

King County Metro Long-Range Plan

Metro Connects

November 17, 2021



Metro Connects

is King County Metro's vision for providing more service, more choices, and one easy-to-use system over the next 30 years.

As Metro's long-range service and capital vision, Metro Connects describes how Metro will work toward a regional, innovative, and integrated mobility network that is safe, equitable, and sustainable. This system will support healthy communities, a thriving economy, and a sustainable environment.

Table of Contents

	Page
Executive Summary	1
The Service Network	11
Overview	11
RapidRide Service	22
Frequent Service	29
Express Service	32
Local Service	35
Accessible Transportation Options	38
Marine Service (Water Taxi)	40
Service Quality Investments	44
Overview	44
Speed and Reliability	45
Boarding and Fares	48
Innovation, Modernization, and Technology	52
Customer Communications	55
Passenger Facilities	58
Connecting to Transit	61
Managing Demand	67
Equitable Transit-Oriented Communities.....	69
Fleet, Infrastructure, and Workforce	72
Overview	72
Fleet	73
Electrification	75
Facilities and Other Support Systems.....	79
Layover Areas	84
Metro’s Workforce.....	86
Attaining the Vision	88
Overview	88
Financial Overview	90
Implementation of Metro Connects: Policies and Planning	94
Implementation of Metro Connects: Engagement with Communities and Partners	101
Accountability and Continuous Improvement.....	106
Next Steps.....	109

Tables

	Page
Table 1 Changes in Access to Frequent and Local Service in the Metro Connects Interim Network.....	15
Table 2 Metro Connects Performance Measures	106

Figures

	Page
Figure 1	Impacts of Metro Connects 2050 Network 8
Figure 2	Examples of How Far Customers Could Go at Midday in 15, 30, 45, or 60 Minutes..... 9
Figure 3	Anticipated Service in 2050 Network12
Figure 4	Growth in Vehicles in Service in 205013
Figure 5	Summary of Service Categories in the Metro Connects Networks14
Figure 6	King County Transit Service Network – 201917
Figure 7	Metro Connects Interim Network.....18
Figure 8	Metro Connects 2050 Network19
Figure 9	Ratio of Transit Travel Time to Driving and Associated Change From 2019 to 205020
Figure 10	2050 Metro Connects Service Network Travel Time Savings Between Growth and Manufacturing/Industrial Centers21
Figure 11	Benefits of RapidRide22
Figure 12	RapidRide – 2019 Network26
Figure 13	RapidRide – Proposed Interim Network27
Figure 14	RapidRide – Proposed 2050 Network28
Figure 15	Metro Connects 2050 Frequent Transit Service Network.....31
Figure 16	Benefits of Express Service During AM Peak Travel Time33
Figure 17	Metro Connects 2050 Express Service Network.....34
Figure 18	Water Taxi Routes in the Metro Connects Interim Network.....42
Figure 19	Water Taxi Routes in the Metro Connects 2050 Network43
Figure 20	Capital Investment Levels46
Figure 21	All-door Boarding Saves Time51
Figure 22	Metro Will Explore New Ways to Provide Customer Information55
Figure 23	Anticipated Transit Center Boardings in the Metro Connects 2050 Network60
Figure 24	Transit Access Zones and Types of Improvements62
Figure 25	Strategic Climate Action Plan Targets for Metro76
Figure 26	Metro Connects Capital Costs and What Could be Funded With Forecasted Revenues90
Figure 27	Metro Connects Service Adds and What Could be Funded With Forecasted Revenues91
Figure 28	Capital Investments 2018-205093
Figure 29	Plans that Guide the Metro Connects Development Program.....97
Figure 30	Capital Investment Planning Process99
Figure 31	RapidRide Prioritization Process 100

More service, more choices, one system

Expanding our regional transit system to include more frequent Metro bus service to connect more neighborhoods to high-capacity transit is a tangible example of how we are creating an interconnected transportation system that gives our residents and visitors more choices to get to more places.

It's one part of our path to the future of transportation in King County, where public transit is the first choice because it's convenient, safe, reliable, affordable, — and positively impacts our environment and economy.

Metro's mission is to provide the best possible public transportation services to improve regional mobility and quality of life in King County. To do so, we are creating an innovative, integrated, safe, equitable, and sustainable mobility agency that connects people to opportunity, protects our environment, and knits together our growing cities. And, this long-range vision—Metro Connects—is how we will get there.

Decades of Metro's innovation and commitment to eliminating disparities by race and place give us a strong foundation to build on, including the nation's leading low-income fare program, one of the greenest bus fleets in the United States, and our highly successful RapidRide lines.

Metro Connects was shaped by input we received from passengers, King County cities, Sound Transit and other transportation agencies, businesses, and stakeholders working together to achieve a shared vision of better mobility in our region.

Now, we are seeing our collective vision become reality.

Metro Connects gets us where we need to go when we need to get there, supporting healthy communities, a thriving economy, and a sustainable environment.

A handwritten signature in black ink on a yellow rectangular background. The signature reads "Dow Constantine" in a cursive script.

Dow Constantine
King County Executive

Executive Summary

Metro Connects is a vision for bringing more and better mobility services to King County over the next 30 years: frequent, reliable, and fast service—all day, every day—through a regional, innovative, and integrated mobility network that is safe, equitable, and sustainable.

Metro Connects is a long-range service and capital vision developed by Metro, its partners, and the public to provide mobility to all. This is especially important as the region grows - gaining more people and more jobs - and becomes increasingly diverse, and as the climate crisis becomes even more urgent.

The vision creates multimodal connections to the places people want to go. It provides for safe and secure operations and facilities for passengers, employees, and communities. Customer-friendly vehicles, drivers, stops, information, and assistance, as well as an emphasis on modernizing how Metro delivers service, will be essential.

This 2021 update to Metro Connects emphasizes Metro's core values: safety, equity, and sustainability. It incorporates the recommendations of the Mobility Framework¹ and aligns with Metro's Strategic Plan for Public Transportation and its Service Guidelines. The update recognizes that many changes have occurred since Metro Connects was first adopted in 2017 and makes targeted changes to the proposed service networks while updating associated costs.

Highlights include:

- **More than 70 percent increase in service by 2050.** Metro will develop an interim network by the time the West Seattle and Ballard Link extensions have been completed.
- **Increased mobility services of all types to complement the high-capacity transit network.** These will include flexible services that can provide fast and easy connections to the larger public transit system.
- **A commitment to work with partners to improve the quality of services.** Metro and partners will invest in speed and reliability, passenger facilities, equitable transit-oriented communities, and other programs.

¹ Metro co-created the Mobility Framework with an Equity Cabinet, comprised of 23 community leaders, in 2019. The Mobility Framework directed Metro to center advancing equity and addressing climate change in its work. The King County Council adopted a summary of the Mobility Framework's recommendations in 2020 through Motion 15618.

- **Plans to grow Metro’s fleet and operations capacity.** Plans will include charging stations for electric vehicles of all types and the use of greener technologies.
- **A description of how Metro can achieve Metro Connects, which is expensive and not fully funded.** This update includes expected costs. This plan also discusses the need for additional funding, how Metro will work and communicate with partners and communities, and opportunities for cities to help make the Metro Connects vision possible.

Background

Metro Connects responds to critical challenges facing Puget Sound, including:

- A growing, diversifying population and historic inequities
- Transportation challenges resulting from displacement
- The worsening climate crisis
- The need to integrate a wide range of mobility services, including connecting with regional transportation partners
- The COVID-19 pandemic
- The need for new, sustainable funding sources

People across King County helped shape Metro Connects. In 2015 and 2016, transit customers, bus drivers, cities, Sound Transit and other transportation agencies, businesses, and more joined Metro in imagining the future mobility system. Thousands of participants shared their needs, hopes, and ideas for getting around better. Metro met regularly with Technical Advisory Committee participants and Community Advisory Group members. This inclusive process led to a shared vision, and the King County Council adopted Metro Connects in 2017.²

Collaboration continued as Metro updated Metro Connects in 2020-21, through engagement with stakeholders including the Equity Cabinet, a group of 23 community leaders representing riders and priority populations countywide. Metro incorporated recommendations from the Mobility Framework for advancing equity and addressing climate change, aligned Metro Connects with changes and planning done since its adoption, and made targeted adjustments to the service networks and costs.

The Metro Connects update

This iteration of Metro Connects reflects the updated vision and goals described in the 2021-2031 Strategic Plan for Public Transportation. It will help Metro deliver on the goals in King County’s 2016-2022 Equity and Social Justice Strategic Plan and King County’s 2020 Strategic Climate Action Plan. As directed by the Mobility Framework, the updated Metro Connects includes an increased focus on addressing the needs of priority populations as a strategy for improving mobility and prosperity for all.

² Ordinance 18449 adopted Metro Connects.

This focus aligns with a “targeted universalism” approach consistent with King County’s Equity and Social Justice Strategic Plan which defines targeted universalism as “defining outcomes for all, identifying obstacles faced by specific groups, and tailoring strategies and building on assets to address barriers.”³ Metro’s universal outcomes are captured in its mission to “provide the best possible public transportation services and improve regional mobility and quality of life in King County” and vision to “deliver a regional, innovative, and integrated mobility network that is safe, equitable, and sustainable.” The plan outlines how Metro will develop and enact targeted approaches and investments with and for communities with the greatest needs—priority populations. By making investments tailored to community needs, Metro can improve mobility and thereby priority populations’ access to the determinants of equity.

Priority populations: people who are Black, Indigenous, and of color; have low or no-income; are immigrants or refugees; have disabilities; or are linguistically diverse.



Metro defined which populations to focus on in partnership with the King County Office of Equity and Social Justice and the Equity Cabinet as part of the development of the adopted Mobility Framework.

Metro Connects lays the groundwork for next steps by establishing needs for future road, land-use, service, and technology improvements as well as policies that support the vision for future transit. It helps cities understand the service envisioned for their communities and describes the vital role cities play in creating and supporting transit access on their street networks, capital investments and transit-supportive land use and development.

Though the service networks in Metro Connects are important guides, community engagement will drive service changes, ensuring they respond to community-identified needs.

Metro Connects is an intentionally unconstrained vision, reflecting the imagination and input of many stakeholders and partners. Metro Connects is ambitious, expensive, and only partially funded, with the 2050 network expected to cost more than \$28 billion in capital expenses and require more than seven million annual service hours, more than a 70 percent increase from 2019.⁴ Metro will only achieve Metro Connects through a cycle of growing its network and connecting people to mobility services, measuring progress, demonstrating value, securing additional funding, and continuing to grow.

Metro cannot do this alone. Metro, elected leaders, regional partners, and communities must work together to secure additional regional funding and partner on projects and improvements.

³ [King County Equity and Social Justice Strategic Plan](#)

⁴ Estimates are at the time of transmittal of the 2021 updated Metro Connects. Metro expects costs will change as Metro Connects is implemented. Metro updated the cost estimates partly in response to King County Council motion 15252.

Structure of this plan

Metro Connects includes three visioning chapters: “Service Network,” “Service Quality Investments,” and “Fleet, Infrastructure, and Workforce.” They describe what Metro plans to do and the types of investments needed to build the proposed future network of Metro services. The fourth chapter, “Attaining the Vision,” describes how Metro could deliver Metro Connects. Each chapter, explained briefly below, includes an overview of its key elements and how that chapter advances Strategic Plan goals, as well as sections describing individual components of the vision.

Service Network

Metro Connects envisions integrating its expanded mobility system with regional partners—especially Sound Transit—and delivering more than 70 percent more Metro bus service by 2050. This significant service expansion will occur in two phases: an interim service network targeted for implementation before the Ballard Link expansion, and a 2050 service network that completes the Metro Connects vision.

Metro's suite of mobility services will continue to grow and will include RapidRide; frequent, express, and local fixed-route bus service; flexible services; Access paratransit; vanpool and ridesharing; and water taxi service. The Service Network chapter includes updated Metro Connects network maps as well as a section on each of the previously mentioned service types.

Service Quality Improvements

As part of Metro’s commitment to providing fast, frequent, and reliable service, Metro Connects emphasizes improvement of service quality. Metro strives to improve the customer experience and give its workforce the tools and training they need to do their jobs. This chapter describes programs and investments that help improve service quality, connect people to transit, enhance the customer experience, manage the system, and ensure safety. Specific sections include speed and reliability; boarding and fares; innovation, modernization, and technology; customer communications; passenger facilities; connecting to transit; managing demand; and equitable transit-oriented communities.

Fleet, Infrastructure, and Workforce

Metro Connects calls for improvements and expansion of Metro’s physical and people infrastructure to support significant expansion in service growth. Metro must continue growing and electrifying its fleet to keep up with service demand and achieve its goal of a zero-emissions bus fleet by 2035. Base expansion, ensuring bases can support electric vehicles, and targeted on-route charging will be critical, as will increasing the amount of well-maintained layover areas. Finally, supporting and growing Metro’s workforce equitably will be essential. Sections in this chapter include fleet, electrification, facilities, other support systems, layover areas, and Metro’s workforce.

Attaining the Vision


Metro must work with partners to implement and fund Metro Connects. The “Attaining the Vision” chapter describes expected costs for Metro Connects, highlighting the need for a regional conversation about how to close the substantial

funding gap. It also describes how Metro will follow adopted policies and planning processes and engage cities and communities to implement the vision, with a focus on streamlined planning, clear communication, and upstream engagement. It clarifies opportunities for cities to partner with Metro to deliver Metro Connects, outlines how Metro will track progress and demonstrate value, and describes next steps. Specific sections in this chapter include: financial overview, implementation of Metro Connects – policies and planning, implementation of Metro Connects – engagement with communities and partners, measuring progress, and next steps.

Connecting Metro Connects and Metro’s Strategic Plan

As Metro’s long-range service and capital vision, Metro Connects is essential to delivering a system that advances Metro’s mission, vision, and policy goals, as described in Metro’s Strategic Plan for Public Transportation. The Metro Connects service network also helps guide ongoing investment decisions through Metro’s Service Guidelines and service growth investment priorities. Symbols used in this visioning document represent policy goals⁵ outlined in Metro’s Strategic Plan.

Alignment with Strategic Plan Goals

				
Invest upstream and where needs are greatest	Address the climate crisis and environmental justice	Innovate to improve mobility, complement transit, and advance equity and sustainability	Keep passengers, employees, and communities safe.	Support thriving, equitable, transit-oriented communities that foster economic development
				
Improve access to mobility options	Provide fast, reliable, integrated services	Build a skilled, diverse, and well-supported workforce that has opportunities to grow	Be responsible stewards of financial resources and invest in line with values and goals.	Conduct deliberate and transparent community engagement

Want more information?
[Visit www.kcmetrovision.org](http://www.kcmetrovision.org)

⁵ The goals in the 2021 update to the Strategic Plan align with the Mobility Framework’s guiding principles, created in partnership with the Equity Cabinet and adopted by the King County Council.



Imagine what it could be like

A world-class mobility system that gives customers more frequent, reliable, and fast service all day, every day throughout King County. A system that offers innovative new travel options; clean, safe, and customer-friendly vehicles and facilities; and information that allows travelers to connect seamlessly across different transportation modes.

A system that intentionally invests where needs are greatest and addresses climate change helps everyone in King County to thrive.

When a customer gets up in the morning, their smart device or computer shows the choices in an area: Take a local bus, or join a vanpool, or take an on-demand service to a transit center to catch a frequent RapidRide or express bus. Their chosen mode goes straight to their work or to a Link station.

Another choice: go with someone who's driving to the same destination using an app to find people to share the ride. This customer could drive to the local park-and-ride—their smart device indicates there are 12 open parking spaces.

Once they leave home, this person's device offers even more information, accessible to people regardless of abilities and language spoken. Every seat is taken on the first bus, but the one coming five minutes later has plenty of room. This rider can make a quick stop at the coffee shop and catch that next bus.

On the way to the bus stop, cyclists pass by on a new bike lane next to the sidewalk. Some will put their bikes in the secure lockers at the stop and board the bus.

The stop is well-lit, so riders can see who's waiting under the large shelter. The father who drops his children at day care every morning is there. The floor of the bus is even with the stop platform so he can roll the stroller on—and there's a place where he can stash it onboard. People who use mobility aids like level boarding, too, as well as the easy mechanism for securing mobility aids by themselves. Level boarding creates safe and easy boarding for everyone.

It doesn't take long for everyone to get on the bus—the passengers tapped their fare cards on the sidewalk kiosk or used mobile ticketing and boarded through all doors. The driver smiles and answers questions for a few riders.

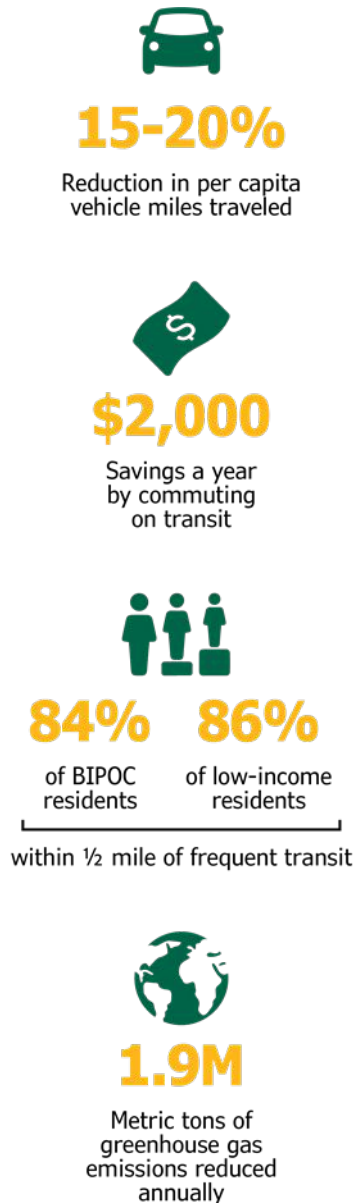
The bus arrives at the destination much faster than it used to. The road now has a bus-only lane and traffic signals that stay green when the bus approaches.

Usually, this person walks the last mile to work for exercise, but it's raining hard. They decide to take an on-demand service that's waiting near the transit center. The driver accepts the ORCA card, so paying is quick and easy.

Compared to 30 years ago, this trip was much faster, easier, and full of options—with choices available all day, any day.

How Metro Connects will help keep the region a great place to live

Figure 1 Impacts of Metro Connects 2050 Network



Advance equity by creating more opportunities for all.

More than 20 percent of people in King County have incomes below 200 percent of the federal poverty level.⁶ Metro will expand opportunities for people to prosper and thrive by offering frequent trips all day to jobs, education, and services. Metro will continue to strive to support those who cannot pay for the system.

Address climate change and protect the environment.

Climate change threatens the global and local environment, economy, health, and safety. Transit, supported by appropriate land use and equitable road pricing, are the best tools for reducing vehicle miles traveled and advancing countywide goals to reduce greenhouse gas emissions by 80 percent by 2050.⁷ They will also help manage congestion and reduce pollution.

Connect a growing population to fast, high-capacity transit services.

With 1.8 million more people and 1.2 million more jobs expected in central Puget Sound by 2050⁸, enhanced transit will help move more people, faster than today. As light rail and bus rapid transit services expand, Metro can get more people to stations for fast, frequent, and reliable trips to major destinations, within and beyond their own communities. Figure 2 shows examples of how much farther people could go in 2050 than in 2019, traveling in the middle of the day.

Save customers money.

Today, an average drive-alone commute in King County costs approximately \$290 per month, not

⁶ Mobility Framework report, Travel Trends appendix

⁷ [King County Strategic Climate Action Plan](#):

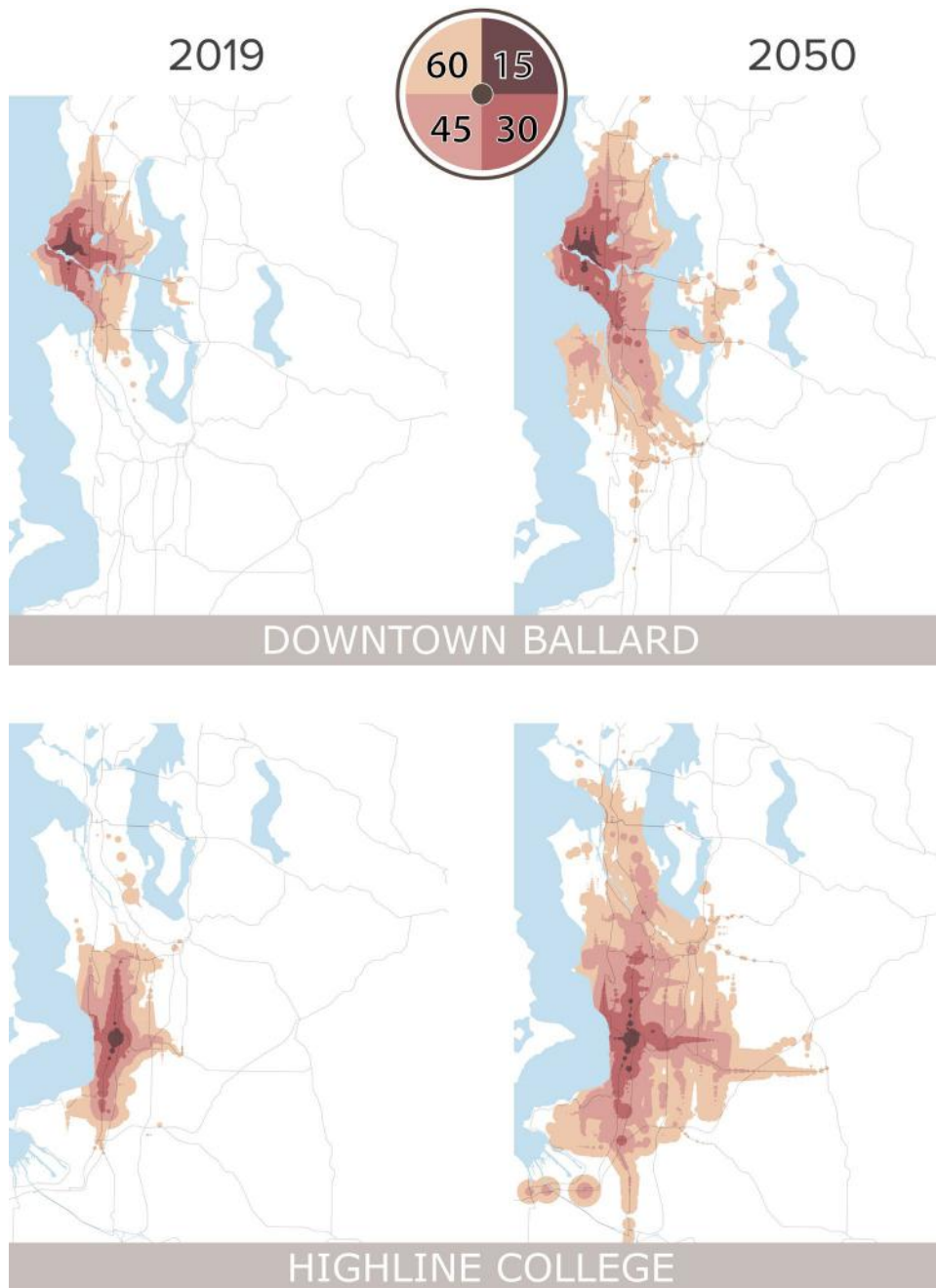
⁸ Puget Sound Regional Council, VISION 2050, www.psrc.org

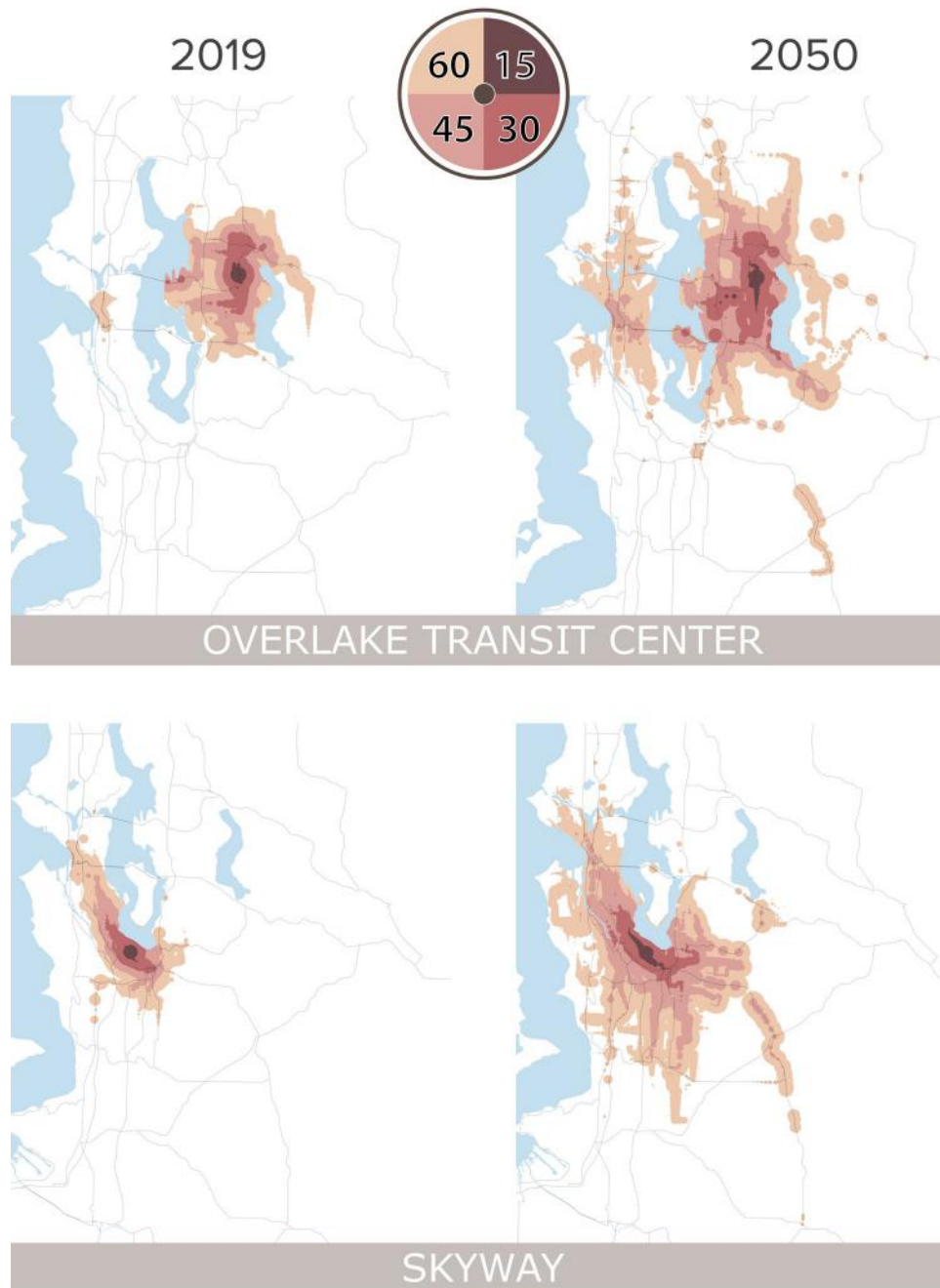
counting parking and tolls. A regional transit pass costs \$117. Expanded transit will allow more people to save more money.

Adopt new technologies that help people get around.

Metro would use emerging technologies—and the most up-to-date data possible—to provide easier, greener, and smarter travel options.

Figure 2 Examples of How Far Customers Could Go at Midday in 15, 30, 45, or 60 Minutes





The travel sheds shown above include walking time, average amount of time waiting for the bus, travel time, and any transfer time between buses starting at noon.

The starting point for each example is:

- Downtown Ballard: 15th Ave NW and NW Market St
- Overlake Transit Center: NE 40th St and 156th Ave NE
- Highline College: S 240th St and Pacific Hwy S
- Skyway: Renton Ave S and 72nd Ave S

The Service Network

OVERVIEW

The expanded service network in Metro Connects is essential to building a regional, innovative, and integrated mobility network that is safe, equitable, and sustainable. If implemented, this network will support healthy communities, a thriving economy, and a sustainable environment. There will be more than a 70 percent increase in Metro bus service by 2050, dramatically expanding the number of places people can go and decreasing the time it takes to get there, increasing Metro bus ridership to a projected 200 million annually by 2050.⁹

Metro Connects includes two networks: an interim network (targeted for delivery before Sound Transit's Ballard Link extension) and a long-range 2050 network. Both networks are ambitious, integrated with services of other agencies, and not fully funded. Metro looks forward to working with transit agencies, cities, and other partners to fund and implement the expanded system.

Services included in the Metro Connects networks and described in this section are:

- RapidRide
- Frequent service
- Express service
- Local service
- Accessible transportation options
- Marine service (water taxi)

Local service includes fixed-route and flexible options, such as buses, on-demand services, and community vans. Expanded and improved local service improves mobility by helping people get to destinations in their communities and providing connections to the regional transit network.

How the network will change

Metro Connects will add approximately three million new service hours to Metro's service network by 2050, on top of the approximately four million hours of service Metro provided in 2019.¹⁰

⁹ The Puget Sound Regional Council VISION 2050 projects the region will grow by 1.8 million people and 1.2 million jobs by 2050, and Metro's annual service is envisioned to grow from approximately 4.25 million hours to approximately 7.25 million hours annually.

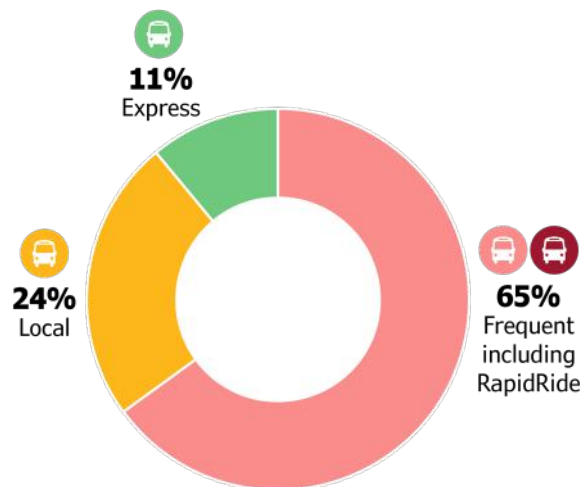
¹⁰ The 4.25 million service hours for Metro bus service was before impacts of the COVID-19 pandemic. It does not include any Sound Transit service operated by Metro.

The enhanced system will:

- **Advance equity and address climate change** by providing additional service in areas with unmet need¹¹ and making transit a more competitive option to driving alone.
- **Connect people to Sound Transit’s expanding regional transit system** by working in concert with Sound Transit’s existing, planned, and proposed investments.
- **Meet current transit needs** identified in Metro’s annual System Evaluation Report and future transit needs identified in cities’ growth plans.
- **Provide more flexible services** that improve mobility by connecting people to key locations and to the fixed-route network.
- **Move Metro toward an all-day service network** that operates from earlier in the morning to later at night.

Figure 3 illustrates the anticipated percentage of Metro’s fixed-route bus service, by type, in 2050.

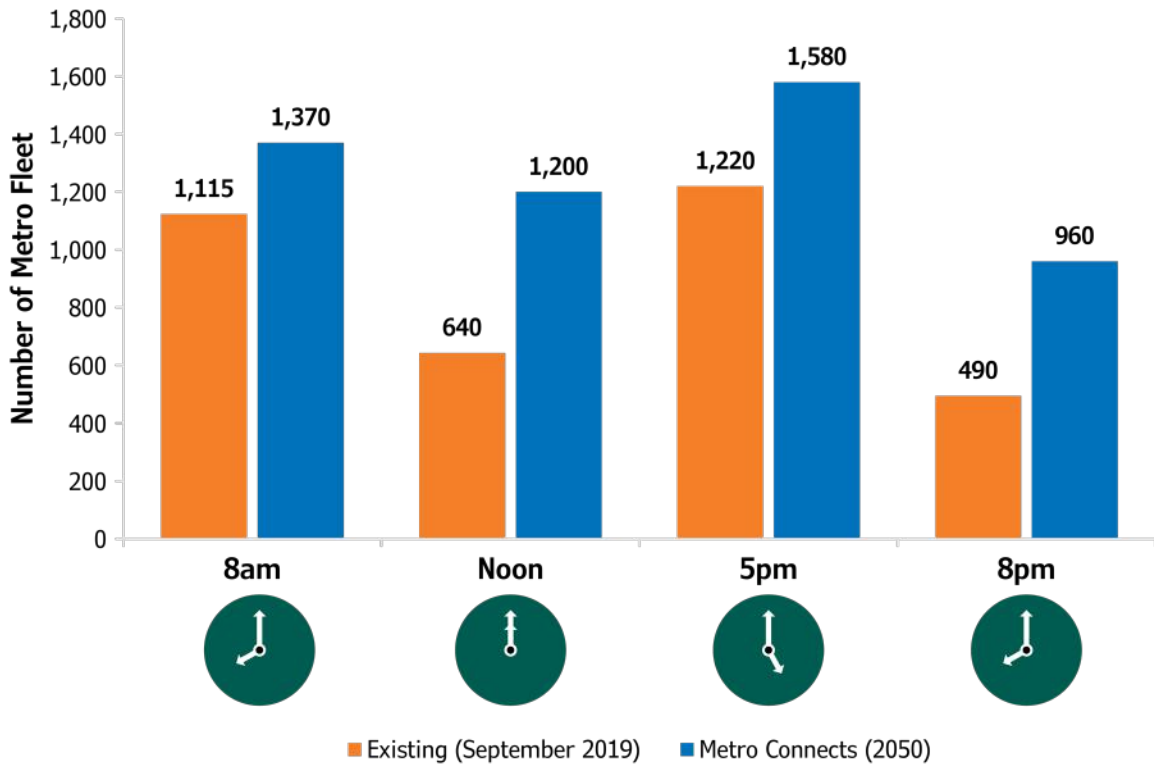
Figure 3 Anticipated Service in 2050 Network



As shown in Figure 4, Metro will provide a more robust all-day network by increasing service throughout the day, with the largest relative increases in the middle of the day and the evening.

¹¹ Per the adopted Mobility Framework, unmet need is defined as areas with high-density, a high proportion of priority populations, and limited midday and evening service.

Figure 4 Growth in Vehicles in Service in 2050



As shown in Figure 5, the proposed Metro Connects network includes: RapidRide, frequent, express, local, accessible transportation options, and marine service (water taxi).

RapidRide is Metro’s arterial bus rapid transit service. Frequent and express are fixed-route bus services that operate on regular schedules and pathways. Local services include fixed-route transit and flexible services that are tailored to local needs and connect riders to regional transit services. The majority of Metro services will continue to be fixed-route transit. However, Metro Connects envisions flexible services, such as on-demand services and community vans, expanding as part of Metro’s suite of travel options in the future.






Metro currently operates some routes that run only when demand is the highest (peak-only routes). These routes might have trips in the morning and evening but little or no service at other times of day. While Metro Connects will expand many express routes to provide all-day service, peak-only service will still be an important tool for serving certain markets.

Metro also operates Access Paratransit service and will continue to focus on improving Access while also making its other fixed-route services more accessible for people of all abilities. Additionally, Metro operates and envisions expanding marine (water taxi) services.

Metro Connects uses a network of local fixed-route bus service to approximate the future locations and quantity of local service. However, guided by community

engagement and further exploration, these services may be developed in different ways according to local needs.

Figure 5 Summary of Service Categories in the Metro Connects Networks

SERVICE TYPE	DESCRIPTION	FREQUENCY	STOP SPACING	HOURS OF SERVICE
RapidRide 	Bus rapid transit service with the highest level of investment in service, amenities, innovation, and speed and reliability	5-15 MIN	1/2 MILE	16-20 HRS/DAY
Frequent 	Show-up-and-go service that starts early and runs late in the day	5-15 MIN	1/4 MILE	12-16 HRS/DAY
Express 	Limited stop service that runs throughout the day	10-30 MIN	1-2 MILE	15 HRS/DAY
Local 	Fixed-route and flexible options, including buses, on-demand services, and community vans, that improve mobility and provide connections to the high-capacity transit network	15-60 MIN	1/4 MILE	18 HRS/DAY
Marine-Water Taxi 	Passenger ferry service expanding connections	15-60 MIN	N/A	8-18 HRS/DAY

Equity gap analysis

In the 2021 update to Metro Connects, Metro conducted an equity gap analysis on the interim network to identify households in areas of greatest need, as defined in the Mobility Framework, with limited access to transit service. Based on this analysis, Metro made several changes to the interim network in south King County to improve service to priority populations. Equity gaps were defined as areas with high

proportions of priority populations who are farther than one-quarter mile from local service or one-half mile from frequent service.¹²

Priority populations: people who are Black, Indigenous, and people of color; have low or no-income; are immigrants or refugees; have disabilities; or are linguistically diverse.



Metro defined which populations to focus on in partnership with the King County Office of Equity and Social Justice and the Equity Cabinet as part of the development of the adopted Mobility Framework.

As shown in Table 1, the analysis found that if the interim network was in place today, it would improve access to frequent and local service for priority populations and everyone in King County. Priority populations would have relatively higher access than other households to both frequent and local service in the interim network, which is important because people at lower income levels are less likely to own cars and more likely to depend on transit for mobility. Technical Report B. Metro Connects – Service Network includes a more detailed breakdown of access by priority population.

Table 1 Changes in Access to Frequent and Local Service in the Metro Connects Interim Network

	Access to Frequent Service – 2019	Access to Frequent Service – Interim	Access to Local Service – 2019	Access to Local Service – Interim
Everyone in King Co.	51%	68%	74%	80%
Priority populations	61%	82%	79%	90%

Equity gaps remain across King County for many reasons. These include increased housing costs in central areas that have good access to jobs. This results in people with lower incomes moving farther into suburban areas with lower densities and less street connectivity. These areas are harder to serve with traditional fixed-route transit.

Metro cannot solve these problems alone, or even address all the gaps that could be filled by mobility changes. However, Metro is committed to acting intentionally to build a more equitable system. Through the 2021 update, Metro made targeted updates to the interim network to improve service where it would have the greatest positive impact.

Metro conducted a cluster analysis to identify larger concentrations of households in areas with equity gaps and determine where to make targeted improvements. The results identified three areas for focused improvements: Kent East Hill, SeaTac, and Skyway. Metro staff evaluated bus routes in the interim and 2050 networks that serve these areas to determine how access to transit could be improved. Metro reclassified three routes from local to frequent in the interim network and moved one new route from the 2050 network to the interim network to provide new connections.

¹² Given the challenges in predicting future demographics, Metro used demographic data from 2020 for this analysis. For that same reason, Metro chose to conduct the equity gap analysis on the interim network, rather than the 2050 network.

Understanding and addressing gaps in service to priority populations is essential for advancing equity and improving the quality of life for these populations. Prioritizing service where needs are greatest is also critical to addressing the climate crisis and supporting economic prosperity regionwide.

Equity gaps are the result of historic inequities and are part of a complicated system. Solving them will take more than increased mobility. The solution will require a commitment by partners to address rising housing costs and to support equitable transit-oriented communities, among other things. Metro is committed to doing whatever it can to advance equity across the region.

Metro Connects service network maps

The evolution of the transit service network from 2019, to the interim network, and to the 2050 network is illustrated in Figure 6, Figure 7, and Figure 8. Each of these maps shows the planned extent of these services: Metro RapidRide, frequent, express, local, and water taxi; Sound Transit Link light rail, Stride bus rapid transit, Express, and Sounder; and Seattle Streetcar. The maps also illustrate how Metro and Sound Transit will integrate services to deliver the greatest mobility to customers.

Figure 6 King County Transit Service Network – 2019

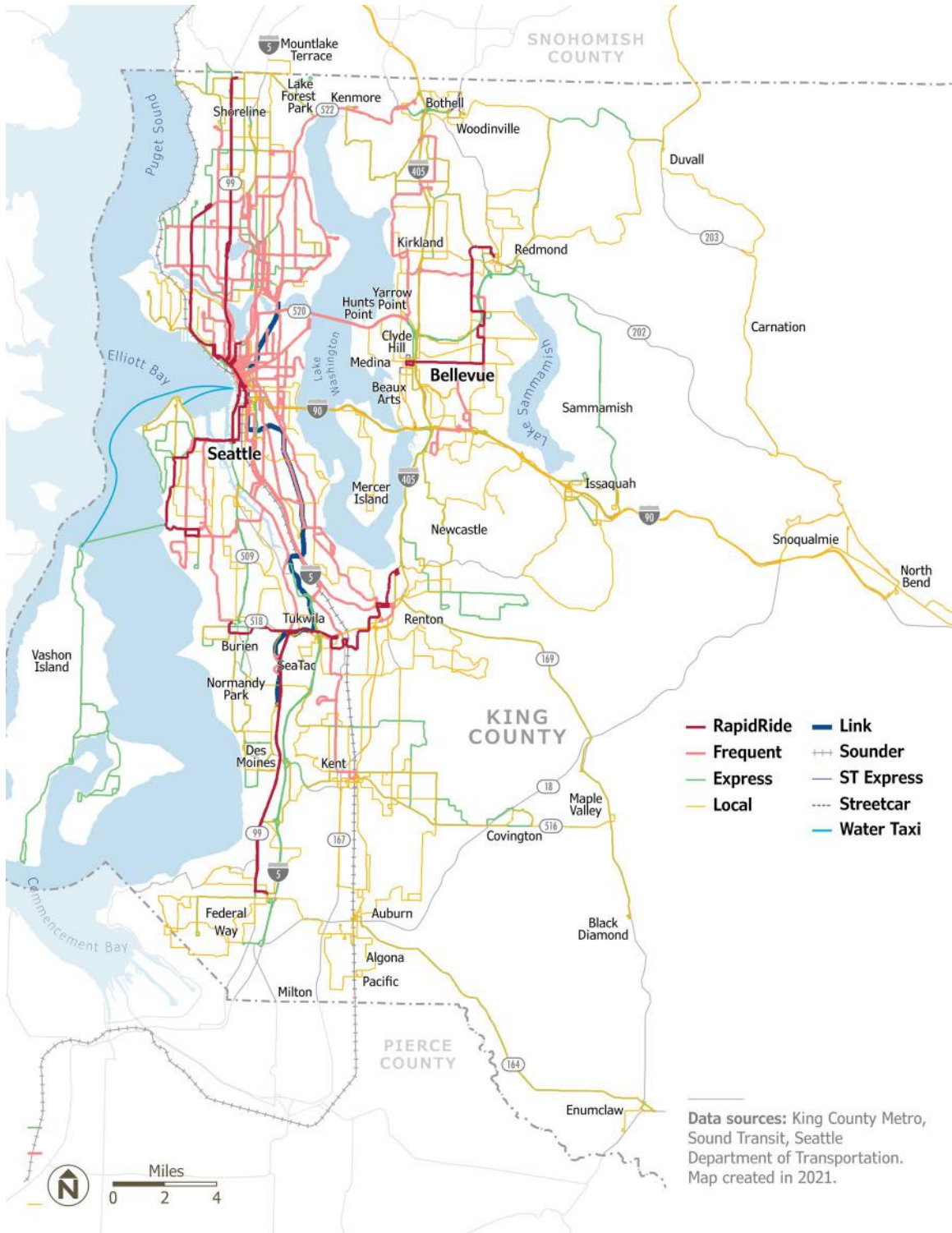


Figure 7 Metro Connects Interim Network

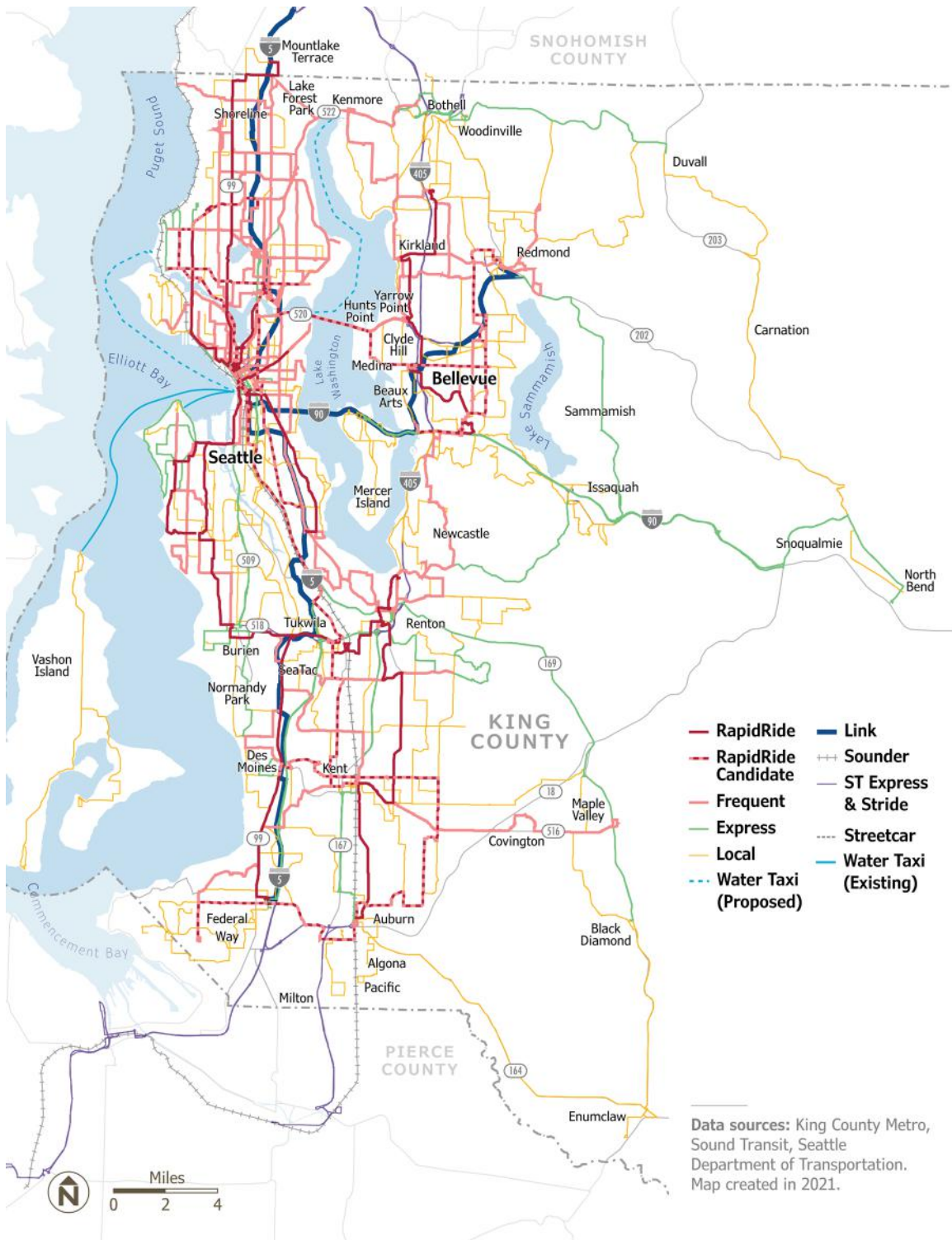


Figure 8 Metro Connects 2050 Network

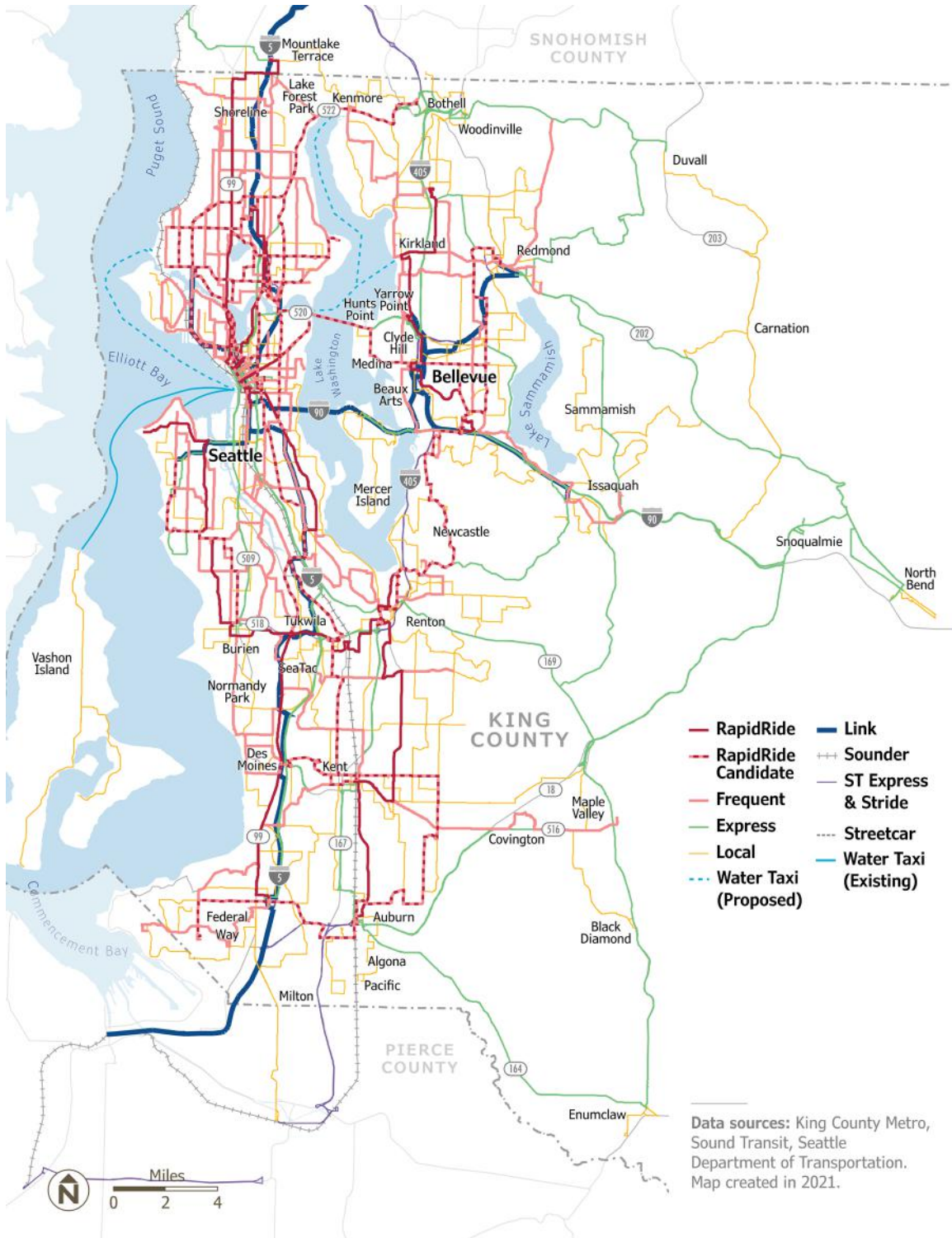
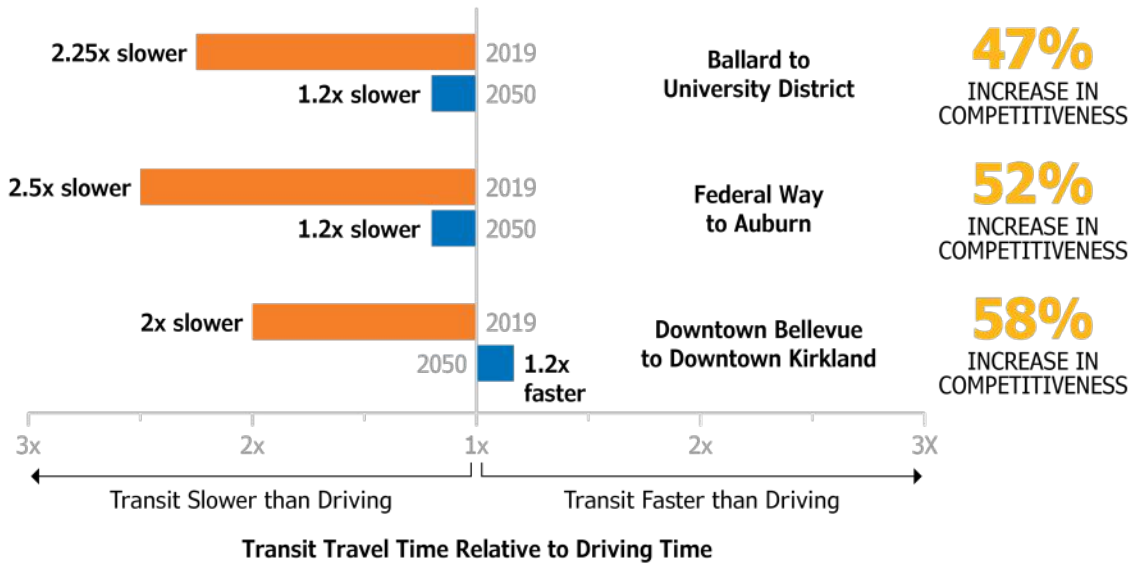


Figure 9 illustrates how the Metro Connects network can make transit a more competitive option to driving alone. For example, traveling from downtown Bellevue to downtown Kirkland via transit took twice as long as driving in 2019. In 2050,

transit would be the faster option for that trip. These improvements will help reduce vehicle miles traveled and emissions.

Figure 9 Ratio of Transit Travel Time to Driving and Associated Change From 2019 to 2050

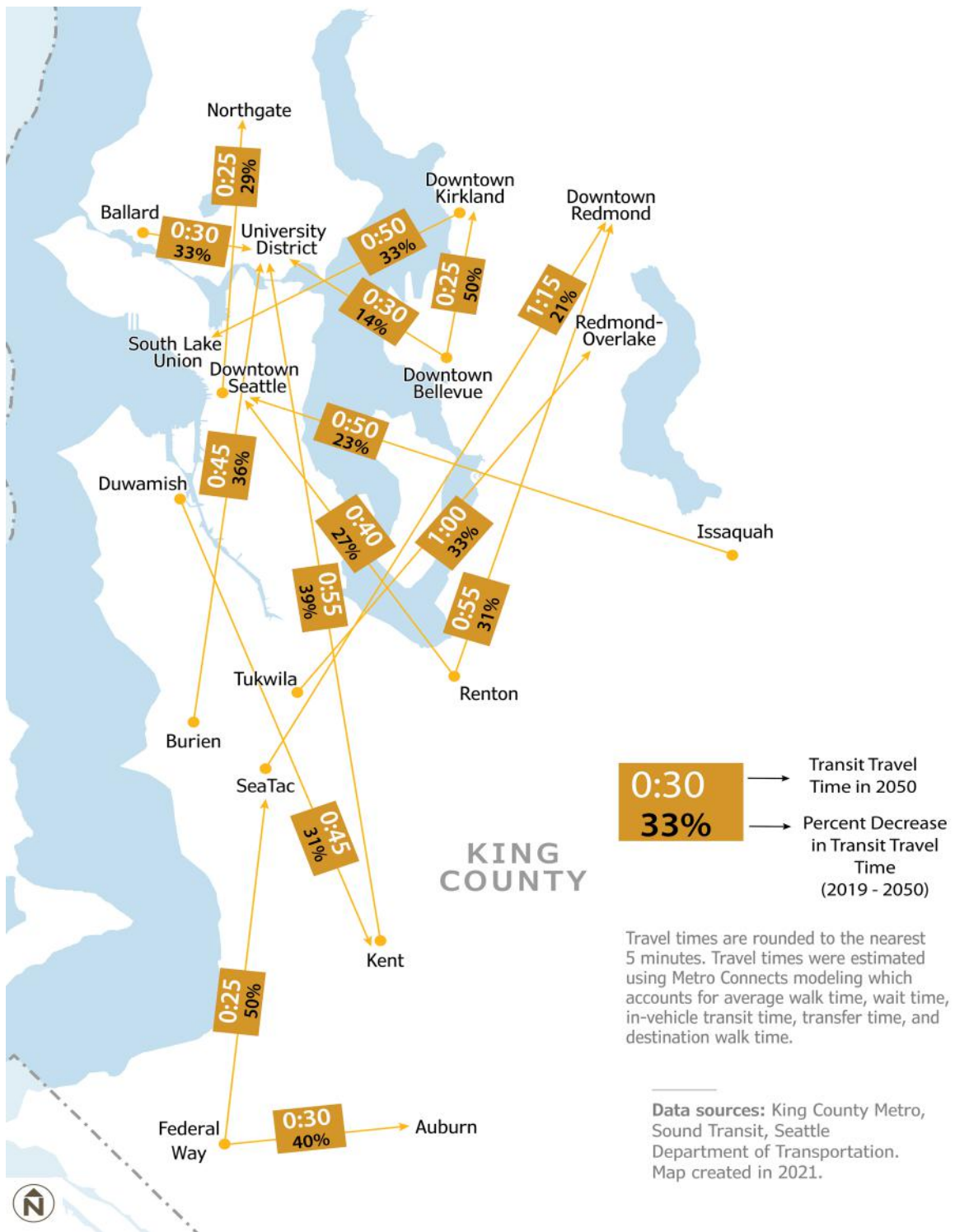
How competitive is transit relative to driving?



Travel times were estimated using Metro Connects modeling which accounts for average walk time, wait time, in-vehicle transit time, transfer time, and destination walk time.

The faster and more reliably transit gets someone to their destination, the more it becomes a competitive and attractive option to driving alone—especially for people with fixed work schedules. Figure 10 shows examples of travel-time savings between major centers in the 2050 network. The figure shows how a combination of speed and reliability improvements will make transit faster.

Figure 10 2050 Metro Connects Service Network Travel Time Savings Between Growth and Manufacturing/Industrial Centers



RAPIDRIDE SERVICE

RapidRide is Metro’s highest level of service, characterized by innovations, amenities, frequent trips, speed, and reliability. This arterial bus rapid transit service¹³ is integral to the region’s high-capacity transit network. RapidRide improves mobility along major corridors as well as between and into regional centers.

What will RapidRide service look like?

Metro intends to continue providing top-quality RapidRide service that produces strong results (see Figure 11).

Today, RapidRide buses arrive at least every five to 15 minutes from early morning until late evening. Stations at the busiest stops have broad shelters, real-time bus arrival signs, and ORCA readers that let cardholders pay on the sidewalk and get on at any of the buses’ three doors. Riders benefit from well-spaced stops, roadway improvements, onboard WiFi, and “intelligent transportation systems” that help the buses keep moving quickly.

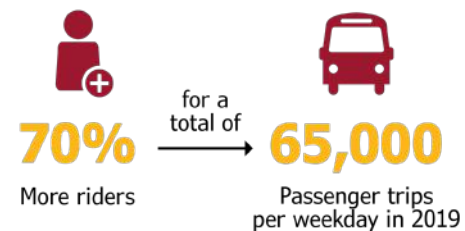
The next generation of RapidRide will expand and improve on these features. Metro Connects envisions more investment in speed and reliability improvements to achieve even more robust bus rapid transit.

Success will look different for each RapidRide corridor. However, all RapidRide lines will have an established set of standards and improvements. RapidRide’s features, including:

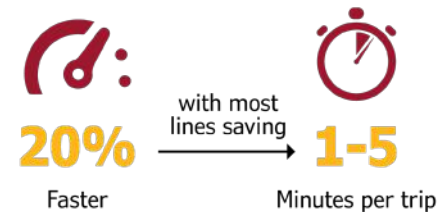
- Transit priority measures such as business access transit (BAT) lanes, queue jumps, and transit signal priority to ensure operations are faster and more reliable than standard bus service

Figure 11 Benefits of RapidRide¹⁴

Compared to the bus routes they replaced, RapidRide A to F lines combined carry about:



Travel is as much as



Customer satisfaction is high

Service is more reliable

¹³ Bus rapid transit (BRT) is bus service that operates as part of the region’s high-capacity transit system, with frequent service most of the day; articulated buses; stops at half-mile intervals; operation in improved roadways, bus lanes, or segregated right of way; shelters with real-time arrival signs; and offboard fare payment.

¹⁴ Infographic based on 2019 data

- Customer amenities such as off-board fare payment, all-door boarding, advanced customer information technology, onboard Wi-Fi, and high-quality stations
- Service on corridors and communities with strong transit demand
- Integration with the rest of the region's high-capacity transit network, offering connections to Sound Transit's Link and commuter rail services as well as other regional bus rapid transit services
- Operation on arterials, with wider stop spacing to strike a balance between greater access along a corridor and shorter end-to-end travel time
- Operation on freeways where travel markets can only be served by limited-access freeways
- Major capital investments such as access improvements and other community priorities

Metro will work closely with partner agencies to make the most of investments in RapidRide service.

Prioritization of RapidRide lines

Metro currently operates six RapidRide lines (A-F). Four additional lines (G-J) are being developed and are expected to be in operation by 2026.

An additional two lines, the K Line (Corridor 1027 between Totem Lake, Eastgate, and Kirkland) and the R Line (Corridor 1071 between Rainier Beach, Mount Baker, and the Seattle Central Business District), had been selected for investment, and community engagement and capital planning efforts were underway for those lines when those efforts were paused as part of King County's 2021-2022 budget in response to the financial impacts of the COVID-19 pandemic. Metro has prioritized the K and R lines as the next RapidRide lines to be implemented and has identified these lines in the Metro Connects future network maps (Figures 7, 8, 13, and 14) as being in operation by the time of the Interim Network. Because the K and R lines have already been prioritized for investment, they are not considered to be candidate lines and are not subject to the prioritization process described below.

The high level of service associated with RapidRide requires significant investment in service and capital improvements. To be successful and make the best use of financial resources, all RapidRide expansion corridors must have:

1. Strong service demand; and
2. Connections to and between regional and other major destinations as part of the high-capacity transit network.

Corridors that meet both criteria have been identified as candidates for RapidRide expansion in the interim and 2050 networks. Metro will prioritize equity and sustainability factors in selecting the specific candidate lines for development. This approach gives Metro flexibility to adapt to changing conditions and information gained from studies and community engagement before selecting and implementing new routes.

As Metro plans new RapidRide lines, it will work with cities and the public to study and evaluate routing, stop and station locations, integration with other services, multimodal connections, and other features. Public input will be a critical part of planning as projects move closer to final design. Metro’s Service Guidelines provide direction for planning and outreach around developing and changing service.

For more information

See Technical Report C. RapidRide Expansion Report, for information about how the candidate RapidRide lines were selected.

What will it take?

- **Develop and maintain a prioritization plan for selecting future RapidRide lines.**
A prioritization plan emphasizing equity and addressing climate change will provide opportunities to evaluate RapidRide candidates and engage with partners and the community to inform the planning and selection process. The process for developing this plan is explained in the “Implementation of Metro Connects – policies and planning” section of Metro Connects.
- **Expand and enhance the RapidRide network.**
Building on the current A to F lines and planned G to J lines, Metro will complete at least three new projects as part of the interim network and at least nine new projects by 2050. The H Line will launch in 2022, and planning for the G, I, and J lines is underway. The R and K Lines, which had started planning before being paused during the COVID-19 pandemic, are planned to be two of the projects in the interim network. Additional RapidRide lines for the interim network will be identified through the prioritization plan. All existing lines will be upgraded to meet the RapidRide Expansion Program standards.
- **With city partners, encourage equitable, transit-supportive land uses in existing and future RapidRide corridors.**
Equitable, transit-supportive land use policies concentrate dense, mixed-use, mixed-income development near frequent transit and enable more people of all backgrounds and income levels to drive less and access transit more easily. Metro will work with partners at the County and regional planning levels to advocate for transit-supportive and inclusive land use policies and programs.
- **With cities and other partners, invest in speed and reliability improvements in all existing and future RapidRide corridors.**
As discussed in the “Speed and Reliability” section, Metro, Sound Transit, and local partners have started to identify where major investments are needed to remove bottlenecks on corridors that are candidates for RapidRide service. Metro will assume primary responsibility for funding passenger facilities and roadway enhancements. Partners will assist with project planning and right-of-way acquisition and use.

Figure 12, Figure 13, and Figure 14 show the 2019 RapidRide network, the Metro Connects interim proposed RapidRide network, and the Metro Connects 2050 RapidRide network.

The City of Seattle and Burien are partnering with Metro on the development of the H Line corridor that will benefit transit riders and the community.

Seattle is investing in safer and easier access to stations, pedestrian and bicycle infrastructure, streetscape features and stormwater management upgrades to stimulate economic development, business access and transit (BAT) lanes to keep buses moving, as well as contributing funding to increase H Line frequency in off-peak direction (to match peak-direction frequency levels).

Burien has secured a state grant that will fund Metro's implementation of speed and reliability upgrades, access to transit improvements, communications and technology enhancements, as well as RapidRide station construction throughout the H Line corridor in that jurisdiction.

Figure 12 RapidRide – 2019 Network

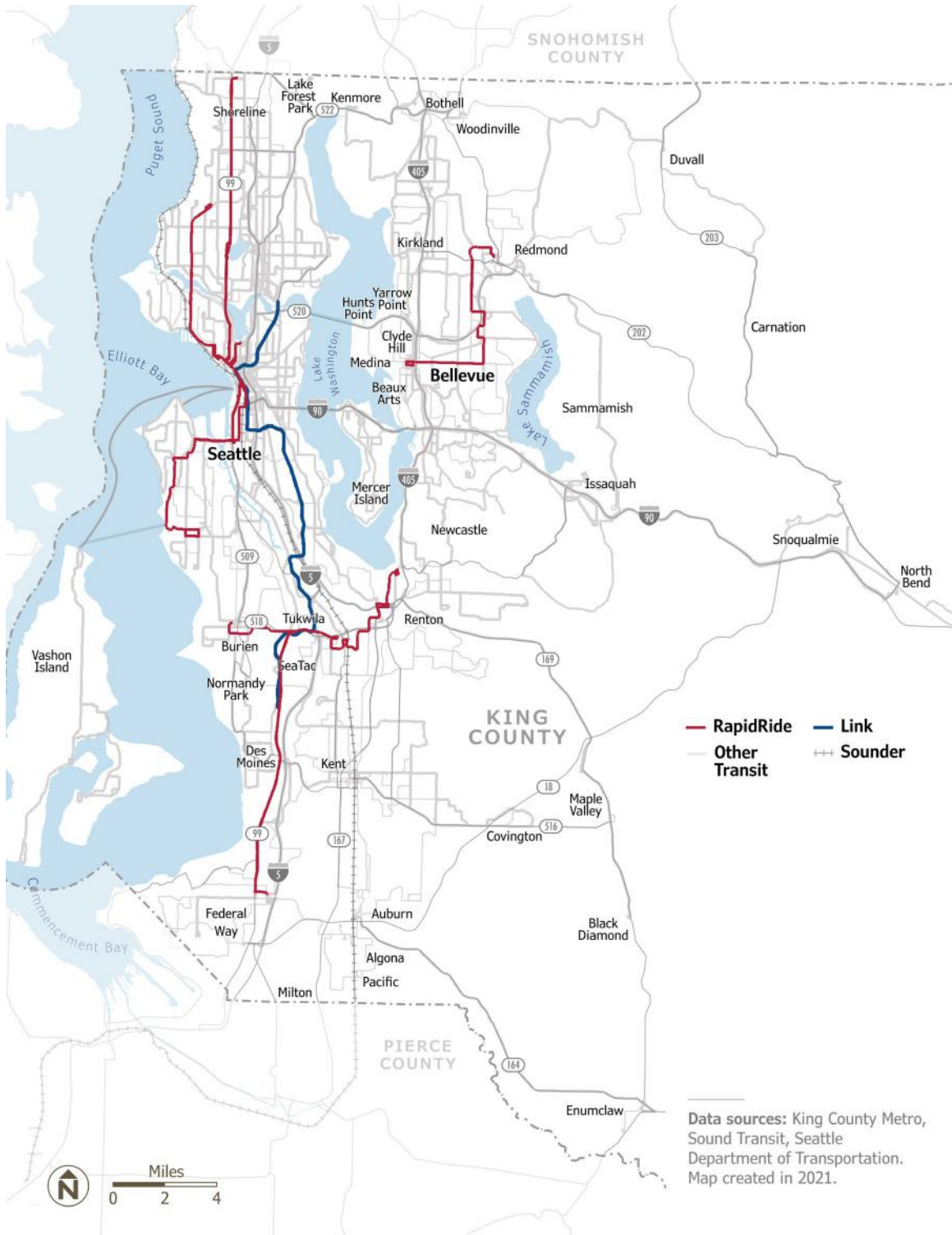


Figure 13 RapidRide – Proposed Interim Network

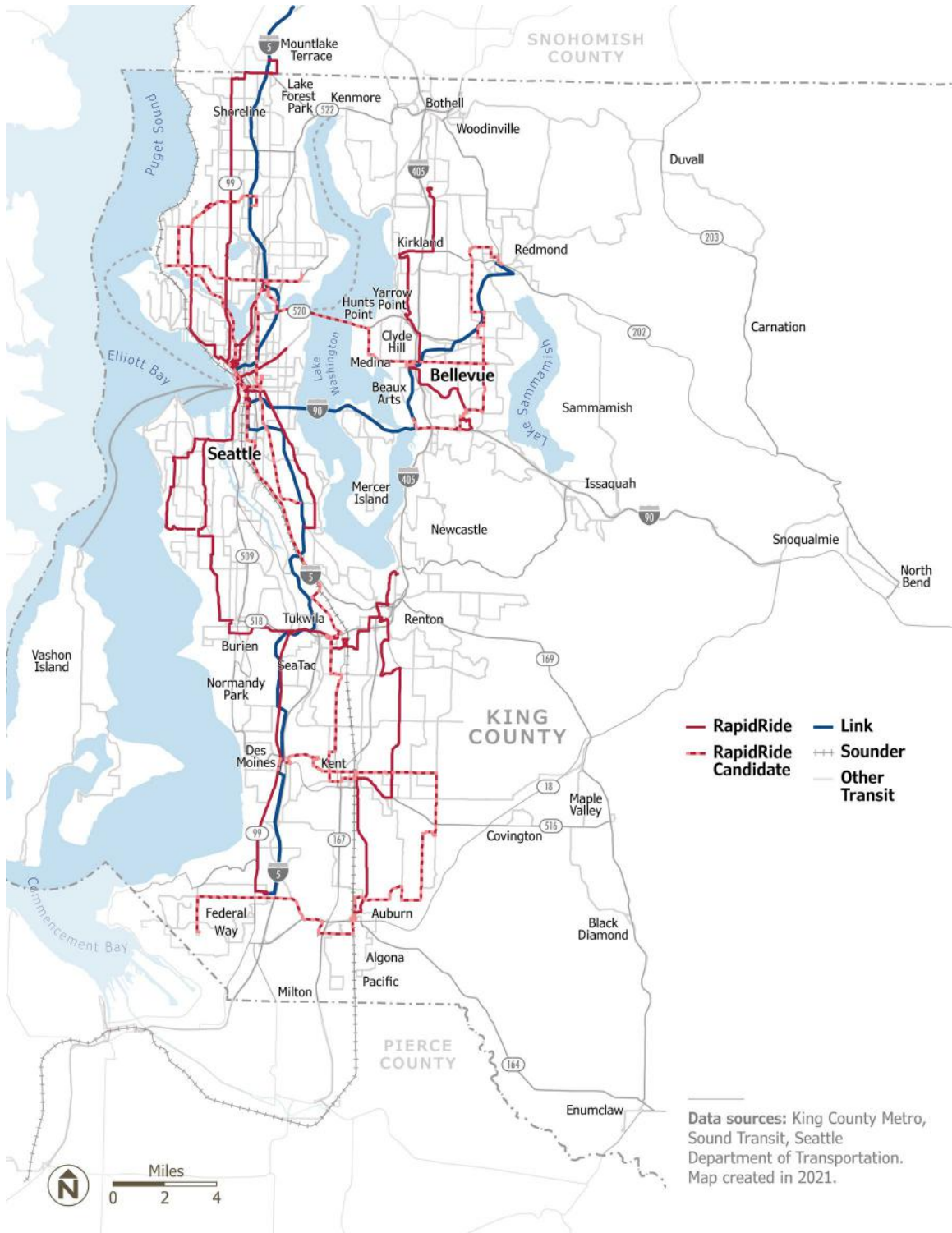
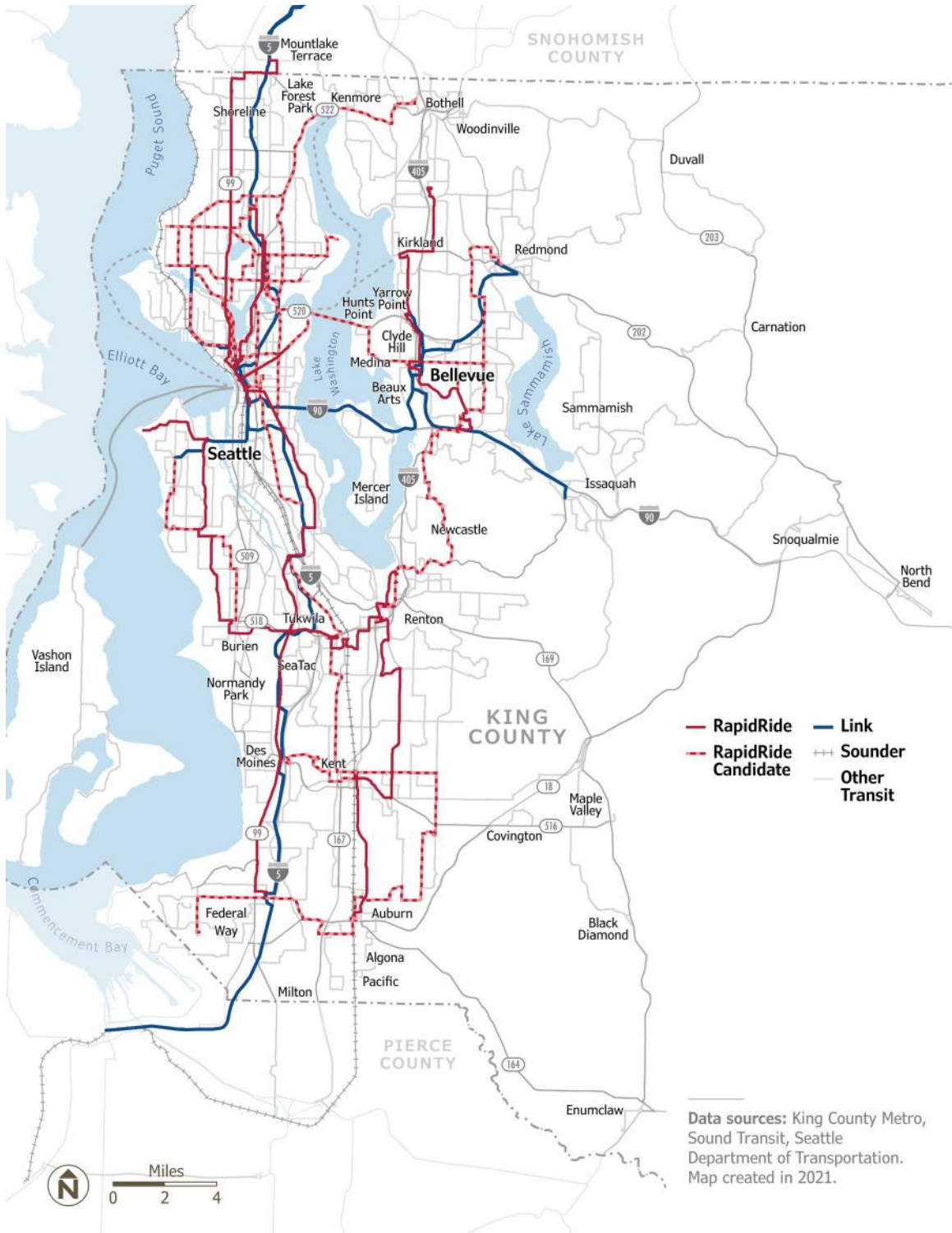


Figure 14 RapidRide – Proposed 2050 Network



FREQUENT SERVICE

“Show-up-and-go” service that starts early and runs late. Frequent service is fundamental to a transit system that improves mobility, confronts climate change, and advances equity. Metro Connects envisions an expanded frequent transit network that will improve access and connectivity regionally and support a growing population and economy. By 2050, 80 percent of King County residents will have access to frequent transit.

What will frequent service look like?

Frequent service will be provided by an interconnected network of routes with a high level of reliable, easy-to-use service all day, every day. Metro Connects defines frequent service as any route that comes at least every 15 minutes, 16 hours a day on weekdays and 12 hours a day on weekends. Stops will be every quarter mile.

Metro Connects proposes a major expansion of frequent service. The 2050 network will have nearly 630 miles of frequent service throughout the county. It will allow riders to travel faster and more conveniently for short, local trips and to major destinations and mobility hubs.

Frequent service will be reliable. Buses will move quickly along streets where buses have priority. Metro and city partners will invest in capital improvements to boost speed and reliability, such as bus lanes, signal priority, queue jumps, and other improvements. Metro may also use headway management, so buses come at consistent and reliable intervals, reducing customer wait times. Off-board fare payment at key stops and heavily used transfer points will get customers to their destinations sooner.

The frequent transit network will be easy to use. Customer information, including signage, maps, smartphone apps, and Metro’s website will clearly denote routes and stops with frequent service. Getting to and waiting for the bus or making transfers to other routes and modes will be easy, comfortable, and safe. Bus stops will have clear route and trip information, passenger amenities, and connections to walking and biking infrastructure. Metro will use technology to improve the customer experience. Real-time information about arrivals, transfers, and vehicle capacity will be provided at stops with many boardings, on the bus, and via smartphone apps.

The combination of frequent service with transit-supportive land use is one of the most effective and cost-efficient ways to encourage transit ridership and to reduce greenhouse gas emissions.¹⁵ Metro will emphasize frequent service on arterials and corridors that have supportive land uses (as described in Metro’s Service Guidelines) and that provide connections to major centers, transit hubs, and destinations in the county. These corridors have a density and mix of housing, jobs, and activity

¹⁵ For more information see Technical Report D and [King County Metro Mobility and Fleet Investment Strategies to Reduce GHG Emissions](#)

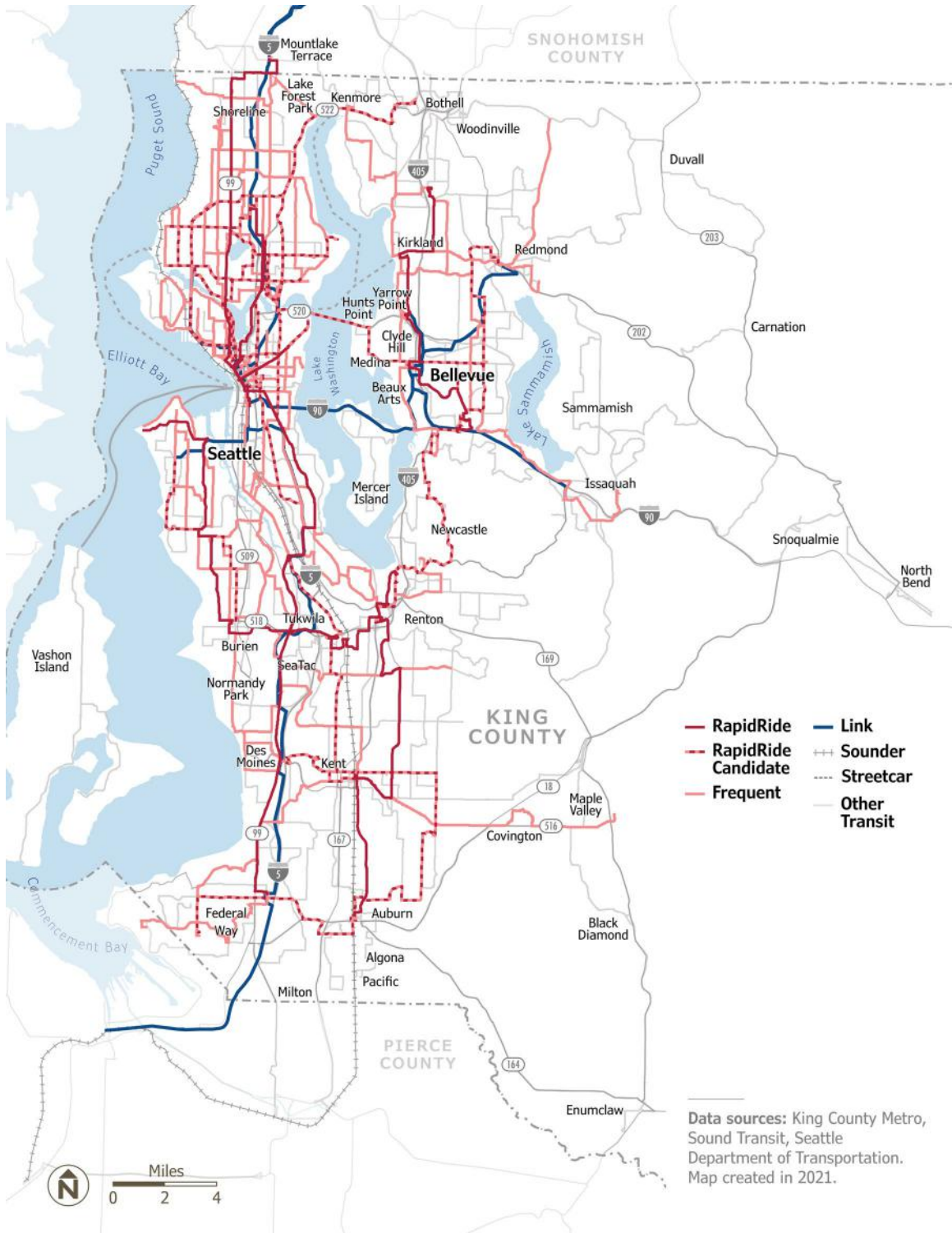
requiring high-quality service all times of day, every day. Frequent service will improve customers' access to jobs, schools, shopping, and social activities.

What will it take?

- **Increase investment in frequent service.**
Expand routes with at least 15-minute service 16 hours a day on weekdays and 12 hours a day on weekends.
- **Coordinate service, capital, and customer information investments.**
Develop an investment framework to align capital improvements with service growth and needs as frequent transit expands. Frequent routes and stops will be easy for customers to identify, and information will be consistent and accessible at the stop, online, and other avenues.
- **Work with city partners to invest in capital improvements and ensure transit-supportive policies.**
Prioritize transit over other modes, construct features that improve speed, reliability, and access to transit, and address existing needs and gaps. The level of investments will vary depending on the need and right-of-way conditions. Metro will work with cities to adopt transit-supportive land use policies, such as appropriate zoning, reduced parking requirements, and affordable housing incentives, along corridors with frequent service.

Figure 15 shows proposed Metro Connects frequent transit service in 2050.

Figure 15 Metro Connects 2050 Frequent Transit Service Network



EXPRESS SERVICE

Express service makes limited stops for faster and easier trips between growth centers across King County. Metro Connects includes new all-day express routes that support various schedules, destinations, and trip purposes, giving riders more flexibility.

What will express service look like?

Express service will run all day, unlike traditional express buses that primarily serve commuters during peak times.

As the number of people and jobs grow,¹⁶ King County will need fast, reliable, all-day service to support changing travel patterns. Express service will move more people to work or other destinations quickly, and Metro and Sound Transit have worked together to develop a complementary network of express services connecting important corridors countywide.

In the future, express buses will arrive more frequently during peak periods than during the off-peak. Some buses will arrive more frequently during the off-peak in high-demand corridors. Express stops will be spaced one to two miles apart, on average. Stops will be less frequent on highway segments and more frequent when serving local transportation hubs and stations.

Express service will connect transit centers, employment hubs, and educational institutions along major corridors. It will connect small suburban cities to regional growth centers and the larger transit system. The proposed express network will be integrated with regional rail and bus rapid transit services.

Express service will:

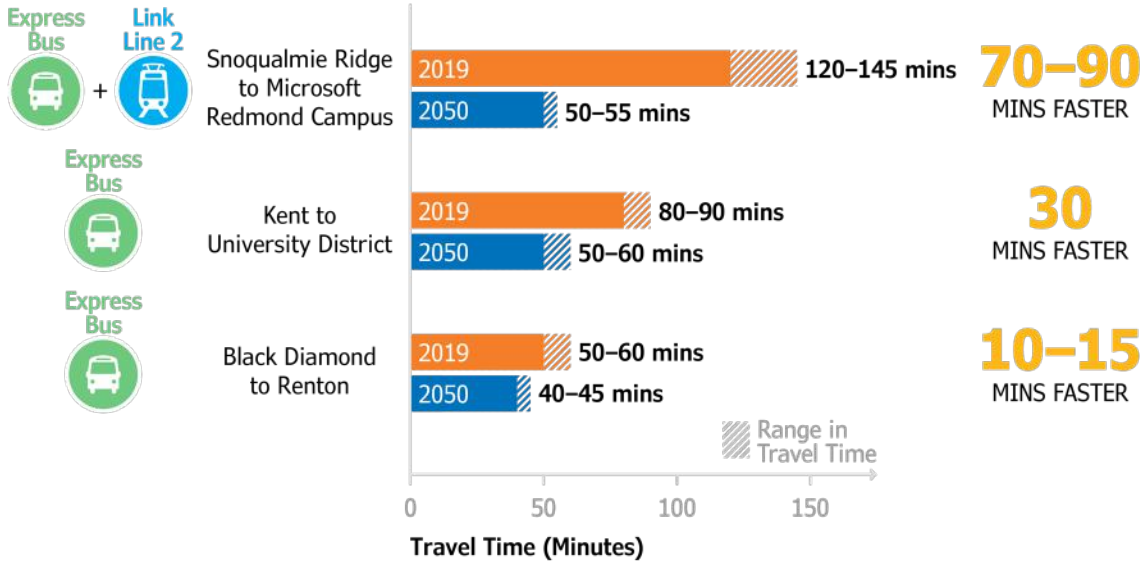
- Connect areas that have concentrated demand at both ends of the route
- Connect centers not well served by other regional high-capacity services such as light rail and bus rapid transit
- Operate primarily on highways or major arterials where express buses can maintain a travel speed of more than 20 mph, or 45 mph on freeway portions
- Provide significant and reliable travel-time savings compared to alternatives
- Provide faster trips by using improvements that help buses move more quickly and reliably
- Expand access to transit by connecting to parking facilities

Figure 16 shows how the Metro Connects 2050 network will benefit riders who travel during the morning peak period. The travel times savings will be significant. For example, a Microsoft employee who commutes from the Snoqualmie Ridge five days

¹⁶ More information and maps showing projected job and population growth in the Metro Connects Service Network Technical Report.

a week, 50 weeks a year could save 580 to 750 hours or 24 to 31 days per year in 2050 compared to 2019.

Figure 16 Benefits of Express Service During AM Peak Travel Time



Transit service types refer to 2050 service (Express Bus, Link Line 2).

Travel times were estimated using Metro Connects modeling which accounts for average walk time, wait time, in-vehicle transit time, transfer time, and destination walk time.

What will it take?

- Expand express service.**
Expand to new areas, lengthen spans of service, and increase frequency. Dedicate about 11 percent of Metro’s total service hours to express service by 2050.
- Partner to improve express travel speeds and reliability.**
Improve non-highway roads where express service operates. Partnerships with local jurisdictions could enhance the right-of-way available for express service or augment planned in-street transit priority improvements. Continued and new partnerships with the Washington State Department of Transportation could help improve operations on highways.
- Coordinate express service with Sound Transit and other transit providers.**
As Sound Transit expands, some of its express bus corridors will be replaced by Link light rail and Bus Rapid Transit. Metro will use these milestones to implement new or modified express routes to expand regional express service and integrate it with the high-capacity transit network.

Figure 17 shows the 2050 Metro Connects express service network.

Figure 17 Metro Connects 2050 Express Service Network



LOCAL SERVICE

Local fixed-route and flexible services improve mobility and provide connections to the regional transit network. Metro will work with communities to determine the best options for them, ranging from expanded bus service to more flexible options such as ridesharing, on-demand service, and partnerships with other transportation providers.

What will local service look like?

Most of Metro’s local service is provided by fixed-route buses that operate on regular routes with fixed schedules. Metro also operates services that use smaller vehicles and have a combination of fixed-and flexible-routing in some areas, such as Dial-A-Ride Transit (DART). Metro Connects defines local fixed-route service as a bus that comes every 15 to 60 minutes during weekdays, and possibly increased frequency during the peak periods. Stops along the route are spaced one-quarter mile apart. It often provides more point-to-point connections, which may result in less direct routing between destinations.

Metro will continue to expand flexible options that complement bus service and match local conditions and community needs. Options will focus on priority populations and build on and complement existing services such as community vans, vanpools, and on-demand ridesharing services. People might use these services to make connections to and from transit, or to get to other destinations in their community. Flexible service can provide more direct and dynamic connections than a fixed-route bus can in low-density areas, including rural King County.

Metro is thinking creatively about new options that match local needs in urban and rural parts of the county, understanding that local needs differ widely across the county. It is partnering with private providers of mobility technology and services to create on-demand services that work better for customers and integrate with the region’s other transit and mobility services. The integration of flexible services with fixed-route services will be a priority as Metro works with communities to design services.

For more information

Via to Transit is a pilot, on-demand service connecting riders to and from transit hubs in southeast Seattle and Tukwila. People who live, work, or go to school within the specified service areas can download the app and request a ride from Via to Transit to catch Link light rail or a bus at certain stations.

For more information, visit: <https://kingcounty.gov/depts/transportation/metro/programs-projects/innovation-technology/innovative-mobility/on-demand/via-to-transit.aspx>

Metro intends to meet customer needs by taking a community-based planning approach that centers community needs in decision-making and will evaluate innovations to ensure they deliver value to the customer. Metro will follow the Service Guidelines and will develop project-specific performance measures and

evidence such as customer feedback and rigorous impact evaluations. The results will inform decisions about scaling up and making pilot services permanent.

Metro Connects will dedicate about 24 percent of Metro's total service hours to local services, including fixed-route and flexible service. Most of the growth in hours will be used to improve local fixed-route service, increasing frequency to achieve more arrivals every 30 minutes most of the day. However, for local service in particular, Metro will maintain flexibility and work with communities to define the services that meet their needs.

What will it take?

- **Pilot new innovative flexible service models and technology applications.**
These could include on-demand ridesharing options, innovative booking and routing technologies, automated vehicles, and other advances in technology yet to come. Partnerships with private service providers might create opportunities to give communities more and better mobility options. Such services should align with the Strategic Plan and include evidence-building plans for how impacts on mobility, equity, and sustainability will be evaluated according to Metro's Service Guidelines.
- **Partner with local jurisdictions, non-profits, and employers to secure additional funding for flexible services.**
Continue to work with local partners to identify opportunities to secure grants and apply other funding sources to launch flexible services throughout the county. Metro will also engage with communities to develop services, as outlined in Metro's Service Guidelines.
- **Use evidence from community-based planning, customer research and feedback to design, implement, and evaluate new services.**
Metro's flexible service projects have been successful in part because of collaborations with nonprofit organizations, jurisdictions, and community groups. Community partners help identify needs and support development of unique services to meet them. Continuation of these community partnerships will be important. Metro will also strengthen its capacity and partnerships to build evidence about what works and how innovative services impact mobility and quality of life for people and communities in the region.

Community collaborations

Metro has collaborated with communities in several areas. To improve connections to transit in southeast Seattle and Tukwila, Metro worked with Sound Transit, local jurisdictions, and community groups to implement and evaluate a feeder-to-fixed route (also known as first-last mile) service, improving access to buses and light rail for communities in need of improved service.

Metro also launched flexible, app-enabled, on-demand services in the Juanita area. These services coordinated with updates to the bus service network in northeast King County.

Another example is Community Van programs where in partnership with local jurisdictions and community groups, volunteer drivers are provided, and the vans bring together people who take trips in common to places like farmers markets or grocery stores.

Metro also is launching a new feeder-to-fixed-route pilot in Kent. It will address the specific needs of workers in the Kent industrial valley and will test new ways to integrate on-demand and fixed-route transit services.

For more information

For additional discussion of innovation and technology, see the Innovation, Modernization, and Technology section.

For a full description of Metro's current service types, see Technical Report B. Metro Connects – Service Network.

ACCESSIBLE TRANSPORTATION OPTIONS

Metro Connects envisions mobility options for all people, regardless of ability. Metro will pursue innovative ways to improve the quality of Access paratransit services while reducing costs. And it will make all services more accessible by providing 100-percent low-floor Access buses and accessible stops, designing vehicle interiors to better accommodate customers and what they bring on board, and increasing auditory and tactile information.

What will accessible transportation look like?

Metro will provide comfortable and easy-to-use service for all passengers, regardless of physical abilities, languages spoken, and mobility or other devices they need to have with them. For people whose disabilities prevent them from getting to a fixed-route bus service, paratransit provides travel training and transportation options to the fixed-route bus service; for people whose disabilities prevent them from using fixed-route bus service, paratransit service is a comparable alternative. Access paratransit is not required or intended to meet all the transportation needs of people with disabilities. The Access paratransit program provides service, travel training, and other resources to give people with disabilities access to public transportation, as required by the Americans with Disabilities Act.

What is the Americans with Disabilities Act (ADA) of 1990?

Civil rights legislation that provides a national mandate for the elimination of discrimination against individuals with disabilities with specific requirements for public transit agencies. ADA requires the provision of demand-response transportation service for people with disabilities who are unable to use fixed-route transportation systems.

Accessible services can be challenging to use or inconvenient for customers. Access service today requires that reservations be made one to seven days ahead and has a 30-minute pickup window. To meet the needs of a growing and diversifying community, Metro will work to improve service for customers with innovative approaches to deliver same-day scheduling and to reduce barriers that customers with disabilities face when trying to use transit.

About 30 percent of paratransit customers can use fixed-route transit for some trips. However, the other 70 percent cannot use existing services because of difficulties reaching the nearest stop or boarding and riding the bus. Making the transit system more accessible to more people also requires improvements to facilities, information, and customer experience.

Metro will also continue to support specialized services, such as Community Access Transportation (CAT), which help community agencies that serve older adults, people with disabilities and low-income populations set-up their own transportation services. Metro will continue working to expand services, such as CAT, that provide mobility in ways that meet people’s needs in a cost-effective manner. Metro is also expanding

its trip planning services with a focus on making CAT more accessible to priority populations.

New technologies and transportation services will open opportunities to improve accessibility of all services, provide paratransit trips that are more convenient, have lower operating costs, and could complement or reduce demand for some existing paratransit services. Metro could pilot on-demand paratransit trips. Metro's use of wheelchair-accessible vehicles in its Via to Transit pilot program is an example of how Metro will improve accessibility of all of Metro's services and bring people of all abilities to the fixed-route system. The Via to Transit pilot also provided a call center for people without smartphones, interpreter services for riders with limited English proficiency, and pick up options where riders with disabilities made their request (rather than needing to meet their vehicle a few blocks away) to address other barriers to accessing mobility.

What will it take?

- **Use inclusive planning to make the entire transit network more accessible.**
Continue improving how Metro involves people with disabilities in planning, to ensure Metro understands their challenges in using transit. Partnering with local jurisdictions to ensure sidewalks and pedestrian infrastructure are accessible. Implementing changes such as capital improvements to make buses more accessible and training for operators and riders can make all services more accessible.
- **Pilot and start new service models to reduce costs and improve service quality.**
Potential approaches include same-day Access Transportation service and public-private partnerships to expand accessible taxis or transportation network companies. Pilots should include evidence-building plans for how these services will be evaluated for impact.
- **Make customer information and support available to customers who have limited English proficiency or disabilities.**
Strategies might include enhanced availability of interpretation services and translated materials, audible announcements on vehicles and at facilities, tactile wayfinding options, and use of universal and intuitive symbols.
- **Partner to provide service.**
Continue to partner with community organizations to provide cost-effective transportation for people with disabilities. This could include expanding the CAT program, which is less expensive to operate than Access service or piloting partnerships with community-based organizations to provide 'cultural navigators' to help customers with limited English proficiency navigate the Access paratransit eligibility process.

MARINE SERVICE (WATER TAXI)

Expansion of new passenger ferry service routes on Puget Sound and Lake Washington, in appropriate locations, could provide more reliable options for getting around and connecting to the regional transit network. Passenger ferries can also allow people to avoid traffic congestion.

What will passenger ferry service look like?

Passenger ferry service represents one component of the region's transportation system, and can provide fast and reliable connections in appropriate locations. Ferries serve as a supplement to the countywide transportation system in locations where it serves the network as well as, or better than, traditional fixed-route transit service. Service hours could be extended during summer and special events to accommodate rider demand.

Ferry service can complement bus and rail service; it is not constrained by the road and rail network and traffic congestion. For example, when the West Seattle bridge closed in 2020, the water taxi became an essential connection for West Seattle residents. Planning for additions¹⁷ or changes to ferry service will consider Metro's core values: safety, equity, and sustainability.¹⁸ As a technical report to the Strategic Plan for Public Transportation, King County should update the King County Ferry District 2014-2018 Strategic Plan to complete the policy-level analysis and decision-making to determine the level of service desired for water taxis and the property tax rate needed to provide that level of service. Until updated strategic planning answers these questions, planning for expanded new marine service routes must use the county's adopted Service Guidelines and consider the cost-benefit comparison of water taxi service to land-based transit services, including fixed-route and flexible service options.

As with all service envisioned in Metro Connects, Metro will need additional funding to expand passenger ferry service.¹⁹ Marine services are funded by a dedicated property tax levy, passenger fares, and federal and state grants. Future marine services will be funded by these sources or other sources specifically dedicated to marine travel. Each new route will require investments in capital infrastructure, including a terminal at each landing, mooring docks, transit connection improvements, and vessels.

¹⁷ Potential new routes studied by King County and the Puget Sound Regional Council are Kenmore and Kirkland to Seattle via Lake Washington, and Ballard to downtown Seattle via Puget Sound.

¹⁸ The Service Guidelines include guidance for evaluating and adjusting Marine service.

¹⁹ Passenger ferry service is currently funded through a dedicated Ferry District property tax, a separate source than the rest of Metro's bus service. That could change in the future.

What will it take?

- **As a technical report to the Strategic Plan for Public Transportation, update the King County Ferry District 2014-2018 Strategic Plan** to account for current conditions, including changes in the Marine Division's organizational structure and management, of the regional transit system and to King County transit policies and procedures for planning and providing transit service, including an equity analysis.
- **As recommended in the King County Ferry District 2014-2018 Strategic Plan, determine the desired level of service for passenger ferries** and required property tax level to deliver that level of service.
- **Build on the update to the 2014-2018 Strategic Plan and update past studies to determine the role of passenger ferry service as part of the regional transit network.**
Evaluate connectivity and service to further the time and cost competitiveness of passenger ferries as well as parking and land use compatibility.
- **Engage with communities and partner with jurisdictions** to complete strategic planning for routes and terminals that enhance the regional transit system.

Figure 18 and Figure 19 illustrate the passenger ferry routes envisioned in the Metro Connects interim and 2050 networks.

Figure 18 Water Taxi Routes in the Metro Connects Interim Network



Figure 19 Water Taxi Routes in the Metro Connects 2050 Network



Service Quality Investments

OVERVIEW

Improving the quality of Metro’s services is crucial to building a mobility system that gets people where they want to go, when they want to get there. The whole customer experience matters—from determining which service to take, to paying a fare, to boarding and riding the bus safely and efficiently.

Through Metro’s public engagement processes and surveys, Metro regularly hears about the importance of fast, reliable, service and making the transit system safe, understandable, and easy to use. This chapter describes programs and investments that will improve and modernize service, connect people to transit, and enhance the customer experience.

All of Metro’s services will benefit from the service quality improvements described in this chapter. Metro will use input from the public and customers—with an emphasis on outreach to priority populations—to determine what types of service improvements and attributes to prioritize and where.

Priority populations: people who are Black, Indigenous, and of color; have low or no-income; are immigrants or refugees; have disabilities; or are linguistically diverse.



Metro defined which populations to focus on in partnership with the King County Office of Equity and Social Justice and the Equity Cabinet as part of the development of the adopted Mobility Framework.

Service quality investments described in this section include:

- Speed and reliability
- Boarding and fares
- Innovation, modernization, and technology
- Customer communications
- Passenger facilities
- Connecting to transit
- Managing demand
- Equitable transit-oriented communities

SPEED AND RELIABILITY

Metro aspires to deliver service customers can count on by making an unprecedented level of capital investments to improve transit speed and reliability. By keeping buses moving through congestion and arriving on schedule, Metro will deliver more service and customers will arrive at their destinations in less time.

What will speed and reliability look like?

Metro Connects proposes significant investments to improve transit speed and reliability.

Getting people to their destinations faster and on schedule benefits existing riders and attracts new ones. Speed and reliability are critically important for riders who have fixed schedules or depend on transit to get to work, medical appointments, or other engagements.

Speed and reliability investments can substantially improve the customer experience. They can lead to increased bus ridership and fewer car trips, a key goal of King County's Strategic Climate Action Plan.

Transit service can often become unreliable when it operates in mixed traffic on roadways that do not have transit-priority features. These conditions can result in buses spaced too close together or too far apart, slow travel times, high operating costs, buses running late, and difficult transfers.

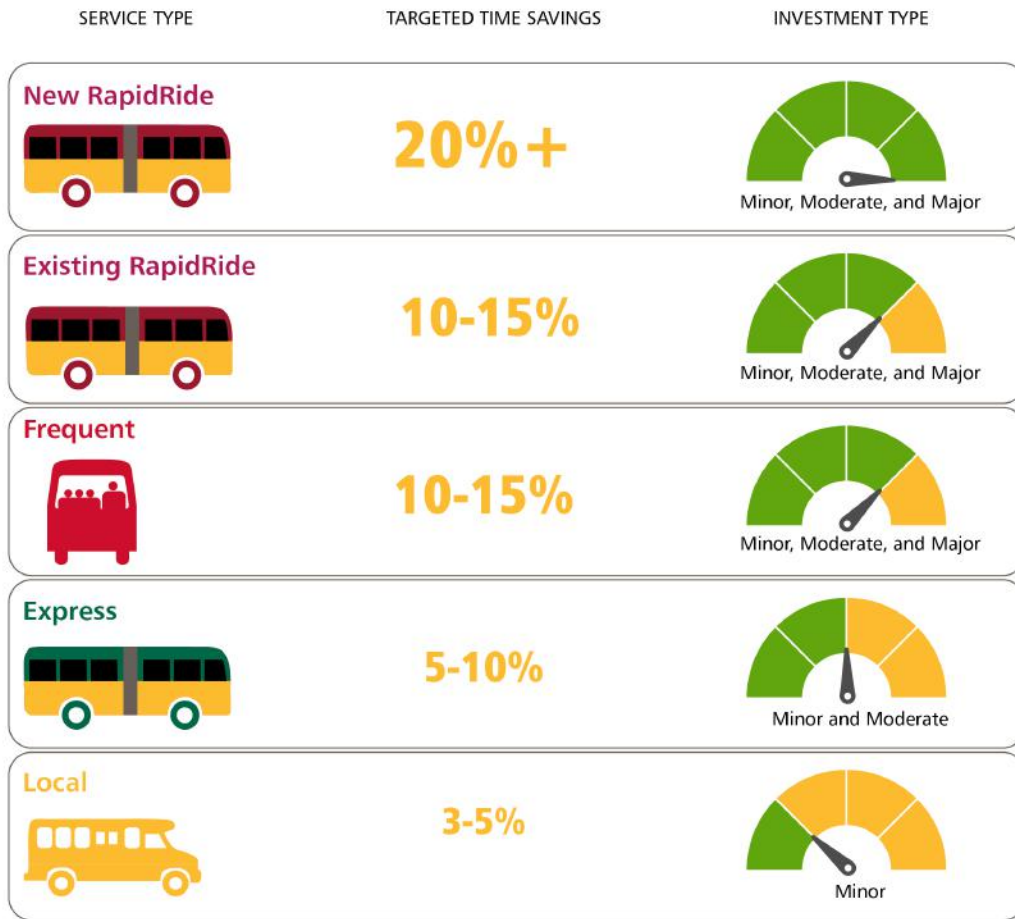
Metro will continue to work with city partners across King County to install transit-priority features that keep buses moving. These features let Metro spend more time moving people and less time getting delayed buses back on schedule, saving operating dollars to be used for more service. The most promising improvements are bus-only lanes, traffic signals that give buses priority, and measures that reduce delay at crowded bus stops. The "Fares and Boarding" section discusses ways Metro could increase reliability by making bus boarding easier and fare payment faster.

Metro Connects proposes different levels of capital investment—major, moderate, or minor—to keep buses moving fast and reliably. Each level has a different mix of tools, described in detail in the "Speed and Reliability Guidelines and Strategies" document. While all of Metro's service types will receive some investments, the priorities for major levels of investment will be areas where needs are greatest, service is most frequent, and roadways are most congested. Service that is less frequent or operates in less-congested areas, such as rural communities and fast-moving highways, will receive moderate or minor levels of investment.

Fast and reliable service is a top priority for Metro's customers.

Metro's 2019 Rider/Non-Rider Survey found that approximately one-third of Metro's customers are dissatisfied with frequency, travel time, and on-time performance. Metro regularly hears similar comments during community engagement activities.

Figure 20 Capital Investment Levels



INVESTMENT TYPES



MINOR INVESTMENT
 EXAMPLE FEATURES
 Spot Improvements at key locations and signal retiming throughout a corridor.



MODERATE INVESTMENT
 EXAMPLE FEATURES
 Business Access and Transit (BAT) lanes and other speed and reliability treatments* within existing right-of-way.



MAJOR INVESTMENT
 EXAMPLE FEATURES
 New bus-only lanes and other speed and reliability treatments* that may require additional right-of-way

* Refer to the Speed and Reliability Guidelines for detailed descriptions of speed and reliability improvements.

What will it take?

- **Work with partners to make significant speed and reliability improvements.**

Rely on, consider incentives for, collaborate with, and communicate transparently with local jurisdictions to identify new projects. Combine Metro and city resources to seek federal and state funding. Seek local jurisdictions' assistance in planning and securing transit-only right-of-way and changing traffic management practices. Leverage investments with additional partner and grant funding to complete a network of infrastructure that keeps transit riders moving. Support improvements such as new bus-only lanes, transit priority features, upgraded signals, new transit signal priority, and rechannelized roadways. Speed and reliability projects can incorporate investments with partners to improve safety, reliability, the customer experience, and transit-oriented communities. Projects could include passenger amenities and safer access by walking, biking, and rolling.
- **Plan early for speed and reliability improvements.**

Align planning efforts with Metro's six-year capital improvement program, the Service Guidelines, and Metro Connects. Make transit speed and reliability improvements on corridors where congestion levels are high. Develop a countywide plan for bus lanes and corridor prioritization. Improve speed and reliability at congested "hot spots" countywide. Manage headways so service comes at consistent and reliable intervals, reducing customer wait times. Work with partners to improve incident response options that keep buses moving through delays, such as installation of temporary bus-only lanes. Pursue grant funding opportunities.
- **Pursue improvements to make boarding faster and easier.**

Read more in the next section, "Boarding and Fares."
- **In partnerships with others, invest in large regional projects that would benefit transit.**

Metro will maintain an inventory of candidate projects, including new transit pathways and service connections, major crossings, and transit bottlenecks.
- **Build on Metro's existing intelligent transportation systems architecture.**

These will support the management of vehicles on the road to make service faster and more reliable, and customer information tools that would make Metro system easier to use.
- **Support security and enforcement around transit priority features.**

Bus-only lanes, busways, high-occupancy vehicle lanes, and roadway features that keep buses moving require enforcement to be effective.

BOARDING AND FARES

Taking the bus will be fast and easy as Metro improves the way customers pay fares, get on and off the bus, and use other mobility services. Metro will provide options for paying for multimodal trips and support incentives for using transit. Metro will work to make transit affordable to all, using an income-based approach to fare subsidies, and making it easier for employers to provide transit benefits to their employees. Investments in effective, community-based messaging will help riders understand how to efficiently get to their destinations.

What will boarding and fares look like?

The time a bus spends at stops to let passengers on and off can lengthen trip time and cause delays. Boarding can be slow and difficult for customers using wheelchairs, other mobility aids, strollers, or carts.

Fare payment also takes time, and boarding is slower when riders pay with cash rather than an ORCA card. Use of cash, paper tickets, and paper transfers increases the risk of fare disputes, as well as health and safety risks, and adds to Metro’s operating costs. Cash users also typically pay a more expensive fare.

Metro Connects envisions an equitable, easy-to-use fare program that improves the boarding experience and reduces trip times for everyone, from frequent customers to visitors. The program might provide new ways to pay, make it easier for cash users to use digital payment options, add more ORCA partners, and better ensure that each user pays the right fare—including income-based fare options.

The ORCA smart card fare payment system gives transit customers the advantages of faster fare payment and regional transfers between systems, as well as better and consistent access to income-based fares. Transit agencies realize benefits such as faster boardings, more accurate ridership data, and improved revenue data and regional revenue reconciliation. The next generation of ORCA will provide a range of improvements and opportunities for fare payment.

Equity benefits of ORCA’s intersystem transfer

ORCA allows a customer to travel on multiple systems within the 2-hour transfer window and to only pay the difference in fares if the second system used has a higher fare. This is not true with payment via cash or mobile ticketing, where riders pay a new fare each time they board. As Sound Transit builds out light rail, Metro will increasingly structure its service to feed the new rail lines. An intersystem transfer credit will be a key benefit for an increasing number of customers.

Next generation ORCA

Vendor support for the current ORCA system will expire in 2022, and the six ORCA agencies in the Puget Sound region are designing the next-generation fare collection system. Technology has changed significantly, and the ORCA partners will continue exploring opportunities to speed up fare collection.

Next generation ORCA will:

- Make fare payment more convenient by allowing customers to manage accounts in real time and use their phones to pay their fare via a new ORCA app or credit card.
- Improve equitable access to transit by increasing the number of retail locations where customers can load their account with cash.
- Support all-door boarding, significantly speeding boarding for customers.
- Be open architecture, meaning it can grow and adapt as new technology options become available. This will allow integration with other systems such as payment for parking at park-and-rides, shared mobility and micro-mobility providers, and transportation network companies.

Two important changes occurred after the 2017 adoption of Metro Connects. The King County Council adopted a flat fare for adults, making fare payment faster and easier. And Metro built on its ORCA LIFT program, which offers subsidized fare cards for riders who meet the income qualifications, by adding a fully subsidized transit pass for people in extreme poverty. ORCA LIFT saves money for participants and reduces cash fare payment on buses. Metro will continue pursuing other strategies to speed up boarding and make transit easier and safer to use.

For more information

Metro is committed to advancing equity through an income-based approach to fares and by ensuring that qualified riders can find the right reduced fare or program for them. For more information about Metro's reduced fare programs, visit www.kingcounty.gov/WhichORCAFare.

What will it take?

- **Move toward all-door boarding and off-board payment to make bus trips faster and enable Metro to provide more service with the same resources.**
Work with ORCA partners to implement next generation ORCA and increase the number of retail locations customers can access to add value to their account. Implement all-door boarding systemwide. Invest in onboard and offboard fare collection equipment. Expand alternative payment methods and provide new fare purchase sites.
- **Move toward a system without cash payment on-board buses, paper tickets, and paper transfers.**
Ensure that customers can purchase fare products with cash through an expanded retail network and other off-coach payment options. This will speed boarding and ensure cash customers can still use the system without paying more than the necessary fare.
- **Ensure affordability is not a barrier preventing people from riding public transit.**
Implement a targeted approach to fare discounts, ensuring that riders most in

- need of a subsidy can access transit while continuing to collect the fare revenue necessary to support the expansion and improvement of Metro’s services countywide. Adjust pricing and partnership strategies so that Metro can better collaborate with human service agencies in making ORCA products available to their clients. Add new ORCA partners, expanding the retail network so that cash users do not have to pay more than the required fare.
- **Make boarding easier and faster for all.**
Procure vehicles with low floors for easy boarding and wider aisles and doors that make it easier to get on and off. Improve boarding for wheelchairs and other mobility aids through passive restraint systems, for bicycles through easier-to-use racks, and for strollers and baggage through vehicle design. Provide safe and convenient securement areas for customers who use mobility aids. Pursue other strategies to speed up boarding and make transit easier and safer to use.
 - **Facilitate integrated fare payment and trip planning.**
Help customers plan and pay for multimodal trips, in partnership with ORCA agencies and private providers, including micromobility providers. Advance income-based fares approach among private partner mobility providers. Explore opportunities for customers to pay fares for all services used in a trip—such as parking, bike-share and car-share providers, and transportation network companies—in real time with a single mechanism, such as Next Gen ORCA.
 - **Work with stakeholders to re-envision fare enforcement so it is safe, equitable, anti-racist, and culturally appropriate.**
Doing so will support more equitable access to the transit system, and may contribute to increased use of ORCA and other non-cash fare payment.
 - **Continually monitor, evaluate, and build evidence about what works and what needs improvement.**
Metro will measure changes in dwell times and associated run times for service as all door boarding is implemented, and tighten schedules where possible to speed service. Metro will evaluate efforts to help customers move to contactless forms of payment. Metro will use rigorous, evidence-based evaluation to determine what strategies are most successful in ensuring customers can pay and pay the fare that is right for them.

Some of these strategies are in use or possible today. Metro’s RapidRide system lets passengers at stations pay their fares offboard and get on the bus through any door. Metro is moving toward all-door boarding throughout its system in 2022. New technology could allow mobile payment at less-expensive onboard readers.

Several Metro programs contribute to steadily increasing use of ORCA. The ORCA Passport business account program has greatly expanded the number of ORCA riders. In 2019, ORCA business accounts represented 44 percent of Metro’s boardings (up from 30 percent in 2015, the last figure in this plan). In 2020, Metro, Sound Transit, and eight human service agencies launched a demonstration project to determine the feasibility of expanding the paper human service bus ticket program to include ORCA options. Results of the demonstration will inform program changes in Next Generation ORCA.

Technological developments could further expand options. Strategies like these will help Metro ensure its fare system is affordable, streamlined, and easy to use.

Figure 21 All-door Boarding Saves Time



INNOVATION, MODERNIZATION, AND TECHNOLOGY

Rapidly advancing technologies are changing how people travel. Metro will invest in, incorporate, and encourage technological innovation. Metro will question “business as usual” and evaluate new ways to better serve customers and advance safety, equity, and sustainability goals.

What will innovation, modernization, and technology look like?

Improved service management and modernization of is one of the best investments to improve service quality. Innovations in technology, such as integrated on-demand mobility platforms and automated vehicles, are changing the transportation landscape—and Metro is changing with it. Metro will continue to improve processes and technologies that enhance the customer experience, such as actively managing service to deliver more reliable and predictable service.

Building on its history of innovation, Metro is testing and adopting new features, services, and products to make services safer, more equitable, sustainable, and easier to use.

Metro is also working to modernize through business transformation efforts. These efforts focus on preparing Metro to deliver the vision outlined in Metro Connects, Metro is focusing on the customer in decision-making, becoming agile and nimble in the way that work is done, and developing employees to deliver on strategic objectives and meet the evolving mobility needs of the region.

Metro will use new on-demand mobility options, smartphone apps, trip planning resources, and real-time information to improve the customer experience and develop new service solutions. Innovative mobility services and partnerships will complement fixed-route transit, use public space equitably and efficiently, support fair labor practices, enable data sharing while protecting privacy, serving priority populations, and advancing climate goals. Innovation in internal business practices and processes will be aimed at delivering the best possible public transportation for Metro customers.

Metro is modernizing service delivery

Service modernization is a top priority for Metro as it strives to improve service delivery to better meet the needs of customers, employees, and the region. Metro is transforming business processes, using technology in new or more efficient ways, employing new ways of managing service such as headway management, and investing in core functions that allow Metro’s employees to deliver better and more-efficient service.

Metro is partnering with industry leaders on a variety of pilots and service enhancements to advance its goals while applying a learning mindset to ensure outcomes are met. One example is Metro’s on-demand Via to Transit pilot program

which provides on-demand ride-share service to support access to transit in areas of greatest need. Another example is advancing the use of software platforms and mobility services to share real-time data and develop integrated payment and planning tools so customers can access the mobility that works best for their specific trip needs through one easy system (See the next section, “Customer Communications,” for details). Use of integrated real-time information will also improve operations by increasing rapid response to incidents, manage demand throughout the system, and support the health and safety of customers and employees.

Innovation will help move Metro toward its policy goals, including safety, equity, and sustainability. Advancing technology is also helping Metro become more evidence-informed, data-driven, and proactive. Metro collects and shares new and more accurate data about operations and performance metrics, increasing Metro’s accountability to the public. Metro prioritizes equity to ensure new technologies do not create additional inequities and barriers. Metro will use technology to address climate change by building greener and healthier buildings and facilities, electrifying the Metro fleet, and advancing a suite of mobility services across the County that enable less reliance on car ownership.

What will it take?

- **Respond to community-identified needs and live up to Metro’s values.**
Embrace a value- and customer-focused approach that lets community engagement and customer feedback drive priorities and service and program design. Give the private providers Metro partners with incentives to share its focus on safety, equity, and sustainability.
- **Expand investment in research, development, implementation, and evaluation of innovative technologies.**
With a focus on ensuring equity, test, evaluate and launch new services, products, and practices enabled by emerging technologies that improve customer service, help Metro manage operations actively and operate more efficiently, and move toward the Strategic Plan goals.
- **Better use quantitative and qualitative data for decision-making, to ensure decisions are values-driven and data-informed.**
Create systems that better manage information and feedback from customers and employees and improve internal data collection, integration, use, and reporting. Create processes to ensure data is available to support decisions.
- **Nurture a learning culture that welcomes and adapts quickly to new ideas, technologies, changing conditions, and ways of working.**
Prepare for unexpected opportunities by developing flexible policies and processes that can adapt to change. Foster creative thinking and innovation through cross-disciplinary teams, regular performance assessments, strategic evidence building and use, and other avenues.
- **Increase communication about innovations and their evaluation.**
Focus on ensuring innovations are accessible, understandable, and easy to use for priority populations. Engage communities as Metro evaluates

innovations and acts on the results. Use the Service Guidelines as a framework for evaluating service innovations.

- **Convene and support public and private partners in equity- and evidence-informed mobility innovation.**

Engage public and private entities across the region's transportation system to support learning and innovation. Metro will also engage with transit agencies nationally to share work, build evidence, and learn from innovations.

CUSTOMER COMMUNICATIONS

Metro Connects envisions a mobility system that is rich with easily understood information that will make the system accessible for all. People will know about their options and how to use services.

Figure 22 Metro Will Explore New Ways to Provide Customer Information



Left, middle: Paris has explored bus shelters designed as multi-purpose public spaces that include fare vending, neighborhood information, coffee or food for purchase, electrical outlets, integrated bikeshare stations, and more. (Photo source: Human Transit, humantransit.org)

Right: Onboard screens can provide information about connecting service, transit alerts, and other information. (Photo source: Redeye Chicago, redevChicago.com)

What will customer communications look like?

In 2021, Metro customers can get information and assistance from a range of sources—Metro’s website, trip planning app, Customer Information Office, email and text alerts, social media, marketing and promotion programs, and other sources that rely on data provided by Metro. Metro drivers play a major role in customer communications as they interact with passengers.

Metro will build on these resources by emphasizing:

- New types of information and ways to share it with customers
- More accessible methods of communication, such as making information available in multiple languages and for different abilities, developing strategies for communicating directly to priority populations, and partnering with community members and community-based organizations to spread information
- Continued emphasis on customer service training and support systems that enable Metro operators to provide the best service possible
- A suite of tools that make navigating the transit system easy, including wayfinding signs, announcements, promotional materials, and interactive options for questions and comments

Emerging technologies will enable the delivery of enhanced information or new communication platforms. Imagine if smartphones let customers know a traffic accident had blocked their bus, told them how full the next bus was, or showed the availability of a bikeshare service or park-and-ride. Or, Metro might install software-based passenger counters on its entire fleet, enabling real-time tracking of the number of people on a bus. Metro Connects proposes to make this information-rich future a reality as customer service solutions evolve.

Not everyone has a smartphone or computer and not everyone communicates in English, so Metro will pursue tools that help everyone. Dynamic, up-to-the minute information could be displayed at bus stops and transit centers and on buses. This could include nearby transportation options to make last-mile connections, such as real-time bike share, car share, or ride-hailing services.

New tools might offer other types of information, such as upcoming events at a venue the bus was passing. Metro customer service agents could provide personalized assistance through new channels. Marketing could target desired audiences to increase awareness of new and improved services and tools.

Metro will support open-source platforms and third-party developers by giving them clean and accurate transit data for their travel products and services. As new transit information products are developed, Metro will work with private sector partners to ensure they are integrated with Metro products and services.

Metro and other ORCA agencies will determine what role the next generation ORCA mobile app will play in the customer information environment. Will the agencies add functionality like trip planning to the ORCA app or will third party providers such as Google, Transit App, or OneBusAway be allowed to access and leverage the ORCA app platform? Metro will engage customers to inform this decision.

What will it take?

- **Evaluate current customer information systems and engage customers.**
Identify the gaps between what Metro provides and what customers want and expect to achieve more equitable access to mobility.
- **Improve communications, responding to community-identified needs.**
Target priority populations and ensure customers see their input incorporated into communication and marketing strategies.
- **Provide real-time information about current conditions and nearby transportation options.**
Equip transit hubs and vehicles with customer tools that provide static and real-time information. Include information about local transportation connections, and bus and train arrival times. Provide information about available park-and-ride spaces, bike parking, bikeshares, carshares, and transportation network companies.
- **Ensure advancements in customer information improve accessibility for all, regardless of their abilities or language spoken.**
Help all customers use the transit system safely and easily with accessible customer interfaces and improvements in audio, tactile, and electronic communications.
- **Gather and manage customer information to improve service.**
Collect and integrate data related to Metro's performance, customer information and feedback, and other areas, and integrate it into planning, performance management, and evidence-building processes. Develop mechanisms to make better use of qualitative data that Metro collects through surveys and community engagement.

- **Make data available to third-party developers.**
Sharing Metro data in common formats allows third-party app developers, such as One Bus Away and the Transit App, to use the best available transit data to help customers plan their trip. Metro will continue to improve the quality of the data it provides and recognize that consumer choice will continue to drive which app a person uses for travel planning.

PASSENGER FACILITIES

Metro Connects proposes well-designed stops, stations, and transit centers as well as improvements to existing facilities. Passenger facilities will help keep riders safe, give them better service information, make transfers convenient and close, and support equitable, transit-oriented communities.

What will passenger facilities look like?

Metro will improve more than 26 existing and new transit centers and more than 3,500 bus stops. The upgrades will emphasize enhanced safety, new customer features, and seamless integration between transit providers and other travel modes.

As of 2020, Metro owned and maintained more than 7,000 bus stops, including RapidRide stations and at transit centers. With Metro Connects' proposed expansion of transit service and integration with Sound Transit, the number of Metro-owned stops will increase. For many trips, the fastest option will include a transfer between bus and rail or between buses. Sound Transit's planned and proposed investments will add more light rail and bus rapid transit stations.

The number of people using these facilities will increase. The activity at many stops will change, with more riders transferring among buses and rail.

As Metro builds or rejuvenates facilities to accommodate more passengers, it will design them for easy connections across modes—bus, light rail, train, ferry, streetcar, biking, walking, etc. Access for single-occupancy vehicles will be low priority.

Passenger facility design principles

Metro Connects envisions top-notch passenger facilities that will give customers a high-quality transit experience.

Passenger facilities will be in the right locations. While following general guidelines for stop spacing, Metro will consider topography, safety, lighting, surrounding land use and development, and the presence of sidewalks when deciding where to place stops. Street crossings will be highly visible, well-lit, and located to minimize conflicts between vehicles and pedestrians.

Metro is coordinating with Sound Transit to ensure bus loading areas will be at or next to light rail stations so customers transferring will have short walks, short wait times, and minimal street crossings.

Wayfinding and transit information will be easy to see and understand for people of all abilities and languages. It will clearly direct passengers through transfer areas. Consistent signage across all major transfer points will help riders easily navigate Metro's and transit agency systems.

Stops, stations, and pathways will be safe for and accessible to all customers, regardless of age, ability, or gender. They will have ample space for passenger

loading and circulation. Access for people who walk, bike, or roll to the station will be prioritized.

Shelters and waiting areas will provide lighting, customer information, and protection from weather. Passenger facility designs that prioritize safety and security will help passengers feel safe and comfortable while waiting for a bus or train. Transit centers could be spaces for residential, commercial, and community activities, creating a friendly, equitable, and welcoming atmosphere for customers.

Combinations of many uses at transit centers will strengthen transit-oriented communities. The result will be efficient use of available land, reduced car trips, integration of transit with neighborhoods, and strengthened businesses.

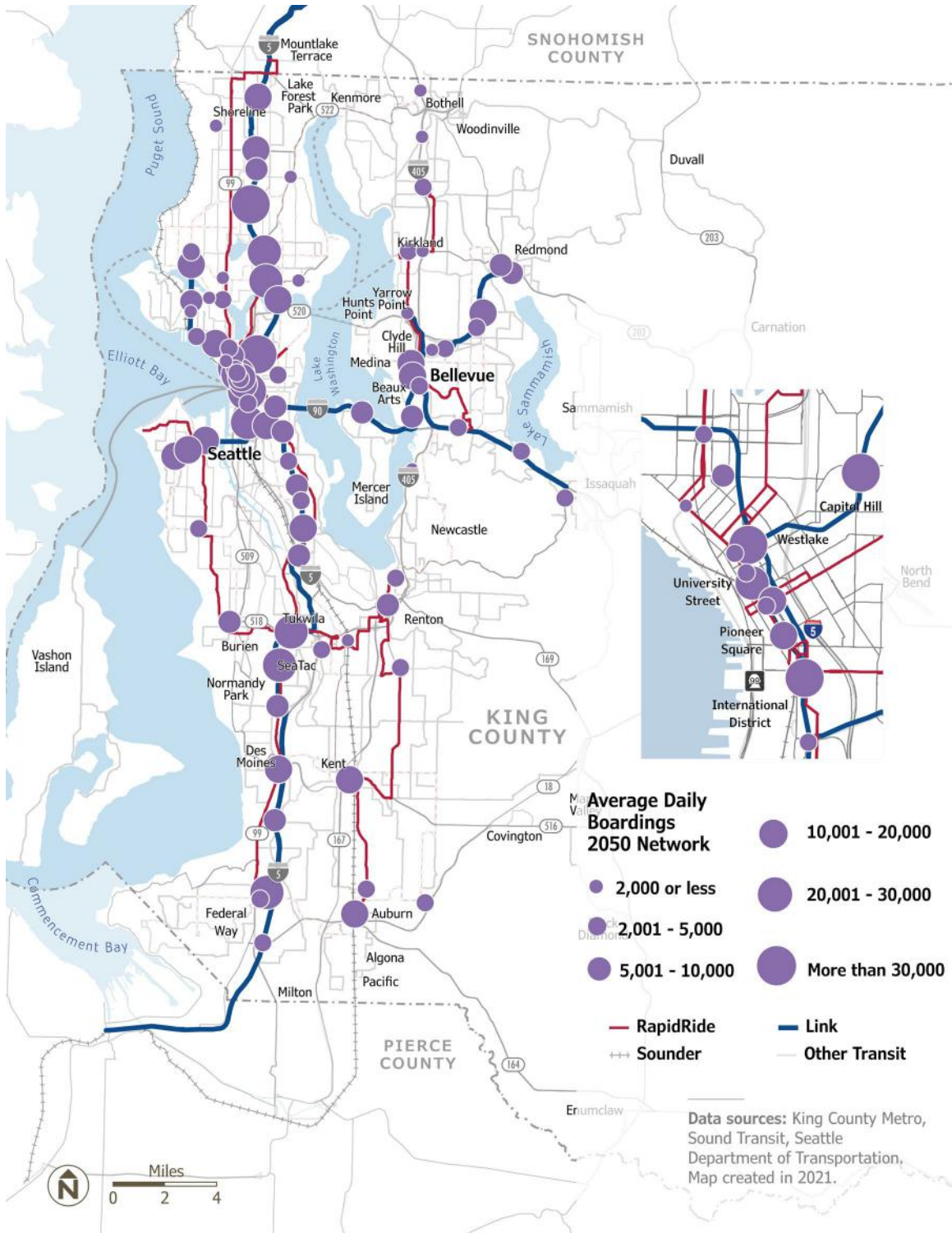
Metro will need improved facilities at transfer locations to support the proposed 2050 service network. Figure 23 shows anticipated major transit center boardings, including Link and some bus rapid transit stations. New or improved transfer locations will be needed at existing and future Sound Transit light rail stations, stops with significant ridership growth, and other key transfer points and transit centers in the system. Metro and Sound Transit will continue working together to provide passenger facilities that are appropriately sized for the anticipated passenger and bus volumes at light rail stations.

What will it take?

- **Build an extensive system of well-designed and safe passenger stops, stations, and transit centers.**
Make sure transit facilities are comfortable and easy to use by keeping design guidelines up to date and employing lessons learned from Metro’s passenger facility best practice study and community input.
- **Design facilities that make connections from other modes easy and comfortable, working with partners for shared facilities.**
Coordinate with Sound Transit and other partners extensively and early in the design process for light rail and bus rapid transit facilities. Ensure their design makes transferring quick and easy. Incorporate principles of universal design, accessibility, equity, sustainability, and engagement into the design process.
- **Coordinate with cities and private partners to ensure facility locations are consistent with land-use plans and designed to help integrate different transportation services.**
Consider partnering with private, governmental, or nonprofit property owners in transit facility development, helping reduce the costs of land acquisition, construction, and permitting while creating opportunities to meet community development desires.

In 2019, six major transit centers—four Link stations in downtown Seattle plus Capitol Hill and University of Washington—have 10,000 or more daily boardings. Westlake Station has the most boardings—28,000 per day. In 2050, as many as 30 transit hubs across the county could have more than 10,000 boardings. Smaller stops and stations around the county could also see more riders.

Figure 23 Anticipated Transit Center Boardings in the Metro Connects 2050 Network



CONNECTING TO TRANSIT

Metro wants customers to have safe, comfortable, equitable, and easy ways to get to transit. Metro Connects will invest in projects and strategies for improving the walk, roll, bike ride, drop-off, or drive to or from bus stops and stations.

What will connections to transit look like?

A person's decision to drive, ride, walk, roll, or bike to transit can be affected by many factors: how close they are to a stop, how often the service runs, the availability of parking, and the presence and quality of sidewalks, bike lanes, secure bike parking, lighting, and other safety and security features.

While the overall number of riders will increase by 2050, the share driving a personal car to transit is expected to decline with the expansion of transit service envisioned in Metro Connects²⁰. Metro Connects will support this shift by investing to improve bicycle and pedestrian access and to ensure access to auto parking is available, convenient, and equitable.

Several travel options will help riders reach transit service without driving alone. These include carsharing, micromobility services like bike and scooter sharing, taxis, on-demand ridehailing services, and public and private shuttles. Technology platforms offering real-time information, trip planning, and fare purchasing will provide a seamless experience for travelers connecting to and between the full range of mobility options.

The siting of new parking, bicycle and pedestrian investments will be based on access to the service network— particularly frequent and express service—and on local considerations and local urban character. Figure 24 outlines different types of areas with different densities and urban characteristics and the appropriate types of investments envisioned.

²⁰ King County Strategic Climate Action Plan.

Figure 24 Transit Access Zones and Types of Improvements

High Density	Medium Density	Lower Density	Lowest Density
<p>High-density areas served by a grid of frequent service, such as downtown areas.</p>	<p>Medium-density areas that are within walking distance of at least one frequent service.</p>	<p>Lower-density areas within walking distance of less frequent local or express service.</p>	<p>Lowest-density areas with limited or no walk access to transit.</p>
<p>Improvements</p> <p>Focus on bicycle and pedestrian facilities, little or no expansion of Metro parking.</p>	<p>Improvements</p> <p>Strong emphasis on more bicycle and pedestrian facilities, little or no expansion of parking.</p>	<p>Improvements</p> <p>Moderate emphasis on bicycle and pedestrian facilities and some parking investments.</p>	<p>Improvements</p> <p>Limited investment in bicycle and pedestrian facilities, emphasis on increasing transit parking.</p>
<p>Estimated Future bike/walk share</p> <p>96%</p>	<p>Estimated Future bike/walk share</p> <p>82%</p>	<p>Estimated Future bike/walk share</p> <p>50%</p>	<p>Estimated Future bike/walk share</p> <p>16%</p>

Analysis of walking, biking, and rolling to transit

To make walking, biking, or rolling to transit safer and more convenient, King County needs more high-quality sidewalks and crossings, ADA accommodations, bicycle and scooter lanes, and trails. Metro also needs secure places to park bikes and other mobility devices, like shared bikes and scooters.

Growing demand for trails and transit

King County has over 300 miles of multi-use trails used for some 10 million bicycle and pedestrian trips annually. The trails network presents opportunities to combine cycling or walking with the fast, frequent, transit service envisioned in Metro Connects.

Trail routes are being designed and constructed. These include the extension of the Mountains to Sound Trail east of Bellevue, the Eastrail from Renton to Woodinville, and the Lake to Sound Trail from Lake Washington in Renton to Puget Sound in Des Moines. These trails will help riders reach transit service without driving alone and will greatly enhance regional mobility.

Jurisdictions play an essential role in providing safe access to public transportation, as sidewalks, intersections and bike facilities are primarily on their rights-of-way. Metro will collaborate with them through programs such as Safe Routes to Transit, to

fund, design and build these improvements and encourage people-friendly street designs near transit.

Safe Routes to Transit

Metro’s Safe Routes to Transit (SR2T) program helps cities design and build safer, more convenient ways for people to walk, roll, and bicycle to transit services. The program contributes to improvements like safer pedestrian crossings, ADA ramps, new or improved sidewalks, pedestrian-scale lighting, signal treatments, traffic calming, and improved bicycle facilities. Potential project sites are evaluated for equity, ridership, proximity to key destinations, community feedback, and other factors. Between 2017 and 2020, the program contributed to 33 projects in 11 jurisdictions.

Parking and mobility hubs analysis

Metro provides service to 130 park-and-rides across the county that have a combined total of more than 25,000 parking spaces. Metro and other transportation agencies own or lease these facilities. In lower density areas (such as Zones 3 and 4 in Figure 24), park-and-rides provide auto access to transit. They concentrate rider demand, allowing Metro to serve these areas more efficiently. Moderate and higher density areas (Zones 1 and 2 in Figure 24) have a growing need to accommodate additional access mode options, and present opportunities to re-imagine existing park-and-rides as multi-modal mobility hubs.

Metro Connects will introduce fully managed parking, deliver new parking access, enhance lots to accommodate multimodal access, and integrate technology. This will improve efficiency and the customer experience getting to the transit system. It will also ensure climate and equity goals are advanced through the design and prioritization of access and the management of auto parking.

As demand for mobility grows, Metro Connects envisions tailoring access investments to meet the needs of specific communities. To assess these needs, Metro will consider:

- Areas of the county with the greatest needs
- The level of transit service
- Population and jobs
- Bicycle and pedestrian infrastructure
- Availability of multimodal options such as micromobility or on-demand services
- Existing and future parking inventory, including the new parking facilities Sound Transit plans to build by 2050

Parking and mobility hub strategies will be prioritized as follows:

Manage parking to meet customer and community needs

- Increase efficiency by promoting carpools and real-time ridesharing, marketing underutilized lots, or employing other strategies
- Implement permits and payment for parking, making it easier for customers to find spaces

- Introduce technology to support real-time parking information, dynamic trip planning, parking monitoring and enforcement, and parking reservations and sales
- Facilitate community and third-party uses of park-and-ride lots at times when parking is underutilized by transit riders

Increase access to transit using creative and multi-modal solutions

- Expand capacity through leased parking, shared parking, and restriping existing lots to create more spaces
- Convert existing parking lots into multimodal mobility hubs, providing access to more modes and the potential for community and commercial uses

Deliver access to new parking

Compared to other access investments, construction of permanent parking is more expensive for the ridership it generates and can limit future development in key locations. This will be a lower priority strategy.

As Metro considers providing access to new parking, it will emphasize delivering permanent parking capacity through partnerships and transit-oriented developments (TODs), rather than through constructing standalone facilities. Metro will coordinate with affected jurisdictions and consider costs and needs, local partnerships, opportunities to deliver in conjunction with TODs, the service network, and other options for accessing transit. Metro will seek to leverage any parking investments to increase equitable development, bringing more riders close to great transit service.

For more information

See Technical Report B. Metro Connects – Service Network for more detail on connections to transit.

What is a mobility hub?

Mobility hubs are transportation nodes where many modes connect.

Metro Connects proposes to introduce multimodal mobility hubs at existing and future park-and-ride lots and in conjunction with transit-oriented developments. Mobility hubs would allow riders to seamlessly transfer to, from, and between transit, walking, biking, micromobility, shuttles, transportation network companies, and parking for private and shared vehicles.

To create mobility hubs, Metro would reconfigure existing lots and add hub elements such as:

- Enhanced bicycle and pedestrian circulation
- Improved passenger waiting areas
- New pick-up and drop-off zones
- Micro-mobility corrals
- Electric vehicle charging
- Real-time information

Mobility hubs would give riders more abundant and flexible options. They would support using nonmotorized and shared modes instead of driving alone.

Metro consistently hears from stakeholders and the public about the need for more ways to safely and easily connect to transit. Mobility hubs would help address that. Metro Connects proposes to expand access to all options, in alignment with local priorities.

What will it take?

- **Invest in mobility hubs to improve equitable access to transit through safe and sustainable design solutions that work for the community.**
Using a community-led process, Metro will collaborate with partner transportation providers and redesign existing park-and-ride locations to expand mobility choices for customers while advancing equity and climate goals. As a part of the transition to a mobility hub, Metro will invest in bicycle and pedestrian improvements to make it easier and safer to walk, bike and roll to key transit hubs. Along with the non-motorized investments, Metro will also manage vehicle parking to improve the customer experience and improve efficiency while ensuring those with greatest need can reliably find parking when they need it.
- **Provide reliable and real-time parking information to manage demand and improve the customer experience.**
Continue monitoring park-and-rides and pursue strategies to best use existing resources through active demand management practices. This includes using technology to provide real-time information to customers about parking availability and options for paying for or reserving a space. Data will be standardized and shared to allow for integration with tools that will help customers to easily plan, book, and pay for their mobility needs.
- **Develop partnerships to improve connections to transit.**
Work with city partners, King County's Department of Natural Resources and Parks, and other partners to create high-quality trail connections, sidewalks, and bicycle facilities that connect to bus stops and transit centers and support transit-oriented communities. Partners could help identify, design, permit,

and build access improvements; assist in leased-lot negotiations; implement transit-supportive land uses; and contribute financially. Metro could provide funding to jurisdictions through grants or other mechanisms and help develop grant proposals.

MANAGING DEMAND

Metro Connects will help the transportation system work better by attracting new transit riders and reducing the use of single occupant vehicles. Metro's transportation demand management (TDM) program will be a key tool for maximizing the efficiency of existing roads and reducing greenhouse gas emissions.

What will Metro's TDM program look like?

TDM programs breakdown barriers to using alternatives to single occupancy vehicle trips for customers. These programs expand the customer base for transit and improve efficiency by maximizing use of the networks in place. TDM programs have a lasting impact on how people think about getting around, and lead to sustained changes in travel behavior over time.

TDM spreads transit demand across travel modes and times of day. One demand-management strategy is to provide access to efficient travel options such as carpooling, vanpooling, walking, biking, or riding transit. Another is to promote flexible work schedules that reduce demand during peak travel times. During the COVID-19 pandemic, metro observed dramatic changes in ridership patterns due to a shift towards telework for many employees. Changing work patterns to reduce stress on the transportation system could make more and more-frequent service available all day and support the use of mobility options closer to home, in addition to commuter travel.

How people travel can significantly affect the need for new transportation investments and can support system preservation and maintenance. TDM activities help get the most out of transportation infrastructure and services by making lower-cost, more-efficient transportation options easier to use and more readily available.

Metro's TDM program will continue to use outreach, education, incentives, and new products and partnerships with both community groups and employers. These strategies will help to reduce barriers to using transit, maximize the value of transit investments, create a healthy environment, and help the transportation system work better—especially where needs are greatest and with priority populations. Metro's TDM program covers a variety of transportation modes and tools, including but not limited to:

- Community-based social marketing
- Employer transit products
- Shared mobility options
- Parking management
- Flexible services
- Emergency ride home programs
- Pass programs
- Telework
- School and student-based programming

Metro will also develop new methods to connect with transit, using emerging technology and transportation pricing as well as improvements to alternative mobility. For example, Metro will explore ways to change pricing of its programs and services to influence demand.

What will it take?

- **Research, develop, and evaluate new tools.**
Build Metro’s capacity for evidence-based research, development, and evaluation of new TDM tools to reduce VMT while advancing equity. Co-create TDM programs with community partners to maximize their effectiveness. Assess employer products to expand participation among businesses that employ lower wage workers. Budget for TDM in Metro projects and continue to develop new TDM partnerships and transform existing partnerships. Design evaluation into each project and continue to build evidence on the most effective strategies.
- **Support local and regional land-use decisions that benefit transit and other alternatives to driving alone.**
Advocate for national, state, and local policies and funds that support alternatives to driving alone and help create walkable communities.
- **Partner to put TDM solutions to work.**
Seek opportunities to expand TDM activities through partnerships with cities, transit agencies, WSDOT, employers, the private sector, community-based organizations, and others.
- **Create sustainable pipelines to transit ridership.**
Support early and consistent intervention with transit and alternative modes, especially with youth and people new to the region.

EQUITABLE TRANSIT-ORIENTED COMMUNITIES

By supporting housing, services, and jobs near transit, Metro Connects will strengthen communities. Metro will consider surrounding land uses when it plans transit service and will take an active role in building and promoting compact development and pedestrian-oriented improvements. Communities will benefit from more travel options, more affordable housing, and more transit users.

What will Metro's equitable transit-oriented communities program look like?

Equitable transit-oriented communities (TOC) enable people to drive less and access transit more easily. They embody a holistic approach to place-making through intentional and coordinated land use planning, development, and public investment.

In TOCs dense, mixed-use, mixed-income development is concentrated near frequent transit to enable more people of all backgrounds and income levels to benefit from improved mobility. Compact mixed-use development combined with frequent transit reduces trip making, trip length, and encourages alternatives to driving alone. More trips can be made through transit, walking, biking, or rolling, instead of driving. This helps communities grow to be healthy and sustainable.

Metro will strive to support and strengthen the communities it serves with transit. It recognizes the importance of integrating land use and transit service to advance equity and address climate change. Evidence shows that it is the combination of increased transit service, increase land use density, and equitable pricing of vehicle usage together that drives down car travel, no one strategy alone will get there.²¹

Metro will work with partners at the County and regional planning levels to advocate for transit-supportive and inclusive land use policies and programs. Metro will consider existing and future land uses when planning new services and siting new facilities. Metro will seek opportunities to leverage investments in transit infrastructure to meet community development and King County goals.

Metro will proactively manage its properties and identify opportunities to create equitable, transit-oriented development, including affordable housing. Metro will partner with others when possible and support projects that strengthen communities.

Similar to a TOC, a transit-oriented development (TOD) is a private or public/private real estate development. Typically, it is located within a 10-minute walkshed of frequent transit service. It often includes a mix of uses and its design is influenced by its proximity to frequent transit service. Typical TODs include:

²¹ Rodier, Caroline J. (2009) [A Review of the International Modeling Literature: Transit, Land Use and Auto Pricing Strategies to Reduce Vehicle Miles Traveled and Greenhouse Gas Emissions](#). Institute of Transportation Studies, University of California, Davis, Research Report UCD-ITS-RR-09-39

- A mix of commercial and residential uses
- A variety of housing types, including affordable housing and active ground floor uses, often commercial, that frequently include schools and early learning facilities, retail and office space
- Multimodal access improvements such as street, sidewalk and intersection improvements that promote safe travel and improve access for people walking and biking
- Street grid, connectivity, and traffic calming features intended to encourage safe vehicle speeds
- Reduced parking supply and parking management strategies to minimize the land devoted to parking and increase efficiency of use
- High-quality urban design

Generally, the development density and co-location of uses justifies frequent transit service. Frequent transit enhances opportunities and market demand for additional similar development, stimulating an active streetscape and commercial activity with a quality pedestrian scale.

The South Kirkland Park-and-Ride

The South Kirkland Park-and-Ride, completed in 2014, is King County's eighth TOD project. It includes:

- A new transit center.
- A garage with 530 parking stalls and a surface lot with 323 stalls.
- Electric vehicle charging stations.
- 184 market-rate and 58 affordable housing units with easy access to transit in an opportunity-rich location; 12 units are for homeless families.

The project received Built Green 4 Star, Evergreen Sustainable Development Standard, and King County Sustainable Infrastructure Score Card certifications.

What will it take?

- **Implement Metro's equitable transit-oriented communities policy.**
Metro will conduct a comprehensive inventory of county-owned property to identify existing opportunities and potential new projects.
- **Work with partners to plan for and implement transit-oriented development.**
Ensure coordination between Metro, cities, and other regional partners to leverage available resources, advance community development goals, meet transit system needs, and ensure that projects are consistent with land-use plans. Partnerships with cities and with public and private stakeholders could help reduce the costs of land acquisition, construction, and permitting.
- **Resource a robust program that advocates for, plans for, and develops transit-oriented development projects.**
Use Metro's role as a regional transit provider and as a part of King County government to support communities and implement transit-oriented development. Have the staff and consultant resources needed to grow and

support a robust program, as transit-oriented development projects take years to develop and deliver.

- **Advocate for transit-oriented communities.** Use Metro’s role as convener, advocate and as part of King County government to advance VISION 2050 goals, including via the King County Countywide Planning Policies and Centers Framework, for increase land use density and affordable housing near transit. Seek to drive results that include actions taken by local jurisdictions to reduce parking requirement, increase affordable housing, increase zoning capacity, prioritize right-of-way for transit, and minimize displacement near transit.

Fleet, Infrastructure, and Workforce

OVERVIEW

The Metro Connects network, a mobility system that supports healthy communities, a thriving economy, and a sustainable environment, is founded upon critical physical and people infrastructure that supports service expansion—as Metro’s fleet, facilities, and workforce do.

Enhancement and expansion of Metro’s fleet and facilities will be essential to delivering the increased service envisioned in Metro Connects. To deliver 7.2 million service hours, Metro will need a larger bus fleet, and additional bus bases with newer, greener technologies to support this growing fleet. And, Metro’s non-bus fleets such as Rideshare, Access, and other support vehicles will also need to grow as Metro’s suite of mobility services grows.

Metro’s commitment to reducing its greenhouse gas emissions will affect fleet and facilities. Metro will transition buses and other vehicles to zero-emissions vehicles powered by renewable energy and invest in charging infrastructure. Metro will build its facilities differently as it incorporates green building practices.

More well-maintained layover areas—where buses rest between trips—will help ensure buses arrive on time and drivers get the breaks they need.

Finally, supporting and growing Metro’s workforce is essential to ensuring Metro can reach the Metro Connects vision for significantly expanded service. This will be especially important as changing transportation technologies will require new and equitable training and development opportunities for employees, and as Metro builds a diverse workforce that reflects the communities it serves.

Sections in this chapter include:

- Fleet
- Electrification
- Facilities and other support systems
- Layover areas
- Metro’s workforce

Alignment with Strategic Plan goals

-  Invest upstream and where needs are greatest
-  Address the climate crisis and environmental justice
-  Keep passengers, employees, and communities safe
-  Provide fast, reliable, and integrated mobility services
-  Build a skilled, diverse, and well-supported workforce that has opportunities to grow
-  Be responsible stewards of financial resources and invest in line with values and goals

FLEET

Vehicles designed for customer comfort, safety, and efficient and green operations are key to Metro Connects. Metro is building toward an entirely zero-emissions, low-floor bus fleet, and will expand its fleet of buses, vans, and support vehicles to provide the higher levels of service envisioned in the 2050 network.

What will the Metro fleet look like?

As of 2021, Metro's fleet, including Metro and Sound Transit coaches, has more than 1,500 fuel-efficient buses. These include hybrid diesel-electric and clean-diesel coaches, electric trolleys, and several battery buses. Metro's fleet also includes paratransit and DART vehicles, Rideshare vans and electric Metropool vehicles, and passenger ferries for the water taxi service. A large additional "non-revenue" fleet used to support service has tow trucks, supervisor vans, maintenance trucks, and more.

Metro Connects will require additions throughout the fleet, including approximately 430 new buses by 2050. Replacement vehicles will also be needed as current vehicles reach the end of their useful lives—usually after 12 to 15 years of service. As detailed below, all replacement buses after 2023 will be zero emission vehicles, and this will require development of associated charging infrastructure. In addition, Metro will also work to incorporate zero emission vehicles into its non-revenue, vanpool, and Access fleets as it replaces current vehicles and expands operations. Metro's goal is to power Metro fleets with 100 percent renewable electricity.

Compared to the current network, more of the new service proposed in Metro Connects will be in non-peak hours. Since fewer buses are used then, they will be used more efficiently, operating for more hours a day. As a result, Metro could purchase relatively fewer buses compared to the increase in service hours.

Metro Connects also envisions potential expansion and optimization of the electric trolley bus network, which carried about 15 percent of Metro riders in 2020. This will require investing strategically in the trolley network, focusing first on places where a relatively small expansion of wire could allow new service concepts to operate successfully. These include places that have frequent service, common overhead wires with existing trolley bus routes, steep hills, and dense urban service areas.

As of 2020, the passenger ferry fleet includes three biodiesel-powered high-speed vessels. Metro Connects proposes to add up to four vessels for three new routes over the next 30 years. Vessels purchased for expanding service must significantly reduce emissions. Ferry propulsion technology is quickly evolving for diesel-electric hybrid, hydrogen fueled, or full battery-electric systems. Metro is committed to moving toward zero-emissions vessels, as explained in the "Electrification" section. This includes replacement vessels for the existing fleet by 2050.

Smart design

As Metro purchases new fleet vehicles, it will continually improve their design with the ease, comfort, and safety of customers and operators in mind. Metro will ensure vehicles support equitable access for everyone, regardless of their ability. Metro will continue to emphasize features that make bus boarding fast and easy and keep maintenance costs down.

Metro will also proactively include systems that support developing technology. Bus real-time intelligence systems provide immediate access to useful information about operations and conditions, and could support features such as:

- Real-time information for customers about the availability of seats, bike storage space, and space for wheelchairs or other mobility aids
- Telematics—vehicle systems that use telecommunications to send, receive, and store computer-based engine data—for proactive identification of mechanical problems
- Video systems that use license plate readers and object recognition to identify vehicles parked in bus-only lanes
- Onboard environmental monitors for weather conditions and air pollution
- Traffic control that goes beyond transit signal priority, such as remote activation of pedestrian crossing buttons at intersections to encourage patrons not to jaywalk to catch the bus
- Secondary uses of a vehicle, such as an emergency communications hub or power generator
- Safety features including audible signals to pedestrians

For more information

See Technical Report E. Capital Costing Methodology for more detail on the topics in the Supporting Infrastructure section.

What will it take?

- **Procure state-of-the-art zero-emissions vehicles and supporting infrastructure** to support expanded service, replace vehicles as needed, and meet customer needs.
- **Use fleet design criteria that focus on customer and driver needs.**
- **Optimize and moderately expand the trolley network by:**
 - Filling gaps in the network to allow flexibility
 - Working with partners to potentially extend wire to new streets so routes could be converted to trolley bus service
 - Keep the trolley system infrastructure in a state of good repair through regular maintenance and planned replacement cycles.
 - Increasing use of trolleys on weekends.

ELECTRIFICATION

Metro Connects will confront climate change by transitioning to zero-emissions vehicles, powered by renewable energy, over the next 20 years. A zero-emissions fleet will deliver world-class transportation benefiting drivers, mechanics, passengers, and people living along the bus routes—improving the quality of life for everyone in King County.

What will fleet electrification look like?

Metro is committed to having the greenest fleet possible. Starting in 2004, Metro was a national leader in adopting diesel-electric hybrid bus technology. In 2015 Metro reinvested in the second largest zero-emission trolley fleet in the nation. As of 2020, Metro operates a bus fleet of all hybrid or electric coaches (including electric trolley buses).

As of 2021, Metro is preparing for rapidly evolving electric vehicle technology and continuing the transition to a zero-emission fleet. Zero-emission electric buses produce no exhaust, are quieter, and can lower operating costs. Metro is also exploring options to transition its non-bus fleets to zero emission vehicles.

Metro has committed to powering its electric vehicles with 100 percent renewable energy sources. Electricity from Seattle City Light is carbon neutral and from Puget Sound Energy is purchased from a long-term contract from a new wind and solar installations in Washington State purchased through the Green Direct agreement.²² Furthermore, over time all electricity supplied in Washington State will be free from GHG emissions. In 2019, Washington State signed into law the Clean Energy Transformation Act which required all electricity supplied to be carbon neutral by 2030 and fossil fuel free by 2045.

Metro's substantial investment in a zero-emissions fleet will help achieve King County's equity, sustainability, and safety goals²³. It will help King County respond to the climate crisis by improving air quality and reducing greenhouse gas emissions from transportation, contributing to the health and mobility of county residents.

²² More information about Puget Sound Energy's Green Direct Program available [here](#).

²³ Articulated in the County's Equity and Social Justice Ordinance and Strategic Implementation Plan and the Strategic Climate Action Plan.

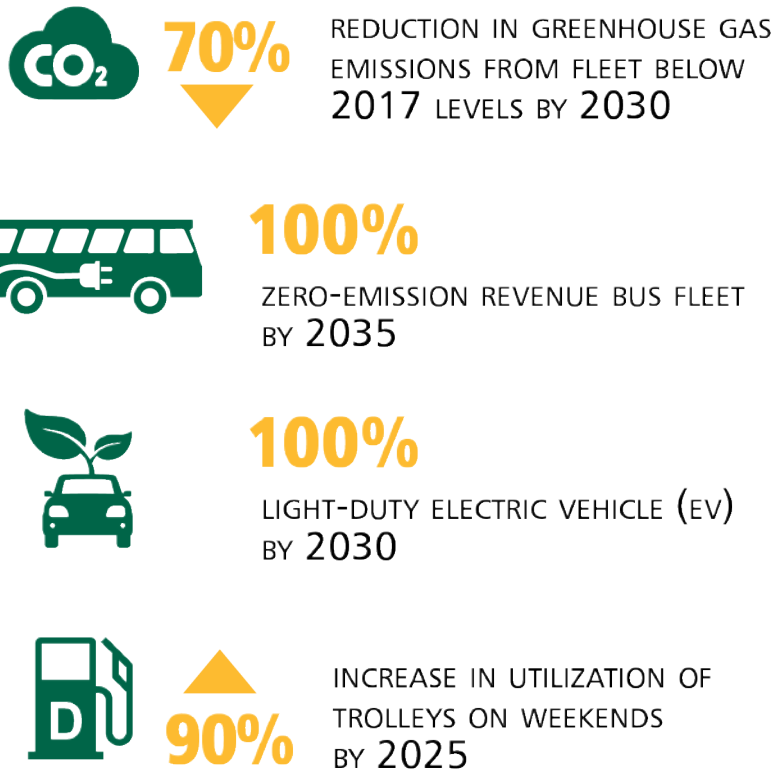
King County’s vehicle fleet operations targets

Reduce greenhouse gas emissions from County fleets by 45 percent by 2025 and 70 percent by 2030 (below 2017 levels).

Increase the percentage of County-owned vehicles that are electric, including a 100 percent zero-emission bus fleet by 2035; and 50 percent of light-duty vehicles electric by 2025 and 100 percent by 2030.

Metro will use a phased approach to acquire battery-electric buses, convert operations, prepare the workforce, and build the necessary infrastructure to support a 100 percent zero-emissions bus fleet. Metro is continuing to plan and evaluate alternatives for accelerating the transition of the bus fleet to achieve the 2020 Strategic Climate Action Plan goals of zero emissions by 2035. Metro is evaluating requirements, potential impacts to service, and operational needs to achieve this target. Metro will operate the next wave of new battery-electric buses from Metro’s South Base, predominantly serving south King County, improving air quality in communities where people are disproportionately affected by pollution. Battery-electric buses will benefit communities near the bases and along routes by reducing noise and eliminating tailpipe air pollution. Metro will retrofit existing bases and build new bases that house, charge, and maintain battery-electric buses.

Figure 25 Strategic Climate Action Plan Targets for Metro



Trolley fleet

The trolley fleet comprises approximately 12 percent of Metro’s current (2021) bus fleet (174 trolleys). Trolleys will continue to be key to Metro’s zero-emissions strategy. The trolleys include battery energy storage to enable operation over short distances without overhead wire. Metro will continue to explore innovations in the batteries that support trolleys and other strategies to optimize and expand use of the trolley fleet. Continued innovation and technical advancements will help Metro increase use of trolleys on the weekends as well. Construction projects often require that portions of the trolley overhead system be turned off to safely allow work to occur. Construction that impacts Metro’s trolley system is currently limited to weekends. Technical advancements such as increased off-wire capabilities and continued work with partners in scheduling construction projects will help Metro keep trolleys running.

Battery-electric buses

Metro has committed to purchasing only zero-emission buses after 2023. Trolley buses will continue to be an important component of the zero emission fleet and the bulk of these will be battery-electric buses (BEBs) that will replace existing diesel-hybrid buses. Metro currently operates 11 fast-charge BEBs. It is planning an initial purchase of 40 long-range BEBs in 2021. Metro will continue to expand its BEB fleet as buses need replacement.

Zero-emission non-bus fleets

Metro is also exploring options to transition its non-bus fleets—such as Rideshare, Access and the non-revenue vehicle fleet—to zero emission. Metro’s efforts include continuing to transition light duty-sedans to electric, piloting new vehicle technologies to meet operational needs, and developing cost analysis tools to inform purchase decisions. Metro is also upgrading and expanding electric charging infrastructure.

In addition, Metro is working to electrify its ferry fleet. Ferry propulsion technology continues to evolve with cleaner diesel engines, hybrid propulsion systems using batteries for low-speed docking operations, and full battery-electric systems able to achieve operating speeds that meet commuter needs. Battery-electric vessels will reduce fuel consumption and costs, maintenance, and air emissions. Electric power reduces noise and vibration and enhances vessel responsiveness and safety.

Metro will use the best available propulsion technologies as existing fleet vessels reach the end of their useful life and as new ferry routes are started. Shoreside charging infrastructure will be deployed to support the overnight and underway needs of battery-electric vessels.

Infrastructure

Metro has begun building large-scale electrical charging infrastructure and will continue developing information technology solutions to manage vehicle charging. Metro is planning to use on-base and on-route charging. It is building new bus bases and retrofitting existing bases with bus charging infrastructure. Charging stations at

layover locations will enable buses with long assignments to charge in the field during breaks. Metro is also investing in electric vehicle charging infrastructure to support its non-revenue fleet vehicles and considering charging infrastructure needs for program such as Access and Rideshare.

What will it take?

- **Commit the resources needed to add and replace existing buses.**
Purchase battery-electric buses and electric trolley buses and build supporting vehicle charging infrastructure.
- **Build new and convert existing bases to support battery-electric bus technology.**
Build new facilities like Interim Base and South Annex Base at South Campus with electrification infrastructure. Retrofit Metro's existing facilities to support a fully zero-emissions system. Provide sufficient base capacity to continue operations while portions of bases are closed during the retrofit process.
- **Pursue renewable energy sources.** Continue to work with utilities and explore opportunities for solar energy production at Metro facilities to ensure that electricity used is from 100 percent renewable. Metro's ability to meet this target is dependent on availability of renewable energy production and purchasing options from utilities as the demand from Metro's fleets increases.
- **Invest in vehicles and charging infrastructure for non-bus fleets.**
- **Continue to operate and optimize use of electric trolley buses.**
Explore opportunities to increase trolley utilization on weekends.
- **Coordinate and form partnerships with local utilities.**
Work together to deploy charging infrastructure for battery-electric buses and ensure that electricity is from renewable sources.
- **Engage with transit industry and manufacturer partners.**
Ensure that zero-emission vehicles and charging technology are available and meet operational and service needs.
- **Train and develop Metro's workforce to operate and maintain battery-electric buses.**
- **Work with jurisdictions and other agencies throughout King County to develop electrical infrastructure for layover charging.**
Coordinate and collaborate with others to develop and install a network of charging infrastructure to support fully zero-emission fleets. Partner with Sound Transit and other transit agencies that own key terminal locations in King County. Budget for infrastructure requirements.
- **Make necessary code and policy changes.**
- **Measure and report on progress toward achieving an all-zero-emission fleet.**

FACILITIES AND OTHER SUPPORT SYSTEMS

Building and maintaining infrastructure, such as bus bases, other support facilities, bus shelters, transit centers, and park-and-rides, provides the foundation of the Metro Connects vision. Metro has made significant investments in infrastructure to support high-quality service, but continued growth is essential. Maintaining a state of good repair will help ensure that Metro customers enjoy a world-class transit system.

What will bases and support facilities look like?

Bases and support facilities are essential to expanding, improving, and operating service. Mechanics do maintenance or repairs. Employees clean and fuel the bus and may post “rider alerts” about upcoming service changes. Drivers learn about events that might affect transit service that day. Activities like these are performed at Metro’s seven bus bases and other facilities, and Metro Connects proposes infrastructure to support the service proposed for the future.

What is “state of good repair”?

State of good repair means keeping capital assets in a condition at which they could operate at a full level of performance. Maintaining the transit fleet and facilities in a state of good repair helps to avoid the high costs of deferred maintenance, to qualify for federal funding, and to deliver safe, reliable, and comfortable customer service.

Bus bases

Metro’s seven bus bases support an average of 200 buses each and have both operations and maintenance facilities. Metro is currently near capacity at existing bases, limiting the ability to add more vehicles to the fleet. Metro expects additional capacity to become available with the construction of Metro’s Interim Base in 2021. Metro will need one or two additional bases to house the expanded fleet and non-revenue vehicles needed to deliver the service in Metro Connects. Metro is planning to build a new base on its South Annex property at the South Campus.

The exact facilities required depend on factors such as the sizes of buses needed, their propulsion technologies, and partnerships with other transit providers. New bases will be sited and designed according to these criteria:

- **Service demand.** Timing and size for new facilities is driven by the demands of service growth. Occasionally, service demand exceeds available capacity, driving the need for unique and rapidly deployable solutions to provide additional capacity quickly.
- **Sustainability.** King County’s Green Building Ordinance and Strategic Climate Action Plan set requirements and targets for achieving the highest green and equitable infrastructure standards in facilities. Bases will also be designed and retrofitted to support zero-emissions fleets.

- **Location.** Locating bases near the start and end points of service provides operational benefits by limiting the distance vehicles travel without passengers. Metro considers land availability and use, along with potential impact to adjacent properties and area traffic, when siting a new base.
- **Partnerships.** Metro has agreements with Sound Transit to share bus base capacity, helping both agencies operate efficiently.
- **Operational success.** Bases should be located and designed for efficient and effective operations and maintenance to occur. They should provide working space for employees.
- **Employee access.** Bases must provide adequate space for employees to park on site, or include mobility solutions in their siting, to ensure all employees can reliably and conveniently access their work site.
- **Resilience.** Facilities should be sited in locations not expected to be impacted by sea-level rise, with further attention to the effect of sea-level rise on the routes those bases support. With deployment of electric buses, proximity to key utility infrastructure adds to the resilience of the site in a catastrophic event as those services are restored first.

Metro continuously explores ways to maximize the use of facilities and reduce costs, such as parking some North Base buses near downtown Seattle during the day rather than driving empty buses back to the base.

Marine vessel maintenance facilities

The existing infrastructure to support marine operations is a moorage and maintenance barge on the north side of Pier 48 in Seattle. The proximity to the Pier 50 passenger ferry terminal supports efficient servicing of vessels for preventative maintenance and emergency repairs. The facility provides moorage for all three existing vessels.

As new routes are added, daily maintenance and moorage of new vessels will have to be sited at a terminal or a nearby location. Building a small satellite maintenance facility to provide reliable vessel operations will be a priority—especially for lake routes that will be far from the current maintenance barge.

Support facilities

Metro will also have to expand and accommodate facilities and functions to support non-bus fleets and deliver the Metro Connects service networks. For example, Metro's paratransit fleet resides at one Metro owned base and a variety of contractor leased bases strategically located across the service area to provide efficient and timely service. To support efficient paratransit operations, Metro Connects calls for strategic planning for long term KCM facilities to include state of good repair ongoing improvement maintenance practices, technological upgrades, and the latest fleet maintenance techniques. Metro Connects support for expanding to new facilities and upgrading current facilities to meet SCAP standards would align with the county's safety, equity, and sustainability goals.

Van distribution base. Metro currently manages the largest publicly owned vanpool program in the country. To support the continued growth of the vanpool program, Metro Connects calls for another vanpool distribution base.

Operations support. Metro will need more people to manage and support the operation of a growing transit system. The Transit Control Center (TCC) is the nerve center for Metro's bus operations. TCC staff monitor and manage the movement of buses in service. They coordinate radio contact with all bus drivers on the road, supervisors in the field, emergency responders, and other groups that support bus operations, helping manage problems and occasional emergencies.

As RapidRide and the frequent transit network expands and new technology emerges to help manage the transit system, the TCC will evolve. It will provide real-time headway management of frequent service and the TCC must grow to support the specialized equipment and dedicated space needed for an expanded network.

Metro will also need to ensure other staff have the space, capacity, and training needed to accommodate service growth. For example, service quality staff and field supervisors need to be accommodated when they are not in the field. Metro must expand classrooms and test areas for driving buses to train operators. Bus operators need adequate restroom facilities and places to rest between trips.

Maintenance and power distribution. The number of bus stops, shelters, and park-and-rides will grow with Metro Connects. Expanded RapidRide service will need enhanced shelters and signs at stops. Expanded use of technology will lead to more sign maintenance, radio maintenance, battery charging, and more. The employees who build, repair, clean and maintain these structures must have adequate space and equipment to do their work, located as close as possible to major service areas.

Administrative support. Though the COVID-19 pandemic may change work patterns, Metro will always need office space for customer service, planning, engineering, marketing, information technology, and other functions. As service expands, some of these functions will grow, particularly as new capital projects are planned and built. Revenue-processing requires secure physical space for processing cash and fare media that riders pay with every day.

Safety and security

All customers and employees should feel safe and welcome on Metro services and at Metro facilities, and keeping customers and employees safe is a top priority. Metro will continue to improve the safety and security of its system, through actions such as:

- **Build systems that support the safety of customers and employees in an equitable way.** As the transit system grows and urban centers expand, ensuring safety and security will continue to be essential for Metro to provide excellent services. In particular it is important to address gentrification and suburbanization of poverty, and the needs for people experiencing the lack of shelter or housing. Security needs and approaches will continue to evolve and emphasize the region's most vulnerable and impacted populations' needs. Safety onboard buses and at stops, stations, transit centers, and park-and-

rides will remain a priority in facility design and staffing. As of 2021, Metro is working with stakeholders to reimagine and restructure its security, safety, and fare enforcement approaches and practices.

- **Engage community partners to build connections for those with the greatest need.** Metro will pursue partnerships with human service providers, jurisdictions, and other transit providers to build connections for people riding transit that are in need of subsidized fares, housing, shelter, or other support programs.
- **Partner to ensure security at shared facilities, including expanded Link stations.** Metro will continue working with partners to ensure that shared facilities are safe, secure and welcoming for riders and employees.
- **Promote passenger safety** through operator training, continued use of safety shields at the front of coaches, onboard safety and security features in new vehicles, and use of emerging technologies.

Intelligent transportation systems (ITS)

Emerging technologies that connect travelers, vehicles, management centers and the roadway—called intelligent transportation systems (ITS)—will transform travel.

Metro has been a leader in using ITS. A wireless communications network on RapidRide corridors enables buses to request priority treatment at traffic signals, lets passengers pay fares before boarding, and delivers “next bus” information to electronic signs at stations.

Metro will build on this architecture to deliver improvements systemwide, connecting the management of transit and other transportation modes. This will make Metro’s service faster, more reliable, and easier to use. Many of Metro’s concepts for using ITS are mentioned throughout this document, including:

- **Intelligent buses** that report the availability of seats, bike racks, and space for mobility aids; have engine diagnostics; have weather and pollution information; and communicate with the road network and other vehicles
- **Integration of public and private travel options** such as bus, rail, carshare, bikeshare, and transportation network companies like Uber and Lyft into a single trip-planning and payment system
- **Integration of transportation management centers** operated by Metro, WSDOT, the City of Seattle, and others
- **Improvement and exchange of raw transit data** among regional partners to better understand customers’ needs, building on past initiatives
- **Other future technologies** such as automated buses and active safety systems.

With the ongoing extension of Link, Metro is restructuring its network around the rail system as well as multimodal connections and new travel options. As this service network evolves, service integration will become even more critical. Metro will need better tools to analyze ridership, productivity, on-time performance, traffic congestion, roadway volumes, corridor performance, and other aspects of operations

in a more regional and collaborative manner. The region's transit agencies could become better aligned by sharing more data and analysis.

Metro will not fully understand riders' needs and travel patterns without knowing where and how they transfer. Metro will need agreements with the ORCA partners to obtain regional data and conduct integrated service planning.

What will it take?

- **Invest in operations and system preservation.**
Build base capacity for up to 450 new vehicles, along with a new vanpool distribution base, Access fleet base, and other support facilities. Prepare existing bases and building new facilities to support electric vehicles. Expand safety and security infrastructure to keep customers and employees safe in an equitable way. Continue to lead in the testing, development, and procurement of information technology assets that are vitally important to providing excellent customer service over the long term.

LAYOVER AREAS

Layover sites are critical for reliable service. They help get buses to the right place at the right time and give Metro drivers safe places for breaks. Metro Connects envisions expanding layover space as service grows. As competition for curb space increases, Metro will invest in new, off-street facilities that will provide long-term stability and benefits for riders and bus operators.

What will future layover areas look like?

Layover is time built into bus schedules between a bus's arrival at the end of a route and its departure for the next trip. This provides break time for operators, helps buses get back on schedule if the preceding trip was late, and allows buses to depart at regular, predictable intervals. Layover areas include facilities for the bus to park, restroom and in some cases break facilities for operators, and are located throughout the county, either on-street or off-street, such as at a transit center.

Layover sites have a huge financial impact on Metro operations. Layover areas must have clean, safe, and well-lit facilities for bus operators. Service costs more when operators must drive empty buses long distances to reach layover spaces. Well-located layover areas—close to the start and end of routes—increase scheduling flexibility, reduce travel time to the beginning or end of routes, and enhance reliability. To achieve the Metro Connects vision, new layover spaces will need to be needed to support the growth of the mobility system, and new facilities will be needed at layover locations to support battery electric bus charging and active service management and service modernization.

On-street layover spaces are where buses park along curbs in street right-of-way. Metro partners closely with jurisdictions to secure layover space. Metro sites on-street layovers where they will not interfere with traffic and strives to minimize impacts on adjacent properties. However, property development or changes often result in pressure to reduce or move layover sites. This pressure can be particularly acute in dense urban areas, where development pressure is intense but where layover space is most needed because of the large amount of transit service starting and ending at major destinations. Many areas are seeing increasing competition for limited curb space.

In 2015, Metro's layover sites accommodated approximately 530 buses. The service changes envisioned in Metro Connects will affect both the number of layover spaces needed and their locations.

Metro estimates adding 270 layover spaces to accommodate the 2050 network—approximately 50 percent more than in 2015. This increase reflects the expectation that some current on-street layover spaces will no longer be available because of development. Many of these spaces will be needed in dense urban areas, including downtown Seattle. Metro must update and renegotiate many current layover agreements, develop new ones, and invest in off-street layover facilities.

Layover charging for battery electric buses will be necessary to support a future zero-emission fleet. Layover charging will be needed for more frequent services, like RapidRide, and will require significant electrical infrastructure in jurisdictions throughout the county. Metro will likely need to partner with other transit agencies that own key terminal locations in King County.

What will it take?

- **Provide adequate layover areas and explore innovative options and practices to meet layover needs.**
Meet the growing layover need by delivering new dedicated layover spaces, through innovative approaches such as incorporating layover space into other types of projects, additional park-and-rides and transit-oriented developments. Explore operational, service modernization, and scheduling practices to more efficiently utilize layover spaces.
- **Support new operational needs at layover locations.**
Provide facilities at new layover locations to support changing operational needs, including facilities to support battery electric bus charging where needed as system evolves to zero-emission over time. Provide facilities to support service modernization and management, such as break stations for operators.
- **Work with jurisdictions to site on-street layover areas or build off-street layovers where Metro expects a long-term need, such as in downtown Seattle.**
Work with property owners and builders to include layover areas that have rider facilities as part of new development. Transit-oriented development projects are great opportunities for these types of partnerships.
- **Continue partnerships with other agencies to secure layover space.**
Build on Metro's successful joint agreements with Sound Transit, and consider King County Housing Authority as another potential partner.

METRO'S WORKFORCE

In preparation to deliver the service envisioned in Metro Connects, Metro is growing the workforce, hiring people with highly specialized skills, and attracting diverse employees who reflect the communities Metro serves. It is working to become an anti-racist organization, strengthening leadership and accountability, and focusing on safety for employees and customers.

What will Metro's workforce look like?

As of 2020, Metro had more than 5,000 full and part-time employees, including about 3,000 bus operators. Other Metro employees plan service; purchase and maintain buses; build and keep up customer facilities; respond to events affecting service, safety, and security; and otherwise support daily operations. Metro's marine division employees operate and maintain the water taxis.

Metro also operates Sound Transit's light rail system, which will grow three-fold, and two streetcar lines for the City of Seattle, which is evaluating expansion. Metro's growing workforce will be essential to building an integrated system that lets people travel farther, faster, and more easily.

Metro will build a diverse workforce that reflects the communities it serves and engages employees in decisions that impact their workplace. Creating a culture of belonging at Metro means respect, safety, and accountability are priority. Metro will look beyond traditional recruitment strategies to build space for racial, gender, and other diverse communities at Metro. Efforts to attract and retain a quality workforce will include succession planning, employee training and development programs, and the creation of pathways to Metro employment—especially important as Metro faces a high retirement rate among supervisors, managers, and trades positions.

Metro's culture will shift to focus on the value of people. Metro's ability to embrace anti-racist principles will support retention and leadership development and will make Metro a place where people want to work. Above all, Metro will ensure employees have what they need to provide the highest levels of customer service and safety.

As the Metro Connects vision unfolds, effective internal communications will be critical for building a common understanding and commitment to transforming the Metro system.

Metro will also focus on productive labor-management relationships with the unions that represent most of the workforce. Strategically partnering with the labor community and others can help Metro recruit new employees in addition to developing and supporting its current workforce.

What will it take?

- **Keep employees engaged and respond to employee needs.**
Ensure that teams are staffed commensurate with the work assigned. Ensure that training, recognition, and engagement needs are considered and planned for when making changes to the system. Increase employee pulse surveys and Employee Resource Groups, which offer opportunities for greater employee engagement. These types of engagement will provide data points on how Metro is moving toward a culture shift.
- **Continuously improve safety.**
For example, improve layover facilities and reduce onboard cash fare payment to minimize conflicts between operators and passengers.
- **Build a workforce that experiences belonging at Metro and reflects the diversity of King County’s population.**
Use equitable recruitment, hiring, development, and performance management practices—all critical to a high-performing organization and a culture shift that allows racial, gender, and other aspects of diversity to thrive. Create the conditions that prioritize health and well-being, and invest where needs are greatest.
- **Implement an organizational health framework.**
Promote an organizational health strategy that creates the conditions for employees from the most oppressed communities to thrive. Ensure that Metro leaders slow down and take stock of what is needed for Metro to truly recover from the pandemic and create conditions that support collective health.
- **Respond to a high retirement rate by training new employees and leaders.**
Invest in robust training and development programs and stay competitive with the private sector for hiring and retaining the next generation of Metro employees. Work with technical institutes and colleges to recruit and train employees and develop leaders for jobs in maintenance, operations, and administration. Consider pathways for communities where needs are greatest and people might not have access to technical resources and colleges.
- **Keep employee skills up to date with changing technology and innovation in the transit industry.**
Foster a sustainable learning culture at Metro. For example, as the fleet modernizes, ensure that operators and maintenance workers get updated training and new skills. Invest in employees where needs are greatest.

What operators had to say

Metro drivers experience first-hand the factors that affect their ability to transport passengers safely and on time. They also hear from customers about the quality of service. Metro hears regularly from its drivers about their ideas for the future of Metro’s service. Some key themes incorporated into this vision include the importance of strengthening safety and security for riders and drivers, reducing overcrowding, improving fare payment, and improving speed and reliability through capital improvements and well-timed transfers.

Attaining the Vision

OVERVIEW

Metro cannot achieve Metro Connects all at once or do it alone. Collaboration, partnerships, continuous improvement, and demonstration of value will be key.

Consistent with how Metro Connects was developed, Metro will continue to collaborate with jurisdictions, transportation agencies, and the public to move toward this shared vision.

Metro Connects is a living document that Metro expects to update every six to ten years, in alignment with updates to the Strategic Plan and Service Guidelines. As a long-range vision, Metro Connects and its networks will not change drastically with every update. However, this iterative process will contribute to an enduring consensus about the future of transit and will help cities and the region realize their visions for the future.

Metro will use existing planning processes to strive to make progress toward Metro Connects. Metro will continue to collaborate with jurisdictions, community organizations, riders, and community members on service changes and capital projects. The Service Guidelines will ensure that near-term investments align with the Metro Connects networks. Service restructures will remain an important tool for achieving Metro Connects. Metro will follow guidance in Metro Connects for prioritization of capital projects and will document that planning through its 6-year Capital Improvement Program, which informs biennial budgets.

Metro will plan for its mid-range future through its planning and budgeting processes. Metro understands that jurisdictions, employers, and community stakeholders need targets to plan toward, and the Metro Connects interim network provides those targets for service expansion. Metro will continue communicating its plans to elected

Alignment with Strategic Plan goals

-  Invest upstream and where needs are greatest
-  Address the climate crisis and environmental justice
-  Support thriving, equitable, transit-oriented communities that foster economic development
-  Improve access to mobility options
-  Provide fast, reliable, and integrated mobility services
-  Be responsible stewards of financial resources and invest in line with values and goals
-  Conduct deliberate and transparent community engagement

officials, jurisdictions, and other stakeholders through its Regional Project Schedule,²⁴ updated annually.

The Metro Connects networks are important guides for future service, but engagement with affected communities and priority populations must drive the final service changes to ensure they advance equity and respond to community needs. Metro will continue engaging the public in shaping major service changes before they are adopted by the King County Council. The capital program will be subject to budget review and approval by the King County Council.

Priority populations: people who are black, indigenous, and of color; have low or no-income; are immigrants or refugees; have disabilities; or are linguistically diverse.



Metro defined which populations to focus on in partnership with the King County Office of Equity and Social Justice and the Equity Cabinet as part of the development of the adopted Mobility Framework.

The interplay between King County and Metro’s policies, local land use and comprehensive plans, and the processes for implementing services changes, capital projects, programs, and initiatives is shown in Figure 29.

Key elements described in this section include:

- Financial overview
- Implementation of Metro Connects: policies and planning
- Implementation of Metro Connects: engagement with communities and partners
- Accountability and continuous improvement
- Next steps

²⁴ The Regional Project Schedule identifies the implementation timing of major mobility projects and capital projects throughout King County on a six-year time horizon.

FINANCIAL OVERVIEW

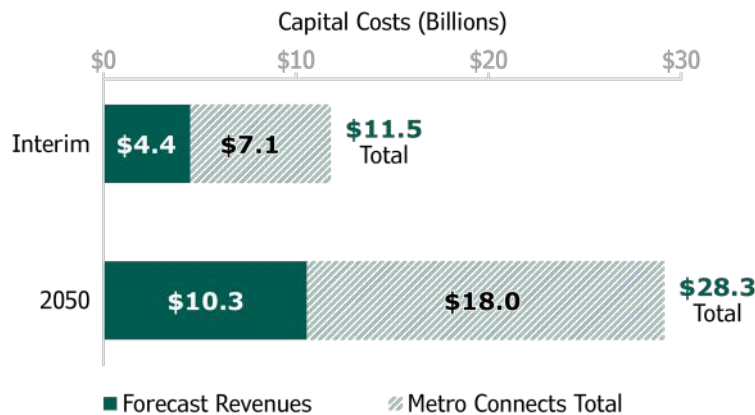
Metro Connects is an ambitious service and capital vision, consistent with forecasts of future transit needs and the Puget Sound Regional Council’s transportation plan. Additional funding is needed to grow service, make capital investments, and achieve the full vision.

In response to King County Council motion 15252²⁵ and as part of the 2021 update to Metro Connects, Metro updated the expected costs for the interim and 2050 networks, as well as Metro’s assumptions about forecast revenues.

The costs are high-level planning estimates of investments needed to support Metro’s network, expressed in year-of-expenditure dollars, which include inflation. These costs are subject to change as investments are further defined and sequenced. Because of inflation and the ongoing cost of service once implemented, the timing of investments can have a significant impact on the total costs.

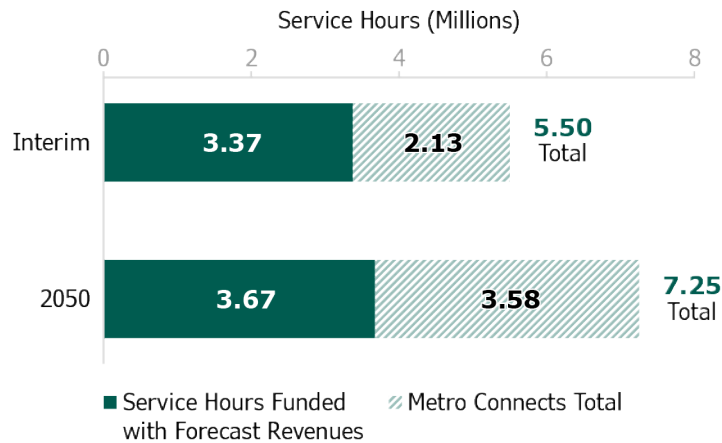
Figure 26 and Figure 27 illustrate the capital costs and service additions identified in Metro Connects between now and the interim network (for costing purposes, 2035), and through 2050. These figures also show the current estimate of what could be funded with currently forecasted existing revenue sources—sales tax, farebox revenue, federal and state grants, and others.

Figure 26 Metro Connects Capital Costs and What Could be Funded With Forecasted Revenues



²⁵ A motion expressing support for regional planning, coordination and funding efforts to address the implementation of Metro Connects. Passed by the King County Council on Nov. 13, 2018.

Figure 27 Metro Connects Service Adds and What Could be Funded With Forecasted Revenues



In summary, as of June 2021, Metro expects the interim network to cost approximately \$11.5 billion in capital costs and require 5.5 million annual service hours. The 2050 network will require an even larger investment—\$28.3 billion in capital costs and 7.25 million annual total service hours.

Existing revenues will enable Metro to maintain service levels, however the cost of attaining Metro Connects will significantly exceed existing revenue sources. Metro looks forward to working with elected leaders and partners on a regional funding solution.

Metro’s revenue sources include sales taxes, fares, property taxes, federal and state grant funding, with sales tax representing metro’s primary revenue source. Using a sales tax as Metro’s primary revenue source amplifies the challenge of sustainable and equitable funding. Sales taxes are volatile and regressive. Property taxes—another available funding source—are also regressive. The region could pursue many funding approaches, including sources that may be more equitable and less regressive. A 2019 report²⁶ to the King County Council included potential funding options, although these may evolve based on changes at the state or local levels. Metro will also work to control costs and ensure maximum impact of investments when implementing Metro Connects.

These figures are meant to give Metro, elected officials, and other stakeholders a sense of the large scale of investments required to implement Metro Connects. However, given the likelihood the figures will change, Metro is transmitting more detailed information about the projected costs and costing methodology separately, in Technical Report E. Capital Costing Methodology. Metro proposes more regular updates on what Metro could afford toward the projected costs through the Strategic Plan web-based dashboard (for more information, see the “Accountability and Continuous Improvement” section).

²⁶ Status report on Metro Transit’s Regional Planning Effort (in response to Motion 15252), transmitted to the King County Council on May 31, 2019

Service investments

In 2019 Metro spent \$755 million on service operations. An additional \$337 million annually for the interim network, and an additional \$711 million annually for the 2050 network (in 2019 dollars) would enable Metro to implement the Metro Connects service improvements, bringing frequent service to within a half mile of 80 percent of the county's population and expanding flexible transit options. This would require approximately twice Metro's current funding capacity.

As mentioned above, Metro's primary source of revenue is sales tax, along with fares, property tax, and federal and state grants. King County must engage in a regional conversation about how to fund this service investment (which could include, but not be limited to, additional federal, state, and local funding options and partnerships).

Capital investments

Metro Connects will require a substantial expansion of capital investments in infrastructure, facilities, and fleet to support the vision. Investment will be needed to create optimal transit travel conditions that keep buses moving and on time. Significant investments in passenger facilities will also be needed to support the new service network. Metro will invest in technology and supporting infrastructure to create an enhanced customer experience. These capital investments will support the productivity gains associated with the Metro Connects network. Without these investments, service will be slower, operating costs will be higher for the same level of service, transit will be less productive, and it will be more difficult to meet the region's goals for climate, equity, mode share, and ridership.

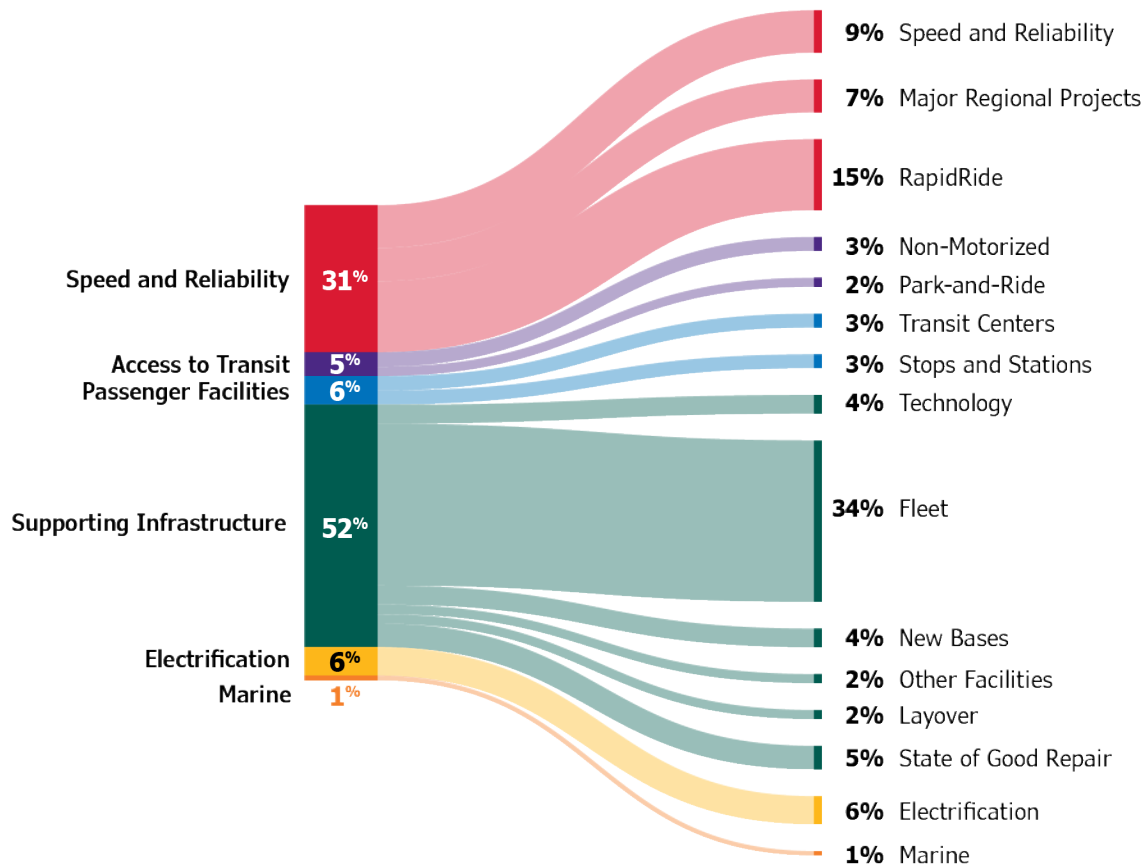
Metro Connects will also require substantial investment to acquire battery-electric buses, convert operations, prepare the workforce, and build the necessary infrastructure to support a 100 percent zero-emissions bus fleet.

As mentioned above, Metro estimates the 2050 network will require an investment of approximately \$28.3 billion in year-of-expenditure dollars on capital projects.

Figure 28 illustrates the current estimates of how the capital investments would be distributed among the major capital elements.

As with the service investments, and as shown in Figure 27, existing revenue streams would cover some of the proposed capital investments. To fund the remaining investment, King County would look to additional federal, state, and local funding options and support jurisdictions and elected officials in a regional conversation about funding. In addition, Metro will seek delivery partnerships to increase the capacity and ability to implement the new investments needed to support the Metro Connects vision.

Figure 28 Capital Investments 2018-2050



State of good repair

Metro’s first commitment is to support the existing system by keeping current assets (bus bases, maintenance facilities, revenue and non-revenue vehicles, trolley wire, substations, etc.) in good working condition. Metro will continue to plan for required maintenance on the existing system as part of the biennial budgeting process. As Metro has done in the past, it will look for federal, state, regional, and grant funds to ensure Metro can meet its obligation to maintain and repair existing assets. The estimated cost for maintaining current assets and for new facilities and infrastructure are shown as “State of Good Repair” in Figure 28.

IMPLEMENTATION OF METRO CONNECTS: POLICIES AND PLANNING

Metro will follow its policies and planning processes to work toward making Metro Connects a reality.

Policies and planning processes

Metro will follow its adopted policies and planning processes to work toward the Metro Connects vision. This will streamline planning and support clear communication to stakeholders about decision-making.

Metro will continue working with cities and engaging the public and stakeholders on service changes, service network restructures, capital projects, and broader priorities. This essential engagement is explained in the “Implementing Metro Connects: Engagement with Communities and Partners” section.

Adopted policies

These adopted policies will support the implementation of Metro Connects:

- **Metro’s Strategic Plan for Public Transportation**
 The updated 2021-2031 plan directs Metro to grow service and deliver capital projects in alignment with seven key goals, and consistent with Metro Connects.
 The Strategic Plan public-facing dashboard will track progress toward key metrics associated with Metro Connects, as well as the funding gap between what Metro can afford and the unconstrained costs of the interim and 2050 Metro Connects networks. The “Measuring performance” section of this plan includes more information.
- **Metro’s Service Guidelines**
 The guidelines establish service growth as Metro’s third priority for service investments, after crowding and reliability. The 2021 Service Guidelines update

Alignment with Strategic Plan goals

-  Invest upstream and where needs are greatest
-  Address the climate crisis and environmental justice
-  Innovate to improve mobility, complement transit, and advance equity and sustainability
-  Keep passengers, employees, and communities safe
-  Support thriving, equitable, transit-oriented communities that foster economic development
-  Improve access to mobility options
-  Provide fast, reliable, and integrated mobility services
-  Build a skilled, diverse, and well-supported workforce that has opportunities to grow
-  Be responsible stewards of financial resources and invest in line with values and goals
-  Conduct deliberate and transparent community engagement

changed the network that this priority aligns with from Metro’s current network to the Metro Connects interim network.

As a result, the annual System Evaluation report will highlight service hours needed to achieve the targets set for the Metro Connects interim network. When funds are available for service growth, after addressing crowding and reliability, the Service Guidelines directs Metro to invest to fill those gaps toward Metro Connects.

- **Metro’s fund management policies**
These policies²⁷, adopted by the King County Council, set priorities for how Metro spends money and serve as the foundation for the priority order of capital investments toward Metro Connects.
- **King County Strategic Climate Action Plan**
Metro is responsible for delivering on priority actions in the Strategic Climate Action Plan (SCAP) that are related to emissions reductions, climate equity, and preparing for climate impacts countywide as well as for Metro-owned fleet and facility operations. The 2020 SCAP update commits Metro to seek specific funding sources to implement Metro Connects and to identify the cost to support service growth and achieve King County climate goals for transit ridership and car-trip reduction targets.
The SCAP biennial report will track progress towards targets and priority actions.
- **King County Equity and Social Justice Strategic Plan**
The King County Equity and Social Justice (ESJ) Strategic Plan articulates a shared vision for a King County where all people have equitable opportunities to thrive. Metro is responsible for delivering on the Transportation & Mobility element of the plan, aligning work with identified goal areas, and employing four strategies to advance ESJ: investing upstream where needs are greatest, investing in community partnerships, investing in employees, and doing this with accountable and transparent leadership.

Planning processes

Metro will use these existing planning processes to implement Metro Connects:

Funded actions

- **Metro’s biennial budget** will support near-term progress toward Metro Connects, including funding of service changes and capital projects. Such system or program changes will be informed by Metro’s policies, business plan, and community and stakeholder engagement. For example, as mentioned above, the Service Guidelines will guide service changes in a way that aligns with Metro Connects.

²⁷ The fund management priorities are: debt repayment, operation and maintenance of the current system, reserves, and new spending on service and capital to achieve Service Guidelines or Metro Connects goals.

- **Metro will plan for future capital projects through its 6-year Capital Improvement Plan**, transmitted to the King County Council with the biennial budget. Immediate projects are funded in each budget. Metro will follow the “Capital Prioritization” guidance, described later in this section, when making decisions about which capital investments should be prioritized, consistent with available resources.

Mid-range strategy

- **Metro will articulate its mid-range priorities and plans through its 10-year business plan**,²⁸ updated regularly. Though the business plan is internally focused, Metro will explore opportunities to communicate its priorities to external stakeholders. Engagement with stakeholders, like the Equity Cabinet, will help inform the development of the business plan.

Coordination and partnership

- **Local and regional plans** informed the development of the Metro Connects network and will continue informing its implementation. Such plans include the Puget Sound Regional Council’s VISION 2050, the King County Comprehensive Plan, the King County Countywide Planning Policies, and jurisdictions’ local plans. Metro hopes clearer communication and continued engagement will help cities plan for and implement improvements to support Metro Connects. More information is included in the “How Metro will work with partners and communities” section.

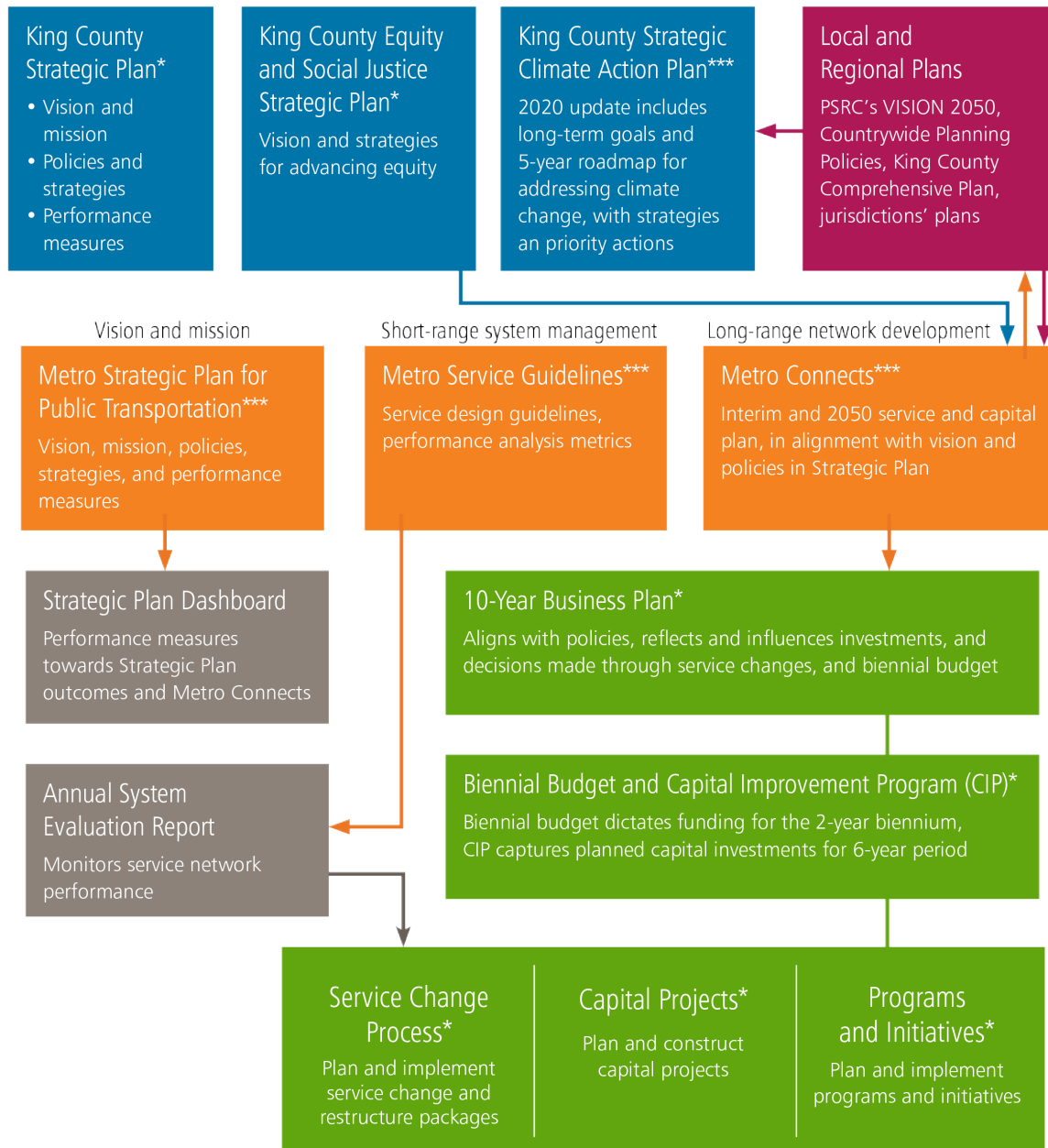
Accountability

Metro will measure performance and track progress toward Metro Connects through the Strategic Plan dashboard, explained in the “Measuring Progress” section of the “Attaining the Vision” chapter.

Figure 29 illustrates how plans and policies will drive implementation of Metro Connects.

²⁸ Metro’s 10-year business plan identifies the operational and service outcomes, business needs, and key strategies that capital investments should support.

Figure 29 Plans that Guide the Metro Connects Development Program



* Informed by community engagement

** 2020-2021 updates incorporate Mobility Framework

*** Informed by community engagement and 2020-2021 updates incorporate Mobility Framework

King County policies that guide Metro's work

Metro policies (RTC and KCC adopted)

Metro-owned implementation products and processes

Local and regional plans

RTC and KCC adopted performance measurement systems

New guidance for prioritizing investments

Since the adoption of Metro Connects in 2017, Metro has heard a desire from stakeholders to better understand how Metro will prioritize implementation of the investments outlined in Metro Connects. In response, Metro updated its Service Guidelines to direct service investments into the Metro Connects interim network. Metro also worked with stakeholders to develop additional guidance for how it would prioritize other key investments, including capital projects and RapidRide. That guidance is included below.

Prioritizing capital investments

3. Significant capital investments are crucial to delivering the Metro Connects service networks.

When identifying and prioritizing capital projects, Metro will lead with its core values of safety, equity, and sustainability, using the following principles:

- Support safety for Metro’s employees, customers and the community by prioritizing investments that address safety concerns and by ensuring all investments and facilities are safe
- Advance equity by identifying and addressing existing gaps and by prioritizing investments where needs are greatest
- Help build a resilient and sustainable King County and address the climate crisis by prioritizing investments that advance King County’s Strategic Climate Action Plan

Given the strong relationships among these values, Metro must balance efforts to support them all.

Metro will prioritize capital investments in the following order to advance Metro’s Strategic Plan and Metro Connects and to align with Metro’s Fund Management Policies²⁹:

1. Maintain assets
2. Support existing service levels
3. Grow and improve service and operations by balancing core values

Metro’s capital investments will align with Metro’s financial capacity and strategy direction, as identified in its 10-year business plan. In addition to balancing its core values, Metro will consider community input and how a project addresses community-identified needs when making decisions. Such input may come through engagement efforts for specific capital projects and higher-level policy or business plan development. By seeking input upstream and in its business planning and other processes, Metro seeks to go beyond simply seeking feedback on specific projects or proposals.

Metro will use this guidance to develop capital projects, programs, and the Capital

²⁹ The first priority in the Fund Management Policies, “Fund payment of debt service,” is not as relevant and therefore not included in this priority list.

Improvement Program (CIP). Metro will continue to monitor and adjust projects, programs, and overall set of capital investments to respond to changing conditions, agency direction and business needs, and community feedback. This will then inform how the CIP is updated during each biennial budget process. Figure 30 illustrates this process.

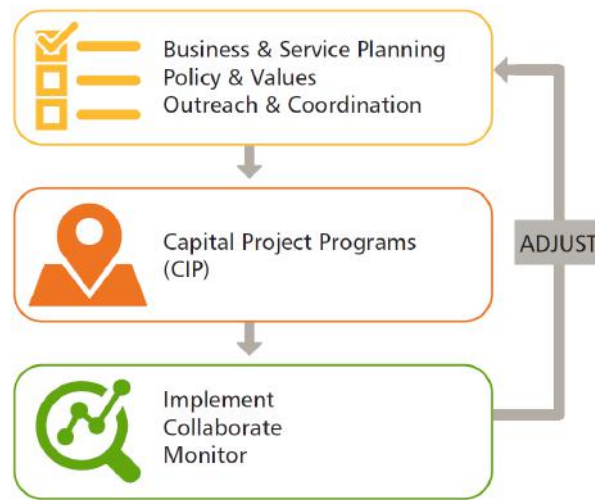
Prioritizing RapidRide implementation

As described in the “RapidRide service” section, the 2021 update to Metro Connects moved to a programmatic approach for identifying future RapidRide lines. Metro identified a pool of candidate lines for the interim and 2050 RapidRide networks rather than a specific set of routes. Metro will develop a prioritization plan to select the specific RapidRide lines for the interim network, which will be informed by updated corridor evaluation, stakeholder engagement, and corridor studies. The corridor evaluation will use the same five factors used in the updated Metro Connects, which are equity, sustainability, service demand, capital, and implementation. Stakeholder engagement will include community stakeholders, affected jurisdictions, and partner agencies.

Metro will develop a RapidRide prioritization plan based on corridor studies that will include a pre-planning level study of candidate corridors that consider route alignment, capital investment needs, and cost estimates. The prioritization plan will organize RapidRide candidate lines into tiers by their priority and potential timeframe for implementation. The top tier RapidRide candidates will include those planned to be implemented for the interim network and the second tier will be the lines next to be developed if funded. Work on the first RapidRide prioritization plan will begin in 2022 and the plan will be presented to the Regional Transit Committee and Council for acceptance by motion upon its completion.

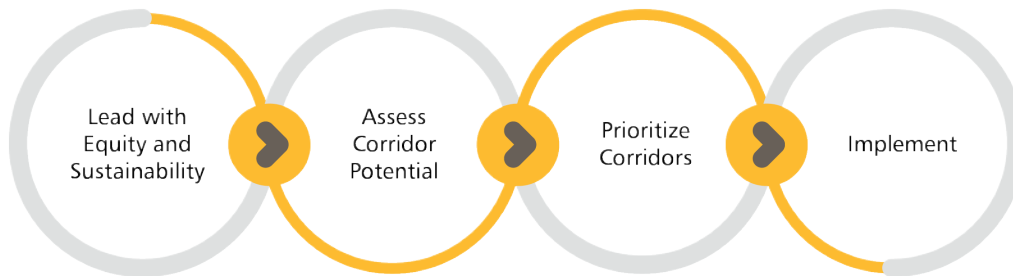
Decisions about RapidRide implementation will be made through Metro's biennial budget process, in alignment with the RapidRide prioritization plan, and adopted by the King County Council. Metro will provide an oral report to the Regional Transit Committee on its proposed capital program at least once each biennium, following the transmittal of the Executive’s proposed biennial budget. Metro will also provide relevant data and status updates on RapidRide in the annual System Evaluation report. In addition, Metro will maintain ongoing consultation with community stakeholders, affected jurisdictions, and partner agencies to discuss quantitative and qualitative data informing the future of all candidate routes. Such consultation will enable Metro to work with affected jurisdictions to facilitate transit supportive land uses and right-of-way improvements that are critical to RapidRide implementation. Decisions about investment in existing RapidRide lines will be prioritized based on

Figure 30 Capital Investment Planning Process



the factors used for evaluating candidates, such as equity and sustainability, and other factors such as safety, age and facility condition. This approach will allow Metro to make decisions about RapidRide that are more informed by timely data and community input.

Figure 31 RapidRide Prioritization Process



Metro will identify and implement future RapidRide lines by:

1. Leading with equity and sustainability in identifying the top candidates
2. Assessing the potential of candidate corridors based on community engagement, consultation with jurisdictions and partner agencies, updated information from corridor studies and analysis, and other implementation factors
3. Prioritizing and grouping the selected candidates into tiers and including this information in the RapidRide prioritization plan
4. Implementing corridors via the biennial budget process and Capital Improvement Plan

Figure 31 illustrates this process, which is explained in detail in Technical Report C. RapidRide Expansion Report. The K Line (Corridor 1027 between Totem Lake, Eastgate, and Kirkland) and the R Line (Corridor 1071 between Rainier Beach, Mount Baker, and the Seattle Central Business District) have been identified by Metro as the next RapidRide lines to be implemented. These lines are identified in the Metro Connects future network maps (Figures 7, 8, 13, and 14) as being in operation by the time of the Interim Network. Because the K and R lines have already been prioritized for investment, they are not considered to be candidate lines and are not subject to the prioritization process described above.

IMPLEMENTATION OF METRO CONNECTS: ENGAGEMENT WITH COMMUNITIES AND PARTNERS

As resources become available, input from riders, community members, cities, and transportation stakeholders will continue to drive the delivery of Metro Connects.

As mentioned, Metro’s adopted policies and planning processes will serve as important starting points for implementing Metro Connects. However, the Metro Connects networks are visionary and not meant to be created without community and partner input. The subsections below explain how Metro expects to center equitable community engagement, work with cities, and align with regional partners.

Centering equitable community engagement

Metro wants to build a mobility system that meets the needs of riders safely, equitably, and sustainably. To do that, Metro will start by listening to and valuing the needs and expertise of communities—especially priority populations. Engaging upstream and early, sharing power and co-creating with communities, and building lasting relationships are central to Metro’s vision for future engagement. Metro will continue to center the voices of communities in decision-making and improve engagement practices based on performance measures and community feedback.

Ongoing partnership with the Equity Cabinet

Metro’s engagement with the Equity Cabinet, a group of 23 community leaders representing riders and priority populations countywide, exemplifies the importance of co-creation and centering community voices. The Equity Cabinet was the driving force behind Metro’s Mobility Framework, adopted by the King County Council in 2020. The Equity Cabinet also continued working with Metro on the updates to Metro Connects and other policies, meeting monthly in 2020 and 2021.

Metro’s vision for how to include communities in decision-making, described below, is guided by the Strategic Plan.³⁰ Metro’s Service Guidelines describe Metro’s approach for service-related community engagement. Other County policies like the Equity and Social Justice Strategic Plan inform how Metro will engage with communities equitably.

Engaging with communities on Metro’s priorities.

Metro will engage early on with community stakeholders to inform and make decisions about Metro’s broader priorities, not just project-level decisions. Metro will explore opportunities to do this - for example, through the development of Metro’s business plan. This will help ensure Metro’s investments reflect community needs and priorities, make Metro’s decision-making more transparent, and support Metro

³⁰ Recommendations from Metro’s Mobility Framework shaped direction in the Strategic Plan.

and partners in identifying opportunities to better coordinate to meet needs. Metro may engage standing groups or commissions like the Equity Cabinet, the King County Transit Advisory Commission, and the Access Paratransit Advisory Committee in addition to community-based organizations, jurisdictions, and others.

Sharing power through community-led engagement.

Metro's engagement processes will strive to include all potentially impacted stakeholders, prioritizing priority populations and those in communities where needs are greatest. Metro will share power by co-creating engagement processes and ideas and designs for service and capital investment, programs, and policies. Metro will partner with and compensate community-based organizations for their work. Metro will make information, materials, and events accessible for people of all abilities and who speak languages other than English. Metro will demonstrate how community input shapes outcomes. Such early, co-creative engagement will help ensure service concepts, capital plans, programs, and policies are built from the ground up with the communities they are intended to serve.

Building lasting relationships.

Metro will take a long-term approach to community engagement rather than a project-by-project approach. This will create more opportunities to understand community priorities, learn about community-led efforts, and explore opportunities for partnership and co-creation. Having a regular presence in communities will enable staff and leaders to respond to their needs and build lasting relationships and trust. It also provides better opportunities to break down silos when involving communities in work across Metro divisions, County departments, and agencies.

Working with cities

Metro Connects was developed in partnership with many stakeholders, with jurisdictions playing a significant role. The original vision was based on local and regional growth plans. Metro will continue working closely with cities to implement Metro Connects. Since the 2017 adoption of Metro Connects, Metro has heard from cities about the need to improve communication and make partnership opportunities clearer. The 2021 update to Metro Connects aims to do that.

Metro recognizes that cities need to plan and make investments that support the Metro Connects network in advance of its implementation. Though Metro's funding uncertainty makes this a challenge, Metro is committed to working closely with cities on needed planning and investment.

Metro has several tools cities can use to plan:

- The **Metro Connects interim network** identifies near- or mid-term investments. The **Service Guidelines** will direct investment toward the target service levels for the interim network.

- The **Regional Project Schedule** facilitates regular communication and ensures cities understand and inform Metro’s plans, and vice-versa.

The **Regional Project Schedule** is a communication tool that identifies the timing for implementing major mobility projects and capital projects throughout King County on a six-year time horizon.

- The **Service Guidelines** will also include guidance regarding the types of land uses that support certain types of transit, so cities can make zoning choices that support the services envisioned for their communities in Metro Connects.

The **Service Guidelines** articulate the types of land uses that best support different service families. Cities could use this guidance to inform land-use decisions that prepare for future transit expansion and improvements.

Metro will also build on ways it communicates and collaborates to ensure cities can inform Metro’s plans, and Metro can inform theirs. Such methods will go beyond project-specific coordination, so Metro and cities continue to collectively inform and work toward the shared Metro Connects vision.

Partnership opportunities.

As discussed in the financial overview section, Metro Connects remains an ambitious, expensive, and largely unfunded vision. Current revenue sources will not get the region to the Metro Connects interim or 2050 networks. **Metro, its elected leaders, and city partners must work together to develop a funding solution.** Metro looks forward to supporting those conversations.

As part of its commitment to supporting healthy communities, a thriving economy, and a sustainable environment across the region, providing mobility to all, Metro’s priority is a regional solution to funding Metro Connects. However, cities can consider partnerships to fund service. Cities can also make in-kind investments and improvements. Such nonfinancial contributions might include:

- Adopt transit-supportive land uses, in alignment with the types of services planned for certain corridors in the interim and 2050 networks
- Engage with Metro in capital planning
- Support efforts to secure additional funding, such as coordinating on grants or engaging in conversations about a regional funding approach
- Expedite permits for transit-related construction
- Make speed and reliability investments
- Prioritizing transit in public right-of-way
- Collaborate on infrastructure expansion and improvements for RapidRide, other frequent routes, and all-day express service
- Support innovations in customer service and operations by adopting programs and tools to improve data quality, quantity, and analysis
- Build safe and comfortable passenger facilities that accommodate many more people, make transfers among services easy, and meet jurisdictions’ needs

- Improve access to transit by increasing park-and-ride capacity, bicycle and pedestrian paths, and secure bicycle parking facilities at major transit hubs around King County

Metro also recognizes that some cities have more staff and financial resources than others. To the extent possible with Metro’s own resources, Metro will provide additional support to jurisdictions with fewer staff or financial resources or jurisdictions with higher percentages of priority populations. Support might include:

- Technical support in project planning
- Support with grants (partial funding, local match, or add with planning to apply for a grant)
- Opportunities for in-kind partnerships (see list above)

Metro’s Service Guidelines includes more information on service and infrastructure partnerships.

Aligning with regional partners

Aligning the envisioned Metro Connects networks with regional partners is crucial to building a regional, innovative, and integrated mobility network that is safe, equitable, and sustainable. For example, integration with Sound Transit’s expansion is essential.

Metro developed the original Metro Connects networks based on regional growth plans with input from jurisdictions. The 2021 update to Metro Connects includes targeted changes to the service networks rather than a wholesale re-envisioning. The original Metro Connects was consistent with the Countywide Planning Policies, as is the 2021 updated version. As described above, Metro intends to continue working with local jurisdictions to align plans and implementation of projects.

The 2021 update to the Metro Connects networks brought forward input received in the original vision, while updating the 2040 network to be a 2050 network to align with the Puget Sound Regional Council’s VISION 2050. PSRC expects the region to grow by 1.8 million people by 2050, for a total of 5.8 million people, and 1.2 million jobs, for a total of 3.4 million jobs.³¹ Metro’s updated 2050 network map accounted for this projected growth by increasing service proportional to the assumed growth. Metro Connects’ emphasis on the connection between dense, affordable, mixed-use zoning and transit is consistent with VISION 2050’s focus on increasing housing density around transit (especially high-capacity transit).

Aligning with regional partners is crucial to Metro’s ability to deliver an integrated network that contributes to broad outcomes like advancing equity and addressing climate change. Such integration will also advance equity by making it easier for all people—especially priority populations—to connect to opportunities.

Increasing transit use by delivering the Metro Connects network remains essential to addressing climate change by reducing greenhouse gas emissions and delivering on other commitments in King County’s Strategic Climate Action Plan (SCAP).

³¹ Puget Sound Regional Council, VISION 2050. <https://www.psrc.org/sites/default/files/vision-2050-plan.pdf>

Ultimately, achieving the SCAP's goals to reduce car trips will require transit service investments, dense land use, and equitable vehicle-usage pricing above and beyond what is currently proposed in Metro Connects, Sound Transit 3, and VISION 2050. However, delivering Metro Connects is an important place to start.

For more information

See Technical Report D. Transportation GHG Emissions Reduction Opportunities Evaluation for a summary analysis of requirements to achieve reductions in vehicle miles traveled and evaluation of Metro investment strategies to reduce greenhouse gas emissions.

ACCOUNTABILITY AND CONTINUOUS IMPROVEMENT

Metro will track progress towards Metro Connects through a web-based dashboard and use evidence-building to understand its impact and improve delivery of Metro Connects.

Measuring progress

Metro will report on progress toward Metro Connects through its Strategic Plan dashboard. Measures will align with the vision of a regional, innovative, and integrated mobility network that is safe, equitable, and sustainable.

To streamline reporting to support data- and evidence-informed decisions, measures align with those already in the Strategic Plan. There will be fewer measures than there were in the original Metro Connects. Many of the measures align with those Metro originally developed with stakeholders, across the three areas of transit access, connections, and use and efficiency. Metro will update these measures regularly, as outlined in the Strategic Plan. The measures used may evolve in the future, as new information becomes available.

Though the costs do not align with a key theme, Metro will also report what Metro can afford against the projected service and capital costs through the “Be responsible stewards of financial resources and invest in line with values and goals” goal on the Strategic Plan web-based dashboard.

Table 2 illustrates the measures that Metro will report on through the Strategic Plan.

Table 2 Metro Connects Performance Measures

Vision Theme	Performance Measure
Integrated	<ul style="list-style-type: none"> ▪ Ridership: Ridership/total number of boardings (rail, bus, water taxi, paratransit, rideshare) ▪ ORCA Transfers: by ORCA category, which includes low-income and disabled populations)
Innovative	<ul style="list-style-type: none"> ▪ Pilot Program Ridership: by service name/product ▪ Customer Communication Satisfaction: Satisfaction with communication/information-sharing from Rider/Non-Rider survey, broken down by demographics/priority populations
Equitable	<ul style="list-style-type: none"> ▪ Proximity to Transit: (frequent and infrequent service), for priority populations and other populations (likely including percentage of populations and map)
Sustainable	<ul style="list-style-type: none"> ▪ Transportation Emissions: Countywide transportation GHG emissions and avoided countywide transportation emissions from Metro’s contribution to mode shift, congestion relief, and land use change ▪ Vehicle Miles Traveled: by passenger and light-duty vehicles
Safe	<ul style="list-style-type: none"> ▪ Customer Safety Satisfaction: Personal safety satisfaction score from Rider/Non-Rider survey (broken down by demographics, including priority populations*) ▪ Assaults and Disturbances: Employee assaults and passenger physical disturbances (per million boardings)
Costs	<ul style="list-style-type: none"> ▪ Metro Connects Funding Gap: <ul style="list-style-type: none"> – Interim Metro Connects vs baseline scenario – 2050 Metro Connects vs baseline scenario

For more information

To track Metro's progress towards Metro Connects, visit: kingcounty.gov/metro

Strengthening Metro's learning and impact

Metro will strengthen its approach to learning and to building and using evidence to achieve Metro Connects. Co-creating and innovating with community includes using data and evidence to understand what works and delivers impact. Innovation requires taking risks and being willing to fail in pursuit of Metro's values. A learning and impact mindset equips Metro with the tools to evaluate potential risk and value, be open to experimentation and failure, and be transparent about what works and where it is necessary to improve or try again.

Evidence – data plus analysis - can be built using qualitative or quantitative data and can include customer feedback and surveys, operational performance metrics and measurement, and evaluation that assesses the impact of Metro's investments on mobility, equity, sustainability, and other quality of life outcomes. Metro has a long history of strong performance management and use of quantitative data in decision making. As Metro strengthens its learning and impact, it will build on these assets to use data of all kinds in rigorously demonstrating how Metro's services impact community outcomes.

For example, when Metro implemented income-based fare discounts, early measures focused on operational metrics, such as how many people enrolled and whether enrollment reached all communities equitably. Metro is now building evidence about how fare discounts lead to better outcomes for people with low incomes, such as increased mobility, employment, and health and well-being. With the many service priorities competing for constrained resources, building evidence of this type will be critical to attaining the vision of Metro Connects.

Sample study: Using evidence to understand that fare cost and service are necessary to creating equitable access to mobility

In 2019, Metro partnered with the Washington State Department of Social and Health Services and researchers from the Wilson Sheehan Lab for Economic Opportunities at Notre Dame and University of California – Irvine on a study to build evidence about the impact of transit fare discounts for people with low incomes.

The researchers randomly assigned 1,800 study participants into two groups. The first received a transit pass with up to 24 weeks of fare-free transit. The second group received an ORCA LIFT discounted fare card with six free trips. The group that received fare-free transit had twice the number of transit boardings compared to the group with the discounted fare card, with similar effects on ridership across all demographic groups. However, little to no effect on ridership was detected for people who lived in neighborhoods without a bus stop. **This impact research indicates that both cost and the service network are important in delivering mobility to priority populations.**

As Metro creates a stronger learning culture and evidence-informed decision-making practices, several approaches will help achieve Metro Connects:

- **Develop longer-term strategic approaches that center equity and community in evidence building and use.**
Equity-based and evidence-based practice work together to support pro-equity outcomes when data and evidence practices are driven by, inclusive of, and responsive to communities. To make best use of research and data assets, Metro will use its data and research capacity to answer the questions that are most critical for informing decision making related to the goals of Metro Connects. Metro will implement a strategic approach to research through, for example, developing learning agendas, which are now required of USDOT and other federal executive agencies by the 2018 Foundations of Evidence-Based Policymaking Act. Metro will center equity considerations regardless of the primary learning objective and will work with communities and be clear about how it will use evidence and act on the results.
- **Form evidence-building partnerships that leverage Metro’s expertise with that of community, researchers, and other partners.** Such diverse teams will include community expertise to identify priority outcomes and interpret data and results, researchers who bring technical expertise and knowledge of other interventions, and the deep expertise of Metro staff and other partners regarding service delivery. Metro will compensate community partners for their expertise, honor the independence of external researchers, build the knowledge and skills of Metro staff, and engage with other sectors on common outcomes.
- **Increase the rigor and range of research methods.**
Metro is increasing the rigor and range of methods used in research to better understand and demonstrate the impact of Metro’s investments. Metro will use the most rigorous methods best suited to the learning objectives. It will value diverse forms of knowledge and reflect the multiplicity of culture contexts in which Metro’s services are delivered.
- **Share results and learnings transparently and broadly.**
Metro will support scientific practices and the publication of results, regardless of research findings. Metro will engage in regional and national forums to share, learn from, and build evidence regarding the impact of mobility on equity, sustainability, and other quality of life outcomes.
- **Use data to support learning.**
Metro will develop long-term data strategies that better integrate and use quantitative and qualitative data across Metro, King County, and other data sources. This will allow for a better focus on community outcomes and impact, while vigorously protecting data privacy and security.

NEXT STEPS

Metro will continue to provide mobility services that get people where they need to go, when they need to – safely, equitably, and sustainably. Meeting Metro’s vision will require expansion of service and capital facilities, modernization of systems that support operations and customers, and innovation in the way Metro does business. Metro will need to engage in ongoing, authentic partnership with community members, customers, employees, and stakeholders to create the future system.

To start work toward the interim network, Metro will do the following:

- **Put public transit at the heart of a successful recovery from the health, economic, and racial inequity crises precipitated or worsened by COVID-19.**
Build a better, more equitable network that builds trust in public transit and encourages people to choose Metro for their mobility needs. This will include focusing on the customer experience, working with partners, expanding service to build towards Metro Connects, and keeping safety, equity, and sustainability centered in recovery efforts.
- **Secure additional funding.**
Work with elected officials and regional leaders to secure the additional funding needed to deliver Metro Connects. Metro aims to develop the Metro Connects interim service network before the Ballard Link light rail expansion, but will need more funding to deliver this system. Expansion of Metro services described below rely on obtaining significant additional revenue.
- **Make the service investments identified in the annual Service Guidelines Report.**
Annual investments that will help support Metro Connects in a way that prioritizes equity, productivity (future land use), and geographic value.
- **Restructure service around Link light rail and other Sound Transit expansions.**
Continue restructuring around expansions of Link light rail as it is built out. These extensions will be an opportunity to review the entire transit network and build towards the Metro Connects service network.
- **Prioritize and build new RapidRide lines in coordination with partners.**
Expanded and enhanced RapidRide is the centerpiece of the Metro Connects frequent network, which will integrate with the region’s high-capacity transit network to connect urban centers. Metro will also restructure around RapidRide expansion.
- **Expand Metro’s system capacity.**
Meet the region’s growing demand for transit by buying additional fleet vehicles, expanding bus base capacity, installing charging infrastructure, and hiring bus operators and other personnel. The timing of such investments will depend on Metro’s financial situation.

- **Support Metro’s workforce.**
Continue building an anti-racist culture that supports recruitment, retention, and development of a diverse workforce that can embrace changes in the transportation landscape.
- **Help customers get more and better access to the transit system.**
In conjunction with other transit agencies and cities, continue to improve options for transit riders to get to bus stops and high-capacity transit stations.

Internal planning and engagement with communities, cities, and other stakeholders will help Metro’s budget, adopted by the King County Council, and business plans incorporate investments toward the interim network.

King County Metro Transit Department

King Street Center, KSC-TR-0415 201 S. Jackson St
Seattle, WA 98104
206-553-3000 TTY Relay: 711
www.kingcounty.gov/metro

To request alternative formats please call 206-553-3000

Available 206-477-3832 TTY Relay: 711

Para solicitar esta información en español, sírvase llamar al 206-263-9988 o envíe un mensaje de correo electrónico a community.relations@kingcounty.gov

The information in the maps in this vision document was compiled by King County staff from a variety of sources and is subject to change without notice. King County makes no representations or warranties, express or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a survey product. King County shall not be liable for any general, special, indirect, incidental, or consequential damages including, but not limited to, lost revenues or lost profits resulting from the use or misuse of the information in the maps. Any sale of the maps or information on the maps is prohibited except by written permission of King County.