



Comprehensive Operational Analysis Final Network Plan

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



FEBRUARY 2022

Table of Contents

1 Introduction.....	3	5 Existing vs. Proposed Service by Area	31
Why does MST’s network of bus lines need a redesign?	4	Salinas – Existing Service	32
The Challenge of Planning a Good Transit Network in Monterey County.....	9	Salinas – Medium Scenario.....	33
2 Key Choices in Redesigning the Network.....	12	Salinas – How many people would be near service?	34
Ridership vs. Coverage	13	Salinas – Low, Medium and High Scenarios	35
Local vs. Regional Service	14	Monterey Bay & Peninsula – Existing	36
Equality vs. Equity	15	Monterey Bay & Peninsula – Medium Scenario	37
3 How Public Input Shaped This Plan.....	16	Monterey Bay & Peninsula – How many people would be near service?	38
Phase 1: Understanding the Community’s Values and Priorities	17	Monterey Bay & Peninsula – Low, Medium and High Scenarios	39
Phase 2: Input Received on the Draft Plan	19	Regional Service – Existing	40
How Comments on the Draft Plan Were Incorporated in the Final Plan	20	Regional Service – Medium Scenario	41
4 Key Elements of the Plan.....	21	Regional Service – Low, Medium and High Scenarios.....	42
Policy Direction	22	Service Frequency by MST Line and Time of Day – Existing.....	43
Timeline and Funding Scenarios	23	Service Frequency by MST Line and Time of Day – Medium Scenario.....	44
Existing vs. Future Network Maps – Existing	24	Service Frequency by MST Line and Time of Day – Low Scenario	45
Existing vs. Future Network Maps – Medium Scenario	25	Service Frequency by MST Line and Time of Day – High Scenario	46
Existing vs. Future Network Maps – Low Scenario	26	6 How would this plan make transit more useful?.....	47
Existing vs. Future Network Maps – High Scenario.....	27	More people would be near service, and service would be more frequent.	48
Higher frequencies and more consistent hours.....	28	Most transit trips would take far less time.	49
Timed transfers for faster local and regional travel.	29	Change in Average Travel Times Between 15 Key Locations	50
Service that is more direct, and less specialized.	30	Trip Examples - Salinas and Boronda	51
		Trip Examples - Salinas to Monterey	53
		Trip Examples - Monterey Bay & Peninsula	54
		Trip Examples - Regional.....	57
		7 Next Steps	60
		Considerations for Network Implementation	61
		Project Timeline	62

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.

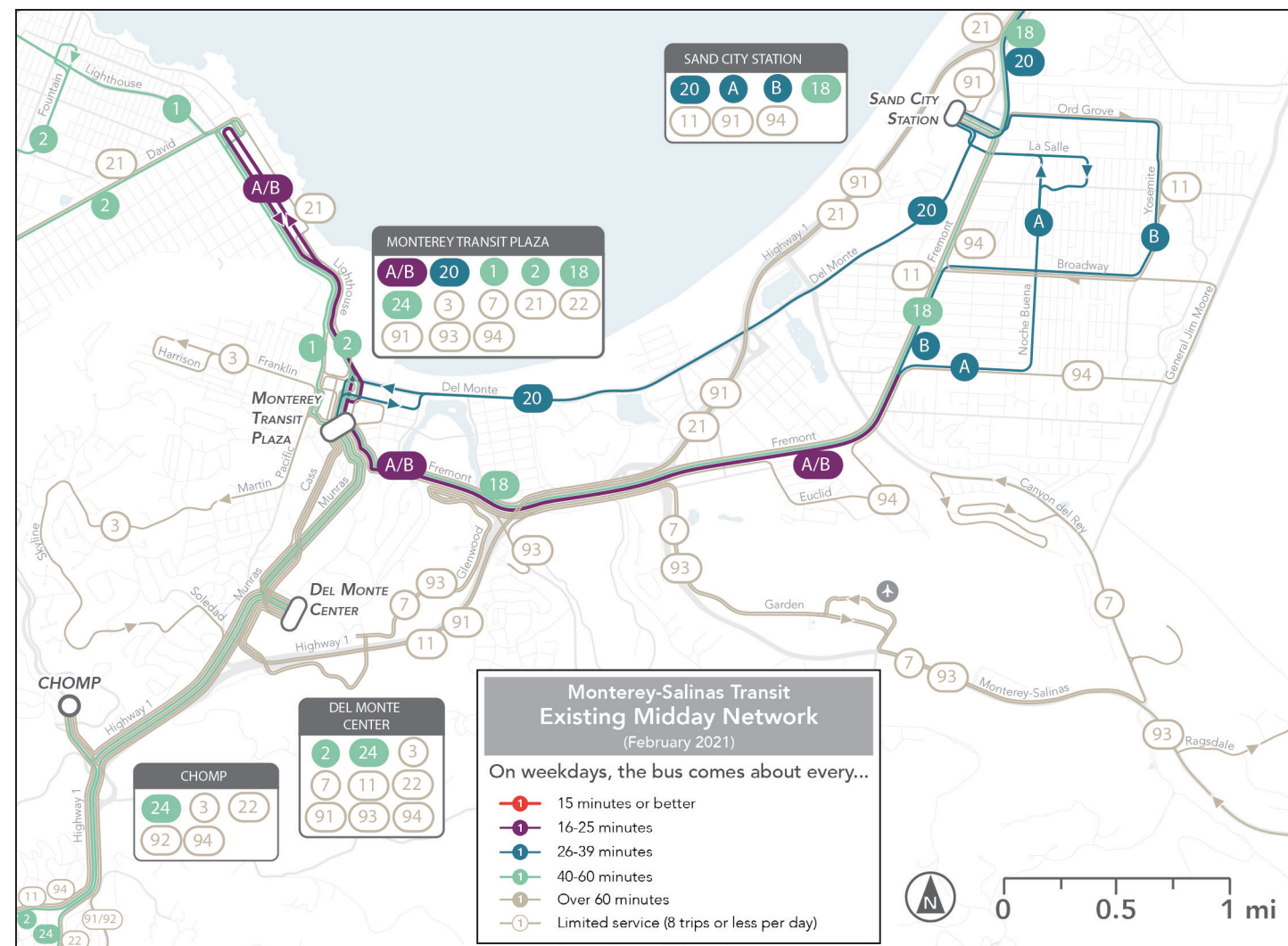


Figure 1: Map of MST's fixed-route network in Monterey and Seaside, with lines color-coded by frequency.

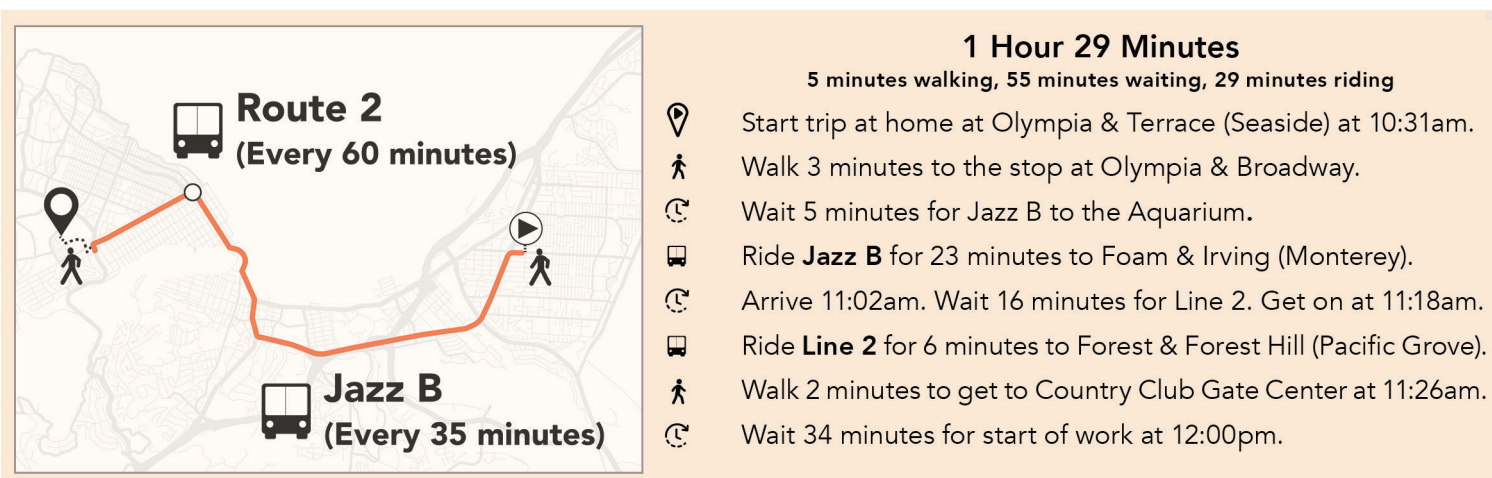
A number of MST lines operate just a few times per day, connecting small numbers of people to specific buildings or facilities.

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:

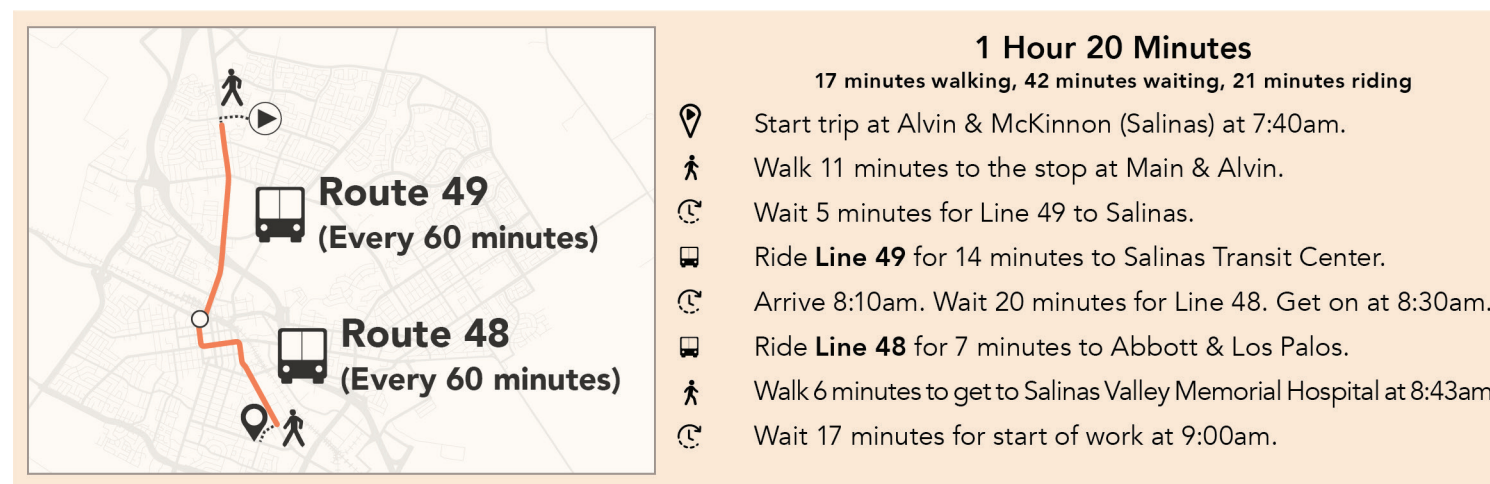


Notice that this trip includes a total of only 29 minutes actually riding the bus, and that *you would spend more time waiting at your destination than you would getting there.*

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:



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, hospitality 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.**

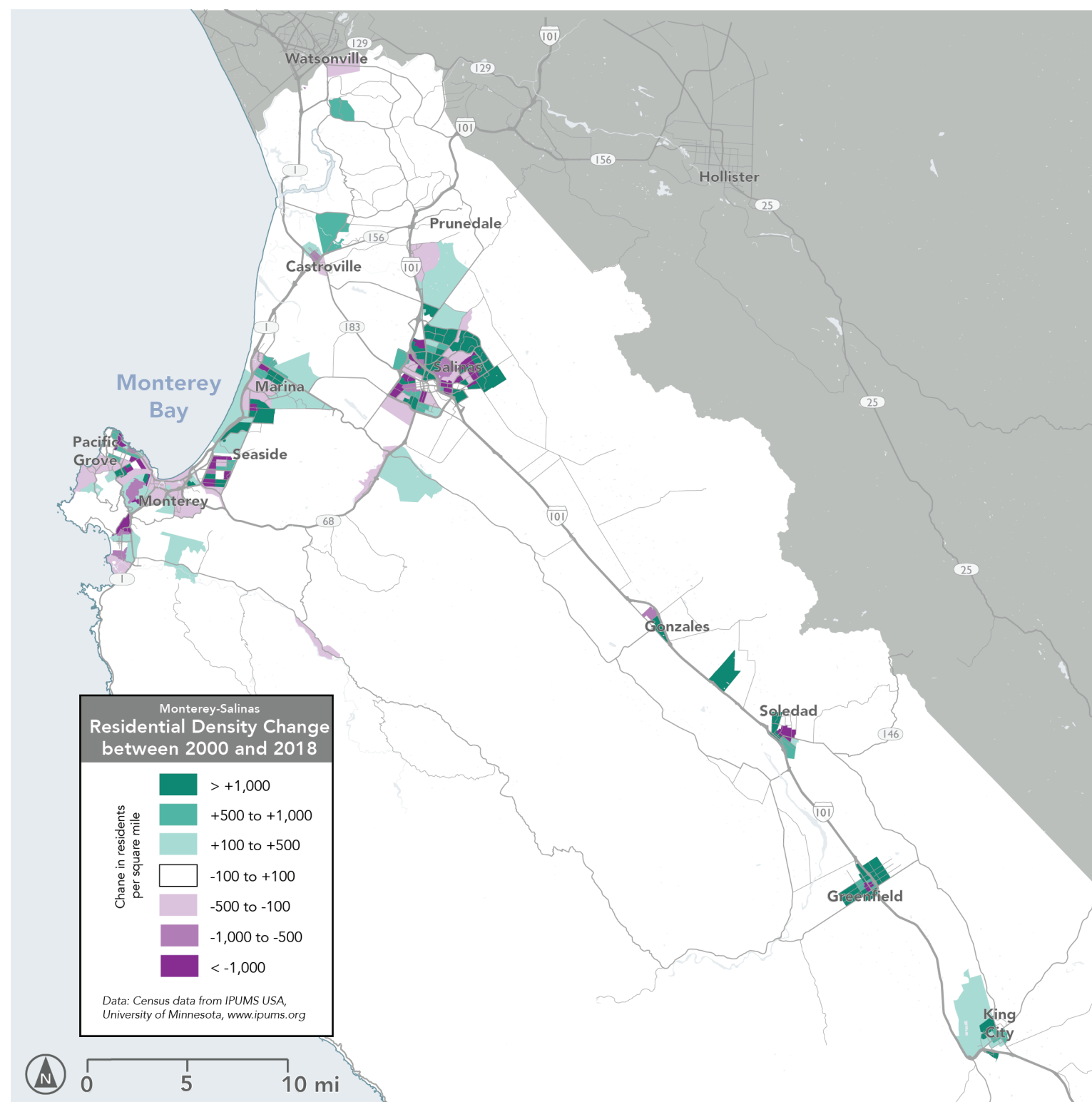


Figure 2: Regional map of change in population density. Growth has largely been concentrated in the outer neighborhoods of Salinas and in the cities of Gonzales, Soledad, Greenfield and King City.

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.

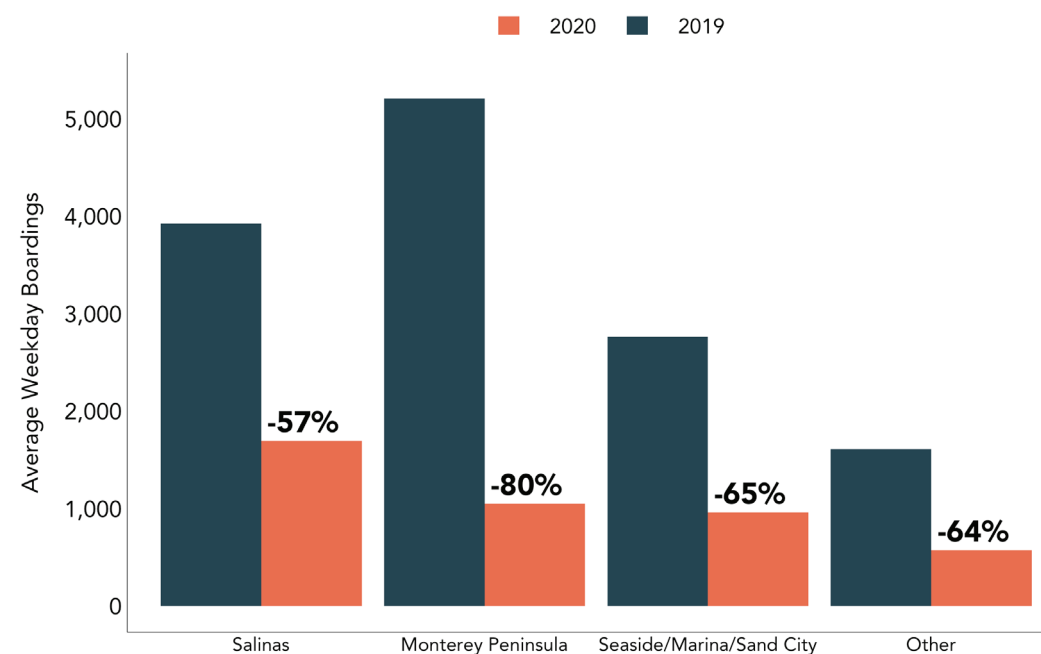
As schools, offices, and many hospitality businesses either closed or significantly reduced their operations, rush hour ridership came down to midday levels. Figure 6 shows that MST experienced about the same level of ridership from 7:00 AM to 6:00 PM, and no longer provided additional service at peak 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.

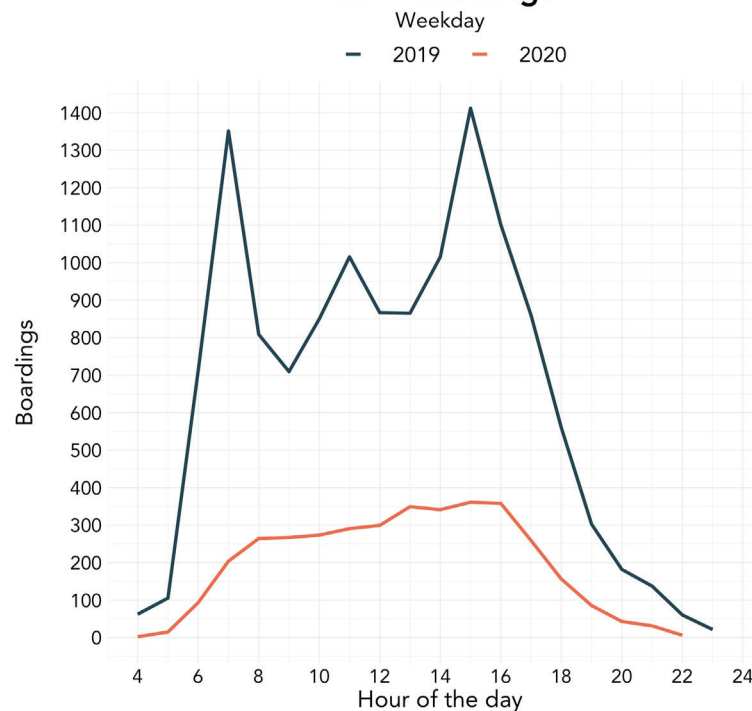
MST Weekday Ridership by Area 2019 vs. 2020



Source: MST ridership data from October 2019 and October 2020

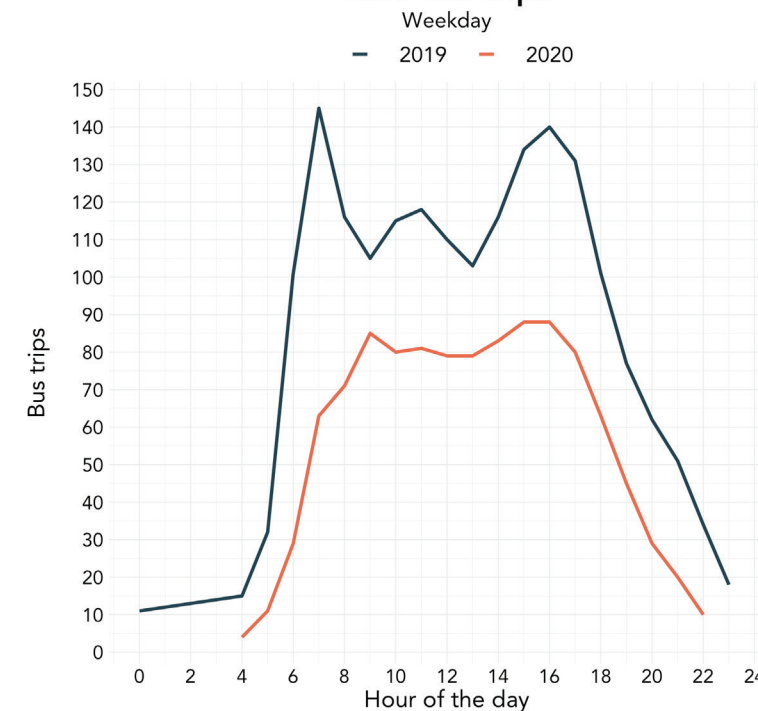
Figure 5: How MST ridership changed from Fall 2019 to Fall 2020, by area of Monterey County.

MST Boardings



Source: MST boardings data and GTFS from October 2020

MST Bus trips



Source: MST boardings data and GTFS from October 2020

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.

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

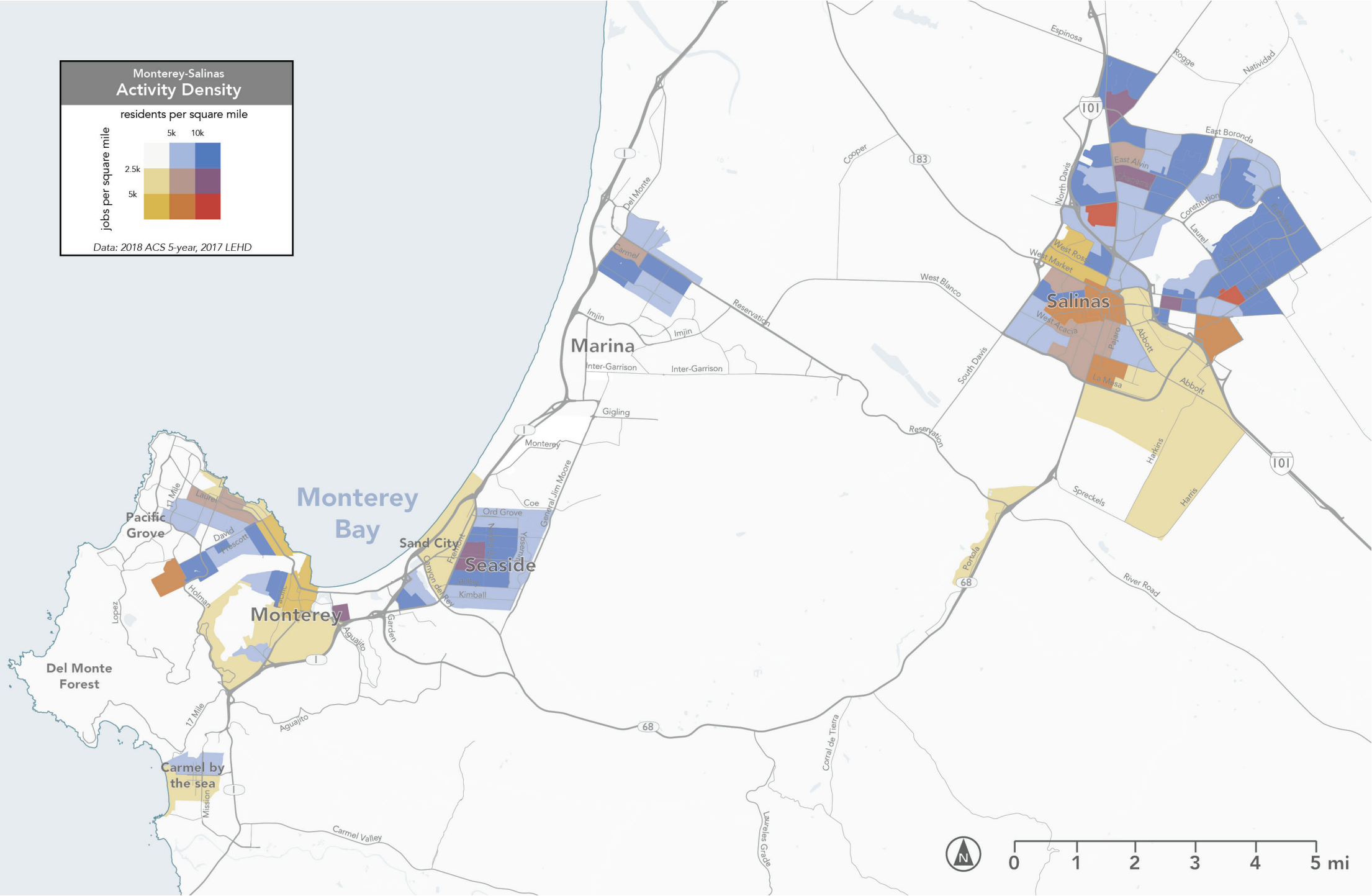


Figure 7: Map of combined population and job density in the greater Monterey and Salinas areas.

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).

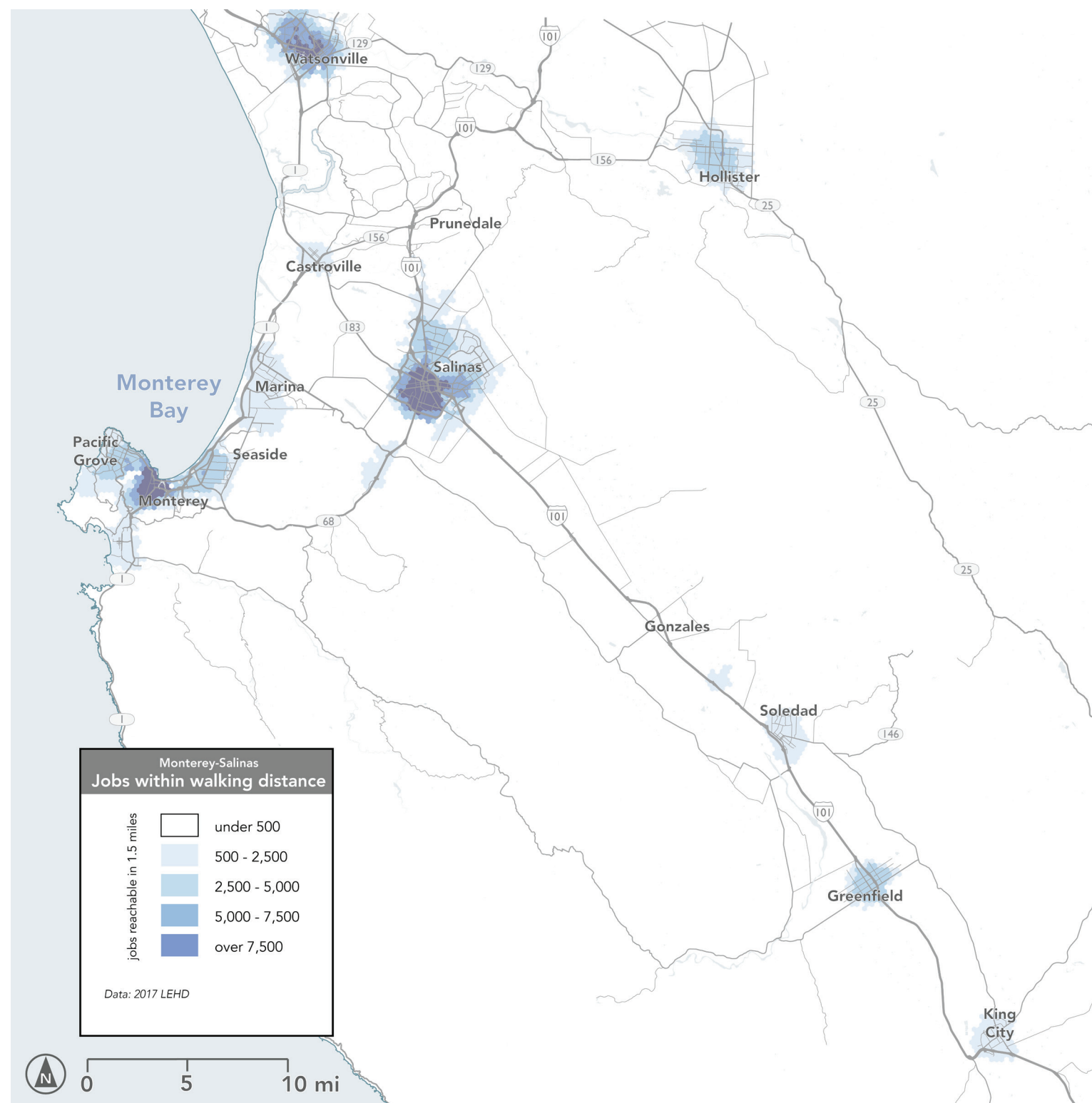


Figure 8: Regional map showing the number of jobs within walking distance, defined as 1.5 miles, or a 30 minute walk by an able-bodied adult.

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.

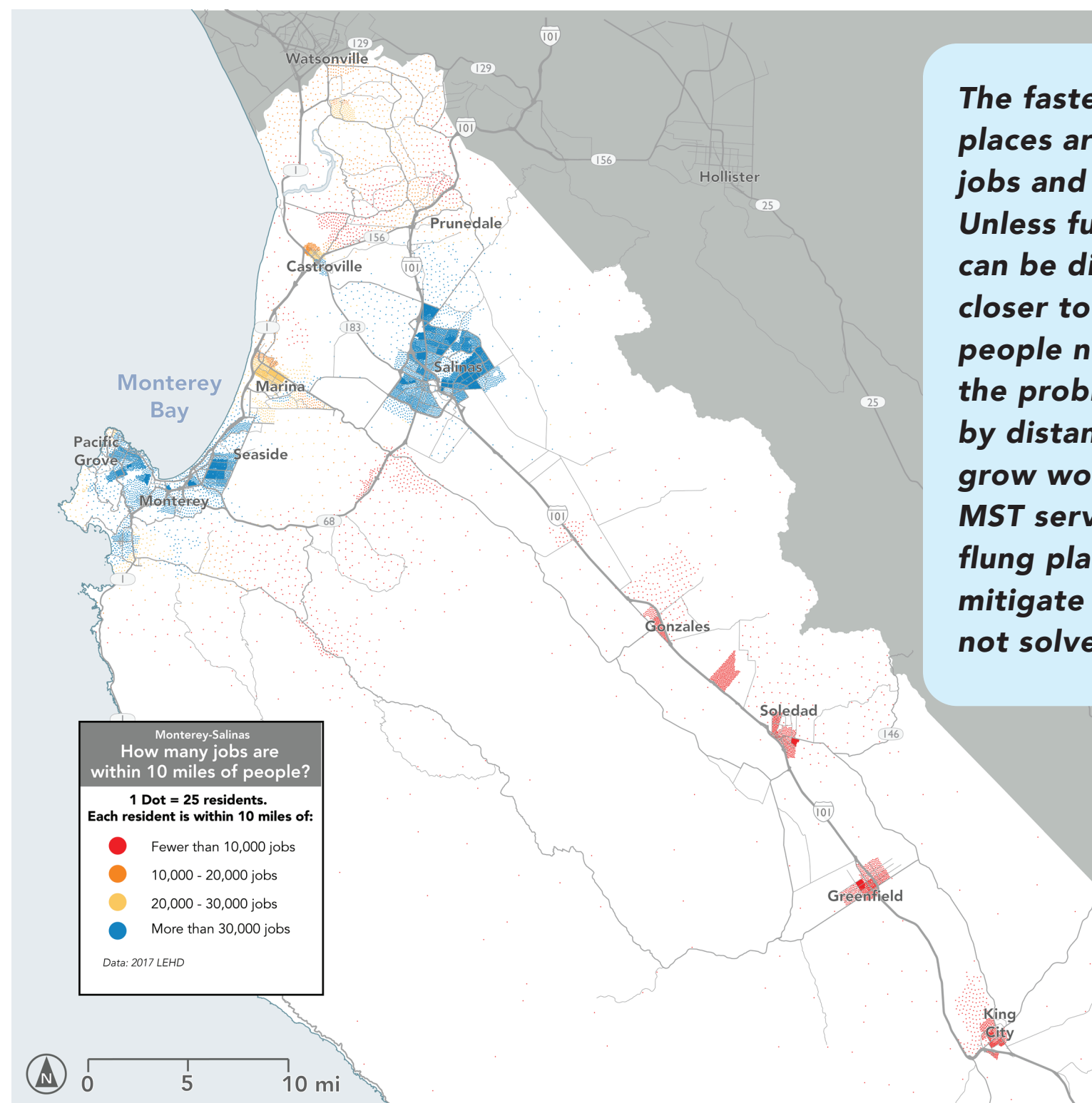


Figure 9: Regional map showing the number of people living in locations that are near many jobs (in blue) vs. in locations that are near very few jobs (in red).

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.

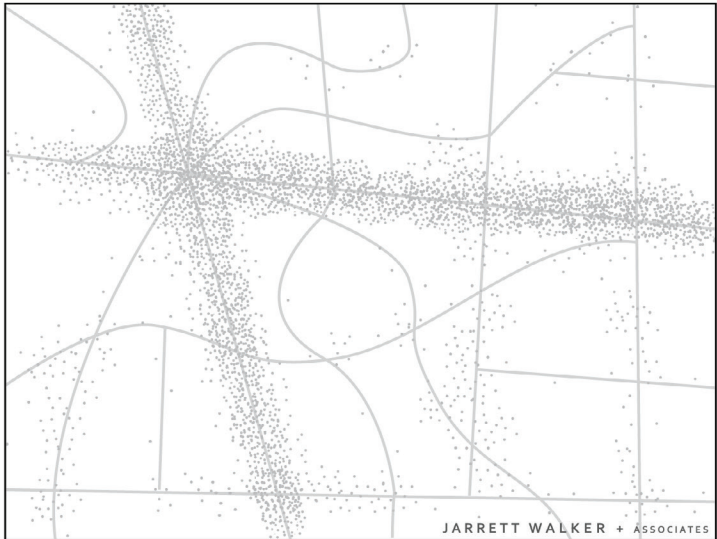
Prioritizing coverage means buses serve as many places as possible, but because they are spread out they don’t come often (once an hour or less) **and aren’t convenient for many trips.**

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?

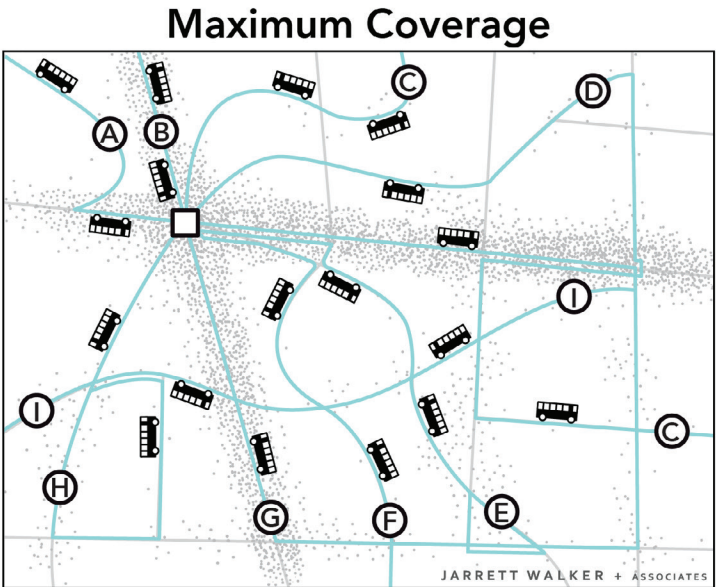
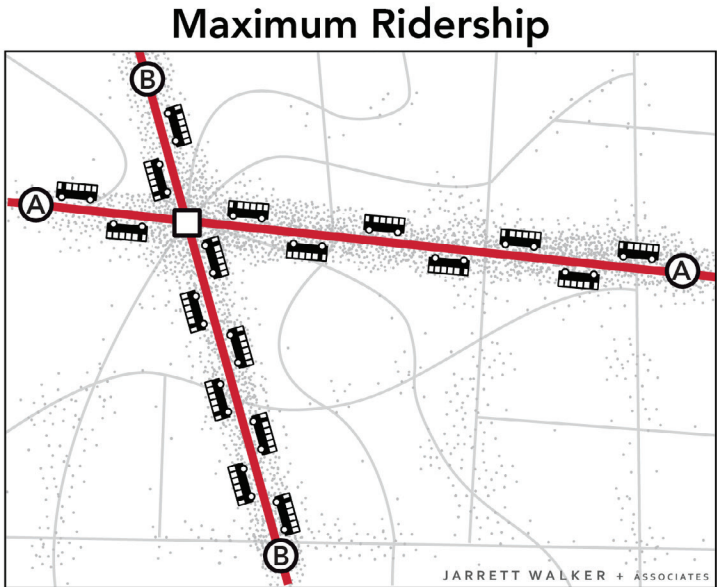


Figure 10: Comparing an imaginary town where transit is run with the goal of maximizing frequency and ridership (left) vs. the same town where transit is run with the goal of providing a little service near everyone (right). The maximum ridership (left) network has very frequent service, but only on 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?

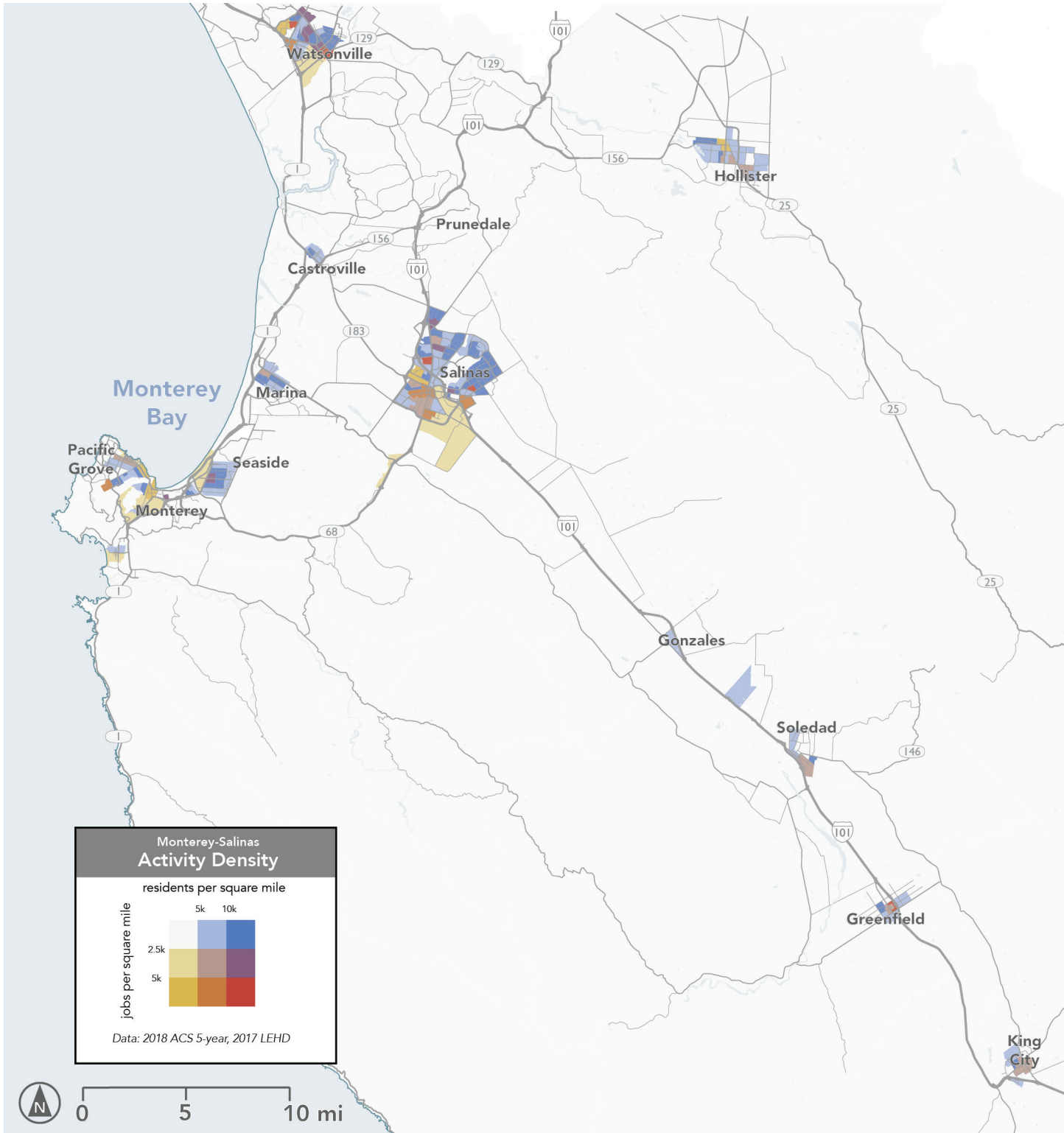


Figure 11: Regional map of combined population and job density.

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.

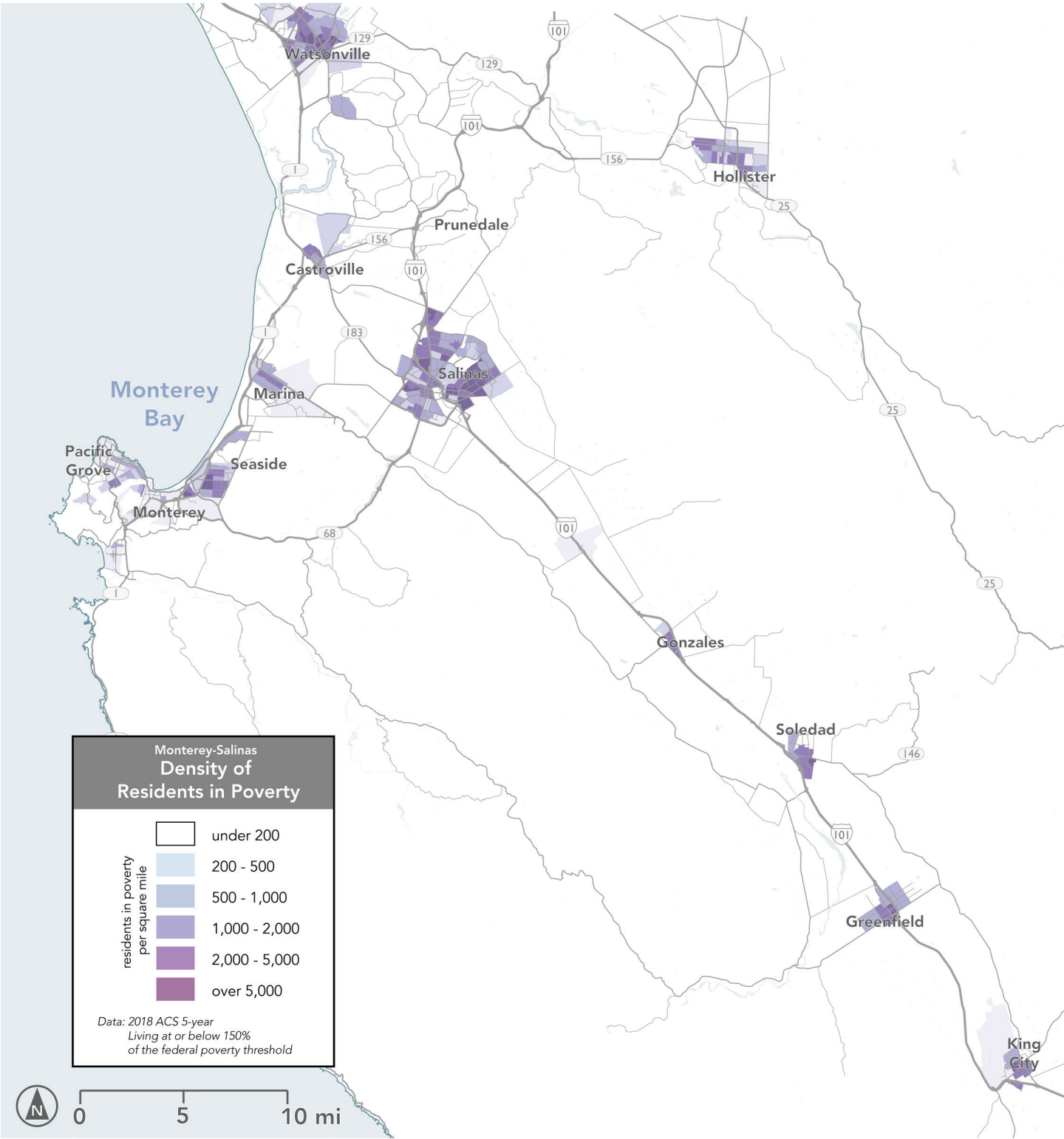


Figure 12: Regional map of the density of people living in households below 150% of the federal poverty line.

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....

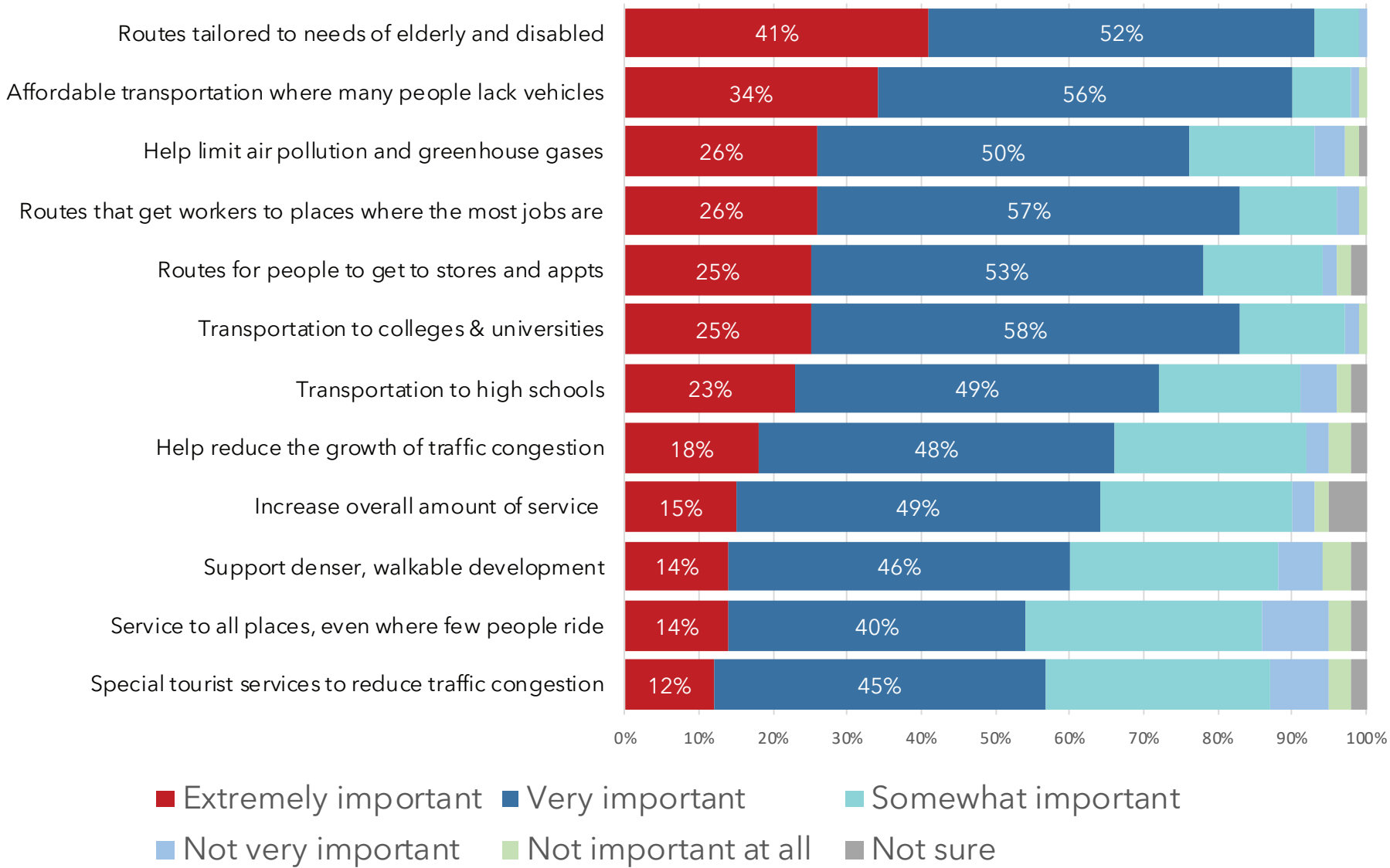


Figure 13: How Monterey County residents rated the importance of different possible priorities for MST transit service in a phone survey.

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...

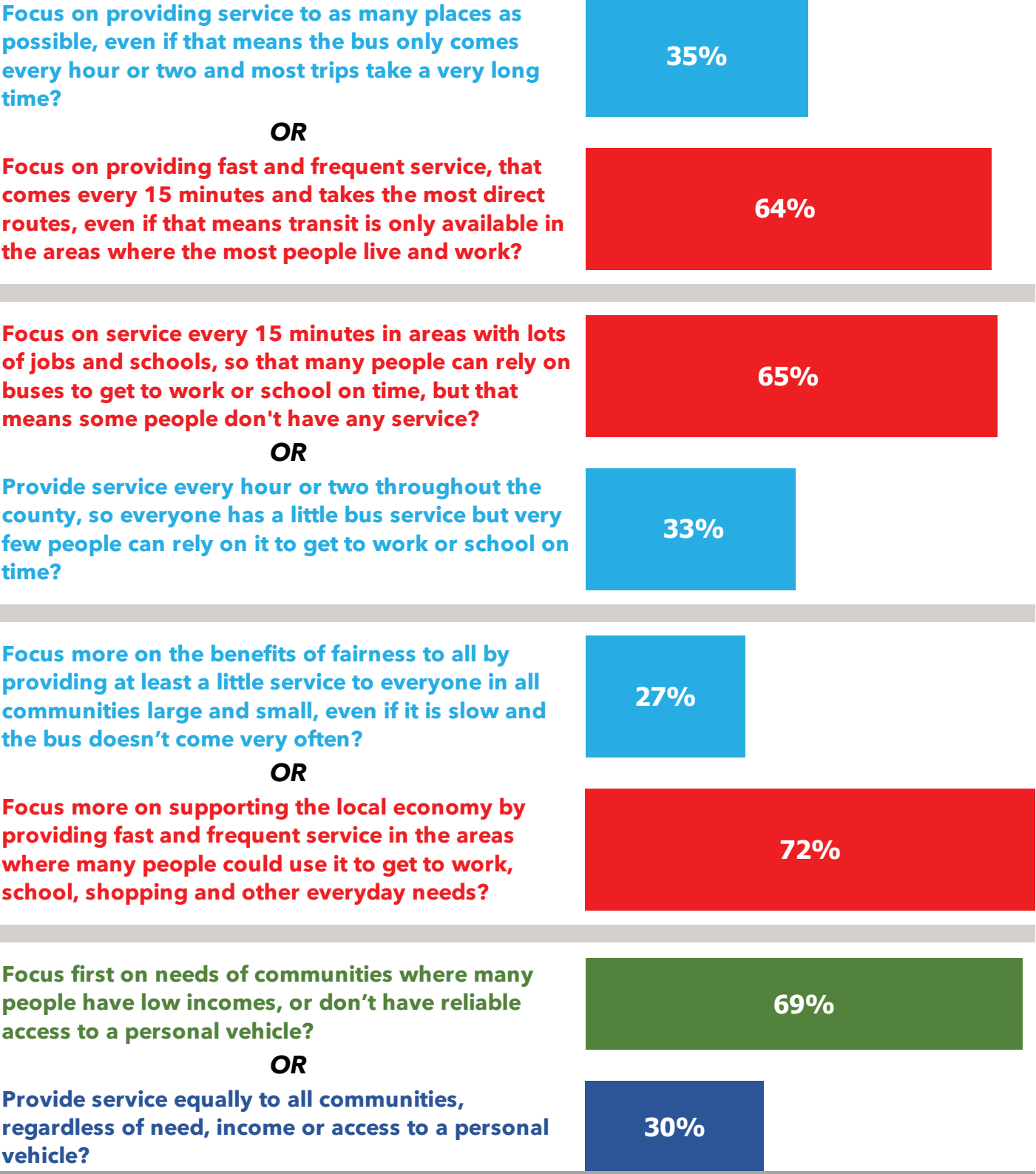


Figure 14: How Monterey County residents responded to key trade-offs in a phone survey.

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.

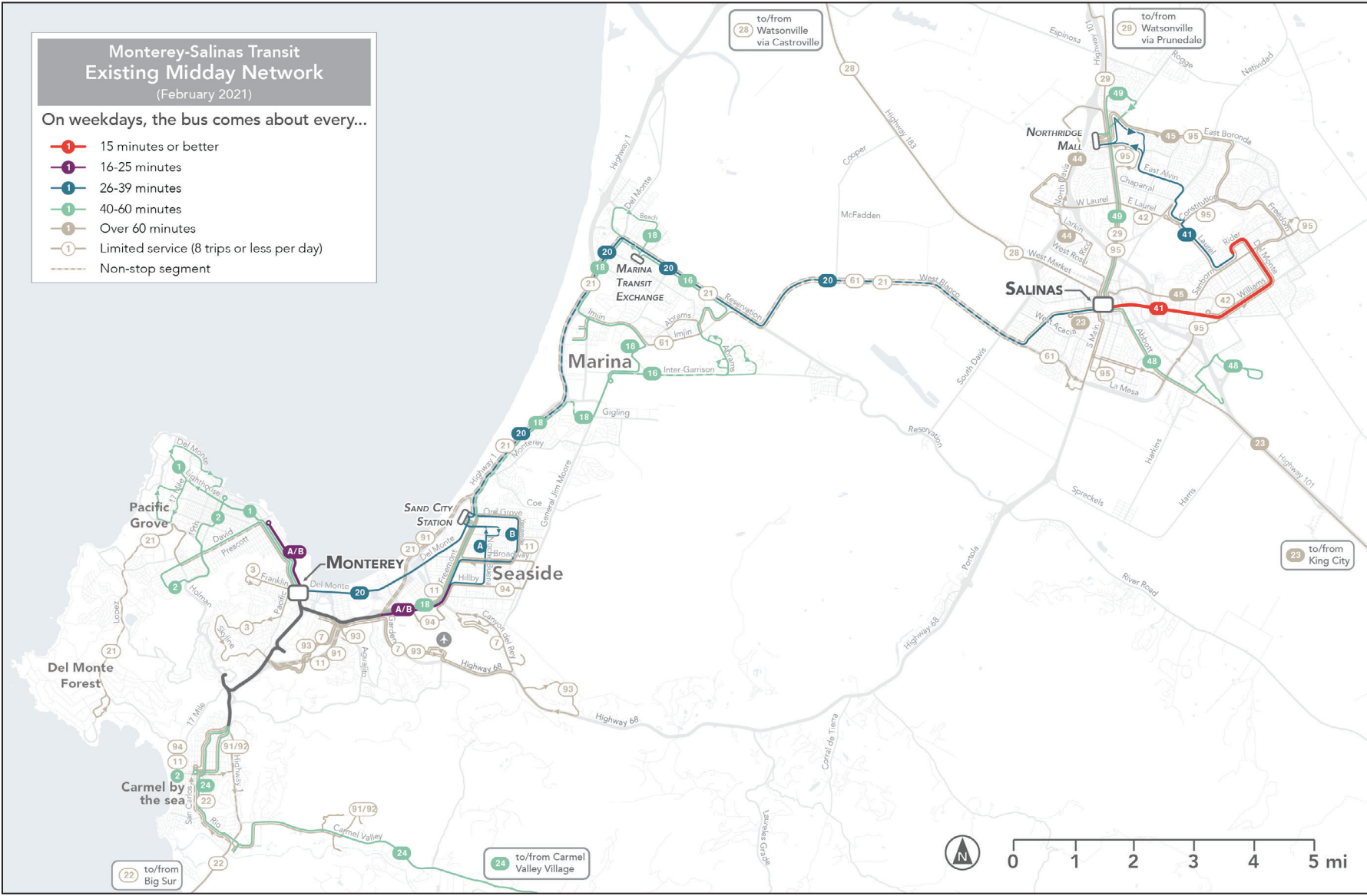


Figure 17: The existing transit network in the Monterey-Salinas area, with routes color-coded by midday frequency.

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.

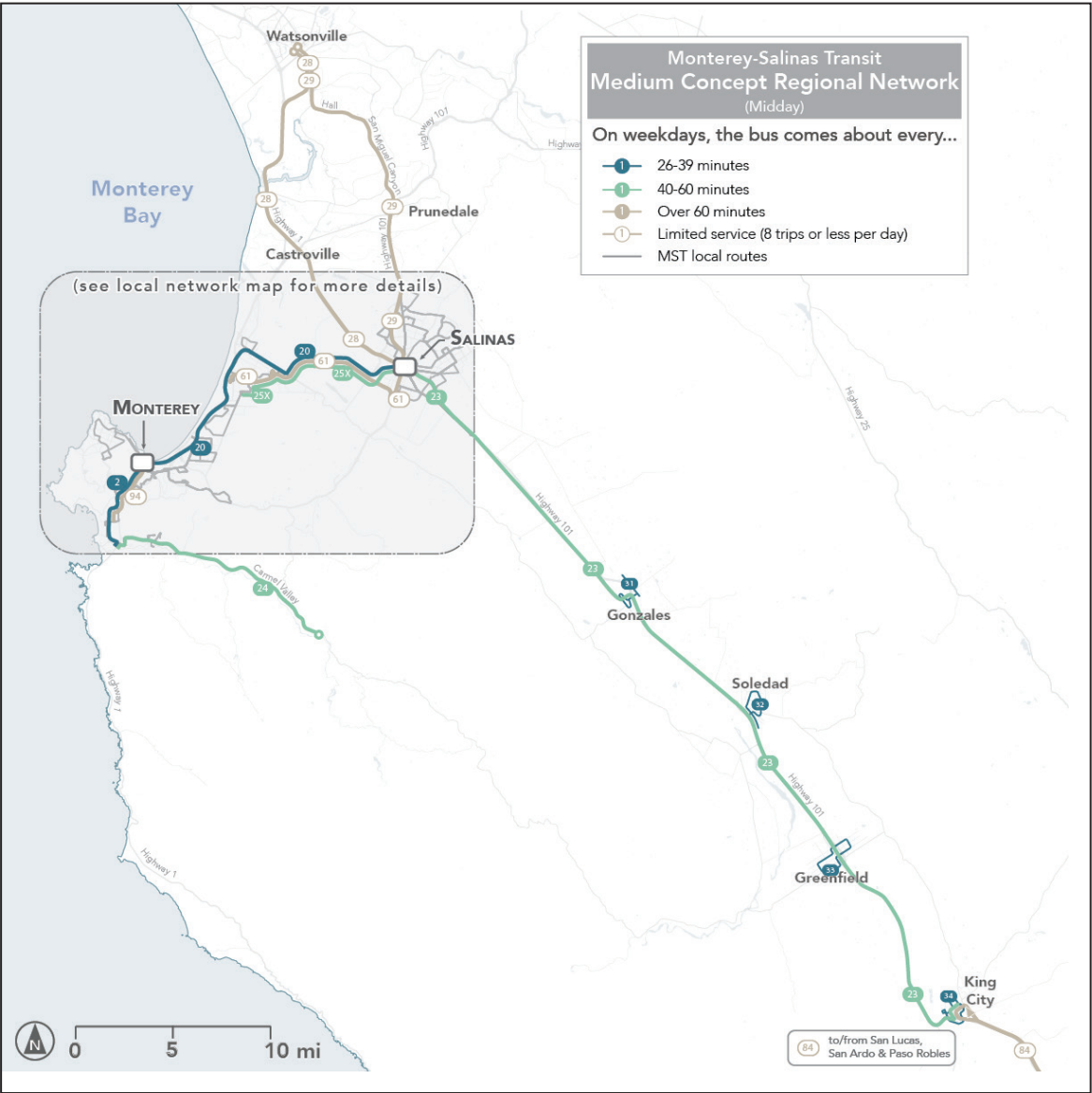


Figure 18: The Medium Scenario regional transit network with routes color-coded by midday frequency.

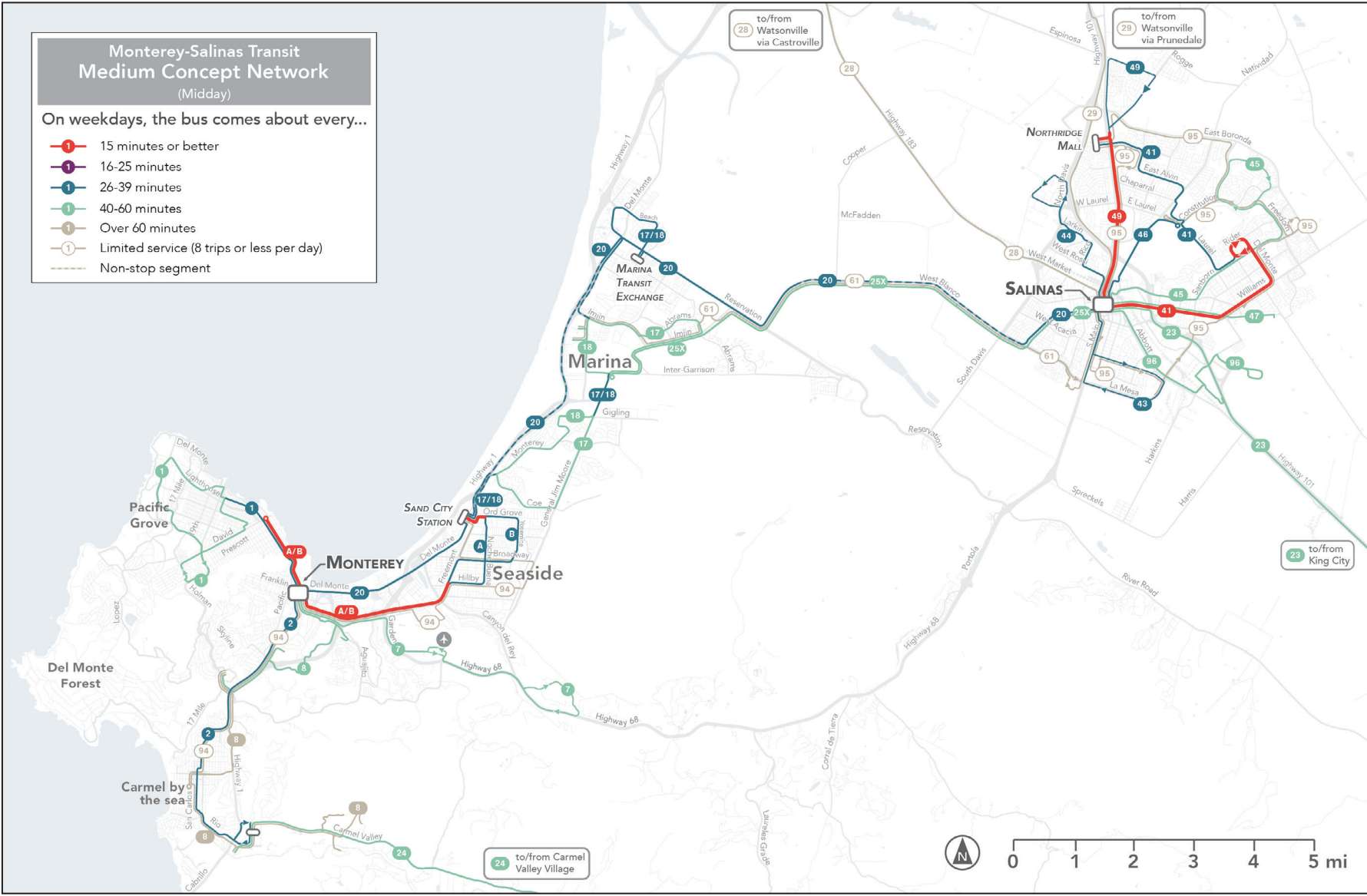


Figure 19: The Medium Scenario transit network in the Monterey-Salinas area, with routes color-coded by midday frequency.

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.

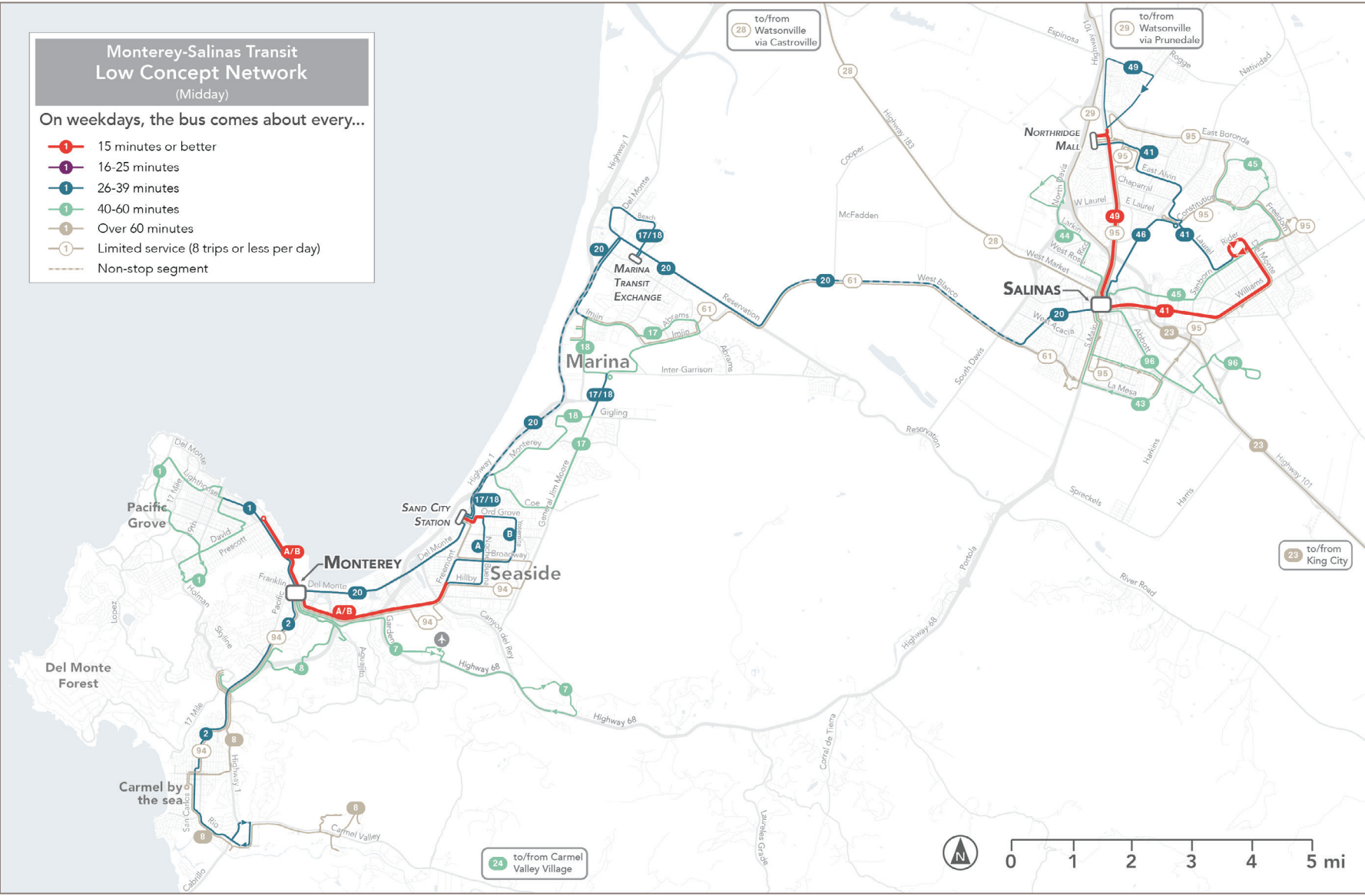


Figure 21: The Low Scenario transit network in the Monterey-Salinas area, with routes color-coded by midday frequency.

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.

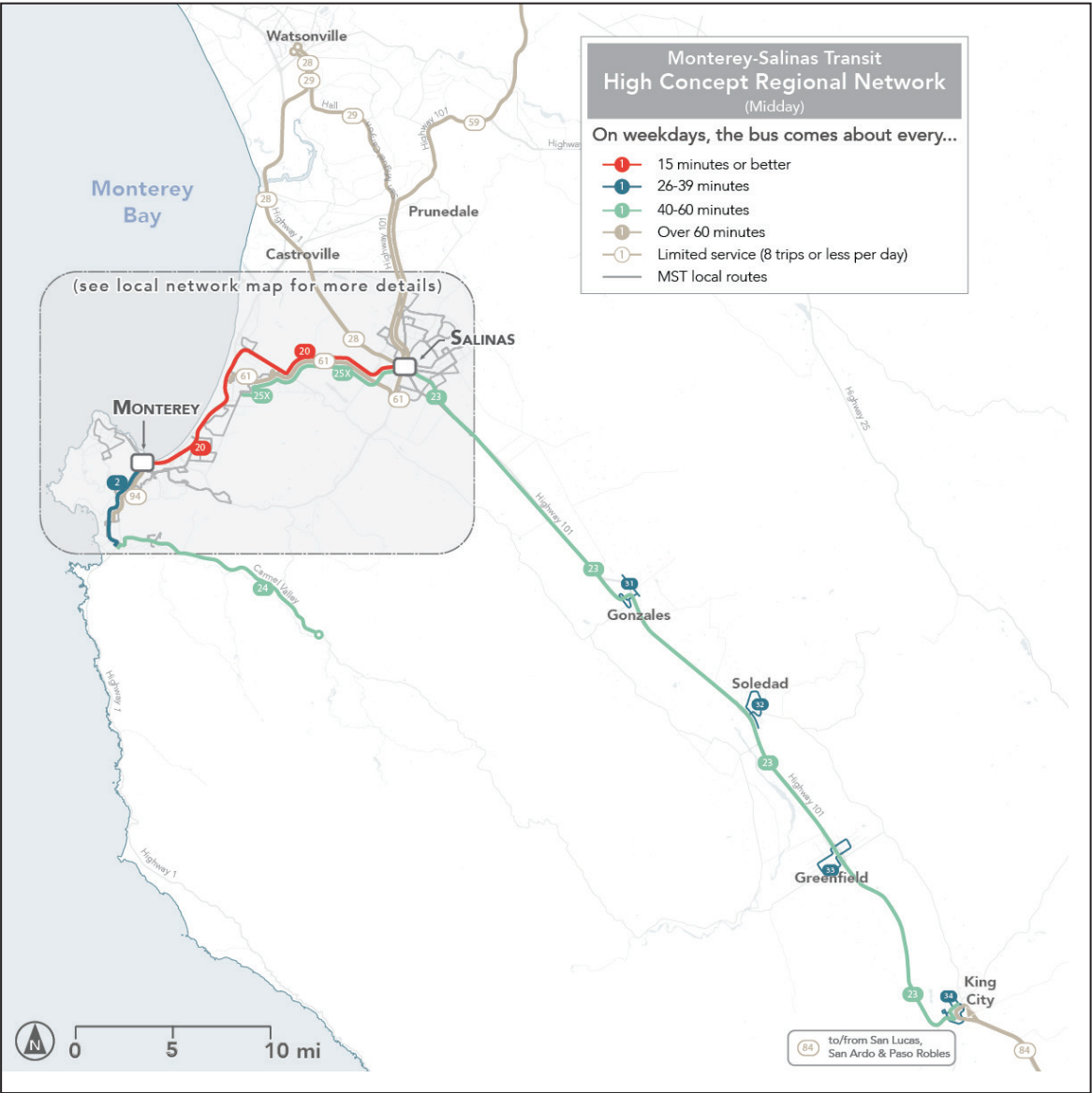


Figure 22: The High Scenario regional transit network with routes color-coded by midday frequency.

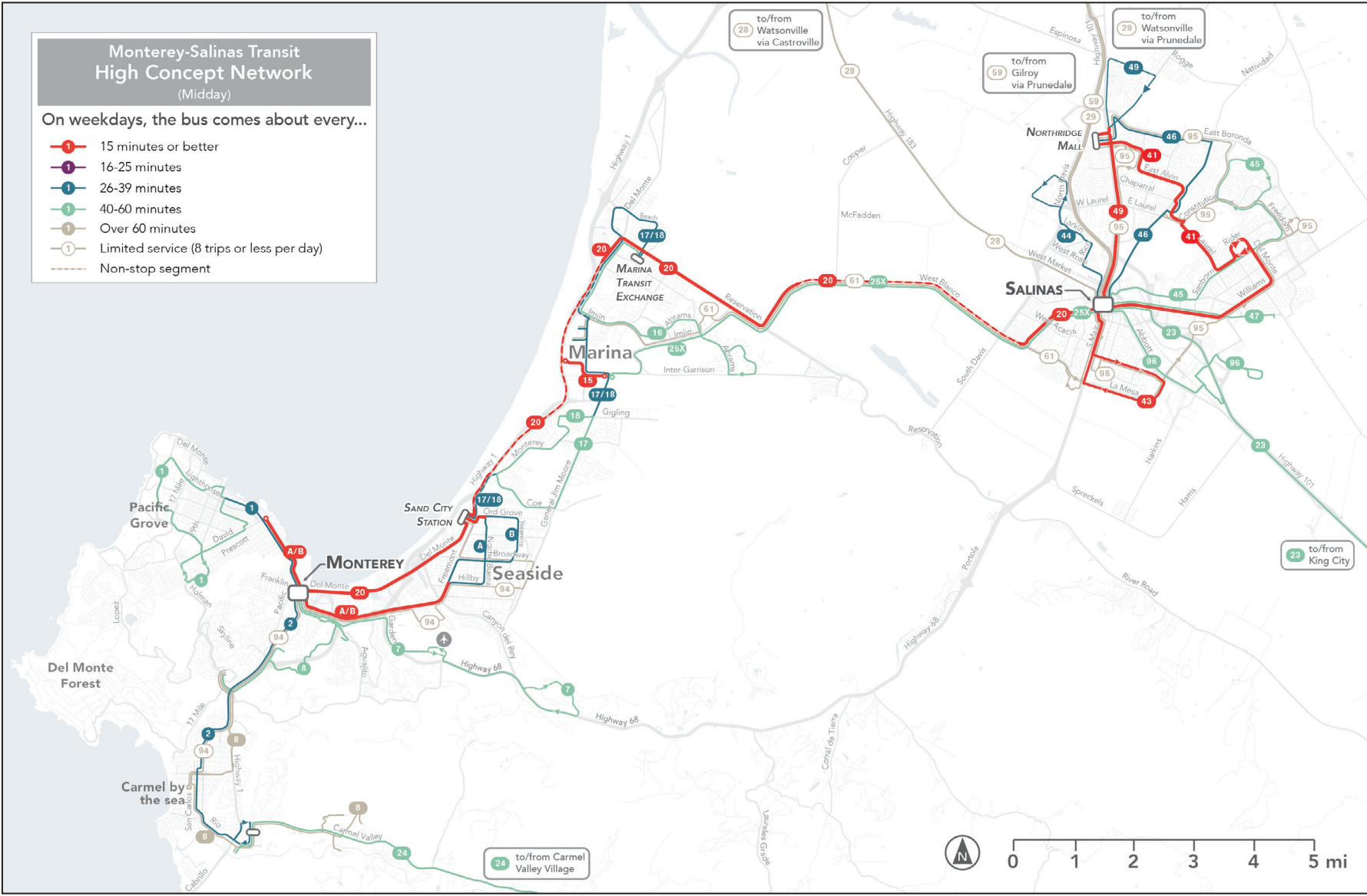


Figure 23: The High Scenario transit network in the Monterey-Salinas area, with routes color-coded by midday frequency.

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.

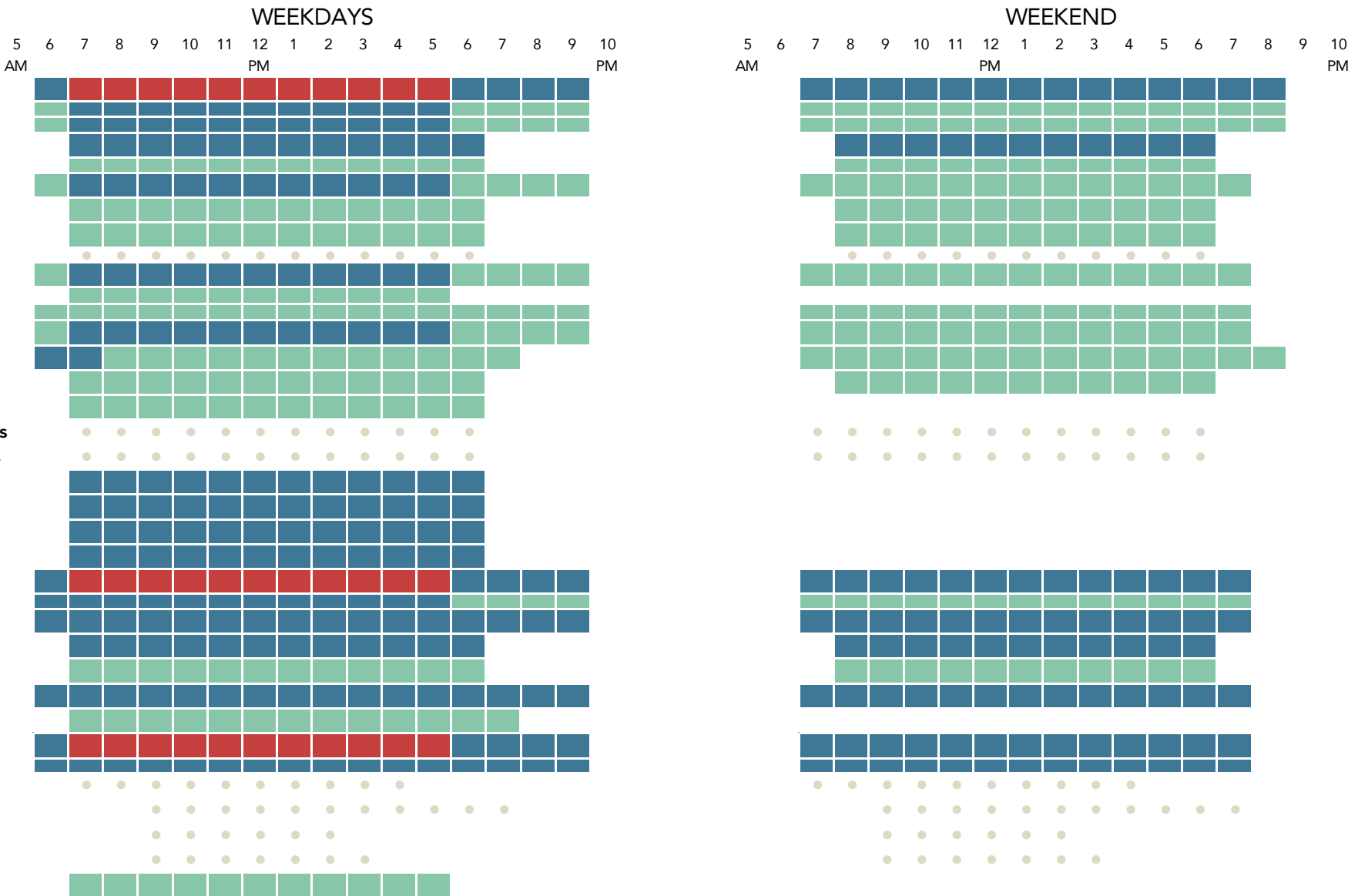
Most other lines (including most regional lines) would operate every 60 minutes or better, from 7 AM to 7 PM, seven days a week. Note that Line 23 (Salinas-King City) would have slightly longer hours, and that Lines 28 and 29 would each run every 120 minutes, but combine to service every 60 minutes between 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).

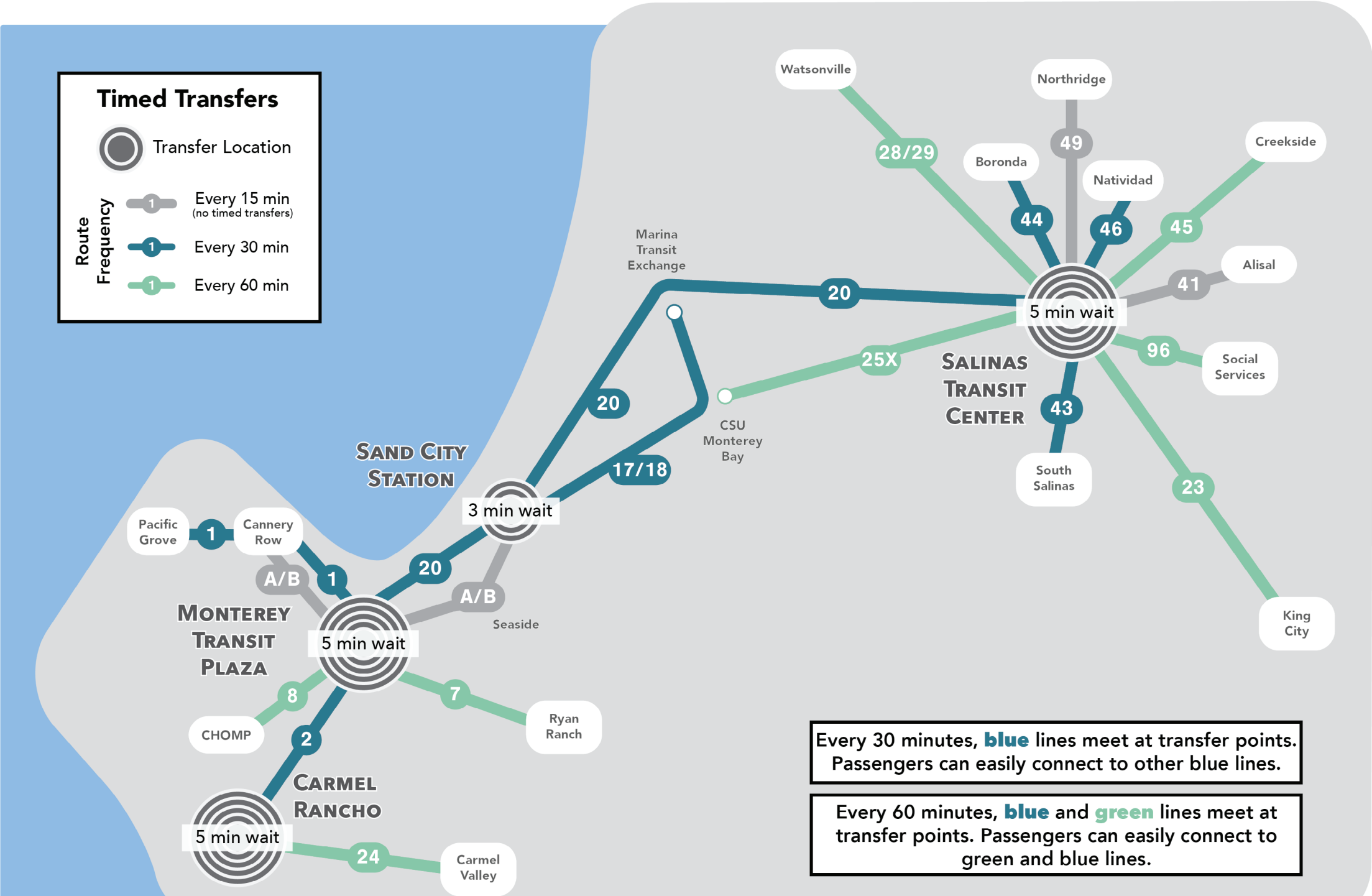


Figure 24: Diagram of the timed transfer system in the Medium Scenario.

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.

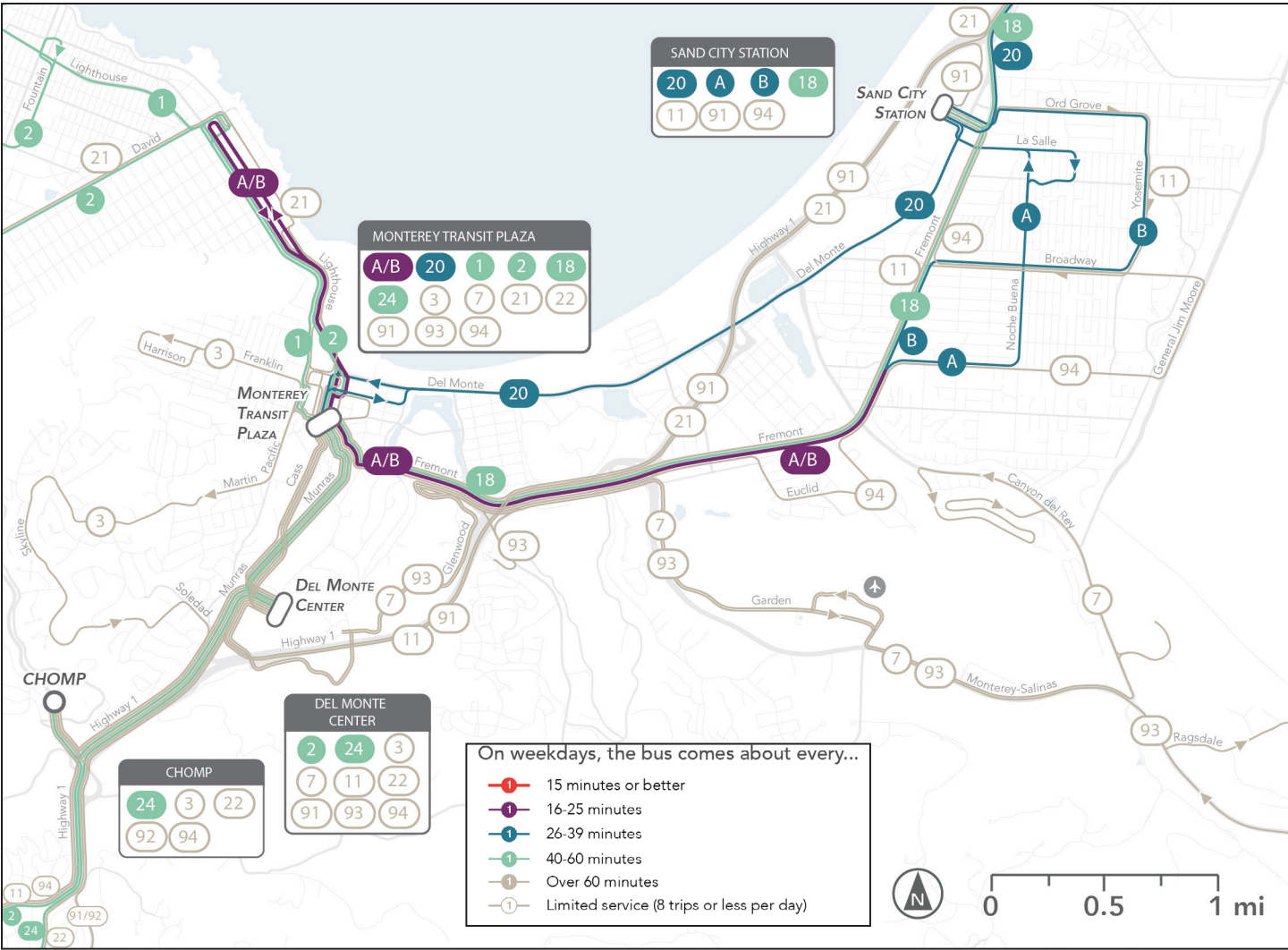


Figure 25: Existing MST bus lines in the core of the Seaside-Monterey area.

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.

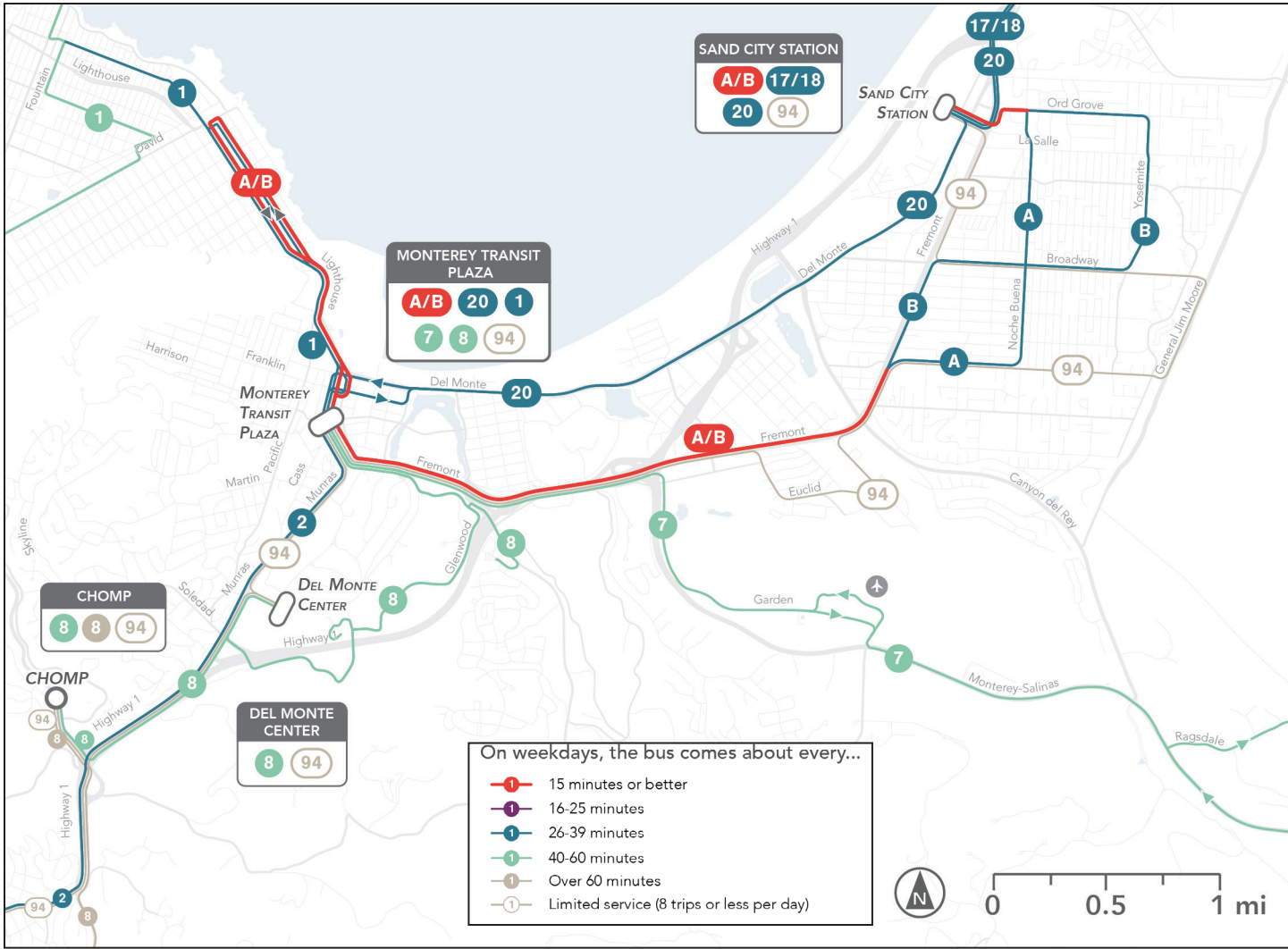


Figure 26: Proposed MST bus lines in the core of the Seaside-Monterey area in the Medium Scenario.

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.

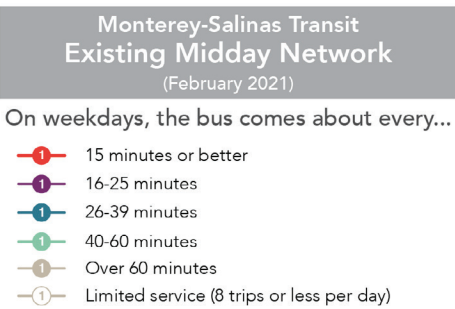
Services like Line 44 and Line 45 cover many outlying neighborhoods, but the bus only comes every 75 minutes, which makes them very difficult to use.

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).

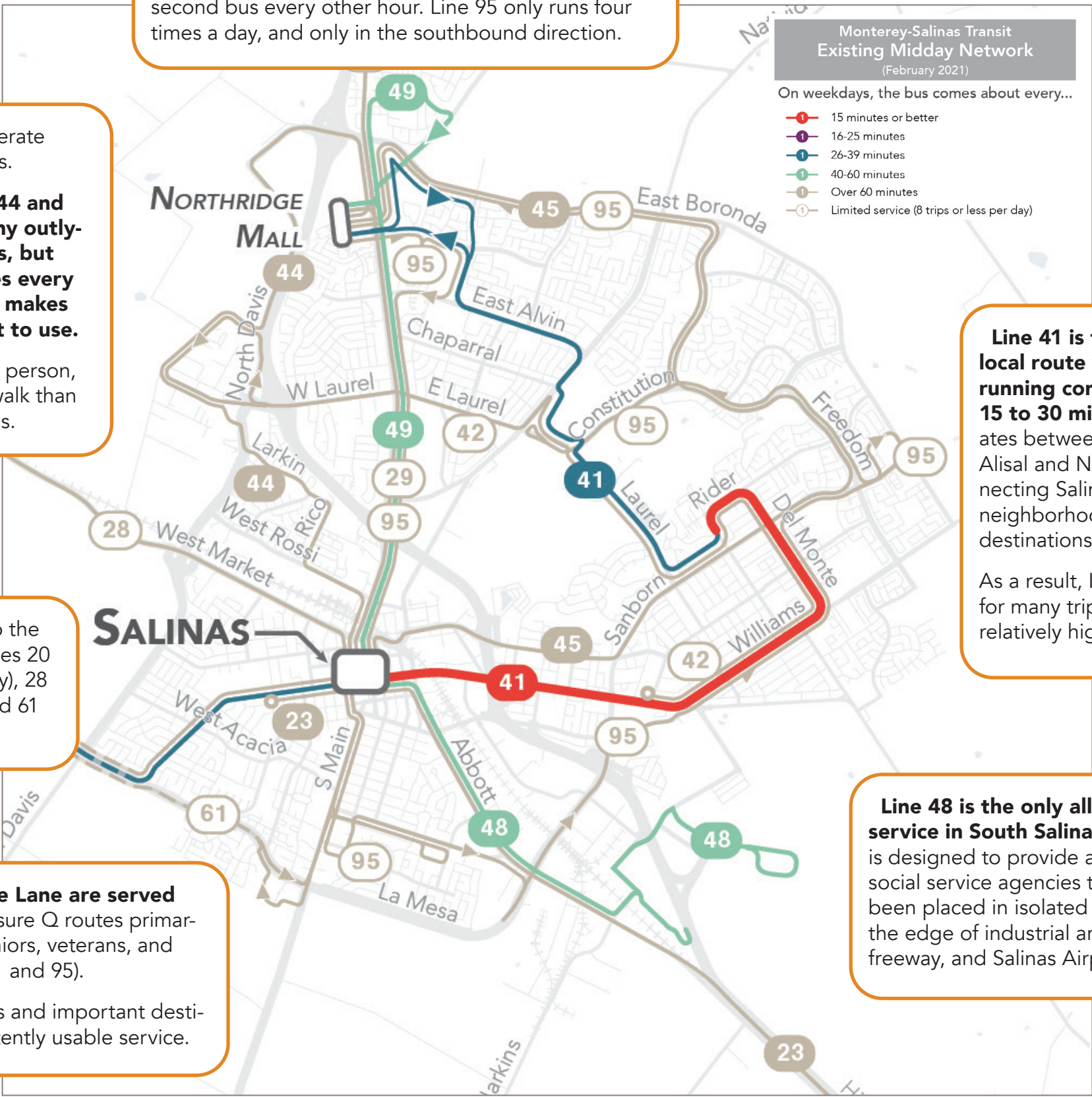
That leaves many jobs, residents and important destinations a long walk from consistently usable service.



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.

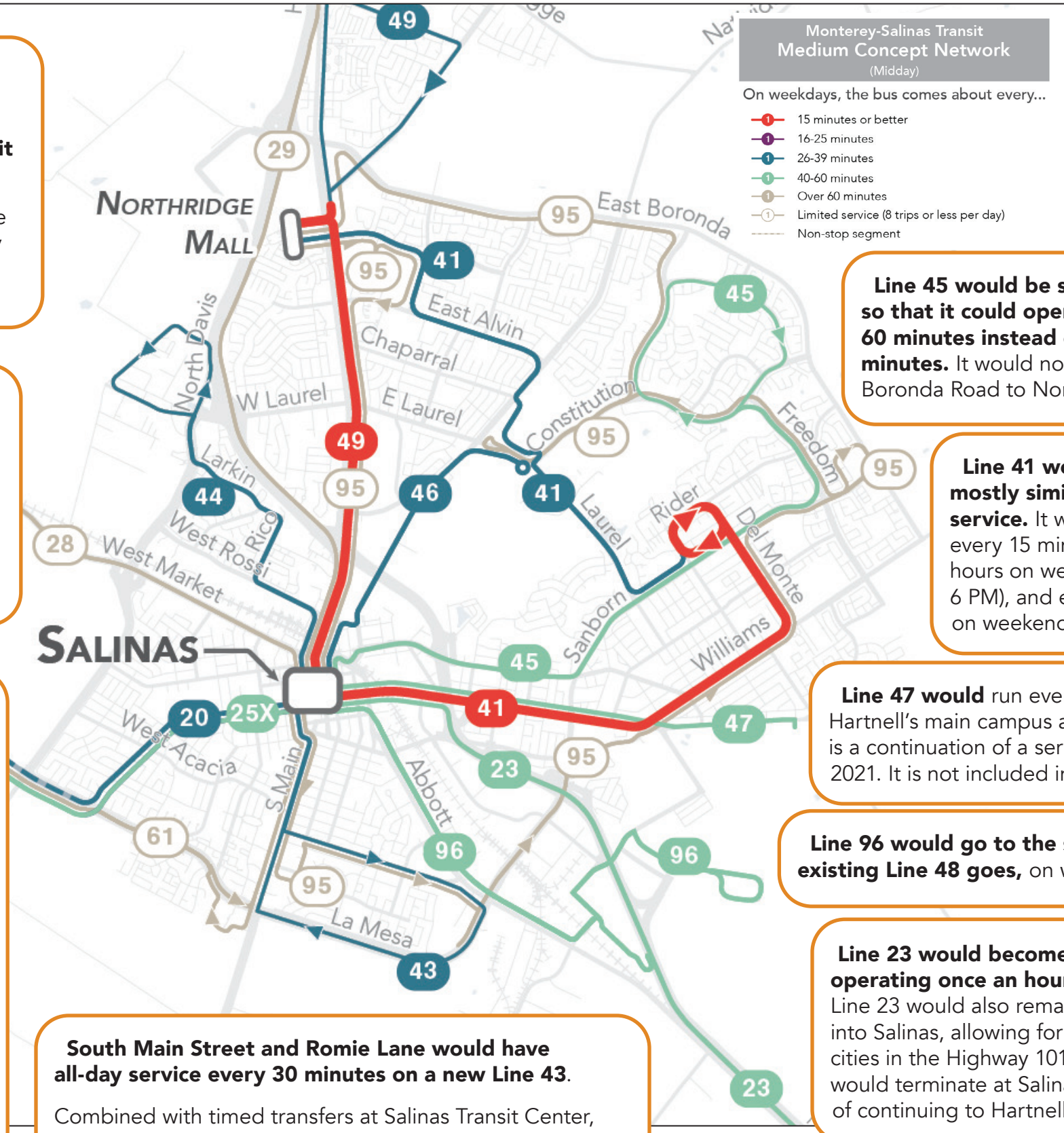
This would make it possible to travel across town in any direction with just a short wait for a second bus.

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.

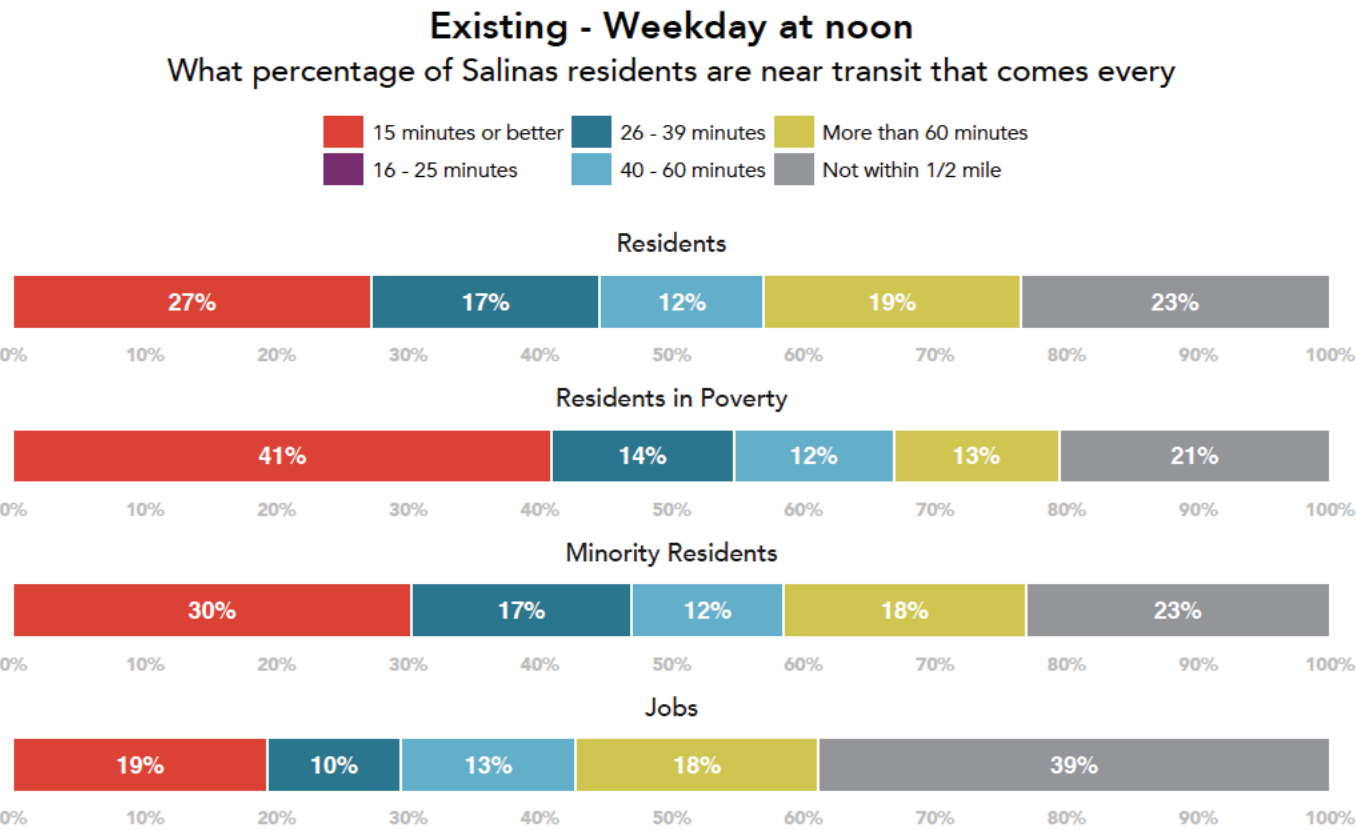
5 EXISTING VS. PROPOSED SERVICE BY AREA

Salinas – How many people would be near service?

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.



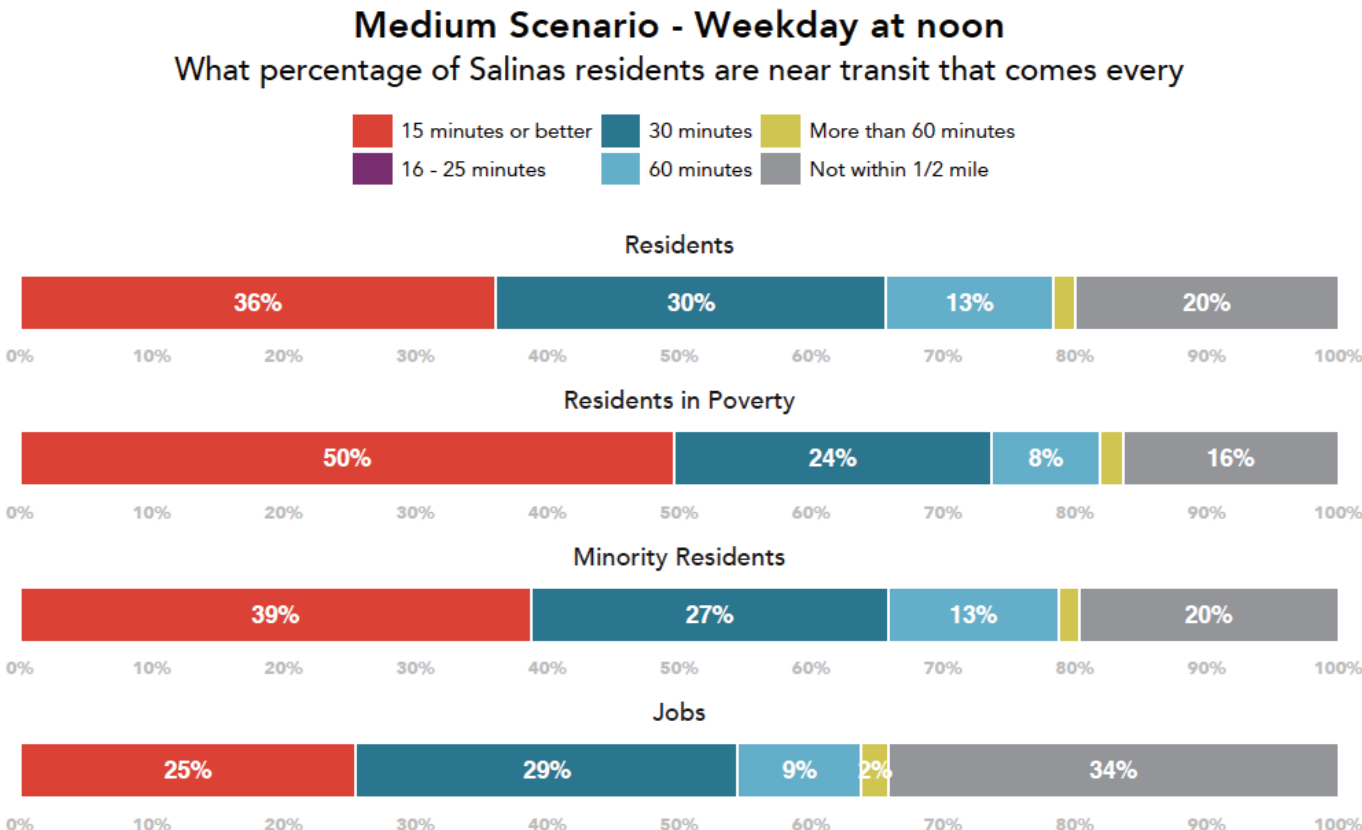
Note: Proximity is measured as being located within 1/2 mile of a bus stop.

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.

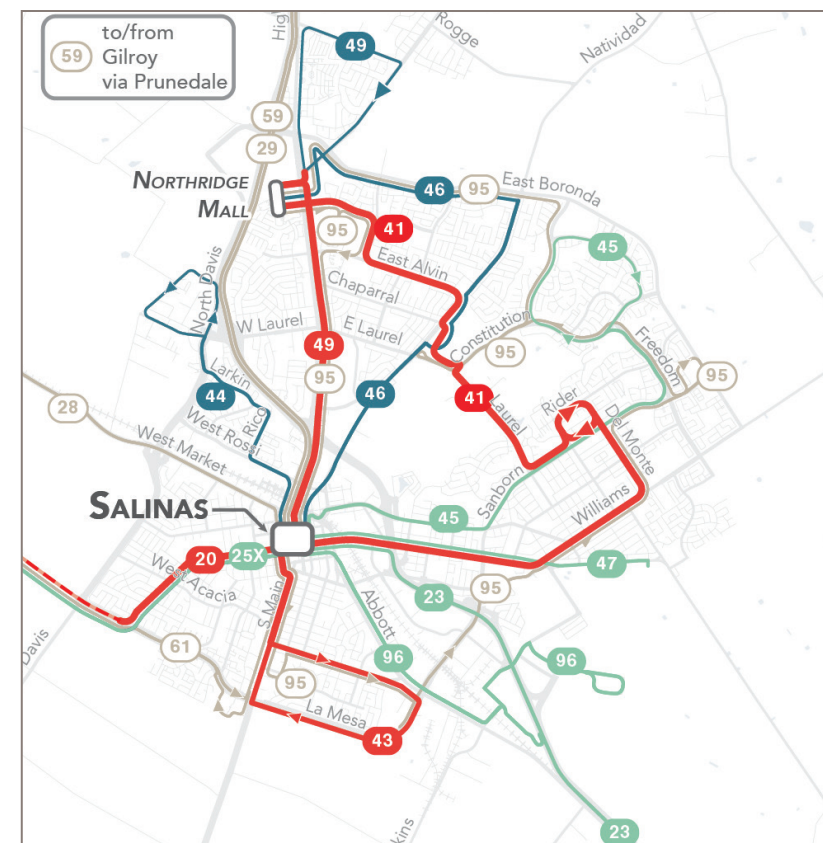
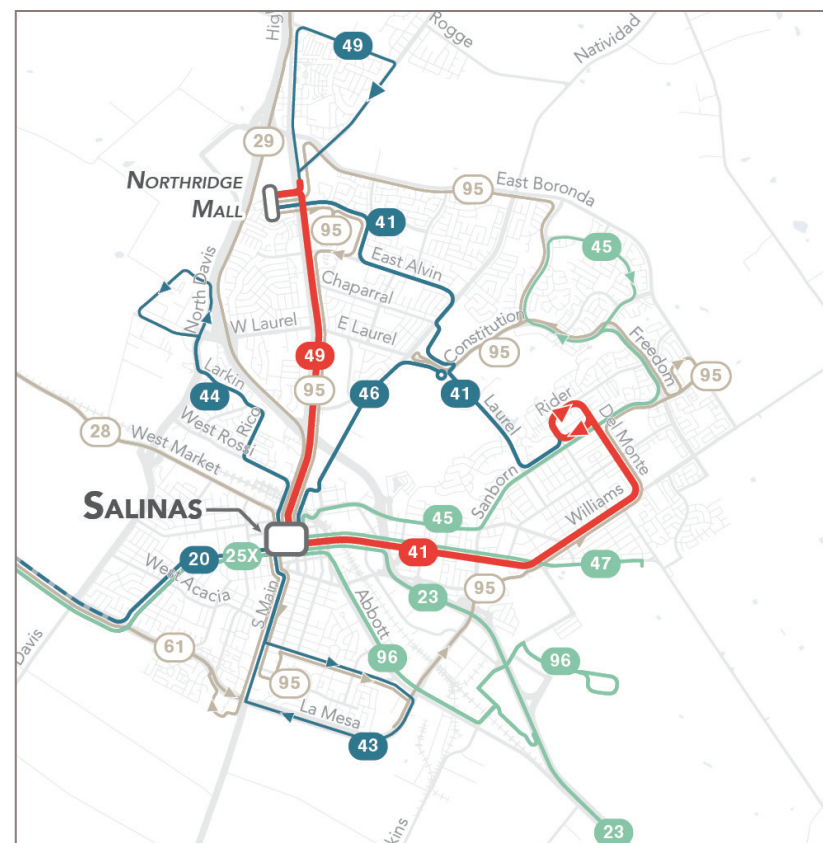
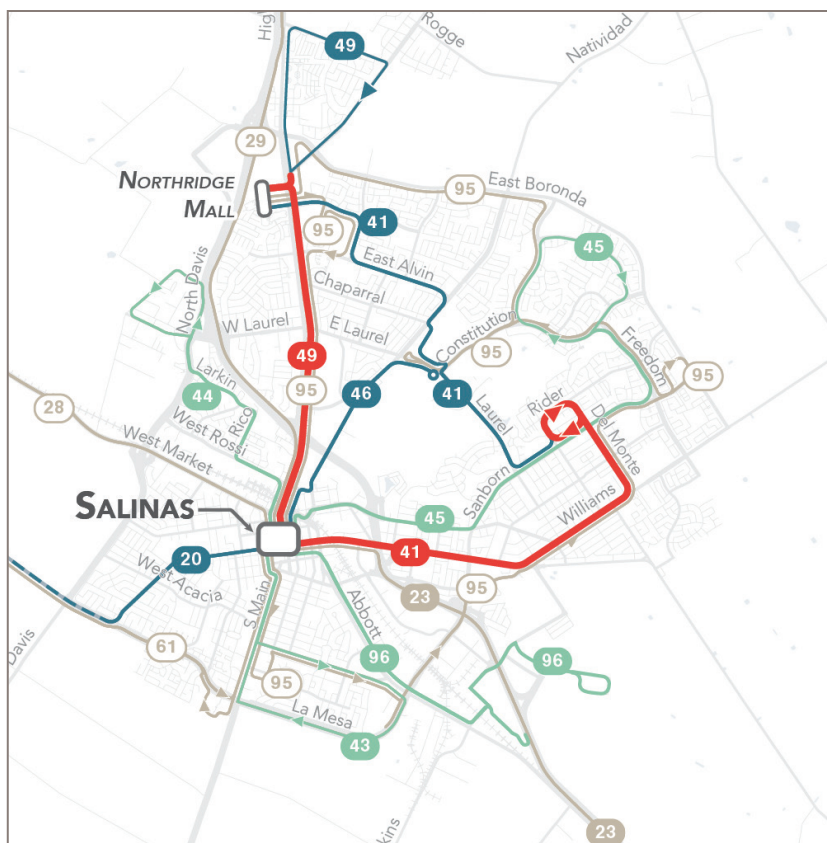
Medium Scenario

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

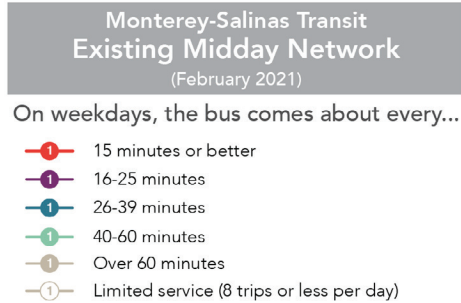
Reading the Maps

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.

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.

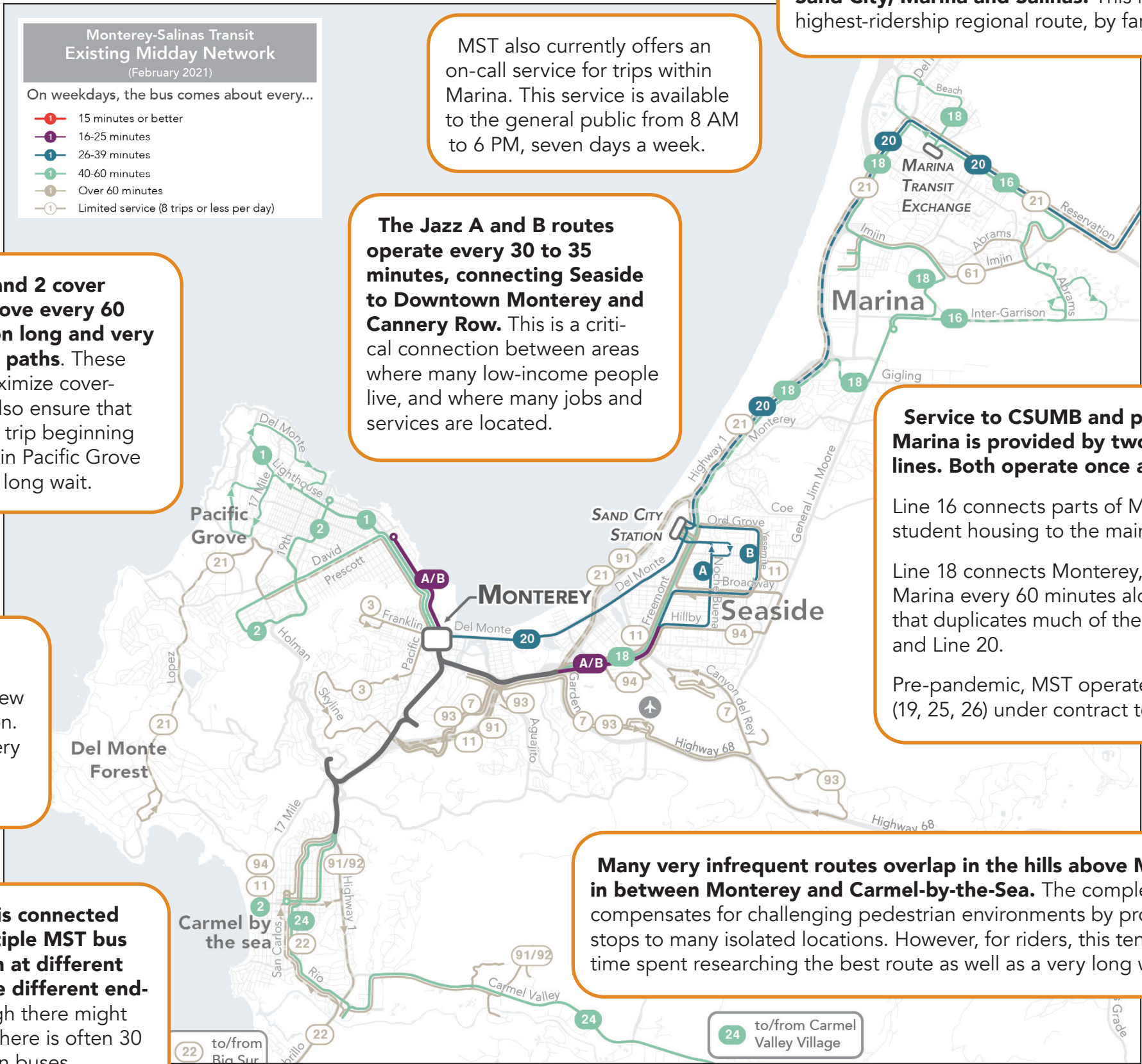
Line 18 connects Monterey, Seaside and Marina every 60 minutes along a path that duplicates much of the Jazz routes and Line 20.

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

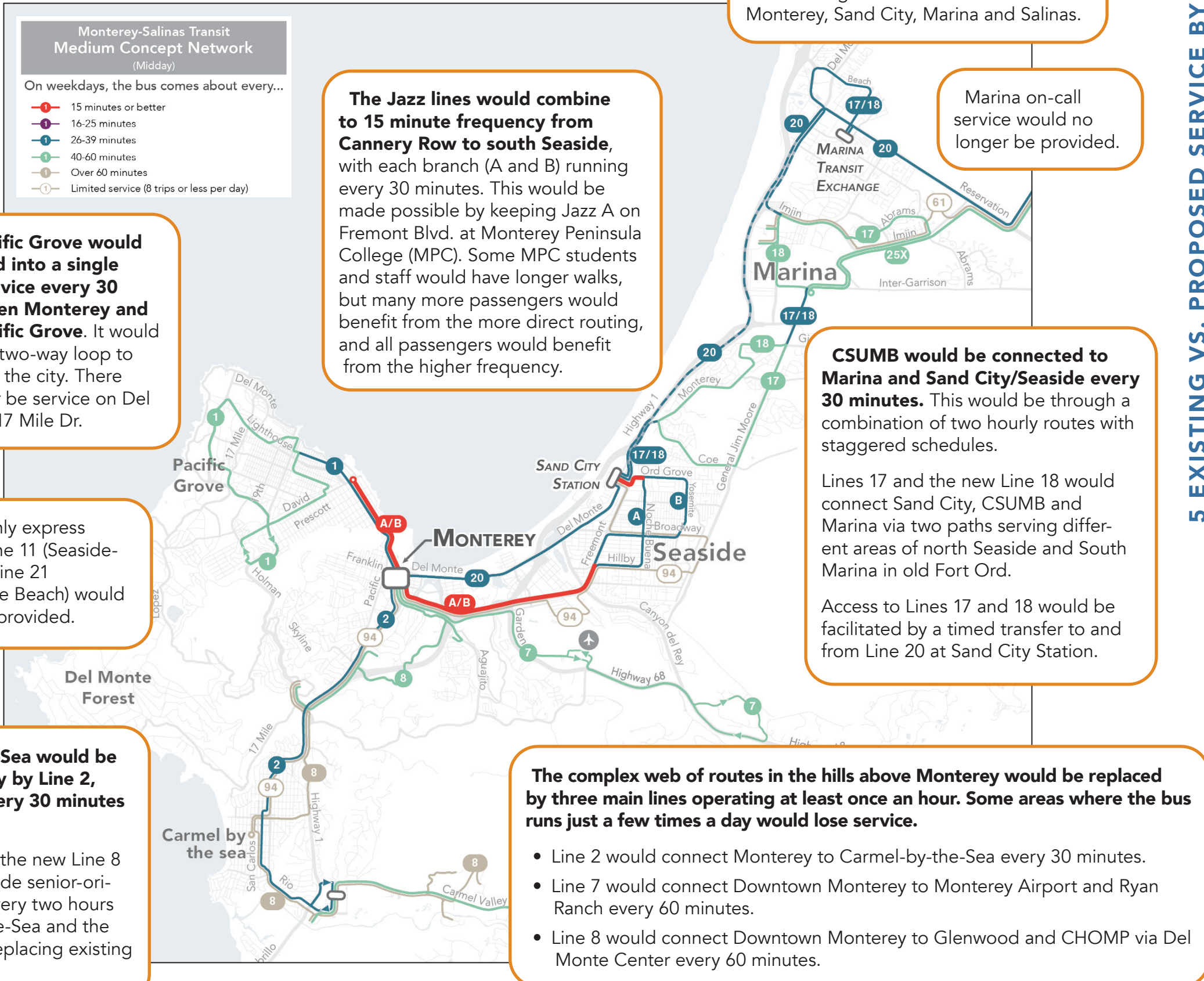
Timed transfers would make it possible to connect from one bus line to another without a long wait.

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.



Monterey Bay & Peninsula – How many people would be near service?

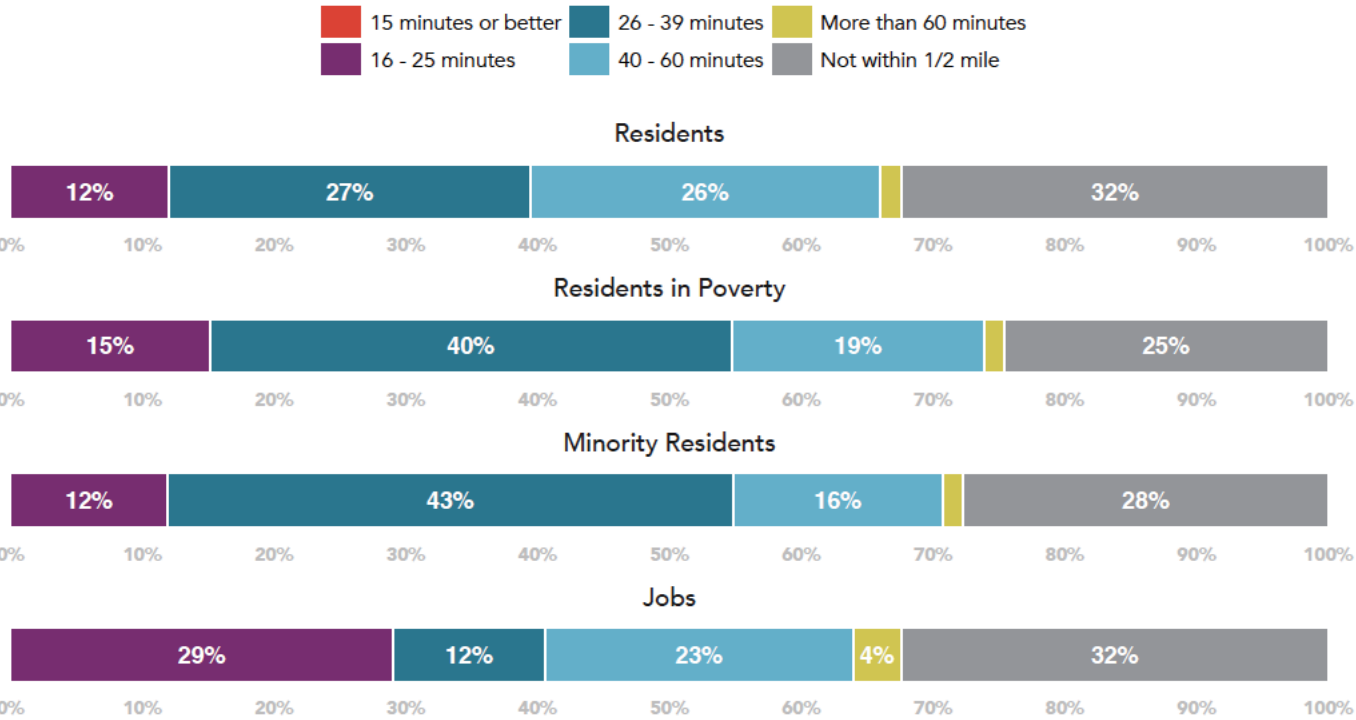
Existing Service

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.

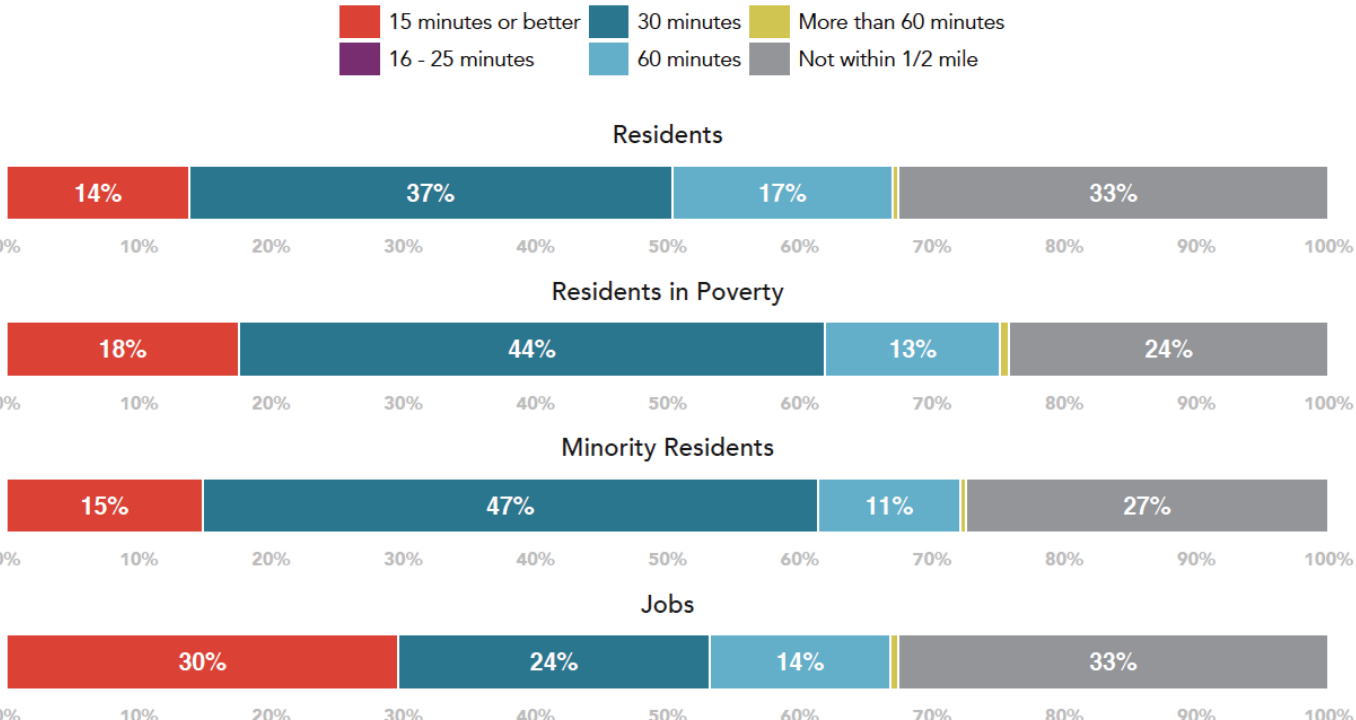
Proposed Final Network

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.

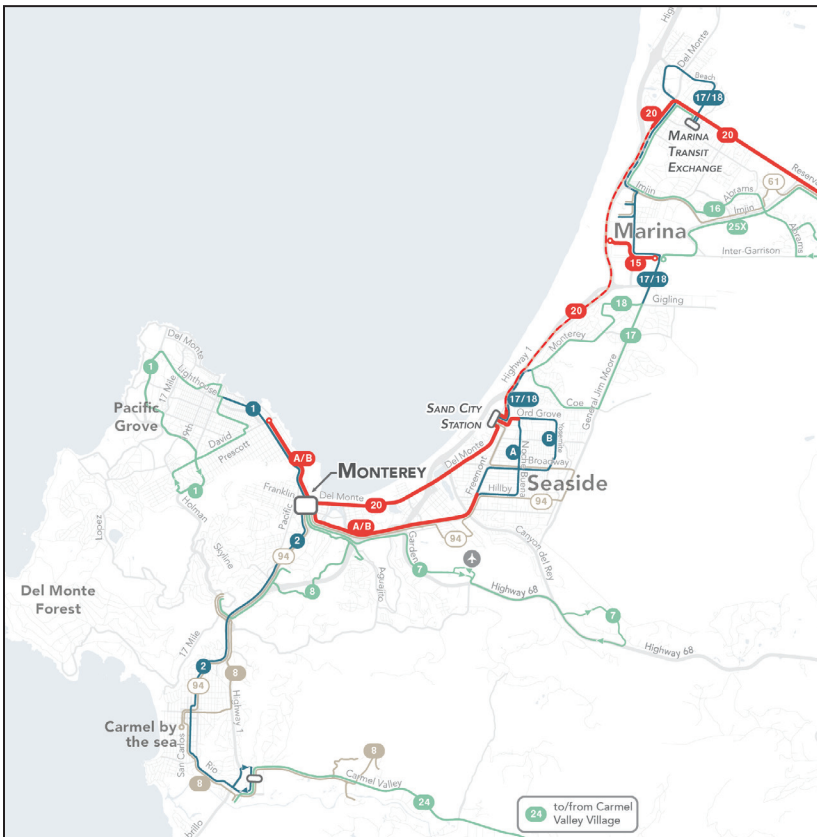
Medium Scenario

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...

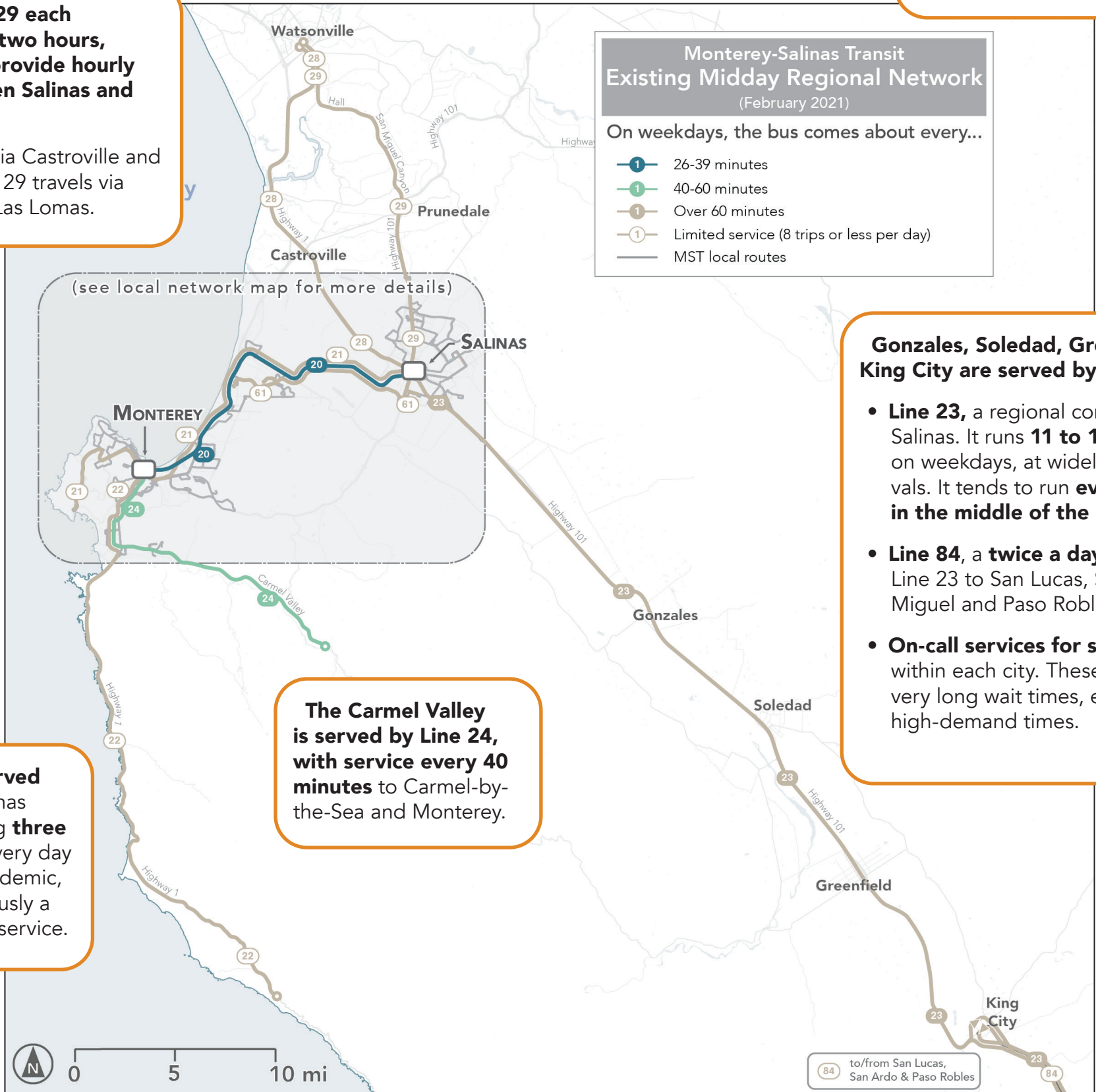
- 1 26-39 minutes
- 1 40-60 minutes
- 1 Over 60 minutes
- 1 Limited service (8 trips or less per day)
- MST local routes

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.

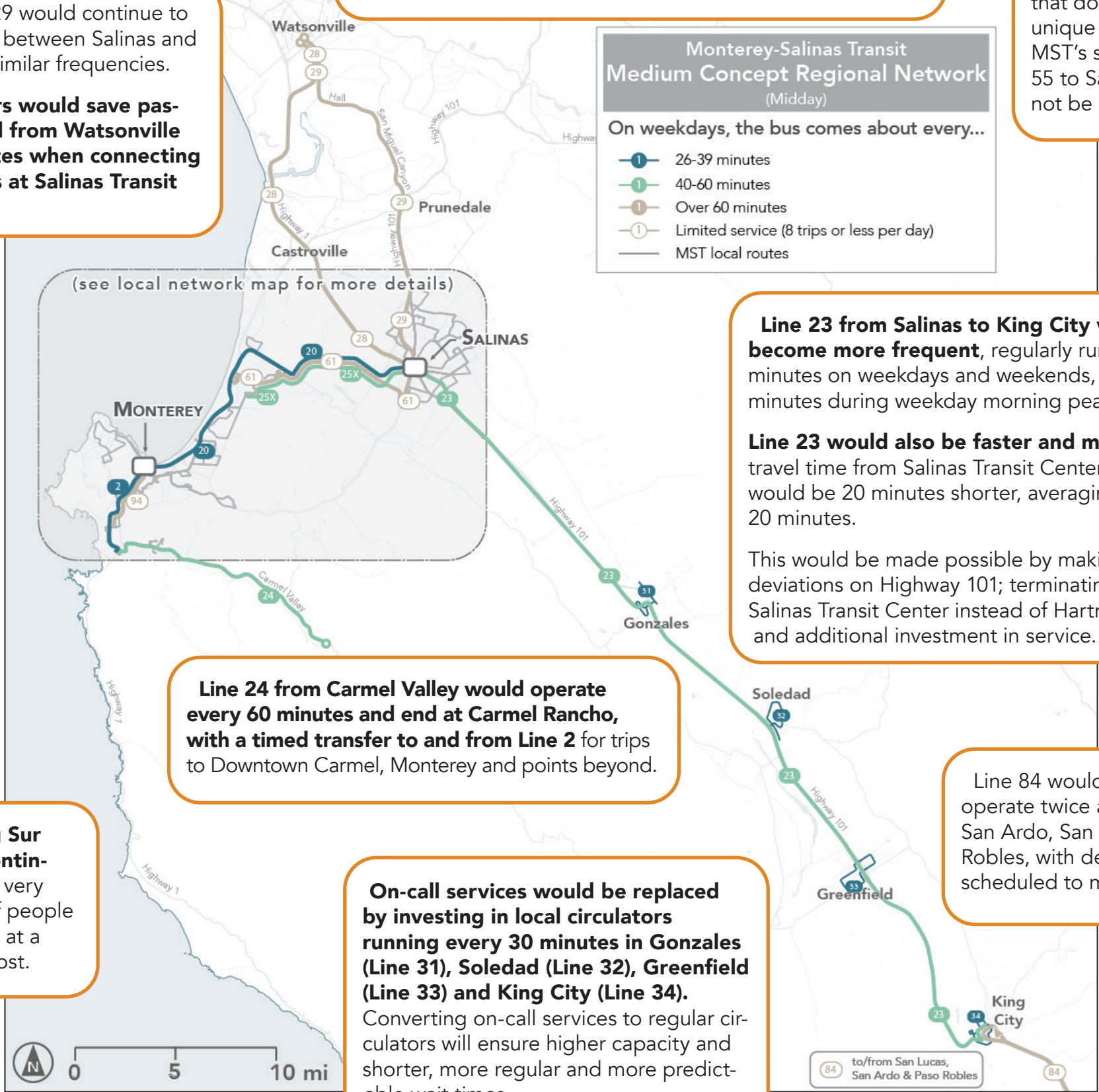
Line 29 would no longer operate on North Main Street in Salinas. Instead, it would stay on Highway 101 for a faster travel time. Passengers traveling between North Salinas and Watsonville would need to transfer at Salinas Transit Center.

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



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.

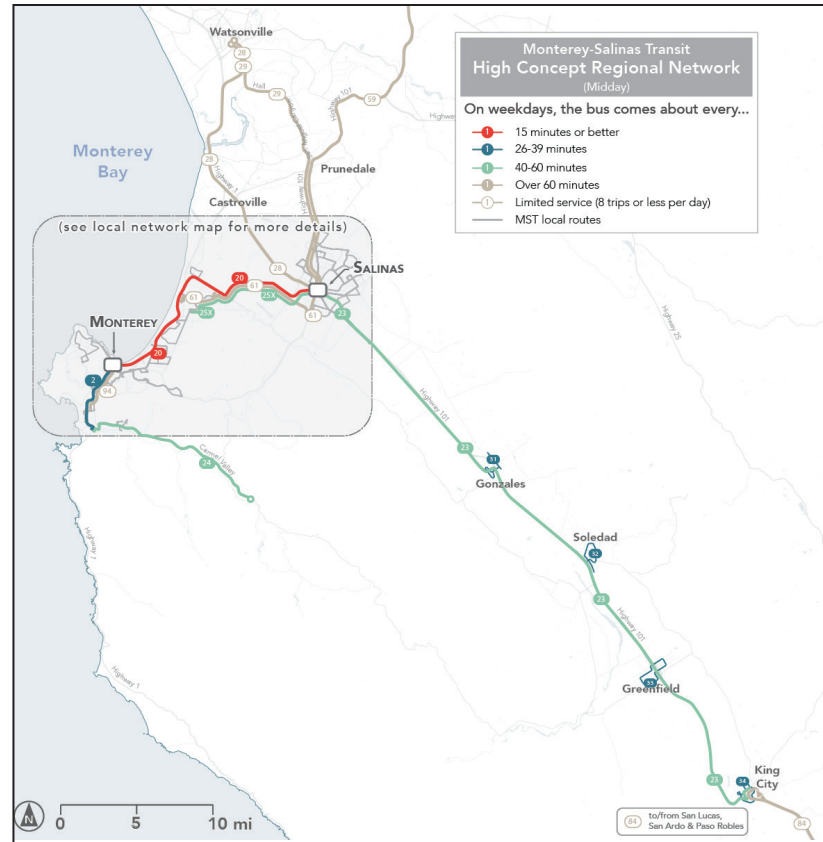
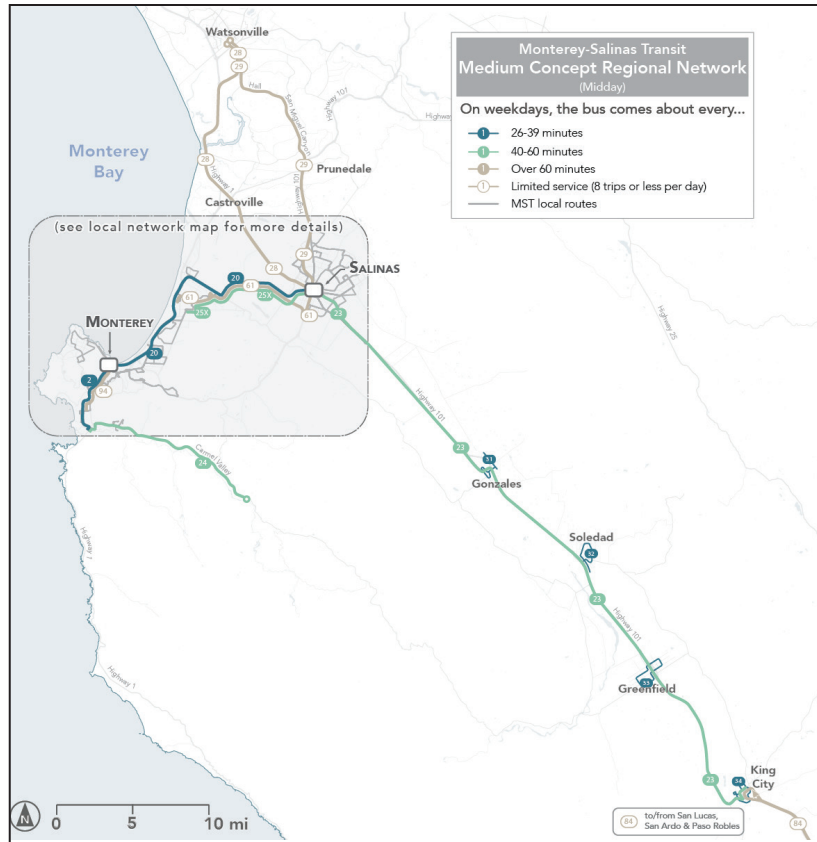
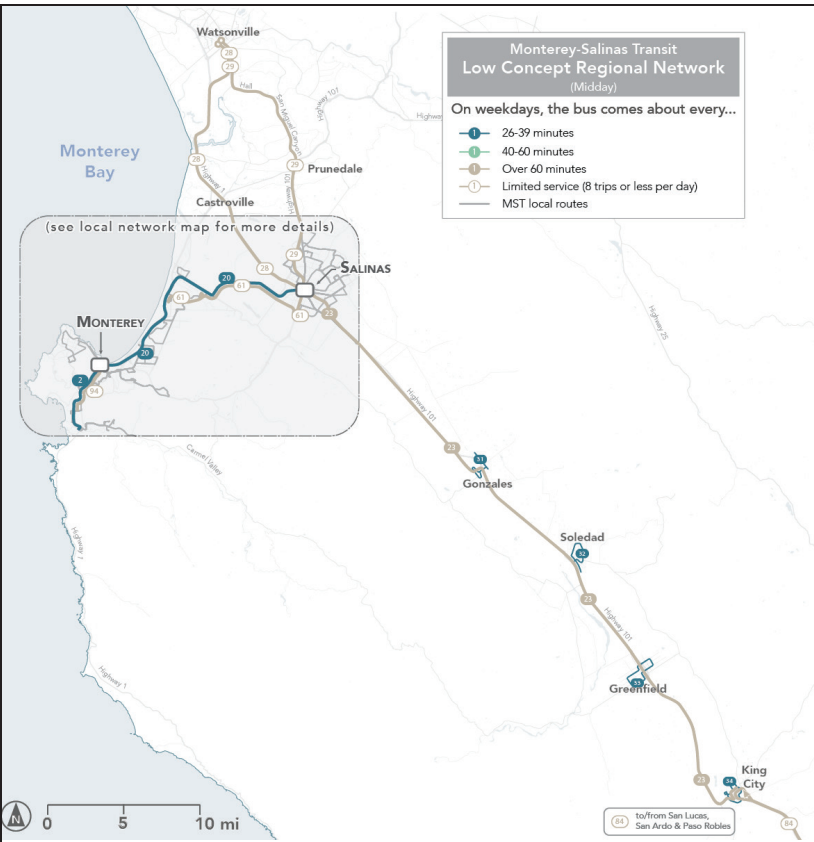
Medium Scenario

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.



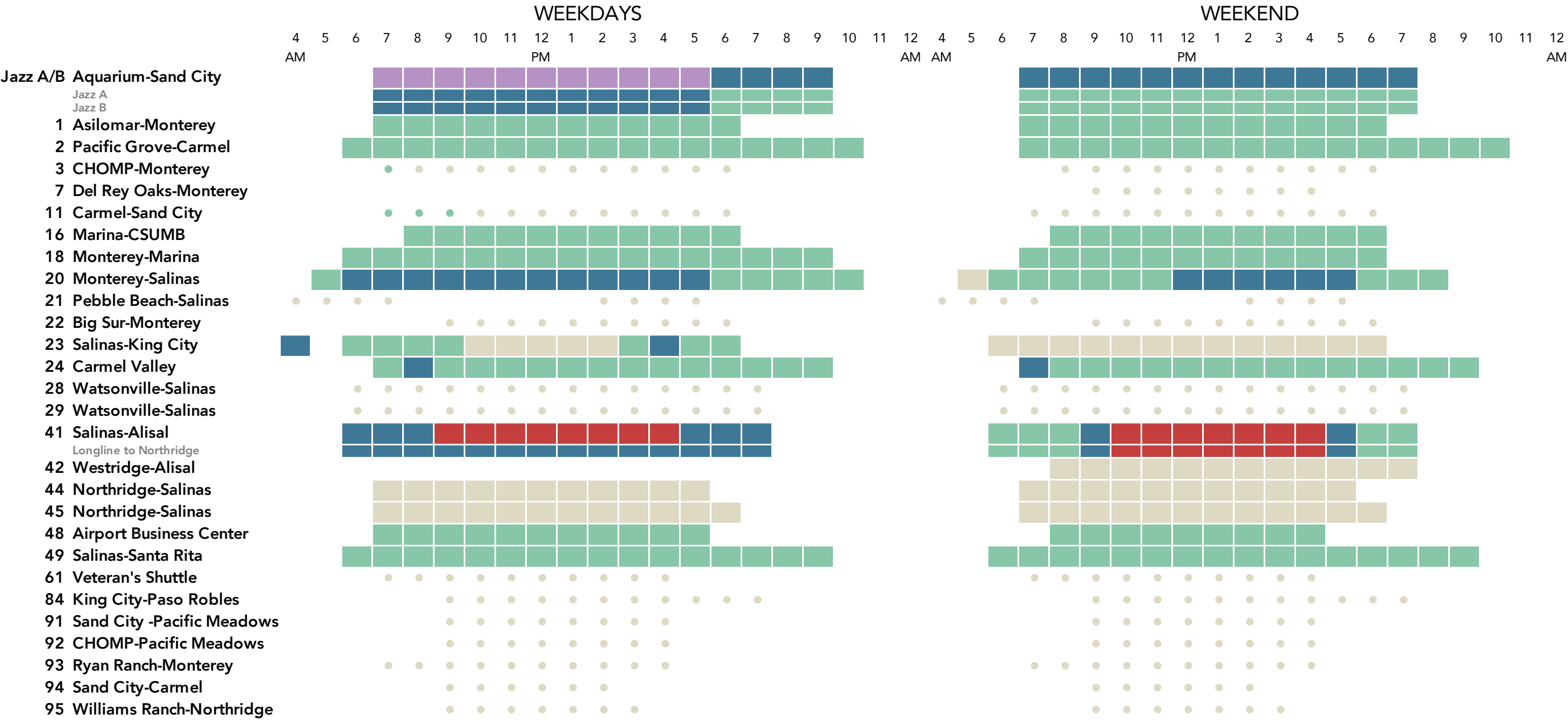
Service Frequency by MST Line and Time of Day – Existing

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)



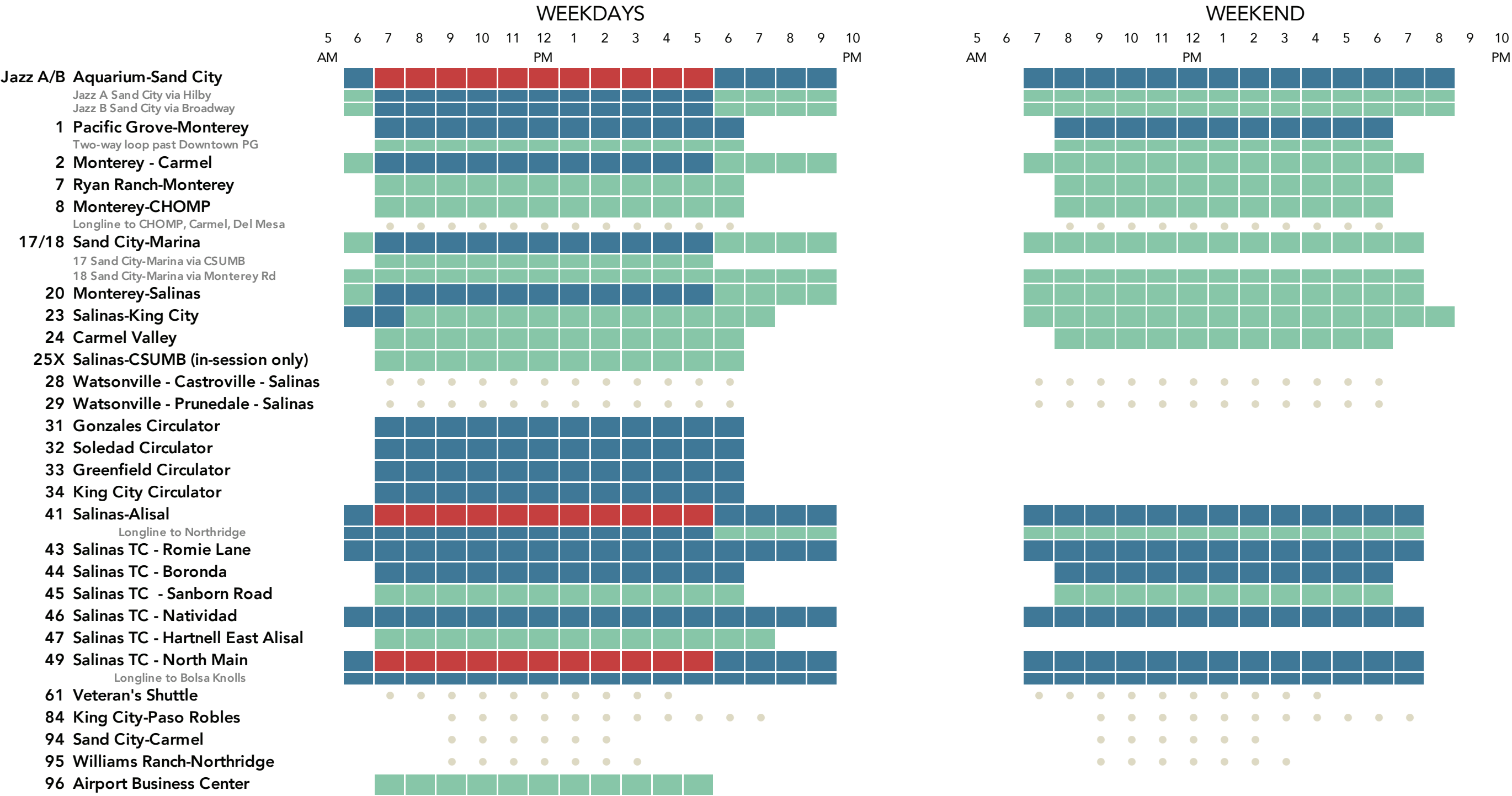
Service Frequency by MST Line and Time of Day – Medium Scenario

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)



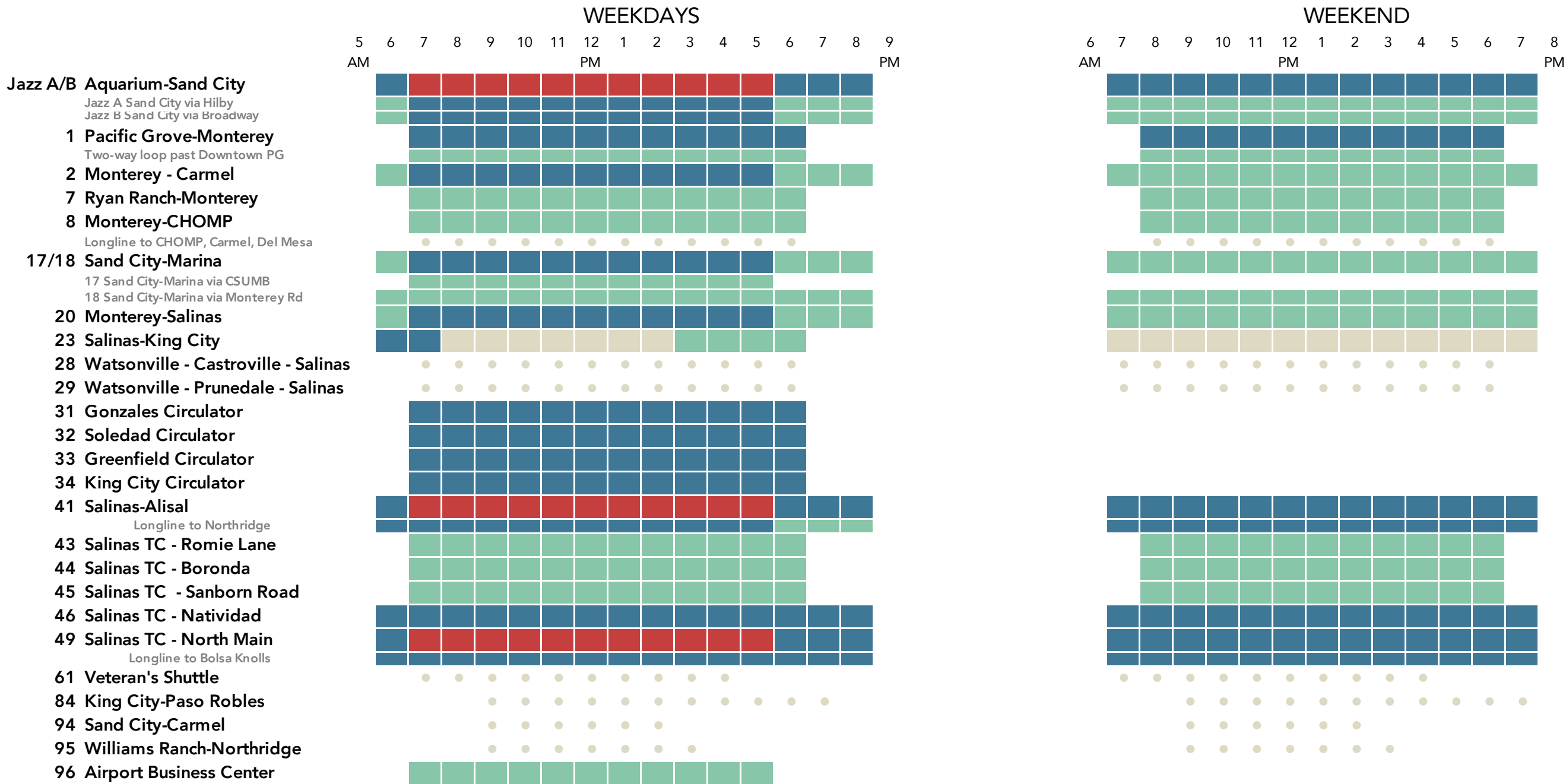
Service Frequency by MST Line and Time of Day – Low Scenario

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)

WEEKDAYS

5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11 12
AM PM AM

WEEKEND

6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11 12
AM PM AM

- 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
- 15 SURF-CSUMB Shuttle
- 16 Marina TE-Abrams
- 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-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
- 59 Salinas - Gilroy
- 61 Veteran's Shuttle
- 84 King City-Paso Robles
- 94 Sand City-Carmel
- 95 Williams Ranch-Northridge
- 96 Airport Business Center

6 How would this plan make transit more useful?

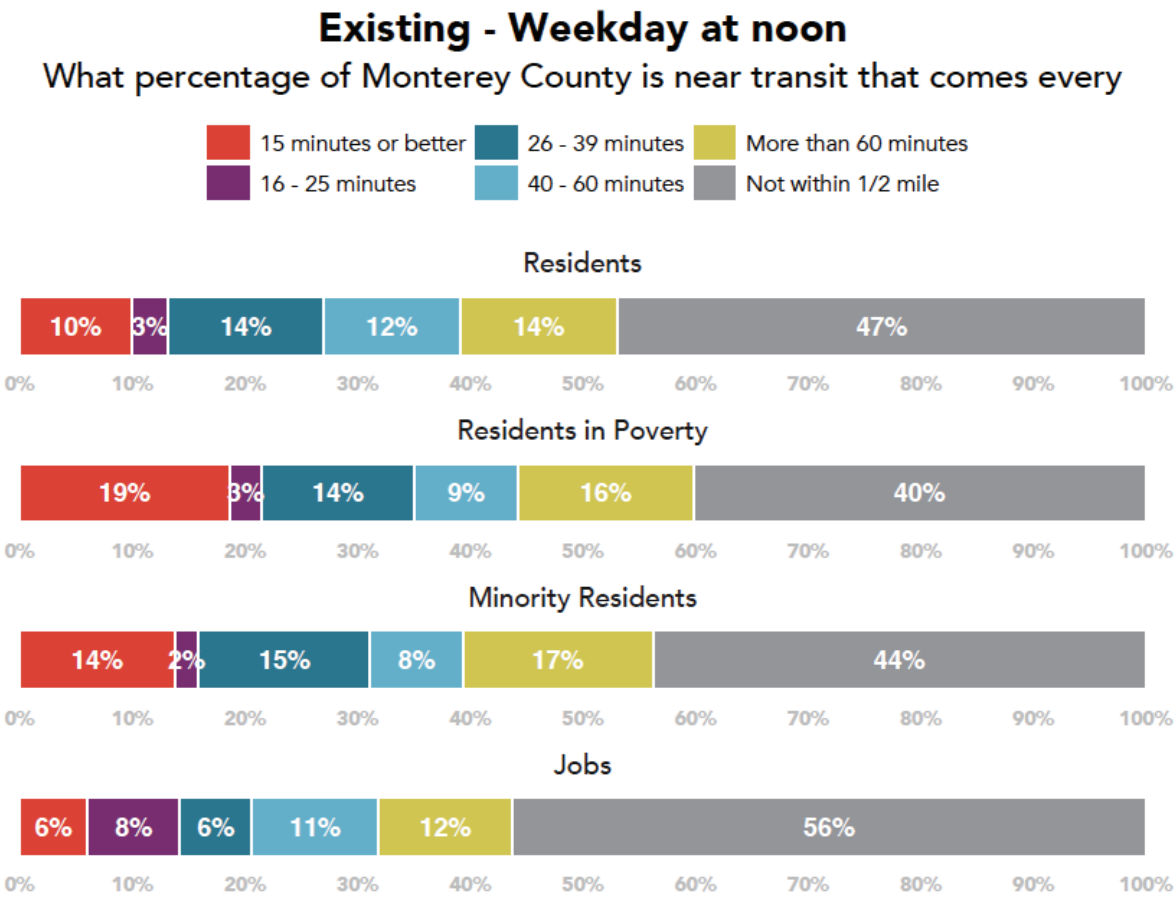
More people would be near service, and service would be more frequent.

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.



Note: Proximity is measured as being located within 1/2 mile of a bus stop.

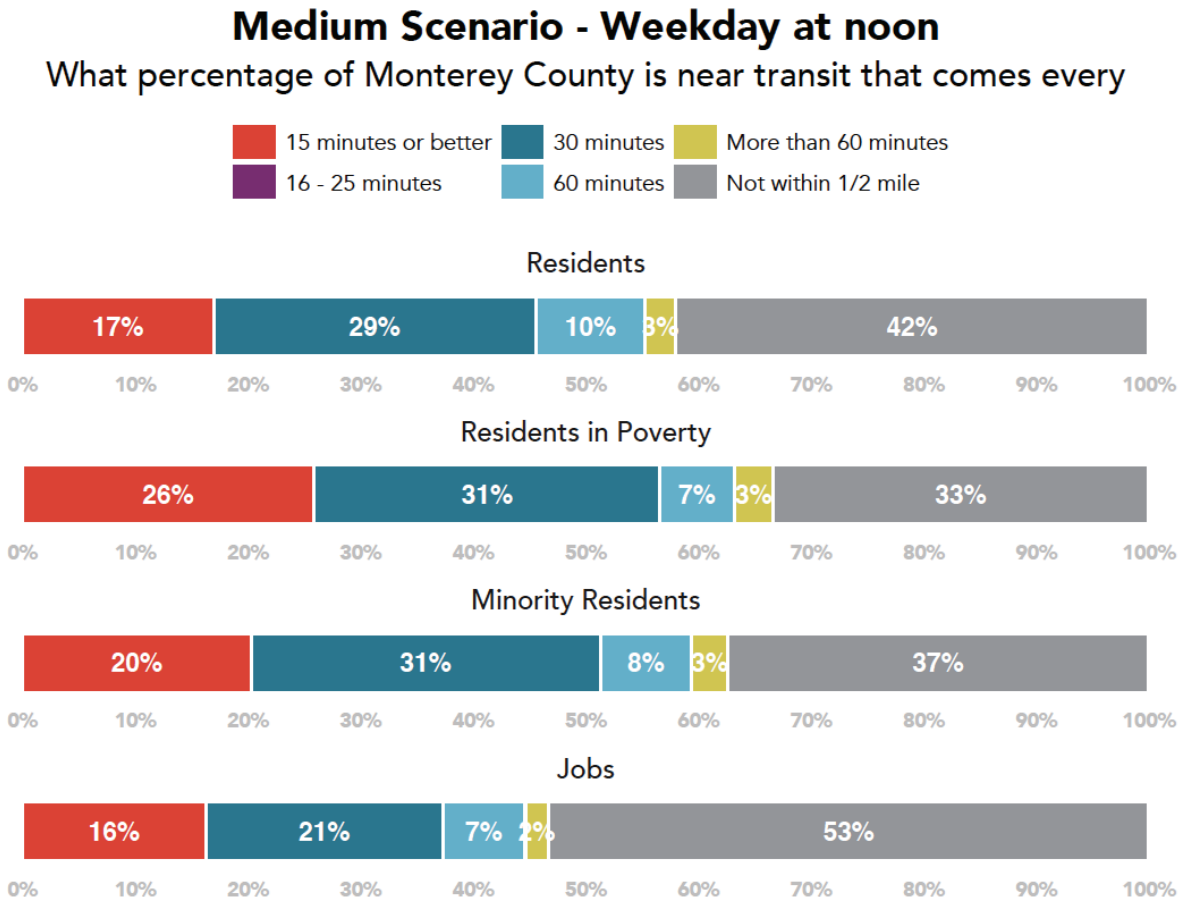
Figure 31: Chart showing the percentage of residents and jobs within a half-mile walk of existing MST bus lines in Monterey County.

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%).



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

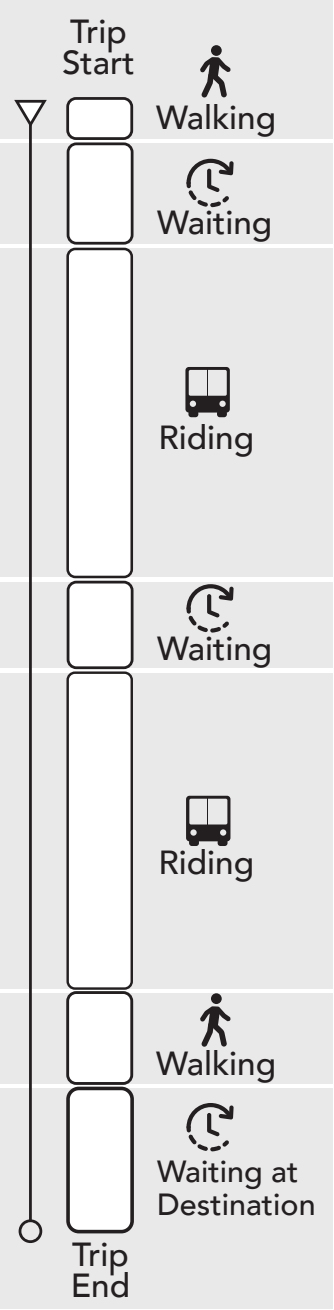
Waiting doesn't just happen at the start of your ride, it also happens at the end. You may not need to leave the house long before your departure, but if your bus is infrequent, you have to choose between being very early or too late.

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.

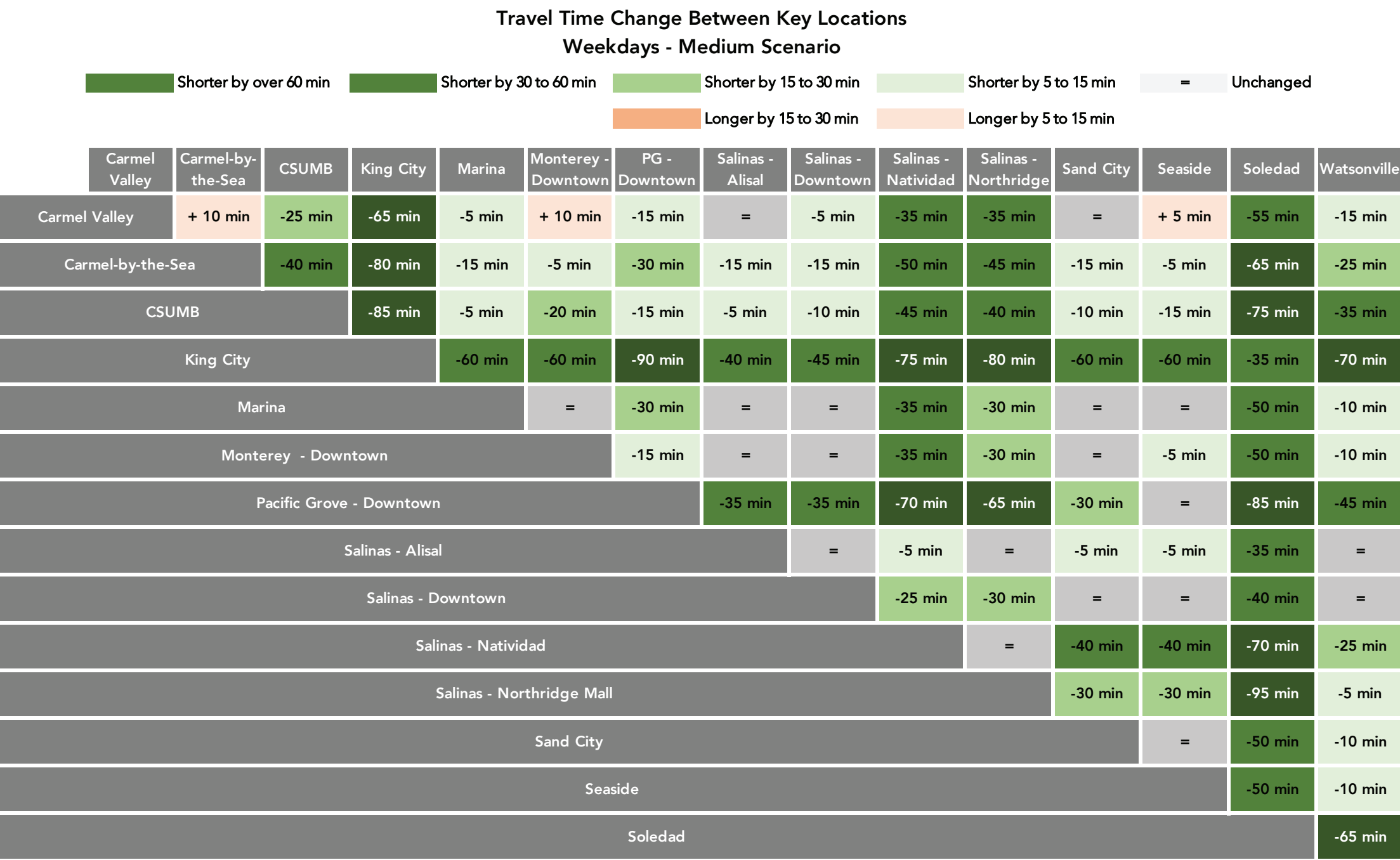
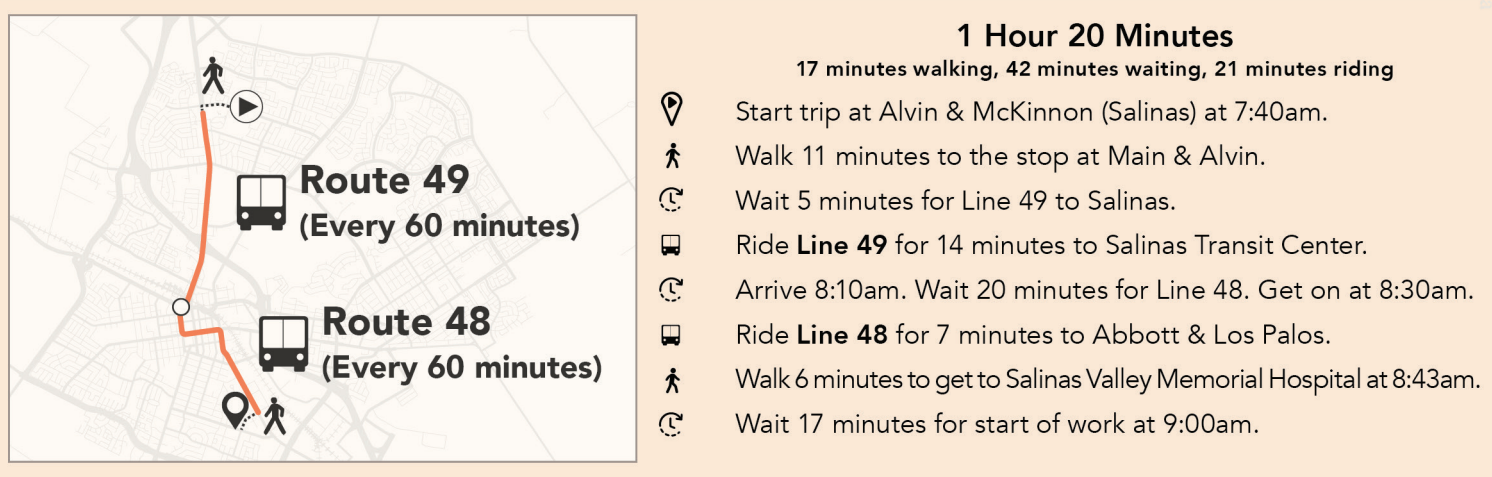


Figure 33: Chart showing the average travel time change between the existing service and the Medium Scenario, if a person were using transit to travel between any two of 15 prominent locations in MST’s service area.

Trip Examples - Salinas and Boronda

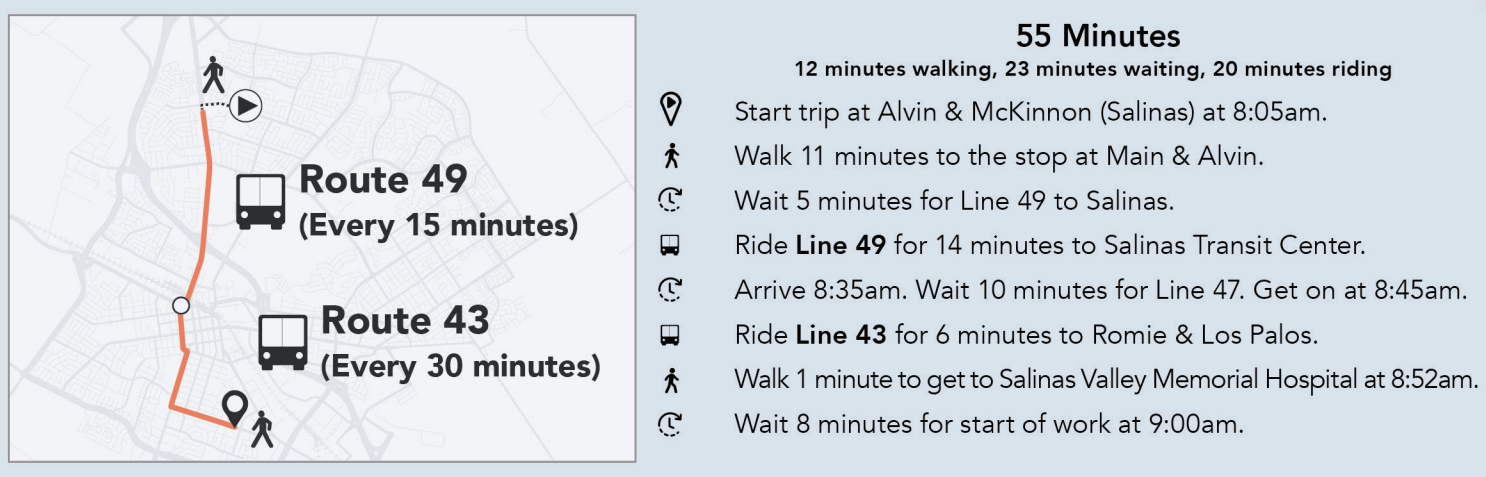
Example no. 1: North Salinas to South Salinas

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.

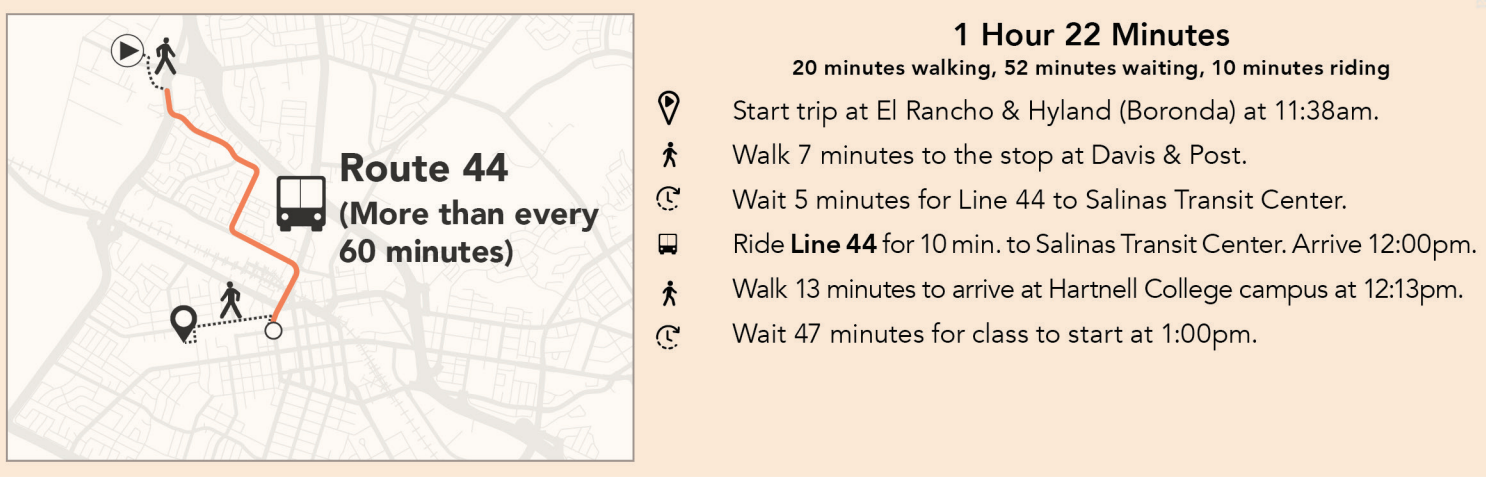
Here's what the same trip would look like if the **Medium Scenario** of this plan were implemented:



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.

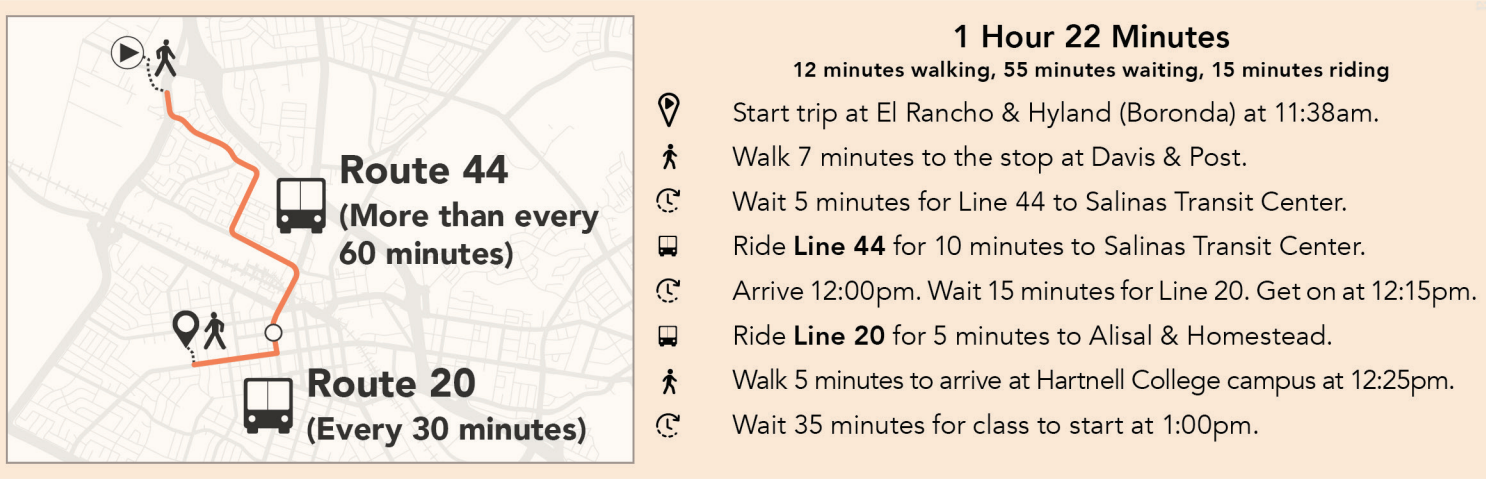
Example no. 2: Boronda to Hartnell College

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.

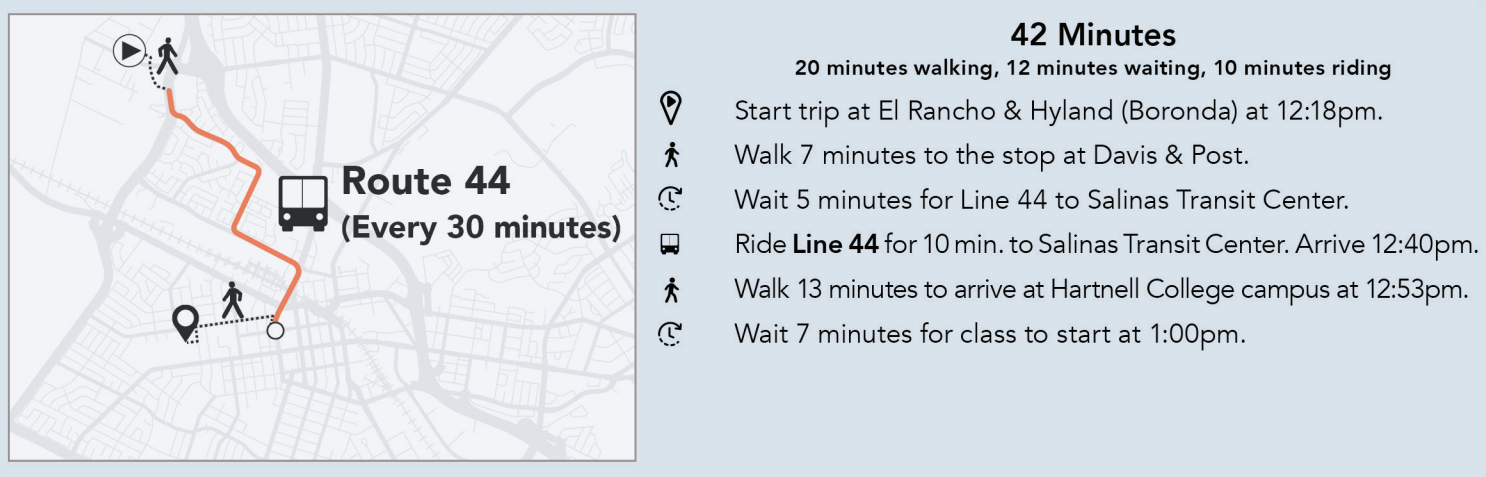
If you decided to transfer to Route 20 instead of walking, this would only change where you wait. You would spend 15 minutes more waiting for your next bus at Salinas Transit Center, and 12 minutes less waiting on campus for class to start.



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.

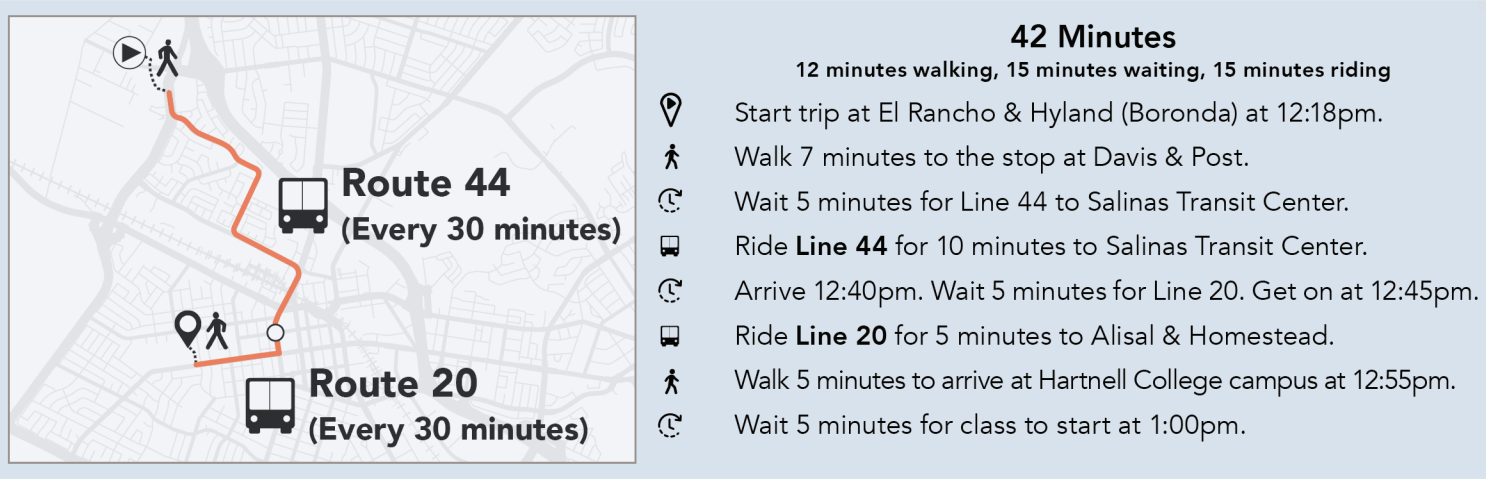
¹ Many in-person classes at Hartnell College in Fall 2021 are scheduled to start around 9:40 AM, 1:00 PM and 6:00 PM.

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.



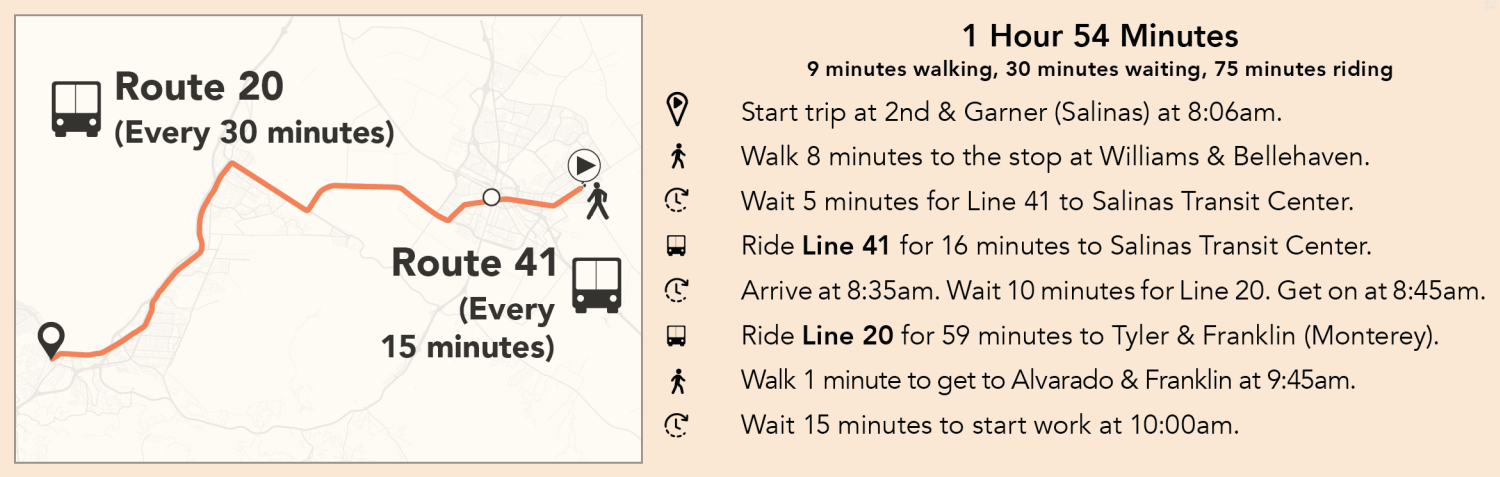
As in the prior example, the **time savings are due to a combination of higher frequency** (in this case, service every 30 minutes instead of every 75 minutes on Route 44) **and the timing of arrivals and departures at Salinas Transit Center.**

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

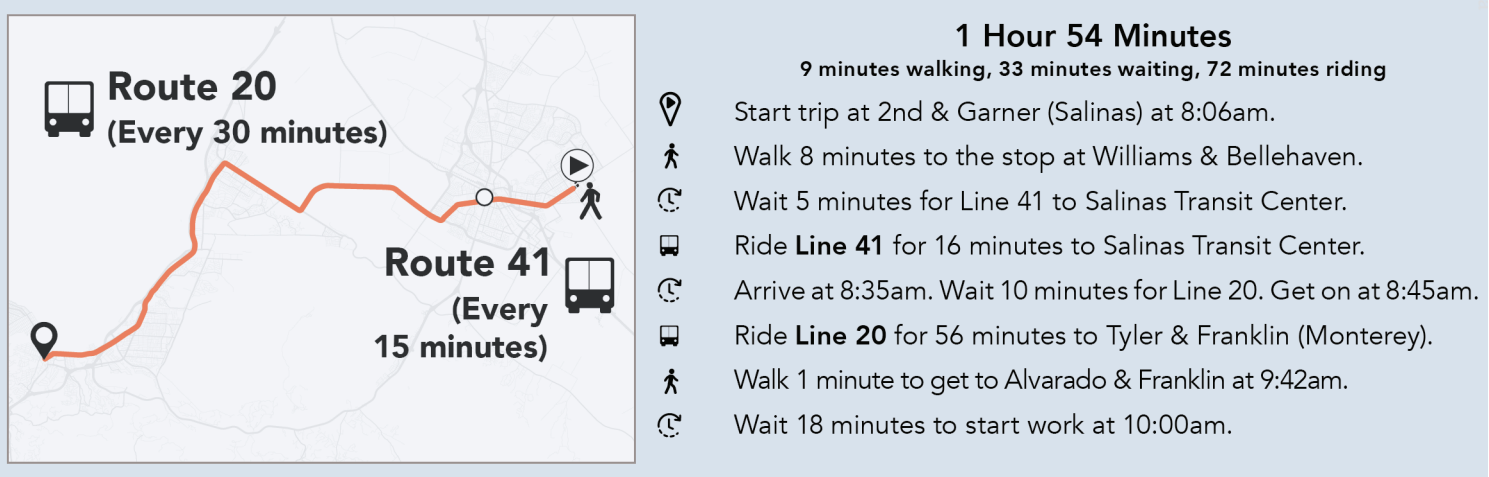
Example no. 3: East Salinas to Downtown Monterey

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:



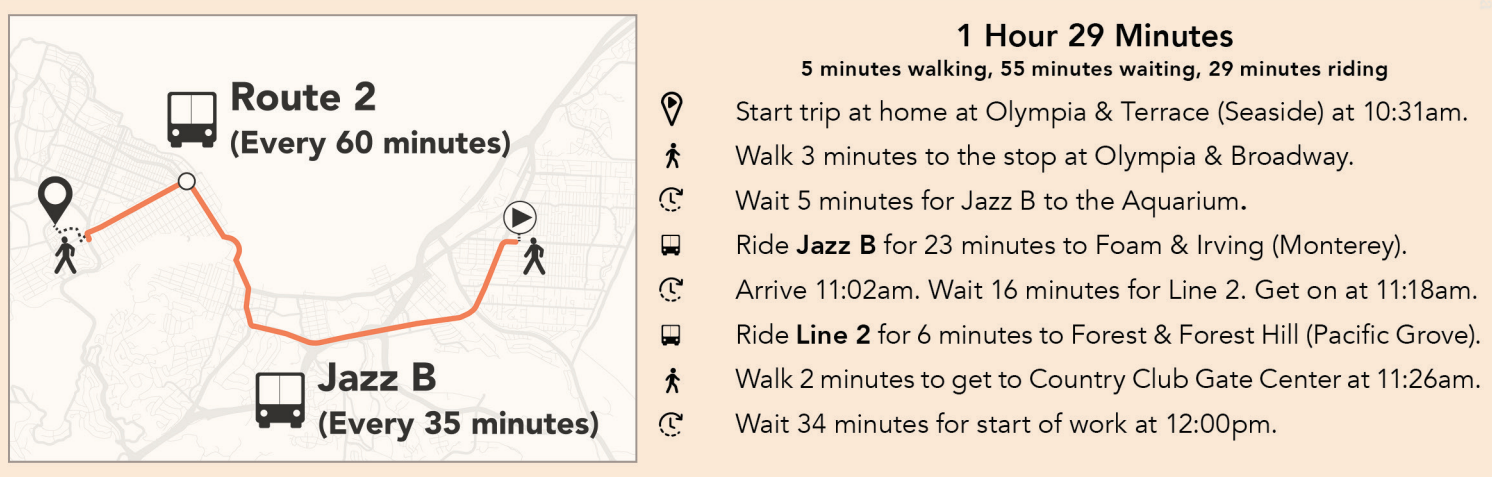
This trip wouldn’t change much. That is because MST has already organized a nearly-timed connection between Line 41 and Line 20 at Salinas Transit Center, and that connection probably wouldn’t shift by more than 5 minutes.

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.

Trip Examples - Monterey Bay & Peninsula

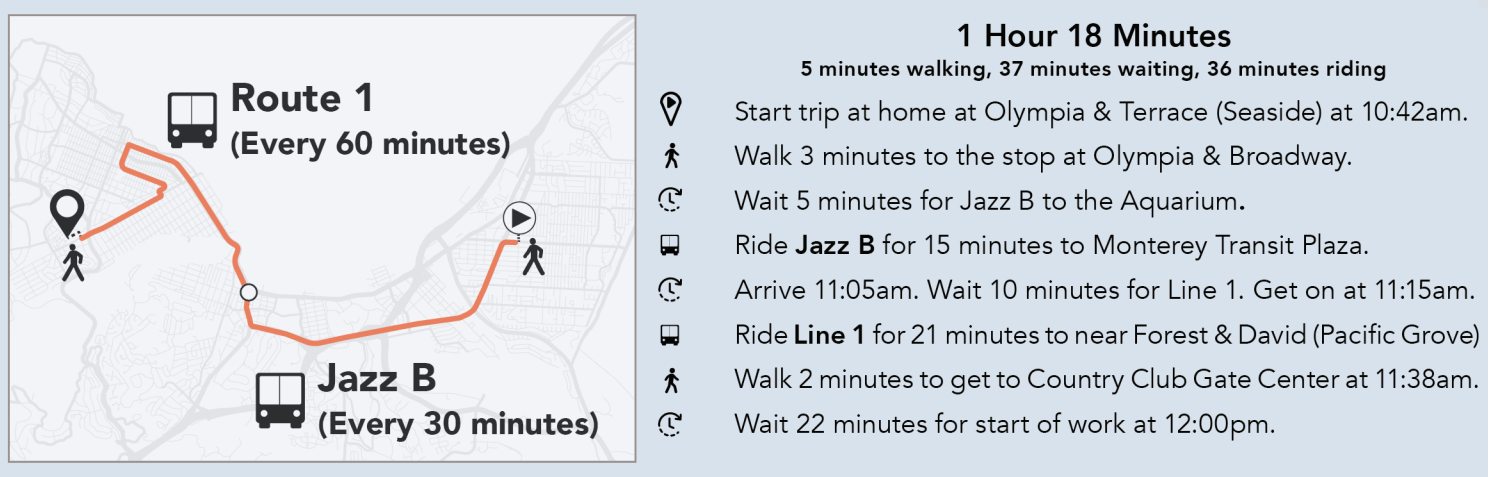
Example no. 4: Seaside to Pacific Grove

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:

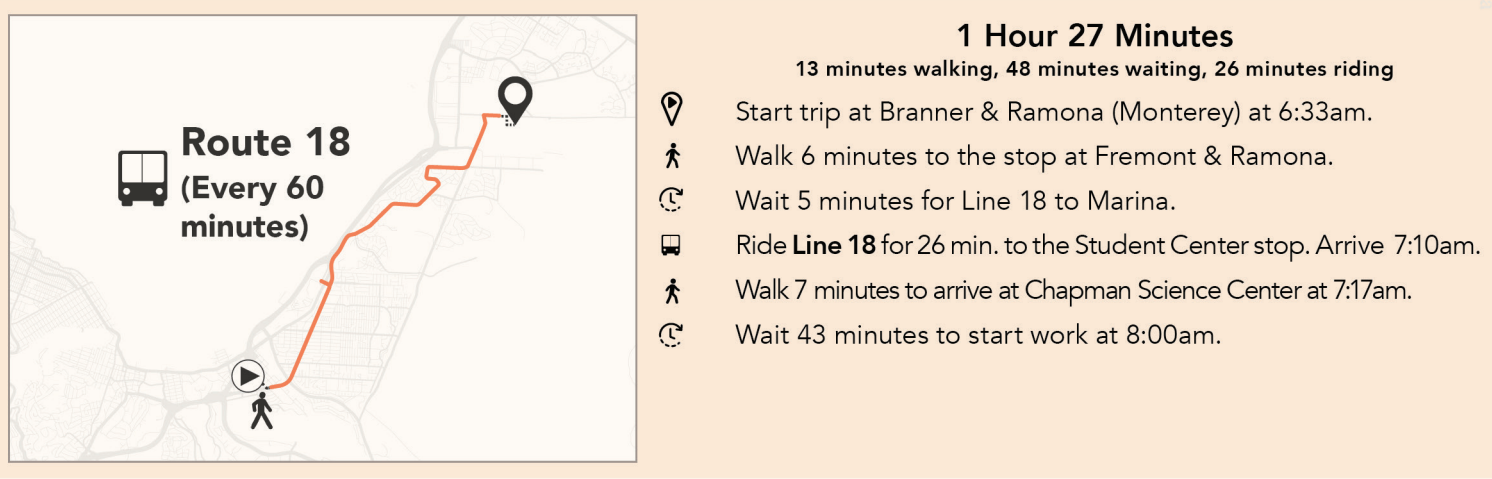


This trip would get 9 minutes shorter; you would be able to leave your house a few minutes later, mostly due to the scheduling of connections at Monterey Transit Plaza. Because most buses are scheduled to arrive at Monterey Transit Plaza between 11:05 AM and 11:10 AM, and leave again at 11:15 AM, it 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.

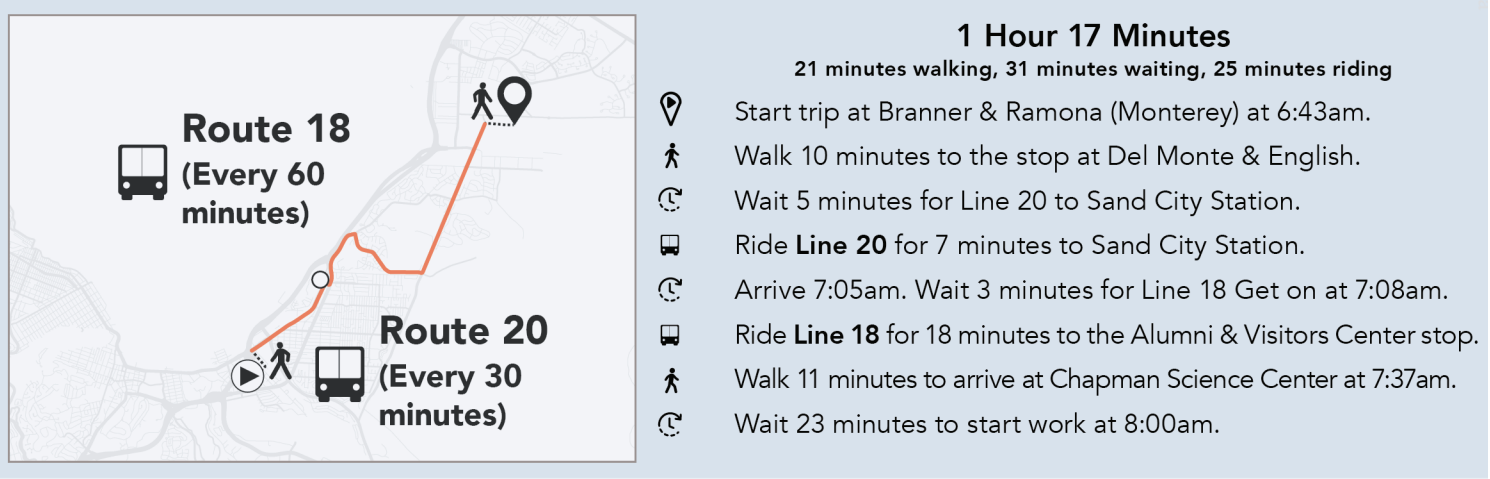
Example no. 5: Monterey/Seaside to CSUMB

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:

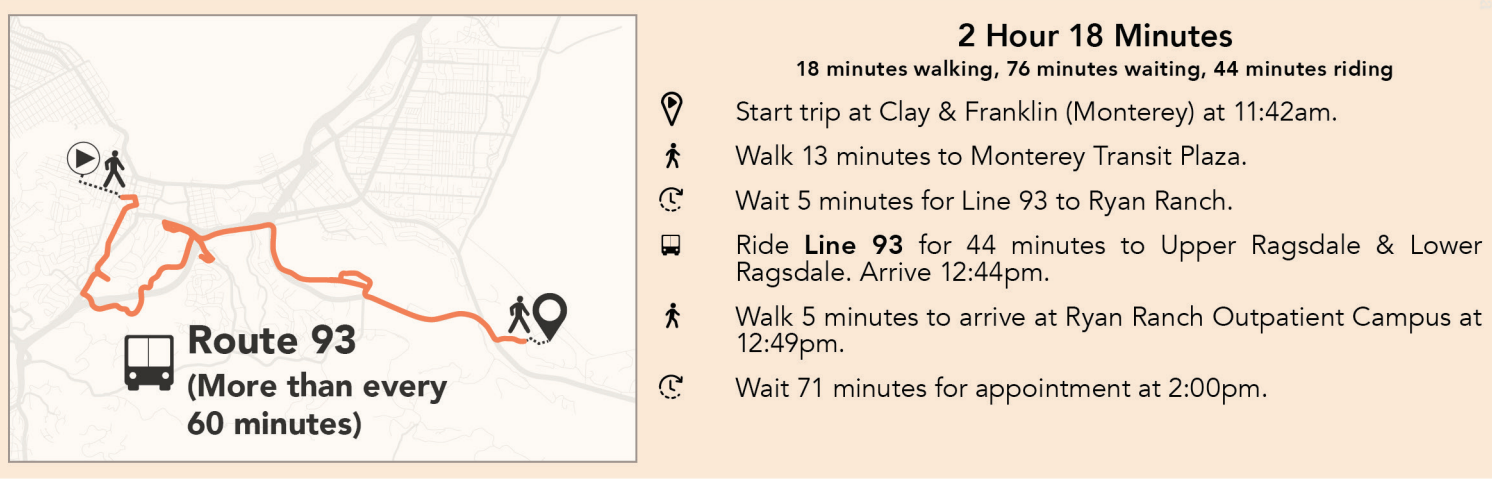


This trip would get 10 minutes shorter. This is because **even though you would need to take two buses, the first one would come every 30 minutes, and you would have a timed connection to the second bus, reducing your overall waiting time and allowing you to leave home 10 minutes later.**

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.

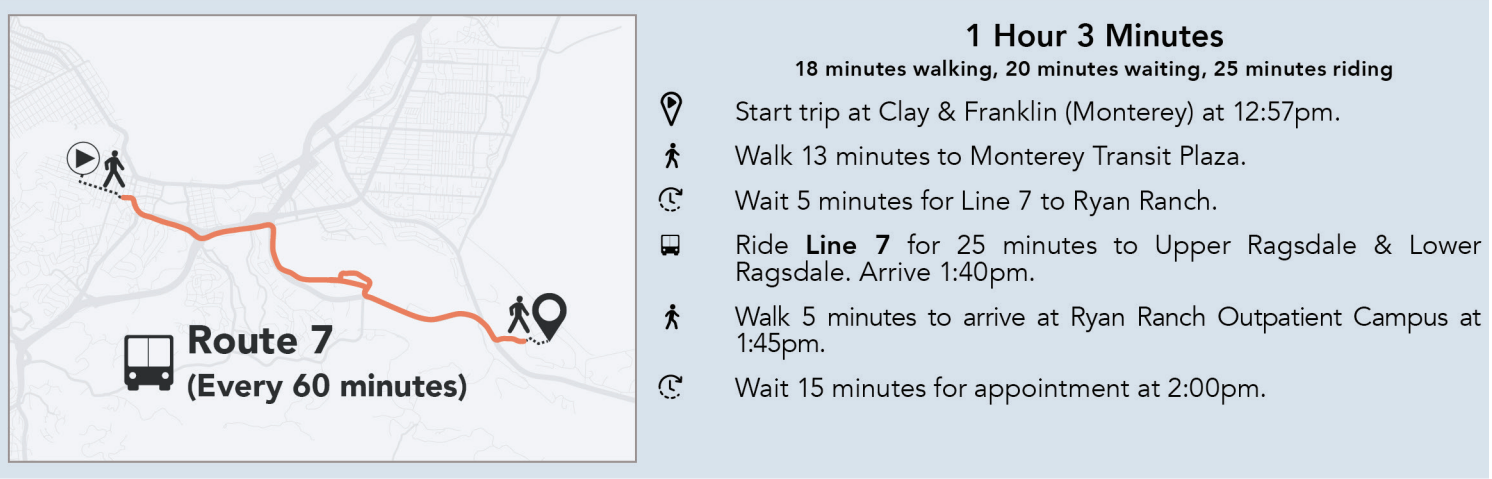
Example no. 6: Monterey to Ryan Ranch

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:



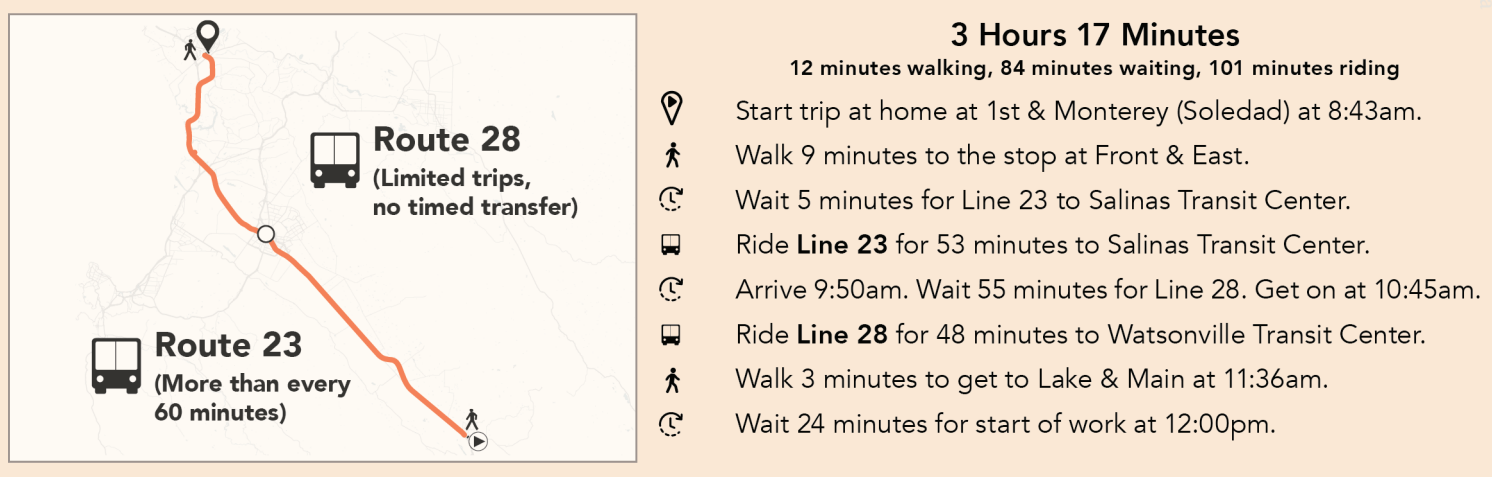
This trip would become over an hour shorter. This is because the proposed Line 7 would run every 60 minutes and take a much more direct path from Monterey Transit Plaza to Ryan Ranch.

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.

Trip Examples - Regional

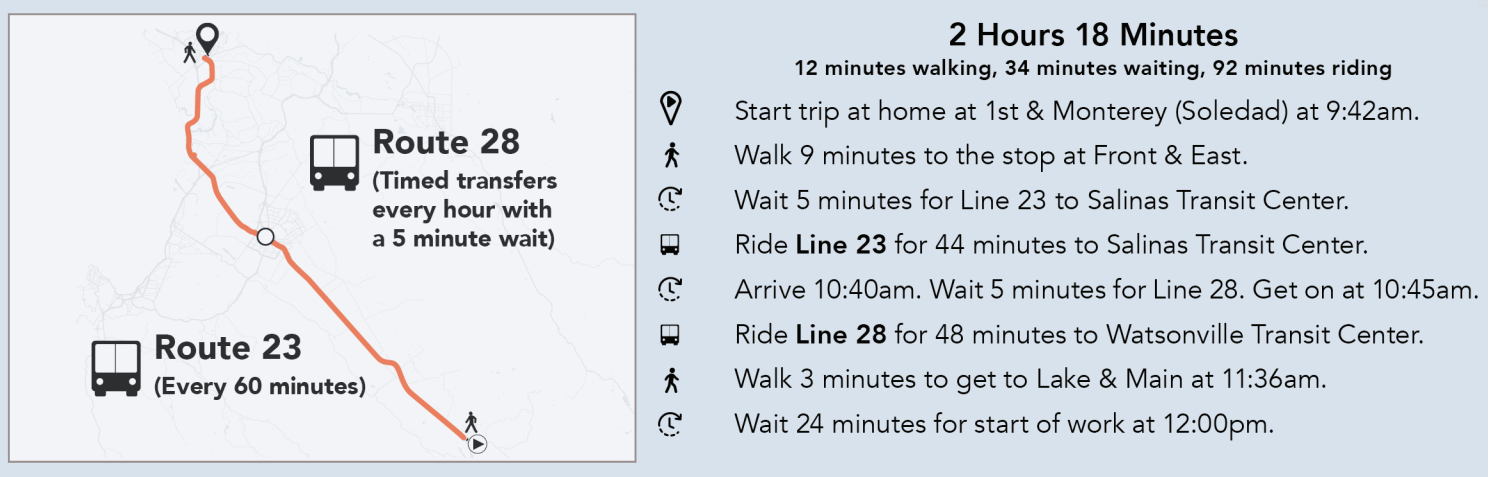
Example no. 7: Soledad to Watsonville

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:

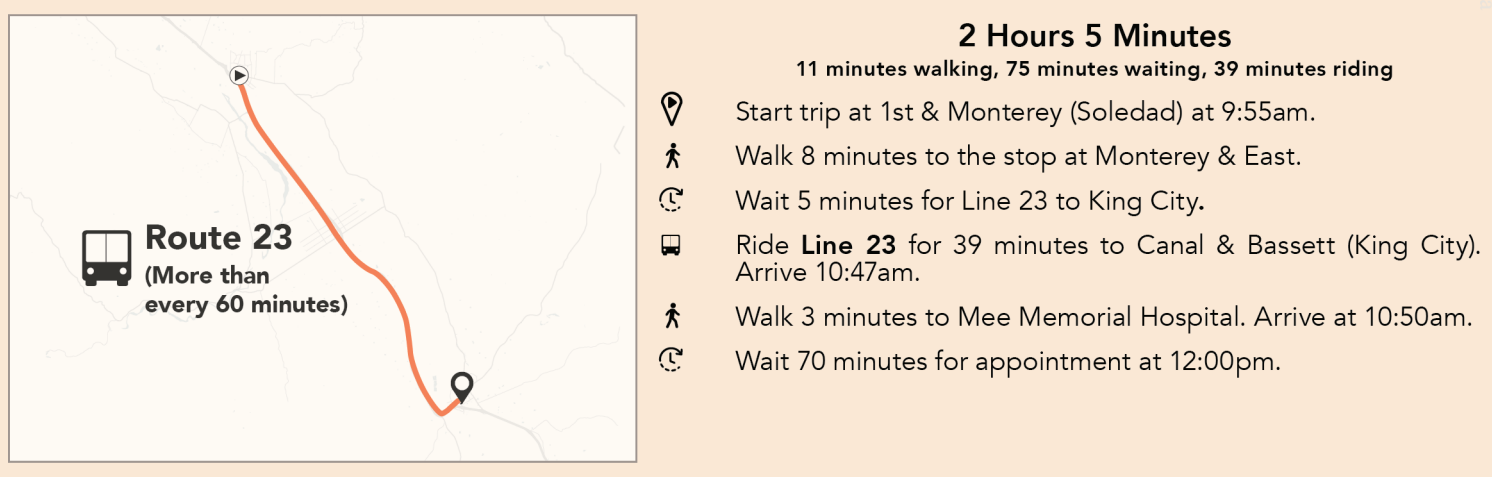


This trip would get over an hour shorter. This is because Line 23 would take a faster, more direct path between Soledad and Salinas, allowing it to arrive on time to make a timed connection with Line 28. You would only wait 5 minutes at Salinas Transit Center.

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.

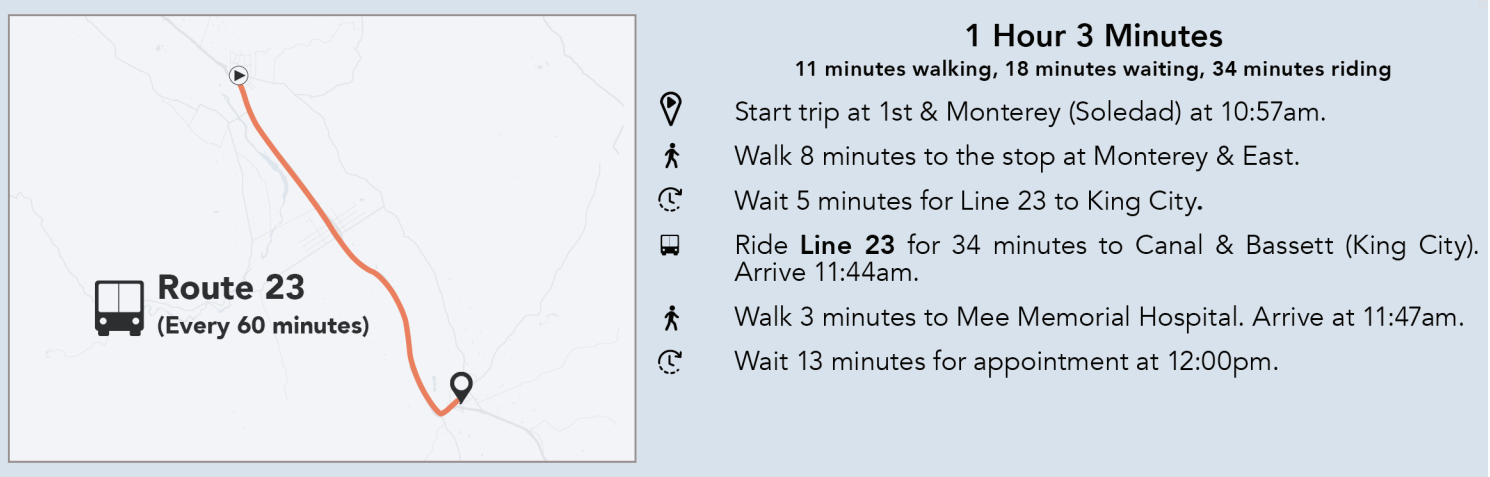
Example no. 8: Soledad to King City

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:

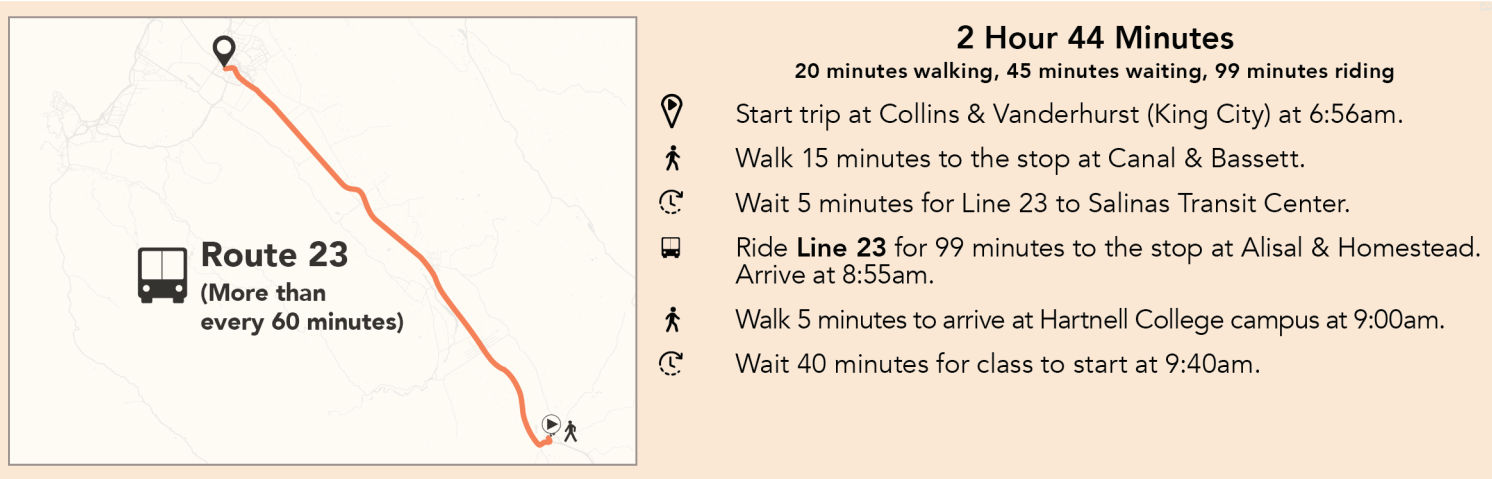


This trip would become over an hour shorter; you could leave home closer to 11:00 AM. This is mostly because Line 23 would run every 60 minutes instead of once every two hours in the middle of the day.

Example no. 9: King City to Hartnell College in Salinas

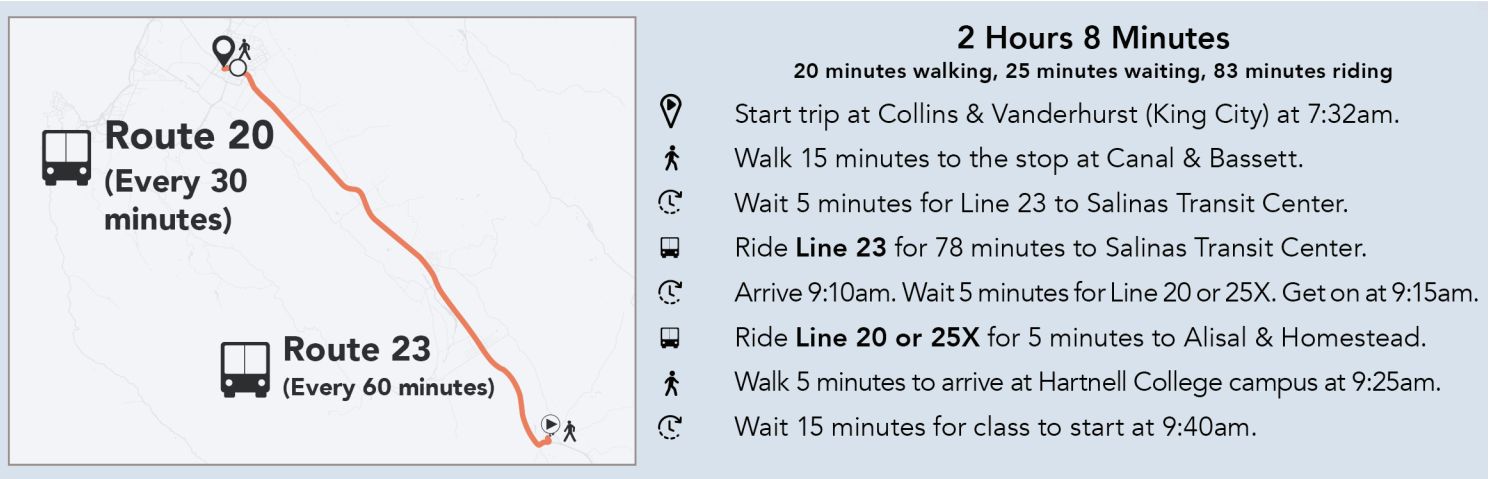
Imagine you live in King City and take classes at Hartnell College main campus in Salinas, almost 50 miles away. The class you need to attend starts at 9:40 AM¹. Here’s what you would need to do in

Existing Service:

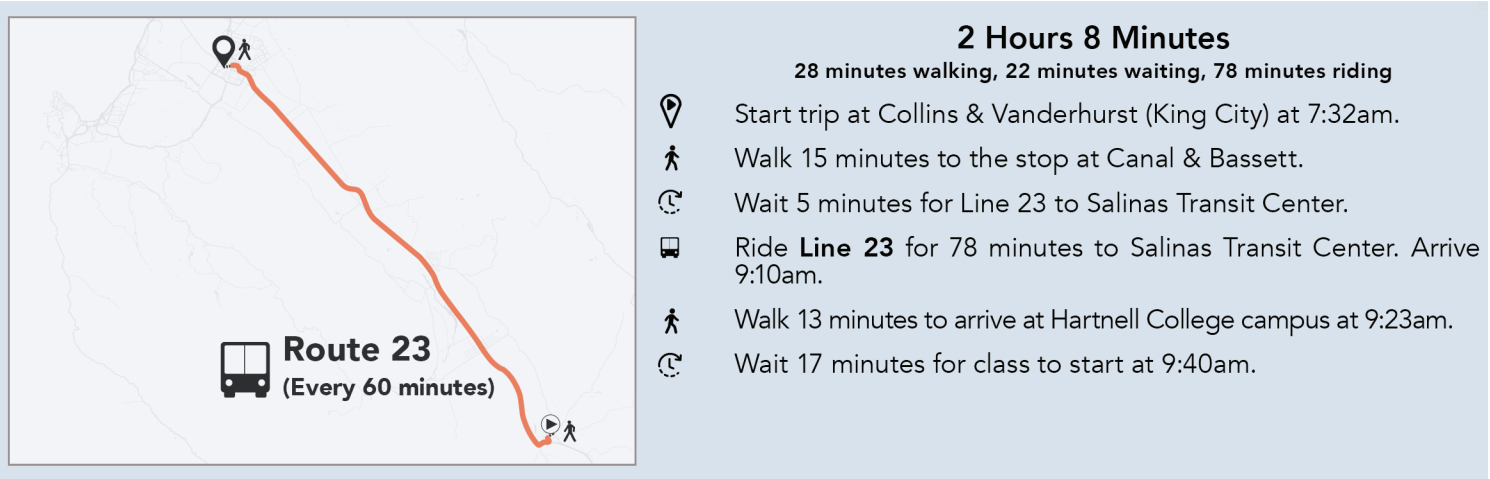


Line 23 would provide a service all the way to Hartnell, but you would arrive 45 minutes before your class starts and have a long wait on campus.

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.**

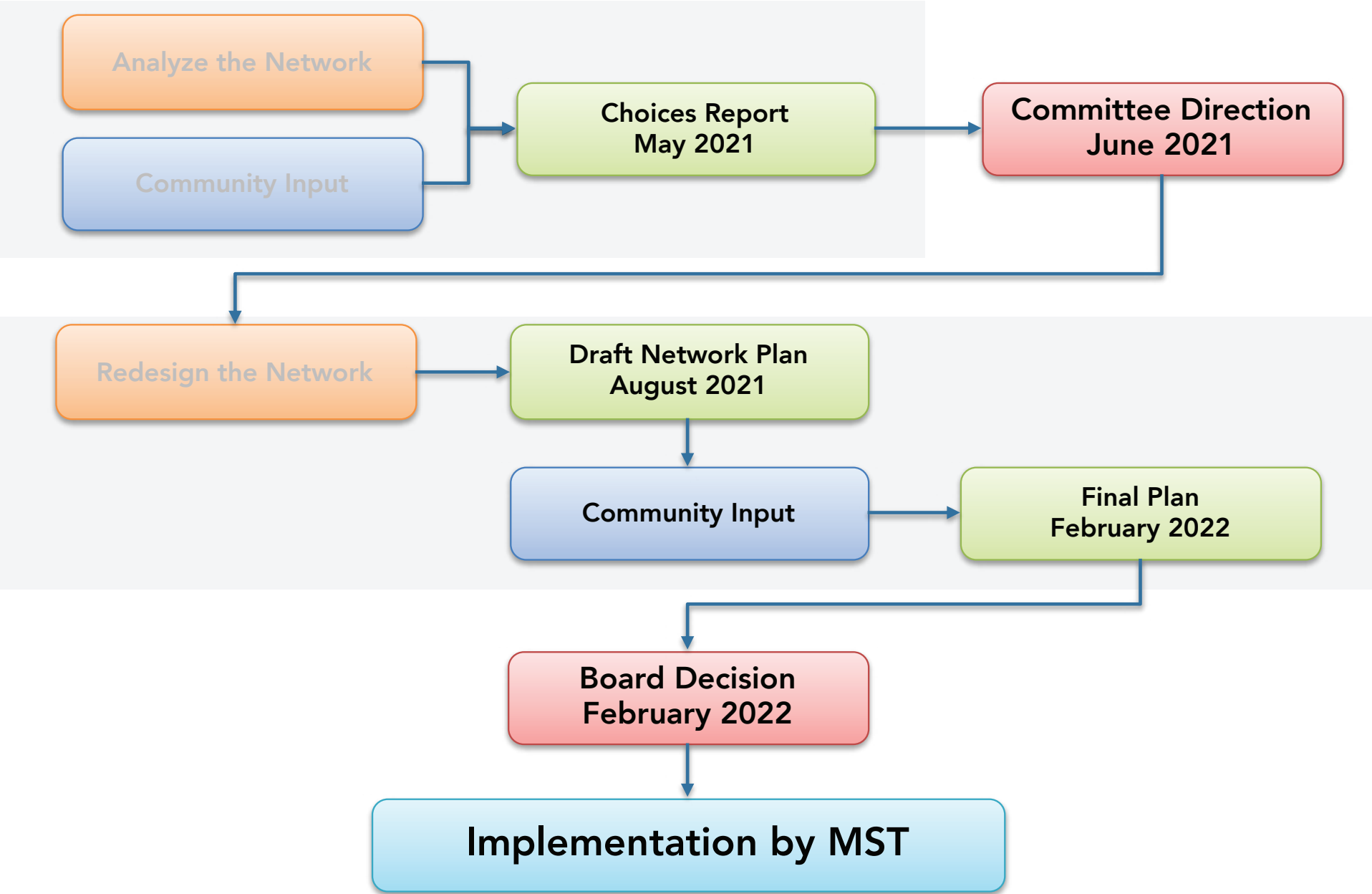


Figure 34: Project timeline. This report presents the Final Plan. The next step will be a decision by MST's Board of Directors to adopt the plan. If the Board makes this decision, MST staff will then be responsible for implementation over the course of 2022.

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.

¹ This could still be modulated with a discount for specific groups (e.g. seniors, veterans and people with disabilities).

² Because most MST riders pay their fares in cash, this summary discussion is written for a cash-and-ticket system. But similar principles can be applied to electronic ticketing systems and other payment technologies. Contactless tap-in tap-out systems (like the one currently being piloted by MST) make it possible to charge distance-based fares, which relate more clearly to MST’s operating costs. Work is under way to make this new system more widely usable for riders who currently rely on cash.

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.