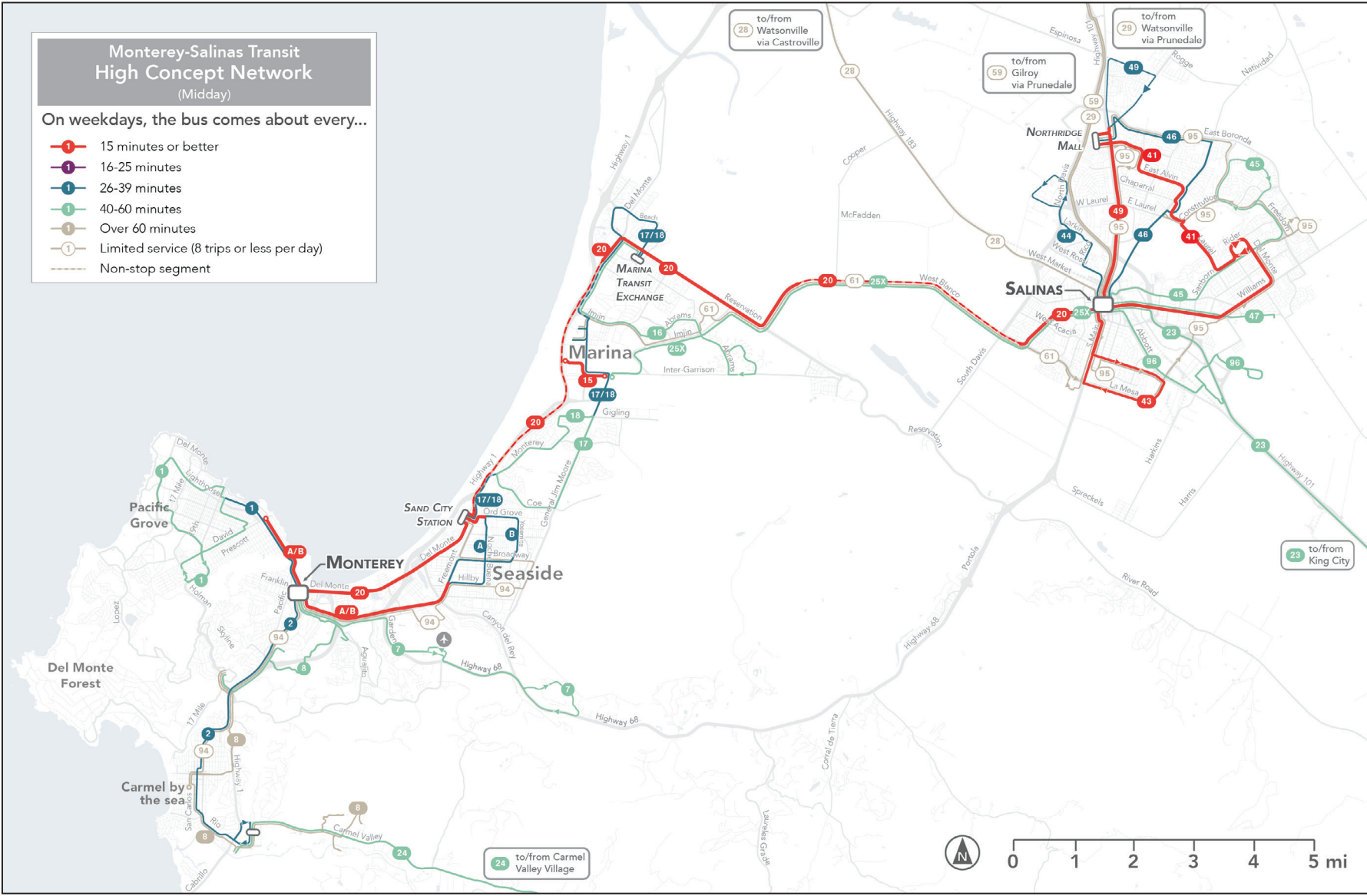


Figure 23: The High Scenario transit network in the Monterey-Salinas area, with routes color-coded by midday frequency.

Higher frequencies and more consistent hours.

To make service more convenient and legible, this plan would organize almost all MST bus lines into three categories based on their weekday midday frequency:

- Lines that run **every 15 minutes**.
- Lines that run **every 30 minutes**.
- Lines that run **every 60 minutes**.

The most frequent lines would operate every 15 minutes from 7 AM to 6 PM on weekdays. Service on these frequent lines would continue every 30 minutes or better after 6 PM and on weekends.

In the Low and Medium Scenarios, these would include:

- Line 41 (Salinas-Alisal)
- Line 49 (Salinas-North Main)
- Shared segments of the Jazz A and B (Aquarium - Seaside)

In the High Scenario, this would also include Line 15 (SURF-CSUMB Shuttle), Line 20 (Monterey-Salinas), and Line 47 (Salinas-Romie Lane).

Most urban lines would operate every 30 minutes or better from 7 AM to 6 PM on weekdays. Service on these lines would continue every 60 minutes or better after 6 PM and on weekends.

This includes routes connecting to major destinations including Natividad Hospital, CSUMB, downtown Pacific Grove, and downtown Carmel-by-the-Sea.

In the Low Scenario, frequent and main lines would end service an hour earlier, at 9 PM on weekdays and 8 PM on weekends.

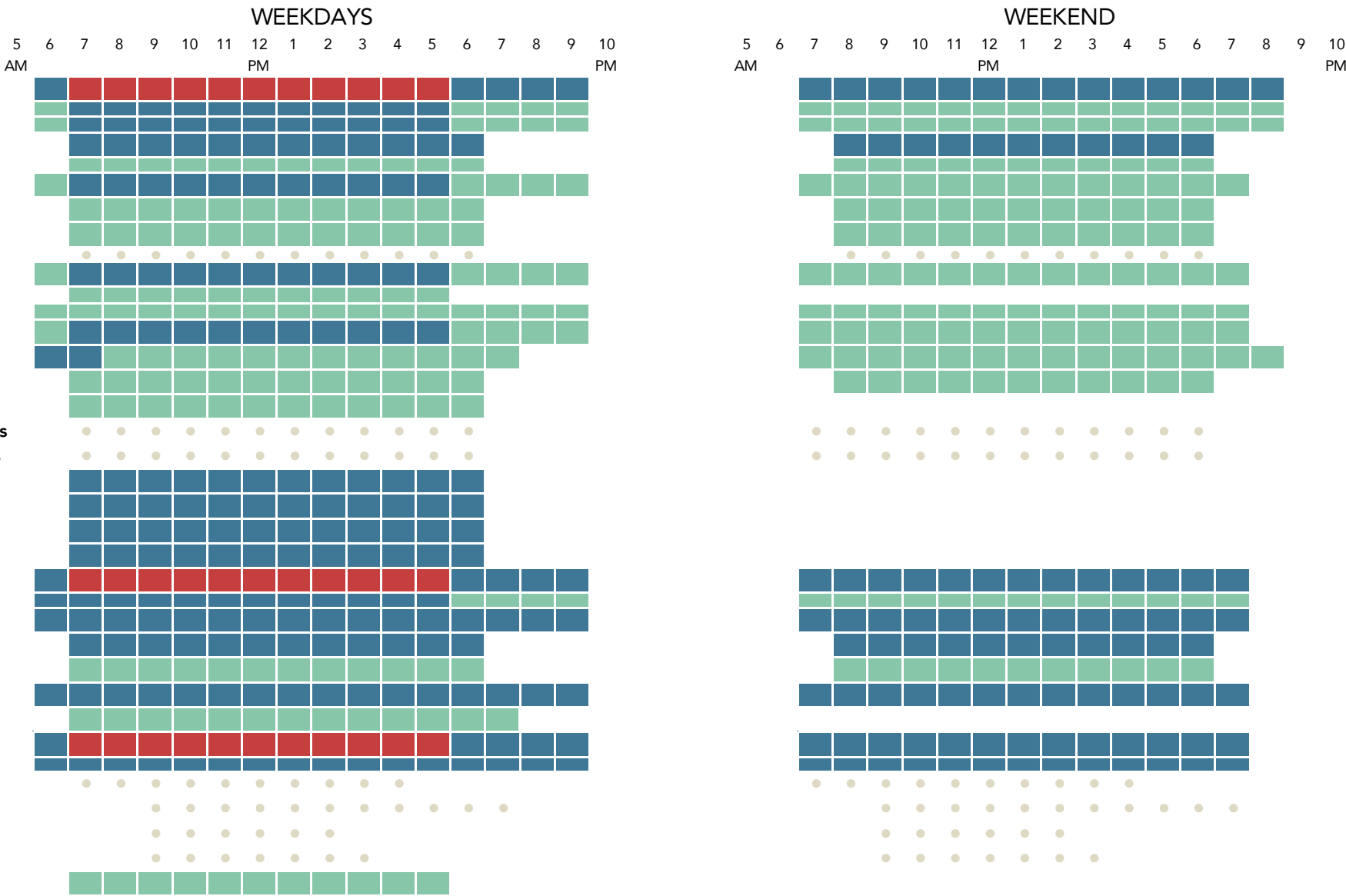
Most other lines (including most regional lines) would operate every 60 minutes or better, from 7 AM to 7 PM, seven days a week. Note that Line 23 (Salinas-King City) would have slightly longer hours, and that Lines 28 and 29 would each run every 120 minutes, but combine to service every 60 minutes between Salinas and Watsonville.

- Jazz A/B Aquarium-Sand City
Jazz A Sand City via Hilby
Jazz B Sand City via Broadway
- 1 Pacific Grove-Monterey
Two-way loop past Downtown PG
- 2 Monterey - Carmel
- 7 Ryan Ranch-Monterey
- 8 Monterey-CHOMP
Longline to CHOMP, Carmel, Del Mesa
- 17/18 Sand City-Marina
17 Sand City-Marina via CSUMB
18 Sand City-Marina via Monterey Rd
- 20 Monterey-Salinas
- 23 Salinas-King City
- 24 Carmel Valley
- 25X Salinas-CSUMB (in-session only)
- 28 Watsonville - Castroville - Salinas
- 29 Watsonville - Prunedale - Salinas
- 31 Gonzales Circulator
- 32 Soledad Circulator
- 33 Greenfield Circulator
- 34 King City Circulator
- 41 Salinas-Alisal
Longline to Northridge
- 43 Salinas TC - Romie Lane
- 44 Salinas TC - Boronda
- 45 Salinas TC - Sanborn Road
- 46 Salinas TC - Natividad
- 47 Salinas TC - Hartnell East Alisal
- 49 Salinas TC - North Main
Longline to Bolsa Knolls
- 61 Veteran's Shuttle
- 84 King City-Paso Robles
- 94 Sand City-Carmel
- 95 Williams Ranch-Northridge
- 96 Airport Business Center

Proposed MST Bus Line Frequencies - Medium Scenario

The bus comes about every:

- 15 minutes or better
- 30 minutes
- 60 minutes
- Limited (8 trips or less per day)



Timed transfers for faster local and regional travel.

Existing Service

The existing MST network features several transfer points, where passengers can connect between several incoming bus lines. But because most lines operate on unique frequencies, have different lengths, and operate from different start and end points, **there are very few timed transfers. This means customers end up waiting a long time.**

Furthermore, MST customers are discouraged from transferring by the requirement to pay a new full fare every time they change buses.

Proposed Final Network

Figure 24 shows how this would change under the Medium Scenario of this plan.

Nearly every MST bus line in the proposed network would either:

- Run every 15 minutes or better, meaning it is always relatively easy to connect to this line, since the next bus is always coming soon (on average, in 7.5 minutes).
- Arrive at Monterey Transit Plaza or Salinas Transit Center at :10 and :40 after the hour, if it runs every 30 minutes.
- Arrive at Monterey Transit Plaza or Salinas Transit Center at :10 after the hour, if it runs every 60 minutes.

Buses would then leave Monterey Transit Plaza and Salinas Transit Center at :15 and :45 after the hour, ensuring a maximum 5 minute wait to connect between most routes. Additional timed transfers would also be available at Sand City Station (to CSUMB) and Carmel Rancho (to Carmel Valley).

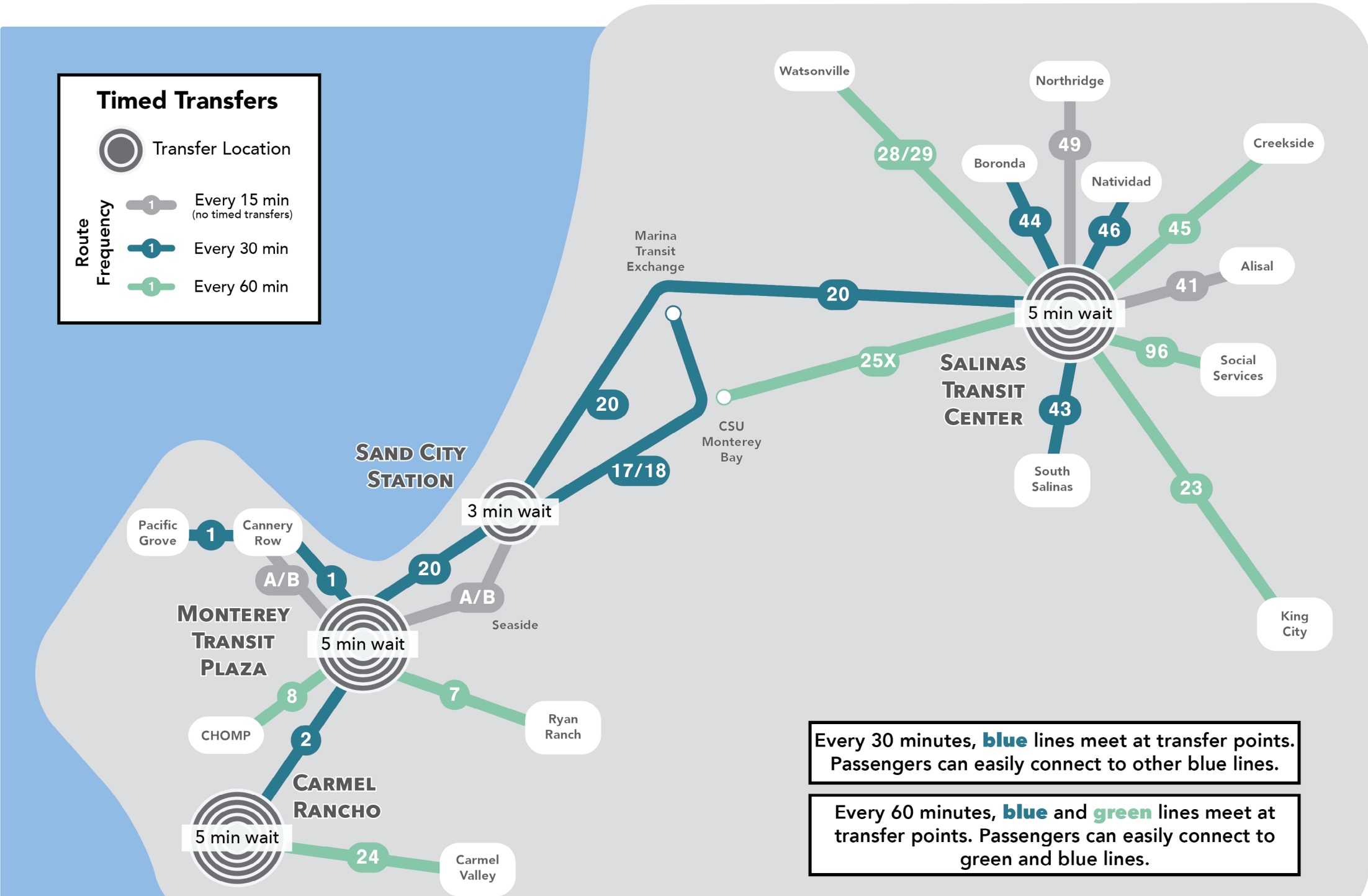


Figure 24: Diagram of the timed transfer system in the Medium Scenario.

Important note: under MST's current fare structure, each transfer requires passengers to pay a second fare. This plan assumes MST will change fares so transfers are either free or significantly discounted.

Service that is more direct, and less specialized.

Existing Service

Figure 25 (below left) shows MST’s existing service in the core of the Seaside-Monterey urban area. Many of the bus lines shown on this map overlap for long segments, deviating here and there to get service closer to a particular street or building. The light green and gold colors of these lines indicate almost all the routes shown here operate once an hour or less. As a result, many locations are accessible by more than one line, but at totally random frequencies that vary widely throughout the day.

For example, Del Monte Center is served by nine bus lines, each one of which has a slightly different path than the others to Monterey Transit Plaza and Carmel-by-the-Sea. But despite these many routes, a passenger can only rely on a trip to central Monterey or Carmel about every 30 minutes, and that trip could take one of several different routes along the way.

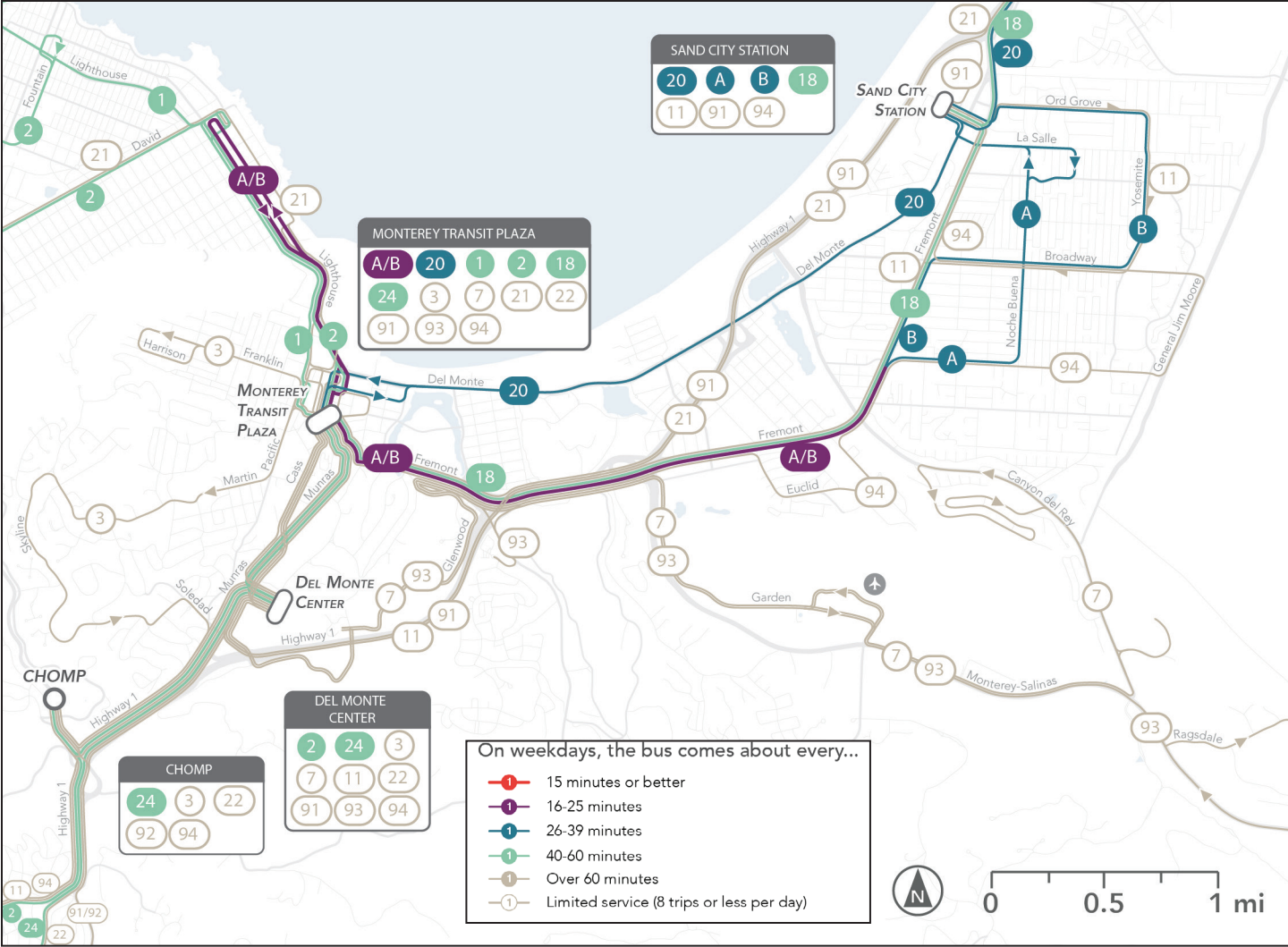


Figure 25: Existing MST bus lines in the core of the Seaside-Monterey area.

Proposed Final Plan

Figure 26 (below right) shows how service would change under the Medium Scenario. Even though the plan would include fewer routes and slightly less service overall in the Seaside-Monterey area, many places would have more frequent service.

This is because consolidating service into fewer lines makes it possible to run a regular schedule between major destinations, so a passenger can know that the next bus is always scheduled in the same amount of time, and will take the route they used last time.

In this example, Del Monte Center would only be near three bus lines, but a passenger could still count on service to central Monterey or Carmel-by-the-Sea every 30 minutes. Furthermore, that passenger would always use the same bus line, along the most direct path from Carmel to Monterey.

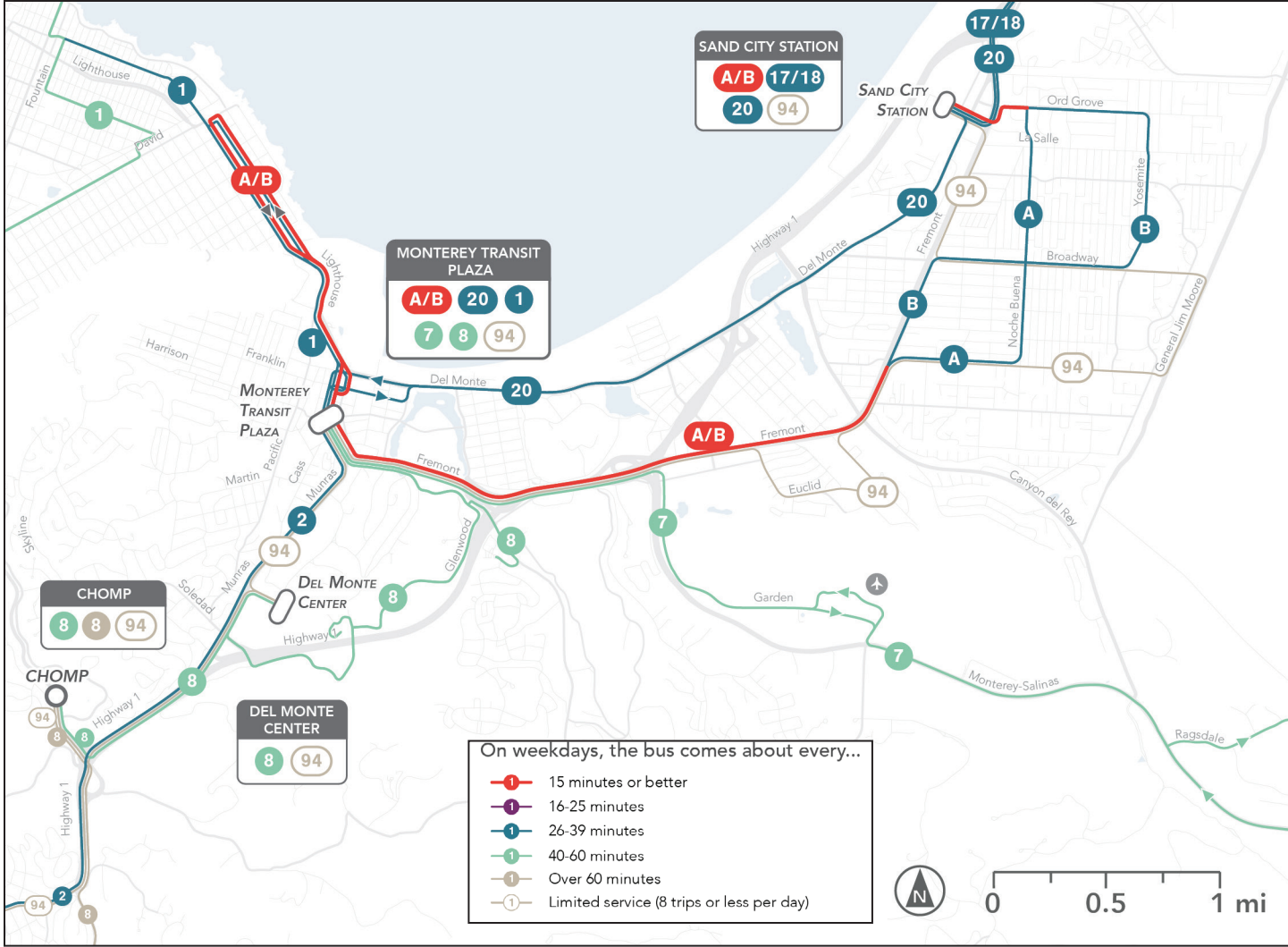


Figure 26: Proposed MST bus lines in the core of the Seaside-Monterey area in the Medium Scenario.

4 KEY ELEMENTS OF THE PLAN

5 Existing vs. Proposed Service by Area

Salinas – Existing Service

Reading the Maps

The maps on this and the following page depict how MST bus lines are currently organized in Salinas, and how that would change if this plan were implemented.

These maps are annotated with comments that explain how the existing network operates, and how that would change in the future.

As in the rest of this report, **maps show bus lines color-coded by midday frequency on weekdays.**

- **Red lines** run about every 15 minutes.
- **Blue lines** run about every 30 minutes.
- **Green lines** run about once an hour.
- **Gold lines** run less than once an hour.

There are three bus lines on North Main Street, but the bus usually comes only once an hour (on Line 49). When Line 29 is in operation, there is a second bus every other hour. Line 95 only runs four times a day, and only in the southbound direction.

Most bus lines operate once an hour or less.

Services like Line 44 and Line 45 cover many outlying neighborhoods, but the bus only comes every 75 minutes, which makes them very difficult to use.

For an able-bodied person, it's often faster to walk than wait for the next bus.

Salinas is connected to the rest of the region by Lines 20 (Monterey), 23 (King City), 28 and 29 (Watsonville), and 61 (Marina-VA Clinic)

South Main Street and Romie Lane are served just a few times a day by Measure Q routes primarily targeted for the needs of seniors, veterans, and people with disabilities (Lines 61 and 95). That leaves many jobs, residents and important destinations a long walk from consistently usable service.

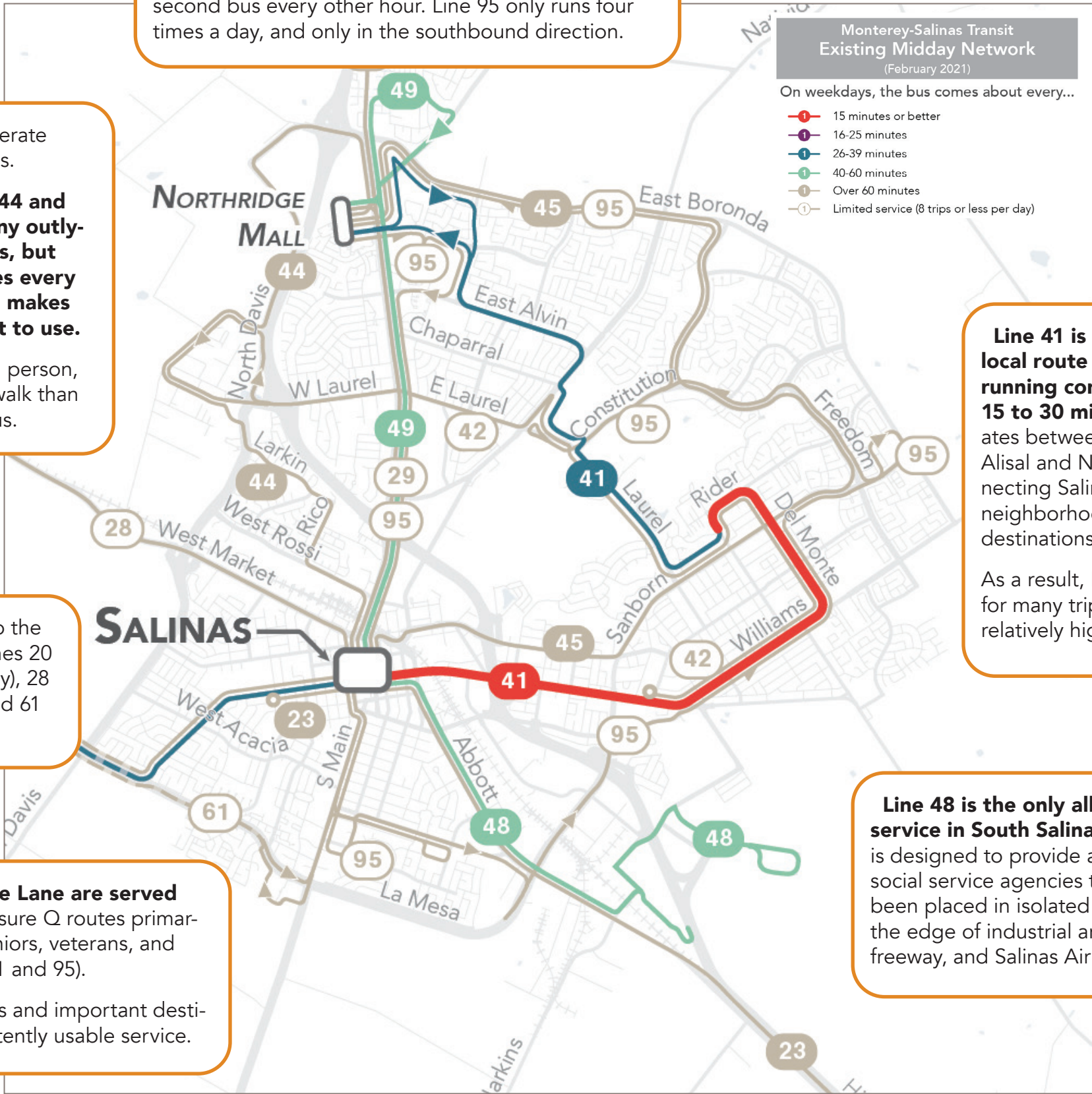
Monterey-Salinas Transit
Existing Midday Network
(February 2021)

- On weekdays, the bus comes about every...
- 15 minutes or better
 - 16-25 minutes
 - 26-39 minutes
 - 40-60 minutes
 - Over 60 minutes
 - Limited service (8 trips or less per day)

Line 41 is the only local route with service running consistently every 15 to 30 minutes. It operates between Downtown, Alisal and Northridge, connecting Salinas' densest neighborhoods to its largest destinations.

As a result, Line 41 is useful for many trips and generates relatively high ridership.

Line 48 is the only all-day local service in South Salinas. Its routing is designed to provide access to social service agencies that have been placed in isolated locations at the edge of industrial areas, the 101 freeway, and Salinas Airport.



Salinas – Medium Scenario

Reading the Maps

As in the rest of this report, this map shows bus lines color-coded by midday frequency on weekdays.

- **Red lines** run about every 15 minutes.
- **Blue lines** run about every 30 minutes.
- **Green lines** run about once an hour.
- **Gold lines** run less than once an hour.

How Timed Transfers Would Work

Timed transfers would make it possible to connect from one bus line to another without a long wait.

Blue lines would arrive at Salinas Transit Center at :10 and :40 minutes after the hour, and leave at :15 and :45.

Green lines would arrive at Salinas Transit Center :10 minutes after the hour, and leave at :15.

Lines 28 and 29 would alternate, but there would always be a departure to Watsonville at :15 after the hour as well.

Red Lines would not have a timed transfer, but the next bus would be scheduled to always come within 15 minutes. In practice, most passengers connecting to and from red lines at Salinas Transit Center would experience a 5 to 10 minute wait. On evenings and weekends, red lines would function like blue lines.

Most of Salinas would be served every 15 to 30 minutes, with timed transfers at Salinas Transit Center.

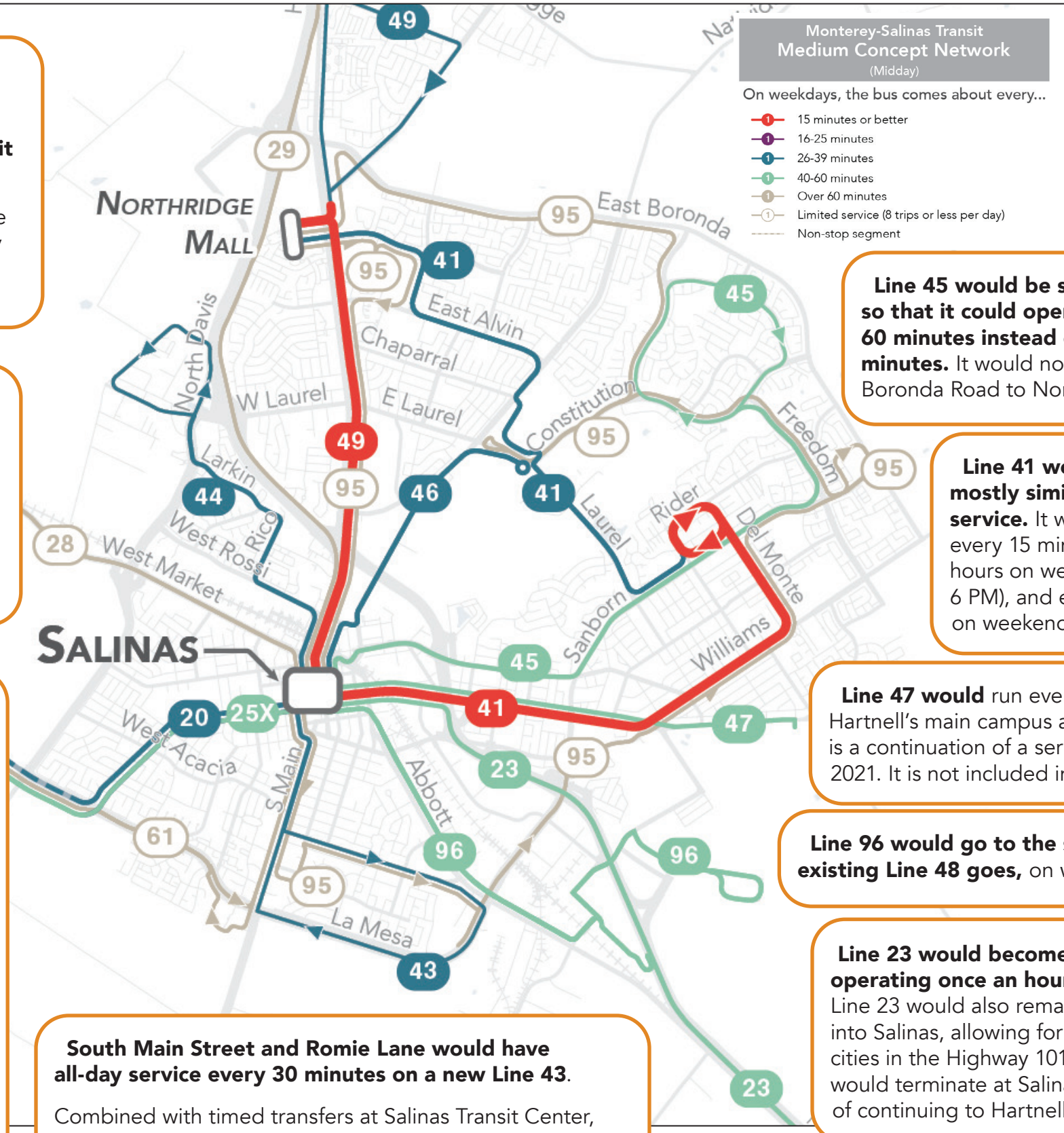
This would make it possible to travel across town in any direction with just a short wait for a second bus.

A new Line 46 would serve Natividad Hospital and Salinas Adult School every 30 minutes from Downtown Salinas, making those destinations reachable from across the region.

Salinas would remain connected to the rest of the region by Lines 20 (Monterey), 23 (King City), 28 and 29 (Watsonville), and 61 (Marina-VA Clinic), but local and regional connections would be facilitated by timed transfers.

A direct route to the CSUMB campus would also be reinstated as Line 25X, with service once an hour when classes are in session*.

Line 49 would be upgraded to provide service every 15 minutes from Downtown to Northridge, with service every 30 minutes continuing to Santa Rita. This would provide frequent service in Salinas' second densest corridor, with many people and jobs nearby.



Line 45 would be shortened, so that it could operate every 60 minutes instead of every 75 minutes. It would no longer serve Boronda Road to Northridge.

Line 41 would remain mostly similar to existing service. It would operate every 15 minutes a few more hours on weekdays (7 AM to 6 PM), and every 30 minutes on weekends.

Line 47 would run every 60 minutes between Hartnell's main campus and its Alisal campus. This is a continuation of a service MST began in mid-2021. It is not included in the Low Scenario.

Line 96 would go to the same areas the existing Line 48 goes, on weekdays only.

Line 23 would become much more frequent, operating once an hour to and from King City. Line 23 would also remain on Highway 101 coming into Salinas, allowing for faster travel to and from cities in the Highway 101 corridor. However, it would terminate at Salinas Transit Center instead of continuing to Hartnell College.

South Main Street and Romie Lane would have all-day service every 30 minutes on a new Line 43.

Combined with timed transfers at Salinas Transit Center, this would connect many jobs, residents and important destinations in this area to the rest of Salinas by transit.

5 EXISTING VS. PROPOSED SERVICE BY AREA

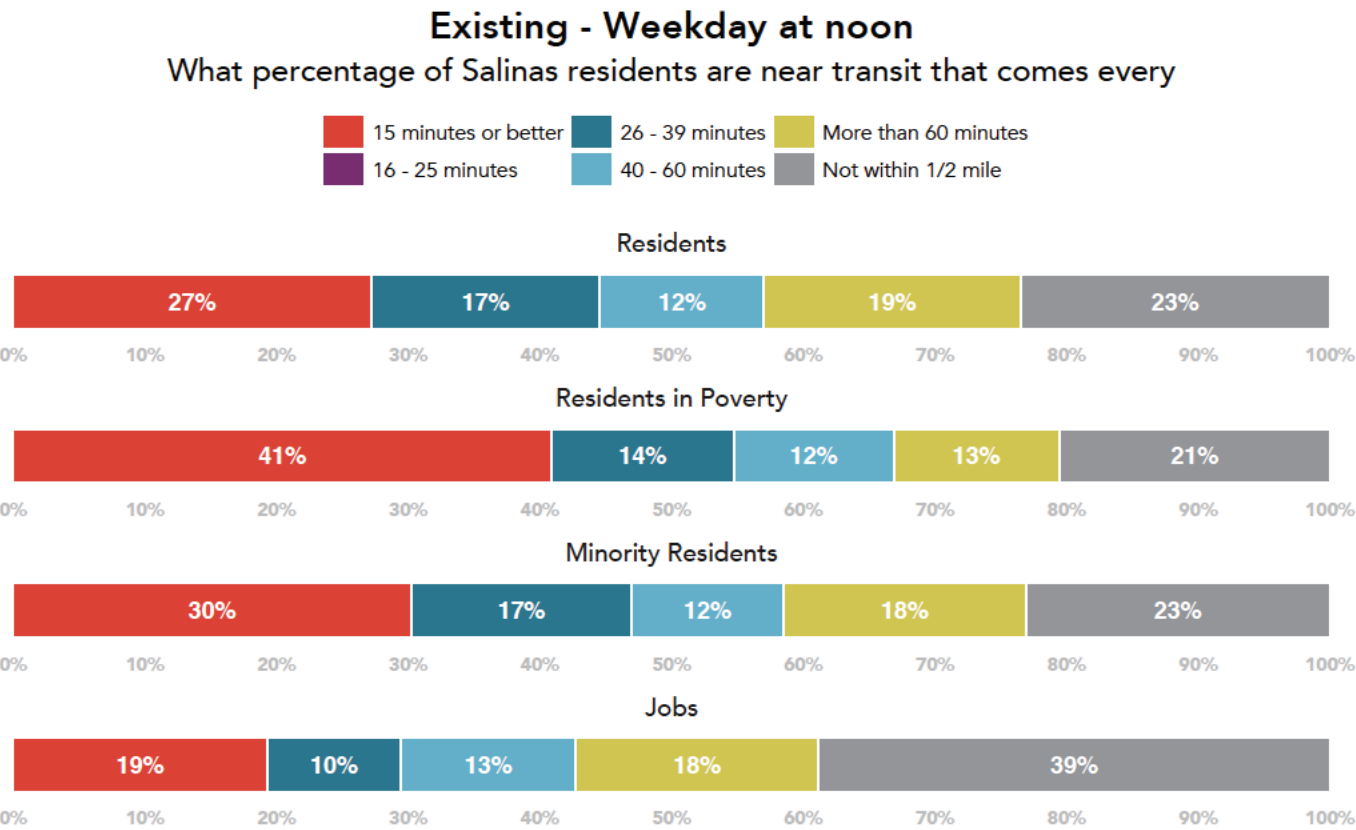
Salinas – How many people would be near service?

5 EXISTING VS. PROPOSED SERVICE BY AREA

Existing Service

Figure 27 (below left) shows how many Salinas residents and jobs are located within a half-mile walk of a stop on an existing MST bus line, and the level of service available on the most frequent route at that stop.

- 77% of Salinas residents and 61% of jobs in Salinas are near an existing MST bus line, regardless of how often that bus line runs.
- But only 44% of Salinas residents and 29% of jobs are located near service that runs about every 30 minutes or better. Most Salinas residents are near either very infrequent service, or no service at all.
- Among residents in poverty, 41% live near service every 15 minutes or better, and 55% live near service every 30 minutes or better. This is almost all related to Line 41, from Downtown to Alisal to Northridge.



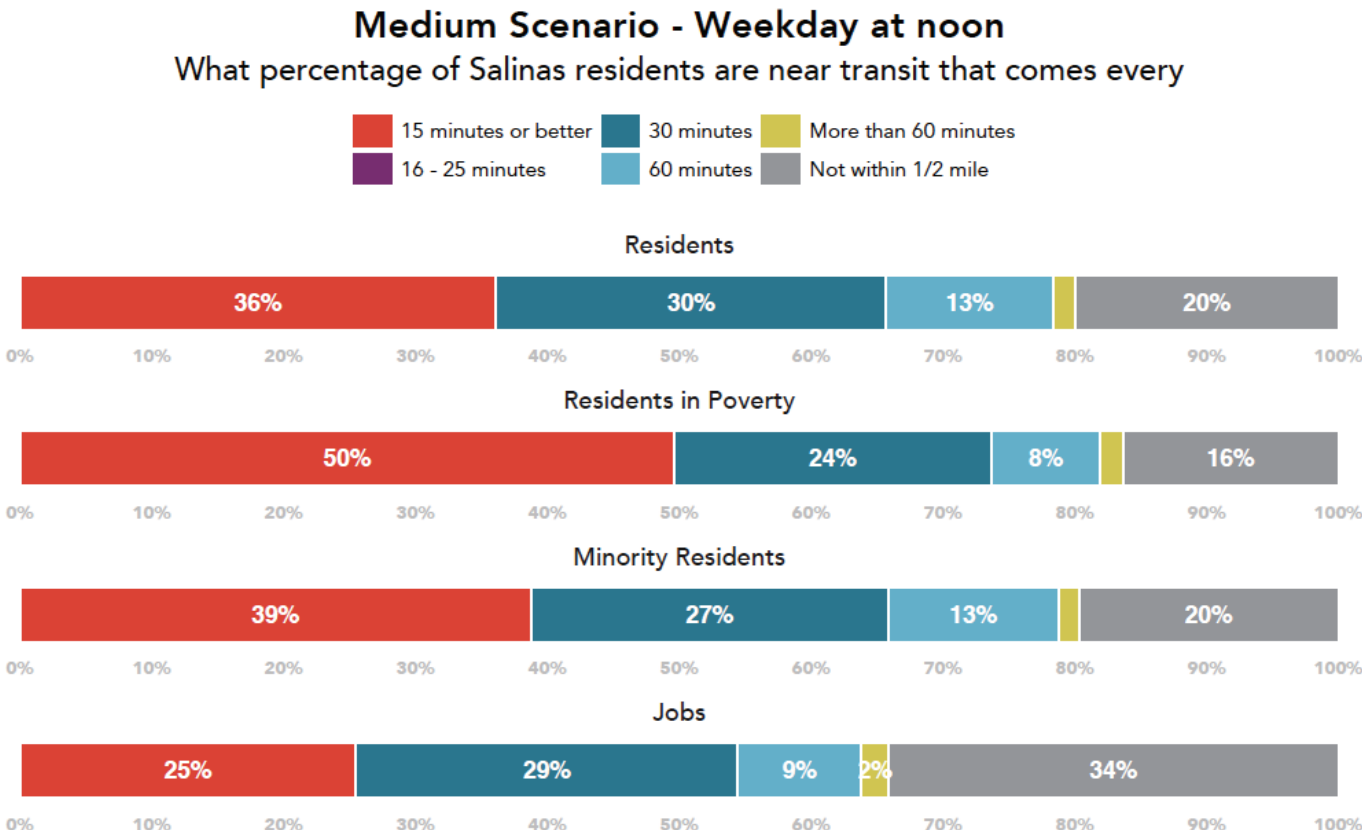
Note: Proximity is measured as being located within 1/2 mile of a bus stop.

Figure 27: Chart showing the percentage of Salinas residents and jobs within a half-mile walk of existing MST bus lines.

Proposed Final Network

Figure 28 (below right) shows the same information, if the Medium Scenario of this plan were implemented.

- **The total number of Salinas residents and jobs near an MST bus line would increase slightly**, to 80% of residents (+3%) and 66% of jobs (+5%).
- **The number of Salinas residents and jobs near service every 30 minutes or better would increase** to 66% of residents (+22%) and 54% of jobs (+25%).
- 50% of residents in poverty would be near service every 15 minutes or better (+9%).
- 74% of residents in poverty would live near service every 30 minutes or better (+19%).



Note: Proximity is measured as being located within 1/2 mile of a bus stop.

Figure 28: Chart showing the percentage of Salinas residents and jobs that would be within a half-mile walk of MST bus lines in the Medium Scenario.

Salinas – Low, Medium and High Scenarios

Low Scenario

The Low Scenario is a contingency plan to help define how MST would react to either (a) lower revenues than expected or (b) an insufficient number of drivers to operate the Medium Scenario (or some other unexpected resource constraint). In the Low Scenario, proposed service would be similar to the Medium Scenario, except for the following changes:

- Red and blue lines would end service an hour earlier in the evening, at 9 PM on weekdays and 8 PM on weekends.
- Lines 43 and 44 would operate once an hour instead of every 30 minutes.
- MST would not operate direct service from Salinas to CSUMB on the new Line 25X, nor the shuttle between Hartnell campuses on Line 47.

Reading the Maps

As in the rest of this report, the maps on this page **show bus lines color-coded by midday frequency on weekdays.**

- **Red lines** run about every 15 minutes.
- **Blue lines** run about every 30 minutes.
- **Green lines** run about once an hour.
- **Gold lines** run less than once an hour.

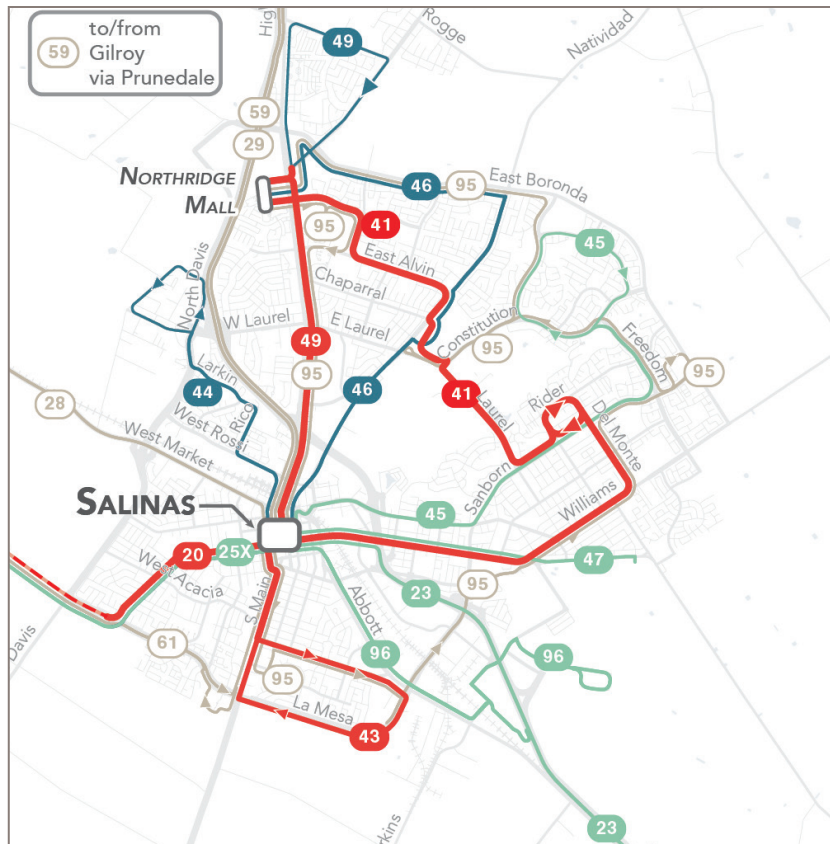
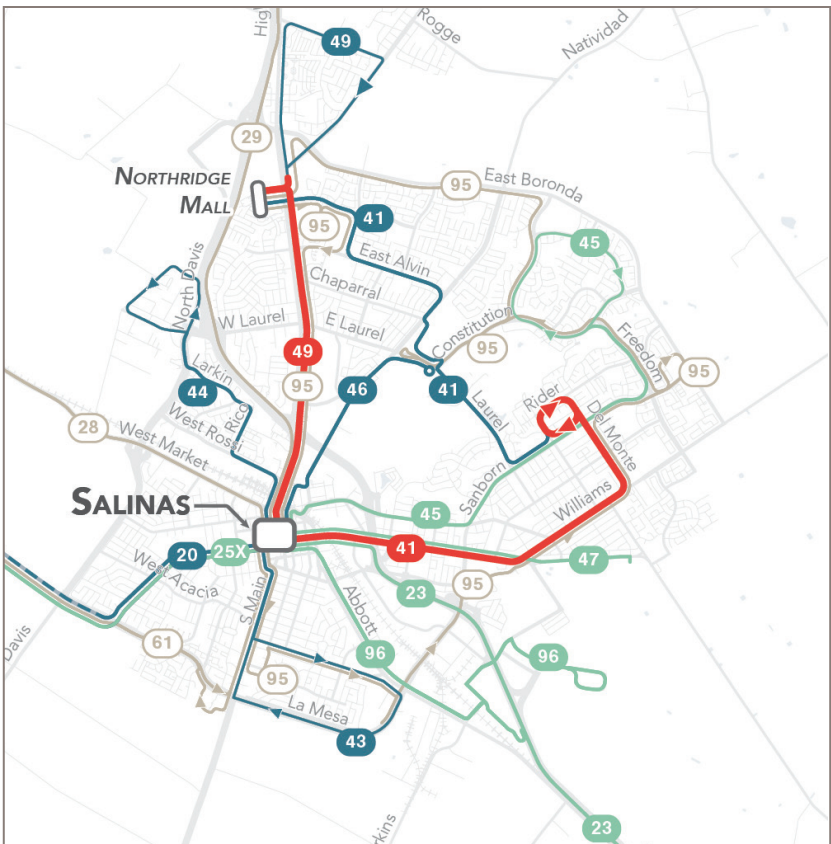
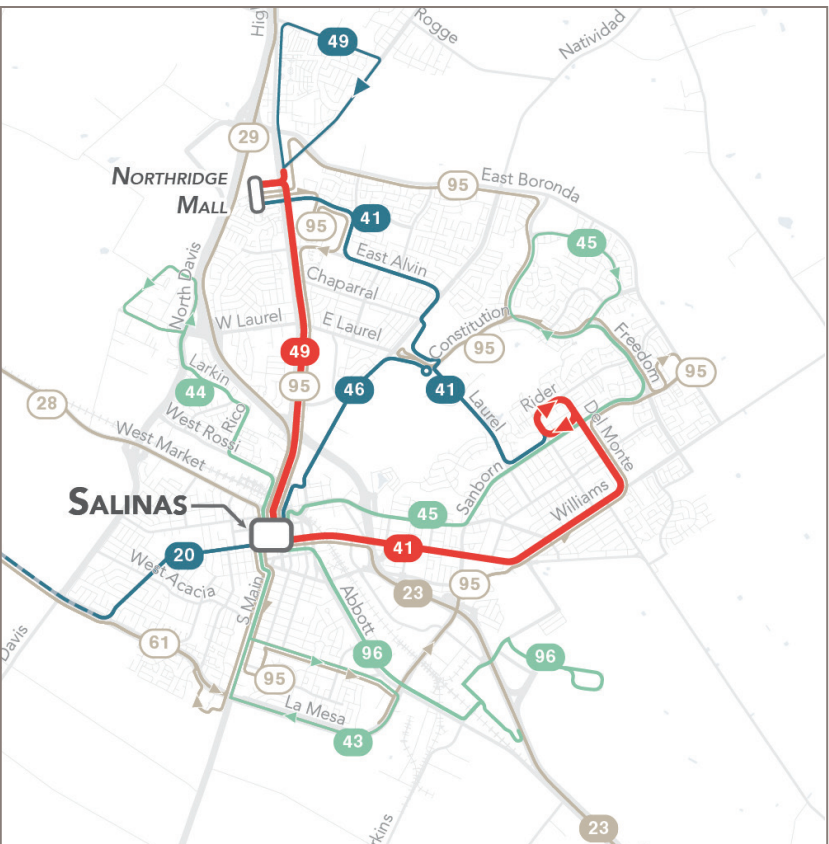
Medium Scenario

The Medium Scenario would operate as described in previous pages. The map below is provided for reference and comparison purposes.

High Scenario

The High Scenario is designed to show where and how much MST could increase service if a new funding source appeared in the future. The most likely source for new funds would be a new countywide 1/8-cent sales tax, if voters were to approve. In the High Scenario, proposed service would be similar to the Medium scenario, except for the following changes:

- Line 20, Line 47, and the northern half of Line 41 would all be upgraded to run every 15 minutes.
- Line 46 would be extended northward from Natividad Hospital to Boronda Road and Northridge Mall.
- There would be a new Line 59 to Gilroy, running every 90 minutes and connecting to VTA and Caltrain.



Monterey Bay & Peninsula – Existing

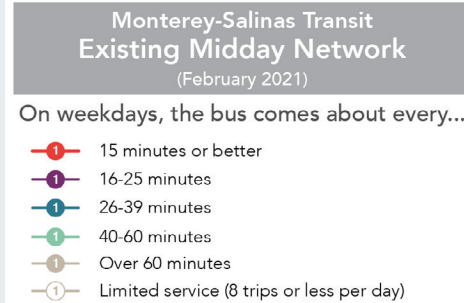
Reading the Maps

The maps on this and the following page depict how MST bus lines are currently organized in the greater Seaside-Monterey urban area, and how that would change if this plan were implemented.

These maps are annotated with comments that explain how the existing network operates, and how that would change in the future.

As in the rest of this report, **maps show bus lines color-coded by midday frequency on weekdays.**

- **Red lines** run about every 15 minutes.
- **Blue lines** run about every 30 minutes.
- **Green lines** run about once an hour.
- **Gold lines** run less than once an hour.



Lines 1 and 2 cover Pacific Grove every 60 minutes on long and very circuitous paths. These routes maximize coverage, but also ensure that any transit trip beginning or ending in Pacific Grove requires a long wait.

MST also currently offers an on-call service for trips within Marina. This service is available to the general public from 8 AM to 6 PM, seven days a week.

The Jazz A and B routes operate every 30 to 35 minutes, connecting Seaside to Downtown Monterey and Cannery Row. This is a critical connection between areas where many low-income people live, and where many jobs and services are located.

Line 20 provides a regional connection every 30 minutes between Monterey, Sand City, Marina and Salinas. This is MST's highest-ridership regional route, by far.

Service to CSUMB and parts of Marina is provided by two MST bus lines. Both operate once an hour.

Line 16 connects parts of Marina and student housing to the main campus.

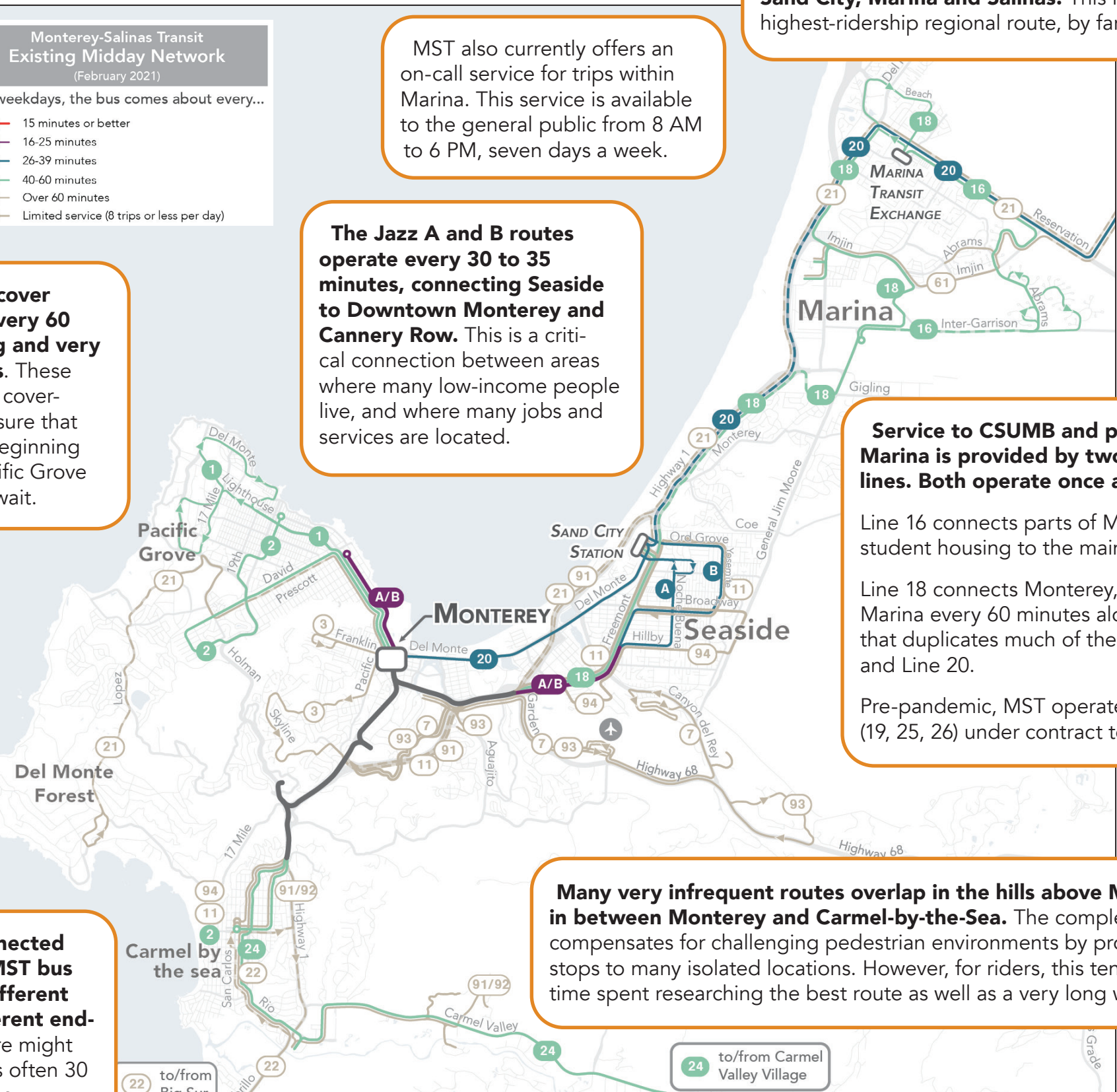
Line 18 connects Monterey, Seaside and Marina every 60 minutes along a path that duplicates much of the Jazz routes and Line 20.

Pre-pandemic, MST operated other lines (19, 25, 26) under contract to CSUMB.

Specialized commuter routes like Line 11 (Carmel) and Line 21 (Pebble Beach) provide fast service, but they run just a few times a day in the morning and afternoon. These are only useful for workers with very specific commute hours, who are also heading straight home after work.

Carmel-by-the-Sea is connected to Monterey by multiple MST bus lines, but they all run at different frequencies and have different endpoints. So even though there might be 3 buses per hour, there is often 30 to 40 minutes between buses.

Many very infrequent routes overlap in the hills above Monterey, and in between Monterey and Carmel-by-the-Sea. The complexity of service compensates for challenging pedestrian environments by providing bus stops to many isolated locations. However, for riders, this tends to mean time spent researching the best route as well as a very long wait.



Monterey Bay & Peninsula – Medium Scenario

Reading the Maps

As in the rest of this report, this map shows bus lines color-coded by midday frequency on weekdays.

- **Red lines** run about every 15 minutes.
- **Blue lines** run about every 30 minutes.
- **Green lines** run about once an hour.
- **Gold lines** run less than once an hour.

How Timed Transfers Would Work

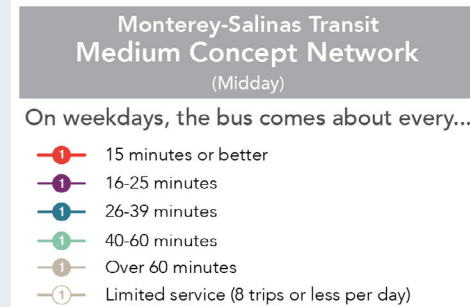
Timed transfers would make it possible to connect from one bus line to another without a long wait.

At Monterey Transit Plaza:

- **Blue lines** would arrive at :10 and :40 minutes after the hour, and leave at :15 and :45.
- **Green lines** would arrive at :10 minutes after the hour, and leave at :15.
- **Red Lines** would not have a timed transfer, but the next bus would be scheduled to always come within 15 minutes. In practice, most passengers connecting to and from red lines would experience a 5 to 10 minute wait. On evenings and weekends, red lines would function like blue lines.

At **Sand City Station**, Lines 17 and 18 would be scheduled to arrive 3 minutes before and leave 3 minutes after Line 20.

At **Carmel Rancho**, Lines 2 and 24 would both arrive at :40 minutes after the hour and leave at :45.



Service in Pacific Grove would be consolidated into a single Line 1, with service every 30 minutes between Monterey and Downtown Pacific Grove. It would then split into a two-way loop to serve the rest of the city. There would no longer be service on Del Monte Blvd. or 17 Mile Dr.

Peak-hour only express service like Line 11 (Seaside-Carmel) and Line 21 (Salinas-Pebble Beach) would no longer be provided.

Carmel-by-the-Sea would be served primarily by Line 2, with service every 30 minutes to Monterey.

An extension of the new Line 8 would also provide senior-oriented service every two hours in Carmel-by-the-Sea and the Carmel Valley, replacing existing Lines 91 and 92.

The Jazz lines would combine to 15 minute frequency from Cannery Row to south Seaside, with each branch (A and B) running every 30 minutes. This would be made possible by keeping Jazz A on Fremont Blvd. at Monterey Peninsula College (MPC). Some MPC students and staff would have longer walks, but many more passengers would benefit from the more direct routing, and all passengers would benefit from the higher frequency.

Line 20 would continue to provide the main regional connection between Monterey, Sand City, Marina and Salinas.

Marina on-call service would no longer be provided.

CSUMB would be connected to Marina and Sand City/Seaside every 30 minutes. This would be through a combination of two hourly routes with staggered schedules.

Lines 17 and the new Line 18 would connect Sand City, CSUMB and Marina via two paths serving different areas of north Seaside and South Marina in old Fort Ord.

Access to Lines 17 and 18 would be facilitated by a timed transfer to and from Line 20 at Sand City Station.

The complex web of routes in the hills above Monterey would be replaced by three main lines operating at least once an hour. Some areas where the bus runs just a few times a day would lose service.

- Line 2 would connect Monterey to Carmel-by-the-Sea every 30 minutes.
- Line 7 would connect Downtown Monterey to Monterey Airport and Ryan Ranch every 60 minutes.
- Line 8 would connect Downtown Monterey to Glenwood and CHOMP via Del Monte Center every 60 minutes.

Monterey Bay & Peninsula – How many people would be near service?

5 EXISTING VS. PROPOSED SERVICE BY AREA

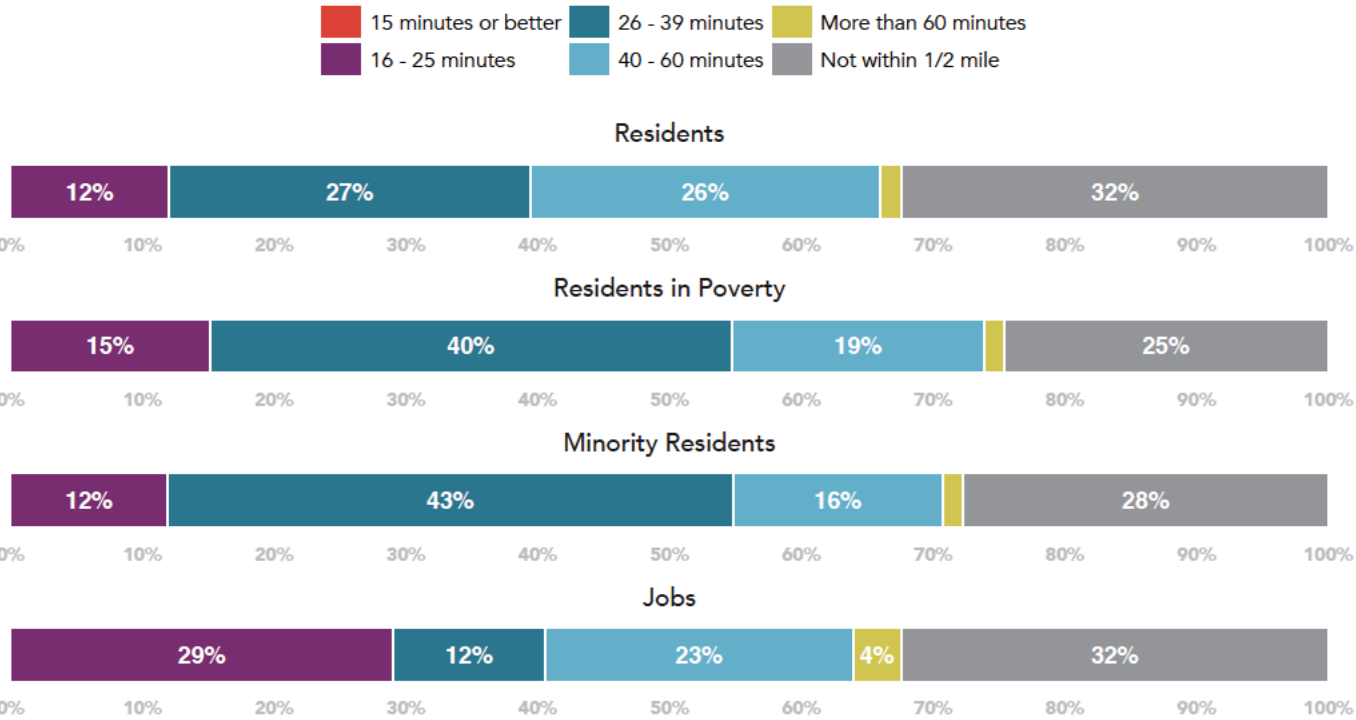
Existing Service

Figure 29 (below left) shows how many residents and jobs in the greater Seaside-Monterey urban area are located within a half-mile walk of a stop on an existing MST bus line, and the level of service available on the most frequent route at that stop.

- 68% of residents and jobs in the greater Seaside-Monterey urban area are near an existing MST bus line, regardless of how often that bus line runs.
- But only 39% of residents and 41% of jobs in the greater Seaside-Monterey urban area are located near service that runs about every 30 minutes or better. Most residents are either near very infrequent service, or no service at all.
- Among residents in poverty, 15% live near service about every 20 minutes (i.e. the shared segment of the Jazz A and B lines), and 55% live near service about every 30 minutes or better. Many of these residents live in either Seaside near the Jazz A and B, or in Marina near Line 20.

Existing - Weekday at noon

What percentage of the greater Seaside-Monterey urban area is near transit that comes every



Note: Proximity is measured as being located within 1/2 mile of a bus stop.

Figure 29: Chart showing the percentage of residents and jobs within a half-mile walk of existing MST bus lines in the greater Seaside-Monterey urban area.

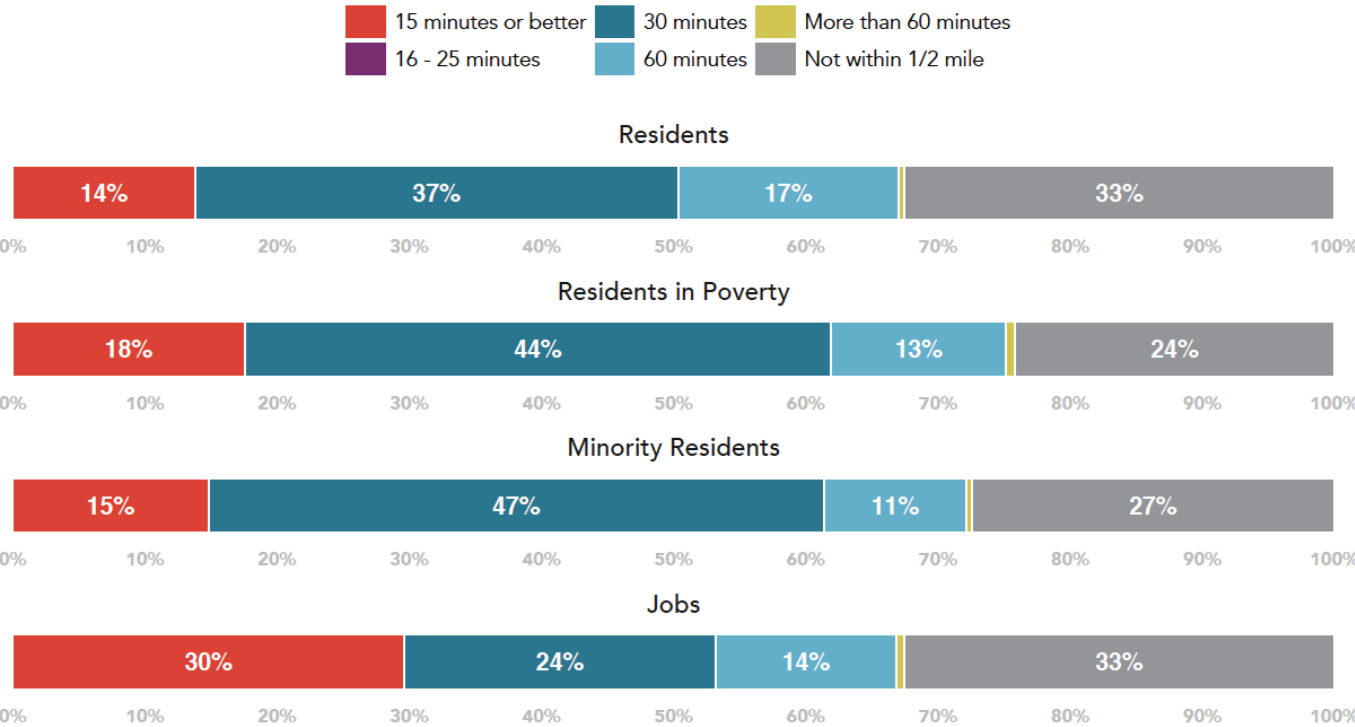
Proposed Final Network

Figure 30 (below right) shows the same information, if the Medium Scenario of this plan were implemented.

- **In the greater Seaside-Monterey urban area, the total number residents and jobs near an MST bus line would decline very slightly, to 67% of residents and jobs (-1%).**
- **The number of residents and jobs near service every 30 minutes or better would increase to 51% of residents (+12%) and 54% of jobs (+13%).**
- 62% of residents in poverty would live near service every 30 minutes or better (+7%).
- 14% of all residents, 30% of jobs, and 18% of residents in poverty would be near service every 15 minutes or better. This would be made possible by eliminating the Jazz A deviation into Monterey Peninsula College and modifying the Jazz routing into Sand City Station.

Medium Scenario - Weekday at noon

What percentage of the greater Seaside-Monterey urban area is near transit that comes every



Note: Proximity is measured as being located within 1/2 mile of a bus stop.

Figure 30: Chart showing the percentage of residents and jobs in the greater Seaside-Monterey urban area that would be within a half-mile walk of MST bus lines in the Medium Scenario.

Monterey Bay & Peninsula – Low, Medium and High Scenarios

Low Scenario

The Low Scenario is a contingency plan to help define how MST would react to either (a) lower revenues than expected or (b) an insufficient number of drivers to operate the Medium Scenario (or some other unexpected resource constraint). In the Low Scenario, proposed service would be similar to the Medium Scenario, except for the following changes:

- Red and blue lines would end service an hour earlier in the evening, at 9 PM on weekdays and 8 PM on weekends.
- MST would not operate Line 24 to Carmel Valley Village. Service in the Carmel Valley would be limited to a longline of Route 8 to Del Mesa Dr., replacing existing service on Lines 91 and 92.
- MST would not operate direct service from CSUMB to Salinas on the new Line 25X.



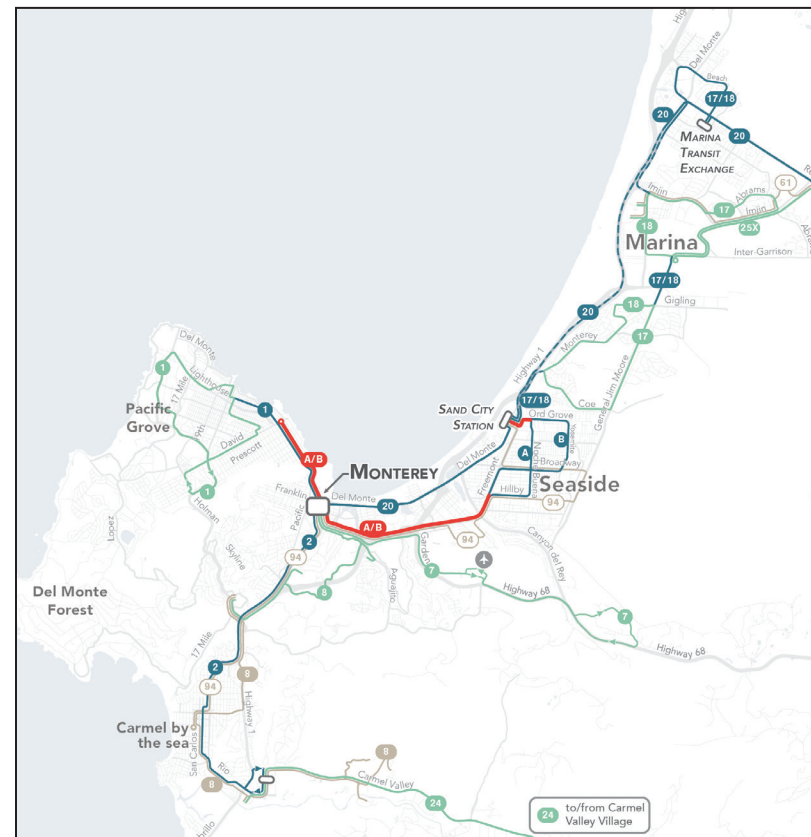
Reading the Maps

As in the rest of this report, the maps on this page **show bus lines color-coded by midday frequency on weekdays.**

- **Red lines** run about every 15 minutes.
- **Blue lines** run about every 30 minutes.
- **Green lines** run about once an hour.
- **Gold lines** run less than once an hour.

Medium Scenario

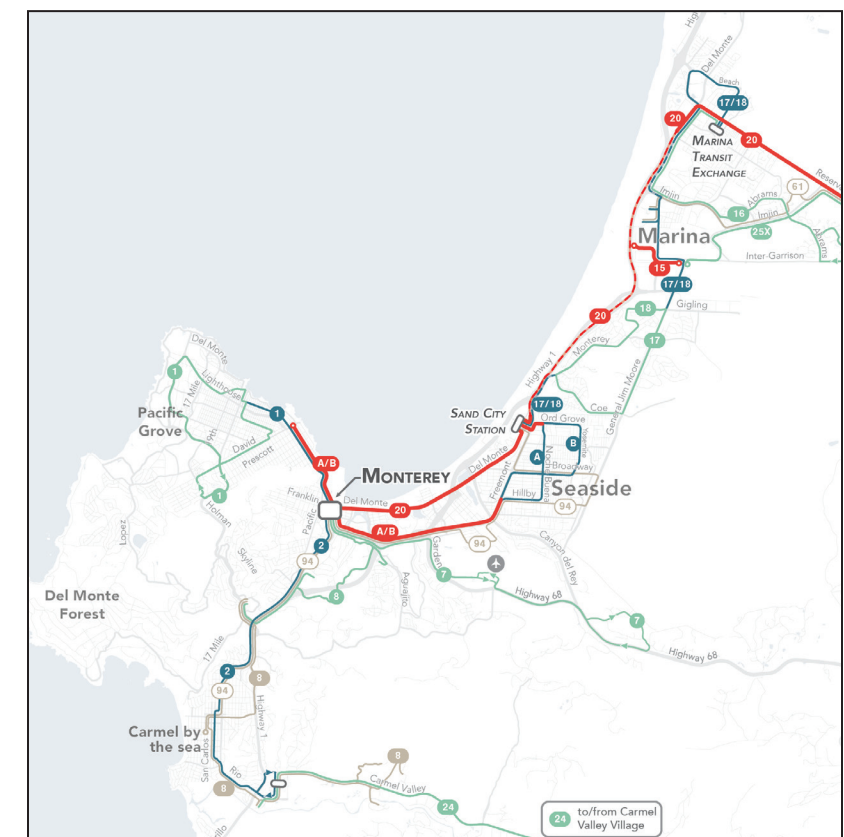
The Medium Scenario would operate as described in previous pages. The map below is provided for reference and comparison purposes.



High Scenario

The High Scenario is designed to show where and how much MST could increase service if a new funding source appeared in the future. The most likely source for new funds would be a new countywide 1/8-cent sales tax, if voters were to approve. In the High Scenario, proposed service would be similar to the Medium scenario, except for the following changes:

- The Jazz A and B would continue operating until midnight, seven days a week, although at lower evening frequencies.
- Line 20 (Salinas to Monterey) would be upgraded to run every 15 minutes on weekdays.
- If the SURF! project is completed, a new Line 15 would connect CSUMB to Line 20 for faster regional connections.
- Lines 17 and 18 would combine into a single path from CSUMB to Marina Transit Exchange. A new Line 16 would restore basic coverage to the Abrams Dr. area in Marina.



Regional Service – Existing

Reading the Maps

The maps on this and the following pages depict how MST regional bus lines are currently organized. These maps are annotated with comments that explain how the existing network operates, and how that would change in the future.

Most MST regional lines connect more rural parts of Monterey County to Monterey, Salinas and Watsonville.

MST also considers Lines 20, 21 and 61 to be regional, because they originate in Salinas and go to the greater Seaside-Monterey-Marina area. However, these are covered in more detail in prior sections.

As in the rest of this report, this **map shows bus lines color-coded by midday frequency on weekdays.**

- **Blue lines** run about every 30 minutes.
- **Green** lines run about once an hour.
- **Gold lines** run less than once an hour.

There are no red lines on this map because no regional service runs every 15 minutes or better at this time.

Lines 28 and 29 each operate every two hours, combining to provide hourly service between Salinas and Watsonville.

Line 28 travels via Castroville and Highway 1. Line 29 travels via Prunedale and Las Lomas.

Line 55 to San Jose has been suspended since March 2020.

Monterey-Salinas Transit
Existing Midday Regional Network
(February 2021)

On weekdays, the bus comes about every...

1

26-39 minutes

1

40-60 minutes

1

Over 60 minutes

1

Limited service (8 trips or less per day)

—

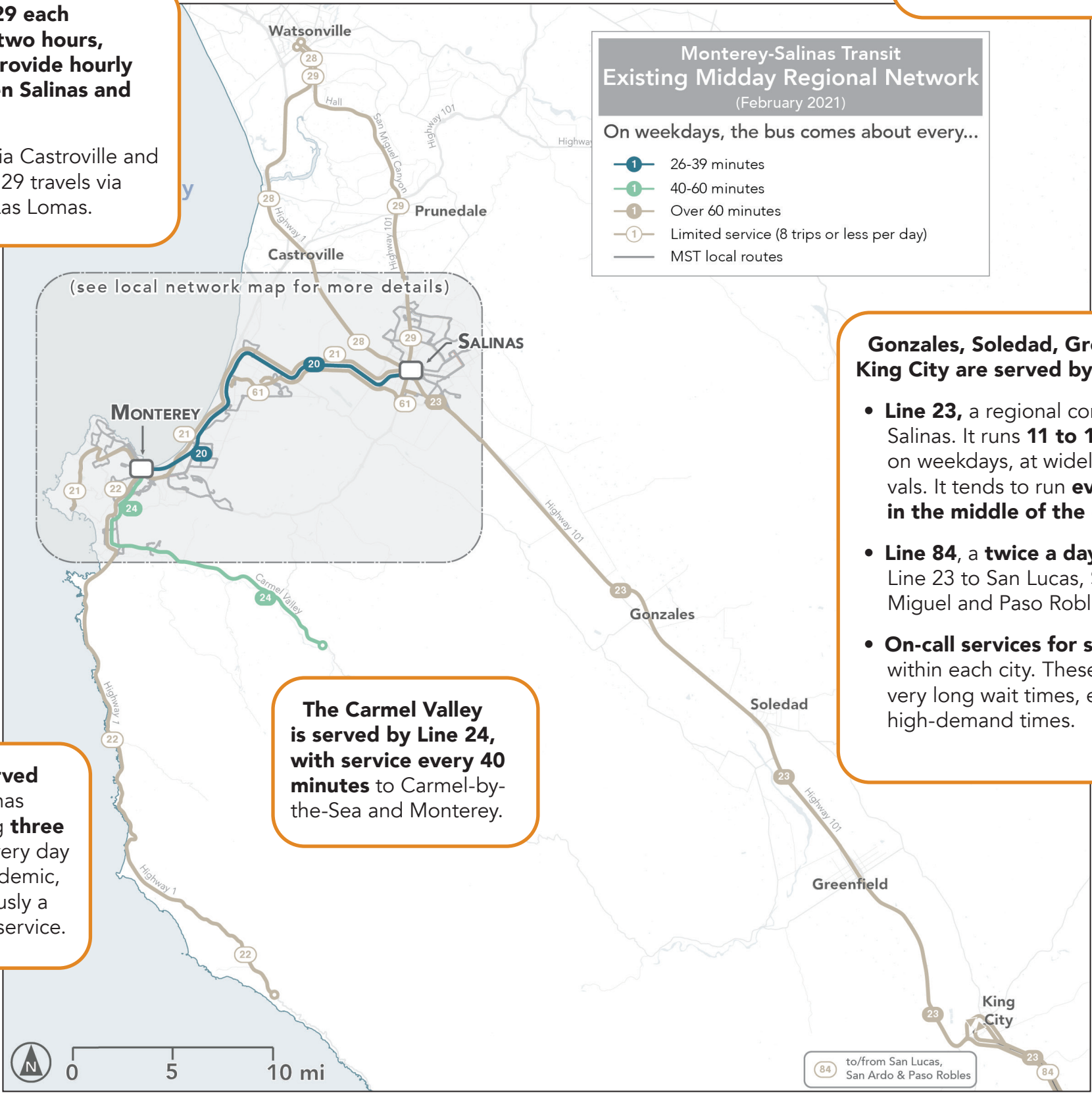
MST local routes

Gonzales, Soledad, Greenfield and King City are served by:

- **Line 23**, a regional connector to Salinas. It runs **11 to 14 times a day** on weekdays, at widely varying intervals. It tends to run **every two hours in the middle of the day.**
- **Line 84**, a **twice a day** extension of Line 23 to San Lucas, San Ardo, San Miguel and Paso Robles.
- **On-call services for short local trips** within each city. These often have very long wait times, especially at high-demand times.

Big Sur is served by Line 22. It has been operating **three times a day** every day during the pandemic, but was previously a weekend-only service.

The Carmel Valley is served by Line 24, with service **every 40 minutes** to Carmel-by-the-Sea and Monterey.



Regional Service – Medium Scenario

Reading the Maps

As in the rest of this report, this map shows bus lines color-coded by midday frequency on weekdays.

- **Blue lines** run about every 30 minutes.
- **Green lines** run about once an hour.
- **Gold lines** run less than once an hour.

There are no red lines on this map because no regional service is proposed to run every 15 minutes or better in the Medium Scenario.

How Timed Transfers Would Work

Timed transfers would make it possible to connect from one bus line to another without a long wait.

At Monterey Transit Plaza:

- **Blue lines** would arrive at :10 and :40 minutes after the hour, and leave at :15 and :45.
- **Green lines** would arrive at :10 minutes after the hour, and leave at :15.

At Salinas Transit Center:

- **Blue lines** would arrive at :10 and :40 minutes after the hour, and leave at :15 and :45.
- **Green lines** would arrive at :10 minutes after the hour, and leave at :15.
- **Lines 28 and 29** would alternate, but there would always be a departure to Watsonville at :15 after the hour as well.

At **Carmel Rancho**, Lines 2 and 24 would both arrive at :40 minutes after the hour and leave at :45.

Lines 28 and 29 would continue to provide service between Salinas and Watsonville at similar frequencies.

Timed transfers would save passengers to and from Watsonville 25 to 55 minutes when connecting to another bus at Salinas Transit Center.

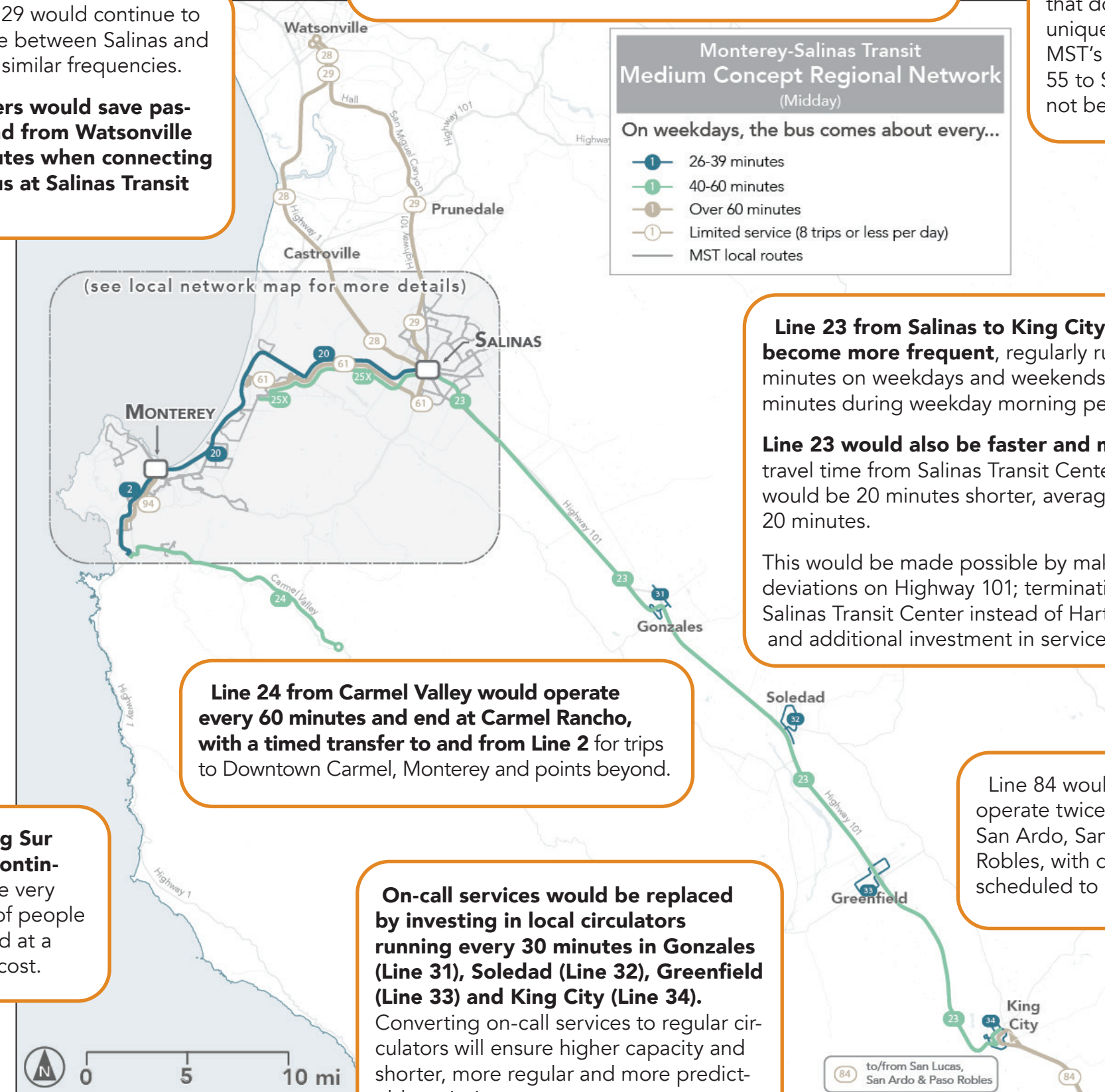
Line 29 would no longer operate on North Main Street in Salinas. Instead, it would stay on Highway 101 for a faster travel time. Passengers traveling between North Salinas and Watsonville would need to transfer at Salinas Transit Center.

As a service with a very high cost per rider that does not provide unique coverage within MST's service area, Line 55 to San Jose would not be restored.

Monterey-Salinas Transit Medium Concept Regional Network (Midday)

On weekdays, the bus comes about every...

- 26-39 minutes
- 40-60 minutes
- Over 60 minutes
- Limited service (8 trips or less per day)
- MST local routes



Line 23 from Salinas to King City would become more frequent, regularly running every 60 minutes on weekdays and weekends, and every 30 minutes during weekday morning peak hours.

Line 23 would also be faster and more direct: travel time from Salinas Transit Center to King City would be 20 minutes shorter, averaging 1 hour and 20 minutes.

This would be made possible by making fewer deviations on Highway 101; terminating the route at Salinas Transit Center instead of Hartnell College; and additional investment in service.

Line 24 from Carmel Valley would operate every 60 minutes and end at Carmel Rancho, with a timed transfer to and from Line 2 for trips to Downtown Carmel, Monterey and points beyond.

Line 22 to Big Sur would be discontinued, due to the very small number of people and jobs served at a relatively high cost.

On-call services would be replaced by investing in local circulators running every 30 minutes in Gonzales (Line 31), Soledad (Line 32), Greenfield (Line 33) and King City (Line 34).

Converting on-call services to regular circulators will ensure higher capacity and shorter, more regular and more predictable wait times.

Line 84 would continue to operate twice a day to San Lucas, San Ardo, San Miguel and Paso Robles, with departures and arrivals scheduled to match Line 23.

5 EXISTING VS. PROPOSED SERVICE BY AREA

Regional Service – Low, Medium and High Scenarios

Low Scenario

The Low Scenario is a contingency plan to help define how MST would react to either (a) lower revenues than expected or (b) an insufficient number of drivers to operate the Medium Scenario (or some other unexpected resource constraint). In the Low Scenario, proposed service would be similar to the Medium Scenario, except for the following changes:

- Line 23 from Salinas to King City would operate every 90 minutes (instead of every 60 minutes) in the middle of the day on weekdays, and on weekends. Morning peak service would remain every 30 minutes, and afternoon and evening service every 60 minutes.
- Line 24 to the Carmel Valley would be discontinued.

Reading the Maps

As in the rest of this report, the maps on this page **show bus lines color-coded by midday frequency on weekdays.**

- **Red lines** run about every 15 minutes.
- **Blue lines** run about every 30 minutes.
- **Green lines** run about once an hour.
- **Gold lines** run less than once an hour.

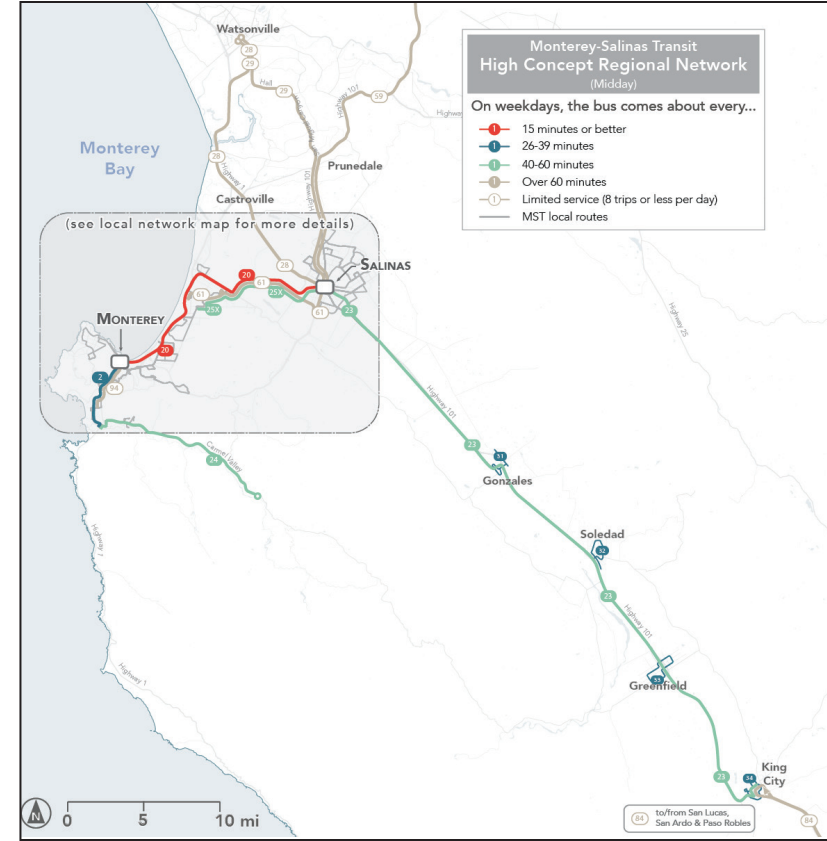
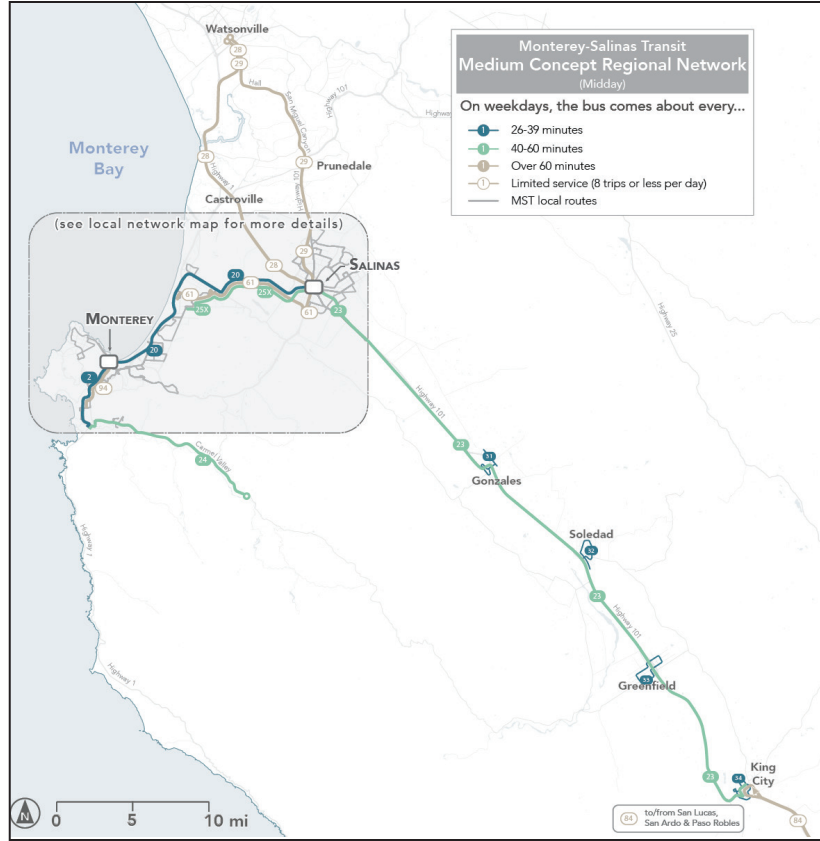
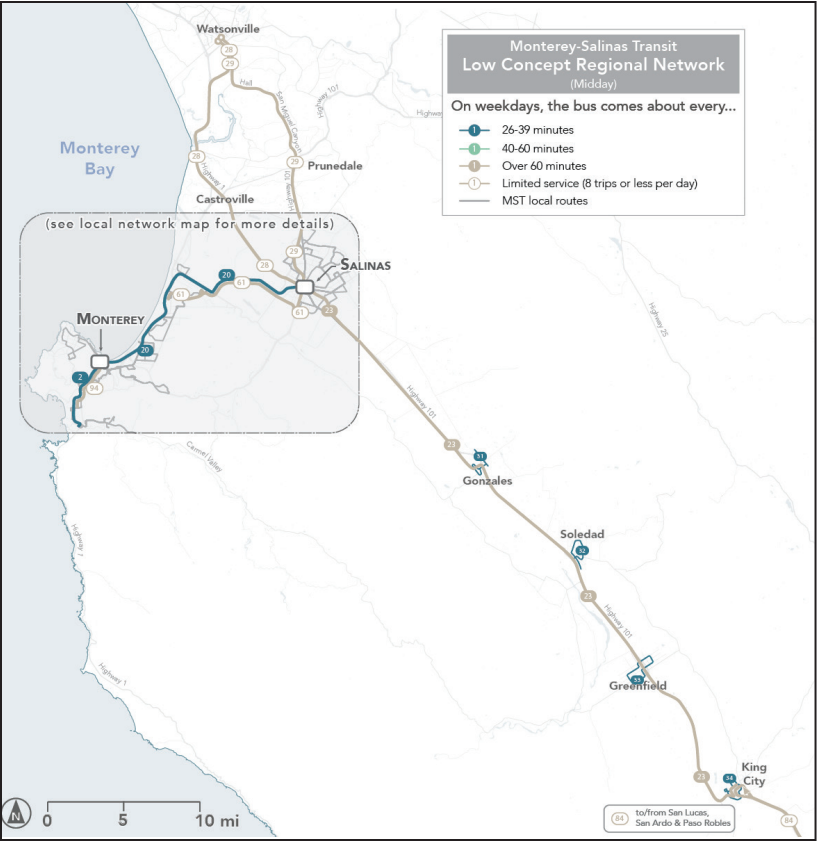
Medium Scenario

The Medium Scenario would operate as described in previous pages. The map below is provided for reference and comparison purposes.

High Scenario

The High Scenario is designed to show where and how much MST could increase service if a new funding source appeared in future. The most likely source for new funds would be a new countywide 1/8-cent sales tax, if voters were to approve. In the High Scenario, proposed service would be similar to the Medium scenario, except for the following changes:

- Line 20 between Monterey and Salinas would be upgraded to run every 15 minutes.
- There would be a new Line 59 to Gilroy, running every 90 minutes and connecting to VTA and Caltrain for access to the Bay Area.



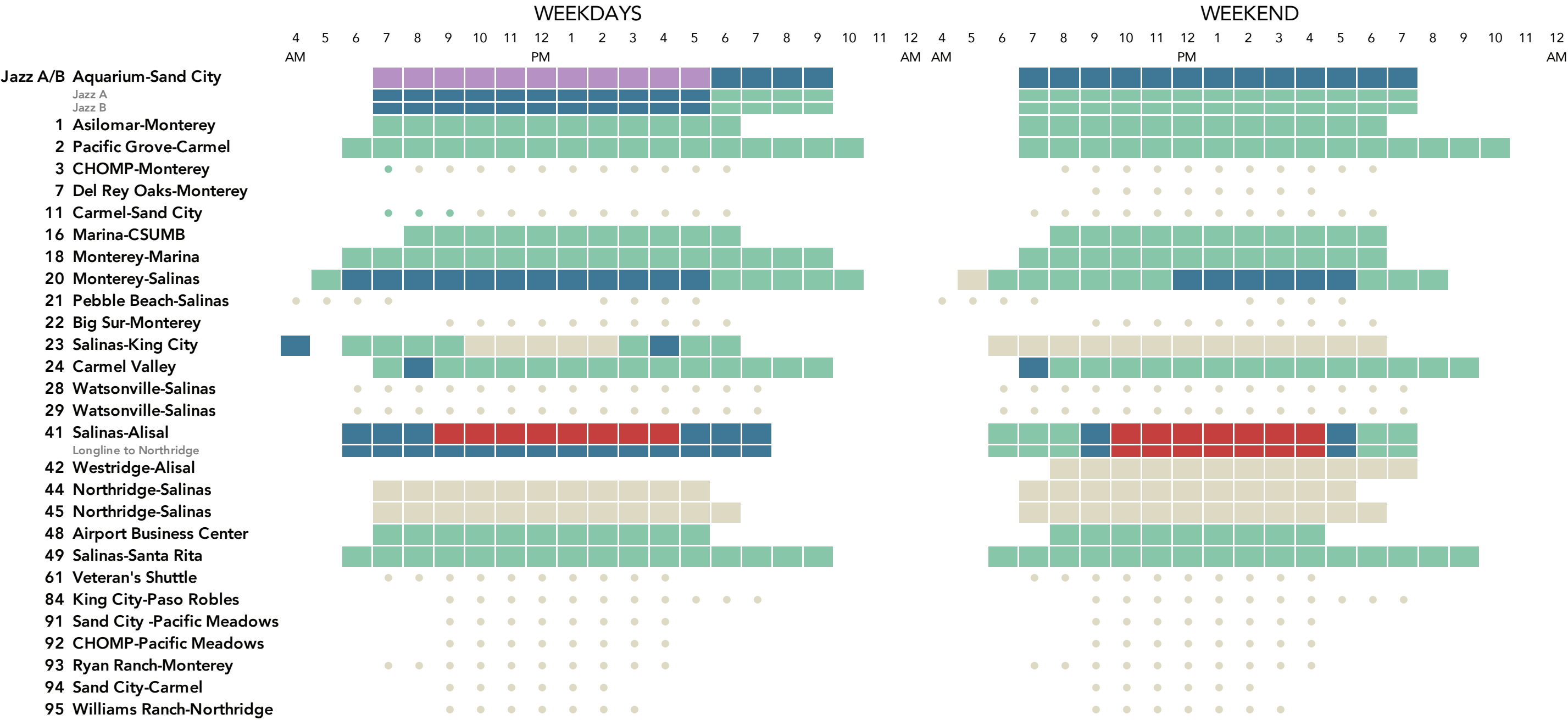
Service Frequency by MST Line and Time of Day – Existing

This page shows how often MST buses are running on existing bus lines.

Monterey-Salinas Transit - Early 2021 Route Frequencies

The bus comes about every:

- 15 minutes or better
- 16-25 minutes
- 26-39 minutes
- 40-60 minutes
- Over 60 minutes
- Limited (8 trips or less per day)



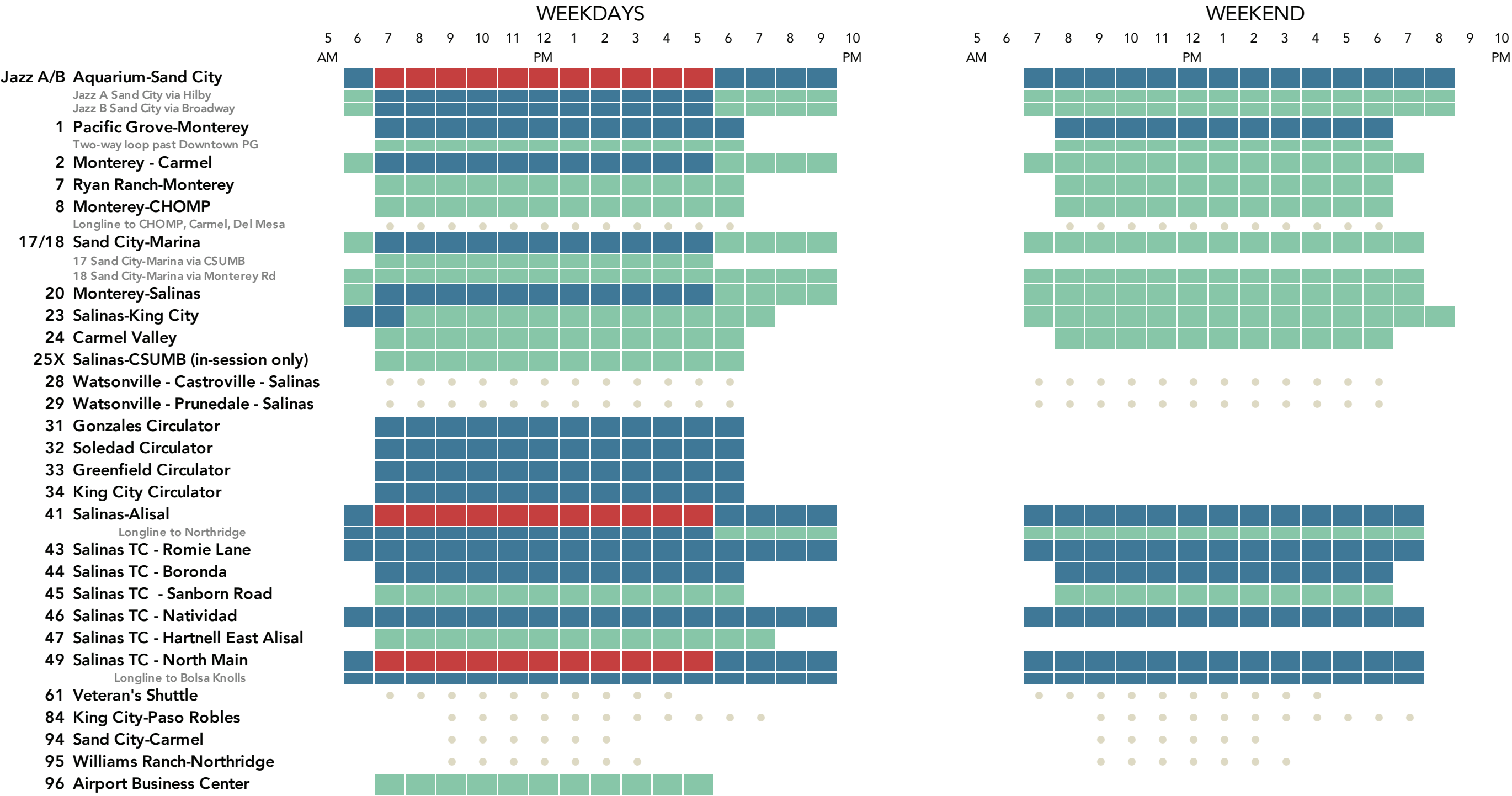
Service Frequency by MST Line and Time of Day – Medium Scenario

The Medium Scenario is the most likely scenario. It is effectively “the plan,” barring unforeseen circumstances.

Proposed MST Bus Line Frequencies - Medium Scenario

The bus comes about every:

- 15 minutes or better
- 30 minutes
- 60 minutes
- Limited (8 trips or less per day)



5 EXISTING VS. PROPOSED SERVICE BY AREA

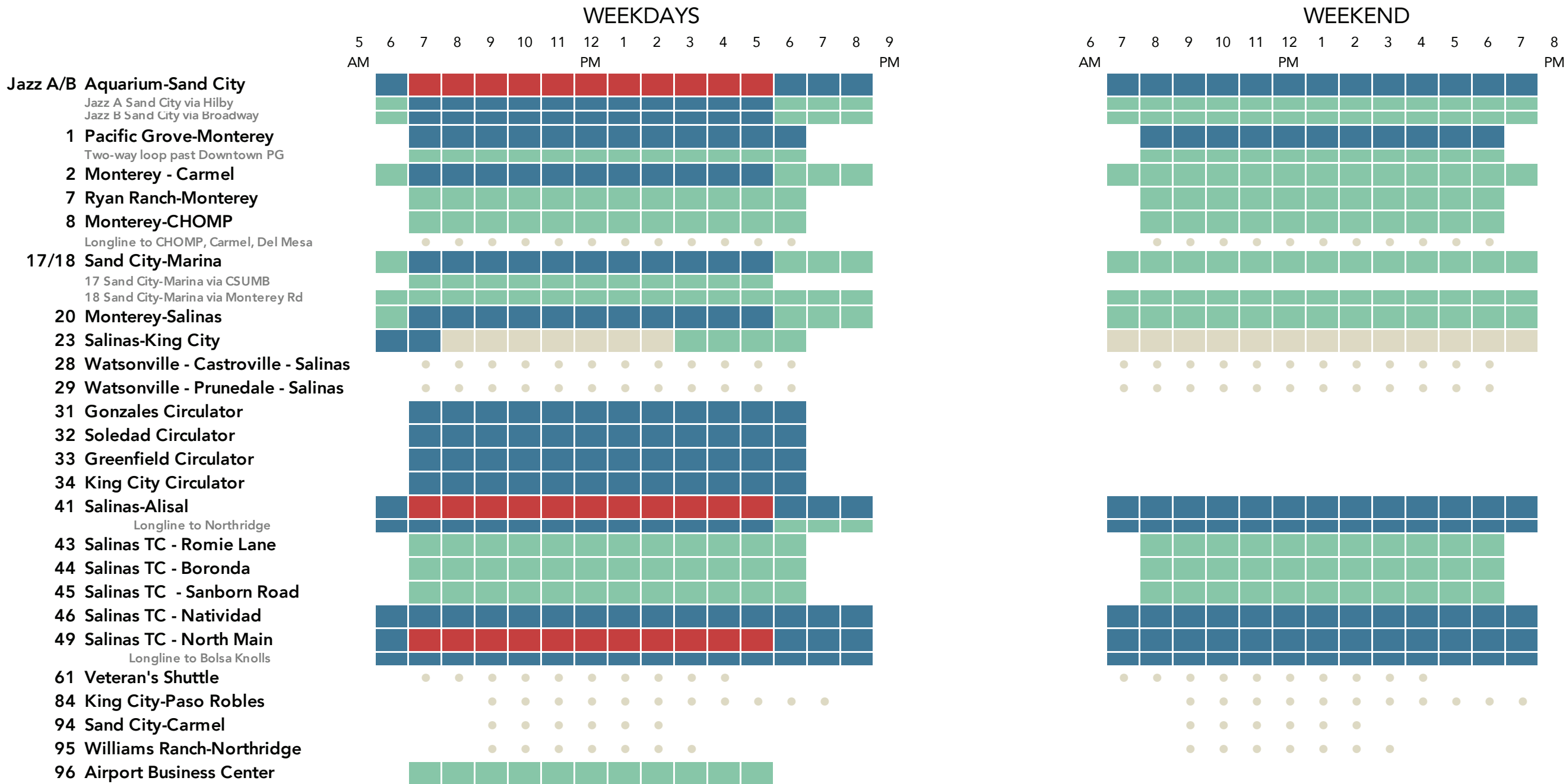
Service Frequency by MST Line and Time of Day – Low Scenario

The Low Scenario is a contingency plan in case MST revenues or bus driver availability were lower than expected.

Proposed MST Bus Line Frequencies - Low Scenario

The bus comes about every:

- 15 minutes or better
- 30 minutes
- 60 minutes
- Limited (8 trips or less per day)



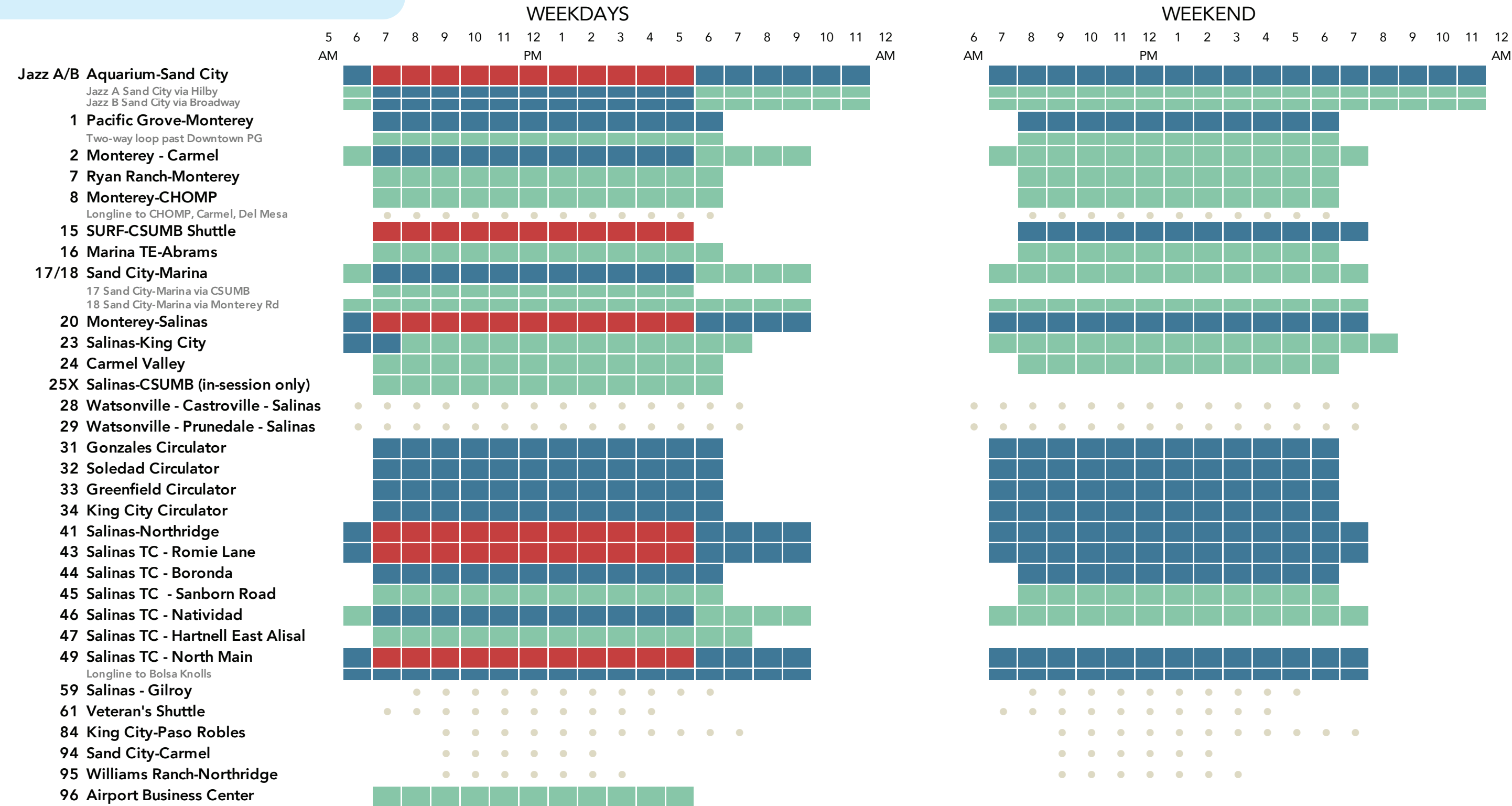
Service Frequency by MST Line and Time of Day – High Scenario

Proposed MST Bus Line Frequencies - High Scenario

The bus comes about every:

- 15 minutes or better
- 30 minutes
- 60 minutes
- Limited (8 trips or less per day)

The High Scenario represents what MST could do if voters passed another 1/8-cent sales tax for service.



5 EXISTING VS. PROPOSED SERVICE BY AREA

6 How would this plan make transit more useful?

More people would be near service, and service would be more frequent.

Existing Service

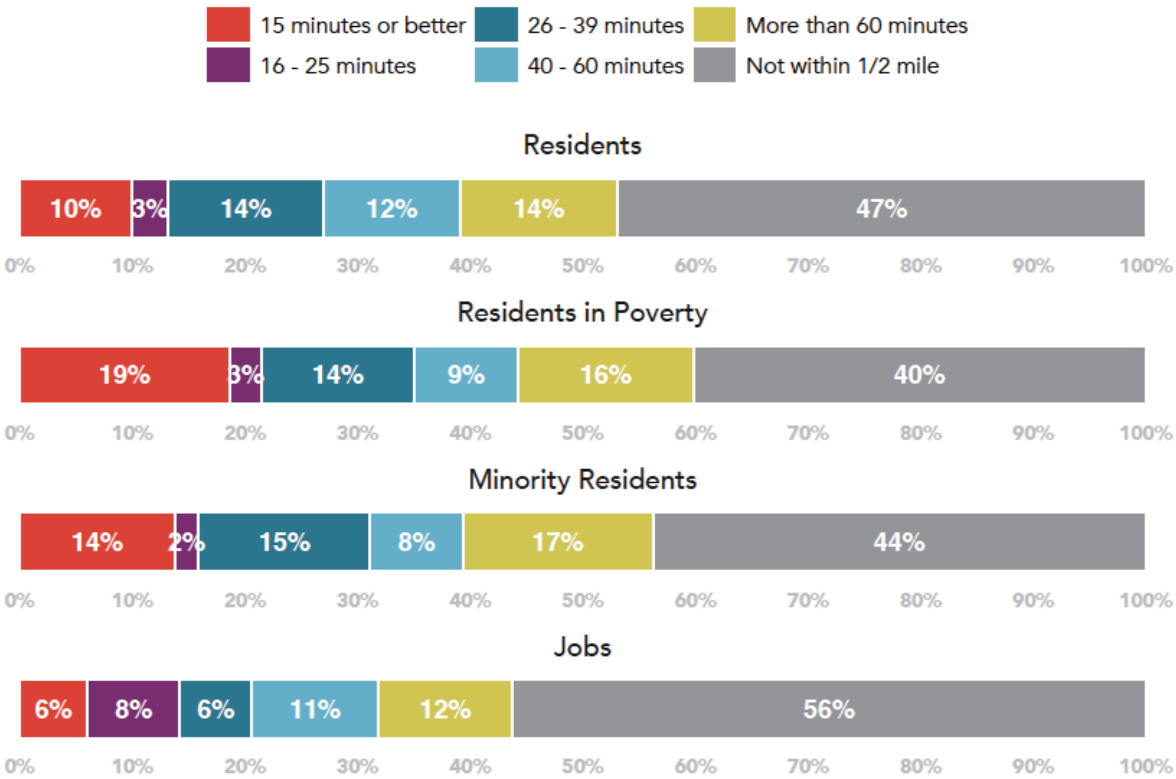
Figure 31 (below left) shows how many residents and jobs in Monterey County are located within a half-mile walk of a stop on an existing MST bus line, and the level of service available on the most frequent route at that stop.

When the bus doesn't come very often, using transit requires lots of waiting; but **few people can afford to spend an hour or more waiting for a trip they need to make every day**, and fewer people want to. The **low frequencies in the existing MST network suggest that most Monterey County residents don't live near transit that comes often enough to be useful**, even if the bus went directly to the places they need to go.

- Only 27% of county residents and 20% of jobs are near service that comes about every 30 minutes or better on weekdays.
- Only 10% of residents and 6% of jobs are near service that comes every 15 minutes or better.

Existing - Weekday at noon

What percentage of Monterey County is near transit that comes every



Note: Proximity is measured as being located within 1/2 mile of a bus stop.

Figure 31: Chart showing the percentage of residents and jobs within a half-mile walk of existing MST bus lines in Monterey County.

Proposed Final Plan

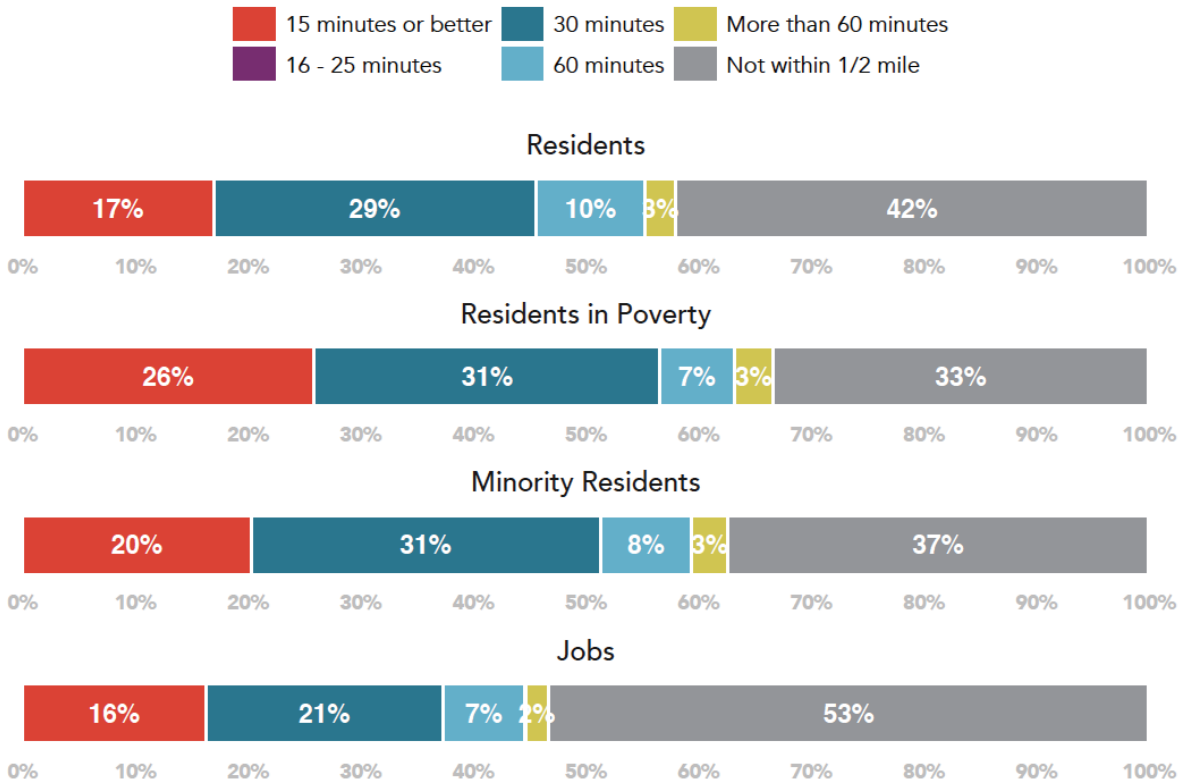
Figure 32 (below right) shows the same information, if the Medium Scenario of this plan were implemented.

Frequency alone doesn't guarantee that a new or changed bus line will be especially useful. But if a bus doesn't come very often, few people will ever use it for more than occasional trips. As such, **the higher frequencies in this plan suggest the plan has the potential to provide service that is useful to more people, for more trips.**

- The number of people and jobs near service every 30 minutes or better would increase to 46% of county residents (+19%) and 37% of jobs (+17%). This includes a majority of residents in poverty (57%).
- The number of people and jobs near service every 15 minutes would increase to 17% of residents (+7%) and 16% of jobs (+10%).

Medium Scenario - Weekday at noon

What percentage of Monterey County is near transit that comes every



Note: Proximity is measured as being located within 1/2 mile of a bus stop.

Figure 32: Chart showing the percentage of residents and jobs in Monterey County that would be within a half-mile walk of MST bus lines in the Medium Scenario.

Most transit trips would take far less time.

In the following pages, we'll show you two different ways to think about how much more or less time transit trips would take if this plan were implemented.

Example Trip Itineraries

The most concrete way of understanding whether transit trips would be shorter or longer in future is to plot out exactly how long those trips take today, and how that would change. This chapter provides nine examples selected to represent:

- Experiences from many different parts of MST's service area.
- A range of trip lengths and purposes.
- In most cases, trips that would need to occur at a specific time in someone's day.

The goal is to show what each trip entails, based on the choices that a reasonable and able-bodied person could make, if they needed to get somewhere by a certain time.

In existing service, travel times were calculated by seeking directions from Google for Wednesday, August 18, 2021¹.

Trip examples in proposed service used the same start and arrival constraints, making adjustments to in-vehicle travel time if the path taken on the bus had changed².

Trip examples are provided on page 51 to page 59.

¹ In one case (Monterey to East Salinas at 4 PM), Google suggested transit directions that appeared less efficient than what the authors of this report could read from the MST schedules for Lines 20 and 21. In that specific case, the trip example was modified from the original Google directions.

² For both existing and future trips, the examples assume that (a) a passenger would want to reach their initial bus stop at least five minutes before the bus is scheduled to arrive and (b) a passenger would plan to arrive at their final destination at least five minutes early, to avoid being late if their bus were running late.

Origin-Destination Matrix

It would be impossible to plot out every possible trip that someone does or could make on transit in Monterey County.

To provide a broader perspective on the degree to which trips get longer or shorter, **page 50 shows a comparison of average travel times in existing service vs. in the Medium Scenario of this plan for 15 prominent locations** throughout MST's service area.

Important: Waiting time counts!

Few people have the liberty of arriving when they please for all their trips, or to control their appointments or social activities so they end exactly at the right time to catch the bus home. Riding transit means waiting somewhere. The more frequent the service, the shorter the wait.

Both the origin-destination matrix and the trip examples include the impacts of waiting on total travel time.

Calculating Travel Times

Every transit trip is made up of walking, waiting, and riding.

Often when people think of riding somewhere by transit they only consider the time spent on the bus or train. It is important to remember that every transit trip is made up of time spent walking (or rolling) and time spent waiting.



Walking to and from a stop

Most transit trips begin and end with walking (or rolling) to and from your destinations. The amount of walking depends on the location of the nearest relevant bus stop for that trip.



Waiting for the next bus or train

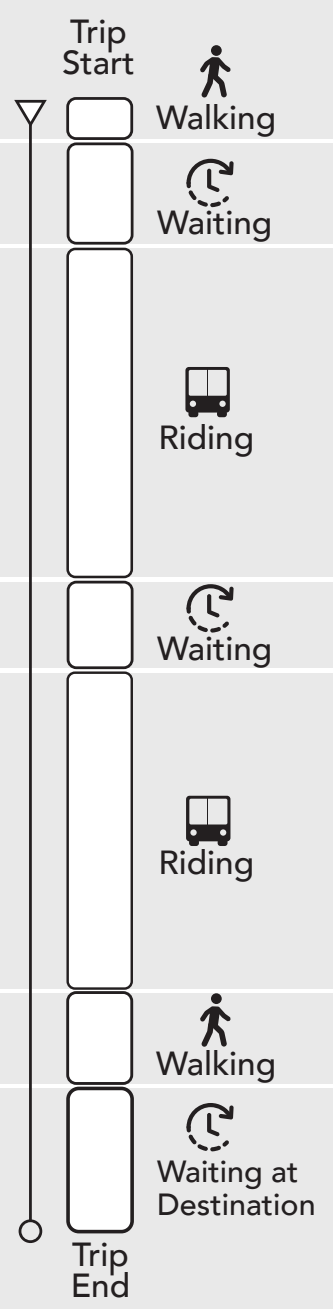
Waiting doesn't just happen at the start of your ride, it also happens at the end. You may not need to leave the house long before your departure, but if your bus is infrequent, you have to choose between being very early or too late.

For these trip examples, we assume you arrive at the first stop five minutes early to make sure you don't miss the bus. We also count the difference between your intended and scheduled arrival time as waiting time.



Riding to your destination

Time spent riding will mostly remain similar between the Existing Network and the Draft Network Plan scenarios, since buses won't suddenly run faster on the same roads. However, there will be some time savings in places where bus lines would be straighter and more direct.



Change in Average Travel Times Between 15 Key Locations

Existing Service vs. Medium Scenario

The chart in Figure 33 shows the average change in travel time by transit:

- When comparing existing service to the service proposed in the Medium Scenario of this plan;
- To travel between any two of 15 selected locations throughout MST’s service area.

The calculated differences in travel time reflect changes to:

- **Frequency.** On average, a passenger will wait half the time between two buses for the next bus. If a bus comes every 60 minutes, that means a 30 minute wait on average. If that same bus would come every 30 minutes in future, the average wait would only be 15 minutes. The matrix shows this kind of change as a 15 minute time savings.
- **Timed Transfers.** The existing MST network has very few timed transfers. A passenger connecting from one line that runs every 30 minutes to another line that runs every 30 minutes would need to wait an average of 15 minutes for their second bus. This plan includes timed transfers for all lines that run every 30 and every 60 minutes, so in most cases that wait would be reduced to 5 minutes. The matrix shows this kind of change as a 10 minute savings.
- **Routing.** In some cases, the lines proposed in this plan take different routes than existing lines. The resulting differences in travel time on the bus (and walking to and from bus stops) are also taken into account in the matrix.

Many transit trips would be 30 or more minutes shorter than they are today if this plan were implemented. Few would be longer.

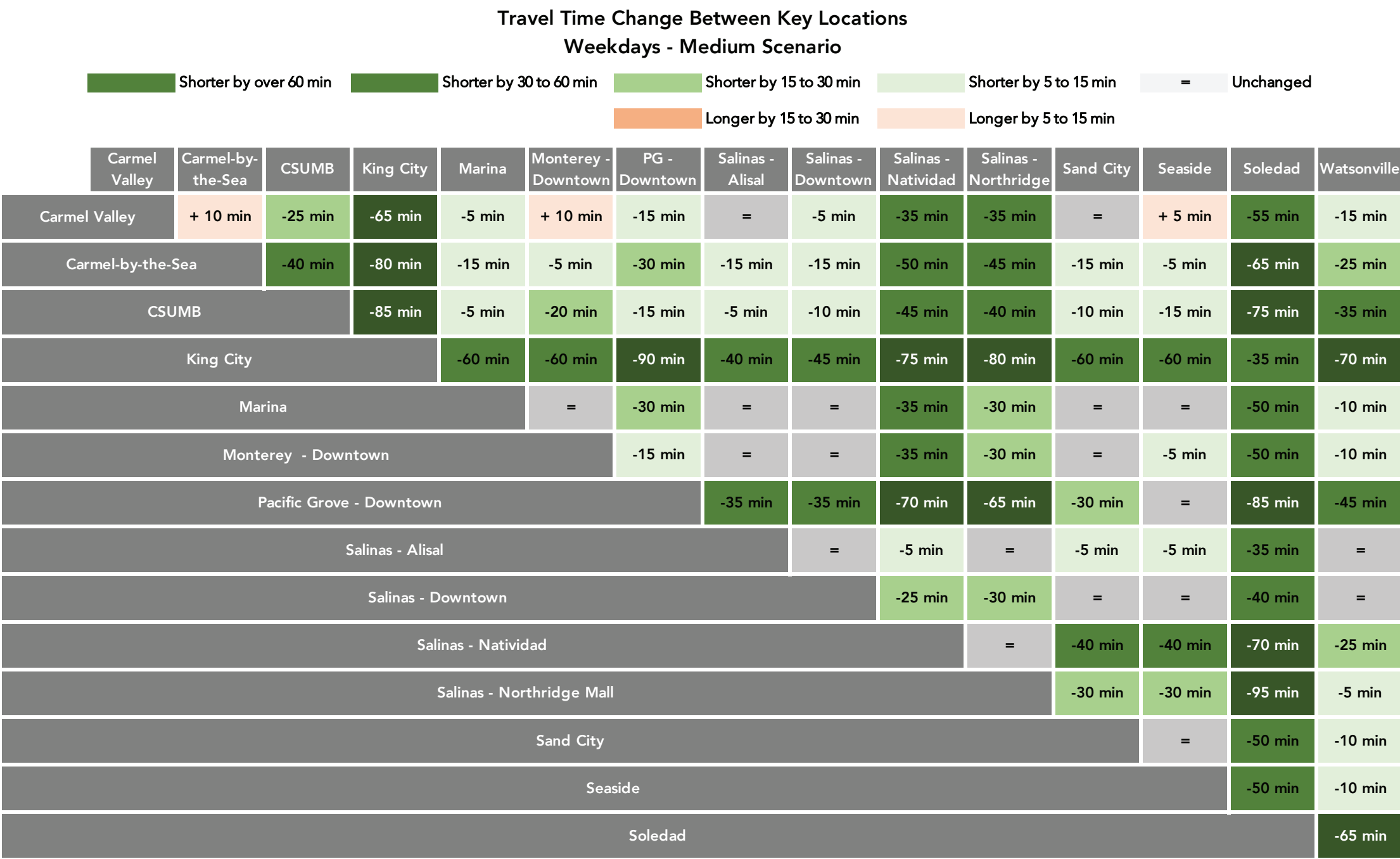


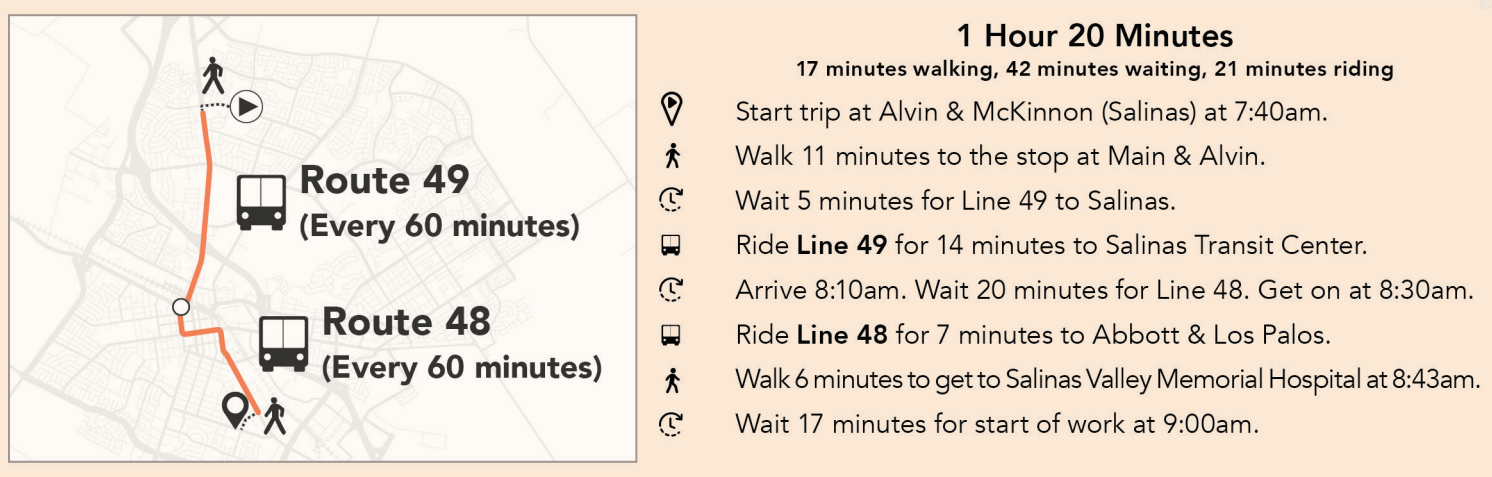
Figure 33: Chart showing the average travel time change between the existing service and the Medium Scenario, if a person were using transit to travel between any two of 15 prominent locations in MST’s service area.

6 HOW WOULD THIS PLAN MAKE TRANSIT MORE USEFUL?

Trip Examples - Salinas and Boronda

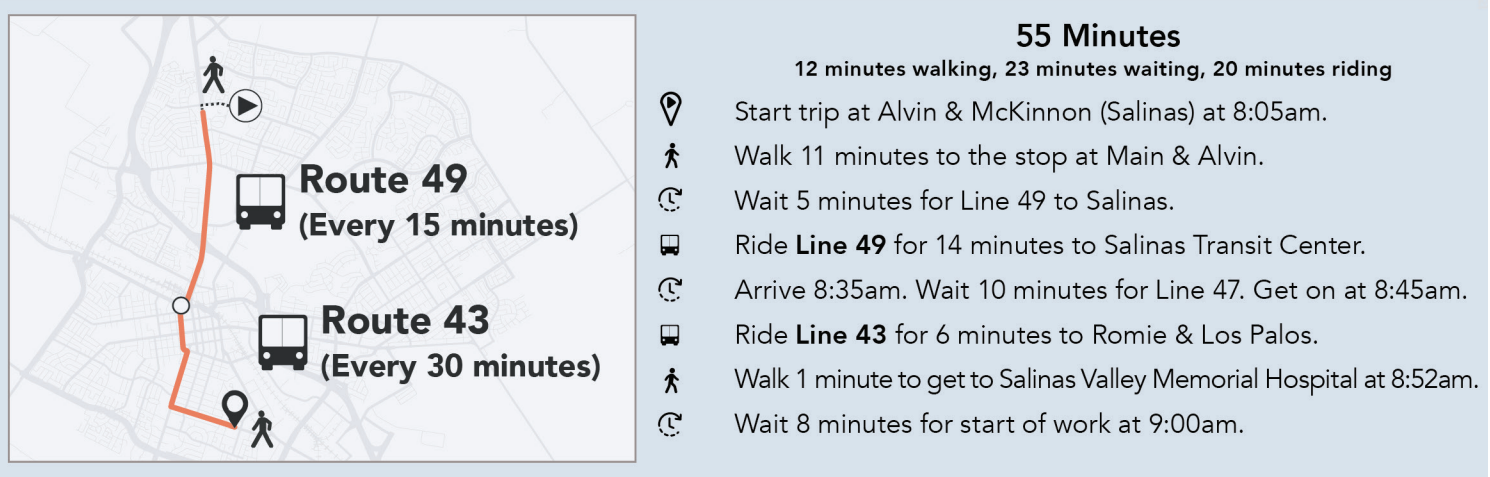
Example no. 1: North Salinas to South Salinas

Imagine you are a hospital worker living near North Salinas High School. You need to reach your job at Salinas Valley Memorial Hospital (4.5 miles away) and your shift starts at 9:00 AM. Here's what you would need to do in **Existing Service**:



Notice this trip only includes 21 minutes riding the bus, and that *you would spend more time waiting at Salinas Transit Center than on either bus*. You might even be able to walk from Salinas Transit Center starting at 8:10 AM and arrive at the hospital and arrive at the same time.

Here's what the same trip would look like if the **Medium Scenario** of this plan were implemented:

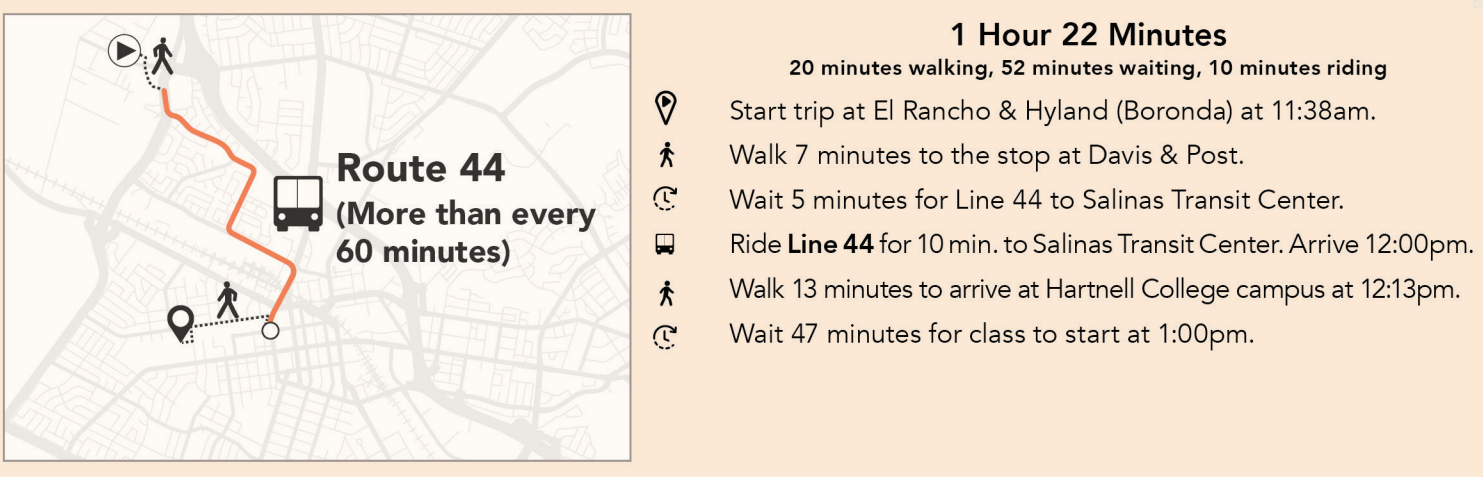


This trip would get 25 minutes shorter; you would be able to leave your house 25 minutes later, mostly due to less waiting. This is due to the higher frequency on both routes, and an important scheduling detail: many destinations are within a 10 minute bus ride or a 20 minute walk of Salinas Transit Center. By scheduling buses to come into Salinas TC between 8:35 AM and 8:40 AM, and leave again at 8:45 AM, you can reach most of the jobs in South Salinas on time for a 9:00 AM shift start.

6 HOW WOULD THIS PLAN MAKE TRANSIT MORE USEFUL?

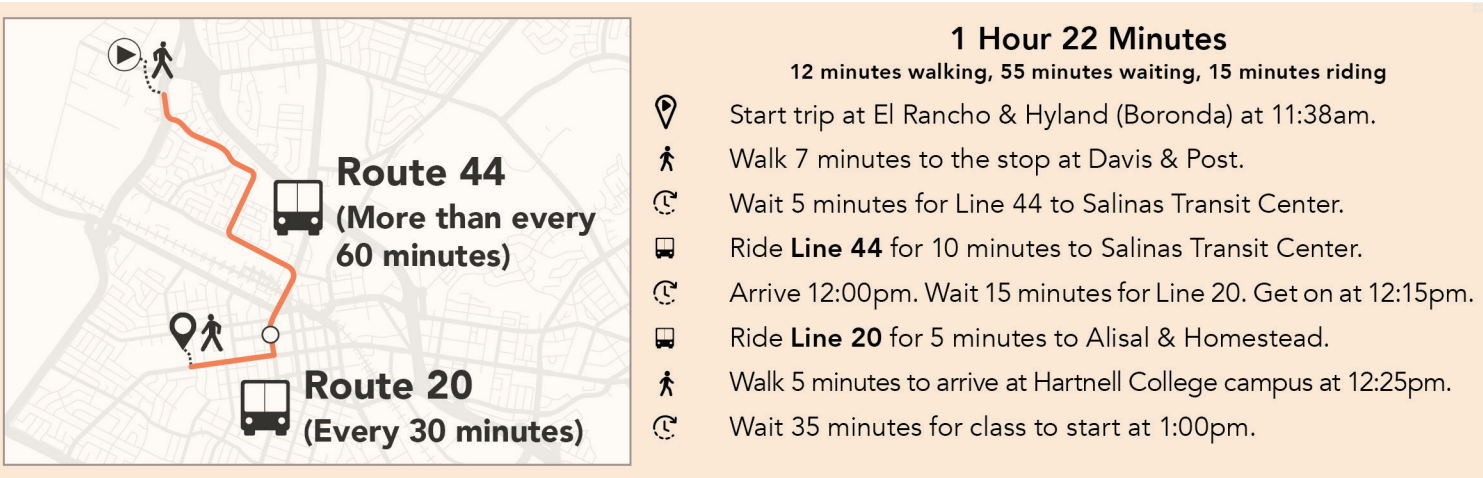
Example no. 2: Boronda to Hartnell College

Imagine you live in Boronda and take classes at Hartnell College, 2.5 miles away. The class you need to attend starts at 1:00 PM¹. Here's what you would need to do in **Existing Service**:



Notice that you would spend more time at Hartnell waiting for class to start than you would spend actually getting to campus.

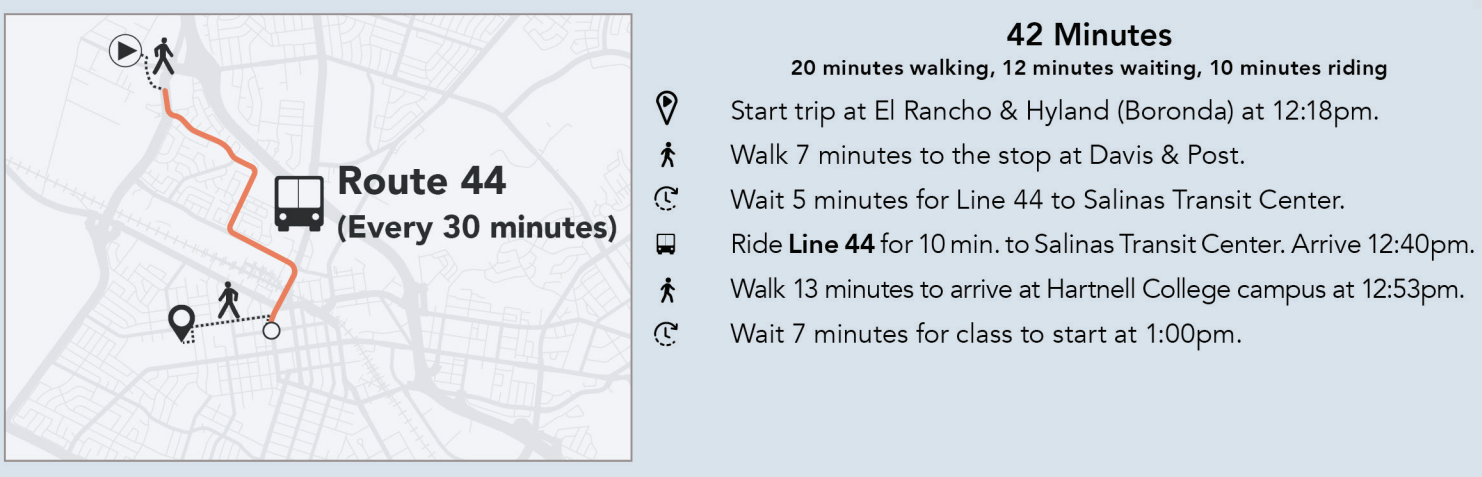
If you decided to transfer to Route 20 instead of walking, this would only change where you wait. You would spend 15 minutes more waiting for your next bus at Salinas Transit Center, and 12 minutes less waiting on campus for class to start.



Given how long this trip by transit is for a short distance, you might even consider walking the whole distance, which an able-bodied person would be able to do in about an hour.

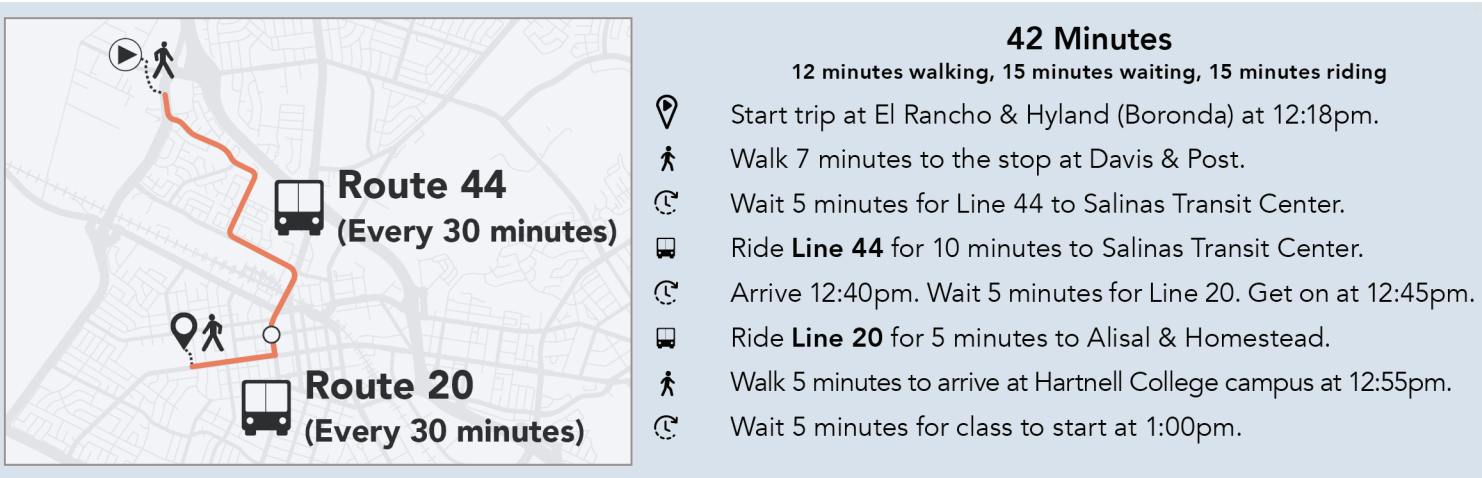
¹ Many in-person classes at Hartnell College in Fall 2021 are scheduled to start around 9:40 AM, 1:00 PM and 6:00 PM.

Here's what the same trip would look like if the **Medium Scenario** of this plan were implemented:



This trip would get 30 minutes shorter; you would be able to leave your house 30 minutes later, mostly due to less waiting.

You would experience the time savings if you preferred to transfer to Route 20 instead of walking. In either case, you would now arrive just in time for class, after traveling less than 45 minutes.



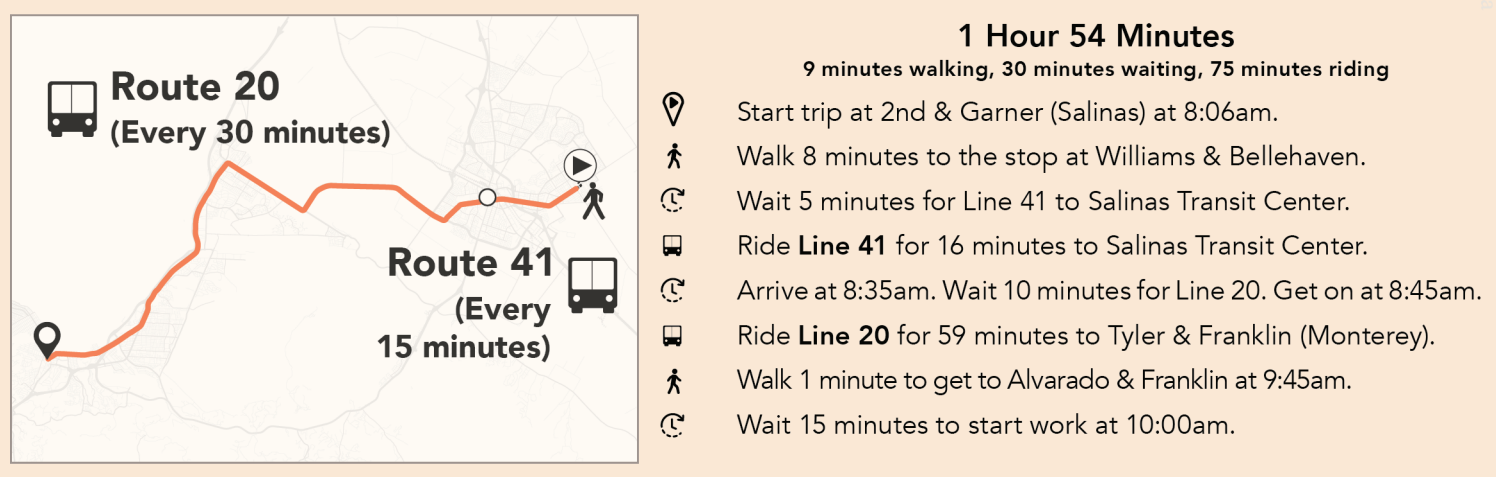
As in the prior example, the **time savings are due to a combination of higher frequency** (in this case, service every 30 minutes instead of every 75 minutes on Route 44) **and the timing of arrivals and departures at Salinas Transit Center.**

The combined time savings would make transit a much more viable option for this trip. It's still longer than driving (15-20 minutes including time to park and walk to class), but it's faster than walking and might be easier than asking a family member for a ride.

Trip Examples - Salinas to Monterey

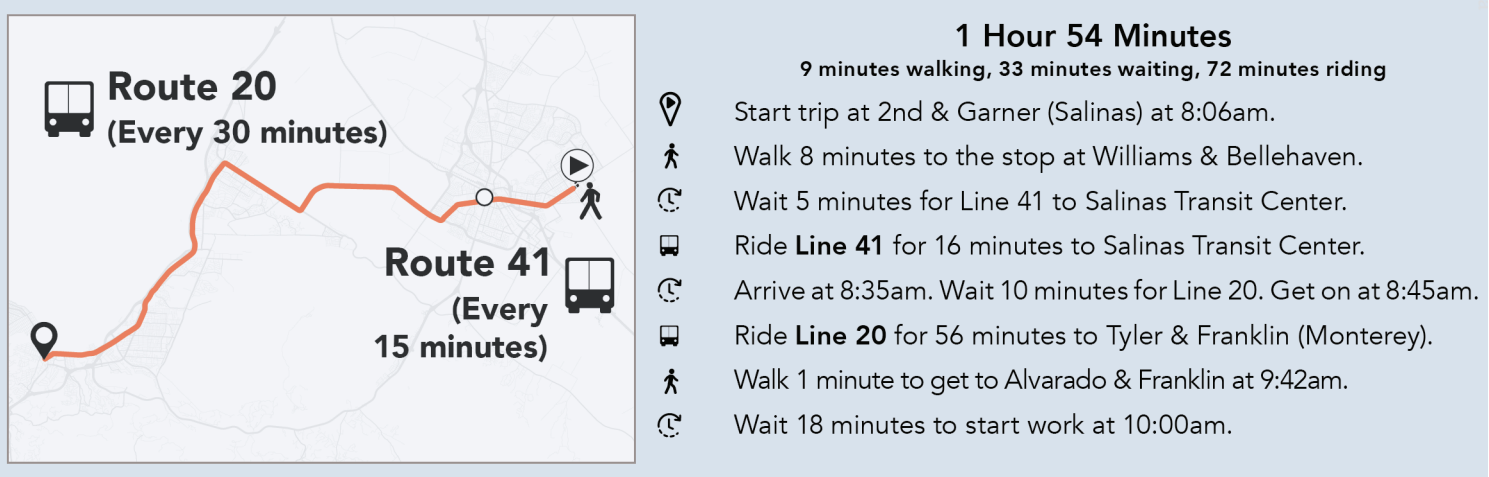
Example no. 3: East Salinas to Downtown Monterey

Imagine you are a restaurant worker living in East Salinas. You need to reach your job in Downtown Monterey for the start of your lunch shift at 10:00 AM. Here’s what you would need to do in **Existing Service**:



This trip uses two of MST’s most frequent routes, so although it does involve some waiting along the way, this is about as fast as transit can connect two places this far apart while also serving a lot of other major destinations on the way.

Here’s what the same trip would look like if the **Medium Scenario** of this plan were implemented:



This trip wouldn’t change much. That is because MST has already organized a nearly-timed connection between Line 41 and Line 20 at Salinas Transit Center, and that connection probably wouldn’t shift by more than 5 minutes.

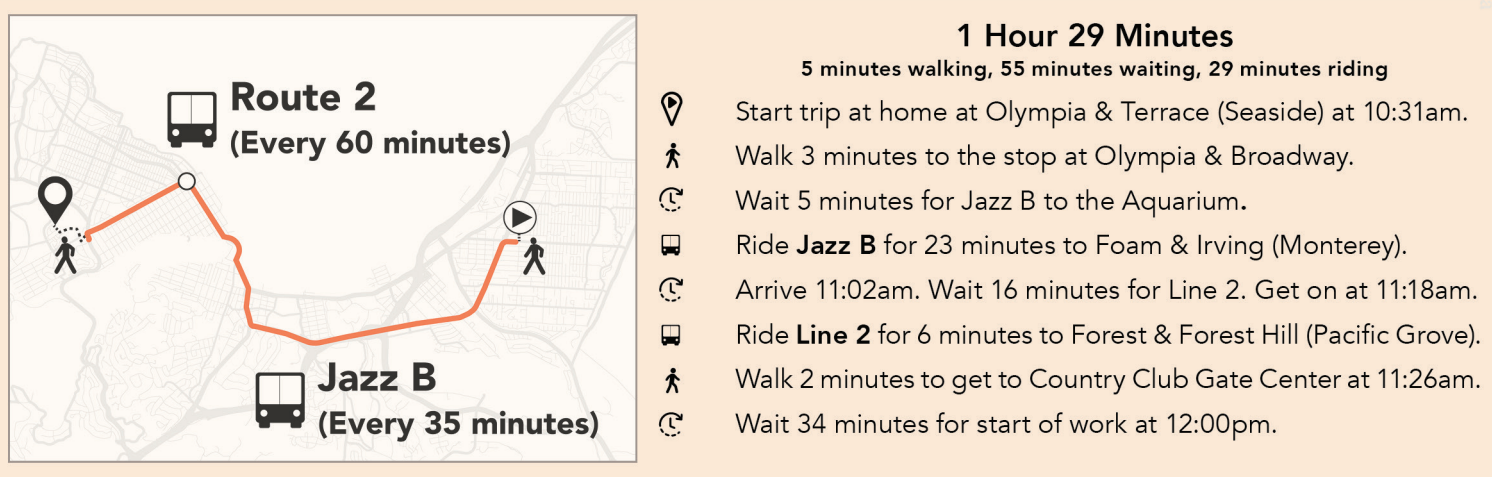
In either case, this kind of service makes it possible to travel regionally from East Salinas, even if you don’t have a car to get around or a carpool of colleagues you can count on. It would, however, still take a long time.

6 HOW WOULD THIS PLAN MAKE TRANSIT MORE USEFUL?

Trip Examples - Monterey Bay & Peninsula

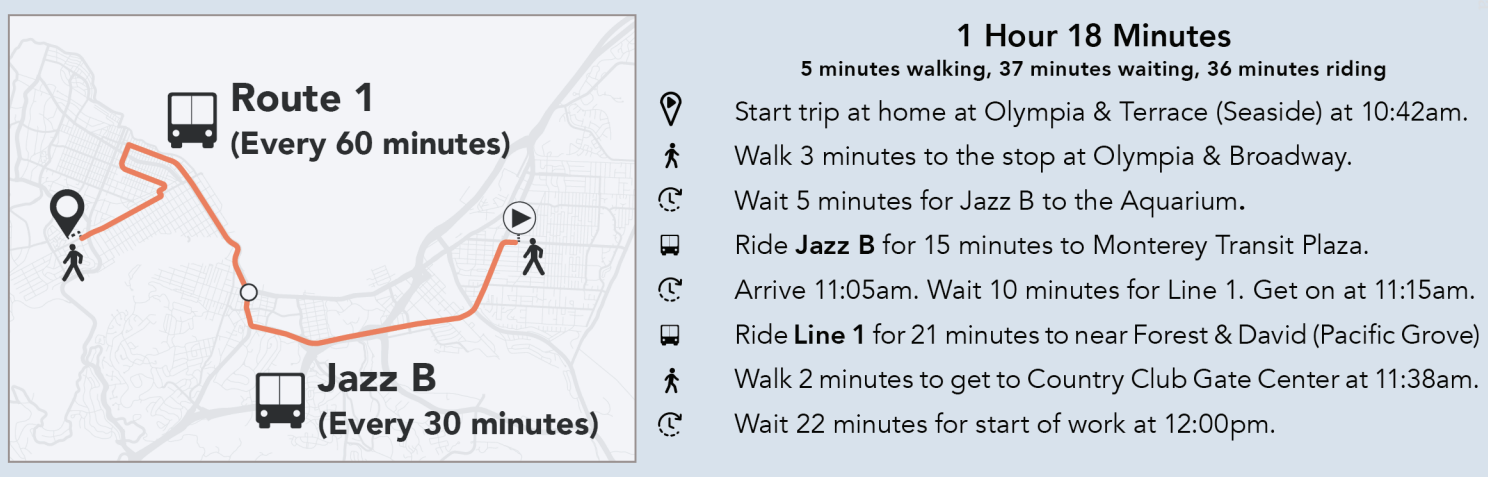
Example no. 4: Seaside to Pacific Grove

Let’s imagine you are a retail worker living in the center of Seaside, and you need to reach your job at Country Club Gate Center in Pacific Grove (6 miles away) and your shift starts at noon. Here’s what you would need to do in **Existing Service**:



Notice that this trip includes a total of only 29 minutes actually riding the bus, and that you would spend more time waiting at your destination than you would getting there.

Here’s what the same trip would look like if the **Medium Scenario** of this plan were implemented:



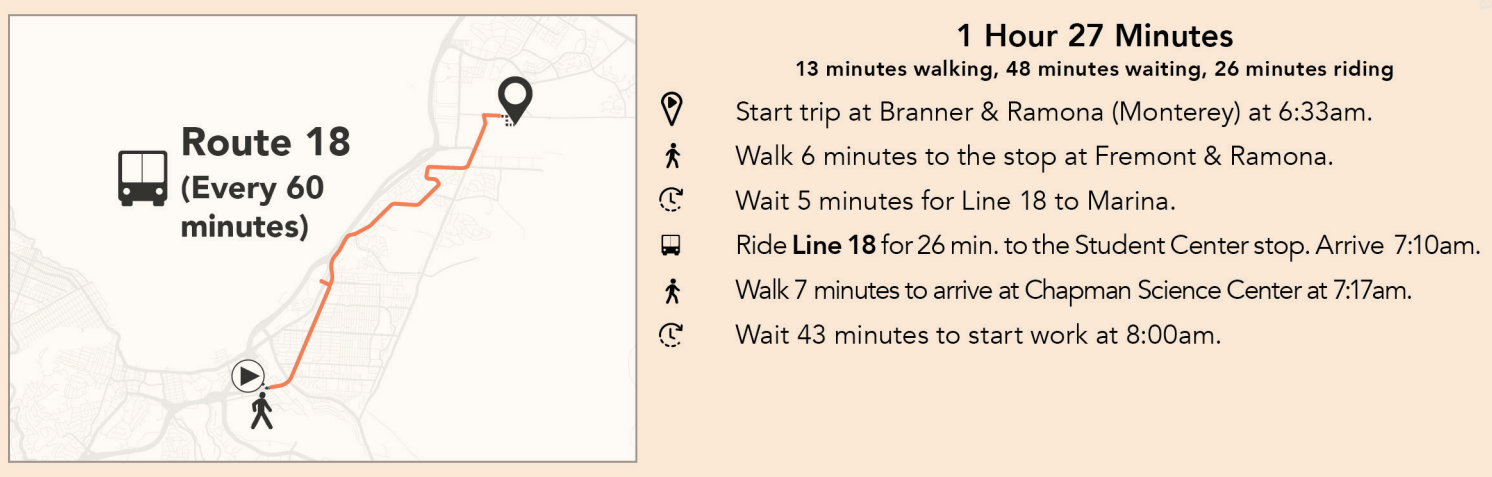
This trip would get 9 minutes shorter; you would be able to leave your house a few minutes later, mostly due to the scheduling of connections at Monterey Transit Plaza. Because most buses are scheduled to arrive at Monterey Transit Plaza between 11:05 AM and 11:10 AM, and leave again at 11:15 AM, it would be possible to arrive near your destination a little less early.

This example and the next one are in some ways typical of many trips in the greater Seaside-Monterey urban area. Timed transfers and small frequency improvements would allow for marginal improvements on many local trips, but those improvements wouldn’t be as significant as the combination of timed transfers and large frequency improvements in Salinas. This is a function of the policy direction of the plan, which would focus more service in Salinas, and slightly reduce service hours overall on the Peninsula.

6 HOW WOULD THIS PLAN MAKE TRANSIT MORE USEFUL?

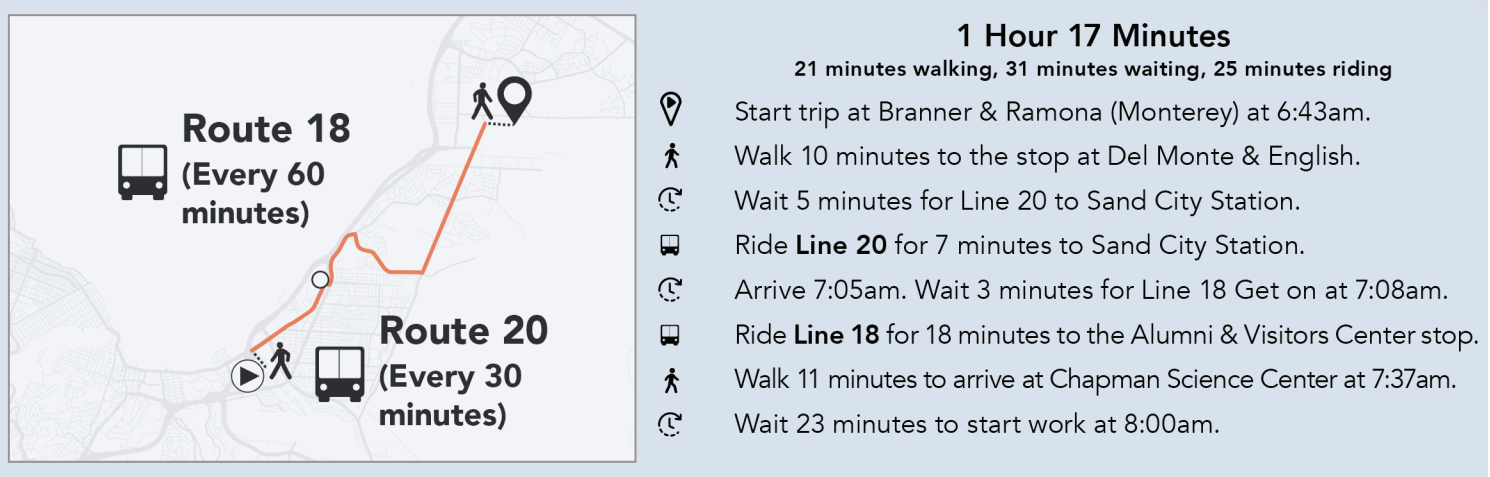
Example no. 5: Monterey/Seaside to CSUMB

Let’s imagine you work in an administrative position at California State University - Monterey Bay (CSUMB). You live 6.5 miles away in the Laguna Grande area near the Monterey/Seaside city limits, and your job on campus starts at 8:00 AM. Here’s what you would need to do in **Existing Service**:



Existing Route 18 is very direct, but only runs every 60 minutes. So getting to campus would take just a few minutes more than driving, but you’d get to work 43 minutes before you were expected to start. Your only alternative using transit would result in arriving 17 minutes late.

Here’s what the same trip would look like if the **Medium Scenario** of this plan were implemented:



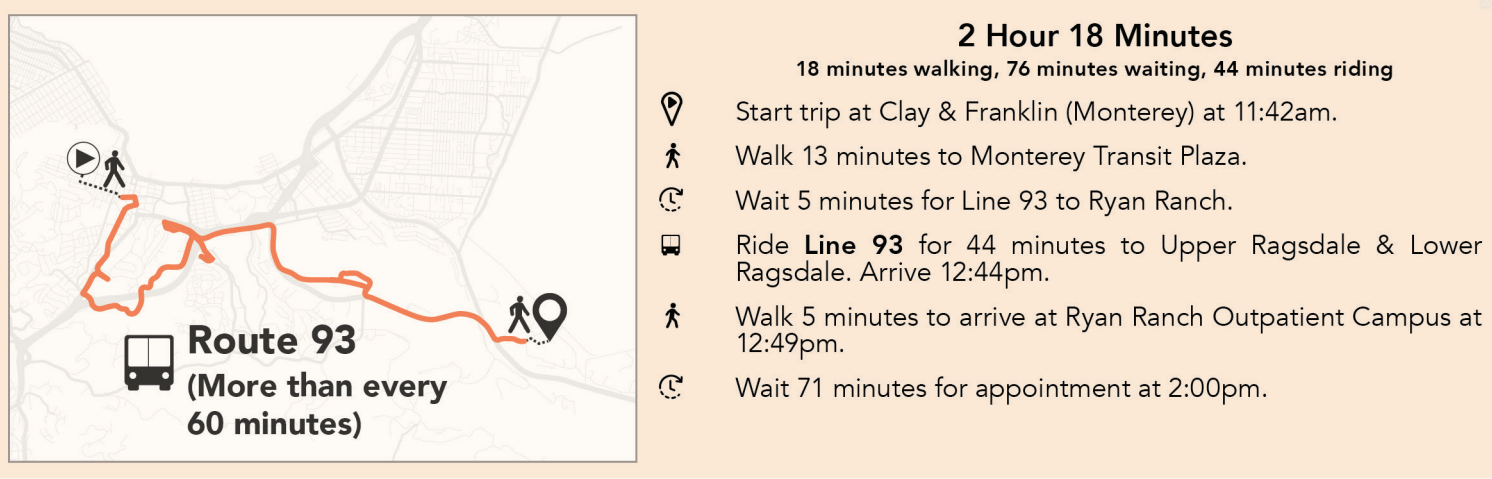
This trip would get 10 minutes shorter. This is because **even though you would need to take two buses, the first one would come every 30 minutes, and you would have a timed connection to the second bus, reducing your overall waiting time and allowing you to leave home 10 minutes later.**

However, you would still get to work a little earlier than would be ideal, and this would still remain a much longer trip than driving (15-25 minutes door to door, depending on traffic and parking). Because you are depending on service every 30 minutes instead of every 60 minutes, You would now be faced with the slightly less dire choice of getting to work either 23 minutes early, or 7 minutes late.

6 HOW WOULD THIS PLAN MAKE TRANSIT MORE USEFUL?

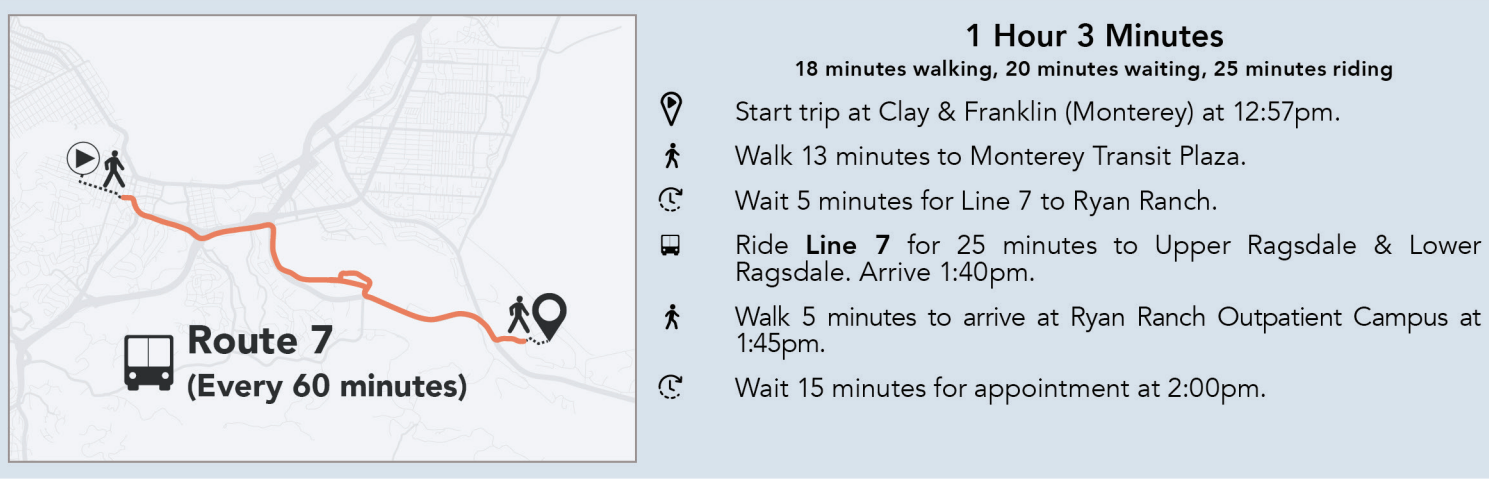
Example no. 6: Monterey to Ryan Ranch

Let’s imagine you live in the Old Town area in Monterey, and you are a senior citizen with regular medical appointments at the CHOMP Outpatient Center in the Ryan Ranch area. Your next appointment is at 2:00 PM. Here’s what you would need to do in **Existing Service**:



If you are not eligible for paratransit, the only way to get to Ryan Ranch on transit is with Line 93, a special-purpose line funded by Measure Q specifically to connect seniors to services and facilities like the medical offices at Ryan Ranch. But **Line 93 only runs six times a day, and takes a very long route to Ryan Ranch, so you would spend over an hour and 15 minutes waiting and nearly 45 minutes on the bus for a 6 mile trip.**

Here’s what the same trip would look like if the **Medium Scenario** of this plan were implemented:



This trip would become over an hour shorter. This is because the proposed Line 7 would run every 60 minutes and take a much more direct path from Monterey Transit Plaza to Ryan Ranch.

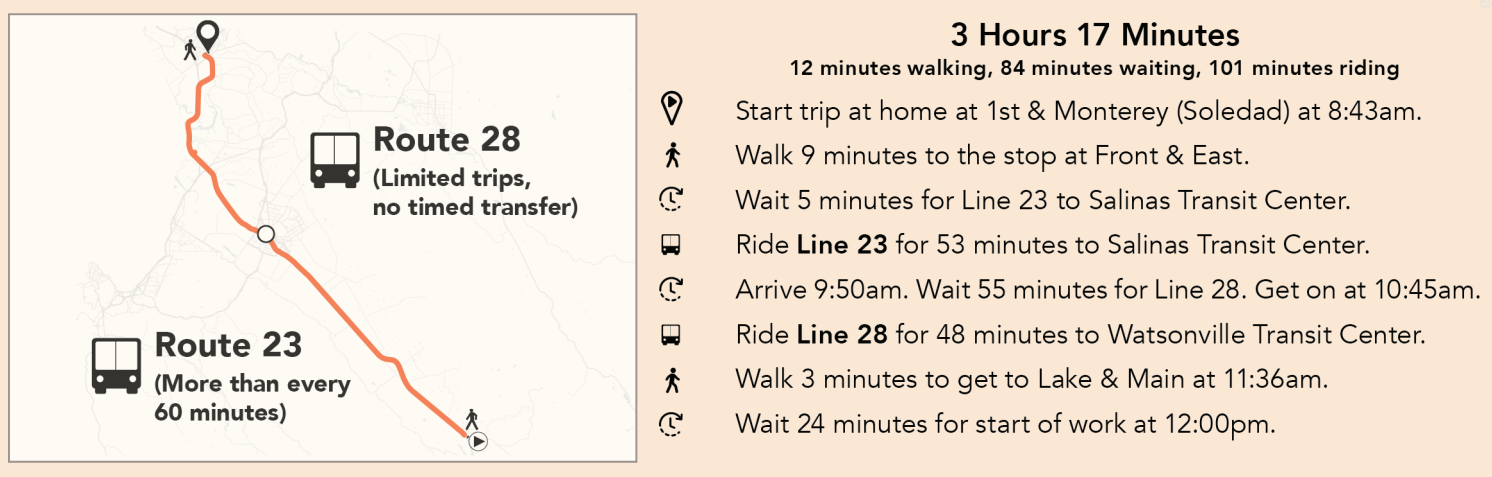
This would still take about twice as long as driving from home. However, there’s no safe way to walk or bike to Ryan Ranch, so transit is the only reasonable alternative. If you live somewhere near a route that would connect to Monterey Transit Plaza, and you couldn’t afford a car or didn’t otherwise need one to go about your daily life, the proposed changes to the network might make using transit a viable option for your medical appointments.

6 HOW WOULD THIS PLAN MAKE TRANSIT MORE USEFUL?

Trip Examples - Regional

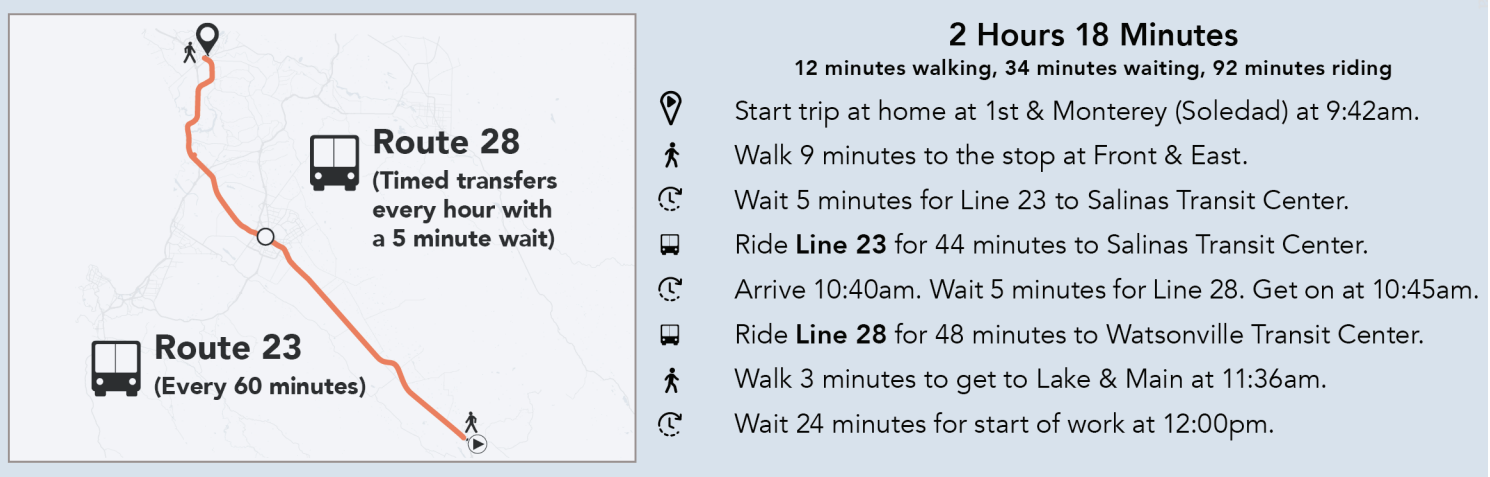
Example no. 7: Soledad to Watsonville

Let’s imagine you live in Soledad, and you need to go to Watsonville (47 miles away) for an appointment at noon. Here’s what you would need to do in **Existing Service**:



Because Line 23 doesn’t connect well with either Line 28 or Line 29 to Watsonville, you would end up waiting almost an hour at Salinas Transit Center to get to your destination. As a result, you would have to leave home before 9:00 AM.

Here’s what the same trip would look like if the **Medium Scenario** of this plan were implemented:



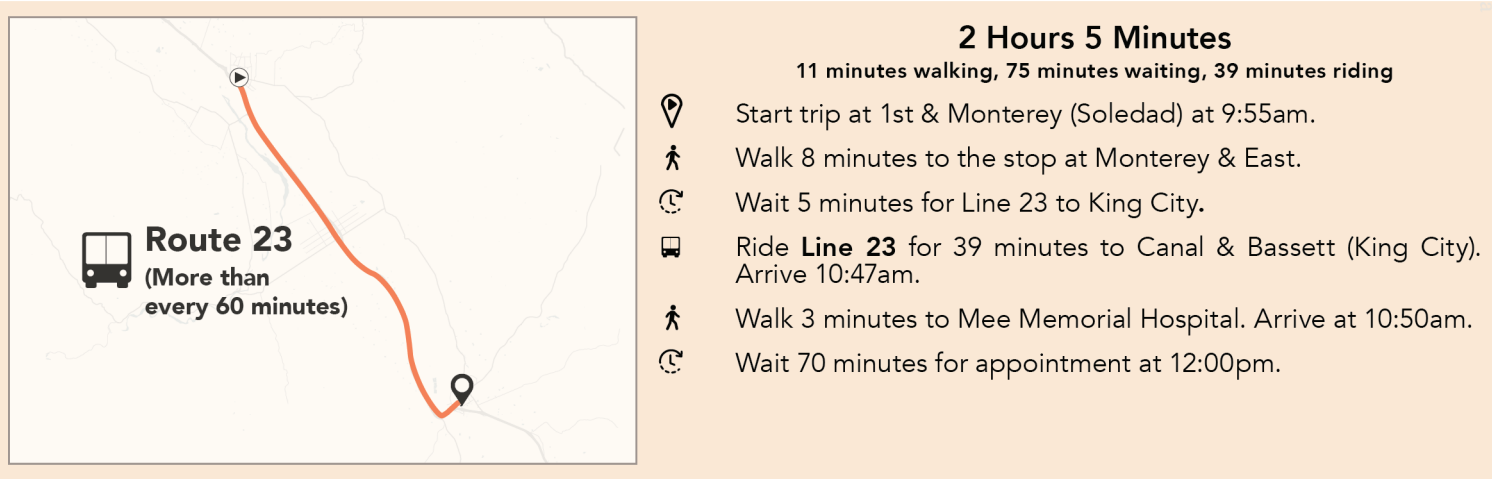
This trip would get over an hour shorter. This is because Line 23 would take a faster, more direct path between Soledad and Salinas, allowing it to arrive on time to make a timed connection with Line 28. You would only wait 5 minutes at Salinas Transit Center.

This would still take about twice as long as driving. But this kind of trip is so long that it would be relatively difficult to convince a friend or family member to take you to Watsonville and back in a single day, let alone regularly. By making this trip an hour shorter, this plan would reduce the hassle associated with transit if you didn’t have a car available, or didn’t have a reliable enough car to take a trip that far from home.

6 HOW WOULD THIS PLAN MAKE TRANSIT MORE USEFUL?

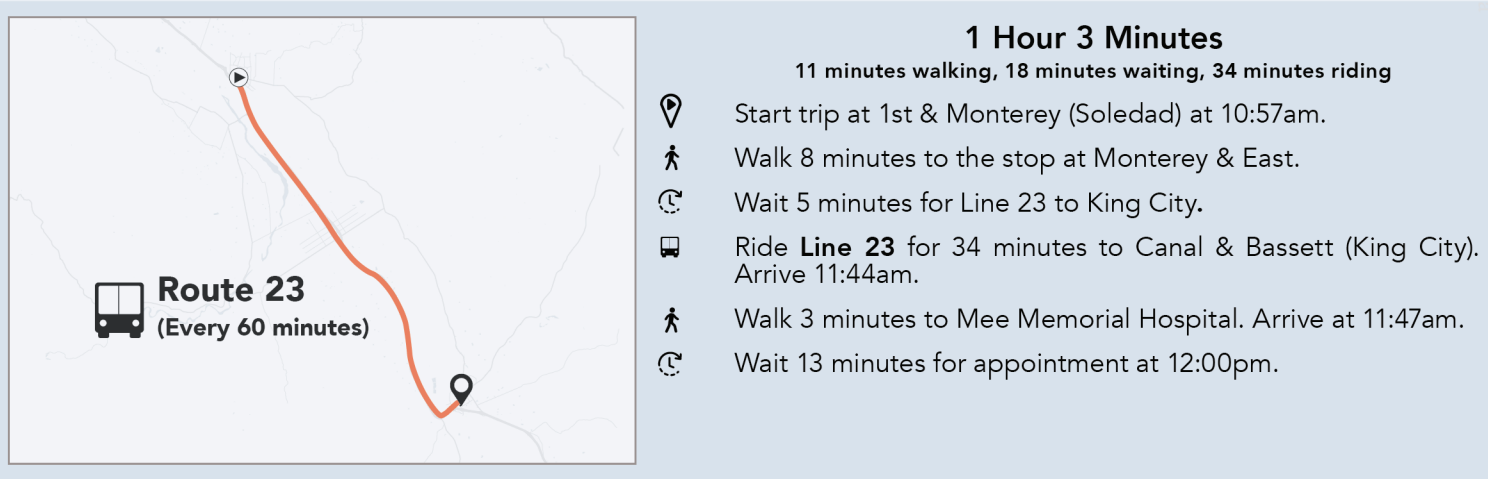
Example no. 8: Soledad to King City

Let’s imagine you still live in Soledad, but this time you need to go visit a family member at Mee Memorial Hospital in King City, and visiting hours start at noon. Here’s what you would need to do in **Existing Service**:



Because Line 23 only runs every two hours in the middle of the day, your last opportunity to get there by noon on the bus requires leaving home before 10:00 AM and waiting over an hour in King City.

Here’s what the same trip would look like if the **Medium Scenario** of this plan were implemented:



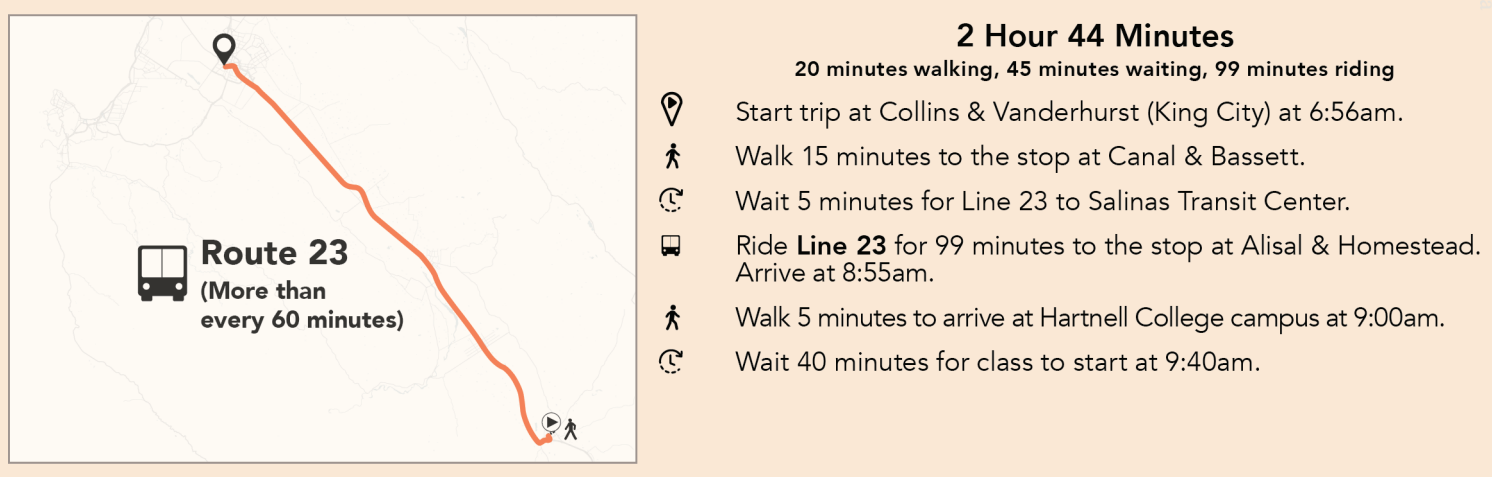
This trip would become over an hour shorter; you could leave home closer to 11:00 AM. This is mostly because Line 23 would run every 60 minutes instead of once every two hours in the middle of the day.

6 HOW WOULD THIS PLAN MAKE TRANSIT MORE USEFUL?

Example no. 9: King City to Hartnell College in Salinas

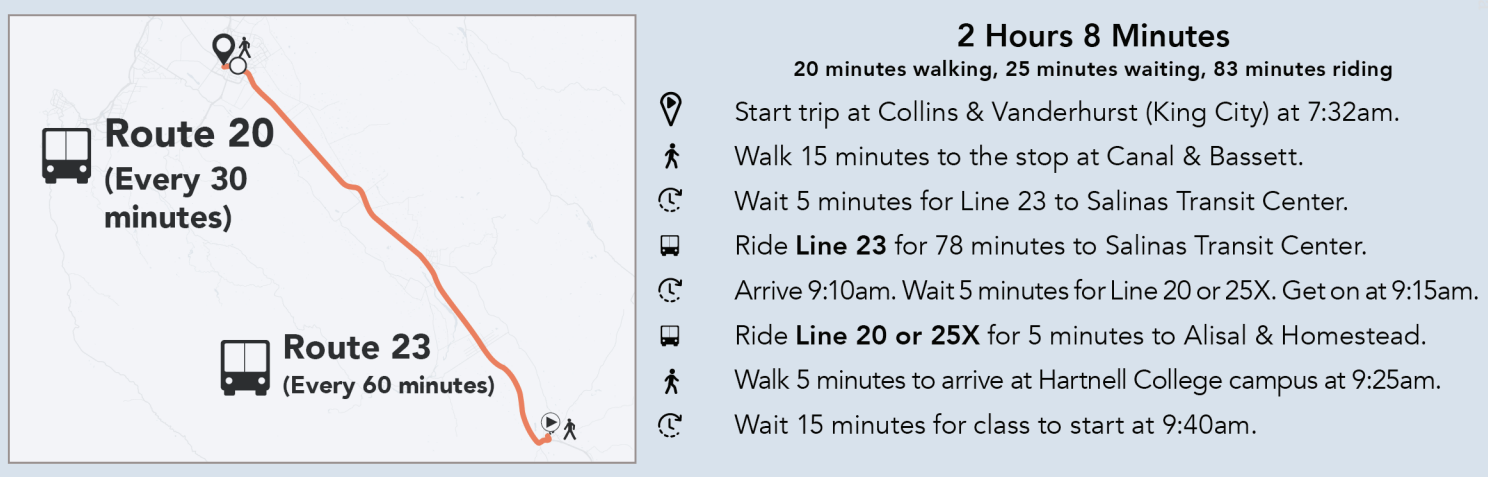
Imagine you live in King City and take classes at Hartnell College main campus in Salinas, almost 50 miles away. The class you need to attend starts at 9:40 AM¹. Here's what you would need to do in

Existing Service:

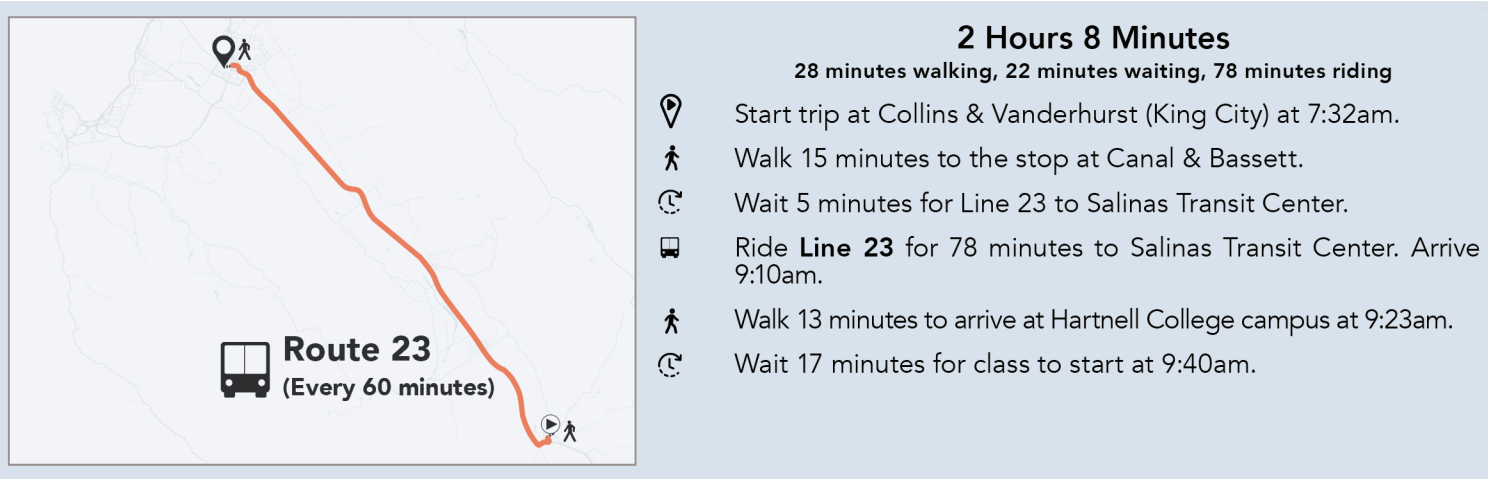


Line 23 would provide a service all the way to Hartnell, but you would arrive 45 minutes before your class starts and have a long wait on campus.

Here's what the same trip would look like if the **Medium Scenario** of this plan were implemented:



Line 23 would terminate at Salinas Transit Center. This would give you the choice to either transfer to Line 20 (with a timed connection and a 5 minute wait, as above) or to walk 12 to 15 minutes from Salinas Transit Center to campus (as shown below). **Either way, your trip would become over 30 minutes shorter.**



The time savings would come from two sources.

- Faster, more direct path on Line 23.** The time riding the bus from King City to Salinas would be reduced by over 20 minutes, because the bus would spend more time on Highway 101 and less time traveling within each city along the way.
- Timed connections in Salinas** (specifically, scheduling for most bus lines to arrive at Salinas Transit Center at 9:10 AM and leave at 9:15 AM). This means Line 23 would arrive in Downtown Salinas at 9:10 AM, with time for you to reach Hartnell either on foot or with a transfer to a second bus, but not so much time you would spend most of an hour waiting around on campus.

¹ Many in-person classes at Hartnell College in Fall 2021 are scheduled to start around 9:40 AM, 1:00 PM and 6:00 PM.

7 Next Steps

Plan Adoption and Implementation

The Monterey-Salinas Transit COA is combining technical analysis and broad-based community input to develop a post-pandemic transit network.

So far, this has included the following steps:

- May 2021: Choices Report.** This report (available at <http://mst.org/coa>) provides facts about the existing network, and describes the key choices for future service. It was developed through a combination of technical and broad-based community input.
- June 2021: Committee Direction.** The MST Board of Directors' Operations Performance Committee provided the project team with direction on the key trade-offs, based on input from the public and policymakers.
- June-August 2021: Develop a Draft Network Plan.** The project team developed a draft of the redesigned bus network.
- September-October 2021: Public Review of the Draft Plan.** The Draft Plan was presented to the public, as detailed in Chapter 3 of this report.
- November-December 2021: Final Plan.** The project team made changes to the Draft Plan taking into account public input and discussions with the Operations Performance Committee. This report presents the Final Plan.

The next steps in the process will be:

- MST's Board of Directors must decide whether or not to adopt this plan in February 2022.
- MST is targeting **implementation of the revised network in late 2022.**

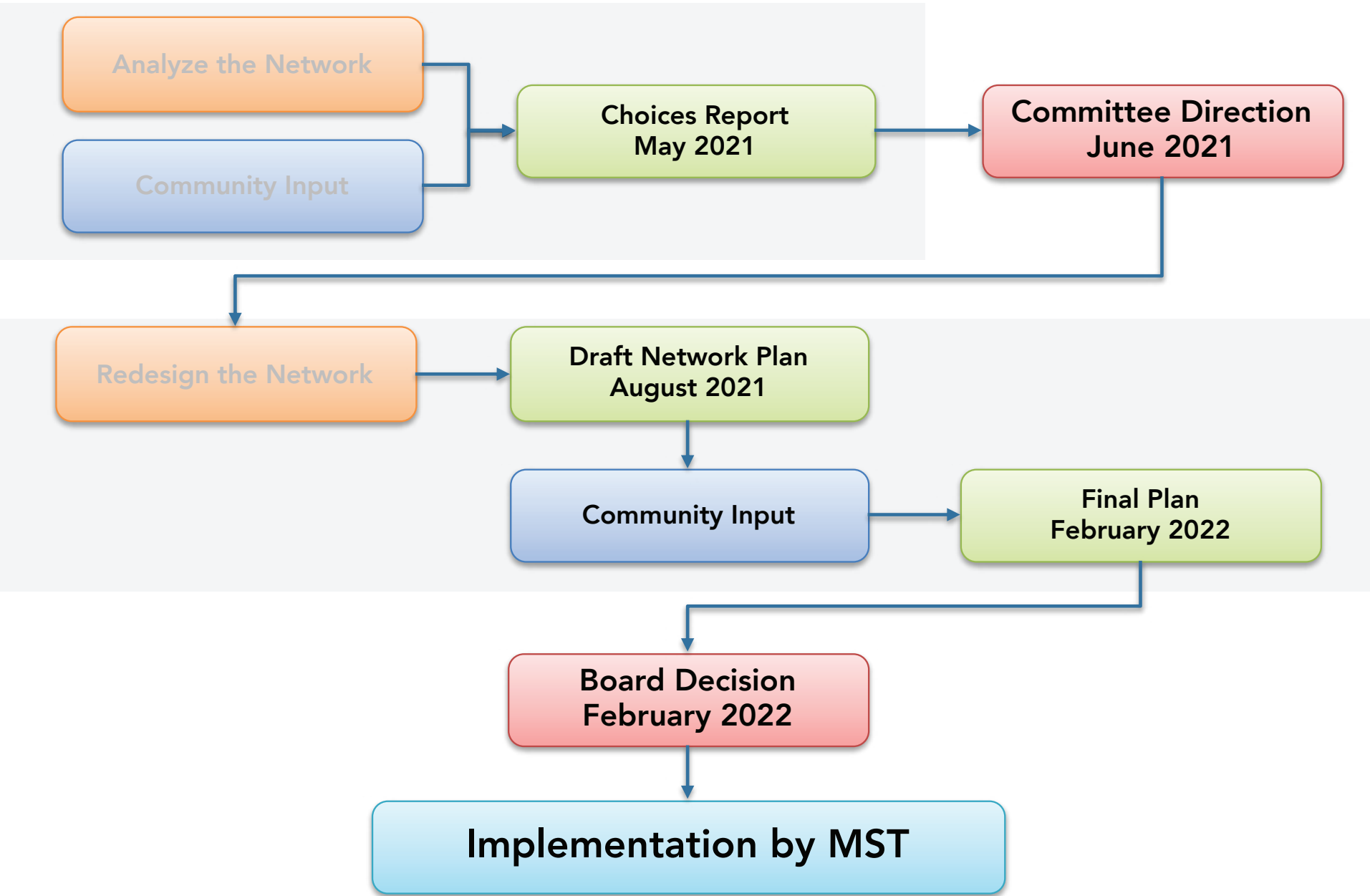


Figure 34: Project timeline. This report presents the Final Plan. The next step will be a decision by MST's Board of Directors to adopt the plan. If the Board makes this decision, MST staff will then be responsible for implementation over the course of 2022.

Key Considerations in Network Implementation

If this plan is adopted, MST will need to take a variety of operational and policy steps over the course of 2022 before it can be implemented.

The most critical steps are described on this page and the next one. This is not intended to be a complete list or set of recommendations, but a high-level overview of the main issues to be addressed.

Operator Recruitment

The most immediate barrier to implementation of any new service at MST is the ongoing shortage of bus drivers. This shortage follows an unusually high number of resignations and retirements since the beginning of the COVID-19 pandemic, combined with a pause on new driver recruitment and training from early 2020 to mid-2021.

To maintain service reliability in the context of an operator shortage, MST reduced service in both September and December 2021. Certain lines listed as “existing” in this report are not currently operating, and many have fewer runs per day than in early 2021.

MST has already begun addressing this challenge, recruiting a new class of drivers in the fall of 2021. But MST still does not have enough staff to operate all the service that it can fund.

To restore the reliability of existing service and ensure that the Medium Scenario can be implemented as planned, MST must hire more operators throughout 2022.

Fare Policy Changes

Since 2011, MST has set fares by route type. Current fare policy does not provide free or discounted transfers.

As a result, MST fares bear little relationship to the time or distance travelled by an MST rider. Many short trips can cost \$5 or more simply because the origin and destination are on two different routes.

The network proposed in this plan allows MST to reach more people and jobs with more frequent service. This is made possible by relying on transfers, so riders can move seamlessly across the region.

To allow riders to take advantage of the new timed transfer system, MST should change its fare policy as soon as practical. The simplest alternative to the existing system is likely to involve:

- **Fewer fare types.** Either a single fare systemwide for boarding the first bus, or limiting to just local vs. regional routes¹.
- **Free transfers within a set amount of time.** Many agencies allow riders to board a second bus for free by showing the ticket they received upon paying their first fare². Typically the transfer is valid if the ticket was issued in the last 2 hours, otherwise a new fare is required.

Free transfers are easiest to implement when all routes charge the same fare. But if MST

needs to continue charging a higher fare for regional service, transfers from local to regional routes may require a discounted fare. For example, if a local fare were \$2.50 and a regional fare were \$3.50, then a passenger might be asked to pay \$1.00 upon boarding a regional bus after taking a local bus.

How would free transfers impact revenue?

Any change in fare policy comes with financial risks. It is reasonable to think that if MST collected less fare revenue, this might require MST to operate less service. Ensuring this does not happen will require careful consideration of fare levels and transfer discounts before any changes are made.

Nevertheless, an initial review shows that MST’s fare collections are a small percentage of the agency’s revenues. With current policies, MST expects to collect about \$2.7 million in direct fare revenue in Fiscal Year 2023, compared to a total operating budget estimated at over \$55 million³.

Even in a very conservative scenario, this suggests switching to free transfers would cost MST about 2 to 3% of annual operating costs⁴. This represents far less than the 8% difference between the Low Scenario and Medium Scenario in this plan, and there are many reasons to think the real impact on revenue would be even smaller.

³ See pp. 27-32 of the *MST FY 2022 & FY 2023 Budget*, adopted on June 14, 2021. As of Jan 14, 2022, this document is available online at: <https://mst.org/wp-content/media/Final-Adopted-FY2022-FY2023-Budgets.pdf>

⁴ In this “very conservative scenario”, we assume that changes to the network attract no new ridership and that 100% of existing trips on MST involve transferring. The latter is obviously not true, but MST does not currently have data on what percentage of its trips involve transfers, so it is useful as a conservative estimate.

New Bus Stops

Most bus lines included in this plan would run on the same streets as existing MST service, and would be expected to use the same bus stops. However, **some lines would operate on streets where MST does not currently operate**, or operates in a different pattern (e.g. one-way vs. two-way). As a result, MST will need to go through a process to:

- **Propose bus stop locations**, in places where the planned service pattern requires new or changed stops.
- **Negotiate with the relevant local governments in charge of streets** to establish the allowable locations of these stops and install any necessary ADA-compliant improvements.

Based on the changes included in the plan, the project team expects that the greatest number of new stops will be needed in:

- Salinas, in areas where MST is proposing entirely new lines and/or restoring service that has not operated in a number of years.
- Seaside and Marina, specifically the north of Seaside and south of Marina where service would reappear on certain streets.
- Pacific Grove, where many areas that currently receive service on one-way loops would in future receive two-way service, in some cases on different streets.

In addition, new bus stops will be required in Gonzales, Greenfield, Soledad and King City along the new path of Line 23 and circulator Lines 31, 32, 33 and 34. However, the planning for these bus stops has already been taking place as a follow-up to the South County Service Plan adopted in early 2021.

Transit Center Operations

The bus network proposed in this plan includes timed transfers at four key locations: Salinas Transit Center, Monterey Transit Plaza, Sand City Station and Carmel Rancho.

Timed transfers can be a great boon for riders, but some operational planning is required to make it possible for multiple buses to arrive at one station and occupy space next to each other at the same time. This will require detailed looks into:

- The arrival and departure path of each route into the timed transfer station.
- The specific gate or stop each route should be assigned to.
- Whether any changes might be required to existing operating practices to allow enough space for all incoming buses.

The challenge may be greatest at Monterey Transit Plaza, where 5 different lines (1, 2, 7, 8 and 20) will be scheduled to arrive at the same time every hour, while MST will also need to ensure enough space for the Jazz A and B and Line 94. Currently Monterey Transit Plaza has only three gates in use, although the physical space exists to allow for more.

Bus Storage and Maintenance

MST has existing bus yards in Monterey and Salinas, and recently opened a brand new facility in King City. This plan envisions a significant increase in service in Salinas, where the existing facility has limited space.

As a result, MST may need to re-think how certain routes are staged. For example, it may be necessary to consider staging all buses for Line 20 in Monterey only and all buses for Line 23 in King City only, rather than splitting vehicles between both ends of those routes.

It may also be preferable to designate a single facility among MST’s bus yard for more heavy-duty maintenance and rebuilding, when buses need multiple days of work before getting back on the road.

Relationship with Intercity Services

This plan focuses MST mostly on local service. But people will still need to travel beyond Monterey County, so it’s important to consider how MST should connect to intercity services.

Both Amtrak and Greyhound service have been reduced in the pandemic⁵, but regional planning suggests intercity services may expand in future, with a potential extension of Caltrain to Salinas and the arrival of new commercial bus companies.

MST expects the main connection point to future intercity services will be the Salinas Intermodal Transit Center. This facility includes the train station and a bus terminal. It is located 1/4-mile north of MST’s Salinas Transit Center, about a 5 minute walk for most adults.

Given this short distance and limited current intercity service, this plan would not send any MST lines into the Intermodal Transit Center. However, MST may do so in the future, when intercity service becomes more regular. Considerations will include:

- **Regional connections.** MST regional lines (such as Line 20 to Monterey and Line 23 to King City) may be a higher priority for intercity connections, because they would connect many communities to the intercity network.
- **Operability in the schedule.** Sending a bus from MST’s Salinas Transit Center to the Intermodal Transit Center and back requires at least 5 minutes. This limits which lines can connect to long-distance buses and trains while maintaining the timed transfer system.

⁵ At time of writing, Greyhound offered 1-2 bus departures per day from Salinas, and Amtrak offered 1 train departure per day. Timelines for restoration to pre-COVID service levels are unclear.



CITY *of* CLOVIS

REPORT TO THE CITY COUNCIL

TO: Mayor and City Council

FROM: General Services

DATE: October 6, 2025

SUBJECT: General Services – Approval - Res. 25-____, Authorize the Federal Funding Under Federal Transit Administration (FTA) Section 5310 (49 U.S.C. Section 5310) with Fresno Council of Governments (FCOG) and the Execution of Certifications and Assurances, Applications, and Documents; and Authorize the Deputy General Services Director to execute all necessary documentation.

ATTACHMENTS: 1. Res. 25-____

RECOMMENDATION

For City Council to approve a resolution authorizing federal funding under the Federal Transit Administration (FTA) Section 5310 (49 U.S.C. Section 5310) with Fresno Council of Governments (FCOG); and Authorize the Deputy General Services Director to execute all necessary documentation.

EXECUTIVE SUMMARY

The Fresno Council of Governments (FCOG) has been designated by the Governor of the State of California to administer the Federal Transit Administration (FTA) Section 5310 grants for transportation projects for seniors and individuals with disabilities. FCOG will have a call for projects in September 2025 and will be accepting competitive project applications. An application requirement is a City Council-approved resolution authorizing the application and execution of project documents, including the grant application, certifications and assurances, and other necessary documentation. The resolution will authorize the Deputy General Services Director to execute all necessary documentation for the FCOG FTA Section 5310 grant.

BACKGROUND

The FTA Section 5310 program provides formula funding to states for the purpose of assisting organizations in meeting the transportation needs of older adults and people with disabilities when transportation services provided are insufficient to meet these needs. Formula funds are apportioned by the state Department of Transportation directly to rural and small urban areas. In large urban areas, the governor designates a recipient. The governor of California has designated the Fresno Council of Governments (FCOG) as the designated recipient in Fresno County of FTA Section 5310 grants for the purpose of administering the funds in accordance with state and federal laws, statutes, and regulations.

The FCOG will conduct a call for projects for FTA Section 5310 funds. The funding available for this call is \$1,741,617. Funding will be split between Traditional Capital (90%) and Other Capital and Operating Projects (10%). Traditional capital projects include vehicles and other related equipment. Total funding available for traditional capital projects is \$1,567,455, with a maximum of \$783,727 per project. Other capital and operating projects include a maximum of \$174,162 for public transportation capital projects planned, designed, and carried out to meet the special needs of seniors and individuals with disabilities, and/or operating projects that improve access to fixed route service and decrease reliance on ADA complementary paratransit, or alternates that assist seniors and individuals with disabilities.

Clovis Transit will be applying for traditional capital funding to purchase vehicles to support the paratransit service. Paratransit services continue to be in high demand for our community's residents. In the last four years, Clovis Transit has had an increase in ridership of more than one hundred sixty-four percent (164%). Clovis Transit continually strives to provide efficient, reliable, and safe service for all passengers. New vehicles support this effort and ensure we can meet our passengers' transportation needs for medical, employment, and educational services.

The grant application will be for approximately \$700,000. This grant requires a local match of 20% for capital projects in FY2026-27. If this grant is awarded, Clovis Transit will provide the local match of approximately \$140,000 with Transportation Development Act (TDA) – State Transit Assistance (STA) funds. The grant application also requires an approved City Council resolution with the designation of a staff member to execute the grant application, certifications and assurances, reporting, and all necessary documentation. The resolution (Attachment 1) will authorize the Deputy General Services Director to execute all required documentation for the FTA Section 5310 grant.

FISCAL IMPACT

If awarded, Clovis Transit will be notified in February 2026, allowing staff time to include this funding in the FY 2026-27 budget.

REASON FOR RECOMMENDATION

The FTA Section 5310 grant opportunity will provide funding to secure additional vehicles, which will enable us to expand our paratransit fleet and better serve our community's needs. The demand for paratransit service in Clovis continues to grow, and vehicles are essential to providing safe and reliable transportation.

ACTIONS FOLLOWING APPROVAL

Following the resolution's approval, staff will complete the Section 5310 grant application and submit it, along with the certifications and assurances and the resolution, to FCOG.

CONFLICT OF INTEREST

None.

Prepared by: Susanna Herrera, Management Analyst

Reviewed by: City Manager *AH*

RESOLUTION 25-__

**RESOLUTION OF THE CITY COUNCIL OF THE CITY OF CLOVIS AUTHORIZING THE
FEDERAL FUNDING UNDER FEDERAL TRANSIT ADMINISTRATION (FTA) SECTION
5310 (49 U.S.C. SECTION 5310) WITH FRESNO COUNCIL OF GOVERNMENTS (FCOG)**

WHEREAS, the U. S. Department of Transportation is authorized to make grants to states through the Federal Transit Administration (FTA) to support capital projects for non-urbanized public transportation systems under Section 5310 of the Federal Transit Act (FTA C 9070.1G); and

WHEREAS, the Fresno Council of Governments (FCOG) has been designated by the Governor of the State of California to administer Section 5310 grants for transportation projects for seniors and individuals with disabilities; and

WHEREAS, the City of Clovis desires to apply for said financial assistance to permit operation of paratransit service in Fresno County; and

WHEREAS, the City of Clovis has, to the maximum extent feasible, coordinated with other transportation providers and users in the region (including social services agencies).

NOW, THEREFORE, BE IT RESOLVED, that the City of Clovis hereby authorizes the Deputy General Services Director to file and execute applications on behalf of the City of Clovis with the FCOG to aid in the financing of capital projects pursuant to Section 5310 of the Federal Transit Act (FTA C9070.1G), as amended.

BE IT FURTHER RESOLVED, that the Deputy General Services Director is authorized to execute and file all certifications of assurances, contracts, or agreements, or any other document required by the FCOG.

BE IT FURTHER RESOLVED, that the Deputy General Services Director is authorized to provide additional information as FCOG may require in connection with the application for the FTA Section 5310 projects.

* * * * *

The foregoing resolution was introduced and adopted at a regular meeting of the City Council of the City of Clovis held on October 6, 2025, by the following vote, to wit:

AYES:

NOES:

ABSENT:

ABSTAIN:

DATED:

Mayor

City Clerk



CITY *of* CLOVIS

REPORT TO THE CITY COUNCIL

TO: Mayor and City Council

FROM: Planning and Development Services Department

DATE: October 6, 2025

SUBJECT: Planning and Development Services – Approval – Final Acceptance for CIP 21-15 Armstrong Avenue Street Improvements, with a final contract cost of \$529,880.88.

ATTACHMENTS: 1. Vicinity Map

RECOMMENDATION

For the City Council to accept the work performed as complete and authorize the recording of the notice of completion for this project.

EXECUTIVE SUMMARY

This project consists of street improvements on Armstrong Avenue from Alluvial to Nees Avenue, approximately ±0.5 mile. Construction included, grinding, scarify/re-compacting portions of aggregate base, asphalt paving, asphalt driveways, asphalt swales, hauling grindings to landfill, ADA concrete improvements, adjustment of existing sewer and storm drain manholes, water valves to finish grade, pedestrian and timber barricades, funding signs, removal and replacement of trees, traffic markings and signs to current Manual on Uniform Traffic Control Devices (MUTCD) standards.

BACKGROUND

Bids were received on May 20, 2025, and the project was awarded by the City Council to the lowest responsible bidder, Doug Ross, Inc., DBA Central Valley Asphalt, on June 9, 2025. The project was completed in accordance with the construction documents, and the contractor has submitted a request for acceptance of the project.

FISCAL IMPACT

1. Award	\$562,298.00
2. Cost decrease resulting from differences between estimated Quantities used for award and actual quantities installed	\$(32,417.12)
3. Contract Change Orders	\$0.00
4. Liquidated Damages Assessed	\$0.00

Final Contract Cost	\$529,880.88
----------------------------	---------------------

REASON FOR RECOMMENDATION

The Public Utilities Department, the City Engineer, the Engineering Inspector, and the Project Engineer agree that the work performed by the contractor is in accordance with the project plans and specifications and has been deemed acceptable. The contractor, Doug Ross, Inc., DBA Central Valley Asphalt, has requested final acceptance from the City Council.

ACTIONS FOLLOWING APPROVAL

1. The Notice of Completion will be recorded.
2. All remaining retention funds will be released no later than 35 calendar days following recordation of the notice of completion, provided no liens have been filed. Retention funds may be released within 60 days after the date of completion, provided no liens have been filed, with "completion" defined as the earlier of either (a) beneficial use and occupancy and cessation of labor, or (b) acceptance by the City Council per Public Contract Code Section 7107(c)(2).

CONFLICT OF INTEREST

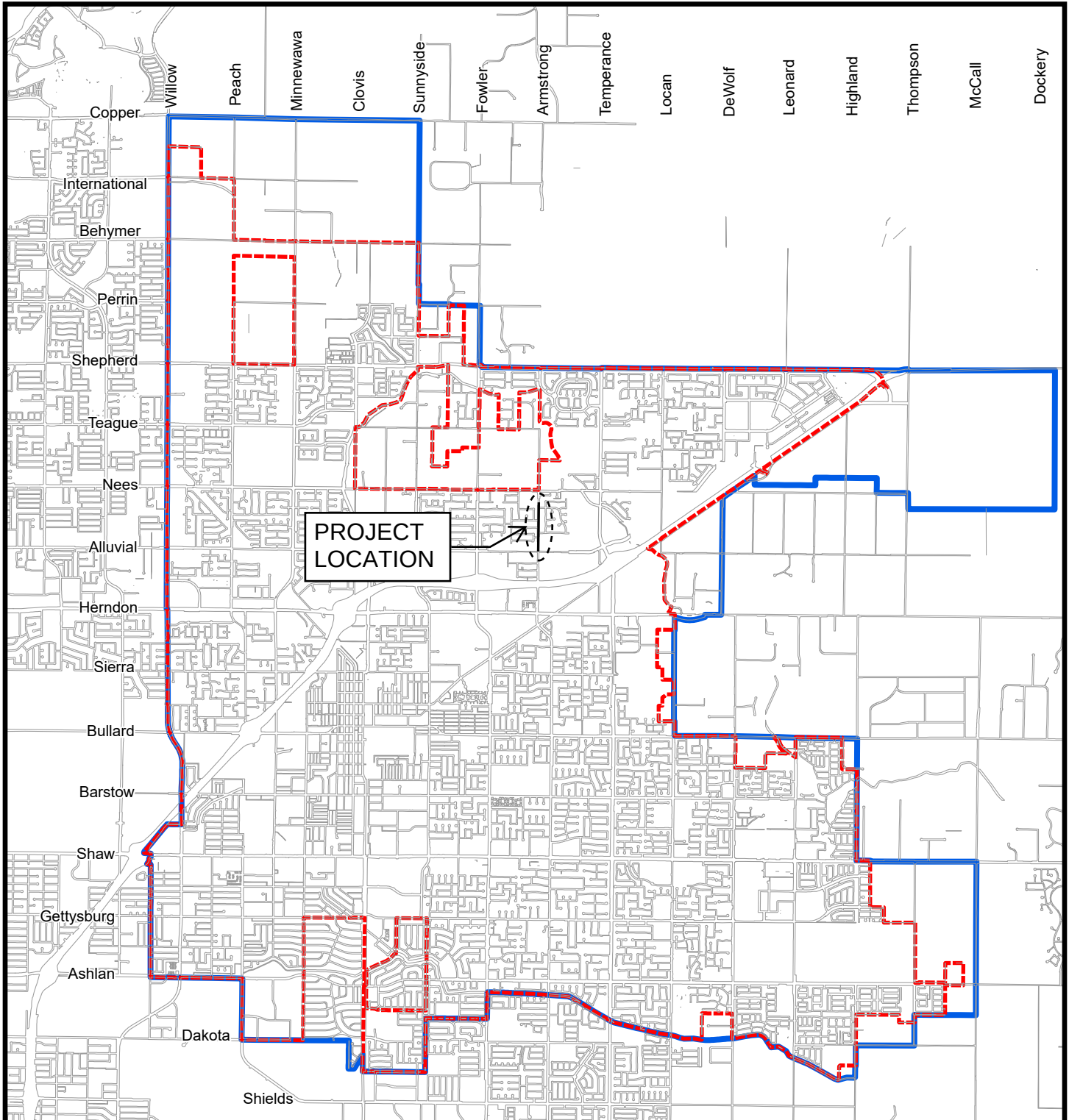
None.

Prepared by: Rami Abunamous, Engineering Inspector

Reviewed by: City Manager AK

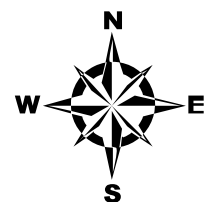
VICINITY MAP

CIP 21-15 Armstrong Avenue Street Improvements



Legend

- City Limits
- Sphere of Influence



Attachment 1



CITY *of* CLOVIS

REPORT TO THE CITY COUNCIL

TO: Mayor and City Council

FROM: Planning and Development Services Department

DATE: October 6, 2025

SUBJECT: Planning and Development Services – Approval – Partial Acceptance for Final Map for Tract 6086, and reduction of the Performance Surety and Labor and Materials Surety to the appropriate values of the remaining improvements to be completed, located at the southeast corner of Shaw Avenue and Leonard Avenue (Lennar Homes of California, LLC).

ATTACHMENTS: 1. Vicinity Map

RECOMMENDATION

For the City Council to:

1. Accept a portion of the public improvements for Tract 6086, and authorize recording the Notice of Partial Acceptance; and
2. Authorize the immediate reduction of the Performance Surety from \$2,280,000 to \$199,104 said reduced amount being equal to 100% the estimated value of the improvements remaining to be completed; and
3. Authorize the reduction of the Labor and Materials Surety from \$1,140,000 to \$99,552, said reduced amount being 50% of the value of the improvements remaining to be completed; said reduction to occur ninety (90) days after the recording of the Notice of Partial Acceptance, provided no liens have been filed.

EXECUTIVE SUMMARY

The owner, Lennar Homes of California, LLC, has requested final acceptance of a portion of the public improvements constructed or installed in conjunction with this tract. The public improvements include all those shown on the subdivision improvement plans approved by the City Engineer, with the exception of the following remaining improvements:

1. Dog Creek and Trail Plant Establishment as dictated by the Army Corp of Engineers Restoration Requirements from the headwall inlet structure South of Shaw Ave to the headwall outlet structure North of Loma Vista Parkway from the West Right Of Way Line to the Eastern Back of Curb.

2. Dog Creek and Trail Plant Establishment as dictated by the Army Corp of Engineers Restoration Requirements from South of Gettysburg from the headwall inlet structure the just North of the installed Rip Rap from the West Right Of Way Line to the Eastern Block Wall along the trail.

All of the required improvements submitted for acceptance have been completed in accordance with the approved plans and specifications. In accordance with Subdivision Map Act Section 66499.7(d), the value of the remaining improvements is less than 20% of the overall improvements. When completed, the remaining improvements will be submitted to the Council for acceptance. This request for partial acceptance complies with the Policy and Procedures for Partial Acceptance of Subdivision Public Improvements and bond Reductions approved by the Council on December 3, 2007.

The owner has requested a deferment of the remaining improvements described above. All remaining improvements shall be constructed per City Standards and Specifications, unless otherwise approved by the City Engineer, prior to full final acceptance of the Final Map.

The owner has requested partial acceptance. Staff is recommending approval of their request.

BACKGROUND

City Inspection staff, including those of the various affected departments, has certified that all the public improvements requested for acceptance have been constructed or installed in accordance with the approved plans, specifications and standards, and to the satisfaction of the City Engineer. The developer has furnished the required Maintenance Surety to guarantee the accepted public improvements for a period of one year from the date of Council acceptance.

FISCAL IMPACT

The cost for periodic routine maintenance, as well as repairs needed as the improvements deteriorate with age and usage, will be incorporated into the annual maintenance budget of the Public Utilities Department as these costs are identified.

REASON FOR RECOMMENDATION

The Subdivision Map Act provides for partial acceptance of improvements and related reduction of sureties once construction of the required improvements has been completed in compliance with all codes, plans and specifications, and all other required documents have been completed and submitted and the value of the improvements to be accepted exceed 80% of the total value of required improvements.

ACTIONS FOLLOWING APPROVAL

Record the Notice of Partial Acceptance and release the Performance, Labor and Materials, and Maintenance Sureties as appropriate.

CONFLICT OF INTEREST

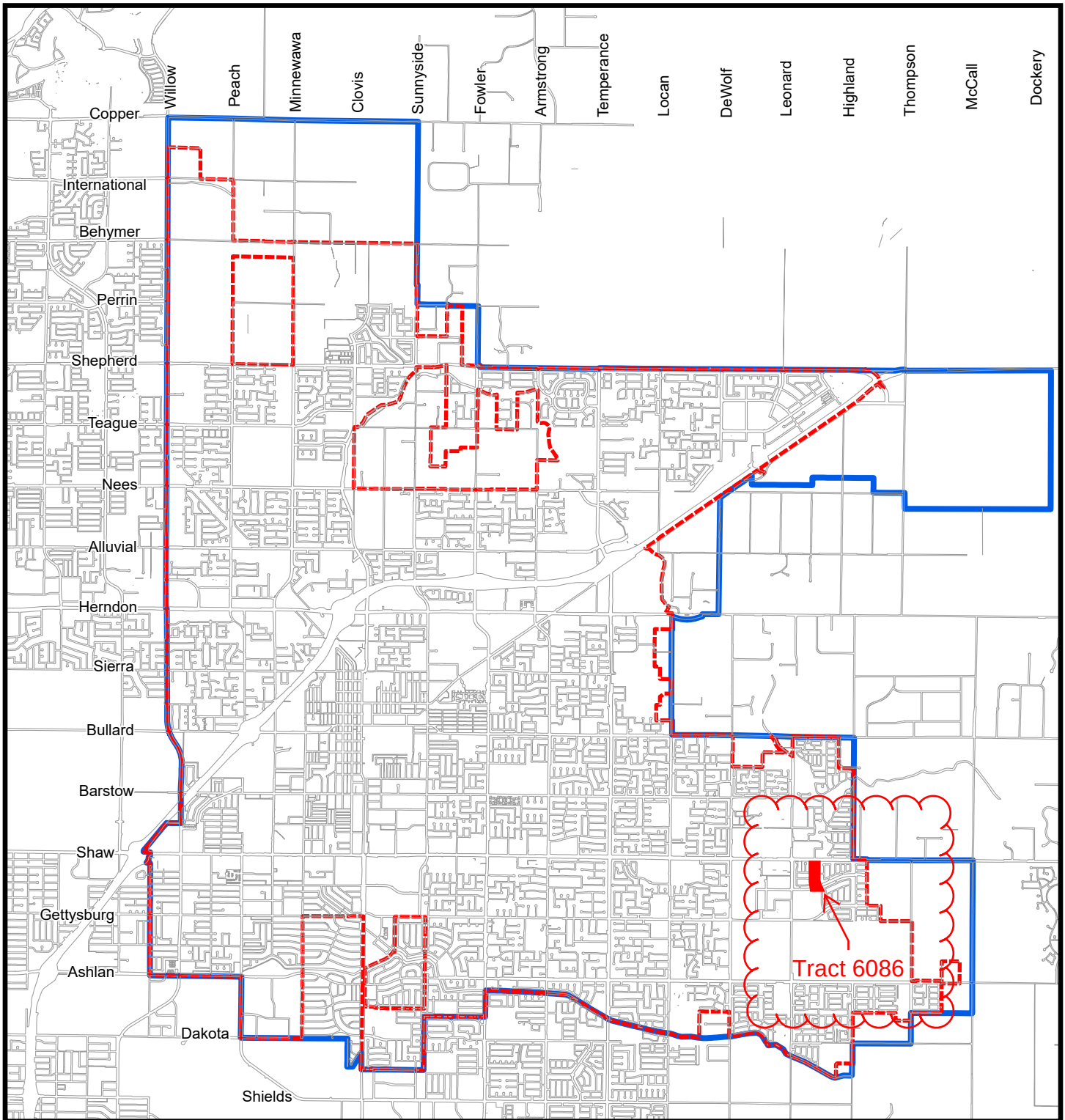
None.

Prepared by: Bruce Bloom, Engineer II

Reviewed by: City Manager *AB*

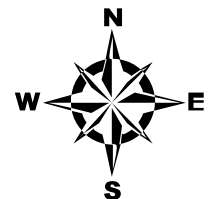
VICINITY MAP

Tract 6086 - Partial Acceptance



Legend

- City Limits
- Sphere of Influence



Attachment 1



CITY *of* CLOVIS

REPORT TO THE CITY COUNCIL

TO: Mayor and City Council

FROM: Planning and Development Services Department

DATE: October 6, 2025

SUBJECT: Planning and Development Services – Approval – Final Acceptance for Final Map for Tract 6107, acceptance of public improvements with authorization to record the Notice of Completion, and release of sureties as required, located at the southwest corner of Shaw and Highland Avenues (Lennar Homes of California).

ATTACHMENTS: 1. Vicinity Map

RECOMMENDATION

For the City Council to:

1. Accept the public improvements for Tract 6107, and authorize recording the Notice of Completion; and
2. Authorize the release of the Performance Surety immediately and then release of the Labor and Materials Surety ninety (90) days after the recordation of the Notice of Completion, (provided no lien has been filed) and release of Public Improvements Maintenance Surety upon the expiration of the one-year warranty period and provided any defective work has been repaired to the City's satisfaction.

EXECUTIVE SUMMARY

The owner, Lennar Homes of California, has requested final acceptance of the public improvements constructed or installed in conjunction with this tract. The public improvements include all those shown on the subdivision improvement plans approved by the City Engineer. The construction or installation of the public improvements is complete. The owner has requested final acceptance. Staff is recommending approval of their request.

All landscaping, including sidewalks along the side yards of lots have been constructed. The construction or installation of the public improvements is complete. The owner has requested final acceptance. Staff is recommending approval of their request.

BACKGROUND

City Inspection staff, including those of the various affected departments, has certified that all the public improvements requested for acceptance have been constructed or installed in

accordance with the approved plans, specifications and standards, and to the satisfaction of the City Engineer. The developer has furnished the required Maintenance Surety to guarantee the accepted public improvements for a period of one year from the date of Council acceptance.

FISCAL IMPACT

The cost for periodic routine maintenance, as well as repairs needed as the improvements deteriorate with age and usage, will be incorporated into the annual maintenance budget of the Public Utilities Department as these costs are identified.

REASON FOR RECOMMENDATION

The Subdivision Map Act requires that once construction of the required improvements has been completed in compliance with all codes, plans and specifications, and all other required documents have been completed and submitted, final acceptance is required, and the appropriate sureties are released.

ACTIONS FOLLOWING APPROVAL

Record the Notice of Completion and release the Performance, Labor and Materials, and Maintenance Sureties as appropriate.

CONFLICT OF INTEREST

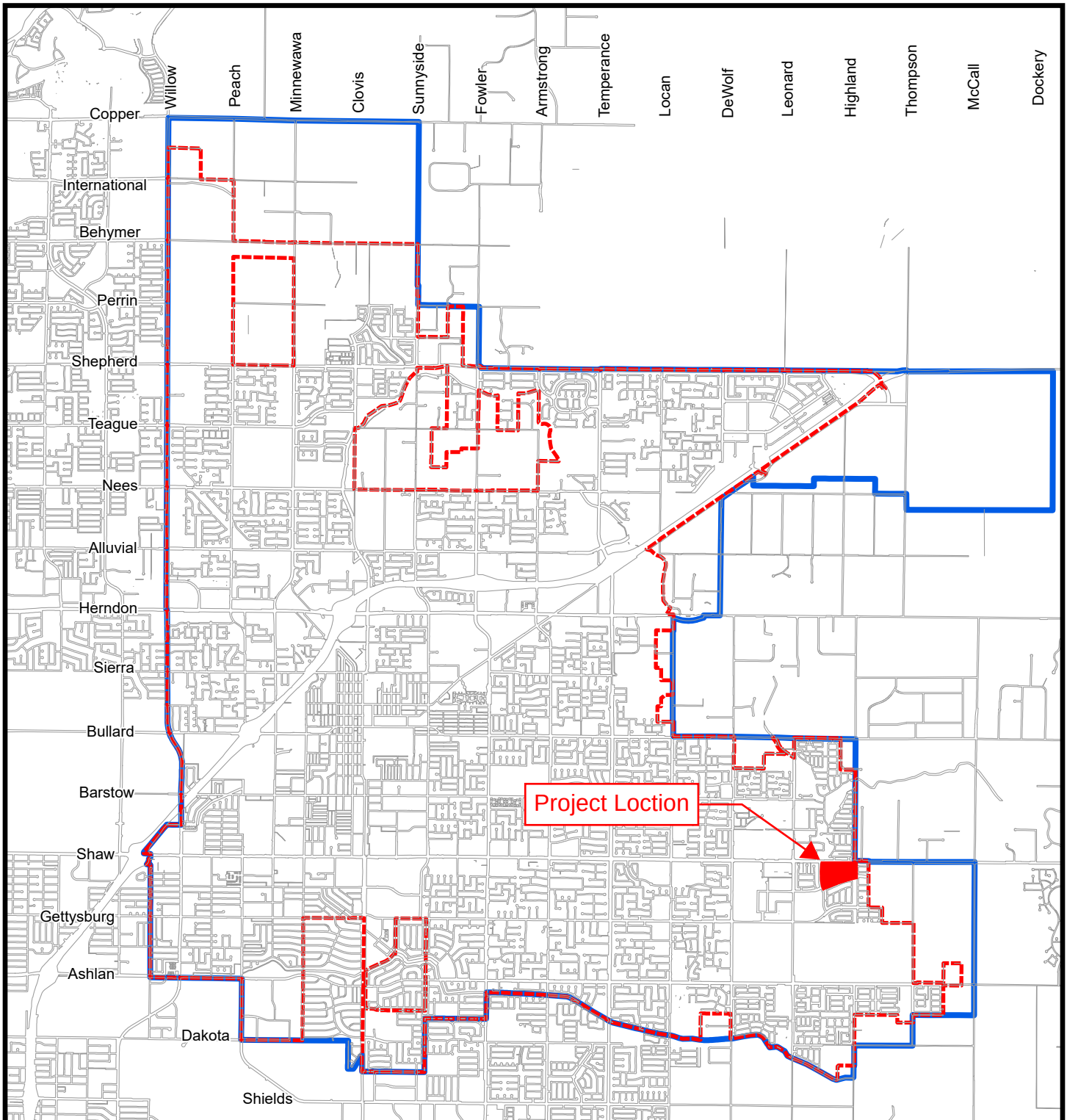
None.

Prepared by: Ruben Amavizca, Engineer II

Reviewed by: City Manager AM

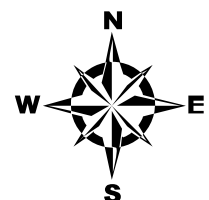
VICINITY MAP

TM 6107 (Lennar Homes of California)



Legend

- City Limits
- Sphere of Influence



Attachment 1



CITY *of* CLOVIS

REPORT TO THE CITY COUNCIL

TO: Mayor and City Council

FROM: Public Utilities Department

DATE: October 6, 2025

SUBJECT: Public Utilities – Approval – Waive Formal Bidding Requirements and Authorize the Purchase of a 2026 Ford F750 Altec Tree Trimming Truck Model LR856 from Altec Industries, Inc., Utilizing the Sourcewell Cooperative Purchasing Contract in the Total Amount of \$211,736.37.

ATTACHMENTS: None.

RECOMMENDATION

For the City Council to waive the City's formal bidding requirements and authorize the purchase of one 2026 Ford F750 Altec tree trimming truck model LR856 from Altec Industries, Inc., in the total amount of \$211,736.37, including tax and delivery fees, utilizing the Sourcewell Purchasing Contract 091521-NAF.

EXECUTIVE SUMMARY

This vehicle will be used to support the addition of a City tree crew for the maintenance of City trees. There are funds in this fiscal year's Measure Y budget to purchase one (1) 2026 Ford F750 Altec tree trimming truck from Altec Industries, Inc., for the Public Utilities Department Parks Division. Altec Industries' bid price of \$211,736.37 includes tax and delivery fees and the Sourcewell pricing discount. The new vehicle will meet all emissions requirements.

The Sourcewell Purchasing Contract – formerly the National Joint Powers Alliance (NJPA) contract – is a nationwide public procurement service that makes the governmental procurement process more efficient. All contracts available to participating members have been awarded by virtue of a competitive public procurement process compliant with state statutes.

BACKGROUND

The recommended equipment is available through the Sourcewell Cooperative Purchasing Contract, formerly the NJPA contract. Sourcewell is a cooperative purchasing contract that allows a vendor like Altec Industries, Inc., to respond to a Request for Proposals (RFP) that covers a large group of government buyers, and it allows a large group of government buyers with similar interests to leverage their buying power to obtain government-only discounts on products.

FISCAL IMPACT

Funds were included in the 2025-2026 Measure Y budget for the purchase of a tree trimming truck for the Parks Division. The Public Utilities Department has the necessary funds for purchase of the vehicle.

To meet Measure Y goals of “Keeping Clovis Safe & Clean” and “Maintaining Youth & Parks Programs,” funds were included in the 2025-2026 budget for the addition of a City tree crew for the maintenance of City trees and for the purchase of an additional tree trimming truck.

REASON FOR RECOMMENDATION

This fiscal year’s Measure Y budget includes the hiring of additional Public Utilities Department Parks Division staff, requiring the purchase of an additional tree trimming truck. Staff have evaluated the available vehicle and have determined that it meets the needs of the Parks Division. The proposed method of purchasing the vehicles is cost-effective and funds are available.

ACTIONS FOLLOWING APPROVAL

Purchase orders will be prepared for the City Manager’s approval and sent to the vendor.

CONFLICT OF INTEREST

None.

Prepared by: Jim Stringfield, Fleet Manager

Reviewed by: City Manager *AS*



CITY *of* CLOVIS

REPORT TO THE CITY COUNCIL

TO: Mayor and City Council

FROM: Public Utilities Department

DATE: October 6, 2025

SUBJECT: Public Utilities – Approval – Res. 25-____, Authorizing the Submittal of an Application Under the San Joaquin Valley Air Pollution Control District Public Benefit Grant Program - New Alternative Fuel Vehicle Purchase and Authorizing the City Manager to be the Contract Authority; and Approval – Waive Formal Bidding Requirements and Authorize the Purchase of Five (5) 2025 Chevrolet Silverado EV Crew Cab Work Trucks from Hedricks Chevrolet in the Amount of \$359,549.40.

ATTACHMENTS: 1. Resolution

RECOMMENDATION

1. For the City Council to approve a resolution authorizing the submittal of 5 grant applications under the San Joaquin Valley Air Pollution Control District (SJVAPCD) Public Benefit Grant Program - New Alternative Fuel Vehicle Purchase and confirm authorization of the City Manager to be the Contract Authority.

2. For the City Council to approve waiving the City's formal bidding requirements and authorize purchasing five (5) 2025 Chevrolet Silverado EV crew cab work trucks from Hedricks Chevrolet in the amount of \$71,909.88 each for a total of \$359,549.40.

EXECUTIVE SUMMARY

The San Joaquin Valley Air Pollution Control District currently has an available grant opportunity called the New Alternative Fuel Vehicle Purchase Program. The purpose of this program is to help fund the purchase of new alternative fuel vehicles which will provide a direct benefit to Valley residents. The grant program identifies alternative fuel vehicles as electric, plug-in hybrid, or alternative fueled vehicles. Under this program, the City is eligible to receive up to \$20,000 per vehicle toward the purchase of eligible vehicles, and up to a maximum of \$100,000 per calendar year. The program terms require that the City provide a resolution from the Council authorizing the submittal of the application and identifying the individual authorized to implement the new vehicle project.

There are funds in this fiscal year's Fleet Renewal Budget to purchase five (5) 2025 Chevrolet Silverado EV crew cab work trucks from Hedricks Chevrolet in the amount of \$359,549.40 for the Public Utilities Department. The existing vehicles are scheduled to be replaced due to age

and the new vehicles meet the California Air Resources Board (CARB)'s Advanced Clean Fleets regulation requirements.

For the purchase of the five work trucks, in accordance with the City Purchasing Manual and Procedures, City staff obtained a price quote from the Sourcewell contracted dealer, National Auto Fleet Group, and a quote from a local dealer, Hedricks Chevrolet. The Sourcewell Purchasing contract – formerly the National Joint Powers Alliance (NJPA) contract – is a nationwide public procurement service that makes the governmental procurement process more efficient. All contracts available to participating members have been awarded by virtue of a public competitive procurement process compliant with state statutes.

The lowest responsible quote was obtained from Hedricks Chevrolet at \$71,909.88 each, including tax and delivery fees.

BACKGROUND

The program criteria states that an eligible public agency may purchase a new Original Equipment Manufacturer (OEM) electric, plug-in hybrid, or alternative fuel vehicle with a gross vehicle weight rating less than or equal to 14,000 pounds for reimbursement up to \$20,000 per vehicle, not to exceed \$100,000 per calendar year. The agency must be located within the geographical area of the San Joaquin Valley Air Pollution Control District.

FISCAL IMPACT

The total cost of five (5) 2025 Chevrolet Silverado EV crew cab work trucks from Hedricks Chevrolet is \$359,549.40. Obtaining additional funds under this program greatly reduces the cost of acquiring the work trucks by up to \$100,000. The Public Utilities Department Fleet Renewal budget has funds available in this fiscal year's budget to make the purchase.

REASON FOR RECOMMENDATION

This funding program will allow the City to purchase five electric vehicles at a significant discount. Staff has evaluated the available fleet and has determined the proposed vehicles meet the needs of the Public Utilities Department. Sufficient funds are included in the current fiscal year's budget.

ACTIONS FOLLOWING APPROVAL

Staff will complete and submit five (5) Public Benefit Program - New Alternative Fuel Vehicle Purchase grant applications, including the City Resolution. Once SJVAPCD approves the applications, the City will proceed with the purchase of the five vehicles. Purchase orders for the vehicles will be prepared for the City Manager's approval and sent to the vendor following the execution of an agreement with SJVAPCD securing the grant reimbursement

CONFLICT OF INTEREST

None.

Prepared by: Jim Stringfield, Fleet Manager

Reviewed by: City Manager *AK*

RESOLUTION 25-____

**RESOLUTION OF THE CITY COUNCIL OF THE CITY OF CLOVIS
APPROVING AND AUTHORIZING THE CITY MANAGER TO SUBMIT AN APPLICATION
FOR, TO SIGN REQUIRED ASSURANCES, AND TO ADMINISTER THE NEW
ALTERNATIVE FUEL VEHICLE PURCHASE PROGRAM WITH RESPECT TO
APPLICATIONS FOR LOCAL, STATE, AND FEDERAL PROGRAMS, PROJECTS, OR
GRANTS**

WHEREAS, several local, state, and federal programs allow public and non-profit transportation providers to apply for administration, capital, and operation assistance programs or grants; and

WHEREAS, the San Joaquin Valley Air Pollution District has a Public Benefit Grant Program for New Alternative Fuel Vehicle Purchase with the objective of funding the purchase of alternative fuel vehicles which will provide a direct benefit to Valley residents; and

WHEREAS, City of Clovis City Council must authorize someone by resolution as the “Authorized Individual” to make application for and administer the New Alternative Fuel Vehicle Purchase Program.

NOW, THEREFORE, BE IT RESOLVED, that the City of Clovis hereby authorizes the City Manager, or his designee, to submit an application for, to sign required assurances, and to administer the New Alternative Fuel Vehicle Purchase Program with respect to applications for local, state, and federal programs, projects, or grants.

* * * * *

The foregoing resolution was introduced and adopted at a regular meeting of the City Council of the City of Clovis held on October 6, 2025 by the following vote, to wit:

AYES:

NOES:

ABSENT:

ABSTAIN:

DATED:

Mayor

City Clerk



CITY *of* CLOVIS

REPORT TO THE CITY COUNCIL

TO: Mayor and City Council

FROM: Public Utilities Department

DATE: October 6, 2025

SUBJECT: Public Utilities – Approval – Waive Formal Bidding Requirements and Authorize the City Manager to Enter into a Contract with Golden Bell Products, Inc., for Insect Control in Sanitary Sewer Manholes, in the Amount of \$221,120.

ATTACHMENTS: None.

RECOMMENDATION

For the City Council to waive the City's formal bidding procedures and authorize the City Manager to execute a two-year contract services agreement totaling \$221,120 with Golden Bell Products, Inc., to apply insect control treatment to sanitary sewer manholes within the City of Clovis.

EXECUTIVE SUMMARY

Golden Bell Products, Inc. has the sole source right for distribution and application of Insecta, an EPA-approved and registered product, within the State of California. The application of Insecta is guaranteed for two (2) full years from the date of treatment. The City is currently on a two-year treatment rotation, with one half of the City receiving treatment one year, and the remaining half receiving treatment the following year. This fall, approximately 3,900 sanitary sewer manholes in the area east of Sunnyside Avenue and south of Nees Avenue will be treated. In fall of 2026, the remaining approximately 4,000 manholes in the area west of Sunnyside Avenue and north of Nees Avenue will be treated. The work includes routine maintenance as defined in Section 2.9.02 (c) of the Clovis Municipal Code.

BACKGROUND

Cockroach populations are common in urban wastewater collection systems worldwide, and if unaddressed, they can become a widespread system problem. Insect activity is detected during routine sewer line cleaning and in response to resident complaints. Wastewater staff actively treat isolated infested sections; however, the treatment provided by Golden Bell Products, Inc., is system-wide and has a longer-lasting residual in comparison to any product historically used by City staff. This treatment has been used for several years within our sanitary sewer collection system and has been the most successful product to control sewer pest infestation.

FISCAL IMPACT

Sufficient funds were included in this year's 2025-26 Wastewater Enterprise budget. The cost to provide insect control in roughly half of the sanitary sewer manholes within the City this year is expected to be \$107,104. The following 2026-27 fiscal year budget will include sufficient funds – approximately \$114,016 – for treatment of the remaining half of the sewer manholes within the City.

REASON FOR RECOMMENDATION

Insecta is the product which Golden Bell Products, Inc., applies to sewer manholes for insect control. Insecta is the only registered product of its type and active ingredient labeled for use in sewer manholes. The product is a United States EPA-approved formulation that is produced in an EPA-approved facility. The product comes ready to use and since it is a polymerized product, there is no field mixing required, which is not the case with any additive-type product. Golden Bell Products, Inc., has used Insecta in approximately 85 other cities and sanitation agencies in California. Golden Bell Products, Inc. holds a Qualified Applicator License and is licensed by the California Department of Pesticide Regulation. Public Utilities Wastewater staff have experience working with Golden Bell Products, Inc., and have experienced the superior performance of Insecta.

ACTIONS FOLLOWING APPROVAL

1. A contract services agreement will be prepared and executed by the City Manager, subject to receiving performance security that is satisfactory to the City.
2. Approximately half of the sewer manholes in the City will receive insect control treatment in October 2025 and the remaining half will receive treatment in October 2026.

CONFLICT OF INTEREST

None.

Prepared by: Nicholas Torstensen, Deputy Public Utilities Director

Reviewed by: City Manager *AT*



CITY *of* CLOVIS

REPORT TO THE CITY COUNCIL

TO: Mayor and City Council
FROM: Administration
DATE: October 6, 2025
SUBJECT: Workshop - Presentation on Cybersecurity Awareness.

Staff: Jesse Velez, I.T. Deputy Director

Recommendation: Receive and File

ATTACHMENTS: None.

I.T. Deputy Director Jesse Velez will provide a verbal presentation on this item.

Please direct questions to the City Manager's office at 559-324-2060.



CITY *of* CLOVIS

REPORT TO THE CITY COUNCIL

TO: Mayor and City Council

FROM: Administration

DATE: October 6, 2025

SUBJECT: Consider Approval – Res. 25-____ Adopting a Position of Opposition to Proposition 50 on the November 4, 2025, Ballot, Authorizing Temporary Changes to Congressional District Maps.

Staff: Paul Armendariz, Assistant City Manager

Recommendation: Consider

ATTACHMENTS: 1. Res. 25-____
2. Legislative Analyst's Office (LAO) Summary of Prop. 50 Legislation

RECOMMENDATION

For the City Council to consider a resolution adopting a Position of Opposition to Proposition 50 on the November 4, 2025, special election ballot, Authorizing Temporary Changes to Congressional District Maps.

EXECUTIVE SUMMARY

On September 8, 2025, on a consensus vote from the Council, staff was directed to bring an item back to the Council to consider approving a Resolution opposing Proposition 50. Proposition 50 will be on a special election ballot on November 4, 2025, for California voters to consider.

A “yes” vote on this measure means the State would use new, legislatively drawn congressional district maps starting in 2026. California’s new maps would be used until the California Citizens Redistrict Commission draws new maps following the 2030 U.S. Census.

A “no” vote on this measure means current congressional district maps drawn by the California Citizens Redistrict Commission would continue to be used in California until the Commission draws new maps following the 2030 U.S. Census.

BACKGROUND

On September 8, 2025, the City Council, by consensus, directed staff to return with an item for consideration regarding an official position on Proposition 50, which will appear on the November 4, 2025, special election ballot.

Proposition 50

Proposition 50 proposes replacing California's current commission-drawn congressional district maps with new, legislatively drawn maps starting with the 2026 elections. These maps would remain in place until the Commission redraws districts following the 2030 Census. The proposition also expresses support for independent redistricting nationwide, but it does not change federal law or require any action by Congress or the California Legislature.

FISCAL IMPACT

None.

REASON FOR RECOMMENDATION

On September 8, 2025, on a consensus vote from Council, staff was directed to bring an item back to Council to consider approving a Resolution opposing Proposition 50.

ACTIONS FOLLOWING APPROVAL

If approved, the Resolution opposing Proposition 50 will be kept on file.

CONFLICT OF INTEREST

None.

Prepared by: Paul Armendariz, Assistant City Manager

Reviewed by: City Manager AA

RESOLUTION 25-__

RESOLUTION OF THE CITY COUNCIL OF THE CITY OF CLOVIS ADOPTING A POSITION OF OPPOSITION TO PROPOSITION 50 ON THE NOVEMBER 2025 BALLOT

WHEREAS, Proposition 50, appearing on the November 2025 California ballot, proposes to amend the California Constitution to alter the process for drawing congressional districts; and

WHEREAS, the current process, established by voters, assigns the responsibility for drawing congressional districts to the independent California Citizens Redistricting Commission, designed to operate in a non-partisan manner; and

WHEREAS, Proposition 50 would transfer the authority to draw congressional districts from the California Citizens Redistricting Commission to the State Legislature; and

WHEREAS, the independent California Citizens Redistricting Commission was created to ensure fair and impartial district boundaries, including safeguards to keep cities, counties, and local communities together; and

WHEREAS, Proposition 50 would remove existing safeguards intended to maintain the integrity of local communities in the redistricting process; and

WHEREAS, Proposition 50 proposes dividing communities, forcing some cities and counties to be split among multiple congressional districts under the measure's new maps and diminishing their voice in Congress; and

WHEREAS, the City Council of Clovis, CA recognizes the importance of maintaining a transparent and independent redistricting process to uphold public trust in electoral systems; and

WHEREAS, the City Council of Clovis, CA believes that Proposition 50 undermines the voter-approved framework for fair redistricting in California;

NOW, THEREFORE, BE IT RESOLVED, that the City of Clovis California, hereby adopts an official position of opposition to Proposition 50 on the November 2025 ballot.

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The foregoing resolution was introduced and adopted at a regular meeting of the City Council of the City of Clovis held on October 6, 2025, by the following vote, to wit:

AYES:

NOES:

ABSENT:

ABSTAIN

DATED:

Mayor

City Clerk

November 4, 2025 Ballot



PROPOSITION 50

Authorizes Temporary Changes to Congressional District Maps in Response to Texas' Partisan Redistricting. Legislative Constitutional Amendment.

ANALYSIS OF MEASURE

BACKGROUND

U.S. Congress

U.S. Congress. The U.S. Congress is the part of the federal government that makes laws. Congress has two parts: the U.S. Senate and the U.S. House of Representatives (House). Each of the 50 states is represented by 2 senators, with 100 senators in total. The House has 435 members. The number of representatives in the House for each state depends on how many people live in that state. Each member in the House represents an area of the state called a congressional district. California currently has 52 congressional districts. Voters who live in each congressional district elect one member of the House every two years to represent them. The next election for all 435 representatives will be in 2026.

U.S. Census Counts States' Populations Every Ten Years. The number of people living in an area goes up and down over time. Every ten years, the U.S. Census counts the number of people who live in the U.S. The last census was in 2020, and the next census is in 2030. This count is used to determine how many people live in each state and how many representatives in the House each state gets for the next ten years.

Congressional Redistricting

Each State Draws Congressional District Maps Following the U.S. Census. Every ten years, after the U.S. Census is completed, states draw new congressional district maps to reflect their number of House representatives and where people live. This process is called "redistricting." Each state decides what process to use to draw its new district maps. When drawing new maps, each state must follow federal laws. For example, each congressional district in the state must represent about the same number of people.

November 4, 2025 Ballot

States Typically Do Not Redistrict Sooner Than Every Ten Years. States typically only draw congressional district maps every ten years, unless a court orders changes to comply with the law. In August 2025, however, the Texas Legislature passed a bill to adopt new maps for the 2026 elections without a court order. Several other states also are considering changes to their maps before the 2026 elections.

Congressional Redistricting in California. State legislatures draw congressional district maps in most states, but some states use commissions to do this job. Before 2010, the California Legislature drew the state's congressional district maps. In 2010, California voters gave this job to an independent commission known as the California Citizens Redistricting Commission (Commission). The Commission includes 14 members: 5 Democratic members, 5 Republican members, and 4 members who are not registered with either of those political parties. When the Commission draws new congressional district maps, it must follow federal and state laws. For example, state law requires, among other things, the Commission to avoid splitting up neighborhoods or local communities of interest to the extent possible. State law also prohibits the Commission from considering political parties, current office holders, or people running for office when it draws the maps.

Current California Congressional Districts. The Commission drew the current maps for California's 52 congressional districts. These maps were based on the 2020 U.S. Census and have been used since the 2022 congressional elections.

PROPOSAL

California's Congressional District Maps

Use Legislatively Drawn Congressional District Maps Until After the Next Census. Proposition 50 replaces California's current congressional district maps with new, legislatively drawn maps. (The total number of districts would not change.) Proposition 50's maps must follow federal law, but they are not required to follow the state requirements placed on the Commission. The state would use Proposition 50's maps for congressional elections starting in 2026. The state would use these maps until the Commission draws new district maps, following the 2030 U.S. Census.

National Congressional Redistricting

Call for Change in Federal Law. Proposition 50 asks the U.S. Congress to change federal law and propose an amendment to the U.S. Constitution to require redistricting be done by "fair, independent, and nonpartisan redistricting commissions nationwide." Proposition 50 expresses voter support for this idea, but does not change federal law or require any particular action of Congress or the California Legislature.

November 4, 2025 Ballot

FISCAL EFFECTS

Minor One-Time Costs to County and State Elections Officials. Counties run elections, and the state oversees them. Because most congressional districts in California would change at least some under the new maps, county and state elections officials would need to update election materials. This would result in one-time costs to counties of **up to a few million dollars** statewide and one-time costs to the state of **roughly \$200,000**. The state amount is much less than one-tenth of 1 percent (0.1 percent) of the state's roughly \$220 billion General Fund budget. (The General Fund is the account the state uses to pay for most public services, including education, health care, and prisons.)

CURRENT AND PROPOSED CONGRESSIONAL DISTRICT MAPS

This section shows maps of the current and proposed congressional districts (1) statewide, as shown in Figures 1 and 2; (2) in the northern part of the state, as shown in Figures 3 and 4; and (3) in the southern part of the state, as shown in Figures 5 and 6. A description of the census blocks represented by each district in the proposed maps can be found at the following website: https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202520260AB604

November 4, 2025 Ballot

Figure 1

Current Congressional Districts



Note: See northern and southern congressional district maps for district numbers for the Bay Area and Los Angeles regions. Map reflects data posted to the California Citizens Redistricting Commission website.

November 4, 2025 Ballot

Figure 2

Proposed Congressional Districts

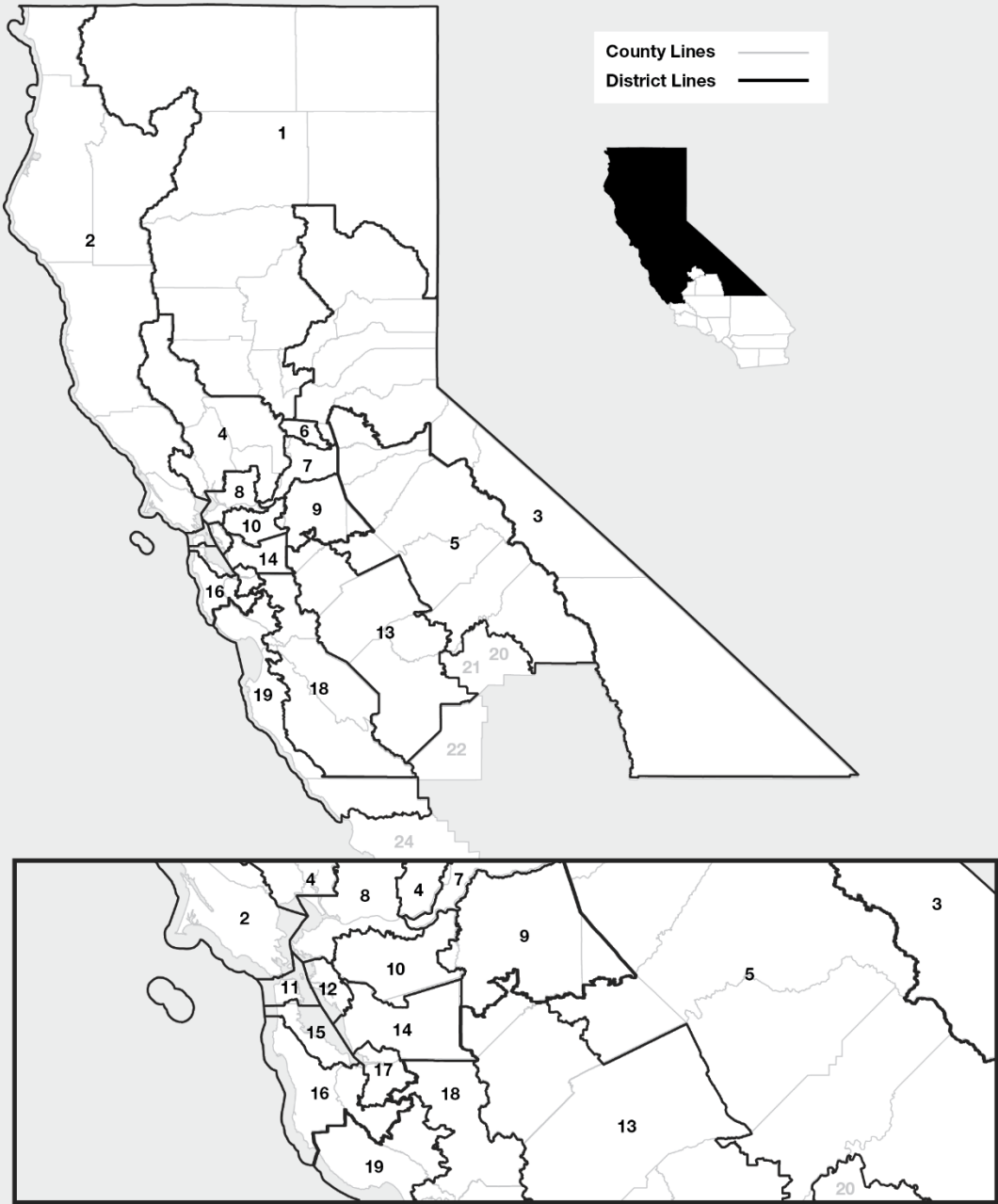


Note: See northern and southern congressional district maps for district numbers for the Bay Area and Los Angeles regions. Map reflects data posted to the California Legislature elections committees' (Assembly Elections Committee and Senate Elections and Constitutional Amendments Committee) websites.

November 4, 2025 Ballot

Figure 3

Current Northern Congressional Districts

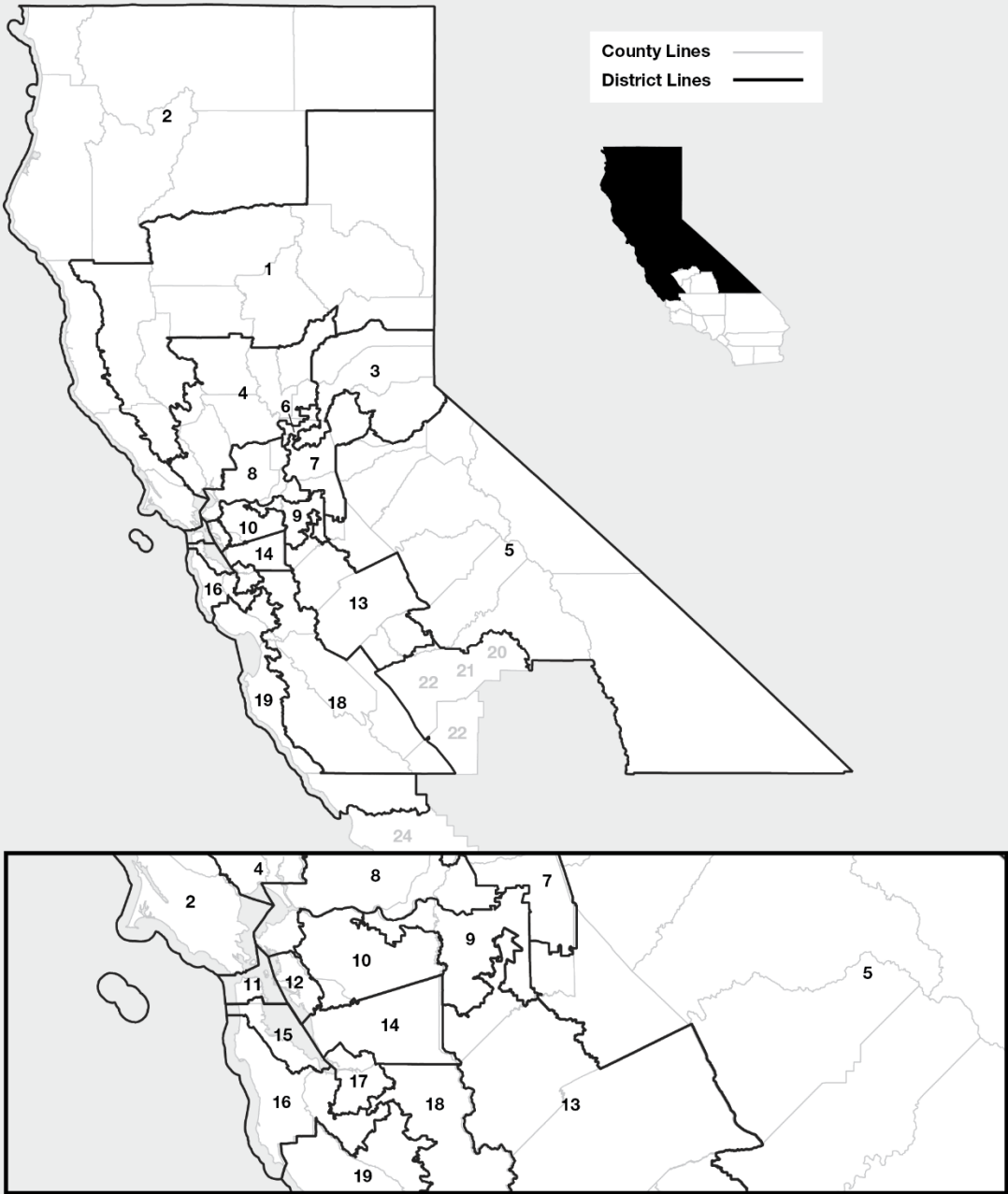


Note: Map reflects data posted to the California Citizens Redistricting Commission website.

November 4, 2025 Ballot

Figure 4

Proposed Northern Congressional Districts

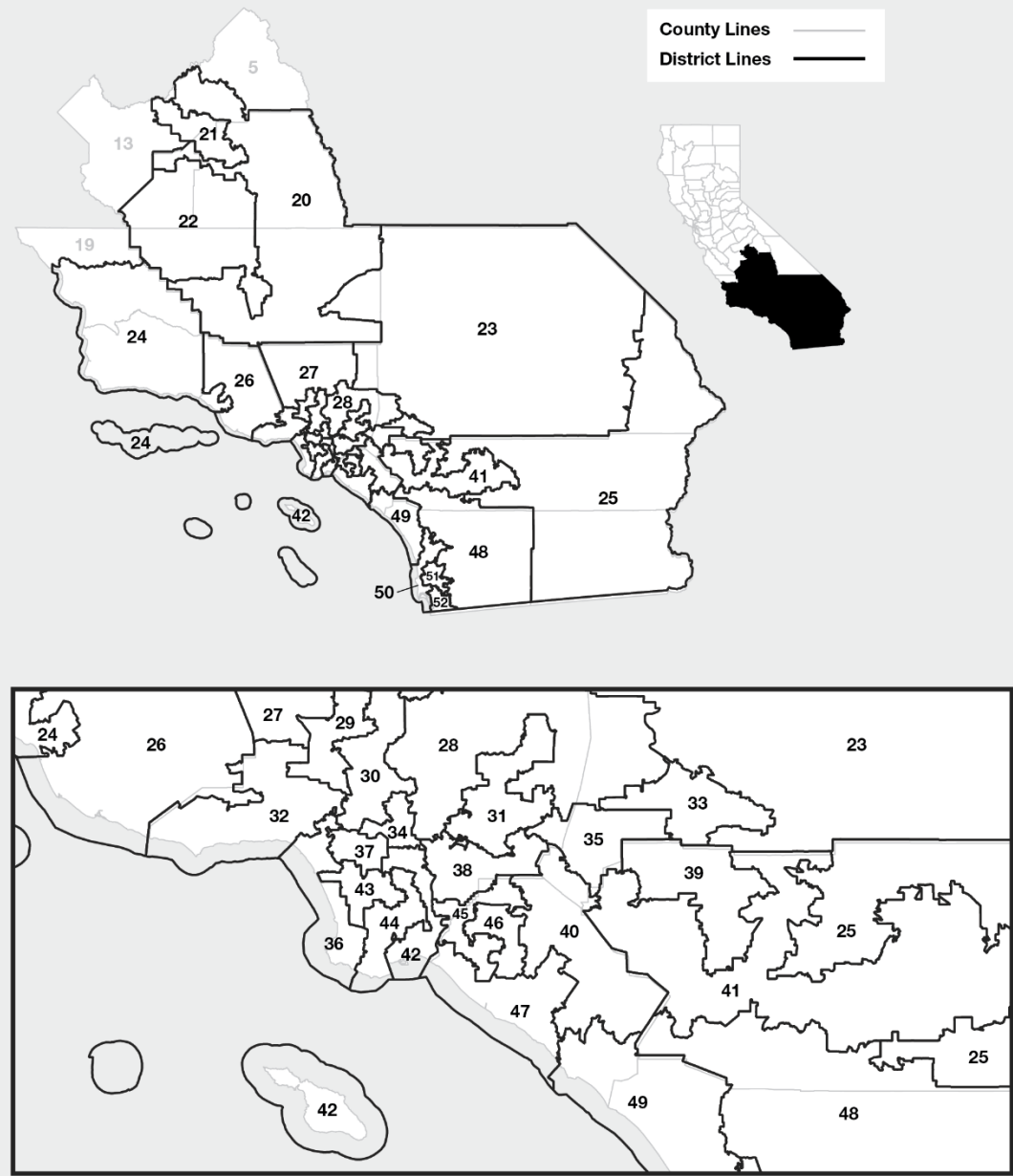


Note: Map reflects data posted to the California Legislature elections committees' (Assembly Elections Committee and Senate Elections and Constitutional Amendments Committee) websites.

November 4, 2025 Ballot

Figure 5

Current Southern Congressional Districts

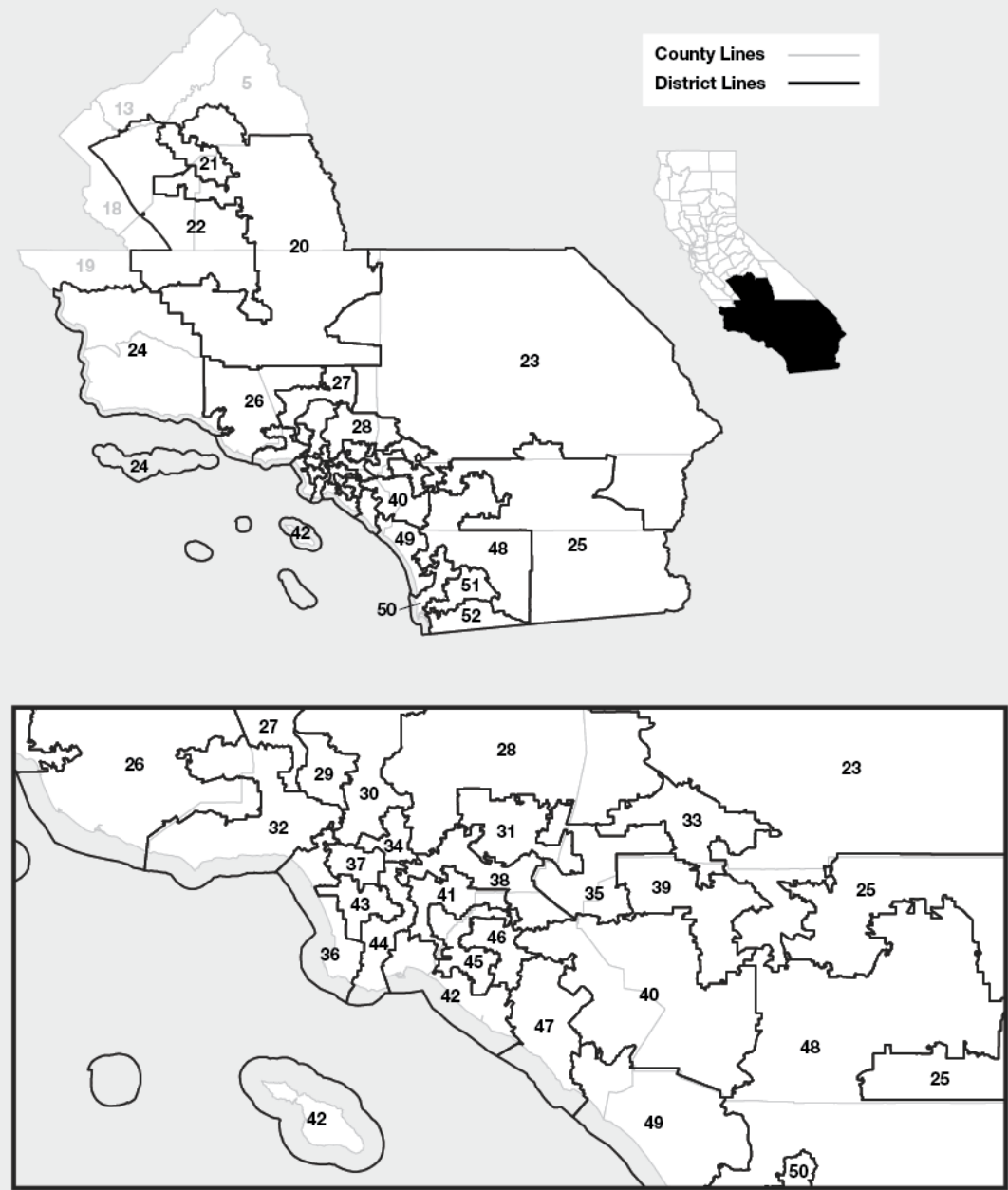


Note: Map reflects data posted to the California Citizens Redistricting Commission website.

November 4, 2025 Ballot

Figure 6

Proposed Southern Congressional Districts



Note: Map reflects data posted to the California Legislature elections committees' (Assembly Elections Committee and Senate Elections and Constitutional Amendments Committee) websites.

November 4, 2025 Ballot

YES/NO STATEMENT

A **YES** vote on this measure means: The state would use new, legislatively drawn congressional district maps starting in 2026. California's new maps would be used until the California Citizens Redistricting Commission draws new maps following the 2030 U.S. Census.

A **NO** vote on this measure means: Current congressional district maps drawn by the California Citizens Redistricting Commission (Commission) would continue to be used in California until the Commission draws new maps following the 2030 U.S. Census.

SUMMARY OF LEGISLATIVE ANALYST'S ESTIMATE OF NET STATE AND LOCAL GOVERNMENT FISCAL IMPACT

- One-time costs to counties of up to a few million dollars statewide. County costs would be to update election materials to reflect new congressional district maps.

BALLOT LABEL

Fiscal Impact: One-time costs to counties of up to a few million dollars statewide to update election materials to reflect new congressional district maps.