

King County Metro Mobility Framework

Mobility Framework Report

October 2019



Table of Contents

	Page
1 Letter from the Equity Cabinet	1-1
2 Letter from King County Metro’s General Manager	2-1
3 Executive Summary	3-1
Introduction	3-1
Guiding Principles	3-1
Recommendations.....	3-1
Next Steps	3-4
4 Introduction: Innovative, Integrated, Equitable, Sustainable Mobility 4-1	
An Innovative Mobility System.....	4-2
An Integrated Mobility System.....	4-4
An Equitable Mobility System.....	4-5
A Sustainable Mobility System	4-6
5 Co-Creating the Mobility Framework	5-1
Equity Cabinet.....	5-1
Research and Analysis	5-1
Engagement.....	5-2
Phased Approach: Guiding Principles to Recommendations.....	5-2
6 Guiding Principles	6-1
7 Recommendations	7-1
Investments.....	7-2
Surrounding Land Use	7-5
Innovation	7-8
Workforce	7-12
Engagement.....	7-16
8 Next Steps	8-1
Impacted Policies and Processes	8-1

Table of Figures

	Page
Figure 1: Photo of King County Metro Mobility Equity Cabinet	1-4
Figure 2: Mobility Transformations from 1900 to 1913.....	4-3
Figure 3: Process for Completing the Mobility Framework.....	5-3
Figure 4: Map of Areas of Unmet Need.....	7-4

Table of Appendices

- Appendix A:** Travel and Population Data, Trends, and Implications
- Appendix B:** Best Practices
- Appendix C:** Analysis of Recommendations
- Appendix D:** Community Engagement
- Appendix E:** Motion 15253
- Appendix F:** Crosswalk of Requirements of Motion 15253

1 Letter from the Equity Cabinet

Dear Friend,

Our region is growing quickly, with more than 30,000 people arriving here every year. Job growth is keeping up, with opportunities in both high-tech and old-tech, including careers that didn't even exist a generation ago. Construction has blossomed around the region, with buildings going up in nearly every neighborhood and light rail lines being extended to the north, south, and east of Seattle. Even the way people travel is changing, with innovative mobility technologies launched every few months — from electric scooters and bikes for rent, to cars and shuttles that can be hailed with a phone app, to plans for driverless deliveries and more.

King County is changing. Unfortunately, not everyone has benefited from these changes.

Rising rents and home prices have meant that many people struggle to afford housing or must move further out. This means that, more and more, our families are paying a larger portion of their income on housing and transportation, two of the three major drivers to wealth, along with food costs. The need to move farther out has also led to increasing congestion on our roads and highways, making it more time consuming to get around, particularly for people who do not or cannot drive. Many people — particularly low- and no-income people, black, indigenous and people of color, immigrants and refugees, people with disabilities, and members of limited-English speaking communities — have experienced the inequities of our region's economic growth and need better ways to get around, because of where they live or the hours of the day they need to travel.

In addition, some of the new mobility innovations may worsen congestion rather than relieve it. The climate crisis requires that we find ways to quickly and significantly reduce greenhouse gas emissions caused by fossil fuel-powered vehicles. We must also build equitable, climate resilient communities. Climate change, rising housing costs, congestion, and other factors lead to cumulative health impacts and disparities in King County. Those disparities are often based on where people live, racial backgrounds, and limited and unequal access to relevant services.

We believe mobility is a basic human right that allows communities and individuals to access the opportunities needed to thrive. Mobility equity must respond to decades of local, regional, and state investments and land use plans that have led to disproportionate health and economic impacts for low-income communities of color. Mobility equity must be intersectional with other aspects of people's lives, such as their health and economic opportunities. For a mobility system to deliver meaningful

equity outcomes, Metro needs a detailed equity strategy and roadmap that holds Metro and local elected leaders accountable to delivering mobility benefits to low-income communities of color. We are dedicated to leading from a place of self-determination despite the history of underinvestment, compounded by institutional racism and oppression. Our communities are resilient and have come together to provide direction on centering leadership from our communities. This is the purpose of our Mobility Framework.

We represent a variety of communities and organizations. We have spent much of the last year working together as the King County Metro Mobility Equity Cabinet. We believe that it is vital that community members work together with public agencies to co-create solutions and policy and to address challenges to those most impacted, and we are proud to have played a key role with Metro. As part of our work, we have reviewed Metro's adopted policies, as well as King County's Strategic Climate Action Plan and Equity and Social Justice Plan. We have also analyzed demographic patterns, travel trends, transit use, new mobility technologies, and adopted transportation policy. Following this research, we developed equity and sustainability-centered recommendations to guide Metro's work and to prepare our region for mobility innovations in a way that puts low- and no-income people, black, indigenous, and people of color, immigrants and refugees, people with disabilities, and members of limited-English speaking communities first; uses public space efficiently and equitably; and addresses our climate goals.

This Mobility Framework is based around 10 Guiding Principles:

- Invest where needs are greatest
- Address the climate crisis and environmental justice
- Innovate equitably and sustainably
- Ensure safety
- Encourage dense, affordable housing in urban areas near transit
- Improve access to mobility
- Provide fast, reliable, integrated mobility services
- Support our workforce
- Align our investments with equity, sustainability, and financial responsibility
- Engage deliberately and transparently

The Mobility Framework also includes recommendations in five areas:

- **Investments:** Metro's financial support for transit service, new mobility innovations, fares, capital investments, and safety improvements
- **Surrounding Land Use:** Support for dense, mixed-use neighborhoods near transit, affordable housing, and better access to transit
- **Innovation:** Metro's role in the regional, integrated network (new technology and services), and Metro's role with private providers
- **Workforce:** Metro's role with current and future Metro employees and contract employees, as well as influence on the treatment of private providers' workforce

- **Engagement:** Metro’s policies for how it engages with the community regarding mobility investments

We thank Metro for taking this important step and centering equity, sustainability, and community power. We urge leaders around King County to do everything possible to ensure that our regional mobility services are integrated, innovative, equitable, safe, and sustainable.

On behalf of the Equity Cabinet, and in partnership with Metro, we are proud to submit this Mobility Framework to King County Executive Dow Constantine, the King County Council, and the Regional Transit Committee. We look forward to working with you to see these recommendations incorporated into Metro’s policy documents and then put into action to ensure King County addresses mobility and climate challenges and creates long-lasting opportunities to serve those most in need in our communities.

Sincerely,

The King County Metro Mobility Equity Cabinet

Paulina López, Co-Chair

Executive Director,
Duwamish River Cleanup Coalition

Tony To, Co-Chair

Director Emeritus,
HomeSight

Lylianna Allala

Community Leader

Michelle Benetua

Community Partnerships &
Planning Manager,
Seattle Parks Foundation

Niesha Brooks

Community Leader

Leda Chahim

Community Leader

Tamieko Cook

Recording Secretary
Amalgamated Transit Union,
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Sarneshea Evans

Outreach & Partnerships Manager,
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Rita Green

Education Chair
NAACP Youth Coalition

Mozart Guerrier

21Progress

Virginia Herrera-Páramo

Para los Niños

Ellany Kayce

Nakani Native Program

Lavanya Madhusudan

Board Member
Got Green

Alex Mayo

Community Activist

Munira Mohamed

Executive Director
East African Community Services

Pah-tu Pitt

Community Leader

Jessica Ramirez

Director of Community Engagement
Puget Sound Sage

Linwood Robinson

Member
King County
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Sili Savusa

Executive Director
White Center Community
Development Association

Leo Segovia

Economic Justice Manager
Ingersoll Gender Center

Jeff Smith

United Indians of All Tribes
Foundation

Chalisa Thompson

University of Washington student

Anna Zivarts

Rooted in Rights

Figure 1: Photo of King County Metro Mobility Equity Cabinet



Equity Cabinet members pictured in front row, left to right: Anna Zivarts, Paulina López, Tamieko Cook, Jessica Ramirez, Linwood Robinson, Sarneshea Evans, Michelle Benetua, Sili Savusa, Chalisa Thompson

Equity Cabinet members and Metro staff pictured in back row, left to right: Jeff Smith, De'Sean Quinn (Metro), Pah-tu Pitt, Alex Mayo, Rob Gannon (Metro), Mozart Guerrier, Tessa McClellan (Metro)

(Not all Equity Cabinet members pictured)

2 Letter from King County Metro's General Manager

Dear Friend,

On behalf of the thousands of dedicated King County Metro employees who provide half a million rides in and around King County every day — on buses, light rail, paratransit, streetcar, community shuttles, and water taxis — I am proud to present Metro and the Equity Cabinet's Mobility Framework.

The recommendations in this Framework will guide our work as we prepare updates to Metro's Strategic Plan, long-range plan (METRO CONNECTS), and Service Guidelines, as well as King County's Strategic Climate Action Plan, and develop a 2021-2022 budget proposal. More important, these recommendations will help us center equity and sustainability as we continue to improve, innovate, and increase public transit ridership and overall mobility in this era of new mobility advances.

The Mobility Framework represents a new approach for Metro. That is because it was not developed solely by our staff, as most documents of this kind have been. Instead, it was co-created with the diverse communities we serve, led by the 23 members of the King County Metro Mobility Equity Cabinet. They drove the development of the Guiding Principles and recommendations, worked with Metro to direct the consultant analysis and research (captured in Appendices A-D, which were created by the consultant team), and helped draft the Mobility Framework document. It has been an honor to work with this group, and I am very grateful for the months of time Equity Cabinet members invested in developing this Framework: reviewing best practices, analyzing travel trends and needs, discussing and debating potential recommendations, and pushing Metro to do more and do better.

The final product captures the Equity Cabinet members' work and reflects their deep knowledge and applied expertise. It embodies Metro's commitment to investing where needs are greatest. Implementing these recommendations will help Metro do our part to achieve healthier communities, a thriving economy, and a sustainable environment.

We look forward to working with our elected officials, regional partners, and community members to fund and implement these recommendations. We are excited to continue the journey and move forward together.

Sincerely,

Rob Gannon
General Manager

3 Executive Summary

INTRODUCTION

King County Metro’s Mobility Framework envisions a regional network of traditional and new transportation services that gets people where they want to go, when they want to get there, while contributing to healthy communities, a thriving economy, and a sustainable environment.

The Mobility Framework was community-led and co-created with the **King County Metro Mobility Equity Cabinet**, a group of 23 community leaders representing riders and a variety of organizations and communities countywide, focused on low- and no-income people, black, indigenous, and people of color, immigrants and refugees, people with disabilities, and limited-English speaking communities.

GUIDING PRINCIPLES

The Guiding Principles below set a vision for how Metro and partners can achieve a regional mobility system that is innovative, integrated, equitable, and sustainable. Safety and financial responsibility will remain high priorities for Metro.

- Invest where needs are greatest
- Address the climate crisis and environmental justice
- Innovate equitably and sustainably
- Ensure safety
- Encourage dense, affordable housing in urban areas near transit
- Improve access to mobility
- Provide fast, reliable, integrated mobility services
- Support our workforce
- Align our investments with equity, sustainability, and financial responsibility
- Engage deliberately and transparently

Following the development of the Guiding Principles, the Equity Cabinet developed recommendations in five thematic areas that consolidated these principles: **investments, surrounding land use, innovation, workforce, and engagement.** Input from elected officials, community stakeholders, regional partners, employees, and the general public informed these recommendations.

RECOMMENDATIONS

The recommendations in this Mobility Framework are visionary and crucial to centering equity and sustainability in Metro’s work. Many of them cannot be implemented by Metro alone and require action and collaboration from partners,

including local jurisdictions, transit agencies throughout the region, and others. Metro looks forward to working with regional elected officials and partners to fund and implement these recommendations.

The recommendations are meant to provide guidance for ways Metro can **add to and build on** its existing, regional network of mobility services, with the goal of achieving a mobility network that is innovative, integrated, equitable, and sustainable.

Investments

- **Provide additional transit service in areas with unmet need**, defined as areas with high density; a high proportion of low-income people, people of color, people with disabilities, and members of limited-English speaking communities; and limited mid-day and evening service. Adapt Metro’s adopted policies to meet this need and to ensure regular and ongoing evaluation of the needs of these areas. \$
- **Support investments to increase safety**, including bus safety features, a safety app or other technology, and amenities such as lighting, real-time arrival signs, and informational campaigns. \$
- **Support improvements to increase speed and reliability** to make transit investments most successful and to provide incentives for local jurisdictions to prioritize use of the right-of-way for transit and access to transit. ★\$

Key

★ Indicates that Metro and partners must work together to implement this recommendation.

\$ Indicates need for additional funding.

Surrounding Land Use

- **Increase dense, mixed-use zoning and affordable housing in urban areas near transit, while working to minimize displacement of priority populations** through the Growth Management Planning Council, by developing a King County Transit-Oriented Development policy, and by updating Metro’s adopted policies to provide incentives for jurisdictions that provide increased density and/or affordable housing. ★\$
- **Develop station area and right-of-way guidelines** that prioritize transit use and access for people who walk, bike, or roll to the station. ★\$
- **Develop people-friendly street design near transit**, including traffic-calming measures and ways to make bus stops safe for all ages, genders, and abilities. ★\$
- **Meet King County’s climate goals by reducing car use, developing green infrastructure, promoting climate justice**, and prioritizing ways to make transit convenient and accessible. \$

Innovation

- **Change Metro’s adopted policies to assert the role of innovation, address new mobility services, and support equitable and sustainable mobility** to ensure innovations supplement transit services and work first for priority populations.
- **Develop new mobility guidelines for how Metro partners with private providers** that incentivize an equity and climate focus.
- **Facilitate integrated payment and planning** to help customers plan and pay for multimodal trips, in partnership with ORCA agencies and private providers. ★\$
- **Enhance communications and engagement** to raise awareness of mobility innovations.
- **Convene and support jurisdictions** in developing a regional framework for innovative mobility partnerships. ★

Workforce

- **Strategically partner with the labor community** to build new “communities of ridership” and benefit Metro employees, priority populations, and the environment. ★\$
- **Use future transportation innovations to target new riders as potential employees.**
- **Use strategic and culturally specific communication methods** to build sustainable community relationships.
- **Build infrastructure to provide pathways to mobility-related employment**, including a “school without a school,” an equity-in-mobility summer internship program, an approach to assist with costs associated with workforce development and employment pathways, and community-based mobility career hubs. ★\$
- **Use strategic workforce planning** to meet current and future workforce needs. ★\$
- **Purposefully foster a sustainable learning culture within Metro.**
- **Require the centering of equity in all contracts and subcontracts.**

Engagement

- **Strengthen communication and marketing efforts** to ensure that priority populations are aware of existing mobility services, innovative new pilots, service changes, affordability programs, and other efforts.

- **Build lasting relationships in communities** and compensate community members for their time and expertise.
- **Use a coordinated cross-departmental approach to engagement**, including a continuing King County Equity Cabinet.
- **Develop an equity-centered engagement framework** by co-creating with the community and measuring equity and sustainability over time.
- **Develop a community liaison program** to hire people to act as a conduit to the community.
- **Identify metrics to measure success and continually improve**, and regularly report on engagement metrics.

NEXT STEPS

The Mobility Framework will guide updates to Metro’s adopted policies, including Metro’s Strategic Plan, long-range plan (METRO CONNECTS), and Service Guidelines, as well as Metro’s 2021-2022 biennial budget proposal and the Transportation Goal Area of the King County 2020 Strategic Climate Action Plan. Metro has invited the Equity Cabinet to remain involved throughout this process and will also engage elected leaders, stakeholder organizations, and communities.

Metro will continue to work closely with elected leaders, stakeholder groups, jurisdictions and other regional partners, and community members to implement and fund these recommendations. Metro will also work with current and future employees and labor partners to implement these recommendations in day-to-day planning and operations.

4 Introduction: Innovative, Integrated, Equitable, Sustainable Mobility

King County Metro’s Mobility Framework envisions a regional network of traditional and new transportation services that gets people where they want to go, when they want to get there, while contributing to healthy communities, a thriving economy, and a sustainable environment.

The Mobility Framework was co-created with the King County Mobility Equity Cabinet, a group of 23 leaders representing riders countywide, including low- and no-income people, black, indigenous, and people of color, immigrants and refugees, people with disabilities, and limited-English speaking communities. The Equity Cabinet was chaired by two of these community leaders, who led the work of developing the Mobility Framework. The Framework’s Guiding Principles and Recommendations center these communities because the use of a targeted universalism¹ approach will result in greater prosperity for all King County residents. Targeted universalism — in this case, leading with race and prioritizing strategies to address the populations mentioned above — allows Metro to define goals for all, identify obstacles faced by specific groups, and tailor strategies to address the barriers in those situations. This approach is also consistent with direction in the King County Equity and Social Justice Strategic Plan and Ordinance 16948.

However, Metro recognizes the importance of serving all customers, and this focus is not meant to exclude people with identities that may fall outside these frames, including but not limited to LGBTQ+ people, youth, seniors, people who have been involved with the justice system, and other communities. Instead, targeted universalism acknowledges that identities are often intersectional (for instance, low-income youth, or youth of color), and by developing focused strategies to benefit populations that have been most historically underserved, Metro can provide the greatest benefit for all.

The Mobility Framework responds to Motion 15253, which asked Metro to develop a regional Mobility Framework to ensure that innovations in mobility put people first, use public space equitably and efficiently, and are coordinated with transit policies and regional funding strategies. Appendix E, “Motion 15253,” includes the complete legislation, and Appendix F, “Crosswalk of Requirements of Motions 15253,” summarizes how this Framework addresses each motion requirement.

¹ Targeted universalism is defined in King County’s Equity and Social Justice Strategic Plan as: “Led by those most affected and lifting up their assets, we define goals for all; identify obstacles faced by specific groups, and tailor strategies to address the barriers in those situations” (developed by King County using multiple sources).

The Mobility Framework also responds to other significant regional changes, including:

- King County’s rapidly growing and diversifying population;
- The transportation challenges that result from displacement, when households must move farther from work, school, and other destinations, to places that are often less in-demand, less dense, and therefore less well-served by transit;
- The worsening climate crisis and the need to quickly and significantly reduce greenhouse gas emissions from transportation, promote climate resilience, and improve health outcomes; and
- The need to integrate traditional, fixed-route transit with new mobility services to help people move quickly and seamlessly throughout the region.

In responding to these challenges, the Mobility Framework articulates a vision for a regional mobility system that is **innovative, integrated, equitable, and sustainable**.

The current Metro-operated transit system provides half a million rides every weekday and is nationally recognized for its performance. In 2018, the American Public Transportation Association named Metro the best large transit system in North America for its achievements in ridership, safety, innovation, sustainability, and equity. However, Metro recognizes the need to do more to address the trends and challenges mentioned above, center equity and sustainability in its policies and practices, and contribute to healthy communities, a thriving economy, and a sustainable environment.

The vision articulated in the Mobility Framework builds on Metro’s current system, as well as METRO CONNECTS, Metro’s adopted long-range plan.² METRO CONNECTS outlines the goal of delivering 70 percent more service by 2040, using innovations to connect people to fixed-route transit, ensuring 77 percent of people of color and 87 percent of low-income residents live near frequent transit service, and reducing greenhouse gas emissions each year by 1.7 million metric tons.

Equity Cabinet members spent much of 2019 working with Metro staff to review adopted policies, King County’s changing demographics, travel trends and needs, best practices, and emerging mobility technologies. Their work aims to help Metro and other agencies put their commitments to equity into practice and guide regional leaders in the planning, development, implementation, and evaluation of equitable mobility. Extensive outreach and engagement with local elected officials, jurisdictions and other regional partners, stakeholder organizations, and community members also informed the Framework.

AN INNOVATIVE MOBILITY SYSTEM



Transportation is changing rapidly. New technologies, services, apps, and innovations — from shared e-scooters to driverless delivery pods, Uber, Lyft, and more — are changing how people and goods move. Many more mobility options exist today than a decade ago, and more will arise in the years and decades to come. With the rise of shared mobility and vehicle automation, the transportation

² Ordinance 18449

industry is on the cusp of a profound and swift revolution in human mobility, as in the early 1900s, when U.S. cities began the transition from horses and buggies to cars (see Figure 2, Mobility Transformations from 1900 to 1913).

Figure 2 Mobility Transformations from 1900 to 1913



These new mobility services are changing people’s travel patterns and expectations, as they offer opportunities for greater efficiency and connectivity. However, they can also compete with public transit for riders and right-of-way, offer fewer well-paid and secure job opportunities, increase traffic congestion and greenhouse gas emissions, and be unaffordable or inaccessible for some populations.

Ride-hail services, including Uber, Lyft, and other shared-ride options, can be faster, more flexible, and more convenient than transit, taxis, and even personal single-occupancy vehicles. These alternative services can increase mobility in lower-density or lower-ridership areas that are hard to serve with fixed-route transit. King County Metro’s Shared Mobility Technical Report (2017) found shared mobility could help reduce car ownership. For example, up to 17-22 percent of existing vehicles in King County could be eliminated if cost was a consumer’s only consideration in deciding whether to switch to shared mobility options³. But these new services alone cannot meet the region’s mobility, equity, and climate needs. Recent studies show that more than half the trips made via Uber or Lyft would have been walking, biking, or transit trips, rather than trips in private vehicles. In King County, about 40 percent of Uber and Lyft rides take place in just four neighborhoods⁴ within Seattle that are already the densest, most congested, and best-served by transit, bike lanes, and walkable streets.

Vehicle automation, though further in the future, is another industry trend with significant implications. Automation can save labor costs, which is why ride-hailing companies are working hard to develop autonomous (self-driving) vehicles to

³ King County Metro Shared Mobility Technical Report, July 2017, <https://issuu.com/metro-transit/docs/metro-shared-mobility-technical-rep/?e=2675565/55078575>

⁴ <https://www.seattletimes.com/seattle-news/transportation/how-popular-are-uber-and-lyft-in-seattle-ridership-numbers-kept-secret-until-recently-give-us-a-clue/>

become cost-effective. Autonomous vehicles could also improve safety, optimize roadway capacity, and increase capacity. However, automation could result in additional empty or single-occupancy vehicles, adding to traffic congestion and emissions. Automation could also cause the loss of many transportation sector jobs.

Micromobility options, or smaller transportation services, including scooter and bike share, can be a flexible and affordable way for people to travel, including to or from transit. As smaller transportation modes, micromobility services use space efficiently and can thus help reduce congestion. They are often electric, potentially supporting climate goals. However, without regionally-integrated infrastructure and regulations to ensure people know when and where they can use and park micromobility options, these services can create safety issues on public streets and sidewalks.

As a mobility agency with a long-range plan (METRO CONNECTS) that envisions Metro investing in, incorporating, and encouraging technological innovation, Metro is embracing new services that can make travel easier and more convenient and connect more people to transit. Metro already tests innovative mobility services, such as the Via to Transit program, which allows riders to order a shared shuttle to take them to and from five transit hubs in southeast Seattle and Tukwila. With approximately 800 daily riders as of late July 2019, Via to Transit has and continues to exceed ridership expectations. For more information, visit the [Via to Transit website](#).

However, Metro and its partners must also work to mitigate the challenges of innovations, such as roads crowded with empty cars, the potential for increased carbon pollution, unaffordable or inaccessible services, and people choosing to travel alone in ride-hail vehicles instead of taking transit. Metro and its partners must do more to lead on innovation in an equitable and sustainable way. This could include employing and testing innovative strategies through pilot programs and services and using its influence to ensure private-sector mobility innovations advance the region's goals.

AN INTEGRATED MOBILITY SYSTEM



As a mobility agency, Metro provides and supports an integrated mobility system that combines existing, high-capacity, fixed-route transit services with new mobility options. [METRO CONNECTS](#) envisions an integrated transit network that includes connections between different services operated by different partners, including Metro's RapidRide, frequent, express, local transit, and water taxi services; Sound Transit's Link light rail, bus rapid transit, express bus, and Sounder services; and the Seattle Streetcar. Such a network requires ensuring high-capacity, fixed-route transit serves as the backbone of an interconnected system that is universally accessible through walking, biking, rolling, park-and-rides, and other first-last mile services.

Traveling the first or last mile to or from the fixed-route transit network can be challenging, especially where good connections do not exist. New mobility services can help to solve the first-last mile challenges and give passengers many different opportunities to get to transit, but they can be confusing, complicated, expensive, and hard to access. Navigating between a range of public and private mobility options can be particularly difficult for people who live in areas with fewer choices available, for people with disabilities and the elderly, and for limited-English speaking communities.

As noted above, Metro has already piloted ways to integrate new mobility services into the public transit system, especially to address first-last mile connections. However, Metro and its partners must find more opportunities to bring people to transit and integrate new, private mobility services into public transit payment and planning systems. Metro must ensure that all forms of mobility are as accessible as possible, especially for communities of color, low- and no-income people, immigrants and refugees, limited-English speaking populations, and people with disabilities. Finally, Metro and other agencies must continue to partner, in a way that expresses Metro and King County's values, while planning service expansions to ensure seamless, integrated, travel options for customers.

AN EQUITABLE MOBILITY SYSTEM



King County is growing and changing. Between 2010 and 2018, the county gained nearly 260,000 new residents. More than half of that growth occurred in dense areas with high concentrations of jobs, including Seattle and downtown Bellevue. King County also expects one million more people and 850,000 new jobs by 2040. Though some have benefited from growth in jobs and population, these factors have also likely contributed to rising housing costs, which in turn have likely contributed to displacement and a shift of lower-income people to communities in less urban parts of the county.

Data shows a loss of low-income households in areas such as Seattle that have become more expensive, and a gain of those populations in relatively less in-demand and therefore more affordable areas of King County, including many cities in south King County. This displacement often means that people must travel farther to work, school, or the other services they need, often from less-dense neighborhoods that are not as well-served by frequent, fixed-route transit service. This challenge is intensified by the fact that low-wage jobs are often less well-served by transit, because they are often located further away from major employment centers and often require mid-day or late evening shift hours, rather than the traditional 9-to-5 schedule of office work.

High costs for housing in many areas of King County have resulted in economic burdens for a larger portion of the population. In King County, \$83,000 per year (about 350 percent of the federal poverty level) is seen as the "self-sufficiency" income threshold for a family of four, the income that is needed to meet basic needs in high-cost areas of the county. However, 22 percent of King County's population is below 200 percent of the federal poverty level (about \$50,200 for a family of four), and 13 percent of the population lives at or below the federal poverty level (about \$25,100 for a family of four). These low- and no-income households are more likely than higher-income households to use transit or walk for more of their trips.

King County is also becoming more diverse. Nearly one quarter of King County residents were born outside the United States, more than 10 percent have limited English proficiency, and 39 percent are people of color. Black, indigenous, and people of color use transit more for work, compared to non-Hispanic white workers.

METRO CONNECTS articulates the importance of access to public transportation in expanding opportunities for people to thrive by envisioning frequent, all-day transit options to jobs, education, and other destinations. It also sets a goal of growing the transit network so that 77 percent of people of color and 87 percent of low-income

residents live near frequent service.⁵ Metro cannot meet these goals and equitably meet the community’s mobility needs without considering the patterns of change across King County. Metro must also meet growing demand for transit services in the denser areas of King County, which are often more expensive and higher income. However, these areas are often already better served by transit, in response to density, which can exacerbate disparities. The needs of lower-income, more-diverse, and less-dense communities, as well as the needs of workers who do not have traditional peak-hour schedules must be addressed differently and with high-quality mobility services.



A SUSTAINABLE MOBILITY SYSTEM

In King County and globally, climate change is already affecting the environment, economy, and human health.⁶ The average annual air temperature in the Puget Sound region is increasing, and the region is already experiencing more heat-related health impacts, including more illnesses and more hospitalizations and deaths. Low- and no-income people, black, indigenous, and people of color, immigrants and refugees, people with disabilities, and limited-English speaking communities tend to bear a disproportionate burden of the impacts of climate change in King County and across the globe.⁷ That is because they are more likely to be exposed to hazards because of where they live or work, such as flooding or other natural disasters, with less open space and other amenities, and with higher exposure to diesel, industrial processes, and other pollutants. In addition, how a family or community is affected by poverty, language barriers, and access to health care and insurance can affect their ability to recover after a hazard event.

In an urbanizing world, the transportation sector is a major generator of climate-altering gases. Transportation generates more than one third of greenhouse gas emissions in King County. It also has a profound influence on the lives of the adults and children living around fossil fuel emissions. For example, air quality made worse by air pollution can be linked to increased asthma-related conditions and increases in respiratory and cardiovascular diseases.⁸

As a result, Metro and other transportation providers play a key role in confronting the climate crisis by reducing vehicle miles traveled by fossil fuel-burning single-occupancy vehicles. While Metro system-wide ridership continues to grow slowly, Metro has begun to lose its “market-share” of regional trips, failing to keep up with both population and employment growth. Total vehicle miles for work trips, per

⁵ “Show-up-and-go” service with speed and reliability improvements; starts early and runs late in the day.

⁶ Snover, A.K., C.L. Raymond, H.A. Roop, H. Morgan, 2019. No Time to Waste. The Intergovernmental Panel on Climate Change’s Special Report on Global Warming of 1.5°C and Implications for Washington State. Briefing paper prepared by the Climate Impacts Group, University of Washington, Seattle. Updated 02/2019. Available at: <https://cig.uw.edu/resources/special-reports/no-time-to-waste/>

⁷ UW Climate Impacts Group, UW Department of Environmental and Occupational Health Sciences, Front and Centered and Urban@UW. (2018). *An Unfair Share: Exploring the disproportionate risks from climate change facing Washington state communities*. A report prepared for Seattle Foundation. University of Washington, Seattle. Available at: <https://cig.uw.edu/our-work/applied-research/an-unfair-share-report/>

⁸ Public Health – Seattle & King County, 2019. Blueprint for Addressing Climate Change. A document prepared to build on the work of the 2015 King County Strategic Climate Action Plan. Available at: <https://www.kingcounty.gov/depts/health/~media/depts/health/environmental-health/documents/publications/blueprint-climate-change-and-health.ashx>

person, have also increased, along with the greenhouse gas emissions from those vehicles. This may be because people are traveling further for work, potentially as a result of moving farther away from job centers.

In general, fixed-route transit is easier and less expensive to provide and more competitive with single-occupancy vehicles in areas with higher population density. Research confirms that compact mixed-land use supported by high-capacity and frequent transit is the most important contributor to reducing transportation emissions.⁹ Residents not only have access to transit to travel to work, but other services such as schools, day care, shopping, and health care are located nearby and more universally accessible.

Metro, as a transit agency, does not have jurisdiction over land use decisions. Metro and local jurisdictions must work together to provide dense, mixed-use, affordable land use near transit, so that it is easier and more cost-effective to provide accessible transit that connects people to opportunities and can compete with single occupancy vehicle travel, therefore reducing greenhouse gas emissions. Metro and partners must also continue supporting climate resilient communities and preparing for climate impacts.

King County's Strategic Climate Action Plan articulates a King County Countywide Climate Goal of reducing regional greenhouse gas emissions by 80 percent by 2050 (compared to 2007). Projections show that achieving that countywide target requires 12 percent of the reduction target to be achieved by reducing car trips, specifically King County-wide reductions in total light-duty vehicle miles traveled by 20 percent by 2030 and reduction of per person vehicle miles traveled by 50 percent by 2050, in alignment with Washington State goals (RCW 47.01.440).

METRO CONNECTS envisioned that Metro would contribute to King County's overarching climate goals by removing 300,000 cars from roadways daily and reducing greenhouse gas emissions by 1.7 million metric tons per year. Implementation would reduce emissions by eight percent (compared to 2007). The Puget Sound Regional Council's 2050 vision incorporates the transit-focused land use strategy, service improvements, and goals in METRO CONNECTS. Vision 2050, if realized, is projected to achieve a 22 percent reduction in per person vehicle miles traveled and a 16 percent reduction in greenhouse gas emissions from land use and transportation only. **This means King County, local jurisdictions, and Metro will need additional strategies to achieve the King County Countywide Climate Goals and vehicle miles traveled reduction targets.** Those strategies could include, but are not limited to, more service, more density, transportation demand management, parking policies, pricing, vehicle electrification, and a clean fuels standard. For example, Metro has already committed to moving towards a zero-emissions bus fleet by 2040 as part of Metro's work on this issue.

For more information on the travel, population, industry, and climate trends explained in Section 4, see Appendix A, "Travel and Population Data, Trends, and Implications."

⁹ Foundation work based on extensive review of research highlighting the importance of compact development on transportation emissions can be found at Ewing et al. 2008. *Growing Cooler: The Evidence on Urban Development and Climate Change*. Urban Land Institute.

5 Co-Creating the Mobility Framework

EQUITY CABINET

An Equity Cabinet, chaired by community leaders, and Metro staff co-created this Mobility Framework, considering input from elected officials, regional partners, community stakeholders, and the public. This approach is consistent with engagement best practices. The Equity Cabinet is comprised of 23 leaders, who were compensated for their time and expertise, representing communities and riders countywide including, but not limited to, low- and no-income people, black, indigenous, and people of color, immigrants and refugees, people with disabilities, and limited-English speaking communities. This process built on the success and momentum of King County's Department of Natural Resources and Parks' [Open Space Equity Cabinet](#), which embedded an equity-based approach into how the region invests in open space to address disparities in access to parks and open space. Metro welcomed some new members to this Equity Cabinet, but many continued from the Open Space Equity Cabinet. The Equity Cabinet approach was essential because traditional engagement methods may limit the participation of low- and no-income communities, black, indigenous, and people of color, immigrants and refugees, limited-English speaking communities, and people with disabilities.

The Equity Cabinet began meeting twice monthly in early May 2019. These leaders developed the Mobility Framework's Guiding Principles and Recommendations. They also worked with Metro staff to direct the supporting research, analysis, and engagement. Equity Cabinet members identified opportunities for Metro to center equity and sustainability by providing high-quality mobility services focused in areas of unmet need. Equity Cabinet members also highlighted opportunities to integrate new and innovative mobility services, invest in transit and related infrastructure, and partner with local jurisdictions and private partners to encourage transit-supportive land use that avoids displacement.

RESEARCH AND ANALYSIS

Metro staff and a consultant team performed the research, analysis, and engagement needed to develop the Mobility Framework. This analysis is provided in Appendices A-D, which were created by the consultant team. The consultant team conducted extensive research on travel and mobility trends, as summarized above and provided more fully in Appendix A, "Travel and Population Data, Trends, and Implications." This research helped the Equity Cabinet consider recommendations within the context of the growth and change occurring in King County and the transportation industry.

The consultant team also completed an extensive review of best practices to understand how transit agencies, cities, and companies around the United States and abroad are integrating innovative transportation options, advancing equity, and addressing climate change (see Appendix B, “Best Practices”). The best practices research focused around the five thematic areas identified by the Equity Cabinet: investments, surrounding land use, innovation, workforce, and engagement. It included all the areas required by Motion 15253, including emerging technologies, opportunities to coordinate innovations with fixed-route and other services, outreach and engagement, allocation of public space, workforce trends, and potential updates to policies. The Equity Cabinet considered these best practices when developing recommendations. Finally, the consultant team conducted qualitative and quantitative analysis on many of the Mobility Framework Recommendations, summarized in Appendix C, “Analysis of Recommendations.”

ENGAGEMENT

Outreach and engagement with regional partners, transit riders, and local communities shaped the Mobility Framework. In addition to engaging with the Equity Cabinet, Metro and the consultant team conducted robust engagement with stakeholders and the public to inform the development of the Guiding Principles and recommended actions. As directed by the Equity Cabinet and Motion 15253, the engagement strategy prioritized low- and no-income people, black, indigenous, and people of color, immigrants and refugees, people with disabilities, and limited-English speaking communities. This approach is also consistent with direction in the King County Equity and Social Justice Strategic Plan.

Metro engaged with dozens of regional partners and stakeholders to shape the Guiding Principles and inform the recommendations. The consultant team also reached hundreds of members of the general public through an online survey and direct engagement at festivals, classes, and other events. Metro worked with the Equity Cabinet to ensure the Mobility Framework’s Guiding Principles and Recommendations incorporated stakeholder and public input. Appendix D, “Community Engagement,” summarizes this work and the key themes that emerged.

PHASED APPROACH: GUIDING PRINCIPLES TO RECOMMENDATIONS

Metro staff worked with the Equity Cabinet to use information from the research, analysis, and engagement to develop the Mobility Framework through a phased approach. While the consultant team conducted travel trends research, the Equity Cabinet developed Guiding Principles for the Mobility Framework, working with Metro to incorporate input from elected officials, stakeholder organizations, jurisdictional partners, and others.

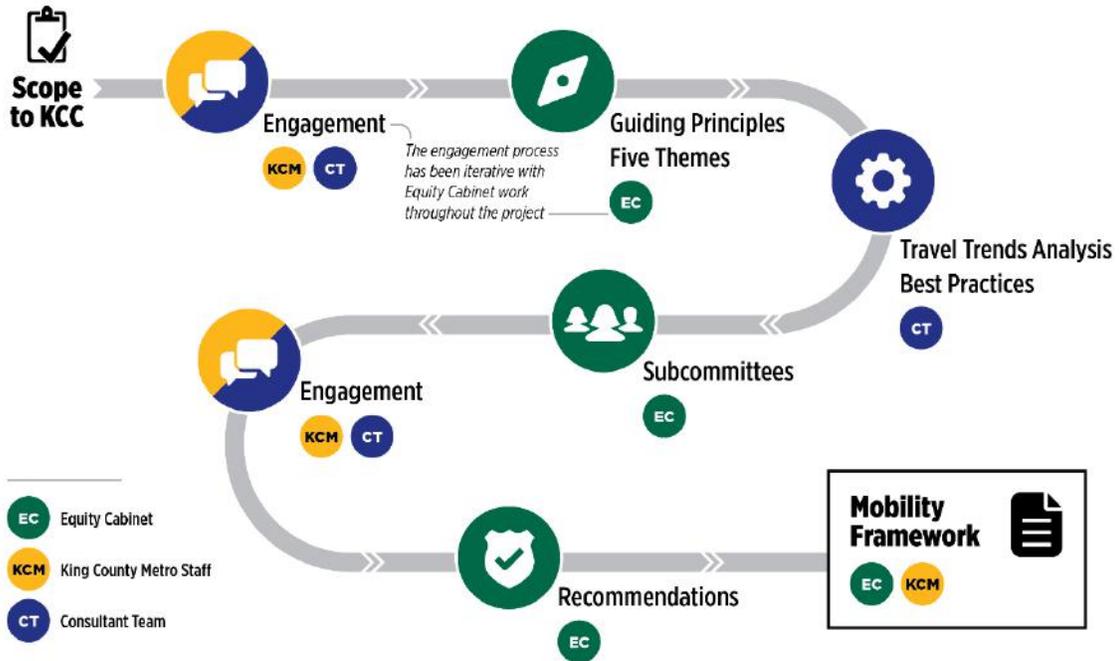
After developing the Guiding Principles, the Equity Cabinet organized them into five thematic areas: investments, surrounding land use, innovation, workforce, and engagement. The consultant team then tailored the best practices review to address the issues identified through the travel trends analysis and to align with the five thematic areas.

Next, the Equity Cabinet worked in subcommittees, based on their own expertise, to develop recommended actions for Metro and partners across the five thematic areas.

They considered the travel trends analysis, best practices review, and community and stakeholder feedback.

Figure 3, "Process for Completing the Mobility Framework," illustrates this process:

Figure 3: Process for Completing the Mobility Framework



10

¹⁰ KCC refers to the King County Council

6 Guiding Principles

The Mobility Framework is based on 10 Guiding Principles, developed in partnership with the Equity Cabinet and with input from elected officials, regional partners, and community stakeholders. The Guiding Principles offer guidance for how Metro and partners can put people first and build on the current system to achieve regional mobility that is integrated, innovative, equitable, and sustainable.

Consistent with the King County Equity and Social Justice Strategic Plan, the Guiding Principles aim to advance strategies that serve low- and no-income people, black, indigenous, and people of color, immigrants and refugees, people with disabilities, and limited-English speaking communities.

INVEST WHERE NEEDS ARE GREATEST



Invest in and measure the outcomes of public transportation services and improvements in geographic areas and at times of day in which there is unmet need, particularly as experienced by low- and no-income people, black, indigenous, and people of color, immigrants and refugees, people with disabilities, and limited-English speaking communities. Understand peoples' needs and create effective partnerships that make transportation services affordable for people for whom cost is a barrier.

ADDRESS THE CLIMATE CRISIS AND ENVIRONMENTAL JUSTICE



Reduce demand for single occupancy and other high-emissions transportation modes. Help King County achieve its greenhouse gas emissions reduction and other climate-related goals by providing integrated transportation services and working to increase transit ridership. Partner with communities to prepare for the impacts of climate change and support resilience in communities disproportionately affected by climate change.

INNOVATE EQUITABLY AND SUSTAINABLY



Implement and partner on innovative new services and emerging technologies in ways that complement transit and use public space equitably and efficiently. Innovations should support fair labor practices, include data-sharing and/or other accountability measures, and serve low- and no-income people, black, indigenous, and people of color, immigrants and refugees, people with disabilities, and limited-English speaking communities.

ENSURE SAFETY



Provide a safe and secure experience for passengers, communities, and Metro employees. Coordinate enforcement in ways that are equitable and culturally appropriate.

ENCOURAGE DENSE, AFFORDABLE HOUSING IN URBAN AREAS NEAR TRANSIT



Work to minimize displacement and increase affordable housing options in urban areas near transit by partnering with local jurisdictions and other organizations. Support programs that incentivize equitable transit-oriented communities and community-centered development.

IMPROVE ACCESS TO MOBILITY



Partner with jurisdictions and community-driven organizations to ensure equitable and efficient use of public space (such as streets, bike lanes, sidewalks, and curbs) and prioritize access to mobility services, including bike, walk, and roll access. Partner to increase access to and awareness of transportation choices to increase ridership. Strategies should prioritize low- and no-income people, black, indigenous, and people of color, immigrants and refugees, people with disabilities, and limited-English speaking communities.

PROVIDE FAST, RELIABLE, INTEGRATED MOBILITY SERVICES



Partner to grow and deliver an integrated regional network of traditional and innovative transportation services that moves people quickly and reliably and increases ridership. Support jurisdictions in making transit-supportive improvements, such as making improvements to the right-of-way to increase speed and reliability of service and adopting transit-supportive land use.

SUPPORT OUR WORKFORCE



Partner with employees, labor, contractors, and communities to support a high quality of life and offer high-skill, high-wage careers, including training and apprenticeships, and opportunities to benefit from transportation-related innovations. Recruit and hire from communities with the greatest barriers to transit and employment, including but not limited to low- and no-income people, black, indigenous, and people of color, immigrants and refugees, people with disabilities, and limited-English speaking communities. Use innovation to engage transit's workforce and create new pathways to living wage jobs.

ALIGN OUR INVESTMENTS WITH EQUITY, SUSTAINABILITY, AND FINANCIAL RESPONSIBILITY



Budget and invest in a way that advances equity and sustainability, while upholding Metro's responsibility to spend public dollars wisely. Exercise sound financial

management and ensure Metro’s long-term financial sustainability. Track and measure progress toward equity and sustainability outcomes, consistent with Metro’s value-driven, data-supported approach.

ENGAGE DELIBERATELY AND TRANSPARENTLY



Be open to shared decision-making and co-creation. Use meaningful, inclusive, and community-driven approaches to develop, provide, and evaluate mobility choices and supporting infrastructure that serve low- and no-income people, black, indigenous, and people of color, immigrants and refugees, people with disabilities, and limited-English speaking communities in a way that works for them.

7 Recommendations

After developing the Guiding Principles, the Equity Cabinet organized them into five thematic areas: investments, surrounding land use, innovation, workforce, and engagement. Equity Cabinet members met in subcommittees based on these thematic areas to review information on travel trends, demographic patterns, and best practices, and then developed recommendations in each area.

The recommendations address Metro’s role as a provider of fixed-route public transit and community-based mobility services; as an employer and contractor; as a partner to jurisdictions around the region; as a co-provider of services with private mobility companies; and as part of a local government that prioritizes equity and sustainability. They provide guidance for ways Metro can add to and build on its existing, regional network of mobility services, with the goal of achieving a mobility network that is innovative, integrated, equitable, and sustainable and that contributes to healthy communities, a thriving economy, and a sustainable environment in King County and beyond.

These recommendations span from visionary to long overdue and are essential to the future of the regional mobility system. Metro looks forward to working with local municipalities, organized labor, transit agencies, community-based organizations, and/or private mobility providers to fund and implement these recommendations.

In these recommendations, priority populations, unless otherwise specified, are defined as: black, indigenous and people of color, low- and no-income people, immigrants and refugees, limited-English speaking populations, and people with disabilities.

Key

★ Indicates that Metro and partners must work together to implement this recommendation.

\$ Indicates need for additional funding.

INVESTMENTS

Metro's financial support for transit service, new mobility, fares, capital investments, and safety improvements

Provide additional transit service in areas with unmet need \$

- Prioritize geographic areas that have: high density; a high proportion of low-income people, people of color, people with disabilities, and members of limited-English speaking communities; and that have limited mid-day and evening transit service to schools, jobs, and child care centers and other ways to build wealth and opportunities. See map on page 7-4 for these priority areas.
- Adapt Metro's adopted policies to provide for service improvements in these priority geographic areas and to provide for regular and ongoing evaluation of the unmet needs in these areas and how populations are shifting.
- Continue developing an equitable, income-based approach to fares to ensure affordability and accessibility for those who need it.
- Consider additional investments in programs such as Trailhead Direct that connect communities to other areas of open space, such as parks and farms.

Support improvements to increase safety ★\$

- Continue to make progress toward a smart phone app or other technology¹¹ to provide a safe and convenient way for passengers to communicate safety information or concerns, as well as provide real-time transit information and purchase transit fare.
- Add first mile/last mile service to get low-income people, black, indigenous, and people of color, people with disabilities, and members of limited-English speaking communities, as well as youth, seniors, and LGBTQ+ people, quickly and safely to transit.
- Provide safety-enhancing features on buses, and provide safety amenities and efforts, such as lighting, real-time information signs, and informational campaigns at transit stops in areas with higher proportions of low-income people, black, indigenous, and people of color, people with disabilities, and members of limited-English speaking communities, as well as to promote greater safety for women and LGBTQ+ people. Ensure that transit stops and transfer points are designed and located in ways that promote safety. Conduct ongoing safety reviews to assess environmental health and potential safety disparities.
- Review transit emergency plans to ensure that Metro is prepared to provide safe and ongoing transportation during natural disasters, weather emergencies, or climate-related crises. Ensure Metro infrastructure and services support community resilience to climate change.

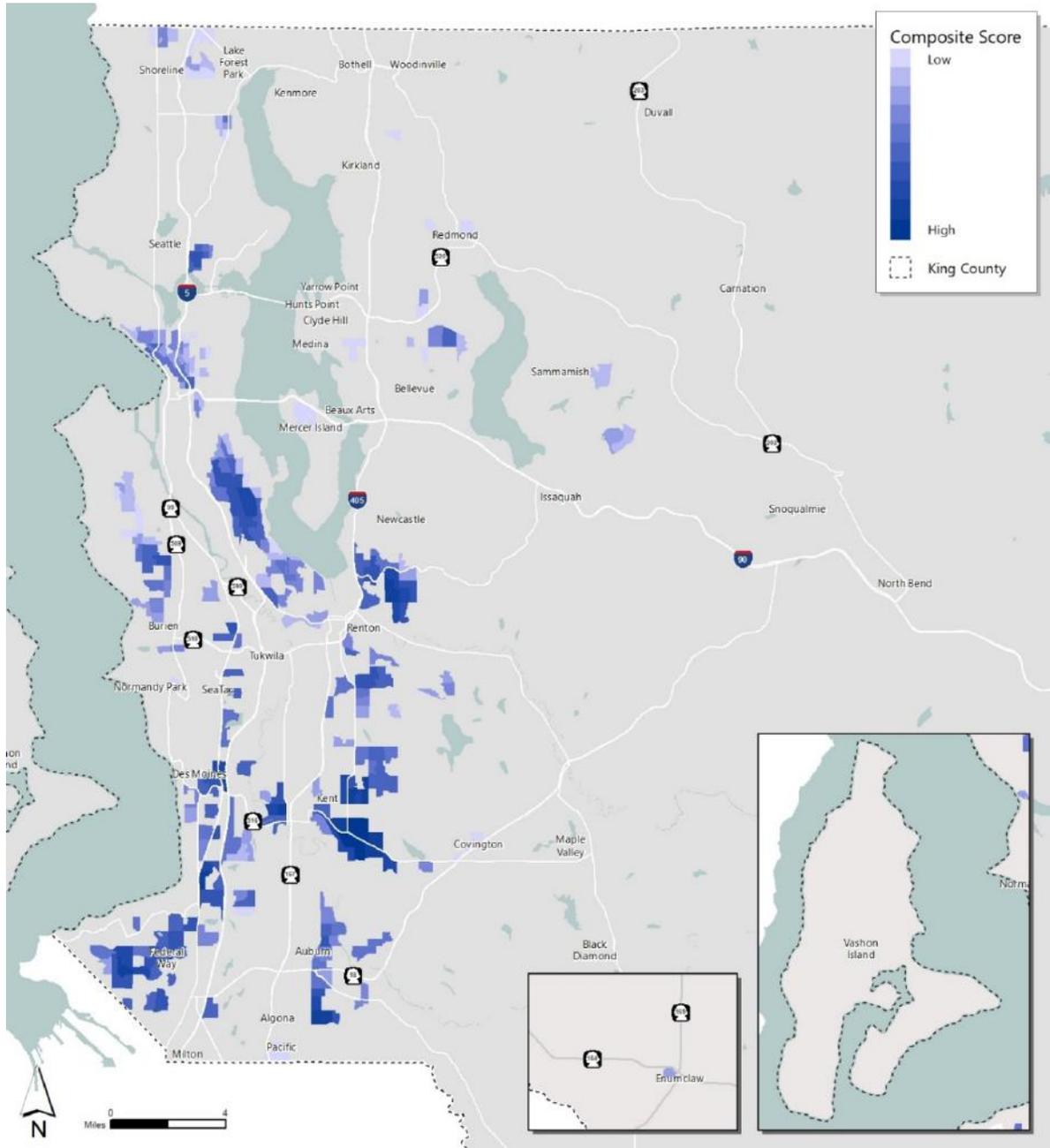
¹¹ One example of a safety app is the Denver RTD [Transit Watch](#) app

Support improvements to increase speed and reliability ★\$

- To make Metro’s investments in service most successful, Metro should advocate for and support jurisdictions in implementing improvements in and near the right-of-way that increase speed and reliability for transit.
- Update adopted policies to include incentives or disincentives that result in local jurisdictions taking transit-supportive actions, such as prioritizing right-of-way for transit. Such incentives should be implemented in a way that recognizes varying staff and financial resources among jurisdictions.
- Continue advocating for state legislation to support stricter enforcement on non-bus travel in bus-only lanes.

Figure 4, “Map of Areas of Unmet Need,” indicates areas of high density; a high proportion of low-income people, people of color, people with disabilities, and members of limited-English speaking communities; and that have limited mid-day and evening transit service to schools, jobs, and child care centers and other ways to build wealth and opportunities.

Figure 4: Map of Areas of Unmet Need



SURROUNDING LAND USE

Support for dense, mixed-use neighborhoods near transit, affordable housing, and better access to transit

Increase dense, mixed-use zoning and affordable housing in urban areas near transit, while working to minimize displacement of priority populations★\$

- Provide incentives for local jurisdictions that provide increased zoning density, affordable housing, and evaluate parking requirements along transit corridors and at transit centers.
- Work with jurisdictions to develop and adopt policies to minimize displacement near transit. Deep, collaborative engagement with low-income people, black, indigenous, and people of color, immigrants and refugees, and limited-English speaking homeowners should be central to these efforts.
- Partner with other jurisdictions and nonprofit, community-centered housing providers to coordinate approaches to zoning and affordable housing to realize more transit-oriented communities, including:
 - Develop a King County transit-oriented development policy that emphasizes community engagement and leadership.
 - Support the work of the Affordable Housing Committee of the Growth Management Policy Council, which is working to implement the recommendations of the Regional Affordable Housing Task Force.
 - Support land use approaches that accommodate families and people with multiple abilities and help mitigate weather extremes.
- Adapt Metro’s adopted policies to support additional density and affordable housing near transit corridors.
- Seek additional funding for transit to implement METRO CONNECTS and to encourage density and affordable housing.
- Expand or support partnerships to increase neighborhood transit hubs that are safe and accessible to connect to high-capacity transit, including future light rail service.

Develop station area and right-of-way guidelines to support access to transit ★\$

- Develop station area guidelines as part of Metro’s adopted policies (including its transit-oriented development policy) that prioritize passenger access and deprioritize single-occupancy vehicle access at Metro transit stops and stations. Encourage local jurisdictions and partner transit agencies to prioritize passenger access at stations they own or operate. Increase availability of ticket vending machines. Coordinate with implementation of King County’s Strategic Climate Action Plan.

- Develop right-of-way guidelines that prioritize the right-of-way for transit and for access to transit by people who walk, bike, or roll. Support incentives for local jurisdictions to make improvements to the right-of-way to prioritize access to and for transit.
- Use Universal Design practices to increase accessibility for Metro-designed facilities and encourage it for facilities designed by others.

Develop people-friendly street design near transit ★\$

- Partner with local jurisdictions to develop plans for transit corridors that provide safe opportunities to walk, roll, and bike safely to transit connections. Support local jurisdictions in implementing these accessibility improvements.
- Partner with local jurisdictions to design and implement traffic-calming improvements at intersections to ensure people can reach transit stops safely in daylight and at night, including signals timed to prioritize the safe movement of people who are walking, biking, or rolling, with limits to rights on red and unprotected left turns when appropriate.
- Partner with local jurisdictions to support ongoing maintenance of sidewalk and bike infrastructure to maintain accessible, smooth surfaces and to clear sidewalks, curb ramps, and transit stops promptly of ice, snow, and debris.
- Ensure that bus stops are designed and maintained to be accessible to all ages, genders, and abilities, including children, with adequate lighting at night, accessible signage, protection from the elements, seating, and setback from traffic lanes. Evaluate transit access regularly.

Meet King County's climate goals by reducing car use, developing green infrastructure, and promoting climate justice \$

- Provide increased transit frequency, as funding allows, to make it more convenient for people to get out of their cars. Deep and intentional investments in public transit expansion will be crucial to the success of this recommendation, and others.
- Continue to electrify Metro's fleet and associated infrastructure to reduce greenhouse gas emissions. Consider climate justice impacts of electrification and other actions (i.e., consideration of source of electricity).
- Adapt Metro's adopted policies to prioritize investments in routes that will reduce greenhouse gas emissions, balancing ridership and climate priorities with other identified investment needs.
- Identify and act on strategies that could be taken to achieve King County's greenhouse gas reduction goal, including more transit service, more density, demand management, parking policies, pricing, and/or vehicle electrification.
- Invest in services such as Dial-A-Ride-Transit (DART) and Community Connections that could help transport people in outlying areas to high-capacity transit. Support park-and-ride options, as well as safe and creative carpool options from large transit hubs into major corridors.

Mobility Framework Report

- Support efforts with employers to increase transit ridership, with a strong focus on those who are most likely to drive to work and those who may have difficulty affording transit. Prioritize small nonprofit organizations and organizations that lack the opportunities and finances to provide ORCA cards and subsidized transit options to their employees.
- Seek reduced parking rates in Metro-owned transit-oriented development. Work with jurisdictions to produce policy agreements or to promote flexibility near high frequency transit stops.

INNOVATION

Metro's role in the regional, integrated network (new technology and services), and Metro's role with private providers

Change Metro's adopted policies to assert the role of innovation, address new mobility services, and support innovative, integrated, equitable, sustainable mobility

- In an integrated mobility system, innovations should:
 - Benefit the community.
 - Help Metro contribute to key outcomes (healthy communities, a thriving economy, and a sustainable environment) and align with Metro's values and Mobility Framework Guiding Principles.
 - Serve and be accessible to everyone, not just people who can afford or already use the transit network.
 - Supplement and bring people to transit services, not take away from them.
 - Integrate seamlessly with transit and support easy transfers.
 - Solve first/last mile challenges.
 - Do more than help people commute during traditional 9-5 hours. They should assist people with diverse commute travel patterns across King County. They should make transit an appealing and competitive option for everyday activities, such as getting to school, daycare, recreation (open spaces, restaurants, etc.), healthcare, and other needs or wants.
 - Build on top of existing infrastructure to make Metro's current system more usable and limit costs.
- Criteria for pilots:
 - Pilots should address a community-identified need, help deliver key outcomes, and align with the Mobility Framework Guiding Principles.
 - Metro should engage with community stakeholders early in the development of pilots and while deciding where and in what to invest (potentially through an Innovation Equity Cabinet).
 - Stakeholders should include, but not be limited to, parents/guardians, people with disabilities, youth, and others who may have different travel needs.
 - Pilots should work for and prioritize low- and no-income people, black, indigenous, and people of color, immigrants and refugees, people with disabilities, and limited-English speaking communities. Pilots should also accommodate the needs of parents/guardians, youth, and others who may have unique travel needs (i.e., need for car seats in first-last mile programs).

- Pilots should include a clear, pro-equity, community-focused evaluation plan and timeline that measures how a pilot addresses a community-identified need and advances key equity and sustainability outcomes. Evaluation should consider customers and workforce.
 - Metro should balance the need for flexibility when developing pilot programs with a desire to minimize major changes to customers once they have grown accustomed to the program (i.e., avoid major price hikes).
 - Pilots should provide Metro with rich data for improved planning, operations, and integration.
 - Pilots should increase Metro’s ability to act as a mobility agency and services manager that integrates public and private services (i.e., not all services can be Metro-operated).
 - Pilots may require Metro taking on additional risks in service delivery (particularly pilots delivered through new partnerships) and Metro should do so if the pilot’s value to the community outweighs the additional risk.
- Metro should update its policies to provide opportunities for incremental development of pilot programs and services and establish guidance for assessing and transitioning pilot programs into permanent services. Successful pilots should lead to deeper investments as programs become permanent, to ensure their continued success.

Develop new mobility guidelines for how Metro partners with private providers★

- Metro should compel private providers with whom it partners with to share its values, through the contracting process and design and implementation decisions.
- Metro’s request for proposal (RFP) process for contracts with new mobility services should reward or incentivize equity and climate-focused respondents. Criteria should align with Metro’s core values, as defined by the Mobility Framework’s Guiding Principles. Specific criteria could include, but would not be limited to:
 - Willingness to have or move towards a zero-emissions fleet¹²
 - Diverse hiring practices
 - Minority-owned businesses
 - High labor standards, including but not limited to living wage jobs, benefits, etc.
 - Use of wheelchair accessible vehicles
 - High safety standards

¹² Metro should also clarify that its zero-emissions goal extends to private providers.

- Demonstrated responsiveness to engagement with priority populations
- Companies that employ rather than contract
- Willingness to comply with requirements for data and information-sharing

Facilitate integrated payment and planning ★

- Metro should work with regional and private partners to facilitate the development and use of integrated, accessible payment and planning mechanisms that work across platforms and modes.
- The goal is to support customers in using one or multiple apps to plan and pay for multiple mobility services, including planning for trips during an emergency:
 - These products should be accessible for people with disabilities, limited-English speaking people, people with low-incomes, etc., and should include a non-electronic alternative.
 - They should leverage existing products and applications commonly used by customers (Google, Waze, One Bus Away, etc.).
 - An alternative for people without a smartphone or data plan and those who are unbanked should take advantage of existing products and avoid burdening users (i.e., perhaps customers could pay on a library card or ID, instead of having to get a separate card¹³).
- Metro should provide quality control to ensure apps operated by external partners are equitable and accessible.
- Metro should also work with others to explore the concept of mobility wallets that bundle together different public and private mobility services to provide more comprehensive sets of solutions to people's diverse mobility needs.

Enhance communications and engagement to raise awareness about innovations¹⁴

- Metro should develop targeted, intentional, and comprehensive communications and engagement strategies to ensure black, indigenous, and people of color, low- and no- income people, immigrants and refugees, limited-English speaking populations, people with disabilities, and others contribute to the planning of and know how to use innovative mobility pilots and services.
- Communications and engagement efforts should be sustained and resourced sufficiently.

¹³ The Go Lorain Bike Share Library-Parks Partnership in Lorain, Ohio is one example of successful utilization of a library card to use mobility options (bike share).

¹⁴ This recommendation aligns with and supplements the overarching recommendation in the "Engagement" section that Metro conduct more outreach, engagement, and targeted communications to raise awareness about all its programs and services.

Convene and support jurisdictions in developing partnerships on innovation★

- If desired by partners, Metro should play a leadership role in convening and supporting jurisdictions in developing a framework for engaging with innovative mobility services (micromobility, ride hail, etc.). This framework could include, but would not be limited to:
 - Consistent values desired in private provider partners.
 - Consistent regulations, including guidelines for allocation of space and right-of-way¹⁵ that prioritize pedestrian and transit needs and de-prioritize single-occupancy vehicles.¹⁶
 - Opportunities to connect with private providers and other resources.

¹⁵ For more information on recommendations related to right-of way, see “Surrounding Land Use” recommendations.

¹⁶ These could be like BART’s Station Access Guidelines, but for streets, or San Francisco’s Transit First Policy). Such regulations may need to be adapted to different road types and jurisdictions.

WORKFORCE

Metro's role with current and future Metro employees and contract employees, as well as influence on the treatment of private providers' workforce

Strategically partner with the labor community to build new "communities of ridership" (bring new riders to Metro services) while simultaneously benefitting Metro's workforce, priority populations and the environment ★\$

- Metro should establish a strategic partnership with the regional labor community that:
 - Focuses on new "communities of ridership" (i.e., previously unexplored and underserved riders) in order to reduce the use of single-occupancy vehicles and vehicle miles traveled.
 - Incorporates time and space to learn about and measure the effectiveness of innovative pilots.
 - Increases the ability of existing Metro staff and new "communities of ridership" to benefit from mobility-related professional development and apprenticeship opportunities.
 - Supports the establishment of formal public/private partnerships that advance equitable employment practices throughout the region (i.e., living wage jobs and equitable working conditions).

Utilize future transportation innovations to target new riders as potential future employees

- Target new "communities of ridership" as a source of potential employees by use of innovative feeder-to-fixed mobility products (also known as first-last mile services) tailored to specific community needs.
- Increase access to potential employment opportunities by strategically incorporating targeted workforce outreach in new and innovative services.
- Use demographic data (quantitative/qualitative) to tailor the promotion of specific job opportunities to riders on specific routes.

Use strategic and culturally-specific communication methods to build sustainable community relationships

- Purposefully enhance priority populations' perception of Metro as an employer of choice and a culturally-responsive service provider by making clear Metro's commitment to equity and sustainability, by:
 - Ensuring that innovative feeder-to-fixed project design, outreach, communications, and evaluation efforts are culturally specific and community-driven.
 - Utilizing culturally specific, experience-based research (quantitative and qualitative) to tailor promotions (including job opportunities to riders on specific routes/services).

- Utilize pro-equity centered perspectives to evaluate the effectiveness of marketing related to Metro services and potential for employment.
- More broadly and effectively promote and educate the public on Metro's various software applications.

Build infrastructure to provide pathways to mobility-related employment ★\$

- Partner with unions, community-based organizations, state agencies, high schools, community colleges and trade schools to prepare to meet future workforce needs by:
 - **Establishing a mobility "School Without A School" (i.e. no brick and mortar):**
 - Utilize best practice research and partner with state agencies, colleges, internal King County agencies, and effective community-based organization models serving priority populations to develop a community-based employment development program that will:
 - Seek grant funding and pursue innovative ways to fund cost of career pathways and employee development.
 - Incorporate community-driven solutions and accountability for addressing community-specific barriers, including opportunities to build resilience to climate change.
 - Include documented career pathing (i.e., predictable and pre-identified employment progression).
 - Provide pre-employment career support and pre-employment training.
 - Incorporate general and mobility-specific employment related training.
 - Include targeted recruitment of priority populations and incorporate a focus on young people transitioning out of foster care and others experiencing structural barriers to employment.
 - Incorporate training on cross-cultural understanding.
 - Incorporate assistance to participants to translate life skills (i.e., resilience and overcoming societal barriers) into valuable skills and abilities in current and future labor market.
 - **Create an equity in mobility summer internship program**
 - Develop a grant-sponsored summer intern program to outreach to priority populations and build awareness of job opportunities in the field of mobility.

- Partner with community-based organizations (and community-based collectives) to identify effective recruitment methods for outreach to priority populations.
- **Develop an approach to assist with costs associated with workforce development and employment pathways**
 - Consider establishment of a scholarship fund.
 - Consider standards for forgiveness of costs associated with pathway/internship programs.
 - Include intentional focus on child care subsidies for priority populations.
- **Develop community-based mobility career hubs that include:**
 - Partnership with Worksource and other employment programs.
 - Strategic placement of “hubs” throughout the region, in areas easily accessible to priority communities.
 - Input of priority populations on best ways to recruit.

Utilize strategic workforce planning to recruit and retain workers and meet current and future workforce needs ★\$

- Utilize intentional strategic workforce planning to effectively assess and prepare for evolving current and future workforce needs including:
 - Identifying the skills needed to meet current and future workforce needs and provide necessary training.
 - Partnering with high schools, community colleges, trade schools, etc., to incorporate preparatory curriculum and programming that leads to apprenticeship opportunities.
 - Partnering with community-based organizations that target priority populations in order to develop a sustainable workforce.
 - Fostering excitement and supporting workforce retention through employee engagement activities.

Purposefully foster a sustainable learning culture within Metro

- Take necessary steps to ensure that Metro’s workplace culture is characterized by:
 - Existing employees having ample opportunities for professional development and growth, and opportunities to see and work with diverse leaders.
 - Front-line managers having knowledge skills and ability to effectively lead their employees with a growth and learning mindset including:
 - Development of a systematic approach to ensure support for staff professional development.

Mobility Framework Report

- Incorporation of career pathways and provision of education and training to support employees to plan for their professional development.
- Provision of adequate internal support and infrastructure so that people leaders can effectively support employee's development goals.

Require the centering of equity in all Metro contracts and subcontracts

- Require the centering of equity considerations in all Metro contracts for services and whenever contracting with private sector transportation providers.¹⁷

¹⁷ This recommendation aligns with one in the "Innovation" section ("develop new mobility guidelines for how partners with private providers").

ENGAGEMENT



Metro's policies for how it engages with the community regarding mobility investments

Strengthen communication and marketing efforts about Metro's services

- Increase the level of communication about Metro's services, including innovative mobility services and fare products, such as ORCA LIFT, to ensure that people from all communities know about these services and how to use them.
- Ensure communication efforts, such as marketing campaigns, signs and wayfinding, and other programs, are culturally appropriate, accessible to priority populations, provided in coordination with community-based organizations, and evaluated and upgraded regularly. Test communications and marketing efforts with real individuals before launch.
- Strengthen community-based communications, including real individuals, groups, and stories.

Build lasting relationships in communities

- Metro should take a long-term approach to engagement, building on existing relationships in communities through broader involvement prior to, or in tandem with, efforts to gather input on specific service planning and capital projects and programs.
- After building these relationships, Metro should seek input from the community to develop and implement engagement efforts for projects, programs, and plans, and compensate community-based organizations and community members for their time and expertise.
- Metro staff, including senior leadership, should participate in and attend regular community organization meetings, events, or meetings of relevant boards, committees, or commissions as appropriate, especially related to transportation, housing, education, etc. to form a deeper understanding of community history, demographics, leadership, experiences, and priorities.

Use a coordinated, cross-departmental approach to engagement

- Metro and other King County departments should coordinate on initiatives to ensure a comprehensive approach that identifies opportunities to work more effectively and efficiently, and so that community-based organizations and residents are being engaged and receiving information in a coordinated and streamlined way.
- King County Equity Cabinet should continue as a body that informs and ensures that equity and sustainability are centered in major County projects, programs, and initiatives. The Equity Cabinet should be intergenerational and focus on building a new generation of leadership in low-income communities, black, indigenous, and communities of color, immigrant and refugee

- communities, limited-English speaking communities, and people with disabilities. Equity Cabinet members should be compensated for their time and expertise.
- Metro should coordinate with County Councilmembers to integrate with each other's community engagement activities to become more familiar with low-income communities, black, indigenous, and communities of color, immigrant and refugee communities, limited-English speaking communities, disability communities, and LGBTQ+ communities in their districts and their experiences and priorities.

Develop an equity-centered engagement framework

- Metro's Mobility Framework should be used to guide transit investments in an equitable way.
 - Start by listening and learning to identify biases and understand the impacts of historical and structural racism and oppression on communities Metro serves.
 - Invite diverse co-creators to the table to identify needs.
 - Conduct an equity analysis to identify modes that best meet identified needs and minimize burdens.
 - Place decision-making power in the hands of the local community.

Develop a Community Liaison program

- Develop a Community Liaison program to hire people, including youth and multi-lingual speakers, from the communities Metro and other County departments are engaging with to act as a conduit between Metro's planning, programs, and projects and local communities.
- Liaisons will bring local knowledge about best engagement practices and language skills. Metro should invest in liaisons with skill development, resume building, professional development, certifications, and identifying career pathways.
- Continue evaluating and updating Metro's approach to fare enforcement to center equity and create an ambassadors' program focused on educating riders about Metro's services.

Identify metrics to measure success and continually improve

- Adapt Metro's adopted policies to further develop qualitative metrics to measure the effectiveness of engagement and relationship building.
- Metrics should be developed with input from the Equity Cabinet and community leaders, and by looking at best practices, with consideration for how to coordinate with other King County department engagement metrics where possible.

Mobility Framework Report

- Metro should regularly review and report out on engagement metrics and consider updates as necessary, including use of a dashboard to display evaluation information.

8 Next Steps

The Mobility Framework, co-created with an Equity Cabinet of community leaders, will guide updates to Metro's adopted policies, including Metro's Strategic Plan, long-range plan (METRO CONNECTS), and Service Guidelines, as well as the Transportation Goal Area of the Strategic Climate Action Plan. The Mobility Framework's Recommendations will also guide the development of Metro's 2021-2022 biennial budget proposal and ongoing regional planning efforts to fund and implement METRO CONNECTS. These policies are explained in more detail below.

Work to update Metro's policy documents will begin during the first half of 2020 to align with the Mobility Framework's Recommendations and to provide detailed implementation guidance for how the recommendations can be realized. Further community engagement will shape these efforts, as updates to these policy documents will benefit from input from Equity Cabinet members, elected leaders, stakeholder organizations, and communities. The policy update process will also include additional analysis to support the proposed changes to the policy documents.

Metro looks forward to working closely with elected leaders, jurisdictions and other regional partners, stakeholder groups, and community members to fund and implement the Mobility Framework's Recommendations and move forward together toward a regional mobility system that is innovative, integrated, equitable, and sustainable.

IMPACTED POLICIES AND PROCESSES

Strategic Plan for Public Transportation

Metro's Strategic Plan outlines the department's goals, the strategies used to achieve those goals, and the measures to determine success. The Strategic Plan has eight goals: safety, human potential, economic growth and built environment, environmental sustainability, service excellence, financial stewardship, public engagement and transparency, and quality workforce.

Service Guidelines

Metro's Service Guidelines direct planning of transit service. They help Metro set targets for the level of transit service to be provided in specific areas or along specific corridors based on productivity (including ridership), social equity, and geographic value. They provide measures to evaluate the performance of individual routes. And they include priorities to guide additions, reductions, or changes to service: overcrowding, schedule reliability, new service to connect activity centers, and route productivity.

METRO CONNECTS

Metro's long-range plan, METRO CONNECTS, is Metro's vision for the future. It outlines a goal of increasing service hours by 70 percent between 2015 and 2040, with a much larger network of routes around the County, higher access to frequent transit service, and capital investments to make the system operate more effectively.

As required by Motion 15252, the update to METRO CONNECTS will include new information to adjust for increased population growth, increasing regional congestion, inflation and construction costs, regional mobility needs, and innovations in transportation.

King County Ferry District 2014-2018 Strategic Plan

The Ferry District Strategic Plan outlined the goals for water taxi service between 2014 and 2018: provide reliable and safe service, deliver financially sustainable water taxi service, and integrate water taxi service with the broader regional transportation system and economy.

King County 2020 Strategic Climate Action Plan

Metro is the lead agency for the Transportation Countywide Goal Area of the King County Strategic Climate Action Plan. The 2020 Update will serve as the five-year road map for County action to reduce greenhouse gas emissions, support sustainable and resilient communities, and prepare for climate change. The Mobility Framework's Recommendations will serve as the basis for goals and priority actions for reducing car trips to support the overall countywide goal of reducing greenhouse gas emissions by 80 percent by 2050. King County's Strategic Climate Action plan will be transmitted to the King County Council in June 2020.

2021-20200 Biennial Budget

The Mobility Framework's Recommendations will also guide the development of Metro's two-year business plan, its 2021-2022 biennial budget proposal, and ongoing regional planning efforts to fund and implement METRO CONNECTS.

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King County Metro Mobility Framework

Appendix A: Travel and Population Data, Trends, and Implications

October 2019



Table of Contents

	Page
1 Executive Summary	A-1-1
Demographic Trends	A-1-2
Travel Trends and Patterns	A-1-2
Public Transportation Service Coverage Comparison	A-1-3
Innovative Mobility Opportunity Areas	A-1-3
2 Demographic Trends	A-2-1
Data Sources and Methodology	A-2-1
Population Growth.....	A-2-2
Limited-English Speakers	A-2-3
Immigrants and Refugees	A-2-4
People with Disabilities	A-2-5
No- and Low-Income Households	A-2-6
Black, Indigenous, and People of Color	A-2-10
Indicators of Displacement	A-2-15
Conclusions	A-2-21
3 Travel Trends and Patterns	A-3-1
Glossary	A-3-1
Accessibility and Investments	A-3-2
Mode Choice.....	A-3-7
Ridership	A-3-10
Surrounding Land Use	A-3-13
Origin-Destination Patterns	A-3-19
Greenhouse Gas Emissions.....	A-3-20
Conclusions	A-3-22
4 Public Transportation Service Coverage Comparison	A-4-1
Conclusions	A-4-8
5 Innovative Mobility Opportunity Areas	A-5-1
Shifting Travel Behavior.....	A-5-1
Opportunity Areas for Alternative Service Delivery	A-5-3
Equity and Sustainability Considerations	A-5-7
Conclusions	A-5-8
6 Resources and References	A-6-1
Demographic Trends	A-6-1
Travel Trends and Patterns	A-6-1
Innovative Mobility Opportunity Areas	A-6-1

List of Figures

	Page
Figure 1 Change in Population Per Acre, 2010-2018.....	A-2-2
Figure 2 Percentage of Population with Limited-English Speaking Proficiency, 2017.....	A-2-3
Figure 3 King County Refugee Resettlement by Jurisdiction, 2006-2016	A-2-4
Figure 4 King County Population by Age Group: Estimated and Projected	A-2-5
Figure 5 Percentage of Population at or Below 200 Percent of Federal Poverty Level.....	A-2-6
Figure 6 Percentage of Population at or Below 300 Percent of Federal Poverty Level.....	A-2-7
Figure 7 Percentage of Population at or Below 400 Percent of Federal Poverty Level.....	A-2-8
Figure 8 Low Wage Jobs, 2015.....	A-2-9
Figure 9 Percentage of Population Identifying as People of Color, 2016	A-2-10
Figure 10 Percentage of Population Identifying as Black/African American Alone.....	A-2-11
Figure 11 Percentage of Population That are Asian Alone.....	A-2-12
Figure 12 Percentage of Population Identifying as Non-White and Hispanic or Latinx	A-2-13
Figure 13 Percentage of Population Identifying as Two or More Races	A-2-14
Figure 14 Percent Change in Housing Costs and Median Household Income, 2011 through 2018.....	A-2-16
Figure 15 Change in Population at or Below 200 Percent of Federal Poverty Level, 2012 - 2017.....	A-2-17
Figure 16 Percent Change in Monthly Rent, 2010 - 2019	A-2-18
Figure 17 Change in Population at or Below 200 Percent of Federal Poverty Level, from 2012 to 2017.....	A-2-19
Figure 18 Change in Black/African American Population, 2000-2017	A-2-20
Figure 19 AM Peak Period Job Access by Transit (2015)	A-3-3
Figure 20 Midday Period Job Access by Transit (2015)	A-3-4
Figure 21 Low-Income Job Accessibility by Transit in AM Period (2015).....	A-3-5
Figure 22 Transit to Auto Accessibility Ratio in AM Period	A-3-6
Figure 23 Zero or One Vehicle Households (2017)	A-3-8
Figure 24 Transit Mode Share for Work	A-3-9
Figure 25 King County Transit Commuters by Income from 2005-2017	A-3-10
Figure 26 Annual Change in King County Transit Boardings by Agency (2011 - 2018).....	A-3-12
Figure 27 Change in Average Rides by Day and Period (Fall 2016 to Fall 2018)	A-3-12
Figure 28 Annual Ridership and Ridership per Capita	A-3-13
Figure 29 Population Density	A-3-14
Figure 30 Average Distance Traveled by Trip Purpose Per Day	A-3-16
Figure 31 King County VMT and VMT per Capita.....	A-3-16
Figure 32 Commute to Work Departure Hour (2017).....	A-3-17
Figure 33 Transit All Trip Purpose Departure Time by Income	A-3-18

Figure 34 ORCA Bus Trips by Hour of DayA-3-19

Figure 35 Sample Origin-Destinations by Zip Code for Lake City, Crossroads,
Rainier Valley, and KentA-3-20

Figure 36 Sources of Greenhouse Gas Emissions for King County in 2017.....A-3-21

Figure 37 Limited Transit Access Composite: Low-Income Households, Low
Transit Accessibility, and Low Vehicle Ownership HouseholdsA-4-3

Figure 38 Low Accessibility Composite: Households of Color, Low Vehicle
Ownership Households, Low Transit Access to ServicesA-4-4

Figure 39 Transit Service Enhancement Composite: High Concentrations of
Priority Populations, Low Off-Peak Access, Population Density Above
15 People per Acre.....A-4-6

Figure 40 Alternative Service Opportunities Composite: High Concentrations of
Priority Populations, Low Off-Peak Access, Population Density
Between 4 and 15 People per Acre.....A-4-7

Figure 41 Percentage of Trips that Shifted to Ride Hailing from other Modes.....A-5-2

Figure 42 Mode Preference by Time of Day and Day of WeekA-5-4

1 Executive Summary

The Mobility Framework positions King County Metro and the region to achieve an integrated, innovative, equitable, and sustainable mobility future. Fehr & Peers and BERK provided information on demographic and mobility trends to inform the Equity Cabinet’s understanding of where and how people are living and moving today, and how that might change in the future. That meant answering key questions, including:

- How does King County Metro better serve unmet need?
- How is population density related to accessibility indicators and outcomes?
- How do demographic variables correlate with travel patterns?
- How can King County Metro reduce transportation GHG emissions?
- How is regional growth impacting vehicle miles traveled and emissions?
- How are innovative mobility trends influencing the region and transportation?

To answer these questions, this appendix provides documentation of current trends in demographic shifts and changing travel patterns and preferences in King County with a focus on equity and sustainability. Census and travel survey data are cited in this documentation, however recommendations for the Mobility Framework must also be complemented by the context of lived experiences.

This appendix focuses on priority populations as defined by the following five population groups:

- Limited-English speakers
- Immigrants and refugees
- People with disabilities
- Low- and no-income households
- Black, indigenous, and people of color

The findings from this appendix provide context for the Mobility Framework Recommendations. Regional and national trends such as the suburbanization of poverty and the increase in vehicle miles traveled have an impact on accessibility, health and environmental outcomes, and as such King County Metro should pursue opportunities to improve equity outcomes and offset the negative impacts of these trends.

DEMOGRAPHIC TRENDS

King County is experiencing rapid population growth. With this growth, the population is becoming more diverse every day. Between 2010 and 2017, 77 percent of the County's population growth has been among residents who identify as black, indigenous, or people of color. During the same period 40 percent of population growth has been among foreign-born immigrants and at least 7 percent are residents with limited English proficiency. It is likely that many of these new residents were attracted by opportunities in King County's growing economy. Others have different motivations, such as refugees resettling here for a better life.

Due in part to strong job growth in the technology sector, many of the County's new residents are in higher income households. This has increased median incomes even while the number of lower income households continues to grow at a slower pace. With increasing population comes increased demand for homes. This drives up housing costs and increases pressure for redevelopment. Nearly half of the County's population growth has occurred through infill and redevelopment in higher density urban and neighborhood centers in Seattle and Downtown Bellevue. These changes contribute to heightened displacement pressure for vulnerable communities, including no- and low-income households, people of color, persons with disability, and those with limited English proficiency.

King County's growth and demographic change is shaping mobility needs in communities across the County. The findings in this chapter highlight the importance of providing transit service that is responsive to the needs of different populations, particularly those who are most vulnerable or face the greatest challenges in achieving access to opportunity.

TRAVEL TRENDS AND PATTERNS

This chapter focuses on the relationship between investments (such as capital projects and service additions) and surrounding land use. The investments section describes accessibility, to illustrate how changes to transit service could better meet the needs of priority populations. This information is presented geographically, illustrating that north and east King County have better access to jobs by transit as compared to south and southeast King County. Access to services (e.g., social, housing, medical) follows a similar pattern to job accessibility distribution; therefore, this appendix focuses on job accessibility as a proxy for overall accessibility. Overall, dense job centers have the best accessibility by all modes for both employment and services.

Surrounding land use is a factor outside the control of King County Metro that greatly influences travel behavior. The data show that people are traveling further (more miles) for work as documented by weekday work trip person miles traveled. This may be due to changing land use patterns in which housing has spread out into the suburbs, but many jobs remain concentrated in a handful of locations in King County. This concept is also known as the suburbanization of poverty, as people have moved further out to seek opportunities to purchase housing or have more affordable rents.

Additionally, despite a substantial increase in population and an increase in transit ridership in the past decade, per capita ridership for King County Metro has recently declined, due to several factors such as gasoline prices, vehicle ownership, emerging mobility options, and land use and travel pattern changes. King County Metro should use the findings in this section to support where to invest in service and capital projects, including in locations where basic transit service needs are currently being met but could be expanded to support a decrease in the number of vehicle-owning households, and where it could be expanded to better serve priority populations.

PUBLIC TRANSPORTATION SERVICE COVERAGE COMPARISON

The demographic and travel trends described in this appendix have a substantial influence on how priority populations can access jobs and services now and into the future. This chapter highlights that with priority populations moving to less-dense and less-central areas of King County, transit access becomes more difficult to provide as a service. Ideas brought forth by the Equity Cabinet for areas to target with new transit service—either through increased fixed-route transit where densities can support service or through innovative mobility services for lower density areas—can provide a model for how Metro may want to identify future transit service enhancements that specifically target priority populations. **Appendix C: Analysis of Recommendations** describes the outcomes and opportunities with service coverage investments in more detail.

INNOVATIVE MOBILITY OPPORTUNITY AREAS

With new mobility options emerging in King County and across the country, there are opportunities to complement existing transit service and challenges in planning and implementation to ensure that new innovative services don't directly compete with transit. These new mobility options include micromobility (on-demand bikes and scooters), paratransit, and ride-hailing services like Uber and Lyft. These options often provide more flexibility than fixed-route transit service and can help to meet the needs of a wide range of people. These services can also help to fill the gap in first-last mile connections.

New mobility options have shifted travel patterns, with some people switching from transit or walking to using ride-hailing and micromobility services. However, there are questions about the affordability of these modes and their long-term relevancy and sustainability. Understanding how people are using these new services and where they could best complement existing transit service presents opportunities for partnerships to better serve King County residents and ensure new services align with overarching goals of equity and sustainability.

2 Demographic Trends

This section, prepared by BERK Consulting, presents data and maps about the demographic and socioeconomic composition of King County, with a focus on priority populations as defined by the following five population groups:

- Limited-English speakers
- Immigrants and refugees
- People with disabilities
- Low- and no-income households
- Black, indigenous, and people of color

The County has experienced rapid job and population growth during the past decade. This growth has contributed to rising housing costs and increased pressure on vulnerable populations who are struggling to afford the cost of living. This can lead to displacement of communities and neighborhood change. This analysis of demographic and socioeconomic trends, as well as indicators of economic and cultural displacement, illustrates the ways this growth is shaping communities across the County.

DATA SOURCES AND METHODOLOGY

Much of this analysis relies on data from the Census American Community Survey, or ACS. The Census publishes estimates based on the ACS on an annual basis. For smaller areas, like census tracts, the latest estimates are based on a survey with a sample of the population conducted over a 5-year period from 2013 to 2017. As with any survey, there is a margin of error associated with estimates.

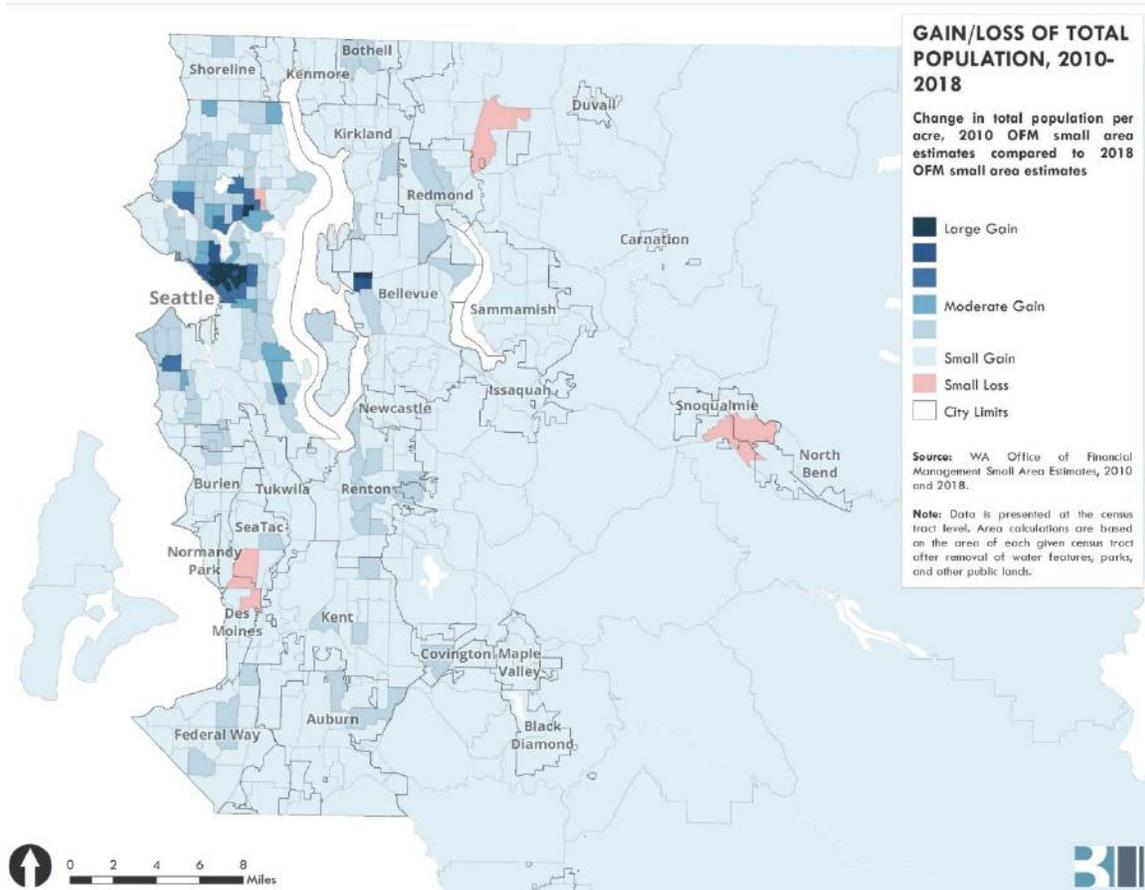
Moreover, the findings should be interpreted with caution, since King County is growing and changing rapidly. Surveys conducted in 2013 may not accurately reflect conditions today. Nonetheless, the ACS provides the most robust quantitative estimates of population groups available for the King County area. For more detailed documentation of the data sources and methodology, see Chapter 6.

These findings should be supplemented with insights drawn from residents' lived experience. Case studies, focus groups, and other forms of qualitative data gathering can be important ways to further develop Metro's understanding of how demographic trends are shaping the lives of King County residents and their mobility needs.

POPULATION GROWTH

King County's population is growing rapidly. Between 2010 and 2019 the County gained nearly **300,000** new residents.¹ That is more than the combined population of Bellevue and Kent, the County's second and third largest cities. As shown in Figure 1, over half of this growth was absorbed in Seattle and Downtown Bellevue in higher density urban centers and residential areas. This map emphasizes the intensity of growth by presenting change in total population per acre.² It highlights the locations (often smaller census tracts) with significant amounts of new apartments and infill development.

Figure 1 Change in Population Per Acre, 2010-2018



Source: WA Office of Financial Management Small Area Estimates, 2010 and 2018; BERK, 2019.

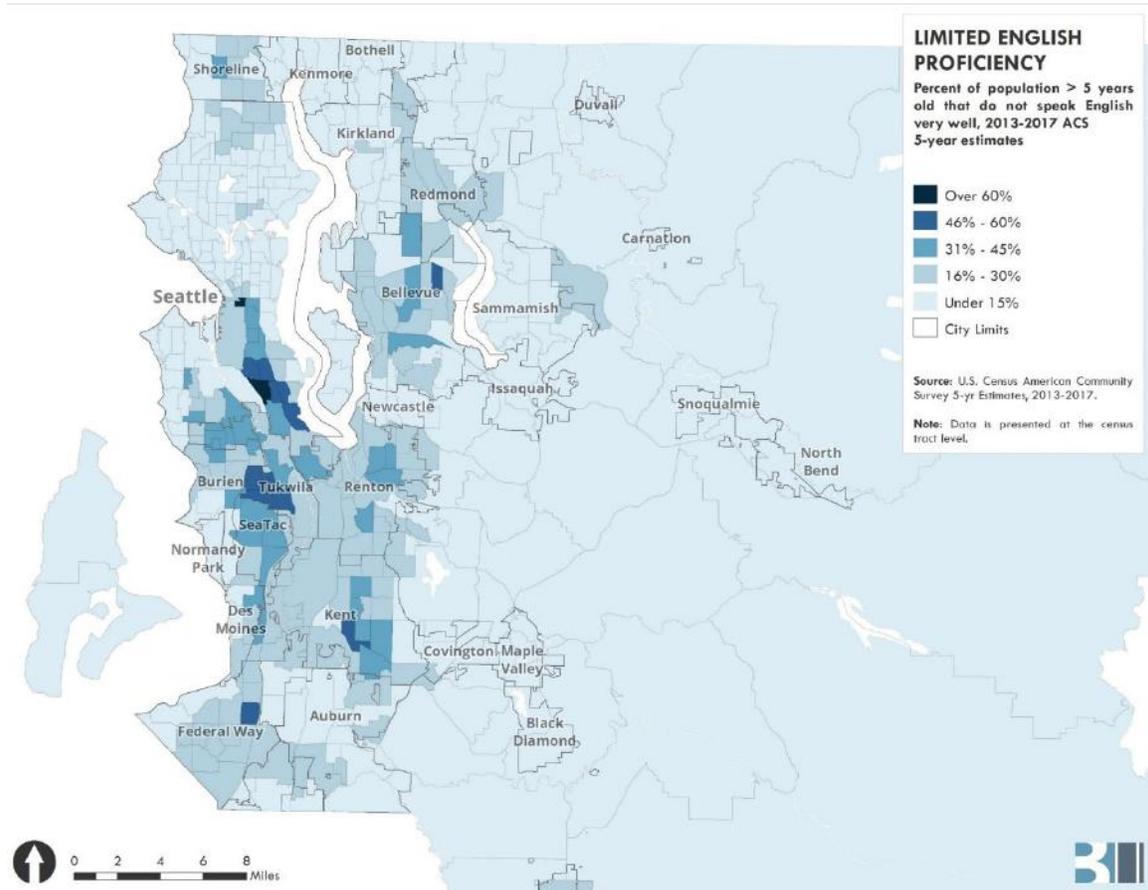
¹ Washington State Office of Financial Management (OFM) Population Change and Rank for Cities and Towns, April 1, 2010 to April 1, 2019.

² This density metric calculates the buildable area of each census tract as land acreage exclusive of parks and open space where development is very unlikely to occur.

LIMITED-ENGLISH SPEAKERS

As of 2017, an estimated **211,000** residents of King County speak English less than very well. Between 2009 and 2017 the County gained about 26,500 limited English-speaking residents. As a share of the total population, limited-English speakers have remained at a constant 11 percent during this period. A map of limited-English speakers as a percentage of the population is presented in Figure 2. It shows the International District, as well as pockets of south Seattle, much of south King County, and parts of Bellevue and Redmond as areas with the highest shares of this population.

Figure 2 Percentage of Population with Limited-English Speaking Proficiency, 2017



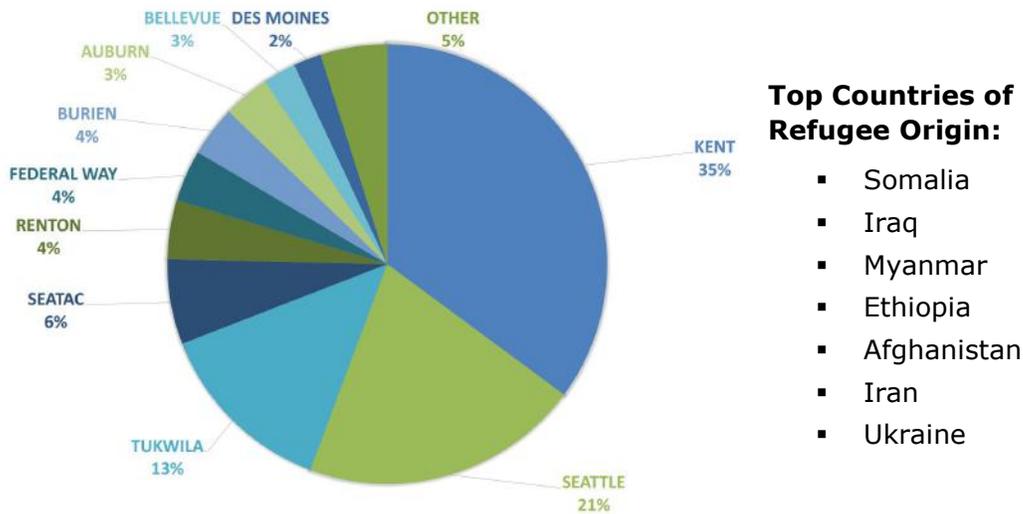
Source: U.S. Census American Community Survey 5-yr Estimates, 2013-2017; BERK, 2019.

IMMIGRANTS AND REFUGEES

Nearly a quarter of King County’s population (464,000) was born outside of the U.S. and King County gained over 95,000 residents who are foreign born between 2010 and 2017. This accounts for 40 percent of the County’s total population growth during that period.

Some of these immigrants are refugees. Between 2006 and 2016, nearly 24,000 refugees resettled in King County. Over a third of resettled in Kent, and almost three-fourths resettled in southern King County communities.

Figure 3 King County Refugee Resettlement by Jurisdiction, 2006-2016



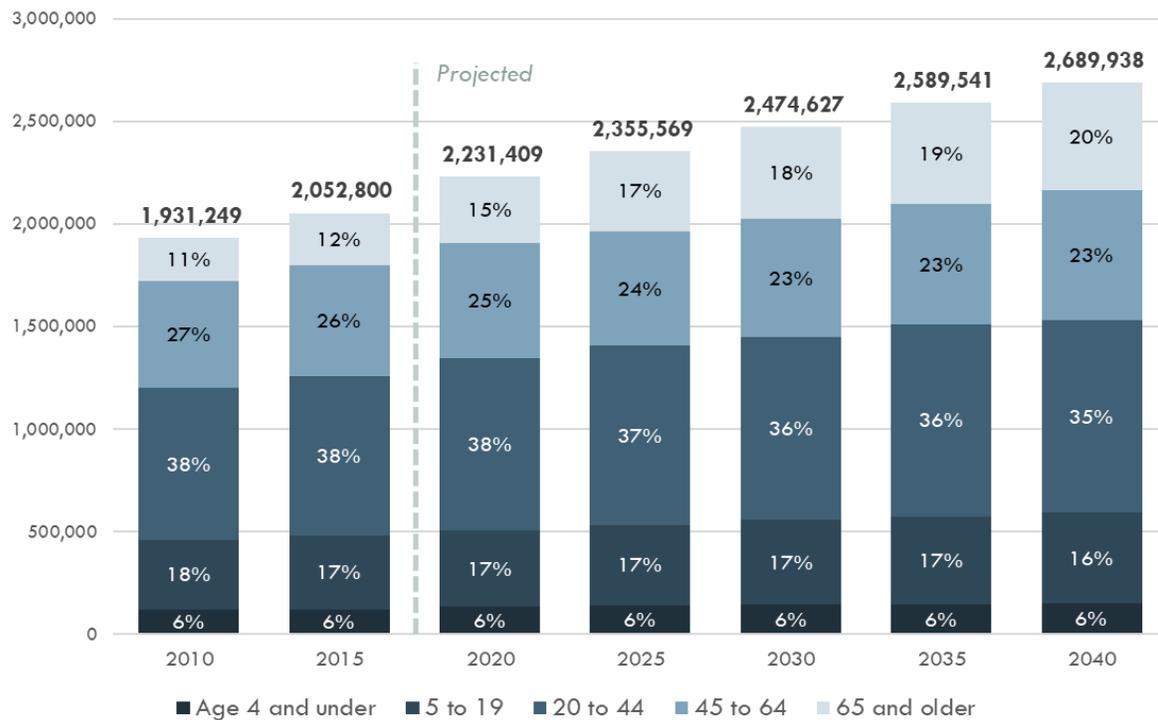
Source: DSHS ACES Data Warehouse, retrieved April 2017

PEOPLE WITH DISABILITIES

Nearly 203,000 residents in King County—nearly 10 percent of the population—self-identify as having a disability.³ These include mobility challenges, vision or hearing impairment, cognitive difficulty, or challenges with self-care and independent living. Older residents are much more likely to report having a disability than younger residents, and many people develop a disability as they reach later stages of life.

Figure 4 presents a breakdown of King County’s population by age group, including projections to 2040. Older adults (65+) are projected to grow by 38 percent between 2020 and 2030, while the rest of the population is only projected to grow by 11 percent during the same period. This reflects a nationwide trend as the last of the large Baby Boomer generation reaches age 65. During this period, it can be assumed that the number of residents in King County with some type of disability will increase dramatically.

Figure 4 King County Population by Age Group: Estimated and Projected



Sources: WA Office of Financial Management, 2017; BERK Consulting, 2019.

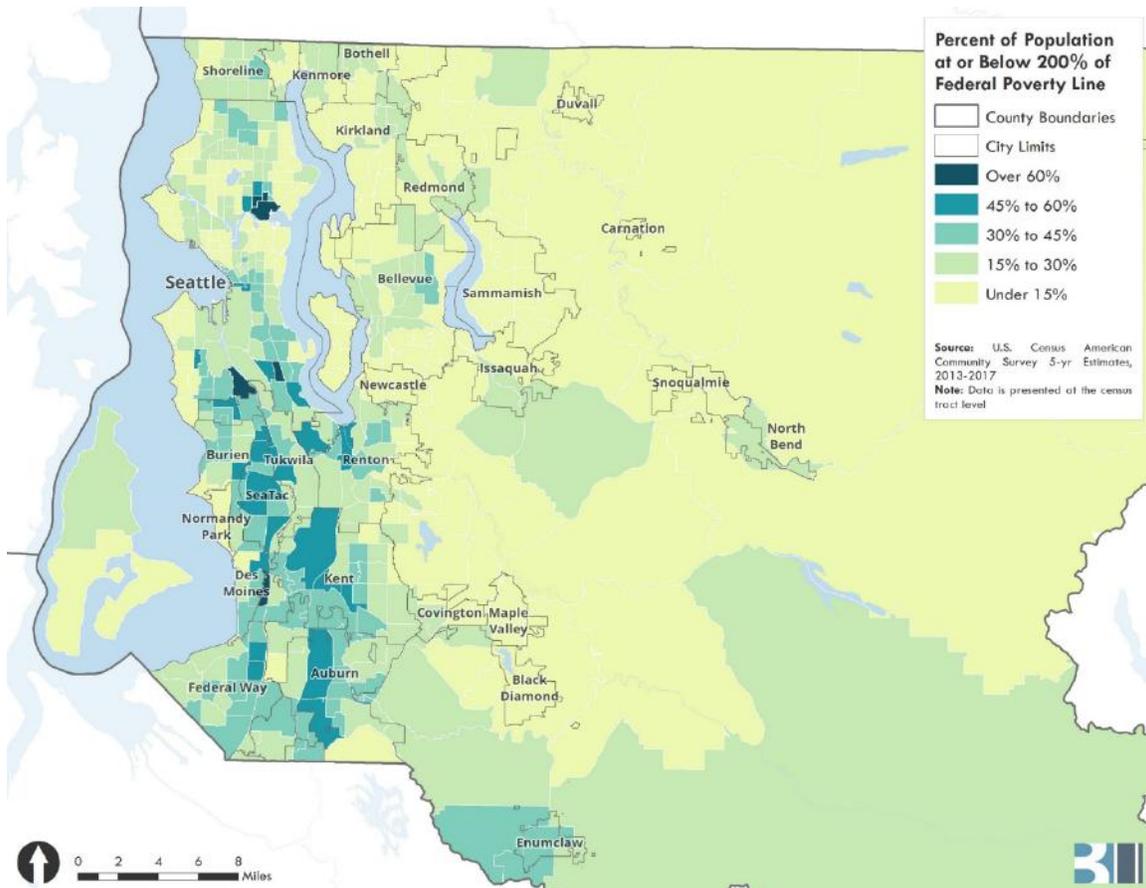
³ Source: American Community Survey 5-year Estimates, 2013-2017.

NO- AND LOW-INCOME HOUSEHOLDS

Due in part to strong job growth in the technology sector, many of the County's new residents are in higher income households. As of 2017, **212,500** King County residents (about 10 percent) lived in a household with income at or below the Federal Poverty Level (FPL).⁴ This level is set based on household size. In 2019, FPL for a four-person household is \$25,750 and \$12,490 for a one-person household.

King County Metro uses 200 percent of FPL, which is currently \$51,500 for a family of four, as a standard for determining eligibility for its Low-Income Fare Program. About **460,000** residents have incomes at or below this level (22 percent of the population). Figure 5 shows the percentage of the population at this income level by census tract. It shows higher percentages in south King County as well as pockets in South Seattle, the University District, North Seattle, Bellevue, and Shoreline.

Figure 5 Percentage of Population at or Below 200 Percent of Federal Poverty Level

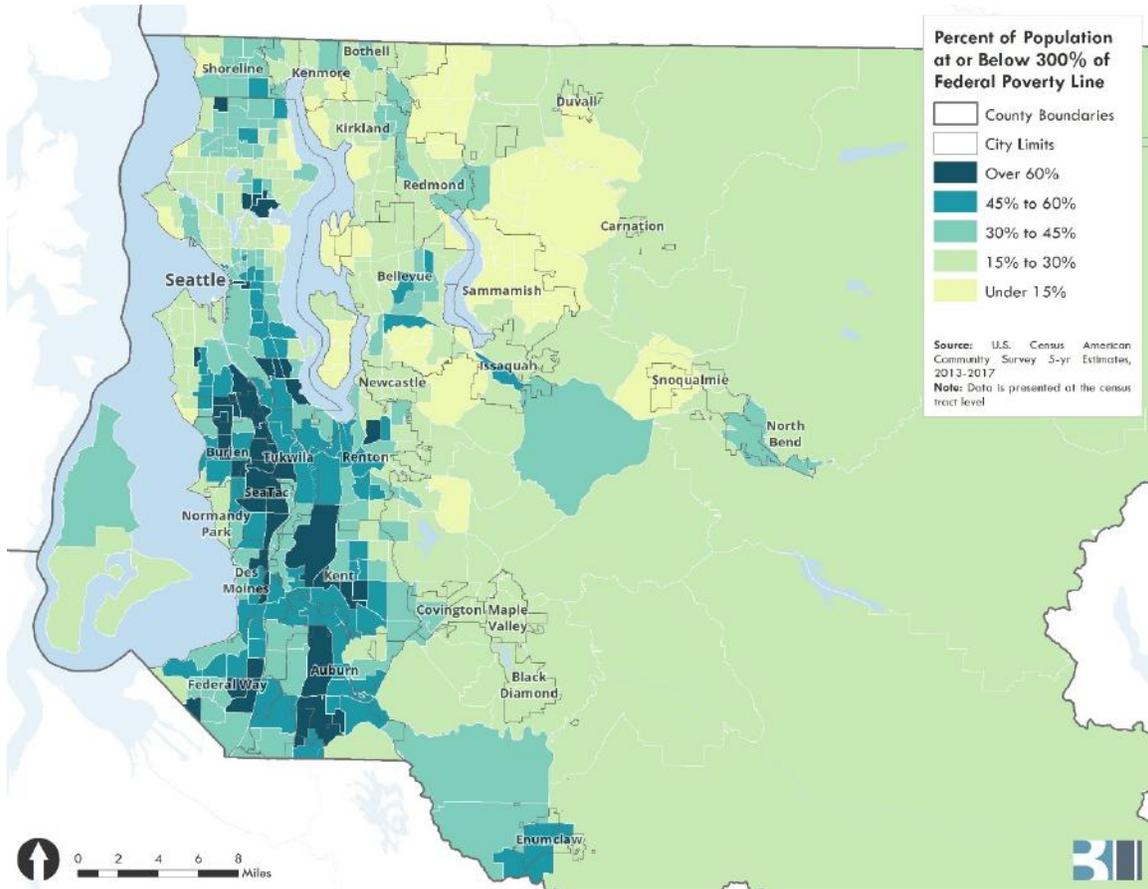


Source: U.S. Census American Community Survey 5-yr Estimates, 2013-2017; BERK, 2019.

⁴ American Community Survey 5-year Estimates, 2013-2017.

Figure 6 shows the percentage of the population at or below 300 percent of FPL, or about \$77,000 for a family of four. This map shows a similar pattern as Figure 5, with higher percentages across most of the areas listed above, particularly south King County.

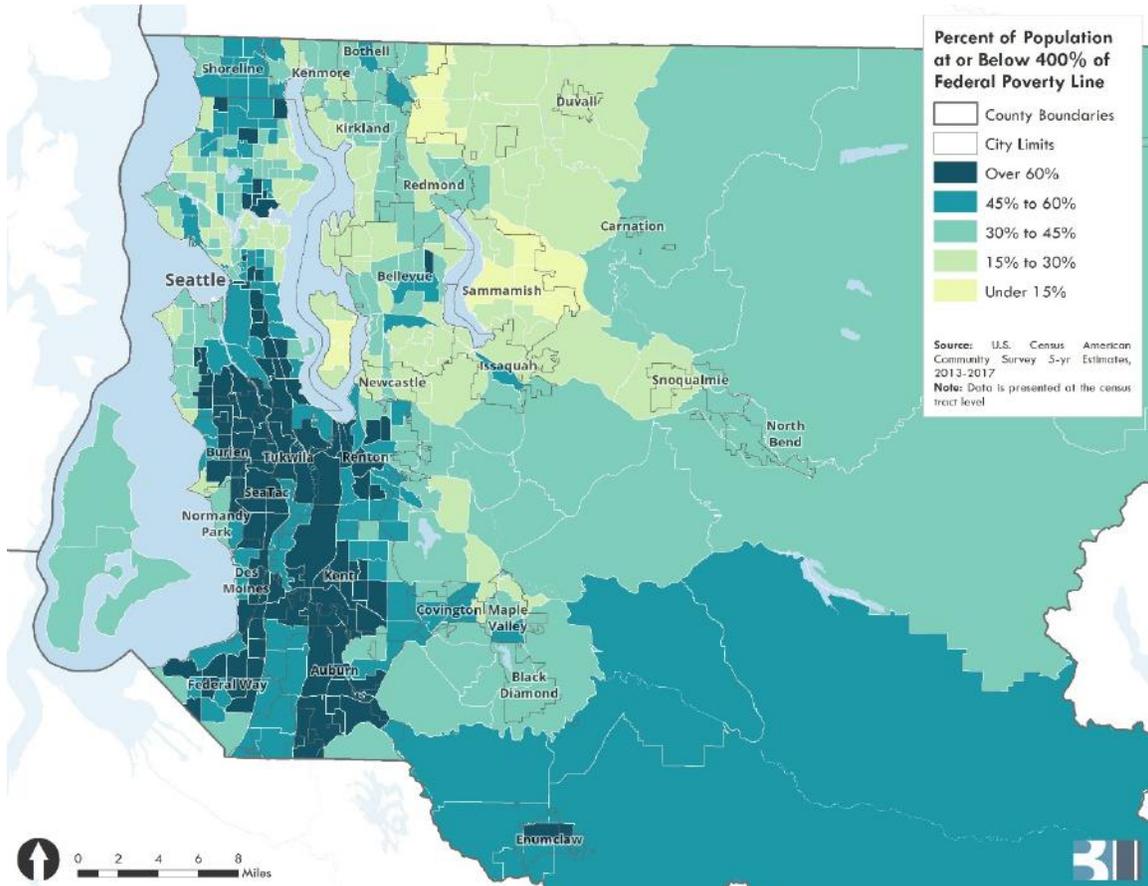
Figure 6 Percentage of Population at or Below 300 Percent of Federal Poverty Level



Source: U.S. Census American Community Survey 5-yr Estimates, 2013-2017; BERK, 2019.

Figure 7 shows the percentage of the population at or below 400 percent of FPL, or about \$103,000 for a family of four. Again, south King County shows the highest percentages while parts of Seattle and eastside communities show the lowest percentages.

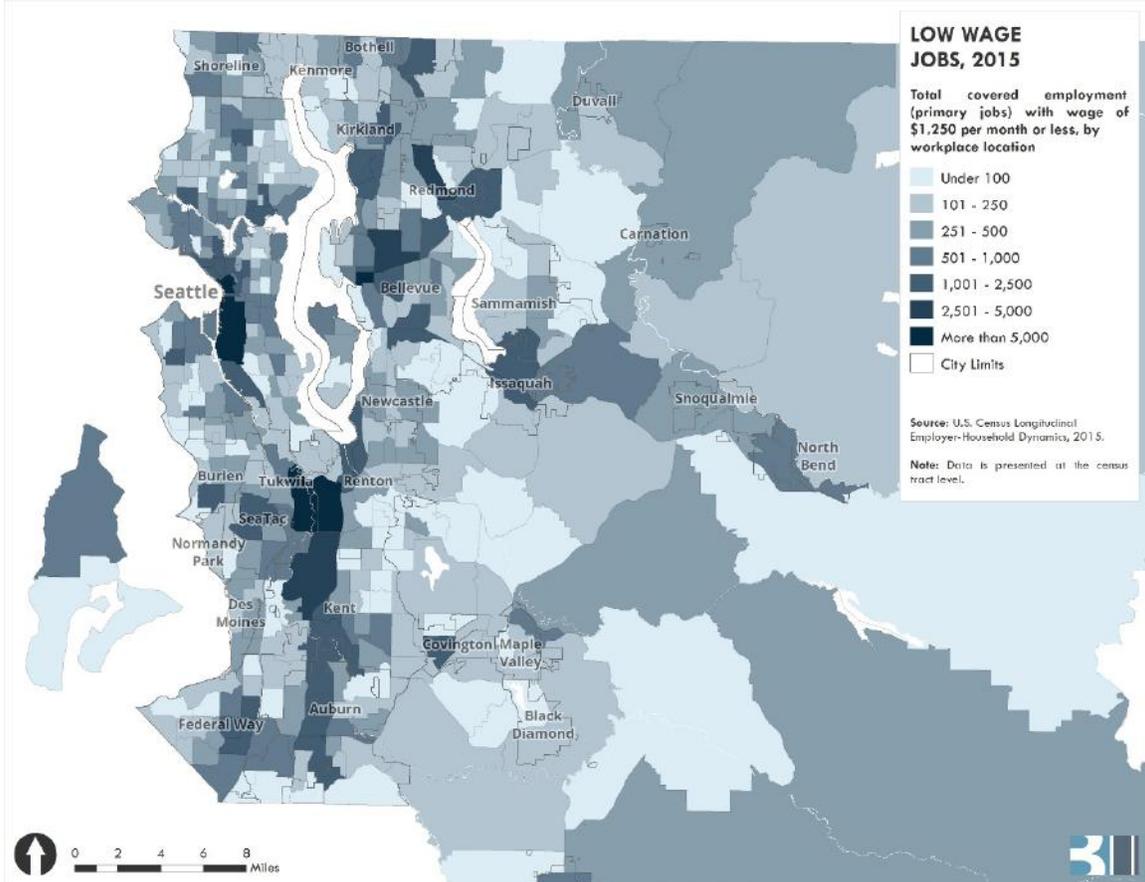
Figure 7 Percentage of Population at or Below 400 Percent of Federal Poverty Level



Source: U.S. Census American Community Survey 5-yr Estimates, 2013-2017; BERK, 2019.

Figure 8 shows the location of low-wage jobs (those with monthly wages of \$1,250 per month or less) across King County. While many jobs are concentrated in traditional job centers like downtown Seattle, Bellevue, and Redmond, this map shows that low-wage jobs are distributed widely. Other areas with notable concentrations of low-wage jobs include Tukwila, Renton, and Kent.

Figure 8 Low Wage Jobs, 2015

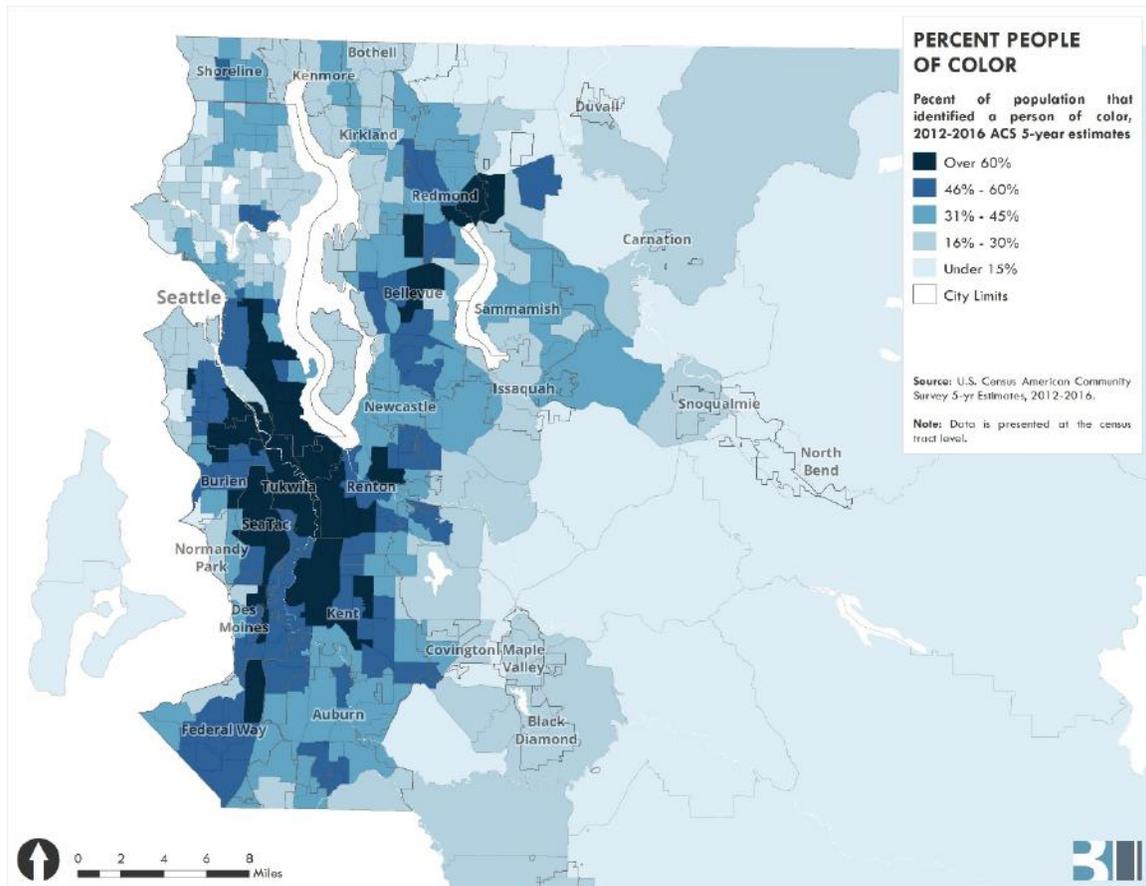


Source: U.S. Census Longitudinal Employer Household Dynamics, 2015; BERK, 2019.

BLACK, INDIGENOUS, AND PEOPLE OF COLOR

In 2017, 817,425 King County residents identified as people of color.⁵ This is 39 percent of the population, up from 34 percent in 2010. There was a gain of 183,073 people of color between 2010 and 2017, or about 77 percent of all population growth during that period. Figure 9 shows the percentage of population that identify as people of color by census tract. It shows high percentages in South Seattle, south King County, and parts of east King County, particularly Bellevue and Redmond.

Figure 9 Percentage of Population Identifying as People of Color, 2016



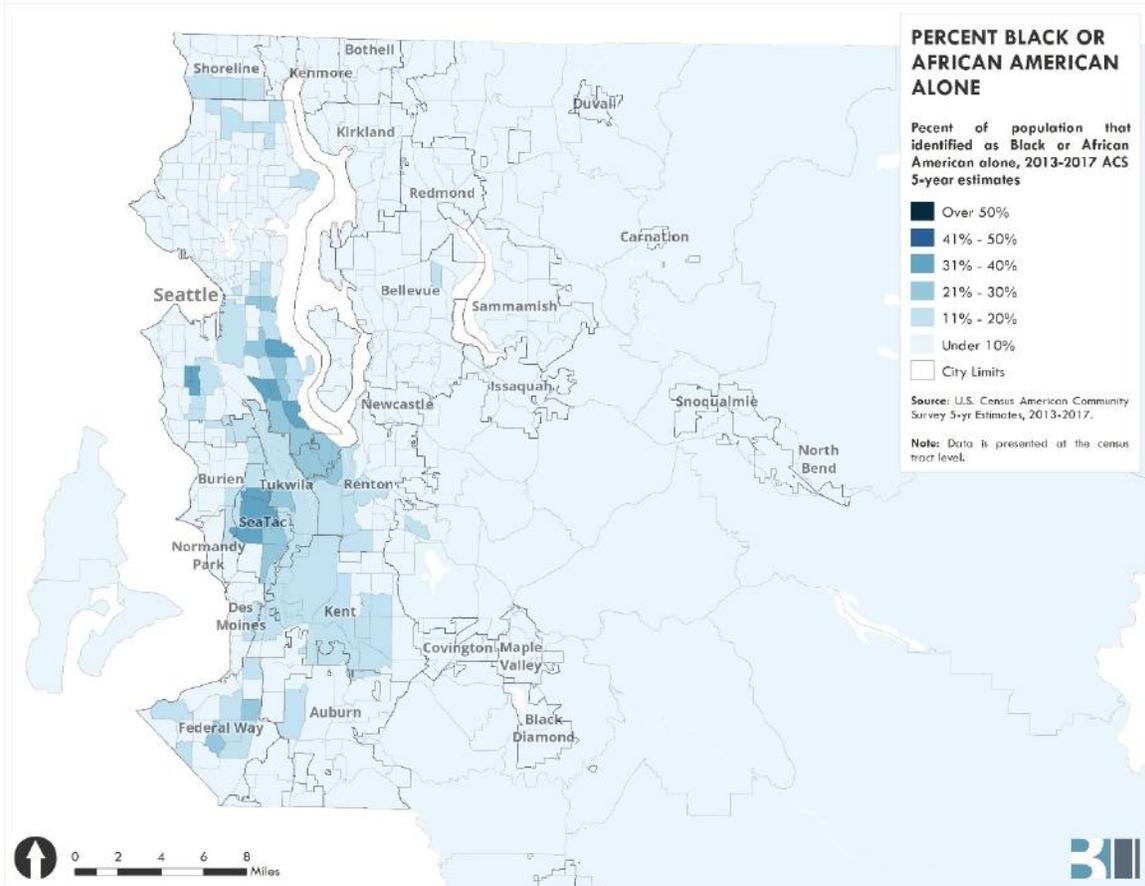
Source: U.S. Census American Community Survey 5-yr Estimates, 2013-2017; BERK, 2019.

⁵ In this analysis we define people of color as people who identify as a racial group other than White alone or who identify as Hispanic/Latino. This includes indigenous persons, defined by the census race categories of American Indian or Alaskan Native.

Black/African American

In 2017, 130,594 residents of King County identified as Black/African American alone.⁶ Areas with the highest percentage of Black/African American residents are in central and southeast Seattle, parts of West Seattle, Skyway, Tukwila, and Federal Way, as shown in Figure 10. Some of these residents are native born while others are from immigrant communities.

Figure 10 Percentage of Population Identifying as Black/African American Alone



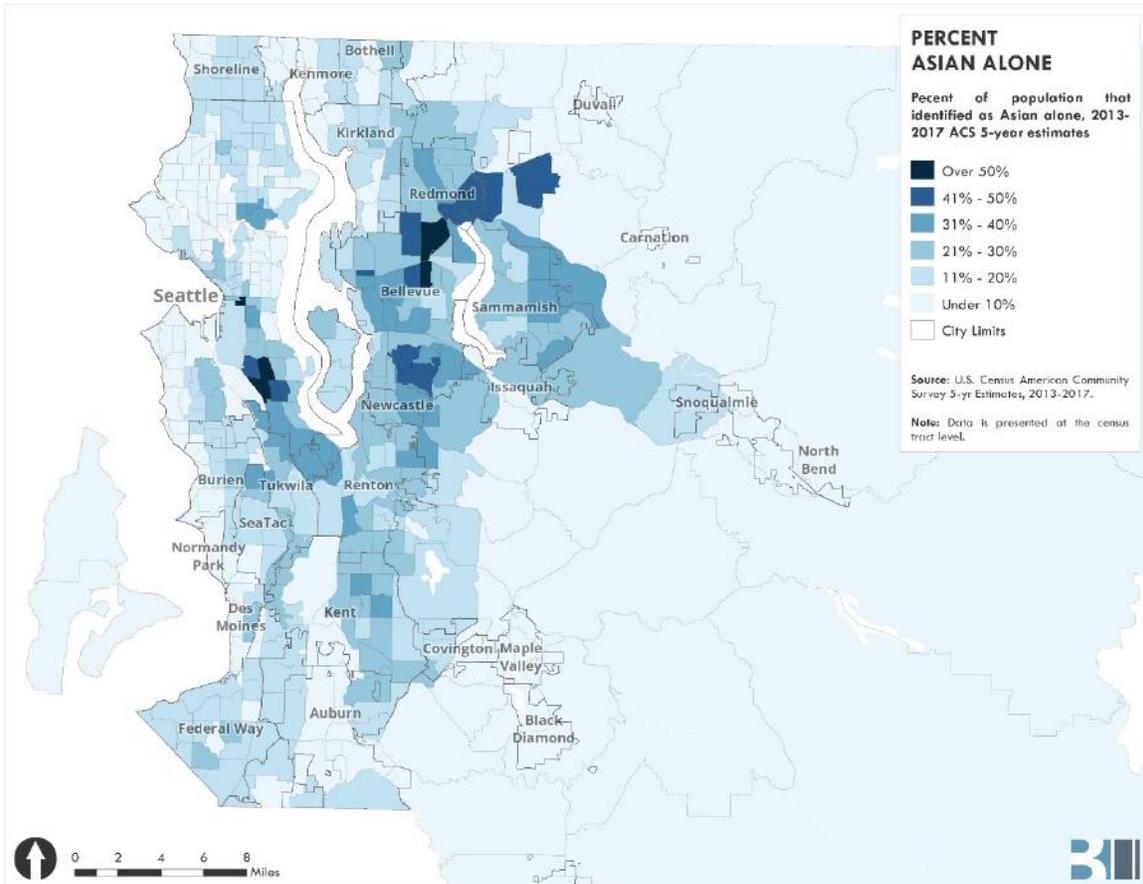
Source: U.S. Census American Community Survey 5-yr Estimates, 2013-2017; BERK, 2019.

⁶ In the Census survey, residents can identify with one or more racial group. This map shows people who only identify as Black/African American.

Asian

In 2017, 350,616 residents identified as Asian. These residents include a mix of many distinct cultural backgrounds including Chinese, Indian, Vietnamese, Filipino, Korean, and Japanese, among others. This distribution of Asian population is shown in Figure 11. It shows long-standing communities in Seattle, including the International District and Beacon Hill, as well as newer communities in eastern King County, particularly Bellevue, Overlake, and Redmond.

Figure 11 Percentage of Population That are Asian Alone

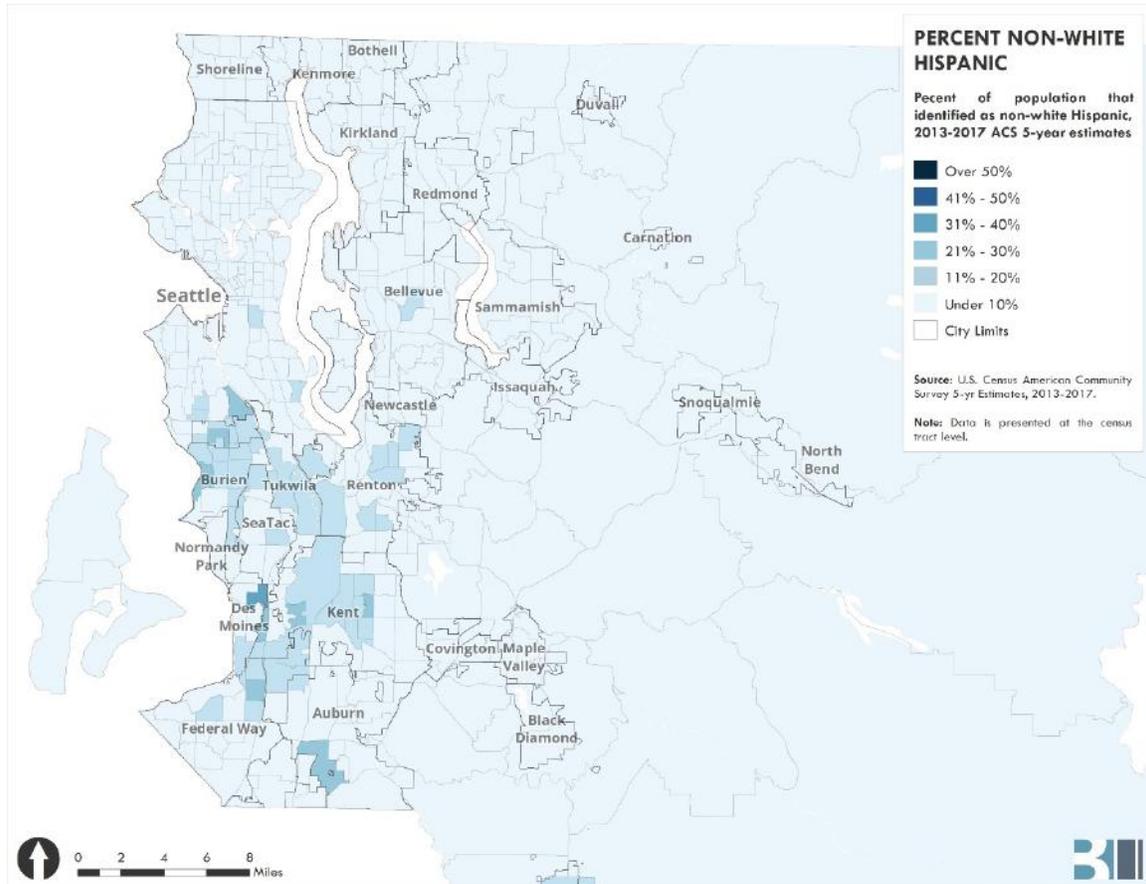


Source: U.S. Census American Community Survey 5-yr Estimates, 2013-2017; BERK, 2019.

Hispanic/Latinx

In 2017, 200,545 residents in King County identified as Hispanic or Latinx. Areas with higher percentage share of Hispanic or Latinx residents are mostly focused in southern King County, including pockets in Des Moines, South Park, Auburn, Federal Way, and Kent. This distribution is shown in Figure 12. These residents include distinct communities with family origins in North America, Central America, South America, and Europe.

Figure 12 Percentage of Population Identifying as Non-White and Hispanic or Latinx



Source: U.S. Census American Community Survey 5-yr Estimates, 2013-2017; BERK, 2019.

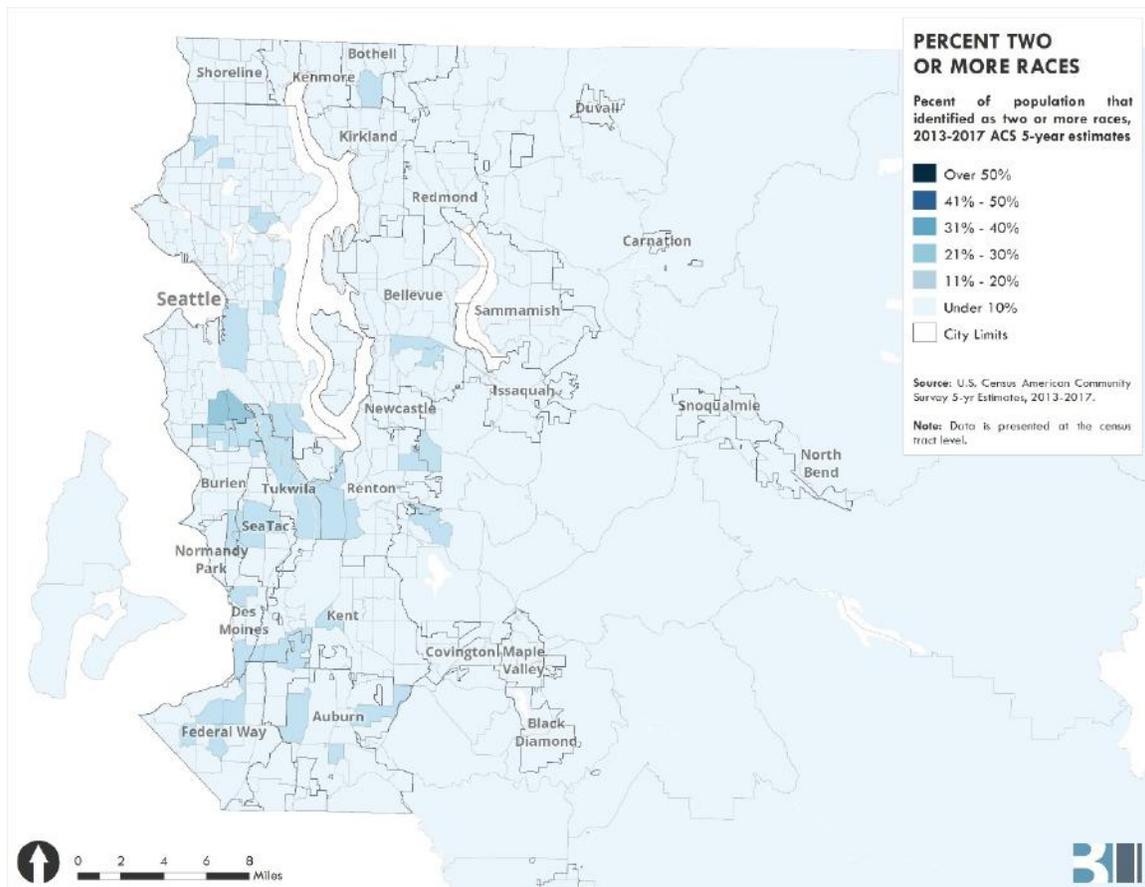
Indigenous (American Indian and Alaskan Native)

King County is located on native land of the Duwamish and Suquamish tribes. Our indigenous population includes 14,276 residents who identify as American Indian or Alaskan Native. An additional 22,000 identify as American Indian or Alaskan Native and another race. Due to the smaller population of indigenous people compared to other racial and ethnic groups, reliable information about the spatial distribution of these residents across the County is not available.

People Identifying with Two or More Races

In 2017, 129,688 residents in King County identified as two or more races. The distribution of this population is shown in Figure 13. Areas with relatively higher percentage shares tend to be in South Seattle and south King County, with some exceptions such as the University of Washington and some eastside neighborhoods.

Figure 13 Percentage of Population Identifying as Two or More Races



Source: U.S. Census American Community Survey 5-yr Estimates, 2013-2017; BERK, 2019.

INDICATORS OF DISPLACEMENT

As King County grows rapidly, its demographic make-up is also changing, as is the distribution of household types across the region. As high demand for homes in King County drives up housing costs and increases pressure for higher density redevelopment, many residents and policy makers are concerned about the potential for displacement. This term refers to instances where a household is forced or pressured to move from their home against their wishes. There are three kinds of displacement:

- **Physical displacement:** Displacement as a result of eviction, acquisition, rehabilitation, or demolition of property, or the expiration of covenants on rent- or income-restricted housing.
- **Economic displacement:** Displacement due to inability to afford rising rents or costs of homeownership like property taxes.
- **Cultural displacement:** Residents are compelled to move because the people and institutions that make up their cultural community have left the area.

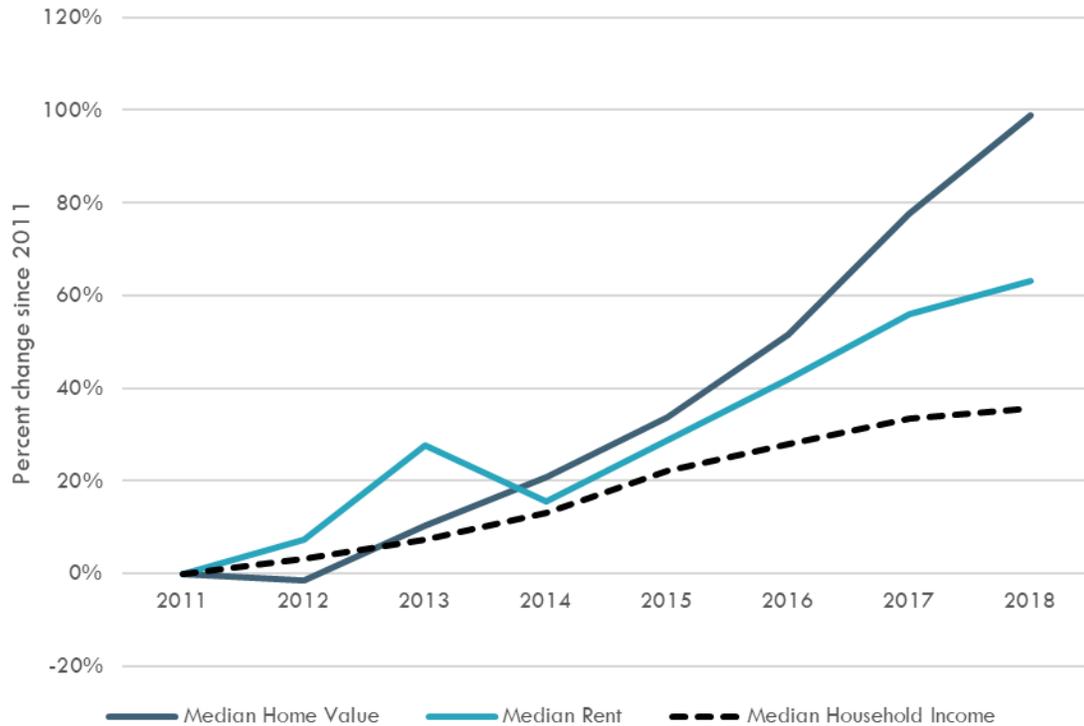
Displacement can result in households relocating to more affordable communities further away from employment centers and the urban core. Metro and partners must consider how to adapt their services to meet the needs of these residents.

This section presents and analyzes indicators of displacement to help inform an understanding of demographic and socio-economic trends. Since appropriate data⁷ for analyzing physical displacement is not available countywide, this appendix focuses on economic and cultural displacement.

Economic Displacement

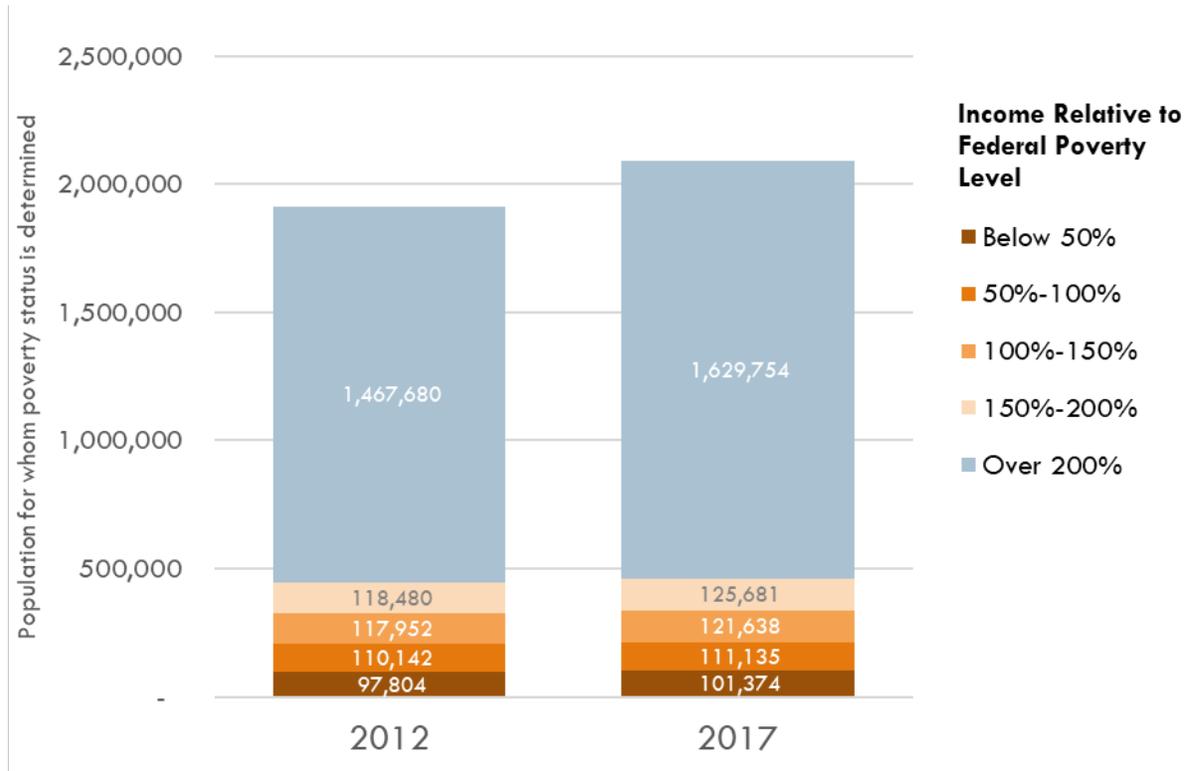
With increasing population comes increased demand for homes. When new home construction does not keep pace with job and population growth, increased competition pushes up market-rate housing costs. Even with the influx of higher income households, housing costs have increased at a faster rate than median income. This disparity between growth in housing costs and incomes is shown in Figure 14. Between 2011 and 2018, median household incomes increased by less than 40 percent, while median housing prices nearly doubled and median rents increased by over 60 percent. This shows that income growth is not keeping pace with growth in housing costs, which affects housing affordability across the income spectrum.

⁷ Some cities collect data about instances of physical displacement. For example, the City of Seattle requires landowners to survey existing residents when applying for a demolition or renovation permit, under the Tenant Relocation Assistance Ordinance. However, this kind of data is not available in a standard format for all jurisdictions within King County. For an analysis of physical displacement in Seattle, see the [Mandatory Housing Affordability Environmental Impact Statement](#).

Figure 14 Percent Change in Housing Costs and Median Household Income, 2011 through 2018

Source: Washington State Office of Financial Management, 2018; Zillow, 2019; BERK, 2019.

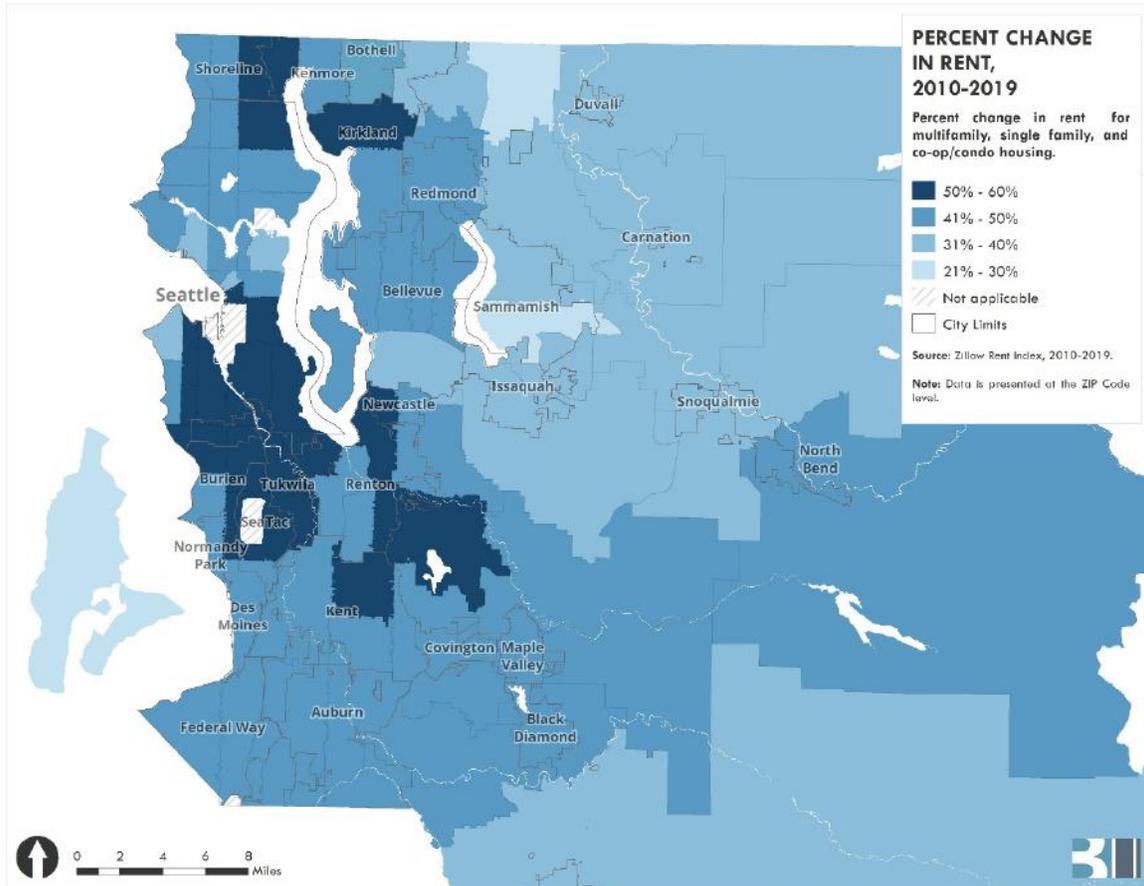
Not all households in King County saw their incomes rise by 40 percent during this period. Growth in median income is largely driven by growth in the number of new higher-income households moving into the County. Many of these new residents were attracted by the strong job growth in the technology sector. Figure 15 compares countywide population growth at different income levels. It shows that the number of low-income residents has grown slowly in recent years, while the number of higher-income residents is increasing much more rapidly. Between 2012 and 2017, the number of residents with incomes above 200 percent of FPL increased by 162,074 (11 percent growth), while those with incomes below 200 percent of FPL increased by only 15,450 (3.5 percent growth).

Figure 15 Change in Population at or Below 200 Percent of Federal Poverty Level, 2012 - 2017

Source: US Census ACS 5-Year Estimates, 2008-2012 & 2013-2017; BERK, 2019.

While rents have increased significantly in all parts of King County, the changes have not been uniform. As shown in Figure 16, many of the areas with the greatest percentage of low-income households are also areas that saw some of the highest increases in monthly rents. These include much of South Seattle, Burien, White Center, Skyway, SeaTac, Tukwila, Kent, Renton, Shoreline, and Lake City. Across south King County, rents increased by more than 40 percent.

Figure 16 Percent Change in Monthly Rent, 2010 - 2019



Source: Zillow Rental Index, 2010-2019; BERK 2019.

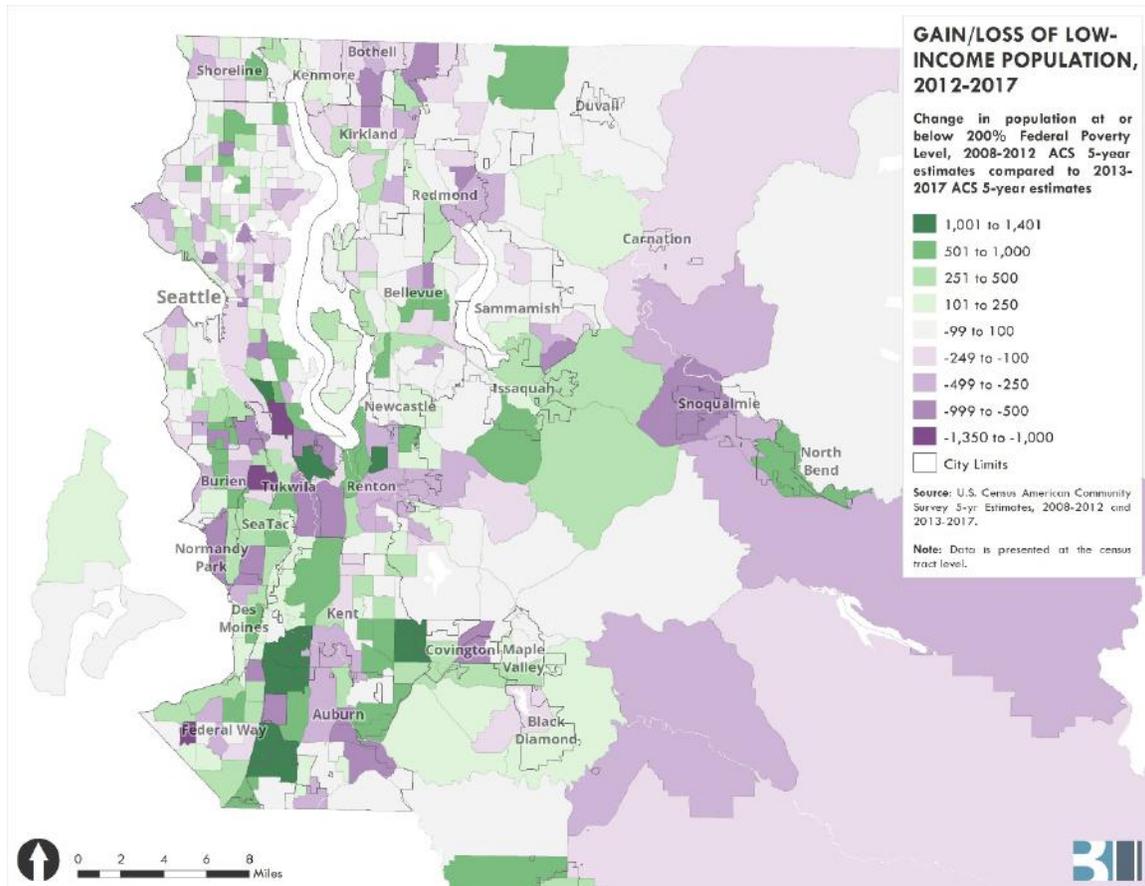
While the County overall has not seen a loss in the total number of low-income households, many households have been pushed out of their homes due to economic pressures and have relocated to other parts of the County or region. It is also possible that the economic displacement of households relocating outside of King County has been balanced by low-income households moving into the County. A closer look at the spatial distribution of change in the number of low-income households can provide indicators of where economic displacement may be occurring at the neighborhood scale.

Figure 17 shows the spatial distribution of the gain and loss of low-income population across King County. South King County has seen considerably more gains in low-income population than other areas of the County, particularly in Kent and Federal Way. However, there are pockets of gains throughout the County. There are also areas with significant losses, including some neighborhoods in South Seattle, Tukwila, Auburn, and Renton. One explanation for these losses is the economic displacement of low-income households due to rising housing costs. But there are other possible explanations as well:

- Change in the income status of existing households who saw increases in their household earnings;

- Gain or loss of income-restricted affordable housing and lower-cost apartment housing;
- In-migration of low-income households, including refugee resettlement; or
- High margins of error in some tract-level census estimates, which can result in unreliable cause “noise” and unexpected changes when comparing different survey periods.⁸

Figure 17 Change in Population at or Below 200 Percent of Federal Poverty Level, from 2012 to 2017



Source: US Census ACS 5-Year Estimates, 2008-2012 & 2013-2017; BERK, 2019.

Cultural Displacement

Cultural displacement is also difficult to measure directly. The approach used in this appendix is to compare the number of residents that identify with one racial or ethnic group at two points in time at the neighborhood scale. These comparisons look at a longer period, as cultural displacement can be a longer-term process that is often

⁸ These maps are based on estimates of population by income level from the American Community Survey (ACS), which only surveys a sample of the total population. When a census tract has a lower survey response rate, there is a smaller sample of population on which to base estimates about the entire population. This increases the margin of potential error in the estimate, and therefore the reliability of calculated change in low-income population from one period to the next.

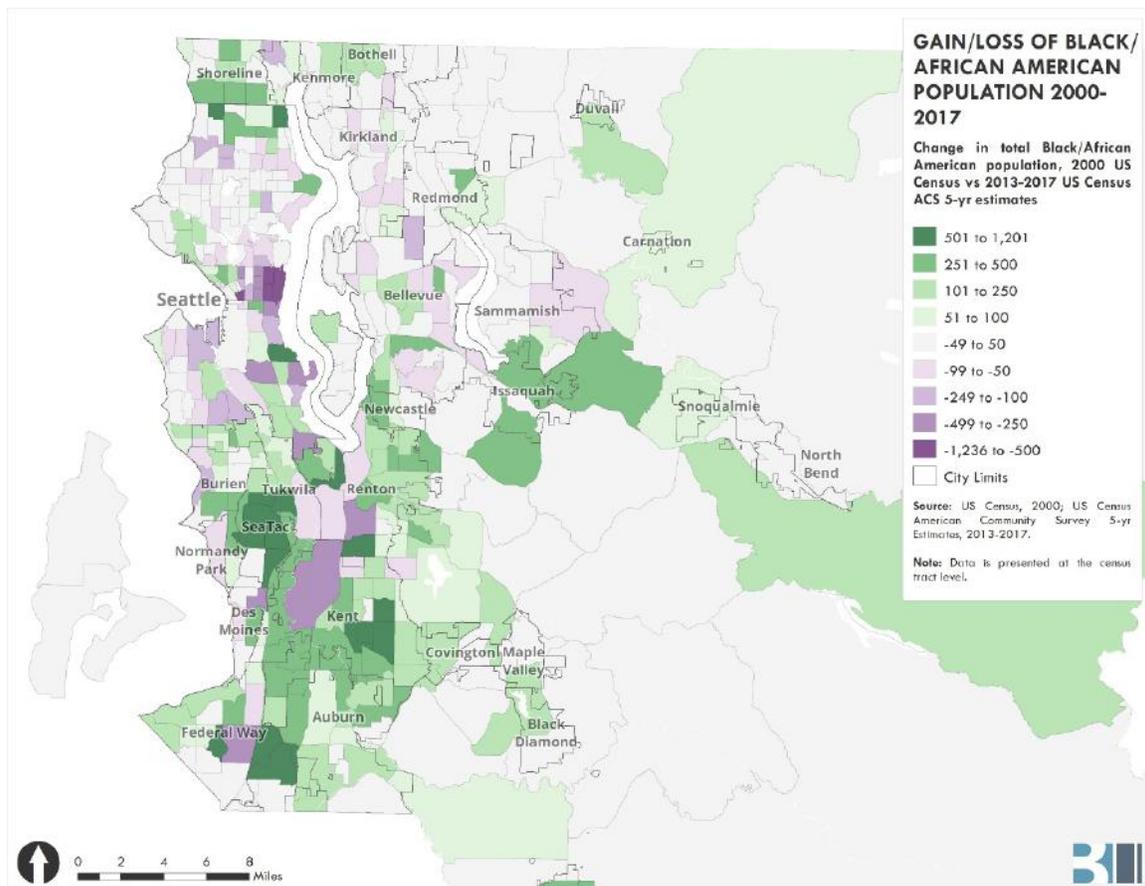
prompted by economic and physical displacement but may be related to other demographic and real estate market trends as well.

Figure 18 illustrates the gain or loss of Black/African American population between 2000 and 2017 by census tract. While the spatial pattern is complex, it shows that the areas of largest losses included parts of the Central District, Downtown, Beacon Hill, and Columbia City in Seattle, as well as parts of Renton, Kent, and Federal Way. Overall, south King County communities saw the greatest increases in Black/African American residents, although parts of Shoreline, Issaquah, and North Seattle also saw notable gains.

While the displacement of black residents is undoubtedly happening and is well documented in neighborhoods such as the Central District, this indicator can be affected by the issues listed above for economic displacement, as well as:

- Increasing numbers of people who identify as bi-racial or multi-racial in census surveys can result in a decline in the number of people who identify as Black/African American alone; or
- In-migration of new residents of African descent, including refugee resettlement.

Figure 18 Change in Black/African American Population, 2000-2017



Sources: US Census, 2000; US Census ACS 5-Year Estimates, 2013-2017, BERK, 2019.

CONCLUSIONS

While the patterns of demographic and socioeconomic change are complex, there are some trends that are important to consider when evaluating current and future mobility needs in King County.

- A great deal of King County's population growth is occurring as dense infill and redevelopment in the existing urban centers of larger cities like Seattle and Bellevue. These new households benefit from a transit network designed to serve those dense urban centers very well.
- However, rising housing costs contribute to increased displacement pressures among some vulnerable communities, including low-income residents, people of color, limited English speakers, and people with disabilities. Many of these residents are being pushed from urban centers to less expensive areas like south King County. Many of these south County communities do not currently have the same level of transit service as an urban center. This is because more dispersed and lower-density development patterns limit the opportunities to efficiently provide more extensive fixed-route transit service.
- Many low-wage jobs are dispersed throughout the County. Although some are concentrated around more traditional employment centers with greater transit service, many are not. Therefore, accessing low-wage jobs may be a challenge for many low-income residents.
- King County is also becoming increasingly diverse. With this racial, cultural, and ethnic diversity comes greater diversity in mobility needs.

The County's current period of economic growth is not likely to continue at the same rapid pace in years to come. Nevertheless, the regional housing market and employment trends contributing to these outcomes are not expected to fundamentally change. King County must be responsive to these changing mobility needs to support equitable access to opportunity.

3 Travel Trends and Patterns

The past decade has been a period of rapid growth in King County. This section details the relationship between income level and job accessibility by transit, and how average vehicle miles traveled has decreased over time for automobile trips but increased for transit riders. The analysis shows that areas with higher population density generally have more transit service available and correspondingly higher rates of transit usage and ridership. In addition, this section describes the interaction between surrounding land use and factors such as population density, travel demand by time of day, and origin-destination patterns. Ultimately, understanding travel trends and patterns helps King County Metro anticipate future mobility needs and meet them in an equitable and sustainable manner.

GLOSSARY

This chapter refers to terms that are specific to analysis conducted for this appendix including priority populations and Priority Population Areas (PPA), typical time periods for transit analysis.

Priority Population Areas refer to Census block groups that have high prevalence of the following demographic variables from the American Community Survey (ACS) 2017 5-year estimates:

Variable	Definition
Household Poverty	200 percent of Federal Poverty Line
Foreign Born Individuals	Anyone who is not a U.S. citizen at birth. This includes naturalized U.S. citizens, lawful permanent residents (immigrants), temporary migrants (such as foreign students), humanitarian migrants (such as refugees and asylees), and unauthorized migrants.
Households of Color	All ethnicities excluding Non-Hispanic White
Limited English-Speaking Households	A household in which no member 14 years and over speaks only English or speaks a non-English language and speaks English “very well.”
Individuals with Disabilities	The Census Bureau reports six disability types: hearing difficulty, vision difficulty, cognitive difficulty, ambulatory difficulty, self-care difficulty, and independent living difficulty. An individual who reports any of these six disability types is considered to have a disability.

This chapter speaks generally about “transit.” This includes all transit service included in the Puget Sound General Transit Feed Specification (GTFS) including bus, light rail, streetcar, commuter rail, and ferry service available within King County.⁹

Transit service time periods mentioned in this chapter include the following:

- AM Peak Period: 6–9 AM
- Midday Period: 11 AM – 1 PM
- Evening Period: 6–9 PM

ACCESSIBILITY AND INVESTMENTS

This section presents data on a range of travel and demographic variables related to how transit is provided and used today. This information can help King County Metro determine where and when to invest in capital and transit operations improvements.

Table 1 shows typical transit accessibility of a person living in King County. The table includes estimates of the number of jobs that can be reached by transit broken down by time period for the general population and for priority populations. Both the general and priority population have significantly lower midday job access than during the AM or Evening periods. On average, approximately 30 percent fewer jobs are within 60 minutes during the midday, as compared to the AM peak period.

Figure 19 and Figure 20 show job access by transit in the AM peak period (6-9 AM) and Midday period (11AM-1PM), respectively. As shown in Figure 19, north and east King County have better access to jobs compared to south and southeast King County. Access and distribution to other services (e.g., social, housing, medical) follow a similar pattern to the job accessibility distribution. As shown in Figure 20, the best access to jobs and services in the midday is concentrated around major employment centers. This is due in part to reduced transit service and frequency during the midday.

Table 1 Typical Transit Accessibility of a Person Living in King County

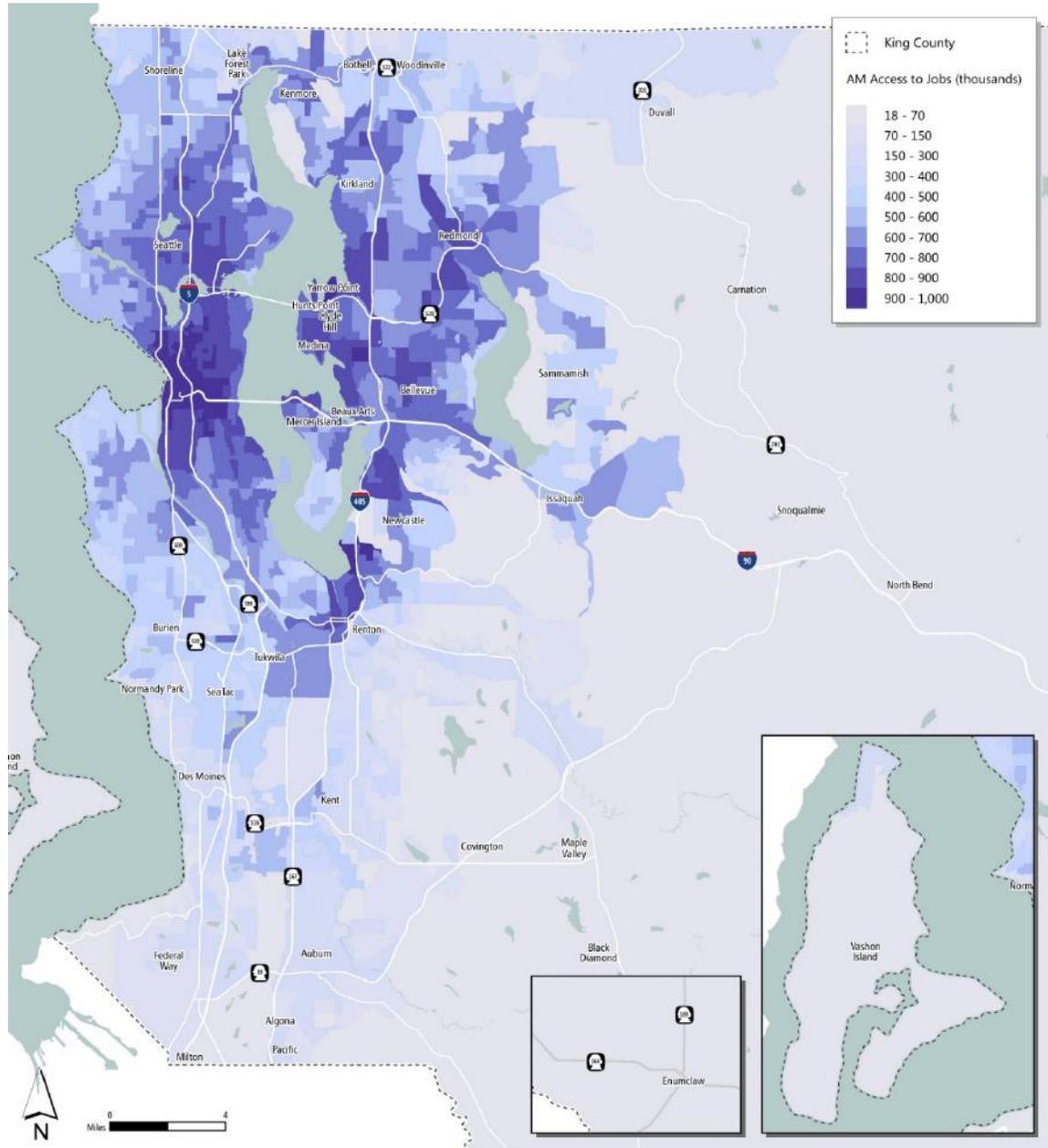
Time Period	General Population Weighted Job Accessibility ¹⁰	Priority Population Weighted Job Accessibility
AM	363,500	365,000
Midday	225,000	236,500
Evening	299,000	326,000

Source: American Community Survey (ACS) 2017 5-Year Estimate, Fehr & Peers 2019.

⁹ Agencies included in the Puget Sound GTFS are King County Metro, Sound Transit, Community Transit, Pierce Transit, Everett Transit, and Intercity Transit

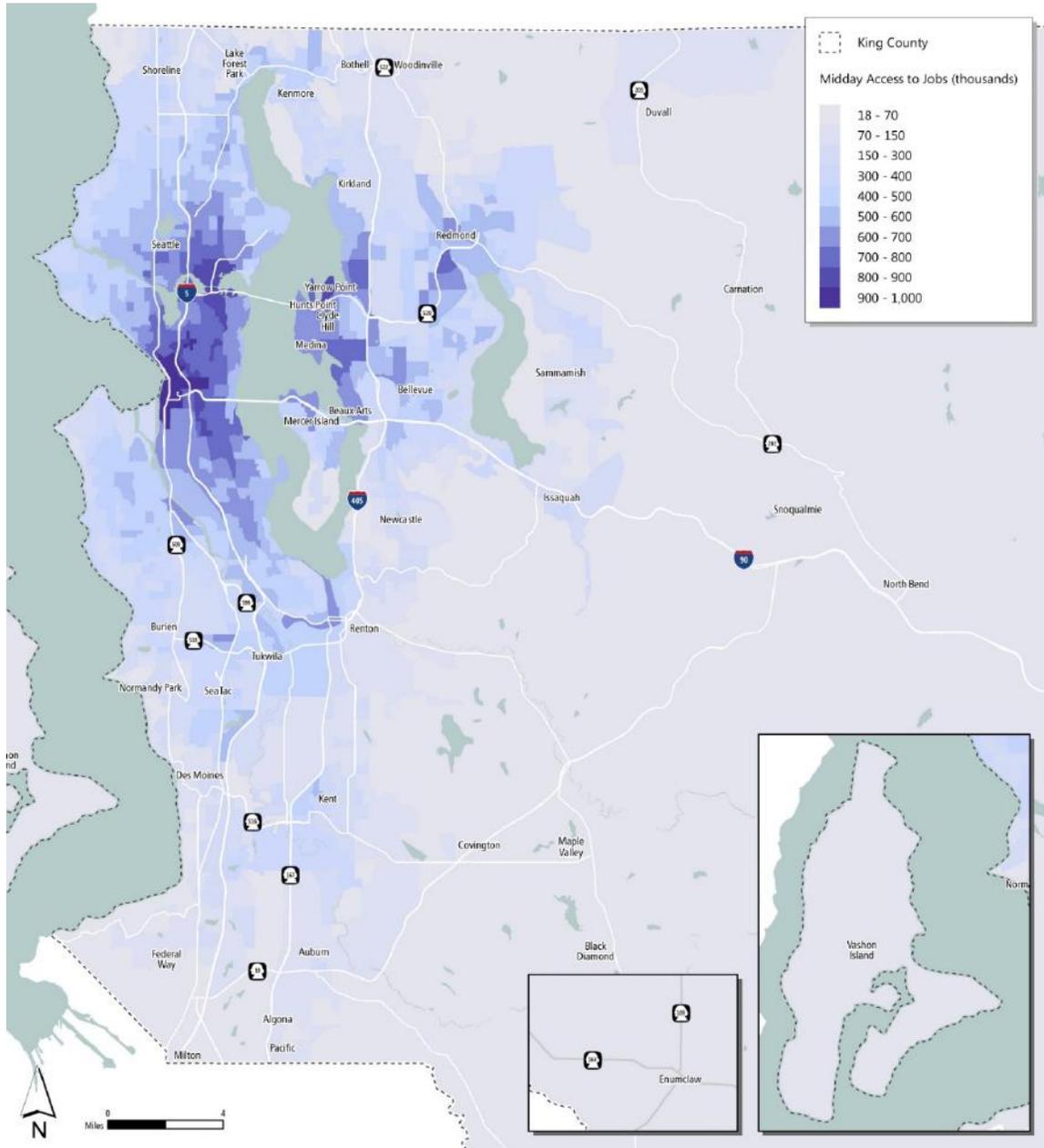
¹⁰ Population-weighted job accessibility is determined by calculating the average job accessibility for each census block group, weighted by the population within each individual census block group.

Figure 19 AM Peak Period Job Access by Transit (2015)



Source: US Census Longitudinal Employer Household Dynamics (LEHD) 2015, Puget Sound Region General Transit Feed Specification (GTFS) 2019.

Figure 20 Midday Period Job Access by Transit (2015)

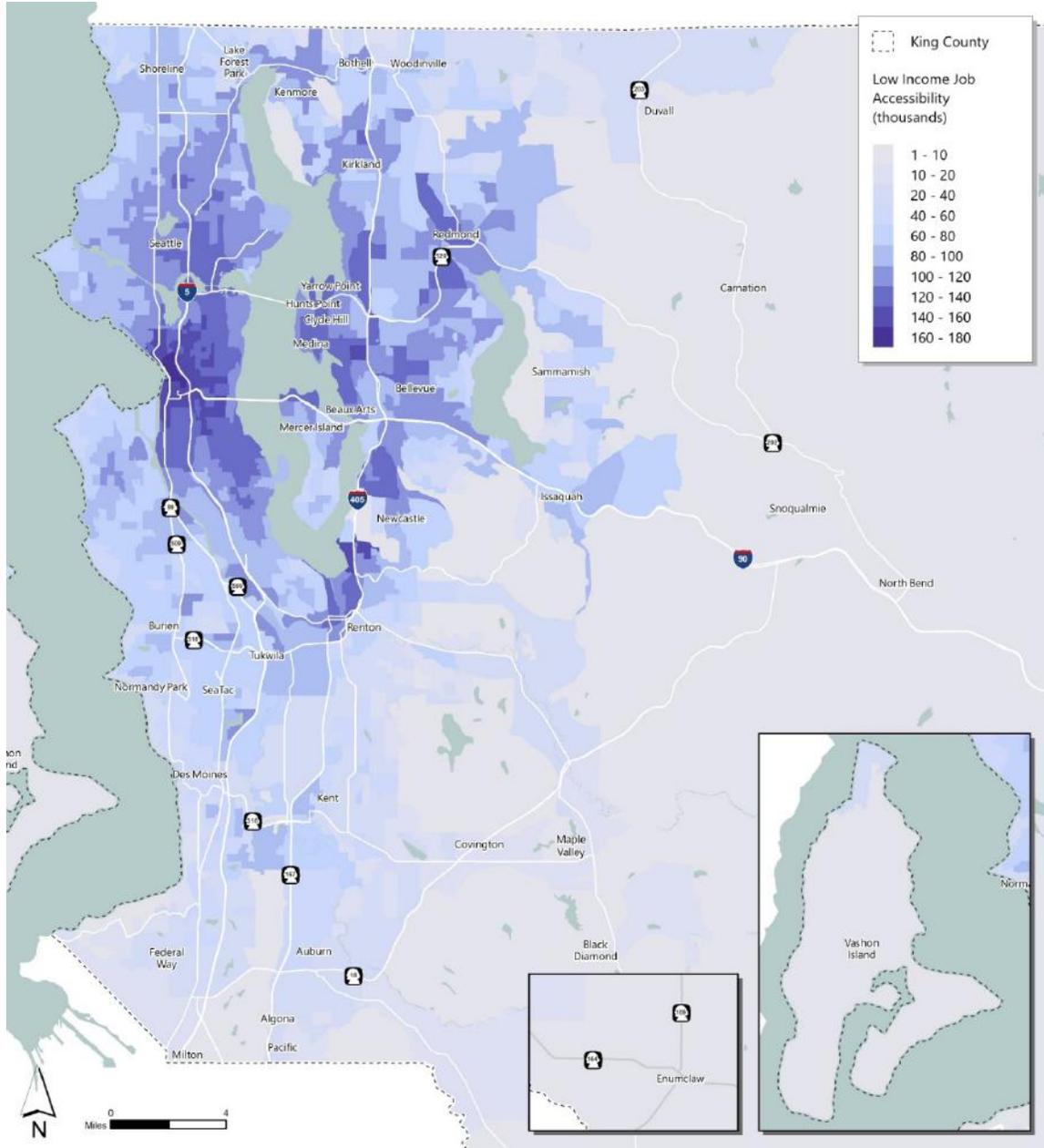


Source: US Census Longitudinal Employer Household Dynamics (LEHD) 2015, Puget Sound Region General Transit Feed Specification (GTFS) 2019.

While low-income jobs (less than \$1,200 per month) are more distributed across the County as compared to all jobs, good transit access to low-income jobs is concentrated near activity centers such as Downtown Seattle, Bellevue, and in Renton as shown in Figure 21, primarily because of the transit service to those job centers. Figure 22 shows the transit to auto accessibility ratio. This measures the ratio of the number of jobs within 60 minutes on transit as compared to a 60-minute drive in a car during the same AM period. Generally, transit is most competitive to

using a car within Seattle and in some portions of east King County as compared to the rest of the King County.¹¹

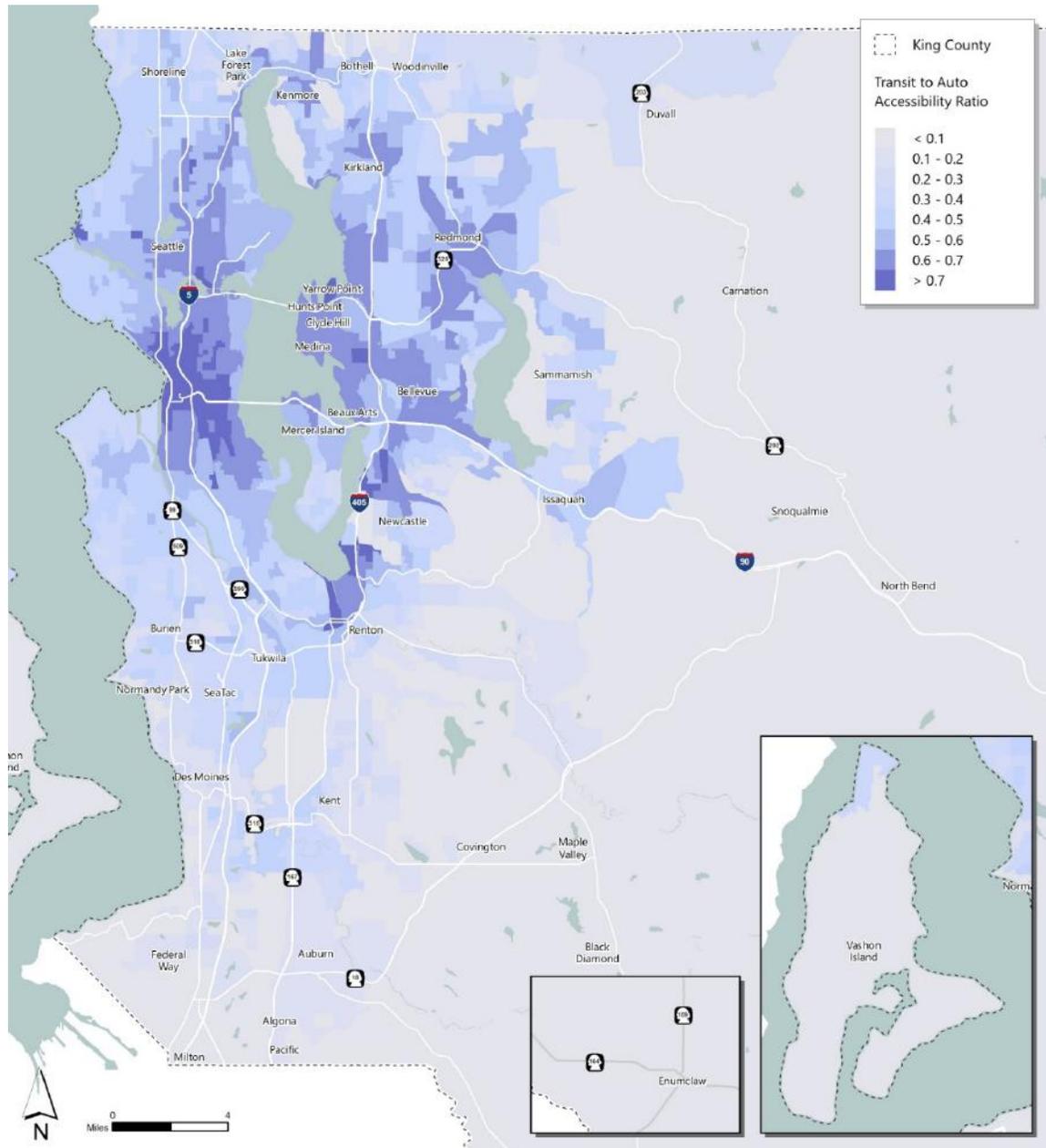
Figure 21 Low-Income Job Accessibility by Transit in AM Period (2015)



Source: US Census Longitudinal Employer Household Dynamics (LEHD) 2015, Puget Sound Region General Transit Feed Specification (GTFS) 2019.

¹¹ Additionally, a ratio of 0.7 for job accessibility on transit as compared to driving is approximately equivalent to a ratio that is “tolerable for choice riders” as defined by the Transit Capacity and Quality of Service Manual (TCQSM).

Figure 22 Transit to Auto Accessibility Ratio in AM Period



Source: Puget Sound Region General Transit Feed Specification (GTFS) 2019, Open Street Map (OSM) 2019.

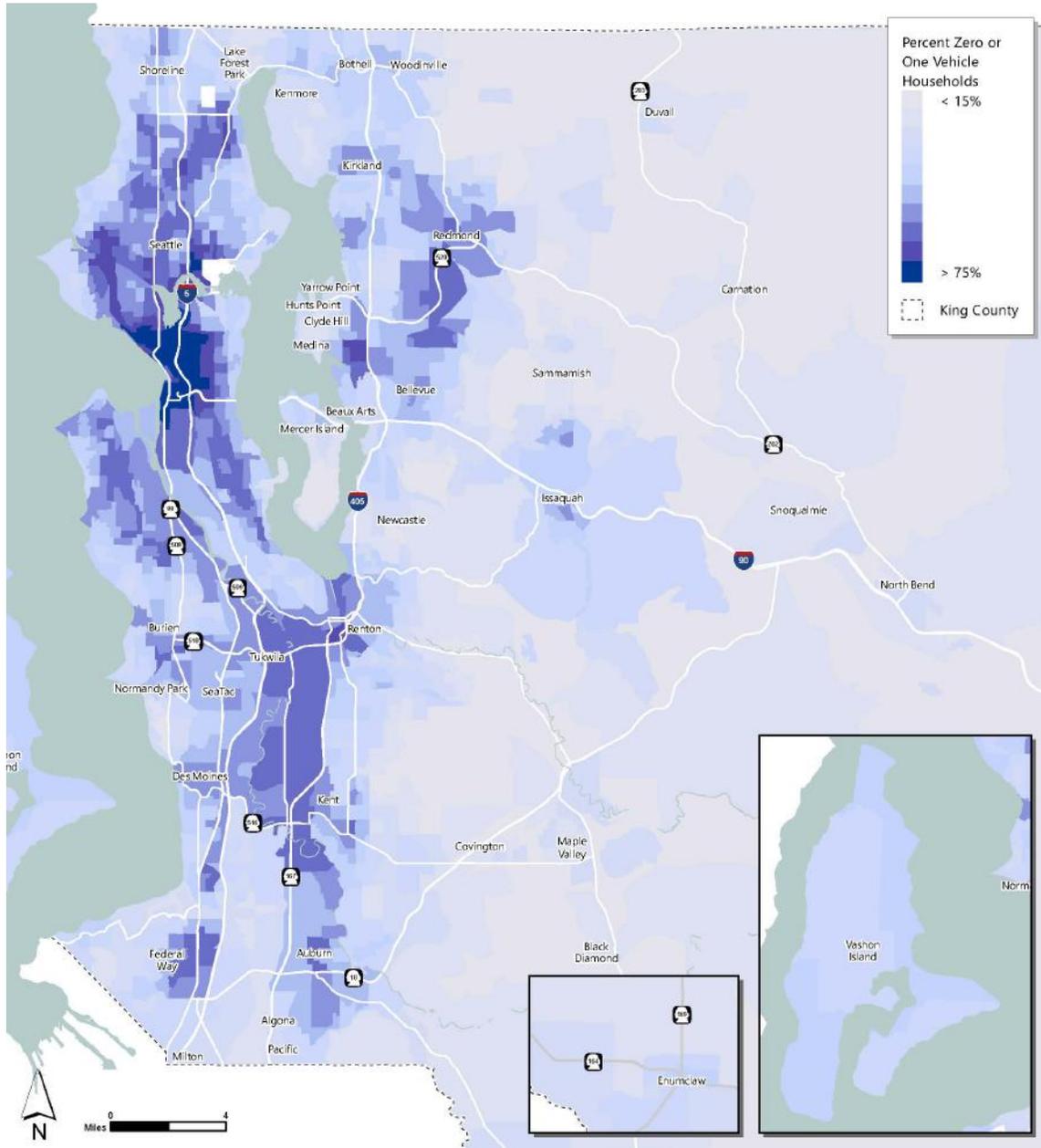
MODE CHOICE

Figure 23 illustrates the percent of residents by census block group with zero or one vehicle.¹² This metric helps illustrate residents who may rely on transit more. King County Metro should consider providing transit service in both locations where people are already transit users, as well as locations serving communities with access to two vehicles in effort to reduce vehicle dependence by these households. Ultimately, a reduction in vehicle ownership can help reduce vehicle miles traveled (VMT) by single occupancy vehicles.

There is a high concentration of low-vehicle ownership in neighborhoods near Downtown Seattle. This correlates with Figure 29, which illustrates population density and the previous Figure 19 that shows a high number of jobs accessible on transit. However, other clusters of low-vehicle ownership may be explained by the correlation with low-income households.

¹² Because average household occupancy is over two people, “low-vehicle” ownership households are typically defined as those with zero and one vehicles to denote populations without everyday access to a vehicle.

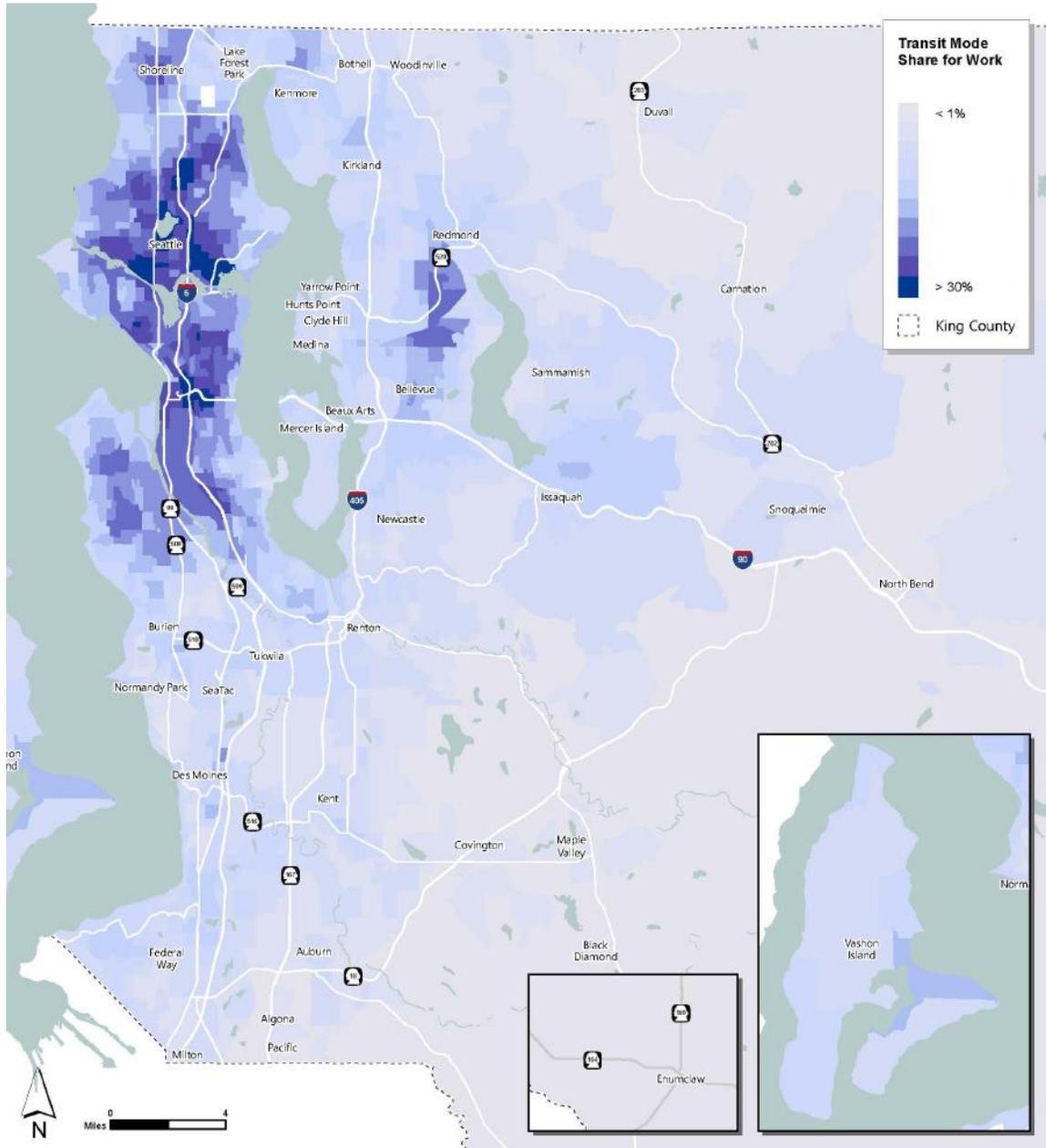
Figure 23 Zero or One Vehicle Households (2017)



Source: American Community Survey (ACS) 2017 5-Year Estimate

Figure 24 shows the percentage of households that commute to work on transit. Transit mode share is highest in north King County. However, there are also some pockets of higher transit mode share in east King County. There is generally lower transit mode share in south King County, which correlates with the lower job accessibility via transit in this part of the County, as shown previously in Figure 22.

Figure 24 Transit Mode Share for Work

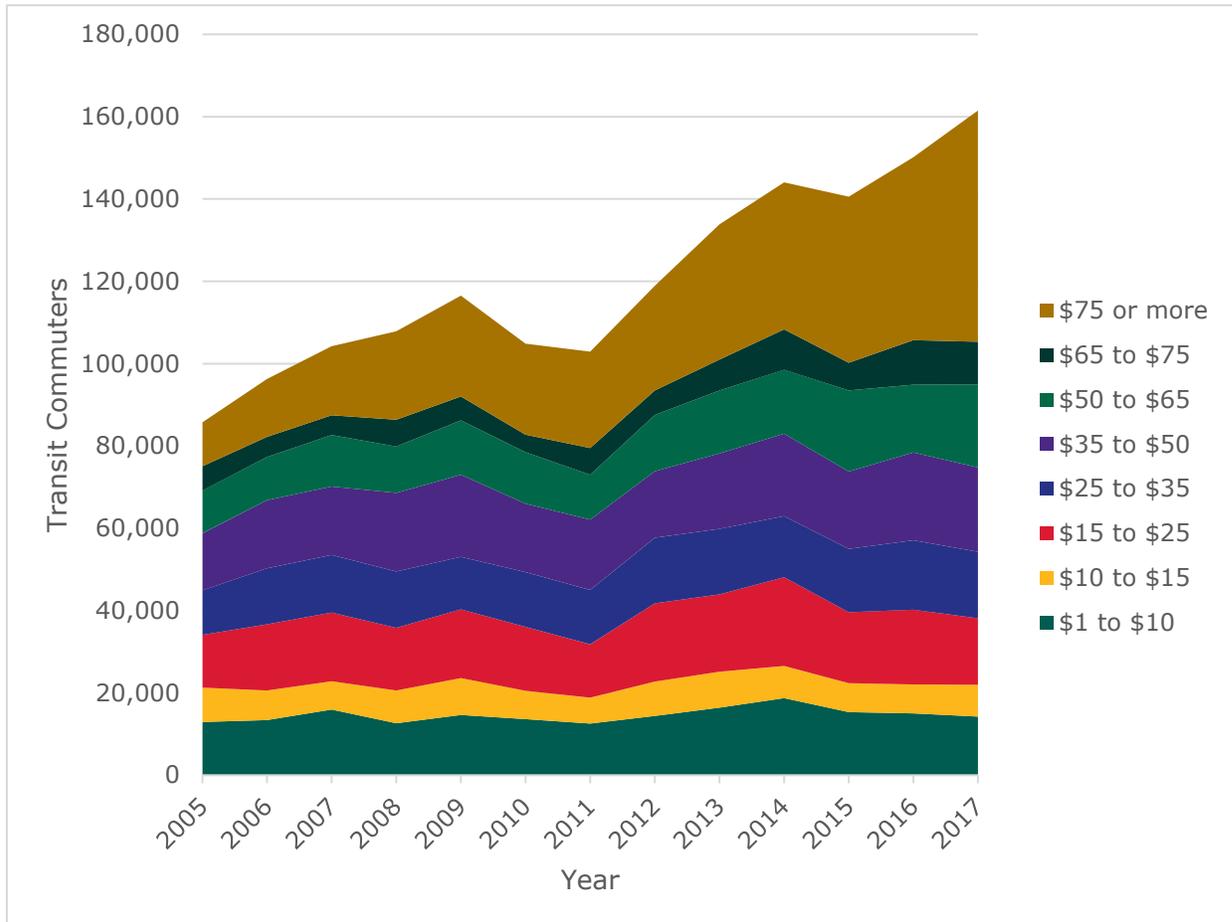


Source: American Community Survey (ACS) 2017 5-Year Estimate

Along with the spatial disparity in transit commuting highlighted in Figure 24, the composition of King County transit commuters by income has changed over time. Despite significant growth in transit ridership over the last decade, Figure 25 illustrates that most of this growth was due to workers earning \$75,000 or more. Some of this can be explained by the disproportionate growth in higher income population in denser neighborhoods with good transit access, such as Downtown Seattle and Bellevue, and partially due to the success of the ORCA Business Passport Program. Recent efforts such as the ORCA LIFT program have been implemented to

help improve transit affordability and expand the use among lower-income individuals. It is important to note that Figure 25 is not adjusted for inflation. Although inflation was not significantly high during this period, it may contribute to the trend that ridership by higher incomes has increased more rapidly than lower incomes.

Figure 25 King County Transit Commuters by Income from 2005-2017



Source: American Community Survey (ACS) 1-Year Estimates

RIDERSHIP

As transit ridership is declining nationwide and slowing its growth in King County, some external factors such as lower fuel costs, increased teleworking, higher car ownership, and the rise of alternatives such as Uber and Lyft are contributing to this trend. Closer to King County Metro's sphere of influence are factors of service, safety, and real time information that pose real and identified challenges to growing ridership and providing mobility to all residents of King County and the region.

In 2018 King County Metro conducted its Rider/Non-Rider survey to measure rider satisfaction with service elements such as: Level of Service, Comfort and Cleanliness, Information, Fare Payment, and Personal Safety. By conducting an analysis of overall satisfaction with Metro services, rider frequency, and satisfaction with individual

elements of service, the Rider/Non-Rider Survey Report was able to identify the greatest barriers to transit ridership in the County. In aggregate, the services elements with both low user satisfaction and a high strength of relationship to ridership are: Level of Service, Transferring, and Comfort and Cleanliness. These results indicate that King County Metro should focus on these elements to improve rider satisfaction and overall ridership.

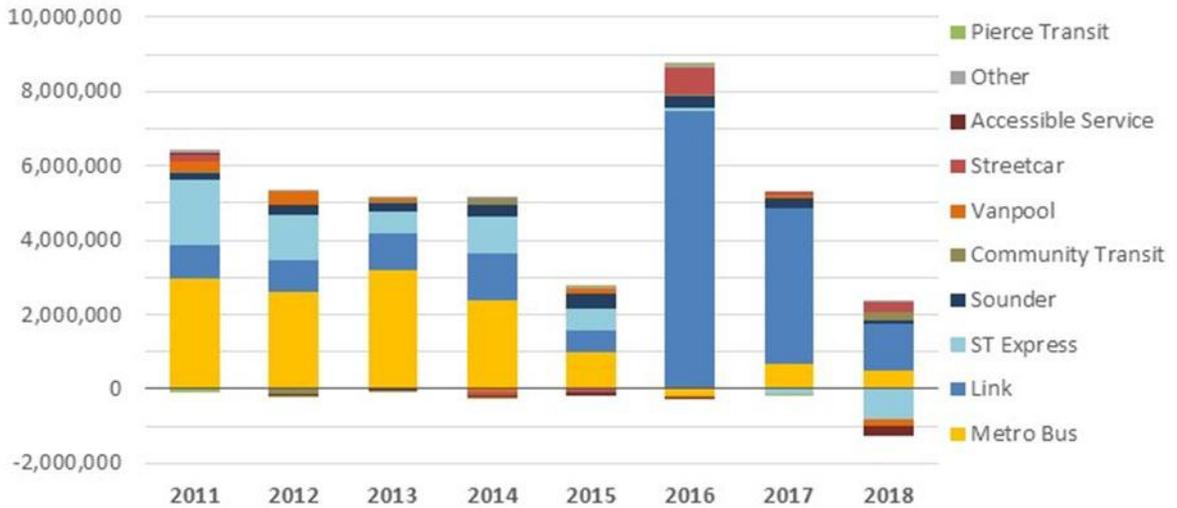
Among the “Level of Service” category, Availability of Service, Frequency of Service, and Travel Time were rated as the most important customer expectations arising from the Rider/Non-Rider Survey. From those considered “Non-Riders,” over 20 percent of respondents stated that they would use Metro bus service regularly if it was available for their commute, and 50 percent stated that they would use it for occasional personal trips if service was more widely available. Other high-level barriers of use for non-riders included long travel times, a lack of flexibility in planning their travel, and a lack of great connections between bus lines. These responses from non-riders and infrequent riders indicate that improved service in terms of availability, frequency, and coverage would encourage more County residents to use transit on their commute and personal trips.

While Metro system-wide ridership continues to grow slowly, Metro is losing its “market share” of regional trips, failing to keep up with both population and employment growth. System-wide ridership have been buoyed by large service hour increases, but they have obscured declines in system-wide productivity over the past few years that are clear with more detailed study. Over the long term, productivity declines result in lower farebox recovery and increasing cost per boarding. System-wide travel speeds are also declining, adding to the ridership challenge.

Overall, annual rides on Metro service (fixed-route bus, Vanpool, and Access) have increased from 113.4 million in 2010 to almost 126.7 million by 2018. Most of this growth occurred before 2015. Metro services realized a decrease in ridership in 2016, likely associated with the expansion of Link light rail to the University of Washington, which realized a dramatic increase in ridership that same year. Since 2016:

- All Metro ridership has only increased 0.65 percent (816,000 annual rides)
- Metro fixed-route ridership increased 1.0 percent
- Several services (ST Express, Vanpool, and Access) had declines in ridership

Figure 26 Annual Change in King County Transit Boardings by Agency (2011 - 2018)



Source: APC Database, Sound Transit, Community Transit, Pierce Transit

While overall fixed-route ridership has increased since 2016, a slight majority (51 percent) of routes had a decline in ridership over that period. All types of routes realized ridership declines, including RapidRide, frequent and less frequent services. To understand changes affecting the leveling of Metro ridership, specifically fixed-route ridership, the analysis looked at changes in ridership by day, period of the day, and frequency of service since 2016. The analysis found ridership in off-peak periods, and particularly weekends, declined countywide.

- Saturdays, in particular, have declined by almost 2,200 average daily riders since 2016. Saturdays had ridership declines during all periods of the day. Notably, trolley routes lost significant ridership on Saturdays.
- Sundays realized a small decline in ridership. All the decreases in ridership occurred in the daytime period; ridership increased during the evening and night periods.
- Weekdays realized a small increase in ridership (0.2 percent), mostly due to the growth of 1,500 average daily trips during the PM peak period. This increase in the PM peak was partially offset by a decrease of 744 average daily trips during the midday period.

Figure 27 Change in Average Rides by Day and Period (Fall 2016 to Fall 2018)

Period	Weekday	Saturday	Sunday
AM Peak	45	-1,162	-563
Mid-day	-744	-1,162	-563
PM Peak	1,520	-527	188
Evening	-62	-527	188
Night	90	-473	327
All Periods	849	-2,162	-48

Source: APC Database

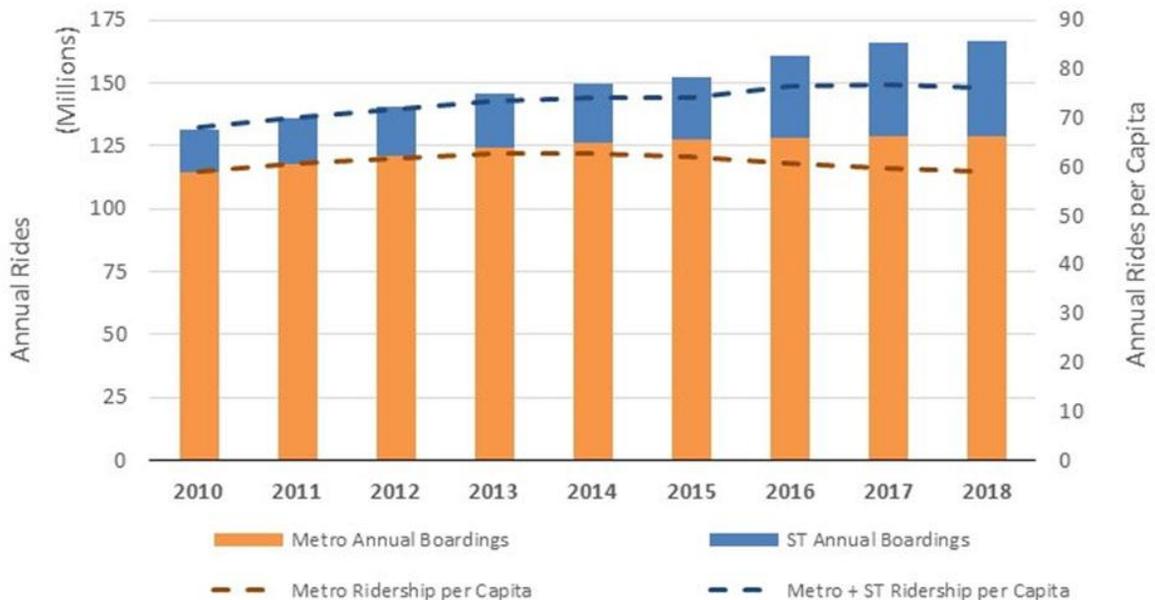
During the off-peak periods, routes with frequent service (defined as routes scheduled every 15 minutes or less) had smaller declines in ridership since 2016 than those with less frequent service. Frequent routes on Sunday realized a 1.8 percent increase in ridership.

Transit's Market Share is Declining

While transit boardings from 2010 to 2018 have grown year over year, the growth in boardings has not kept pace with population growth starting in 2015.

- King County's population has grown considerably since 2010 with the largest annual increases in 2016, 2017, and 2018.
- Ridership per capita (including Sound Transit service) increased from 2010 to 2014 and then started to decline after 2015.
- Metro ridership per capita has fallen consistently from 2014 through 2018.

Figure 28 Annual Ridership and Ridership per Capita



Source: APC Database, Sound Transit, Washington Office of Financial Management

Ridership has also been falling in relation to regional employment. Historically, ridership has increased at about two-thirds the rate of employment growth. However, the last few years have seen employment growth hovering at over 3 percent annually, while ridership growth has been below 1 percent for each of the last three years.

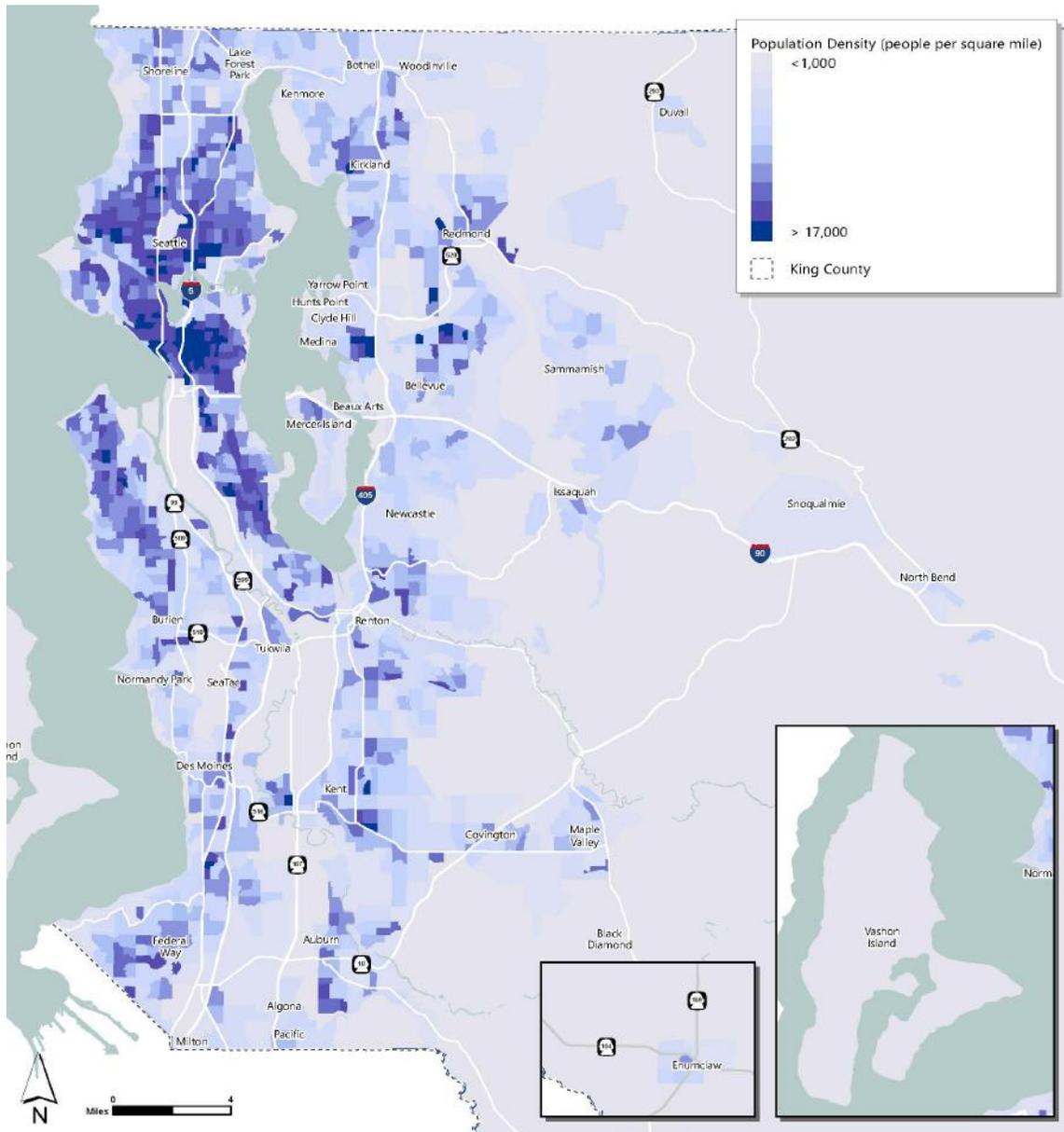
SURROUNDING LAND USE

Land use is a major factor generally outside the control of King County Metro that shapes how transit is provided and used in the County. This section describes how surrounding land use influences travel behavior and transit usage.

Population Density

Population density has a significant influence on the type of transit service accessible across King County. In addition to the correlation between travel behavior and transit usage, King County Metro’s Service Guidelines prioritize transit service in higher density areas due to the likelihood that routes in these areas will draw more riders. As shown in Figure 29, population density in King County is generally highest in Seattle, and in communities such as Downtown Bellevue, the Crossroads neighborhood in Bellevue, and pockets in Kirkland, Redmond, Renton, Des Moines, Kent, Federal Way, and Auburn.

Figure 29 Population Density



Source: American Community Survey (ACS) 2017 5-Year Estimate

As described in Chapter 2, the County's population has increased dramatically in the past seven years. Unlike many other communities across the nation, transit boardings in King County have increased with population growth. However, the growth in transit use has not kept pace with population growth and total vehicle miles traveled have increased as well.

Vehicle and Person-Miles Traveled

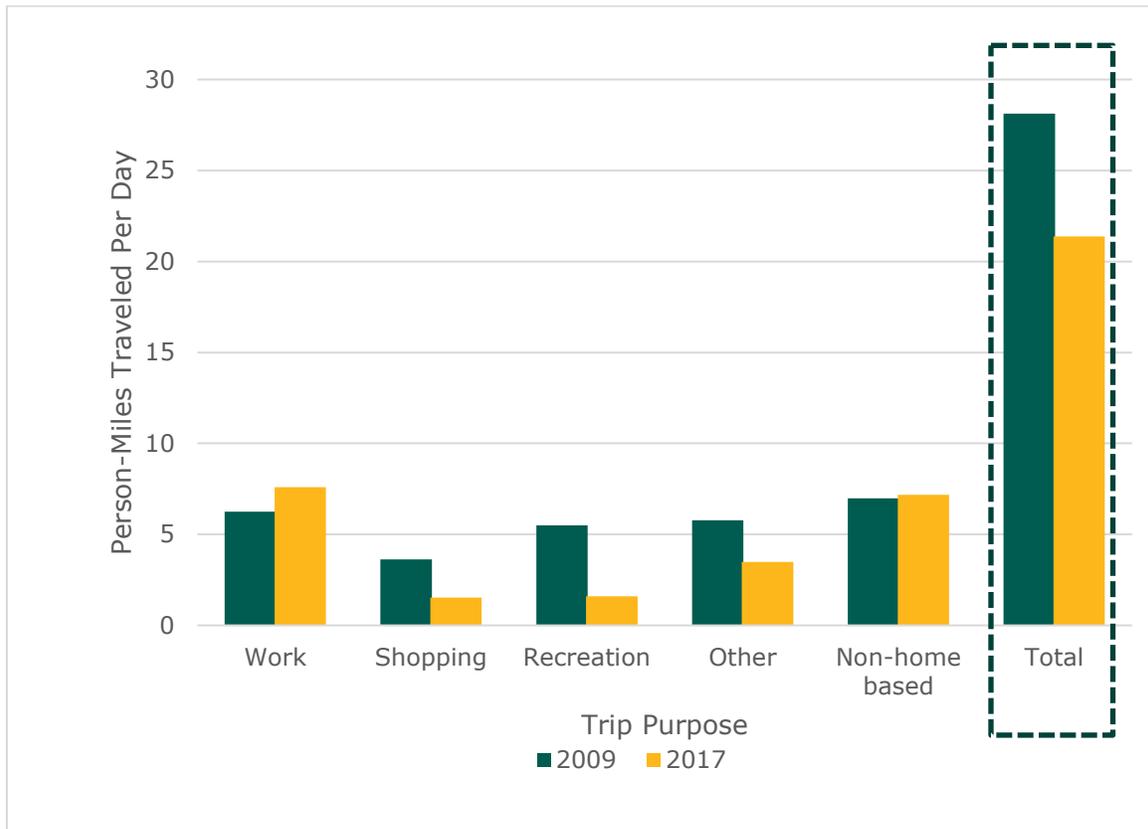
As shown in Figure 30, people are traveling further (more miles) for work, across all modes, over the past 10 years. Compared to 2009, work trips by single occupancy vehicles are longer on average by about one mile.¹³ Although travelers' average mileage in a car for non-work trips has decreased, from 8.9 miles on average to 5.6 miles on average for single occupancy vehicles, there is a slight growth in transit mileage for those trips.

A key caveat to these data is the different trip length reporting methods between 2009 and 2017. In 2009, survey respondents self-reported their trip distances, while in 2017 the distances were calculated using a shortest-path algorithm, resulting in generally lower trip distances on average due to the more precise estimation. Therefore, the fact that work trips also showed an increase even with this methodology change highlights a key trend in how work travel distances in general have increased over the past decade. Conclusions on non-work trips may not be as confident because of the trip measurement discrepancy.

Figure 31 highlights broader travel trends within King County. After several years of decline in 2011 and 2012, vehicle travel began to increase, with daily vehicle travel growing to 47 million VMT in 2017 compared to 46 million VMT in 2010. Much of the vehicle travel can be attributed to population growth, with daily vehicle travel decreasing on a per capita basis from 24 VMT in 2010 to 22 VMT in 2017.

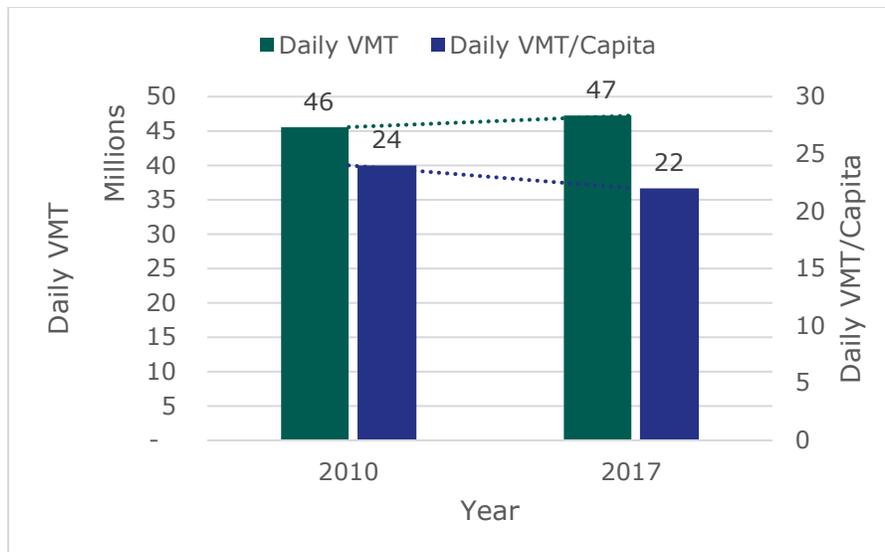
¹³ Weekday Work Trip Person Miles Traveled by Mode, NHTS 2009, NHTS 2017.

Figure 30 Average Distance Traveled by Trip Purpose Per Day



Source: National Household Transportation Survey for Seattle-Tacoma-Bellevue metropolitan statistical area (NHTS) 2017, 2009.

Figure 31 King County VMT and VMT per Capita

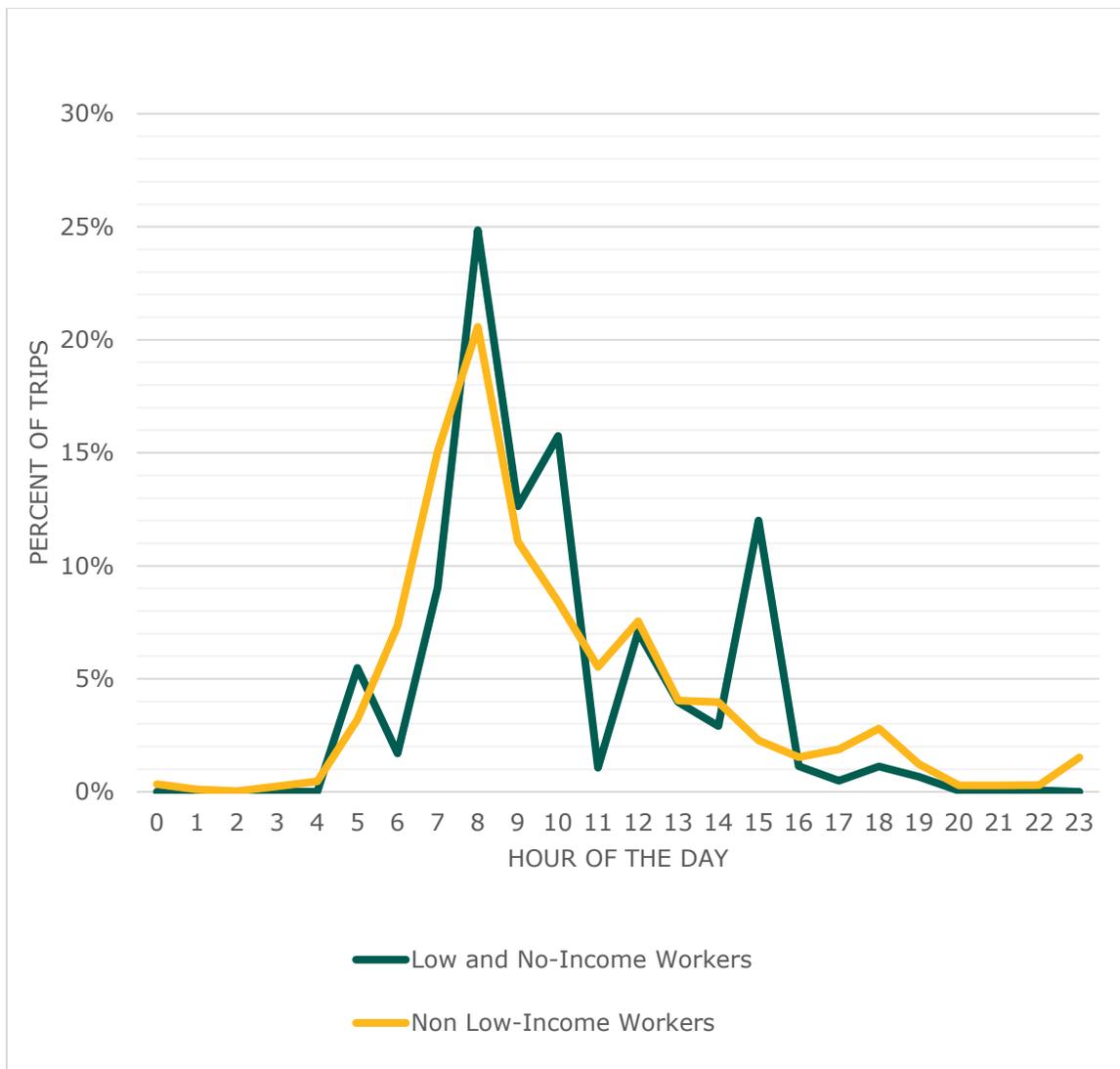


Source: WSDOT Highway Performance Monitoring System (HPMS), US Census Bureau.

Travel Demand by Time of Day

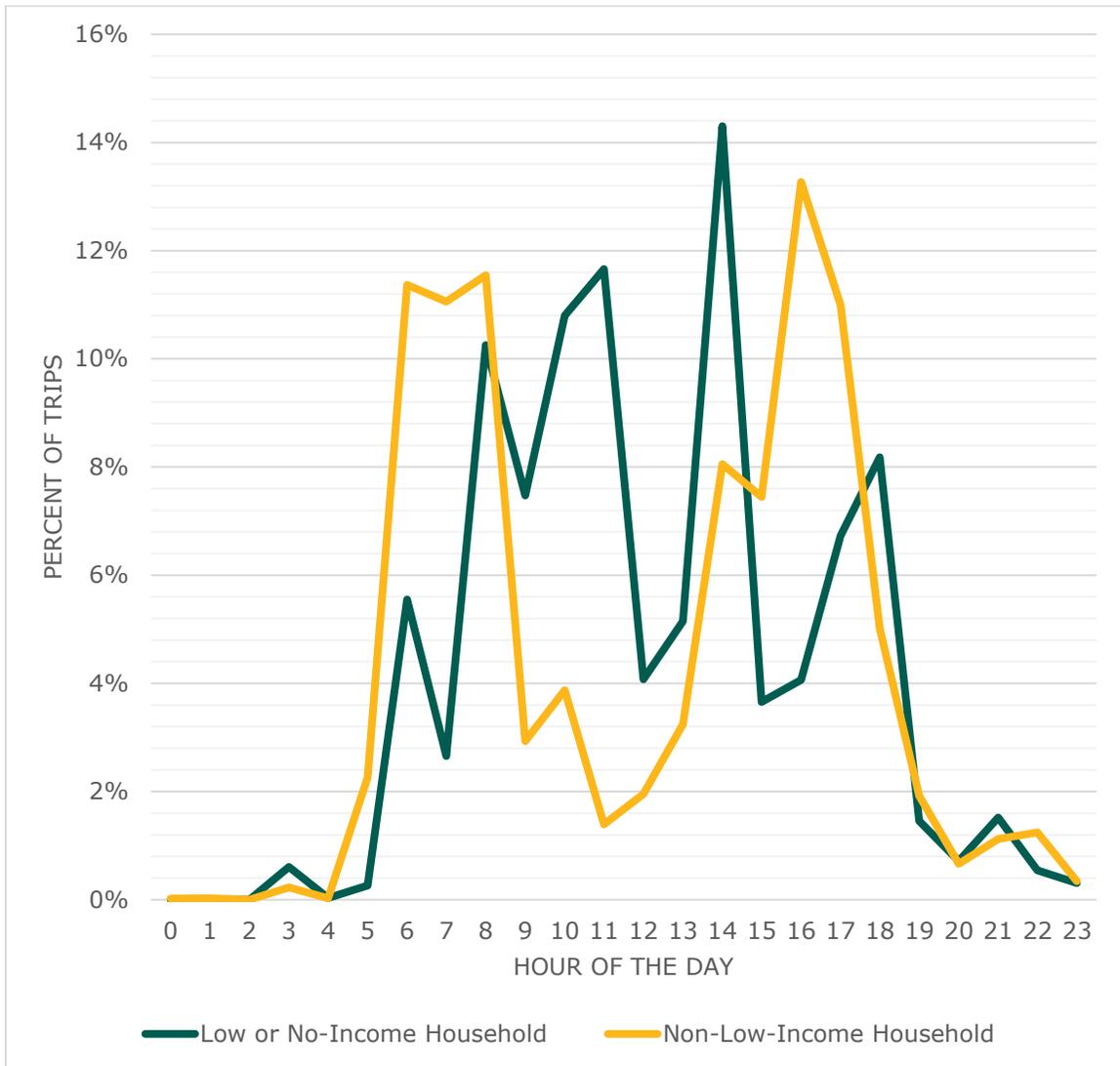
Travel demand by time of day has strong implications for transit service planning in non-peak hours. As shown in Figure 32, compared to people with higher incomes, low- and no-income people's work travel is more spread throughout the day. As shown in Figure 33, low- or no-income households also have more midday transit use than higher income households. These travel patterns are outside the times of day at which Metro has traditionally provided the most transit service, which are the AM (6-9 AM) and PM (3-6 PM) peak periods to accommodate high commuter demand. As shown in Figure 34, ORCA bus boarding data supports a similar pattern of higher mid-day transit usage by ORCA LIFT users as compared to non-ORCA LIFT users.

Figure 32 Commute to Work Departure Hour (2017)



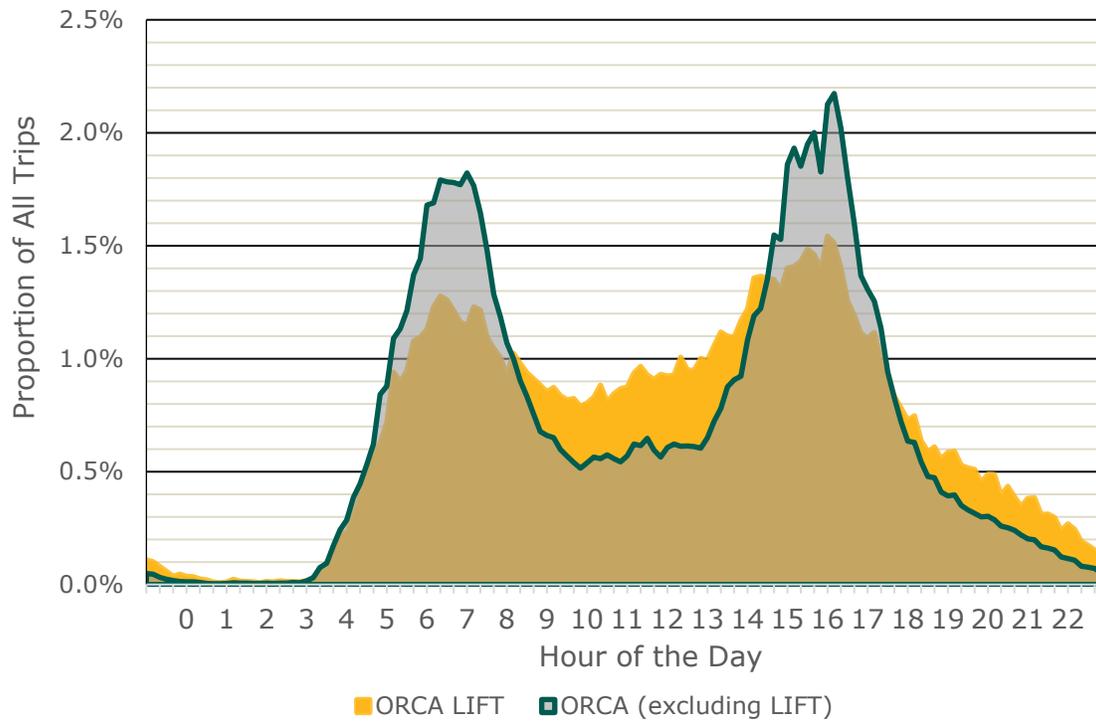
Source: Puget Sound Regional Council (PSRC) Household Transportation Survey, 2017.

Figure 33 Transit All Trip Purpose Departure Time by Income



Source: Puget Sound Regional Council (PSRC) Household Transportation Survey, 2017.

Figure 34 ORCA Bus Trips by Hour of Day



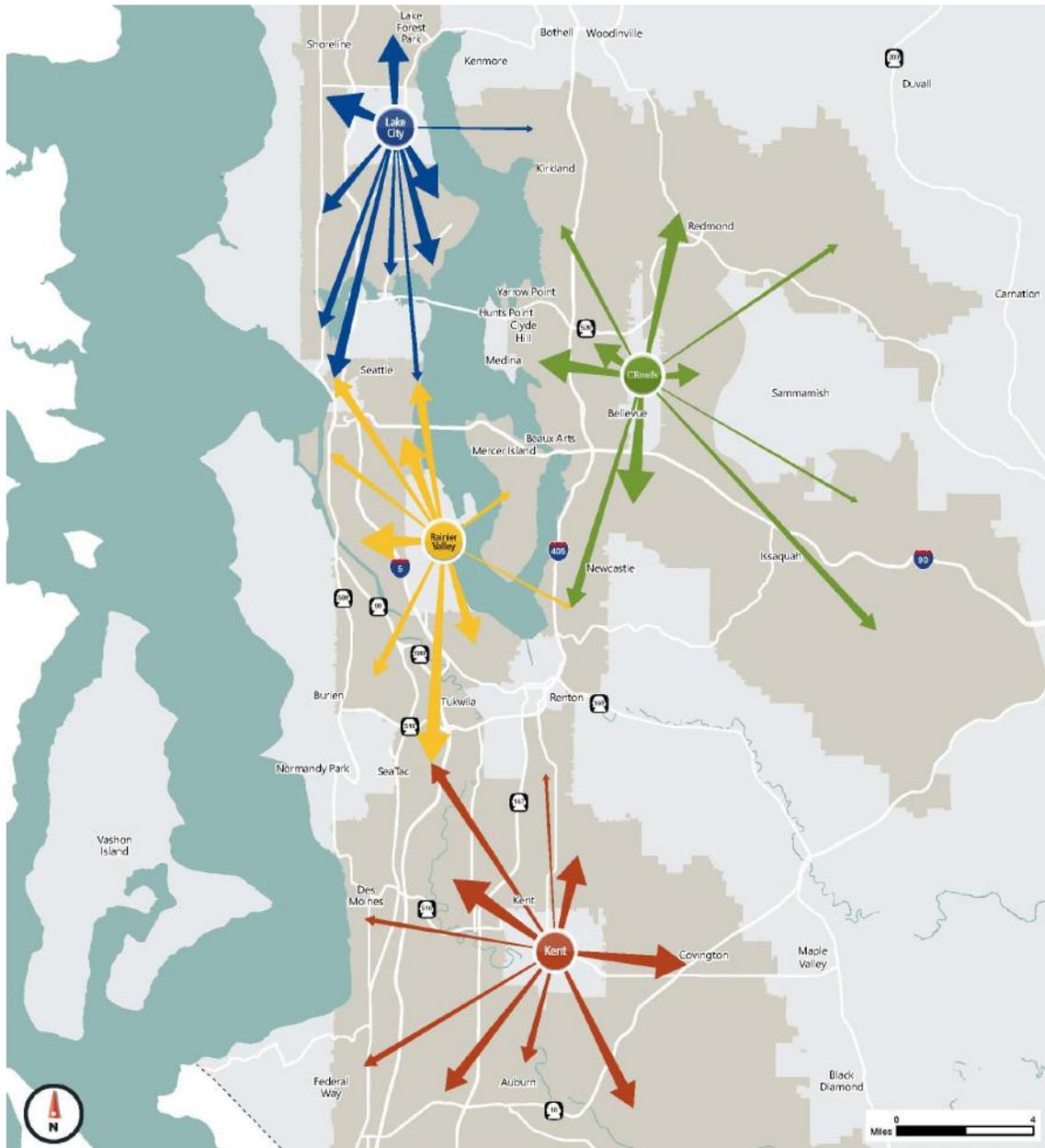
ORIGIN-DESTINATION PATTERNS

Figure 35 identifies the top 10 destination zip codes for a sample of origin zip codes selected by King County Metro Staff including representative portions of Lake City, Crossroads, Rainier Valley, and Kent. The adjacent zip codes tend to be among the highest ranked destinations for the origins selected, with some notable travel patterns not necessarily oriented to the core job centers of Downtown Seattle and Downtown Bellevue including the following:

- Demand from Lake City to Shoreline and northern Kirkland
- Demand from Crossroads to Downtown Redmond and Factoria
- Demand from Rainier Valley to destinations in Beacon Hill and the Industrial District, Central District, and Bryn Mawr-Skyway
- Demand from Kent to adjacent east-west destinations within the Kent Valley

While these origin-destination pairs may have some transit service provided today, they are examples of travel patterns that could benefit from increased transit frequencies throughout the day. As part of the service planning process, more detailed analysis and a comprehensive look at all origin-destination patterns could help identify specific corridors that could be well-served by improved fixed-route transit.

Figure 35 Sample Origin-Destinations by Zip Code for Lake City, Crossroads, Rainier Valley, and Kent



Source: Teralytics Origin Destination data, September 2018. Fehr & Peers 2019.

GREENHOUSE GAS EMISSIONS

In 2017, King County prepared and updated the greenhouse gas (GHG) emissions inventory for the County and contribution analysis of the drivers of emission changes between 2008 and 2017. The 2017 GHG emissions in King County totaled 20.1 million metric tons of carbon dioxide equivalent (MgCO₂e). Transportation is the second leading source of GHG emissions, making up 36 percent of the total emission landscape, much of this dominated by emissions from passenger vehicles and single-

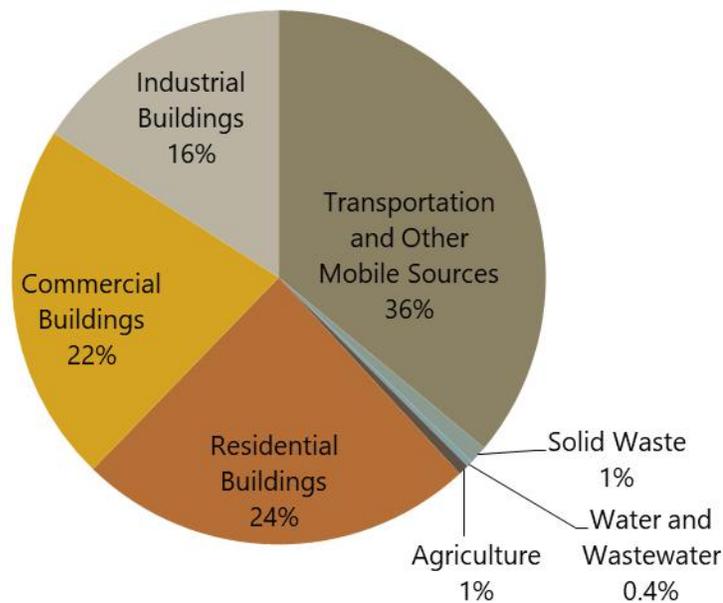
occupancy vehicle travel (Figure 36). This inventory includes all emissions that occur within the County, plus those emissions associated with electricity used in King County even when produced elsewhere.

Overall, transportation emissions in King County have remained relatively steady since 2008 and have declined by 10% per capita over this time period from 3.4 to 3.0 MgCO₂e per capita. These trends are driven by both a growing population (positive GHG emission growth), in combination of factors that have reduced per capita emissions including improved fuel standards, the adoption of electric vehicles for some drivers, and a reduction in single occupancy vehicle miles traveled (VMT).

Most transportation emissions in 2017 came from passenger vehicles (71 percent). From 2008 to 2017, reduced car trips per person resulted in a 1.1 percent reduction in total GHG emissions (225,000 MgCO₂e). However, this rate in reduction of vehicle miles traveled will fall short of King County's climate and sustainability goals without a greater reduction in single occupancy vehicle trips and more trips made on transit and HOV options.

The 2015 King County Strategic Climate Action Plan (SCAP) outlines a goal of 20 percent reduction in VMT for all travel. In addition, analysis to support the 2020 SCAP calls for a reduction of per person VMT of 50 percent by 2050 from a 2007 baseline year. Meeting these goals will require Metro to attract more riders for more of their daily trips and create a mobility environment which encourages people to take transit, bike, and walk in neighborhoods where people can live closer to where they work and play.

Figure 36 Sources of Greenhouse Gas Emissions for King County in 2017



Source: "GHG Emissions in King County: A 2017 Update", King County

CONCLUSIONS

As shown through a variety of metrics, travel trends continue to shift within King County as population and employment increases and land use patterns change. Additional factors such as vehicle ownership rates, fuel costs, and mobility alternatives are leading towards a broad increase in vehicle miles traveled in the County while transit ridership has stagnated relative to population growth.

From an equity and sustainability perspective, travel patterns for lower income households generally are different from the County as a whole, with higher demand for transit during the midday and evening periods. Access to jobs and services during these time periods is not as extensive as during the traditional peak periods, and transit ridership for lower income commuters has generally leveled off in the past decade.

These patterns and the relative growth in the County have resulted in missed targets in vehicle use and greenhouse gas emissions reductions established through the Strategic Climate Action Plan. Evaluating current origin-destination patterns within priority population areas may help identify additional opportunities for future service investments to increase transit use and reduce vehicle ownership while integrating service investments in areas with high population density and relatively good transit connections.

4 Public Transportation Service Coverage Comparison

The previous chapters in this appendix documented some key King County demographic and travel pattern data and trends. These changes have a significant impact on who has transit service in the County and the accessibility of jobs, services (medical, social, community), and education. Some of the key population and employment data that specifically relate to transit service coverage include:

- Low income populations are increasingly located in less-dense areas of the County, particularly in portions of east King County, Renton, South Seattle, and southern King County (see Figure 17).
- Similarly, other priority populations, including black, indigenous, and people of color, immigrants, and people with limited English proficiency, are also moving to east and south King County, where transit service is generally less frequent. See Figure 9 through Figure 18 for the geographic location of different populations and Figure 19 through Figure 21 for overall transit accessibility.
- Meanwhile, a considerable amount of population growth (that is generally higher income populations) has occurred in Seattle and portions of Bellevue, areas that generally have strong transit service.
- Employment (for all incomes) continues to cluster in dense locations like Seattle, Bellevue, and Renton/Kent, although low-income jobs tend to be dispersed in locations throughout the County.

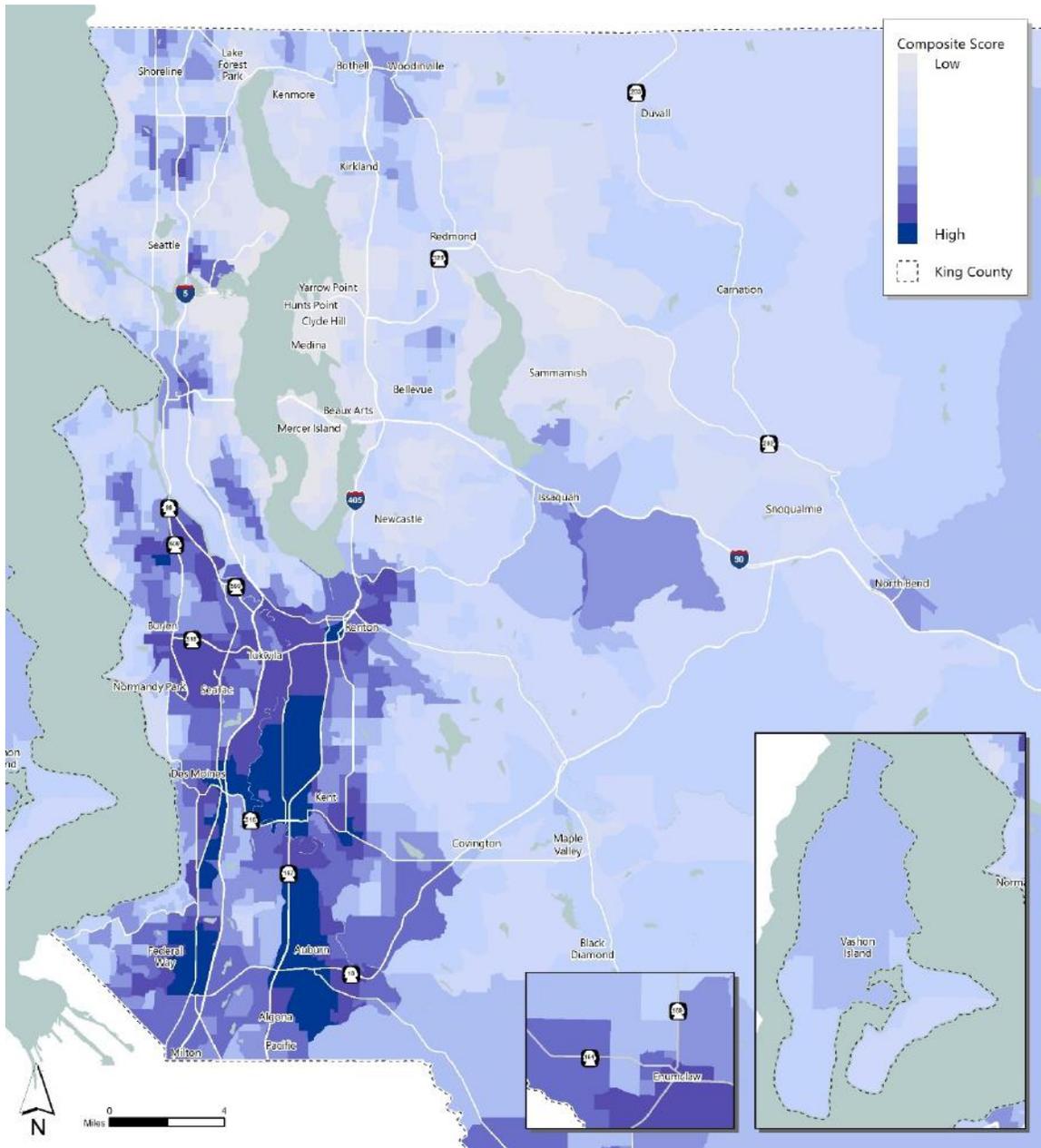
The above changes in demographics and land use patterns have occurred amidst a backdrop of additional transit frequency in a few key areas (RapidRide investments, expanded light rail, more frequency in dense areas like Seattle). However, there have been only modest changes in transit service through most of east and south King County, where priority populations are growing the fastest but where land use patterns present new challenges and opportunities for Metro to provide additional productive fixed-route service. An important conclusion of these shifts is that without providing more transit service to the areas where priority populations are moving, their transit coverage can diminish over time, even as transit service improves in the densest parts of the County.

To highlight some of the challenges of providing equitable transit access to increasingly dispersed priority populations, a pair of “composite” maps were developed. Figure 37 evaluates areas with concentrations of low-income households

and households with limited vehicle availability that also have low overall transit accessibility. In other words, Figure 37 highlights areas with a concentration of people who may be more reliant on transit and who also live in areas with relatively poor transit service. The areas highlighted on Figure 37 with the most vulnerable populations include a large area of south King County, with the cities of Kent, Auburn, and Federal Way particularly prominent. Note that these same areas have high concentrations of other priority populations as well.

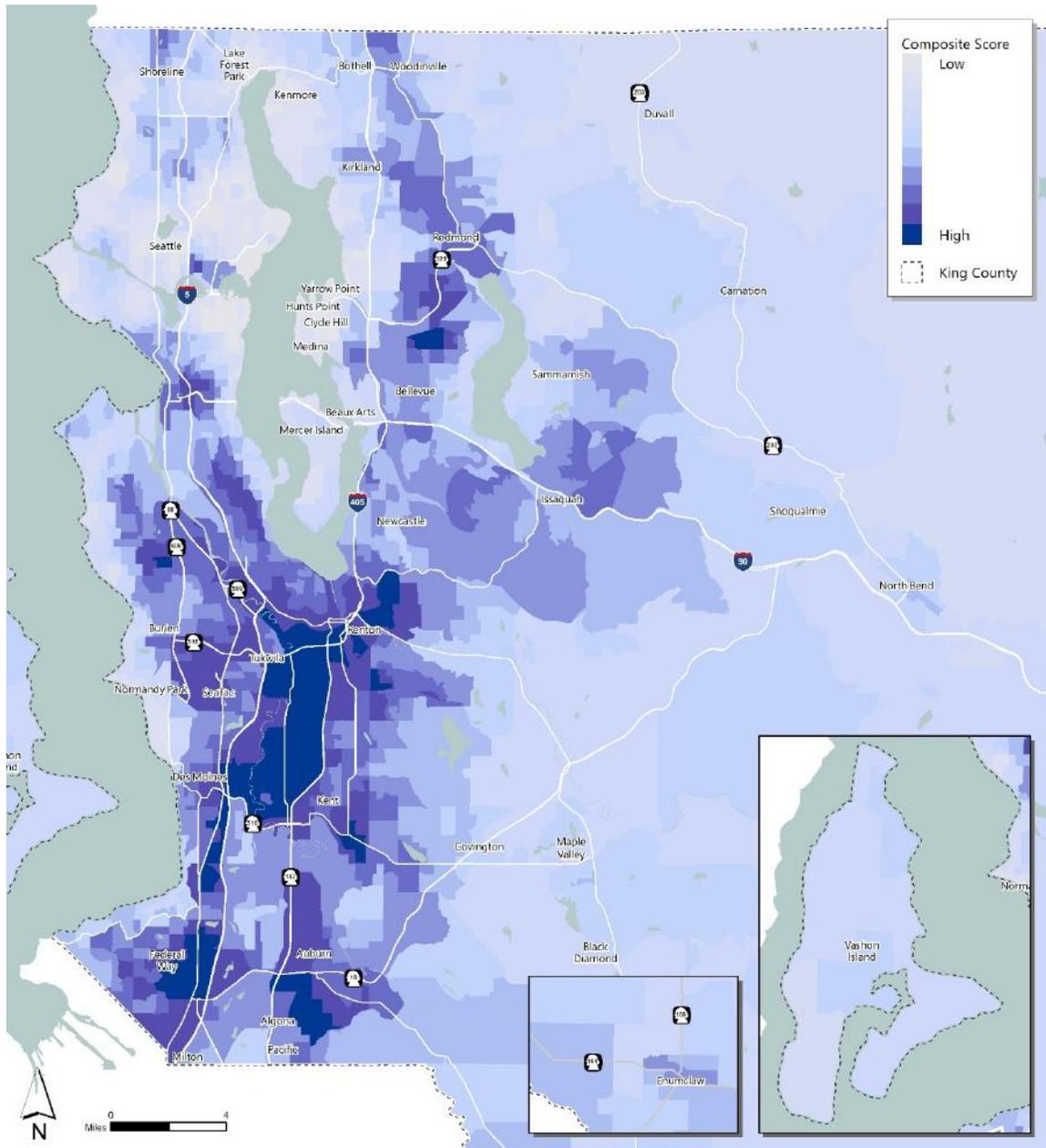
Figure 38 combines households of color and low vehicle ownership households with areas that have poor transit access to healthcare, community services, and housing services. The distribution shown in Figure 38 is similar to what was shown in Figure 37, except that more locations in east King County (East Bellevue, Redmond) emerge that have high concentrations of recent immigrants.

Figure 37 Limited Transit Access Composite: Low-Income Households, Low Transit Accessibility, and Low Vehicle Ownership Households



Source: American Community Survey (ACS) 2017 5-Year Estimate, King County Metro 2019.

Figure 38 Low Accessibility Composite: Households of Color, Low Vehicle Ownership Households, Low Transit Access to Services



Source: American Community Survey (ACS) 2017 5-Year Estimate, King County Metro 2019.

Both Figure 37 and Figure 38 highlight areas where there are people who are more likely to take transit, but where transit accessibility is not strong. The composite scores shown on these figures mirror the overall demographic patterns described at the beginning of this chapter.

One way to improve transit accessibility in the areas highlighted in the previous figures would be to increase transit frequencies and potentially coverage in areas with high concentrations of priority populations. The increase in frequency/coverage

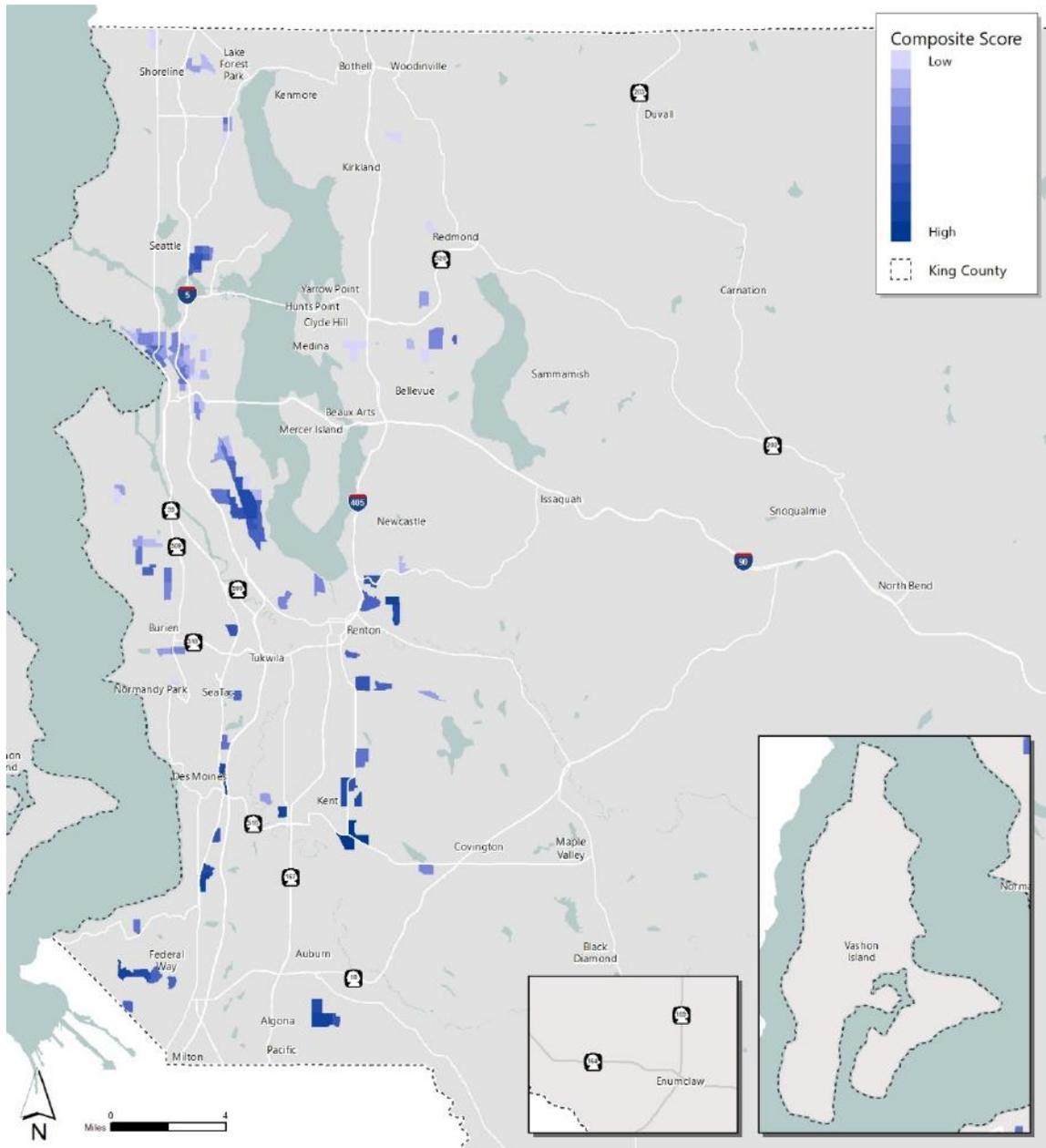
would be particularly beneficial during off-peak periods and to facilitate east-west travel. This transit service investment strategy was highlighted and suggested by the Equity Cabinet during the development of the Mobility Framework. As noted in Chapter 3, transit coverage is fairly robust during the AM and PM peak periods—particularly to major centers like Downtown Seattle, the University District, and Downtown Bellevue—but traveling to other areas via transit is less convenient, particularly between the communities in south King County or between south and north King County.

To target potential areas that would benefit from additional transit services to improve accessibility for priority populations, two additional composite maps (Figure 39 and Figure 40) were created that include higher proportions of priority populations, areas of low off-peak transit access, and moderate population densities¹⁴ that could support enhanced fixed-route bus service or low to moderate densities that would be better served by alternative service (see Chapter 5 for more details).

Figure 39 identifies some areas of Federal Way, Kent, and Auburn that may have high enough population densities to support additional bus service, while increasing access for priority populations. Connections between these cities would also leverage the future RapidRide route between Auburn and Renton. Another area of concentration is between Burien and areas of West Seattle, which are generally along the future RapidRide H line.

¹⁴ Moderate densities refer to more than 15 persons per acre, which is at the level where fixed route transit generally is a viable type of transit service based on typical standards by transit agencies.

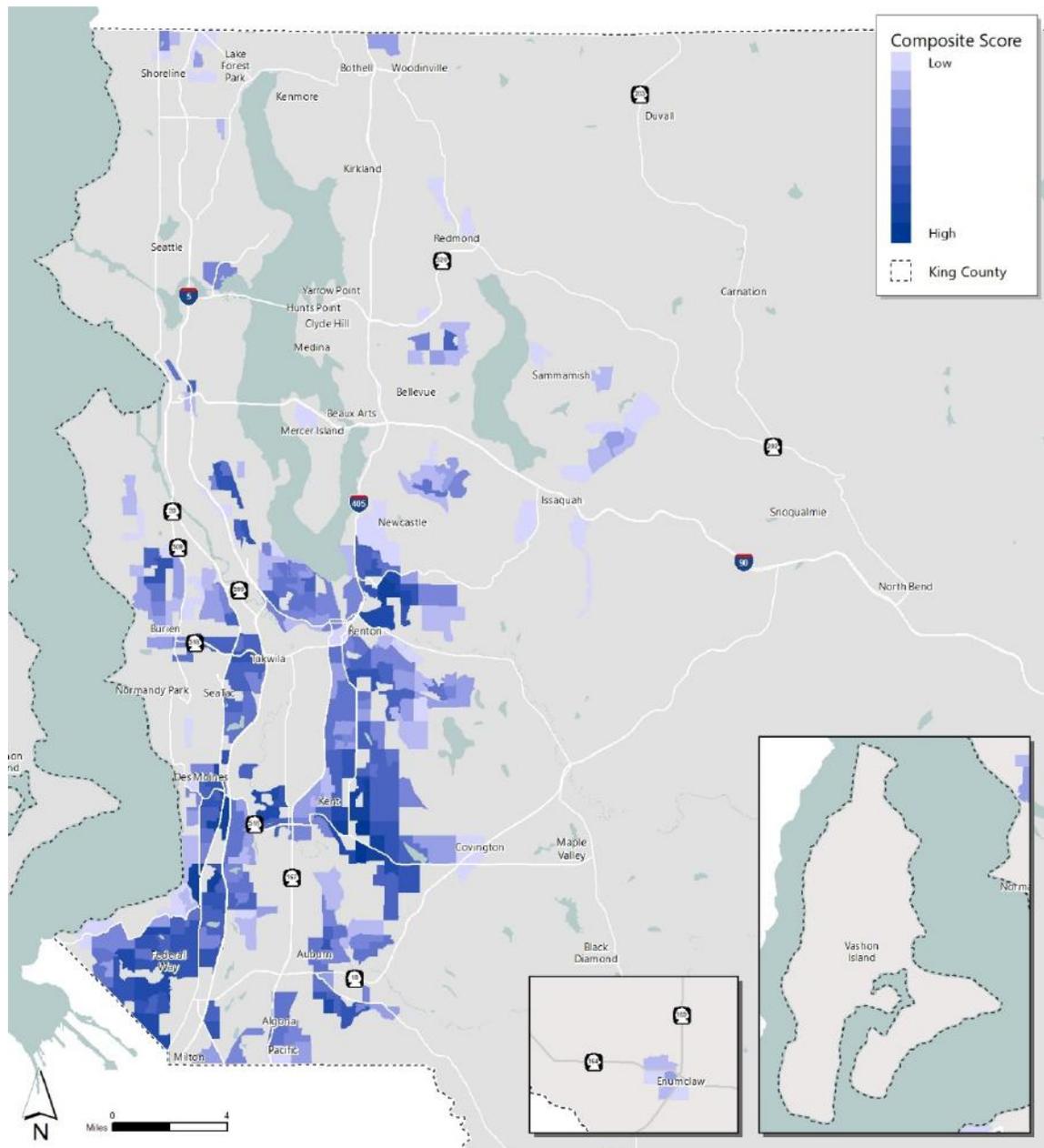
Figure 39 Transit Service Enhancement Composite: High Concentrations of Priority Populations, Low Off-Peak Access, Population Density Above 15 People per Acre



Source: American Community Survey (ACS) 2017 5-Year Estimate, King County Metro 2019.

Figure 40 highlights large areas in south King County—including many areas west of Interstate 5 from West Seattle to Federal Way and east of State Route 167 between Renton and Auburn—as well as more isolated pockets throughout King County that may not have high enough densities to support new or increased fixed-route bus service, but could benefit from alternative service delivery discussed in more detail in Chapter 5.

Figure 40 Alternative Service Opportunities Composite: High Concentrations of Priority Populations, Low Off-Peak Access, Population Density Between 4 and 15 People per Acre



Source: American Community Survey (ACS) 2017 5-Year Estimate, King County Metro 2019.

CONCLUSIONS

As priority populations continue to move to lower density, less transit-rich parts of the County, improving midday and off-peak transit services could help to ensure that residents in these areas who rely on transit are not unduly isolated from employment or services. Ultimately, new mobility strategies outside of the framework of traditional fixed-route service will be needed to connect people to productive and frequent routes. King County Metro must balance these needs with its equity and sustainability goals.

5 Innovative Mobility Opportunity Areas

Transportation choices are changing rapidly, and transit riders' travel patterns and expectations are changing just as quickly. The addition of ride-hailing services such as Uber and Lyft, flexible on-demand transit such as Via, and micromobility options such as bike and scooter share have given people new ways to get to the jobs and services they need. Understanding how these new travel options are changing people's travel behavior, where these services could be most effective, and the equity and sustainability implications of innovative mobility services will help Metro develop an approach to partnerships and leverage the benefits of new mobility options.

SHIFTING TRAVEL BEHAVIOR

A Pew Research Center survey in 2015 found that respondents who used ride hailing on a daily or weekly basis were much more likely to also use other non-single-occupancy-vehicle transportation modes regularly, including both traditional modes like walking and transit, and new mobility services like bike sharing and car sharing. In a 2016 study, it was found that people who use shared modes (ride hailing, car sharing, and bike sharing) are more likely to use transit frequently and own fewer cars.¹⁵ Where these mobility options exist, people have an array of transportation choices. While these new services can complement existing transit in some ways, there is also data that shows these services may be taking riders from traditional transit modes, particularly for shorter trips and during times of the day when transit is less frequent.

In recent years, multiple studies have examined how people use ride-hailing services and whether they are replacing driving trips or transit and active modes. A 2018 study was not able to conclude whether ride hailing use impacted transit ridership.¹⁶ The study authors did determine that shorter travel times and wait times, as well as availability of service in terms of the location of stops and time of day, were some of the most important reasons that transit customers substituted ride hailing for transit.

¹⁵ Feigon, S. and C. Murphy. 2016. *Shared Mobility and the Transformation of Public Transit*. TCRP Research Report 188. Transportation Research Board, Washington, D.C.

¹⁶ Feigon, S. and C. Murphy. 2018. *Broadening Understanding of the Interplay Between Public Transit, Shared Mobility, and Personal Automobiles*. Pre-publication draft of TCRP Research Report 195. Transportation Research Board, Washington, D.C.

One study found a six percent reduction in overall transit use as a result of ride-hailing services, with a six percent reduction in bus service, a three percent reduction in light rail, and a three percent increase in commuter rail service.¹⁷ Overall, it concluded that 49 percent to 61 percent of ride-hailing trips would not have been made at all or would have been made by walking, biking, or transit.

The average distance of a ride-hailing trip is relatively short, ranging from two to four miles in the studies cited previously. The Federal Transit Administration identifies a half-mile radius around a transit stop as a reasonable walkshed and a three-mile radius as a reasonable bikeshed. Therefore, a portion of ride-hailing trips could have been a walking or biking trip instead.

A review of six recent studies found that, overall, a large percentage of ride hailing trips are shifting from transit or active modes.

Figure 41 Percentage of Trips that Shifted to Ride Hailing from other Modes

SHIFTS TO RIDESOURCING PREDOMINANTLY FROM DRIVING, PUBLIC TRANSIT, AND TAXIS

Study Authors Location Survey Year	Rayle et al.* San Francisco, CA 2014	Henao* Denver and Boulder, CO 2016	Gehrke et al.* Boston, MA 2017	Clelow and Mishra** Seven U.S. Cities***** Two Phases, 2014 – 2016	Feigon and Murphy*** Seven U.S. Cities***** 2016	Hampshire et al.**** Austin, TX 2016
Mode						
Drive (%)	7	33	18	39	34	45
Public Transit (%)	30	22	42	15	14	3
Taxi (%)	36	10	23	1	8	2
Bike or Walk (%)	9	12	12	23	17	2
Would not have made trip (%)	8	12	5	22	1	-
Carsharing / Car Rental (%)	-	4	-	-	24	4
Other / Other ridesourcing (%)	10	7	-	-	-	42 (another TNC) 2 (other)

Source: Shaheen, 2018

A 2019 study found that not only does ride hailing immediately decrease transit ridership, but it continues to affect it every year after the introduction of ride-hailing services in a city.¹⁸ It calculated that ride hailing results in a 1.7 percent reduction in bus ridership per year and a 1.3 percent reduction in heavy rail ridership per year.

The study also examined bike share in connection with transit ridership. It found that bike sharing increases light rail ridership by 4.2 percent but reduces bus ridership by 1.8 percent. An analysis of bike-sharing systems in New York City found that every

¹⁷ Clelow, Regina R. and Gouri S. Mishra (2017) Disruptive Transportation: The Adoption, Utilization, and Impacts of Ride-Hailing in the United States. Institute of Transportation Studies, University of California, Davis, Research Report UCD-ITS-RR-17-07

¹⁸ Michael Graehler, Jr., Richard Alexander Mucci, Gregory D. Erhardt (2019) Understanding the Recent Transit Ridership Decline in Major US Cities: Service Cuts or Emerging Modes?

thousand bike sharing docks along a bus route is associated with a 2.4 percent decline in daily unlinked bus trips on routes in Manhattan and Brooklyn.¹⁹ A second model that also controls for the expansion of bike lanes during this time suggests that the decrease in bus ridership attributable to bike-sharing infrastructure alone may be smaller (a 1.7 percent decline in daily unlinked bus trips).

A recent four-month e-scooter pilot program in Portland, Oregon found that 34 percent of Portland riders and 48 percent of visitors took an e-scooter instead of driving a personal car or taking a taxi or ride-hailing service. Interestingly, 74 percent of local scooter riders had not used the Portland bike-share system, so e-scooters were largely capturing a separate market of travelers. Two-thirds of Portlanders used the scooters to get to a destination—compared to one-third that used them for recreation or exercise—and there were clear evening commute and weekend afternoon peaks. There is not currently data available to describe how scooters in Portland have impacted transit ridership, but it seems probable that scooters, like bikes, might increase ridership on core frequent routes that connect longer-distance destinations while reducing demand on less-frequent local routes.

People now have more ways than ever before to meet their transportation needs, many of which can decrease transit ridership but also provide needed connections to transit or provide transportation options where transit is sparse. Most of the new mobility options are used to make short trips for recreational purposes, which could be a good complement to commuter transit service. However, there are notable equity considerations from these new mobility options in terms of both price and availability that are discussed later in this chapter.

OPPORTUNITY AREAS FOR ALTERNATIVE SERVICE DELIVERY

This section identifies opportunities for alternative service models such as ride-hailing and bike- or scooter- share that could help address first-last mile connections to Metro’s fixed-route transit service.

Lower Ridership Routes in Areas with Lower Density

While urban centers often have the population density to support frequent transit service, it is often less financially feasible to provide the same level of service or coverage of routes in suburban and rural areas. Ride-hailing services can help to meet people’s travel needs in these areas without establishing fixed-route service. The Pinellas Suncoast Transit Authority (PSTA) in Pinellas, FL saves \$70,000 annually with its first/last mile pilot program, which provides ride-hailing subsidies in two areas where the agency eliminated fixed-route service. The program has been in operation since 2016 and has expanded from its original two stops to serve 24 stops.

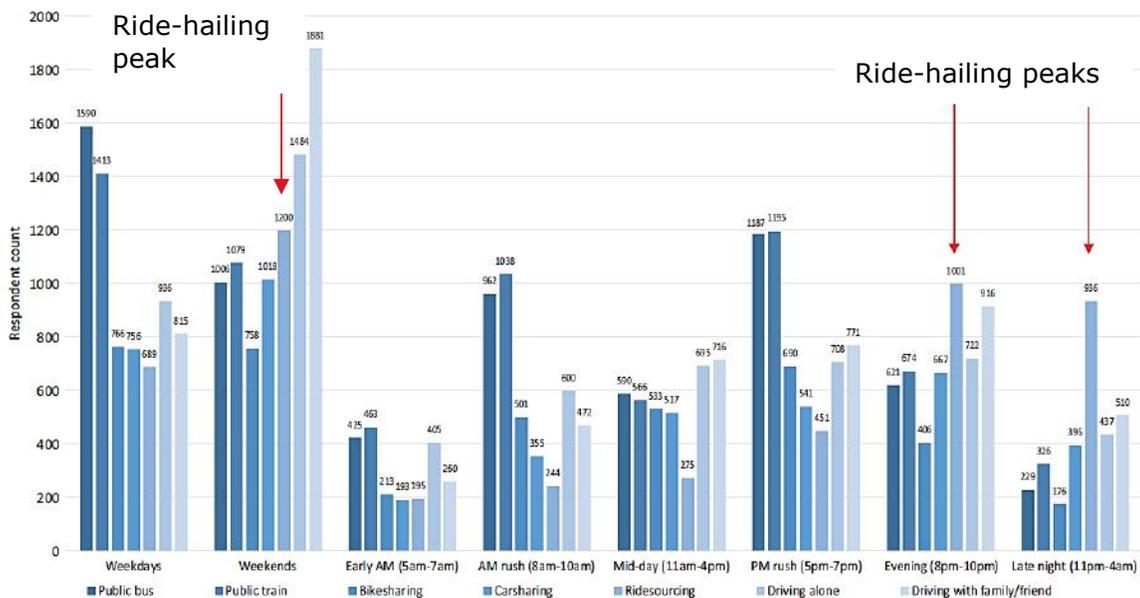
¹⁹ Kayleigh B. Campbell & Candace Brakewood (2017) *Sharing Riders: How Bikesharing Impacts Bus Ridership in New York City*

Metro has had mixed results with two recent pilot projects offering first/last mile connections within relatively lower density areas to bus transit centers in Eastgate and between areas of West Seattle and the Water Taxi in West Seattle. The first/last mile service did not replace a specific transit route but was put in place as an alternative to the frequency and coverage provided by existing fixed-route services. West Seattle has averaged just under one rider per vehicle per hour while Eastgate has averaged just over two riders per vehicle per hour, reflecting an average cost per rider just over \$80 and \$35, respectively. While costs have been high, recent surveys of riders and trips has revealed some successes, including the facts that over 50 percent of the riders used to drive either to the transit center or to their final destination and rider wait-times have routinely been well under the program target of 10 minutes, with an average just below five minutes.

Late Night and Off-Peak Service

There is a consensus among researchers that ride hailing is more commonly used for recreational trips than for everyday commuting. When asked the days and times of the week that they most commonly use different travel modes, survey respondents in eight major US cities reported the highest ride-hailing use on the weekends and in the evenings. Ride-hailing use peaks between 10 PM and 4 AM, with weekday peak-hour trips making up only 20 percent to 27 percent of total ride-hailing trips for the week. Figure 42 illustrates these results.

Figure 42 Mode Preference by Time of Day and Day of Week



Source: Feigon and Murphy, 2016.

Clelow and Mishra found that the most common use of ride hailing is going to bars and parties (38 percent), with 33 percent of respondents citing the desire to avoid driving when having alcohol (13 percent). This ride hailing activity can fulfill people’s travel needs during evenings and weekends when transit runs less-frequently and when it is more difficult to provide productive fixed-route service due to a broader distribution of travel demand.

Paratransit Service

Paratransit provides door-to-door transit service for qualifying riders. Paratransit is much more expensive to operate than traditional fixed-route transit service; King County Metro's operating expenses for ACCESS paratransit are \$74.79 per trip versus \$5.15 per trip for fixed-route bus trip.²⁰ Transit agencies are required by federal law to provide paratransit service in areas served by fixed-route transit. Agencies also have the option to provide supplemental same-day service, but this is not a federal requirement. The optional service can be provided by a greater range of providers than traditional paratransit, often at lower cost.

The Massachusetts Bay Transportation Authority (MBTA) currently has a partnership with Lyft and Uber where riders pay the first \$2 for an accessible ride and MBTA pays up to \$40 of the remainder. In 2015, the average trip on its standard paratransit service, "The Ride," cost MBTA \$45, while the average Uber/Lyft ride cost the agency \$9. Trip duration was also reduced to an average of 25 minutes on Uber/Lyft compared to 59 minutes on The Ride. The agency was able to provide 28 percent more rides while reducing the total cost by 6 percent.²¹

The largest barrier to using ride-hailing services for a greater proportion of supplemental same-day paratransit trips is the availability of wheelchair accessible vehicles. Since most ride-hailing providers use a driver's personal vehicle, further integration of ride hailing with paratransit may require accommodations. These could include transit agencies purchasing accessible vehicles or incentivizing drivers to provide accessible trips, as these vehicles can cost more to maintain, and it takes more driver time to provide these trips.

The transit agency must also ensure that accessible service is provided at the same level—in the same areas and at the same times of day—as non-accessible service to meet ADA and federal regulations for equitable service. This includes having accessible vehicles available, charging the same fare for accessible service as non-accessible service, and having equivalent response times for riders with disabilities. Other needs would be the integration of voice-interactive applications (for people with visual impairments) and the ability to call-in to make reservations.

First/Last Mile Connections

Ride hailing can play a role in providing first/last mile connections to transit. Multiple studies have considered the role ride-hailing companies currently play in passenger pick-ups and drops-offs at major transit stations, and pilot studies have examined the effectiveness of ride-hailing company partnerships with transit agencies. Using these partnerships to encourage ride sharing can help to increase transit use and decrease vehicle miles traveled. They can also be used to provide additional capacity during temporary spikes in demand due to major events in the area.

²⁰ National Transit Database, 2017, <https://www.transit.dot.gov/ntd/transit-agency-profiles/king-county-department-transportation-metro-transit-division>.

²¹ Blodgett, M., Khani, A., Negoescu, D., & Benjaafar, S. (2017). Public/Private Partnerships In Transit: Case Studies and Analysis. University of Minnesota. St. Paul: Minnesota Council on Transportation Access.

A recent and relatively successful pilot project for Metro has been the “Via to Transit” program, connecting riders within the Rainier Valley and Tukwila International Boulevard Station areas to light rail using on-demand service provider Via. The program is serving almost four riders per vehicle per hour and average cost per passenger is just over \$10, a cost on-par with lower productivity routes in the system. In addition, the service has shown that it can reach lower-income riders, with the percent of reduced fare-eligible riders using the service varying between 23 and 32 percent. While the service has not yet operated for six months, early signs show it to be an effective opportunity to improve connections to light rail service, with almost 90 percent of users transferring to light rail, and an additional 6 percent transferring to other transit services.

Go Centennial was a pilot study in Centennial, Colorado, a suburb of Denver, where Lyft and the City of Centennial collaborated to offer fully subsidized first/last mile connections in a 3.75 square mile service area around the Dry Creek light rail station if the trip either started or ended at the station. The fully subsidized rides were only available on Lyft Line to encourage higher vehicle occupancy, and there was a wheelchair accessible van available for riders with a disability. Ridership at the Dry Creek station increased by 11.6 percent over the six-month study period, which was a larger increase than the nearby stations. While park-and-ride use also increased, it was at a much lower rate than nearby stations. There was also a 95 percent decrease in passenger wait time from booking with the available Call-n-Ride service to using Lyft, and a 78 percent reduction in total cost (user fee plus subsidy) when compared to paratransit.²²

The Pinellas Suncoast Transit Authority (PSTA) in Pinellas County, Florida ran a successful six-month pilot in 2016 called Direct Connect that subsidized \$3 of every on-demand trip to or from certain bus stations; the pilot has since been extended and the program now subsidizes \$5 of every qualifying trip and \$25 for wheelchair transport trips. The original pilot only subsidized trips that started or ended at two local bus stations where bus routes had been removed and has now expanded to 24 transit stops. The partnership includes both Uber and United Taxi, with United Taxi accepting cash payments and call-ahead reservations to give riders a range of options. Wheelchair transport is also available through phone reservation. PSTA found that the original pilot provided a similar number of rides as the two bus routes it replaced, but at a savings of around \$70,000 annually. The expanded program continues to operate, and they have now launched an additional service offering free late night on-demand rides to workers, described in more detail below.

Some private companies and event venues have formed temporary partnerships with ride-hailing companies to help manage peak demand. San Diego partnered with Uber to give discounts on shared rides for people traveling to the All-Star Baseball game and Comic-Con International to reduce parking demand and congestion. A coupon code was valid for rides on UberPOOL to and from select transit centers.

²² Go Centennial Final Report. Centennial, Fehr & Peers, 2017.

EQUITY AND SUSTAINABILITY CONSIDERATIONS

New mobility services can provide a greater range of travel options to current and potential transit riders. However, they must also be evaluated on how well they provide equitable service to vulnerable populations such as low-income people, neighborhoods with a high percentage of black, indigenous, and people of color, and riders with disabilities.

Partnerships between transit agencies and ride-hailing companies can help to provide access to jobs and services that would otherwise be impractical or impossible to serve with fixed-route transit. After their initial pilot study, Pinellas Suncoast Transit Authority (PSTA) in Pinellas County launched a program called Transportation Disadvantaged (TD) Late Night in partnership with Uber. The program provides low-income residents with 25 free rides per month between the hours of 9 PM and 6 AM to help third-shift workers find a safe ride to and from their jobs. Other programs, such as Freedom in Motion in Gainesville, Florida, adjusted the proportion of the ride cost that senior residents were responsible for based on their income. These services can be cost competitive with fixed-route transit service while providing transportation options to people that need it most.

On-demand service has the potential to increase access to jobs and services, but there are aspects of the current ride-hailing business model that would need to be addressed to ensure equitable access to these services. To book a ride with most ride-hailing providers, a person must have both a smartphone and a credit/debit card. These requirements can exclude demographic groups such as seniors, of which only 27 percent own a smartphone, or low-income riders, who may be unbanked or lack access to a credit card. A Pew Research Center survey found that 10 percent of Americans with an annual household income of less than \$30,000 have used ride-hailing services compared with 26 percent of those living in households making \$75,000 or more. The Pew study found that there were no substantial differences in ride-hailing use among people of different races.

Riders with disabilities may not be able to use the standard web interface of most ride-hailing platforms, so having a call-in service and voice-adaptive application would help to serve those customers. A study also found that 8 percent of households in the country do not have a bank account²³—the ability to accept cash or other payment methods is necessary to ensure equitable service. For people whose first language is not English, applications and information in multiple languages can increase their ability to use ride-hailing services.

There have been other equity concerns raised about ride-hailing services, such as ensuring there are enough available drivers in low-income neighborhoods to provide reasonable and equitable wait times across the service area. There have also been reports of driver profiling of riders based on the customer's name.

²³ Virginia Department of Rail and Public Transit (DRPT). (2015). Feasibility of Using Private Operators and Independent Contractors for ADA Paratransit Services. Richmond.

A study of Lyft trips in Los Angeles found that coverage was fairly equal throughout the city and that riders in low-income neighborhoods took 36 percent more trips per month than people in high-income neighborhoods. These rides were more often shared trips, suggesting that providing lower-cost options is an important aspect of equitable service. Brown found that while black riders in LA waited six to 15 minutes longer for a taxi than white riders, ride-hailing nearly eliminated differences in service quality.

In Portland's recent e-scooter pilot program, only 43 riders were enrolled in the low-income plan, and only one company complied with requirements to site at least 100 scooters in East Portland communities that have been historically underserved by the transportation system. There were also issues with scooters improperly parked on the sidewalk and impeding access for people who use mobility devices. Stronger enforcement of more equitable policies to benefit priority populations is needed in future deployments.

New mobility services not only have equity impacts but can also have environmental impacts. While there is still some debate, ride-hailing services have generally been shown to increase per capita vehicle miles traveled and the associated greenhouse-gas emissions. If these vehicle trips are replacing walking, biking, and transit trips then there are clear implications for environmental sustainability.

Dash on Demand is a ride-hailing pilot program in the Itasca, Illinois community near Chicago that uses Innova EV electric vehicles. It serves workers traveling to the commuter rail station and Hamilton Lakes business park. Riders pay a flat fee of \$5 per ride, and the program is subsidized by advertisements on the vehicles. Electric vehicles have low or no greenhouse gas emissions and are quieter than non-electric vehicles, both of which reduce the environmental and health impacts of vehicle trips. However, electric vehicles may limit who can drive for the program since vehicle charging typically requires a private parking space with an electric outlet, which are uncommon in many apartment buildings or multi-family properties.

New services can help connect people with transit options or provide more flexibility than fixed-route transit in some service areas, but close attention should be paid to ensure that the service models are equitable and sustainable.

CONCLUSIONS

New mobility services offer a range of travel benefits and options to customers. They provide flexibility and can meet many different needs and travel patterns, especially for priority population areas identified in Figure 39 and Figure 40. Understanding how people are using these new services and where they could best complement fixed-route transit service—while further developing the mechanisms needed to ensure equitable access and service—presents opportunities for partnerships to better serve King County residents.

6 Resources and References

This chapter details resources and references where more information can be found on the best practice examples and case studies included in this appendix.

DEMOGRAPHIC TRENDS

- American Community Survey (ACS) 2017 5-Year Estimate, 2012 5-Year Estimate, 2009 5-Year Estimate.
- Puget Sound Regional Council (PSRC) Displacement Risk Analysis.
- U.S. Decennial Census 2000.
- U.S. Census Longitudinal Employer Household Dynamics (LEHD), 2015.
- Washington State Office of Financial Management (OFM) Small Area Estimates 2010-2018.

TRAVEL TRENDS AND PATTERNS

- American Community Survey (ACS) 2017 5-Year Estimate.
- US Census Longitudinal Employer Household Dynamics (LEHD) 2015, Puget Sound Region General Transit Feed Specification (GTFS) 2019.
- Puget Sound Region General Transit Feed Specification (GTFS) 2019, Open Street Map (OSM) 2019.
- American Community Survey (ACS) 1-Year Estimates.
- APC Database, Sound Transit, Community Transit, Pierce Transit.
- APC Database, Sound Transit, Washington Office of Financial Management.
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King County Metro Mobility Framework

Appendix B: Best Practices

October 2019



Table of Contents

	Page
1 Introduction.....	B-1-1
2 Metro Topic Area Assessments	B-2-1
Background.....	B-2-1
Summary of Findings.....	B-2-2
Potential Actions	B-2-3
3 Best Practices Research.....	B-3-1
Purpose and Methods	B-3-1
Best Practices Booklet.....	B-3-1
4 Metro’s Current Practices.....	B-4-1
Theme 1 – Investments	B-4-1
Theme 2 – Surrounding Land Use	B-4-3
Theme 3 – Innovation.....	B-4-5
Theme 4 – Workforce	B-4-7
Theme 5 – Engagement	B-4-8
5 Next Steps	B-5-1
Policy Updates	B-5-1
Additional Research.....	B-5-1
6 Resources and References	B-6-1
Theme 1 – Investments	B-6-1
Theme 2 – Surrounding Land Use	B-6-2
Theme 3 – Innovation.....	B-6-3
Theme 4 – Workforce	B-6-5
Theme 5 – Engagement	B-6-7

Table of Figures

	Page
Figure 1 Metro Assessment Topic Areas.....	B-2-1

1 Introduction

The best practices element of the Mobility Framework was shaped by King County Metro's staff topic leads and the Equity Cabinet. This work examines Metro's current conditions and practices, national and international best practices, and opportunities and implications for Metro to identify how Metro's policies, services, programs, and investment strategies:

1. Do or do not contribute to equitable mobility, and how they could be designed to better advance equitable outcomes; and
2. Do or do not contribute to sustainable mobility, in terms of reducing regional greenhouse gas emissions from transportation, and what opportunities there are to advance goals to reduce emissions.

This work included the following components, which are described in greater detail in the chapters of this appendix:

- **Metro Topic Area Assessments Overview:** a summary of work by Metro staff to review impacts of the agency's practices and policies on equity and sustainability outcomes;
- **Best Practices Research:** approach to and findings from research on national and international best practices related to the provision of equitable and sustainable mobility services, including a high-level impact analysis for each best practice;
- **Metro's Current Practices:** a summary of Metro's actions and practices in each of the research areas identifying what the department is currently doing to advance equity and sustainability;
- **Next Steps:** an approach to policy updates to move Metro toward a more integrated, innovative, equitable, and sustainable future and additional research needed to support this effort; and
- **Resources and References:** a list of resources for more information on the best practices and case studies included in this appendix.

2 Metro Topic Area Assessments

BACKGROUND

In preparation for the Mobility Framework, Metro completed assessments across topic areas covering many of Metro’s business practices, including those identified by Motion 15253 (emerging technologies, potential implications for Metro and opportunities to coordinate mobility innovations with fixed-route and other services, outreach and engagement, policies for the allocation of public space, and workforce trends). These assessments focused on the extent to which Metro’s practices, policies, and investments advance or impede the Mobility Framework goals of centering Metro’s work in equity and sustainability. Through the assessments, Metro answered the following questions:

- **Equity:** How does Metro’s current state advance equitable mobility (using King County’s definition of equity, including leading with racial justice)? How does it contribute to persistent inequities? Do partnerships impact Metro’s ability to advance equity, and if so, how?
- **Sustainability:** How does Metro’s current state support or impede the reduction of greenhouse gas (GHG) emissions from transportation? Do partnerships impact Metro’s ability to reach its GHG emissions goals, and if so, how?

Topic areas for the assessment process are shown in Figure 1.

Figure 1 Metro Assessment Topic Areas

Topic Area	
Access to Transit	Land Use
ADA Services	Marine
Capital Program	Services/Service Planning
Customer Communications	Outreach and Engagement
Emerging Technologies and Innovative Mobility	Policies for the Allocation of Public Space
Facilities Integration to Support Transfers	RapidRide Program
Fares	Workforce

SUMMARY OF FINDINGS

Several themes emerged through the 14 topic area assessments. Many of these themes, and other staff ideas, are reflected in the Mobility Framework Recommendations:

- Service and capital planning could be better aligned to community and prospective rider needs, rather than maintaining the current network.
- Adequate time and additional resources for community engagement, as well as clarity on how engagement meaningfully shapes program or project budgets, planning, and decision-making, would support more equitable planning and implementation across project areas.
- Metro needs an overarching strategy for partnering with jurisdictions with varying resources in a way that advances equity.
- Current decisions are often driven by cost, schedule, and partnerships. Metro has work to do in terms of integrating equity and climate (to a lesser degree) considerations into decision making.
- Metro could better use its influence to encourage actions that benefit transit and the overall mobility system, equity, and sustainability.



Metro topic area staff leads consider opportunities for the Mobility Framework

Source: King County Metro

POTENTIAL ACTIONS

Metro saw great potential for better advancing equity and addressing climate change through three kinds of actions:

1. **Adopted policy changes** through updates to Metro's Strategic Plan and Service Guidelines (and others)
2. **Changes requiring partner action**, including areas in which Metro does not have authority, such as land use, but that have significant implications for Metro's ability to provide service
3. **Internal process changes**, some of which could be done more quickly than others

To support the work of the King County Metro Equity Cabinet and ensure timely transmittal of the Mobility Framework to the King County Council, most of the best practices work focused on ideas related to adopted policy changes and partner actions. Initial ideas from the assessments across all three areas are summarized below. These ideas, in addition to others, are reflected in the Mobility Framework Recommendations, developed in partnership with the Equity Cabinet.

Adopted Policy Changes

- The Mobility Framework will lead to substantial updates to the Strategic Plan, Service Guidelines, METRO CONNECTS, Strategic Climate Action Plan, and potentially other adopted policy documents.
- Staff initially assumed that policy changes may include:
 - More clearly prioritizing equity within the Service Guidelines
 - Better aligning the Service Guidelines with the METRO CONNECTS network
 - Adapting policies to consider rider needs as well as system needs and clarify meaning of and expectations for "partnerships"
 - Updating speed and reliability investment criteria, transit facilities guidelines, and/or other guidelines around capital investment to better prioritize equity and climate

Changes Requiring Partner Action

- Transit-supportive, equitable land use and zoning policies.
- Partnerships with jurisdictions to prioritize right-of-way use for transit, develop a unified strategy for working with new mobility providers, implement capital improvements, and more.
- Partnerships with colleges, labor, and others to recruit workers and prepare the workforce for a changing industry.

Internal Process Changes

- Better aligning public engagement so it meaningfully influences all levels of decision-making.
- Improving marketing to make programs and services more accessible to priority populations (low- and no-income people, black, indigenous, and people of color, immigrants and refugees, people with disabilities, and limited-English speaking communities).
- Ensuring current programs and services are as equitable and accessible as possible.
- Updating internal policies to prioritize equity in contracting and internal workforce development.

3 Best Practices Research

PURPOSE AND METHODS

To support the Equity Cabinet's development of Mobility Framework Recommendations, the consultant team conducted best practices research into how other transit agencies, cities, and regions work to improve equity and sustainability outcomes. As discussed in the Mobility Framework document, the Equity Cabinet began by establishing Guiding Principles. The 10 Guiding Principles were then grouped into themes based on Equity Cabinet priorities to focus the best practices research.

Each theme—Investments, Surrounding Land Use, Innovation, Workforce, and Engagement—included questions considered by Equity Cabinet members in developing the Recommendations. These recommendations-focused questions were supported by project team research questions to direct the best practices areas of inquiry. The research touched on the topic areas required by Motion 15253 and most of the Metro staff assessment topic areas.

BEST PRACTICES BOOKLET

The Best Practices booklet was created to share the team's research and inform the Equity Cabinet's work. It is organized by theme and includes the Guiding Principles, Equity Cabinet questions, and research questions associated with each theme. Within each theme, a table of best practice examples is grouped by research area and includes a high-level impact assessment of the practice's potential to meaningfully affect equity and/or sustainability outcomes for King County residents. Each theme's summary table is followed by detailed descriptions of select best practice examples.

The Equity Cabinet used the Best Practices booklet, along with other resources, to inform their Mobility Framework Recommendations.



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KING COUNTY METRO TRANSIT MOBILITY FRAMEWORK

Best Practices | Key Findings

September 2019

King County
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Themes

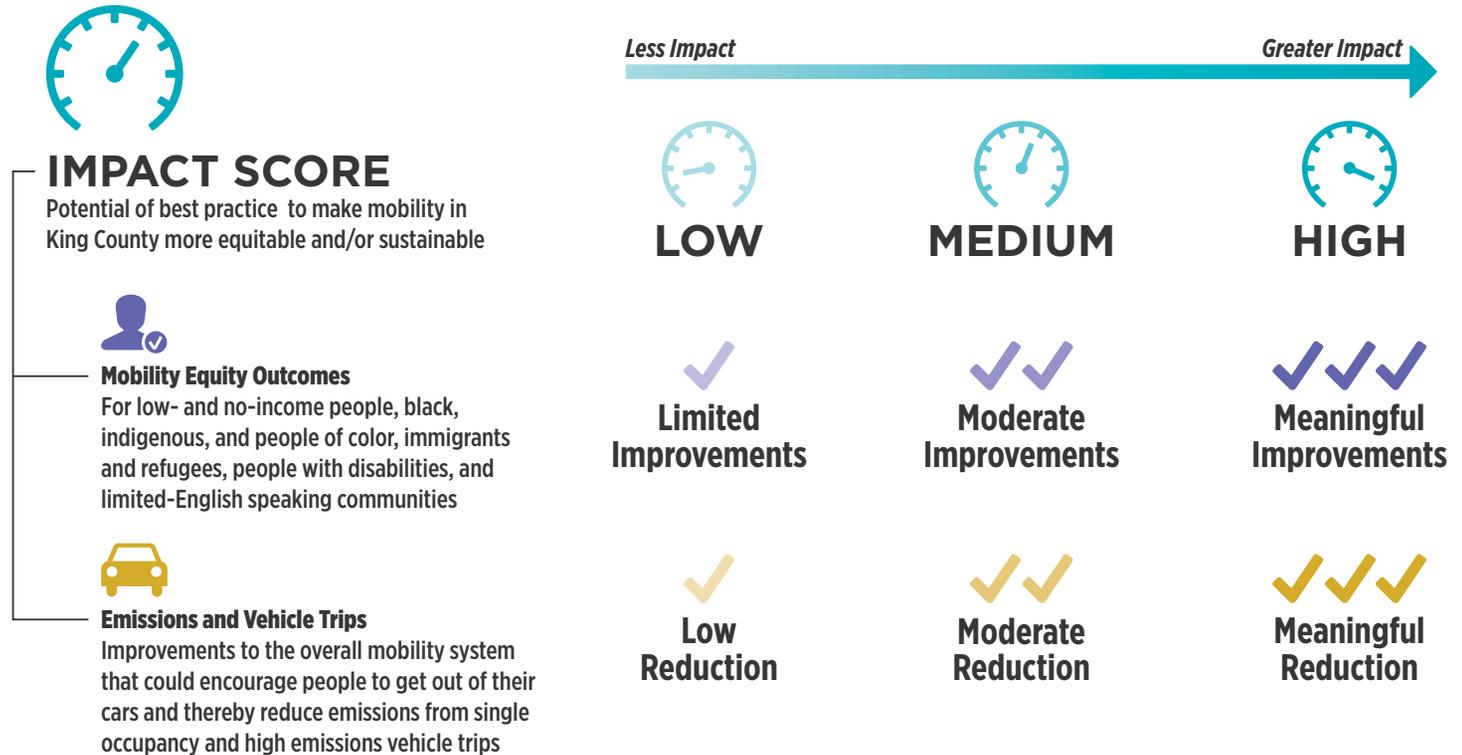
The best practices in this booklet are organized by themes related to the Mobility Framework’s Guiding Principles. Each theme is introduced by its Guiding Principles, questions informing the Equity Cabinet’s work, and the project team’s research questions.



Impact

Each best practice has been assigned a qualitative score describing its potential to make mobility in King County more equitable and/or sustainable. Scores are based on measurable outcomes or impacts of the practice in another location with an eye toward programs and policies already in place in King County.

Metro’s focus on priority populations is grounded in the concept of targeted universalism, which uses targeted strategies to achieve the department’s larger goals. For example, increasing transit ridership and reducing greenhouse gas (GHG) emissions benefits everyone in the county but requires a focus on changing our systems to support priority populations.



INVESTMENTS



Relevant Guiding Principles

- Invest where needs are greatest
- Ensure safety
- Align our investments with equity, sustainability, and financial responsibility

Equity Cabinet Questions

- Where and when is transit service needed, particularly for low- and no-income people, people of color and indigenous people, immigrants and refugees, people with disabilities, and limited-English speaking communities? What types of service would best meet those needs?
 - » What's the right mix of traditional and innovative mobility services?
 - » How can Metro adjust its adopted policies to address these needs?
 - » What changes can Metro make, or what can Metro recommend that partners do, to support a safe experience on and accessing transit?
- What are the amenities and supports that make transit and accessing transit feel safe? How can Metro work with partners to make such improvements, especially to benefit the populations mentioned above?
- Can we define “affordable” (i.e., a percentage of someone’s budget spent on transit)? How can Metro prioritize investments and align policy guidance to support using its fares program to benefit people for whom the price of the fare is a barrier?

Best Practices Research Questions

- What types of services, capital investments, or rider programs are agencies using to meet a broader set of traveler needs?
- Are there transit agencies actively investing—whether service or capital investments—in traditionally underserved or underrepresented communities? How are they doing it?
- Who is using prioritization or investment frameworks that express their values through their budgets and what do those frameworks entail?

Relevant Best Practices & Preliminary Impact Assessment

Best Practice	Description	Impact
Services, capital investments, rider programs that meet broad traveler needs		
Measure M Transportation Funding Ordinance (Los Angeles, CA)	Voter-approved transportation funding measure built with strong community leadership. Measure design reflects diverse traveler needs across LA County.	
Massachusetts Bay Transportation Authority (MBTA) Late Night Bus Service (Boston, MA)	Pilot program to offer late-night service (until 3:00 a.m.) to support workers with non-traditional schedules will transition to permanent service additions (until 1:00 a.m.) in summer 2019.	
TriMet Service Guidelines (Portland, OR)	TriMet's service guidelines detail the planning, engagement, and implementation process for bus and rail service changes. The agency's annual service plans assess the network on an ongoing basis and prioritize recommended investments.	
Los Angeles Department of Transportation DASH Free Student Fares Pilot (Los Angeles, CA)	Funding one-year pilot program (through Low Carbon Transit Operations Program) that provides DASH (Los Angeles city transit service) free for all students from kindergarten through college.	
San Francisco Late Night Transportation Working Group (San Francisco, CA)	Working group of local transportation providers, representatives from late-night and early-morning businesses, nightlife advocates, labor unions, and other stakeholders conducted a two-phase process of developing recommendations and next steps for improving public transportation options for late night and early morning workers.	
Utah Transit Authority Fare Policy (Salt Lake City, UT)	Provides free fixed-route service to ADA paratransit-eligible riders. Began tracking such rides in 2011 to evaluate ridership trends for ADA-eligible riders on paratransit service vs. fixed-route service.	

Best Practice	Description	Impact
Orange County Transportation Authority Safe Transit Stops (Orange County, CA)	Competitive grant program for communities to improve passenger amenities at bus stops.	
Investments in underserved/underrepresented communities		
Metro Transit Equity Approach for Transit Shelters (Minneapolis-St. Paul, MN)	2014-15 initiative adding 150-200 new or replacement bus shelters, the majority of which are within racially concentrated areas of poverty.	
VIA Metropolitan Transit Next-Gen Bus Stop Improvement Program (San Antonio, TX)	Built 1,000 new/improved bus shelters in three years, providing shelters for 95% of system boardings. 73% of the work done was by DBE/SBE companies.	
Values-based prioritization		
Oakland Department of Transportation Goal-Aligned Budgeting Process (Oakland, CA)	Aligning city budget with goals: equitable jobs and housing, holistic community safety, vibrant sustainable infrastructure, and responsive trustworthy government.	
Portland Bureau of Transportation - 2035 Transportation System Plan Evaluation Criteria (Portland, OR)	Developed a new Major Project Evaluation scoring system that incorporates safety, neighborhood access, opportunity access, health, equity, and climate.	

 Highlighted best practices are described in greater detail in this document.

Measure M Transportation Funding Ordinance

Los Angeles, CA (2016)

Measure M is a 2016 voter approved, half-cent sales tax increase to fund transportation projects in Los Angeles County. To identify projects for funding under this measure, Metro turned to local communities, engaging the county’s nine sub-regions and empowering them to identify their highest priority projects. This created buy-in from the beginning and built the framework for the plan.

Lessons Learned

Engagement with local Councils of Governments (COGs) from the beginning of the process was essential to equitably represent their interests in the measure, particularly for smaller, historically underrepresented communities. Metro also provided tools to assist stakeholders and COGs in identifying projects for the measure, including a mobility matrix, project-specific benefits, project cost estimates, a project priority submittal form, and optimal growth targets for each sub-region.

Measurable Results and Impacts

Metro allowed the communities to build their own list of projects based on one of four targets: current population, future population, current employment or future employment. This flexibility encouraged local jurisdictions to think holistically and allowed a more diverse range of projects—meeting the needs of different groups of people—to be included into the project funding list.

To support ongoing community input and oversight, Measure M features an Independent Taxpayer Oversight Committee, which is responsible for reviewing the proposed expenditures and Comprehensive Program Assessment of the Expenditure Plan. This provides a level of accountability with representation from communities impacted by Measure M to ensure that expenditures align with the established priorities. It also enables communities and local jurisdictions to continue their involvement and engagement with transportation improvements across the county, rather than establishing a project list and removing themselves from the process.

Applicability to KCM

Measure M is a model approach for addressing the unique transportation needs of individual communities, which could be translated to King County. The measure also provides direct funding to LA Metro’s LIFE Program, which provides discounted fares to people with no or low incomes, people with disabilities, and older adults and youth. The Measure M engagement process and prioritized project list reflect goals that are closely aligned with King County Metro’s goals.



Extending the Expo Line from Culver City to Santa Monica was a key capital investment in high capacity transit service funded by Measure M. (Image courtesy of KCRW)



Measure M provided funding to develop a network of express lanes on LA County freeways, which provide travel time benefits to transit and reach numerous communities within the county. (Image courtesy of LA Metro)

Impact:



MBTA Late-Night Bus Service

Boston, MA (2018)

In 2018, the Massachusetts Bay Transportation Authority (MBTA) ran a pilot of overnight bus service for early morning and late-night shift commuters. Starting in September 2018, the MBTA expanded bus service on select routes from 10:00 p.m. to 3:00 a.m. every night, at a cost of \$1.2 million over the 10-month pilot. The expansion featured additional evening trips on existing overcrowded routes, later trips, and “late night spine” route variations that included stops in areas where service was most needed. The pilot was intended to provide service in areas with high late-night demand and to meet the needs of low-income workers, typically those in the hospitality and food service industries and those with shifted hours.

In June 2019, the MBTA board voted to make some of these changes permanent. The MBTA determined that ridership was not sufficient to justify the costs required to operate the service after 1:00 a.m., but the agency made service permanent on select routes between 10:00 p.m. and 12:30 a.m.

Lessons Learned

The 2018 pilot is the MBTA’s second attempt at investing in late night service within the past five years. The agency operated a similar pilot between 2014 and 2016, extending subway service until 2:00 a.m., before ultimately eliminating the service extension due to high costs and an internal budget deficit.

The MBTA’s iterative use of pilot programs enables the agency to test what is and is not

working and incrementally add service to meet demand. While the 2014 pilot program did not result in a permanent subway service extension, it provided additional context necessary for the agency to attempt a bus service extension in a different area. These pilot programs enable agencies to explore multiple options for addressing unmet demand and to identify the appropriate level of service to meet demand with limited financial resources.

Measurable Results and Impacts

The late-night spine trips offered between 1:00 a.m. and 3:00 a.m. did not draw sufficiently high ridership as other trips in the pilot project. As a result, the MBTA subsidy per trip was more than \$16, more than triple that of the other late-night service categories.

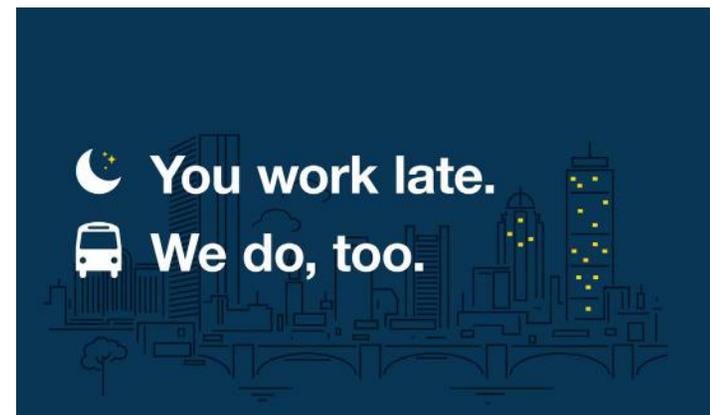
About 120 trips are being added to existing routes between 10:00 p.m. and 12:00 a.m. and another 30 to 40 trips will continue operating into the early morning hours. While most of the late-night trips had fewer than 10 people riding, two routes, including a 2:30 a.m. trip between Logan International Airport and Dudley Square carried over 15 passengers. This ridership indicates there may be additional unmet demand for late-night service that could be addressed in a future pilot program.

Applicability to KCM

Like MBTA, King County Metro uses pilot programs to test and evaluate potential service changes. Metro could develop a late-night service pilot to supplement existing Night Owl service based on the needs of a specific group, such as shift workers, and use pilot results to determine the best path forward for future service changes.



Late-night service from Logan International Airport to Dudley Square was one of the most successful late-night routes offered in the pilot program and may have potential as a future service extension. (Image courtesy of Mass.gov)



The MBTA has attempted to extend late-night and early-morning service through iterative pilot programs, most recently, resulting in a permanent service extension between 10:00 p.m. and 12:30 a.m. on select bus routes. (Image courtesy of Boston Magazine)

Impact:



TriMet Service Guidelines

Portland, OR (2015)

TriMet's 2015 service guidelines detail the planning, engagement, and implementation process for bus and rail service changes in the network. A major component of the service guidelines is an Annual Service Plan, which assesses the transit network and prioritizes recommended investments. The Annual Service Plan organizes service investments into three categories: maintain, optimize and restore, and increase.

Measurable Results and Impacts

Generally, TriMet prioritizes service investments necessary to maintain service, then to optimize underperforming services, and lastly to increase services as the budget allows. Each of these investment categories use different performance measurements and considerations.

Maintain: Service investments in capacity and reliability, such as schedule adjustments and frequency changes, help to maintain performance levels. The primary measurements for these service changes are overcrowding (peak passenger loads) and service predictability (on-time performance).

Optimize and Restore: Investments in route restructuring optimize performance of existing services and restore service to greater levels. The primary measurement is productivity (boardings per vehicle hour). Any route or segment with fewer than 15 boardings per hour is evaluated for potential restructuring and optimization.

Increase: Investments in new and reconfigured routes improve frequency (how often the bus or train arrives) or service span (the hours that service is provided).

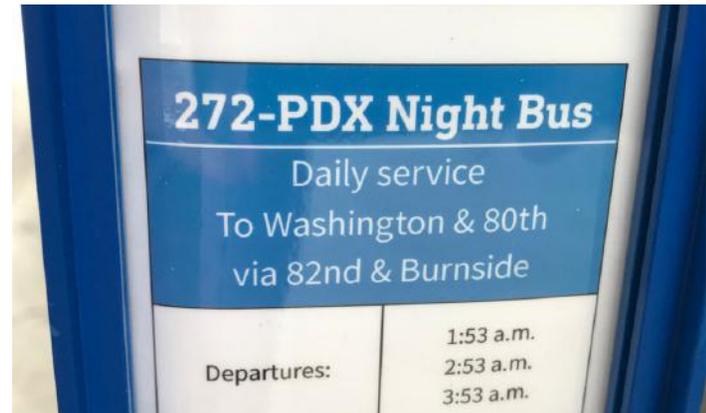
These improvements do not have existing performance data; instead, they are assessed based on their ability to meet the equity, demand, productivity, connectivity, and growth priorities for the agency. Each year, when budget is available, TriMet will increase service using these considerations to meet the highest needs and priorities of the system.

The 2019 Annual Service Plan recommends capacity improvements, earlier service, increased service frequency, and route restructures on 10 routes as well as two new bus routes to provide connections along 82nd Avenue between Burnside Street and Portland International Airport and between Clackamas Town Center and Oregon City Transit Center. A Title VI analysis estimated that these routes would provide new service to over 32,000 jobs, 16 supermarkets, and three employment and housing resource centers.

Applicability to KCM

Both TriMet and King County Metro use an annual approach to service updates that allows the agencies to respond to changing demographics, service needs, performance, and budget restrictions. Keeping established priorities and service guidelines at the forefront of service evaluation in the Annual Service Plan ensures that investments continue to align with agency goals.

King County Metro's service guidelines use metrics similar to TriMet, assessing corridor productivity, social equity, and geographic value as the primary measurable factors for transit investment. Metro could consider changes to the geographic value metric or other metrics in its current guidelines to provide an ability to focus resources in areas where they are most needed.



Route 272 - PDX Night Bus was one of two new routes recommended for implementation following the 2019 Annual Service Plan. (Image courtesy of OregonLive)



In conjunction with the Annual Service Plan and Service Guidelines, TriMet divided the service area into five geographic regions to concentrate service enhancements based on the unique needs of each area. (Image courtesy of TriMet)

Impact:



OakDOT Goal-Aligned Budgeting Process

Oakland, CA (2018)

A stated priority in the Oakland Department of Transportation (OakDOT) budget is to accelerate investment in transportation and infrastructure improvements across the city using an equity framework that considers communities of color, household income, and other social indicators. In 2018, OakDOT developed a new scorecard for the capital improvement projects (CIP) prioritization process. This scorecard considers equity by identifying projects that address disparities within the criteria for health and safety, economy, environment, improvement, and collaboration.

OakDOT also developed analysis tools to support project prioritization, including for the 311 system. Now residents' requests are scored based on factors that include an equity analysis, with requests in communities of concern receiving greater priority than those in other areas of the city.

Lessons Learned

The city spent a full year and a half developing, revising, and vetting the new equity-based scorecard. The concept originated with Oakland's Department of Race and Equity and was finalized by the Capital Improvement Program Workgroup along with members of the community. The group held four large meetings, 24 community-specific meetings, and conducted a survey that reached 1,350 residents. The focus on community engagement early and often during the scorecard development ensured

that priorities were heard, particularly from traditionally underserved and underrepresented communities.

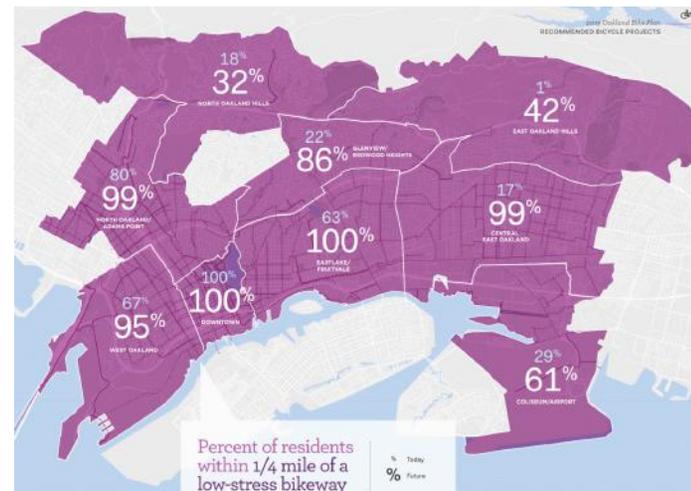
Measurable Results and Impacts

In addition to the new scoring criteria, the city has also changed the process for making funding requests. Rather than city staff compiling projects from other departments, Oakland residents can now submit proposals directly to the city. In October 2018, residents had a 30-day window to file a project request; during this period, community members submitted 285 proposals.

As a result of this focus on equity in prioritizing projects, the proposed three-year paving plan prioritizes funding for neighborhoods that have both the highest percentage of poor roads and the highest percentage of underserved residents. Similarly, the OAK311 report-a-problem service is now prioritizing repairs in traditionally underserved areas.

Applicability to KCM

Metro has a large service area, including jurisdictions with diverse needs and interests. Developing an equity- and sustainability-based scorecard and prioritization framework can increase transparency and streamline project development. It could also enhance engagement with traditionally underserved communities and ensure that their needs feature in Metro's priorities.



OakDOT collaborated with community-based organizations to identify and refine design strategies to create an equitable bike plan, building on the equity framework, which identified the most vulnerable groups. (Image courtesy of OakDOT)



OAK311 aggregates equity scores to ensure that response prioritization incorporates equity factors. (Image courtesy of OakDOT)

Impact:



Portland 2035 Transportation System Plan Evaluation Criteria

Portland, OR (2018)

To provide a more transparent, inclusive, objective, and effective project prioritization process for the 2035 Transportation System Plan (TSP), the Portland Bureau of Transportation (PBOT) developed new evaluation criteria in late 2018. The 11 criteria emphasize outcomes, better align with the department’s policy goals, and ensure that projects of all sizes can be competitive during grant applications. The evaluation criteria include safety, neighborhood access, health, equity, and climate, among others.

Lessons Learned

The process of developing new evaluation criteria resulted in several lessons:

- Limit criteria to the priority issues that matter most. Including too many criteria can minimize the impacts to key areas and result in a failure to identify projects that align with priorities.
- Be aware of similar or overlapping criteria across multiple factors to avoid “double counting” criteria and to accurately represent needs that address multiple values and goals.
- Criteria should be readily available or easy to calculate. Complex analyses may take significant resources and have little impact on the outcome of the selection compared to a simpler calculation.

Measurable Results and Impacts

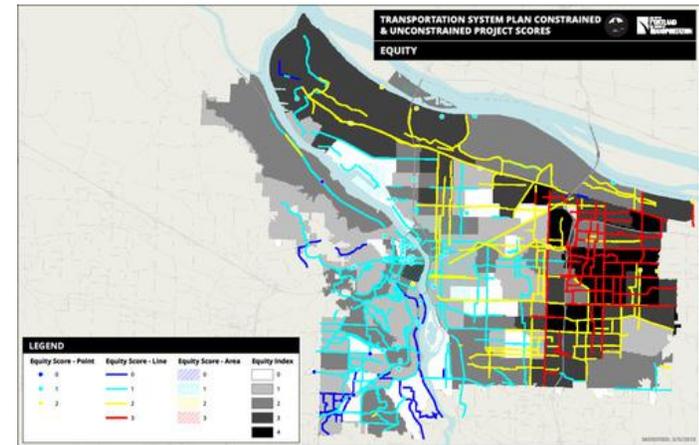
Projects are scored for the equity criteria using a “vulnerability” analysis. That analysis uses demographic data and assigns each Census tract a score from 0 to 6 based on whether the tract’s population met a threshold for six displacement risk factors. Of these six factors, four were used to rank projects in the evaluation criteria: communities of color, households at or below 80% median family income, population age 17 and under, and population age 65 and older.

In addition to the TSP’s evaluation criteria, the plan also includes a Transit Equity Policy to maintain and expand high-quality, frequent transit service to all Town Centers, Civic Corridors, Neighborhood Centers, and Neighborhood Corridors, and to improve service to areas with high concentrations of poverty and historically underserved and underrepresented communities.

Applicability to KCM

Metro is expanding its service, fleet, and capital facilities. Developing evaluation criteria that encourage equitable distribution of services and a transparent prioritization process can build community support and ensure that investments are focused in areas of greatest need.

Similarly to PBOT’s evaluation criteria, Metro currently uses the Equity Impact Review tool to identify, evaluate, and communicate the potential impacts of projects, policies, and programs on equity.



PBOT’s evaluation criteria establishes an equity score for each census tract in the city and is used to prioritize project funding in the Transportation System Plan. (Image courtesy of PBOT)



The Hawthorne Bridge in Portland provides a key east-west connection across the Willamette River and is a direct route for neighborhoods in east Portland to access downtown. (Image courtesy of Nelson\Nygaard)

Impact:



SURROUNDING LAND USE



Relevant Guiding Principles

- Address the climate crisis and environmental justice
- Encourage dense, affordable housing near transit
- Improve access to mobility

Equity Cabinet Questions

- What could make the biggest impact in making transit and other mobility services a more appealing choice than single occupancy vehicles, therefore reducing greenhouse gas emissions from vehicles?
- How do we encourage transit or non-motorized options to get people out of single-occupancy vehicles?
- How do we prioritize communities that face the worst environmental health impacts?
- What is Metro's role related to affordable housing?
- How can Metro use its influence to increase housing affordability and minimize displacement near transit?
- How can Metro support the efforts of community-based organizations and other efforts to develop dense, affordable housing?
- How can Metro influence allocation of public space in ways that support access to mobility services?
- What would be most helpful in increasing access to mobility services?

Best Practices Research Questions

- How are transit agencies partnering with cities to incentivize/encourage transit-supportive development?
- Who is leading in creating denser, mixed-use, more walkable communities and how are they doing it?
- Who is leading in the creation of transit-oriented communities and how are they doing it?
- What agencies are working closely with cities to build affordability and measures to avoid displacement into transit/mobility projects or Transit Oriented Developments/Transit Oriented Communities and how are they doing it?
- Which transit agencies have strong access to transit guidelines, especially those that help agencies encourage jurisdictions to make investments, and what are those guidelines?
- How are agencies and cities working together to make the right-of-way more supportive for transit? How can an agency encourage a city to make the investment it needs (e.g., offer more service, make capital investments to support the city's investment)?

Relevant Best Practices & Preliminary Impact Assessment

Best Practice	Description	Impact
Partnerships to support dense, transit-supportive development		
California Senate Bill 375 Sustainable Communities Strategy and Greenhouse Gas Reduction Targets (CA)	SB 375 directs the California Air Resources Board (CARB) to set regional Greenhouse Gas (GHG) reduction targets. Regional planning agencies (MPOs) develop a "Sustainable Communities Strategy" (SCS) in the regional transportation plan that demonstrates how the region will meet the GHG reduction targets. Transportation funding allocation must be consistent with the SCS. Additionally, SB 375 coordinates the regional housing needs allocation process with the regional transportation process.	
City and County of Honolulu Transit Oriented Development Special District Guidelines (Honolulu, HI)	City-sponsored Transit-Oriented Development (TOD) design guidance developed in preparation for light rail that allows design flexibility to accommodate diverse community types and needs; density bonuses allowed in exchange for provision of community benefits such as affordable housing and public space.	
New Orleans Regional Transportation Authority Strategic Mobility Plan (New Orleans, LA)	By 2018, the agency was to begin working with local governments and partners to increase affordable housing units and community services in areas along High-Capacity Transit lines.	
Affordability and displacement prevention		
Transit Oriented Denver (Denver, CO)	Denver's Transit Oriented Development Strategic Plan is heavily focused on affordability and partnerships with RTD, the regional transit provider.	
TransLink Transit-Oriented Communities (Vancouver, BC)	TransLink's Transit-Oriented Communities (TOC) policy provides design guidelines and other resources to help municipalities create more livable places around transit in Metro Vancouver. TransLink developed these resources in coordination with municipalities to ensure unique local context and affordability challenges are accounted for and to foster relationships and encourage partnerships with organizations that have land use jurisdiction.	

 Highlighted best practices are described in greater detail in this document.

Best Practice	Description	Impact
Portland Metro Transit Oriented Development Program and Strategic Plan (Portland, OR)	Strategic Plan designed to guide future investments by the Metro TOD Program, in order to ensure the program maximizes the opportunities for catalyzing transit-oriented development throughout the region, balances affordability and displacement risk, and effectively leverages additional resources to comprehensively advance TOD in all station areas and frequent bus corridors.	
San Diego Association of Governments Regional Transit Oriented Development Strategy (San Diego, CA)	Overarching strategy to focus housing and job growth in the urbanized areas where there is existing and planned infrastructure; protect sensitive habitat and open space; invest in a network that gives residents and workers transportation options that reduce GHG emissions; promote equity for all; and implement the plan through incentives and collaboration.	
Access to transit		
LA Metro Transit-Oriented Communities (Los Angeles, CA)	Systemwide Design Policy to provide a safe, accessible, and comfortable experience; connect stations to the greater regional network; and orient stations to neighborhood destinations and pedestrian routes.	
BART Station Access Guidelines (San Francisco Bay Area, CA)	Prioritizes funding for walk, bike, and vehicle access to BART stations based on agency and community goals and values.	
Right-of-way management and investment		
San Francisco's Transit-First Policy (San Francisco, CA)	City charter (Section 8A) that prioritizes transit, bicycles, and walking/rolling over individual automobiles regarding decisions on use of right-of-way.	
Sound Transit System Access Fund (Seattle, WA)	\$100 million fund included in voter-approved ST3 measure for projects such as safe sidewalks, protected bike lanes, shared use paths, improved bus-rail integration, and new pick-up and drop-off areas.	

California Senate Bill 375 Sustainable Communities Strategy and Greenhouse Gas Reduction Targets

California (2008)

In 2008, the California Legislature passed Senate Bill 375 (SB 375), the Sustainable Communities and Climate Protection Act. SB 375 directs each of California’s Metropolitan Planning Organizations (MPOs) to include a Sustainable Communities Strategy (SCS) in their long-range transportation plans. The SCS is used to identify strategies to reduce transportation-related greenhouse gas emissions in accordance with regional targets established by the California Air Resources Board (CARB).

Lessons Learned

Initial indications suggest that while California has established appropriate long-range greenhouse gas emissions reductions targets and regional growth and investment plans, the results are falling significantly short of the SB 375 targets.

The 2018 Progress Report from CARB indicates several priority challenges and opportunities for meeting established greenhouse gas reductions—such as better aligning transportation, land use, and housing policies. Despite an increase in funding allocated for clean transportation options, vehicle miles traveled (VMT) per capita is increasing and public transit ridership is decreasing.

Unless changes in authority, mandates, and incentives for these policy outcomes are made, this disconnect will continue to impede progress to attaining the SB 375 targets.

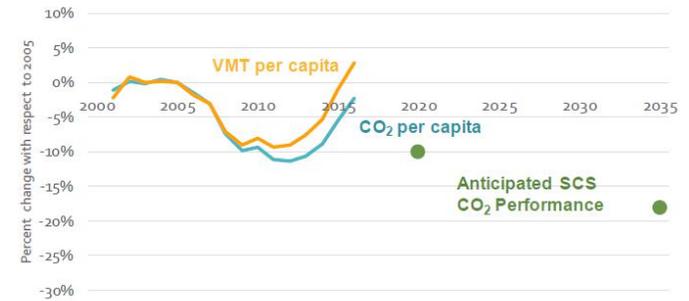
Measurable Results and Impacts

Statewide, current strategies plan for a 9.6% reduction in per-capita passenger vehicle CO2 emissions by 2020 and an 18% reduction by 2035 compared to 2005 levels. Preliminary data show a 2% decrease in per capita CO2 emissions, but a 2% increase in per capita VMT, well short of the target.

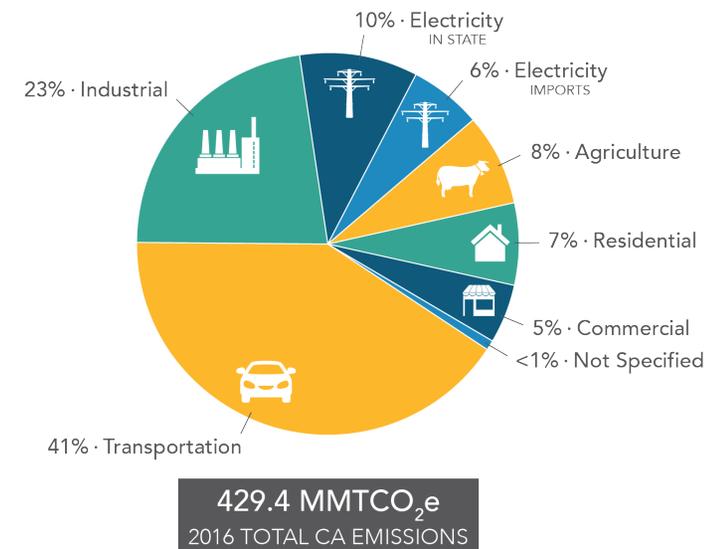
Housing production in the state is also falling far short of demand and of the levels identified in the Sustainable Community Strategies. As a result, housing is becoming less affordable, and California’s low-income residents are relocating to suburban and exurban areas at greater rates than the rest of the state’s population. People earning less than \$25,000 per year are relocating at a rate of about 18% higher than those earning more. This trend of displacement and relocation forces more people into a built environment that is more auto-dependent and provides fewer choices for public transit or active transportation.

Applicability to KCM

While King County Metro has established its own emissions reductions targets related to bus operations, there is a complex relationship between transportation, land use, and housing in reducing greenhouse gas emissions. One of the key takeaways from SB 375 is that allocating additional funding to public transportation is not sufficient to significantly reduce drive-alone rates or greenhouse gas emissions. Instead, Metro should continue to work with regional partners to encourage dense, affordable housing near transit to provide additional transportation alternatives to more communities. Metro should strengthen relations with state partners in addition to regional partners to push for stronger sustainability and land use regulations at higher levels of government.



Although CO2 per capita was 2% lower in 2015 than 2005, it has been increasing along with VMT per capita in recent years and is not on track to meet Sustainable Community Strategies (SCS) targets by 2020 or 2055. (Image courtesy of CARB)



The single largest share of emissions by sector in the state of California is derived from transportation. SB 375 seeks to reduce these emissions. (Image courtesy of CARB)

Impact: ✓✓✓

Transit-Oriented Denver

Denver, CO (2014)

The City of Denver is taking a holistic approach to implement transit-oriented development (TOD) and transit-oriented communities (TOCs) through its 2014 Transit Oriented Denver Strategic Plan. The plan provides a foundation to guide public and private investment at rail stations by:

- Creating an implementation action plan through research and analysis of the existing state of transit-oriented development;
- Providing citywide, high-level policy recommendations and on the ground, station-level action items with the intent to foster implementation of TOD at rail stations; and
- Establishing a system to track and monitor Denver's success so the city can continue to refine and improve its strategic moves in the future.

TODs and high-density development are often associated with gentrification. To prevent potential gentrification and displacement associated with the opening of new rail lines, the City of Denver, Enterprise Bank, and other Denver area partners launched the Denver Regional TOD Fund. The fund allows affordable housing and community developers to acquire and hold strategic transit-accessible properties for preservation or future development. This fund was identified as a priority in the Transit Oriented Denver Action Plan.

Lessons Learned

A successful TOD policy must have affordability at its core and must include a mechanism to dictate opportunities for

affordable housing. Without this type of mechanism, affordable housing developers are generally reactive, purchasing high value property to develop after new light rail stations are operational and limiting the number of affordable units they are able to provide. However, programs like the Denver TOD Fund allow developers to take a more proactive approach by purchasing relatively inexpensive property before new light rail stations are operating. This process allows affordable housing developers to focus on their core mission of providing affordable housing and reducing displacement and gentrification.

Measurable Results and Impacts

The fund has made 15 loans since its inception, deploying \$24.7 million in capital for acquisition of land or operating properties near public transit in the Denver Metro area. To date, 11 of the loans have been repaid, which provides resources toward future acquisitions. The loans have created a pipeline of 1,300 affordable homes, a new public library, and well over 100,000 square feet of supportive commercial and non-profit space, all near public transit.

Applicability to KCM

Housing costs in King County are continuing to increase. Encouraging dense, transit-oriented development is critical to achieving the County's greenhouse gas reduction goals, but such development may further increase the cost of housing. King County could explore a public-private partnership similar to the Denver Regional TOD Fund to encourage TOD and TOC development while maintaining housing affordability, allowing more people to choose transit and other options for travel that do not require driving alone.



The Mariposa District in Denver is an equitable TOC surrounding the 10th and Osage light rail station. (Image courtesy of Enterprise Community)



The FasTracks light rail expansion has created the opportunity for TODs throughout the Denver metropolitan region. (Image courtesy of RTD)

Impact:



TransLink Transit-Oriented Communities

Vancouver, BC (2012)

TransLink is working with Metro Vancouver, the region's municipalities, and other stakeholders to better coordinate and integrate land use and transportation investments. Regionally, the two key guiding documents for coordinating land use and transportation are Metro Vancouver's Regional Growth Strategy and TransLink's Transport 2040.

To develop the TOC policy, TransLink worked directly with municipalities and provided supportive tools and resources. These included the 2012 TOC Design Guidelines, Transit Passenger Facility Design Guidelines, and the TOC Primer on Key Concepts, which provide technical design guidelines for municipalities as well as high-level policies and information on TOCs. A mutual understanding of TOC core concepts, including upzoning and land value capture, fosters a better working relationship with the municipalities and encourages partnerships.

Lessons Learned

Land use decisions are primarily controlled locally, thus the greatest opportunities to influence and shape land use rest with Metro Vancouver's municipalities. In order to maximize leverage over these processes, TransLink works with municipal partners to foster land use and transportation coordination through ongoing dialogue and collaborative planning processes. Rather than establishing guidelines and leaving them for municipalities to interpret,

this active, collaborative approach creates more buy in at the local level and provides additional insight into the municipal processes for TransLink.

Measurable Results and Impacts

By focusing growth and upzoning within transit-oriented communities, often in urban centers and along the region's frequent transit network, municipalities can create the critical mass for efficient transit service. TransLink measures the effectiveness of their TOC policy by identifying the percent of jobs and dwelling units within the urban core and along the frequent transit network and increasing the mode share of transit trips in the region.

Between 1994 and 2011, the mode share of transit trips increased from 10% of all trips to 14% of all trips. Additionally, 43% of all housing growth in the region has occurred in designated urban centers between 2006 and 2016. While TransLink has not determined the extent to which these impacts are directly related to the TOC policy, they are continuing to monitor them.

Applicability to KCM

Creating a transit-oriented community requires coordination and action at all levels of government. Working with various jurisdiction partners to better coordinate land use and transportation is critical for King County Metro, especially related to the agency's equity and climate goals. Developing a common understanding of and guidance for TOCs, including upzoning benefits and land value capture for municipalities, could be an important role for Metro to play in encouraging transit-supportive development and greater use of transit as a result.



The Main Street - Science World Station was the focus of a recent transit and pedestrian corridor plan in accordance with TransLink's Transit-Oriented Communities policy. (Image courtesy of TransLink)



The Newton Town Centre TOD in the City of Surrey is currently being studied for implementation. (Image courtesy of the Daily Hive)

Impact:



BART Station Access Guidelines

San Francisco Bay Area, CA (2016)

Understanding that every station exists in a unique operating environment, the BART Station Access Guidelines establish the minimum and maximum recommended standards for planning pedestrian, bicycle, transit, and vehicular access within BART station areas. These guidelines include four investment framework categories: primary investments, secondary investments, accommodated, and not encouraged.

These design guidelines, adopted in 2016, place people at the center of every access decision. By prioritizing people, the guidelines seek to minimize conflicts between modes. Similarly, parking management is a secondary investment only at stations with parking. This policy makes a concerted effort to reduce vehicle dependency at most stations, with the exception of station areas that have been categorized as auto-dependent. BART's Access Policy is working to shift passengers to greener modes, with targets of 52% active transportation, 32% shared mobility, and 15% drive and park. Meeting these targets is expected to reduce GHG emissions associated with passenger access to the station by 24%.

Lessons Learned

A key component of the Station Access Guidelines was developing a clear hierarchy to resolve competing demands for funding and physical space, while emphasizing low-cost, high capacity modes. Rather than establishing a policy to prioritize specific access modes, this hierarchy establishes investment categories to specifically provide

funding for only certain access modes at specific station areas. Tying funding mechanisms to station access design ensures a consistent approach across stations in the agency and aligns funding with agency values.

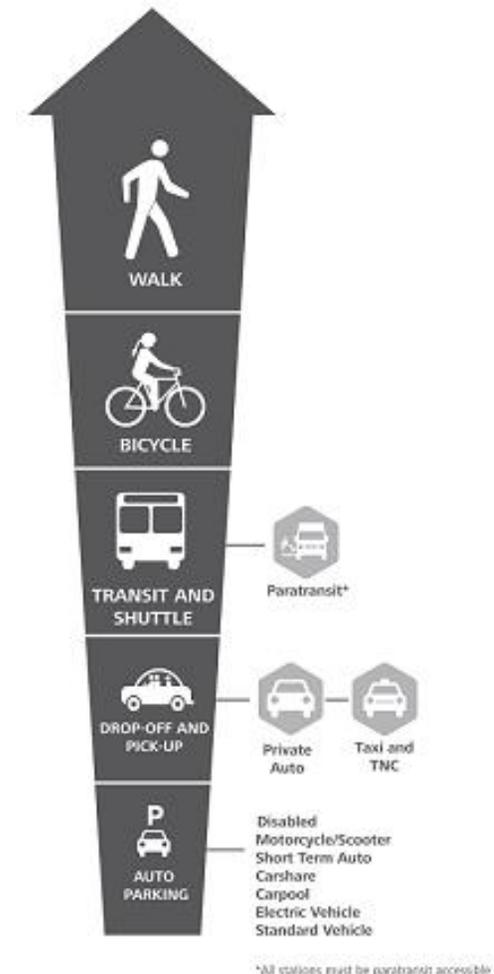
Measurable Results and Impacts

Between 2008 and 2015, the share of station access by drive and park decreased from 34% to 27%, the share of active transportation increased from 35% to 44%, and the share of shared mobility access decreased slightly from 31% to 29% of passengers. These station access mode shift figures indicate that BART is making progress toward the goals stated in the Access Policy by reducing driving and parking and increasing walking and bicycling access.

Applicability to KCM

Metro owns and operates several large transit centers and provides connecting service to Sound Transit rail stations. These station areas are located in a range of built environments with different connectivity needs. Metro currently uses their own transit facility design and access guidelines.

Following the BART approach to primary and secondary investment as a way to prioritize funding toward pedestrian- and bicycle-focused connectivity could improve station accessibility for all. While BART's Station Access Guidelines do not directly encourage other jurisdictions to make investments that support transit access, they do provide an additional layer of transparency and accountability for the agency's station access planning and design.



The BART Station Access Hierarchy prioritizes pedestrian, bicycle, and transit accessibility over automobiles. (Image courtesy of BART)

Impact:



San Francisco's Transit-First Policy

San Francisco, CA (1973)

The San Francisco Municipal Transportation Agency (SFMTA or Muni) is governed by Charter Section 8A, which includes the Transit-First Policy. The Transit-First Policy directs the agency to prioritize transit, pedestrian, and bicycle improvements and enhancements in the limited public right-of-way available in San Francisco. The policy states:

Decisions regarding the use of limited public street and sidewalk space shall encourage the use of public rights-of-way by pedestrians, bicyclists, and public transit, and shall strive to reduce traffic and improve public health and safety.

The policy, which has been in place for over 45 years, adopted in 1973 and reaffirmed in 1999, 2007, and 2014, is designed to keep people moving throughout the city and reduce greenhouse gas emissions by prioritizing more space-efficient and low-emission transportation modes.

Lessons Learned

Despite the expansion of transit, pedestrian, and bicycle infrastructure since the policy's adoption, there is currently no standard approach to identify and prioritize transportation capital improvement projects in San Francisco. This has led to the policy being used as guidance rather than required direction in some cases, resulting in a continued emphasis on automobile-oriented infrastructure in some corridors.

While the policy has generally been successful and resulted in significant improvements to

transit and walkability, developing a strategy to identify and prioritize key pedestrian, bicycle, and transit corridors would provide transparency and accountability in the decision-making process.

Measurable Results and Impacts

The Transit-First Policy has led to additional transit prioritization programs, including the Muni Forward program and the Rapid Network, which reduces wait times on Muni's busiest routes that carry nearly 70% of riders. The agency has seen ridership on the Rapid Network increase by 18% over the past two years as a result of the transit-first measures included in the program.

In addition to improving transit service reliability, the Transit-First Policy has coincided with an increase in transit and bicycling and a decrease in automobile trips. Since 2013, the share of automobile trips in the city has shrunk from 62% to 43% of daily trips. People make an estimated 720,000 transit trips each weekday and daily bicycle trips in the city have more than doubled since 2006, reaching an estimated 82,000 trips each day.

Applicability to KCM

A key difference between SFMTA and King County Metro is that SFMTA is housed within the city and county government of San Francisco, placing the agency within the body responsible for land use and transportation infrastructure decisions. King County Metro, on the other hand, must work with individual municipalities to achieve transit-supportive right-of-way, infrastructure, and policy goals. While a Transit-First Policy would certainly benefit King County Metro's goals, Metro would need to partner with the county's many jurisdictions to adopt and implement this type of policy.



The Transit-First policy directs SFMTA to prioritize transit, pedestrian, and bicycle improvements and enhancements in the limited public right-of-way. (Image courtesy of San Francisco County Transportation Authority)



According to the Transit-First policy, innovative solutions to meet public transportation needs, such as Bay Wheels bike share, are encouraged so long as they do not adversely affect Muni service. (Image courtesy of Bay Wheels)

Impact:



Sound Transit System Access Fund

Seattle, WA (2016)

The Sound Transit System Access Fund is a \$100 million fund allocated equally among the five Sound Transit subareas for projects that include safe sidewalks, protected bike lanes, shared-use paths, improved bus-rail integration, and new pick-up and drop-off areas. Using a call for projects, the System Access Fund allows cities, counties, and transit agencies to apply for funds to help implement projects that improve connections to stations.

Lessons Learned

Following the voter-approved ST2 measure, Sound Transit identified a need to leverage community development opportunities to spur compact growth and provide technical support to local partners. This led to the inclusion of TOD staff working with local partners and the System Access Fund in ST3, which passed in 2016.

Partnerships, both technical and financial, are needed to develop multimodal, multi-jurisdictional connections to transit. Developing a targeted grant program between agencies, cities, and counties to enhance transit, bicycle, and pedestrian connectivity provides benefits for the jurisdictions and the travelers.

The fund allocates \$20 million to each of Sound Transit's five subareas, which does not account for different levels of need across the Sound Transit district.

Measurable Results and Impacts

While the Sound Transit System Access Fund was passed along with ST3 in 2016, funds have not yet been awarded to any agencies or municipalities. Successful applicants will receive funds between 2019 and 2025. Since no projects have been funded by this program yet, there are no measurable impacts. However, eligible projects that may have impacts after receiving funding include:

- Capital projects that have advanced to the design/engineering or construction phase such as safe sidewalks, protected bike lanes, shared-use paths, improved bus-rail integration, and new pick-up and drop-off areas;
- Certain non-capital projects such as operating, technology, and transportation demand management (TDM) programs; and
- Projects that demonstrate a clear nexus with a Sound Transit-served facility.

Applicability to KCM

King County Metro, located within the Sound Transit service area, is eligible to seek funding through this program. Aside from direct participation, Metro could consider developing a similar program to encourage the jurisdictions it serves to implement transit connectivity projects. Using this type of funding mechanism is an effective way to partner with local jurisdictions and encourage them to make investments that support access to transit.



Station access improvements for the Sounder North Commuter Rail line at Edmonds Station include better walking, biking, and transit connections. (Image courtesy of Sound Transit)



The Burke-Gilman Trail provides comfortable walking and bicycle connections to the Husky Stadium Station. (Image courtesy of PSRC)

Impact:



ADDITIONAL LAND USE & CLIMATE STRATEGIES

Land use is among the most important factors for successful public transportation investments. High-density land use and transit-oriented development (TOD) directly correlate with higher transit ridership and reduced dependence on motor vehicles. In King County, the largest source of greenhouse gas (GHG) emissions are from fossil fuels used in transportation. To meet King County's GHG reduction targets, we must increase the mode share of transit and non-motorized transportation, reduce vehicle miles travelled (VMT), and encourage high-density development.

Reducing GHG emissions and combating climate change requires an integrated suite of strategies. Transit-supportive land use can be enhanced by the application of transportation demand management (TDM), parking, and pricing strategies. Together, these strategies can create an environment that is conducive to the use of non-driving options that reduce transportation's contribution to GHG emissions.

Demand Management Strategies

TDM strategies encourage people to shift their transportation choices from drive-alone travel to other modes, including transit, walking, biking, and ridesharing. Through a combination of incentive programs, transportation services, and marketing efforts, a TDM program can greatly reduce auto trips to and from a site or area—as well as the congestion and environmental

impacts associated with auto use. TDM measures typically work in combination with land use plans and transportation network investments to support and encourage non-drive-alone travel within, to, and from specific locations.

TDM is not a one-size-fits-all solution. The most successful TDM programs reduce auto trips through a robust package of complementary measures designed to meet the unique needs of a given site or area. Furthermore, effective TDM programs are iterative—successful measures receive continued support or are enhanced, while unsuccessful measures are phased out. Cooperation between developers (in the case of a TDM program for a development site), public agencies, and area stakeholders can leverage local resources and expertise to maximize the effectiveness of bicycling, walking, transit, driving, parking, and programming strategies to achieve vehicle trip reduction targets. Effective, evidenced-based demand management strategies include:

- **Commuter Trip Reduction (CTR) Programs:** Enacted by the Washington State legislature in 1991, the CTR law requires workplaces with 100 or more full-time employees to develop and manage their own programs based on locally-adopted goals for reducing vehicle trips and VMT.
- **Subsidized Transit Passes:** Free or reduced transit passes are a common feature of CTR programs. Subsidized passes provide a direct incentive for people to use transit, rather than

driving, by allowing them to ride at a free or reduced rate.

- **Flexible Work Schedules:** A flexible work schedule is an alternative to the traditional 9:00 a.m. to 5:00 p.m., 40-hour work week. Flexible schedules allow employees to shift their arrival and departure times earlier or later, alter the number of days per week that they work, and often include telecommuting or work-from-home options, reducing the number of people traveling during peak commute hours.
- **Vanpool and Carpool Programs:** Vanpool and carpool programs are typically self-selected groups who share a similar commute and are often members of the same household or co-workers traveling to work from the same neighborhood.
- **Onsite Commute Coordinators:** Onsite commute coordinators work directly with a company's or site's employees to discuss alternative commute options to driving alone. Commute coordinators can help to match employees into vanpools and carpools, identify safe and comfortable bicycling routes, or plan transit trips for employees who are unfamiliar with the transit network.

KING COUNTY VANPOOL



Source: Commute Seattle

CLARK COUNTY COMMUTE TRIP REDUCTION MATERIALS



Source: Clark County Commute

ORCA FOR BUSINESS PROGRAM



Source: Commute Seattle

Parking Strategies

Parking is an expensive and limited resource that can impact the success of all other trip reduction strategies. Requiring too much parking can squeeze out land uses that could generate activity, make projects less appealing to developers, and make housing less affordable.

Achieving a balance between parking supply and development is critical to creating transit-supportive and transit-oriented communities.

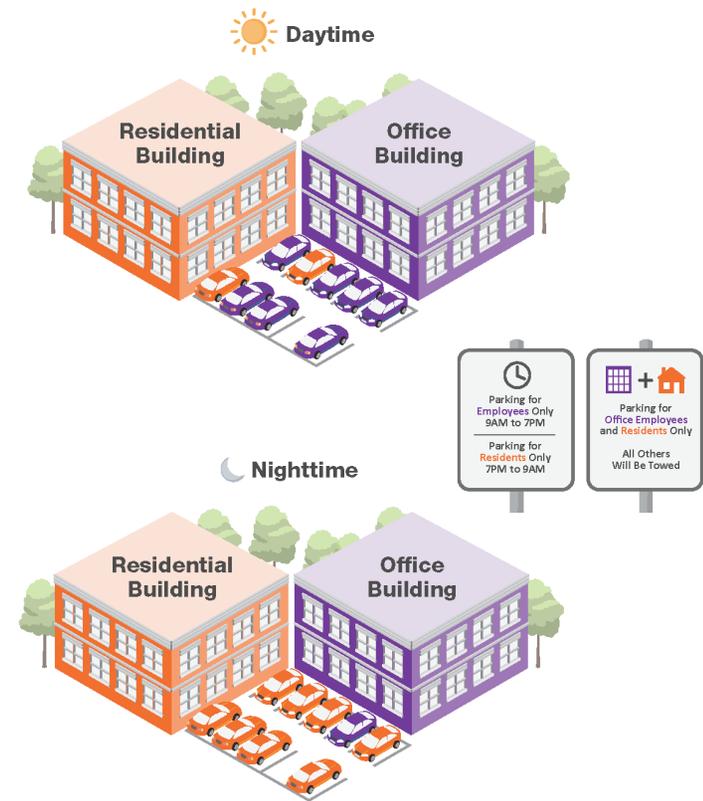
Effective strategies to reduce and manage parking are described below.

- **Unbundled Parking:** Unbundled parking programs require off-street parking spaces to be leased separately from housing rentals, home purchases, or employment contracts, creating a financial incentive to actively evaluate the cost of parking alongside alternative travel modes.
- **Parking Cash-Out:** Parking cash-out programs allow employees to convert parking benefits to other rewards or travel benefits. For example, in parking cash-out programs, employers may offer a parking space, a cash incentive, or a pre-paid transit pass, and employees may choose one of these benefits.
- **Shared Parking:** Shared parking agreements allow multiple groups to use the same parking facility based on different demand patterns, reducing the total amount of parking that would be needed if each group used exclusive parking facilities. For example, an office building, which

needs parking during the day on weekdays, may share parking with a residential building, which generally needs parking during weekday evenings and on weekends. Successful shared parking programs are based on when and where parking is needed, provide a convenient and enjoyable pedestrian experience, and provide a clear management structure to enforce agreements.

- **Parking Minimums and Maximums:** Development regulations in many jurisdictions commonly include parking minimums, which require a certain number of parking spaces for specific land uses. This often leads to an oversupply of parking, which encourages driving and uses valuable land for vehicle storage. Limiting the overall supply of on-site parking by establishing a maximum number of parking spots can encourage alternative travel modes. Transitioning from parking minimums to parking maximums is a strategy for right-sizing the supply of parking at a given development and encouraging the use of transit or non-motorized transportation.

EXAMPLE SHARED PARKING PROGRAM



Source: Nelson\Nygaard

Pricing Strategies

Pricing strategies are based on the concept that vehicle trips come with high costs to society and individuals in the form of air and climate pollution, traffic collisions, and lost productivity due to slower commute times. When vehicle trips are priced—especially when based on demand, with increasing fees at times when more people are driving—some people make changes to some of their trips.

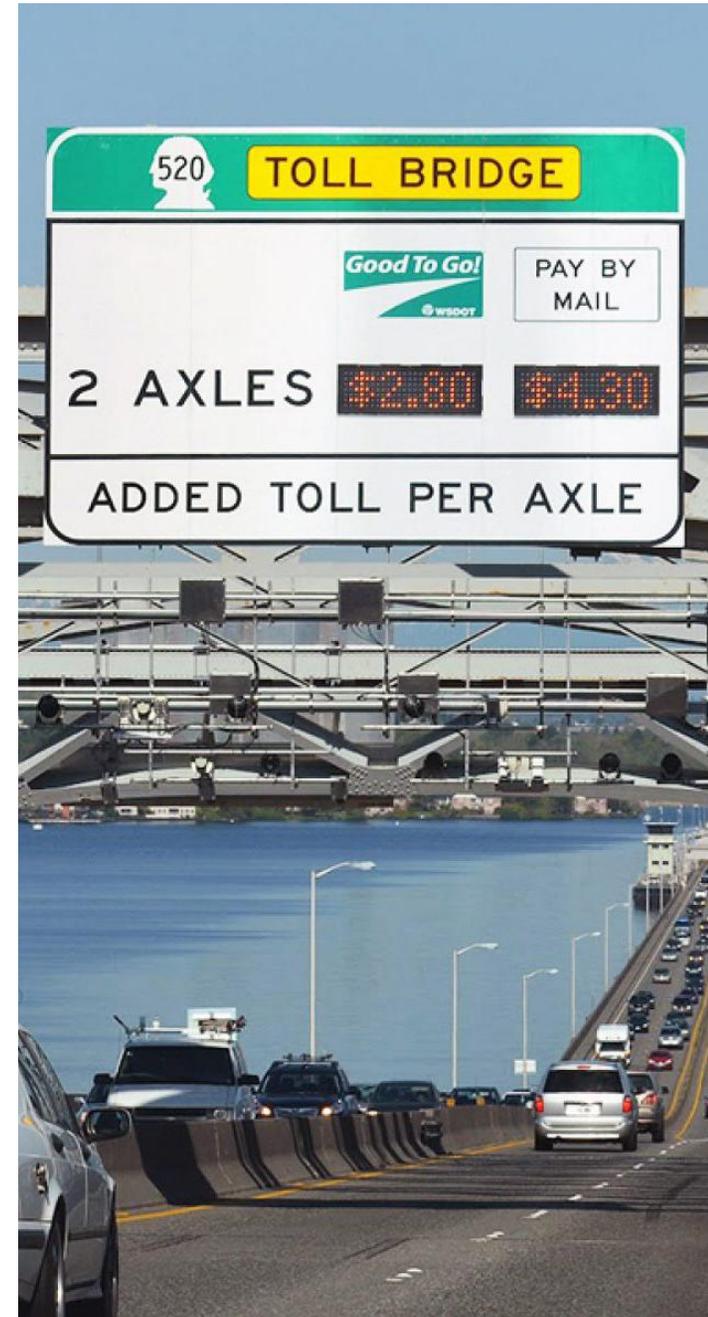
While pricing strategies may be effective for reducing GHG emissions and VMT, they can also exacerbate the inequalities of the existing transportation system if they are not planned and designed with equity in mind. When implemented without a clear focus on racial and social equity, pricing strategies can burden low-income people with new costs.

Pricing strategies that have been shown to reduce vehicle trips are described below. King County Metro has limited ability to implement these strategies on its own, but can support jurisdictional partners in implementation.

- **Congestion Pricing:** Congestion pricing is a pricing strategy that charges drivers traveling to or through a congested area. Costs vary based on the time of day, with a goal of disincentivizing driving during peak periods. Congestion pricing can be applied as cordon pricing, which charges vehicles crossing a boundary into a pricing zone, or as area pricing, which charges vehicles crossing a boundary and driving within a pricing zone. Congestion pricing has been implemented in many European and Asian countries, but it has not yet been used in North America (although many cities, including Seattle, are currently studying potential congestion pricing programs).

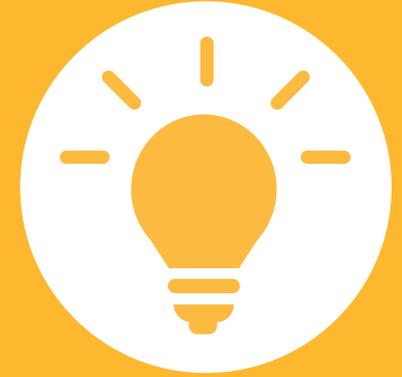
- **Tolling:** Toll roads and bridges are relatively common pricing strategies that charge drivers a fee to access a specific road or bridge. These fees may be flat, distance-based, or congestion-based. Tolling is currently being used in King County on the SR 520 bridge and the I-405 High Occupancy Toll lanes. Tolling can also be implemented on non-highway, arterial roads, which as been done in Singapore and studied in Tampa, FL.
- **Parking Pricing:** Pricing strategies for parking may pertain to on-street and off-street parking. Parking pricing strategies generally use smart parking meters to adjust the price in specific areas based on time, location, and day of week. Prices are usually increased during high-demand periods and decreased during low-demand periods.
- **Road User or VMT Charging:** Road user or VMT charges are directly tied to road use and charge drivers a flat fee per mile driven. Washington State has recently completed a pilot program to test the feasibility of implementing a VMT charge as a replacement for the gas tax; however, this type of pricing can also be used to manage congestion or reduce overall VMT.
- **Fleet Pricing:** Fleet, or vehicle class, pricing is a strategy that charges specific vehicle types entering a specific zone, typically ride-hailing or commercial vehicles. Because this strategy is limited to specific vehicle types, its ability to reduce VMT is more limited than other pricing strategies. However, pricing high-emissions vehicles—as has been done in London and Milan—can help to reduce GHG as well as VMT.

TOLLING ON HIGHWAY 520 BRIDGE



Source: Transportation Research Board

INNOVATION



Relevant Guiding Principles

- Innovate equitably and sustainably
- Provide fast, reliable, integrated mobility services



Equity Cabinet Questions

- What types of new transportation services and technologies would improve our overall mobility system, especially for the populations mentioned?
- How can we implement these services equitably and sustainably?
- How will we measure success and failure?
- How can Metro influence partners to help deliver excellent, integrated services?
- How can Metro partner with jurisdictions with fewer resources (recognizing that partnerships may not be solely financial)?
- What is the right mix of services?
- What types of services should be prioritized?



Best Practices Research Questions

- What agencies or cities are partnering effectively (or at least trying) with new mobility companies and services and how are they doing it?
- How are agencies or cities managing and shaping innovation through the levers they can control? How does government direct what private companies do versus sit in a reactive position?
- What agencies are doing a great job of integrating transit and other services? Who is really thinking about mobility holistically and what are they doing?
- How are transit agencies (and cities) preparing for a future that looks very different? What are they doing to get ready for autonomous vehicles?

Relevant Best Practices & Preliminary Impact Assessment

Best Practice	Description	Impact
New mobility provider partnerships		
Pinellas Suncoast Transit Authority - Transit Dependent Late Shift (Pinellas County, FL)	Provide low-income mobility options when fixed-route bus service is not available via monthly on-demand ride vouchers.	
Massachusetts Bay Transportation Authority On-Demand Paratransit Pilot Project (Boston, MA)	Offer discounted trips on Uber, Lyft, and Curb services to supplement agency-operated paratransit service.	
Capital Metro's Pickup Service (Austin, TX)	Combining paratransit and on-demand microtransit services with a pilot-turned semi-permanent microtransit service known as PICKUP.	
Go Lorain Bike Share Library-Parks Partnership (Lorain, OH)	Partnership between public library and county health and parks departments to allow those with a library card to borrow bike share bikes, helmets, and locks from the library at no cost.	
Transit and new mobility integration		
LA Metro Office of Extraordinary Innovation (Los Angeles, CA)	The Office of Extraordinary Innovation (OEI) was established to explore new ways to move LA by finding and testing innovative ideas that have potential to improve mobility for the people in the region. From public-private capital partnerships to cutting-edge technologies, OEI is tasked with identifying, evaluating, developing, and implementing these new approaches. These efforts may be undertaken by LA Metro on its own or jointly in collaboration with private sector firms through public-private partnership agreements.	

 Highlighted best practices are described in greater detail in this document.

Best Practice	Description	Impact
TriMet New Mobility Strategy Assessment (Portland, OR)	TriMet has begun exploring strategies to evolve and proactively incorporate new mobility services into its business model. This includes deploying a Mobility Manager Model that places TriMet at the center of meeting customers' door-to-door mobility needs.	
Transit and Bike Share Integration Pilot (Pittsburgh, PA)	Allegheny County Port Authority and Pittsburg Bike Share partnered to offer free access to bike share for trips lasting 15 minutes or less for transit pass holders.	
Mobility as a Service: Whim Mobile Application (Helsinki, Finland)	The Wim Mobile Application, first launched in Helsinki, Finland, allows customers to plan, access, and pay for all modes of public and private transportation services on one platform.	
Urban Mobility Collider (Miami-Dade County, FL)	Miami-Dade County produced the Urban Mobility Collider Open Backend Integration Playbook to ensure new technologies and business models can assist in creating a more integrated transportation system that spans many sectors and industries.	
Proactive management and coordination		
Emerging Mobility Evaluation (San Francisco, CA)	Two San Francisco transportation agencies developed a framework of ten guiding principles to manage and evaluate innovative mobility options, identify ways to meet city goals, and shape future policies, programs, and areas of study. They conducted an evaluation based on the guiding principles that led to policy recommendations, strategies, and additional research needed to ensure that emerging mobility serves the city's goals.	

Best Practice	Description	Impact
Seattle Department of Transportation New Mobility Playbook (Seattle, WA)	The New Mobility Playbook is a set of actions, policies, and strategies that will position Seattle to foster new mobility options while prioritizing safety, equity, affordability, and sustainability in their transportation system.	
TriMet Mobility Hub Geofencing (Portland, OR)	TriMet is examining ways to geofence their properties for data ownership leverage. This is currently on the drawing board and not implemented.	
Preparing for the future of mobility		
Los Angeles Department of Transportation Technology Action Plan (Los Angeles, CA)	The Technology Action Plan invites developers, planners, and academics to build and innovate with the department. The plan serves as a guide for how LADOT uses new technologies to provide transportation safety, happiness, sustainability, and equitable access for all.	
Austin Smart Mobility Roadmap (Austin, TX)	Austin's approach to shared, electric, and autonomous vehicle technologies to ensure a future that is equitable, affordable, prosperous and data-driven. Includes five key areas: Shared-Use Mobility; Electric Vehicles and Infrastructure; Autonomous Vehicles; Data and Technology; and Land Use and Infrastructure.	
Autonomous Vehicles and the Future of Transit (Nelson\Nygaard and Perkins&Will)	Proposes a strategy for cities and transit agencies to partner to take advantage of opportunities that Autonomous Vehicles (AV) will provide to reduce the cost and increase the attractiveness of public transportation as a mobility option.	

MBTA On-Demand Paratransit Pilot Program

Boston, MA (2016)

The Massachusetts Bay Transportation Authority (MBTA) developed a pilot program partnership with transportation network companies (TNCs) Uber, Lyft, and Curb to offer on-demand transit service to The RIDE customers beginning in 2016. The RIDE is MBTA's door-to-door, shared-ride paratransit service. A customer signs-up with one company and pays the first \$2 for a trip, and the rest is covered by MBTA with a \$40 maximum subsidy per trip. Uber and Lyft cover all of The RIDE's regular service area, while Curb covers select cities in the service area. The pilot has been extended through March 2020.

The on-demand program has offered the following benefits to MBTA paratransit riders:

- Reduced fares from previous The RIDE fares
- Lower wait times
- Faster trips without the need to share rides
- Same-day booking

Lessons Learned

Bi-weekly meetings with partner TNCs and regular conversations with advocates helped address problems as they arose and contributed to the program's success.

The MBTA's average cost per trip has decreased (\$46 with the traditional RIDE versus \$9 using TNCs). While the pilot

program has reduced per-trip costs, it has also prompted people to take more trips, which has limited overall cost savings.

Accessibility for people using wheelchairs was limited due to the available fleet of TNC vehicles. To address this, MBTA offered an additional \$12 per completed trip to those drivers offering an accessible rental.

Measurable Results and Impacts

- The MBTA On-Demand Paratransit Pilot Program is still ongoing, thus, any result or impacts are preliminary.
- The initial pilot program was limited to 400 people in a restricted service area. After delivering 10,000 successful rides to paratransit passengers through the initial pilot, MBTA expanded the partnership to every customer of The RIDE.
- Passengers who participated in the pilot saved an average of 34 minutes on every trip, while the MBTA saved 71% on the cost of each trip.
- Between October 2016 and February 2017, the MBTA reduced the overall cost of The RIDE program by 6% while increasing the number of rides taken.

Applicability to KCM

King County's new Access paratransit contract, which will go into effect in late 2019, will include flexibility for the contractor to provide some trips through TNCs. King County should work closely with its contractor to develop program requirements that help to contain costs. Workforce issues and ADA compliance are also important aspects to monitor and measure.



The MBTA On-Demand Paratransit Pilot Program was a first-of-its-kind partnership with TNCs to provide on-demand transit service to THE RIDE customers. (Image courtesy of Metro Magazine)



Governor Baker introduced the pilot program in September 2016 stating, "This initiative represents the MBTA's efforts to increase accessibility in a more cost-effective and efficient way that also delivers more convenient service for its paratransit customers." (Image courtesy of Medium)

Impact:



LA Metro Office of Extraordinary Innovation

Los Angeles, CA (2015)

Los Angeles County Metropolitan Transportation Authority (Metro) established the Office of Extraordinary Innovation (OEI) in 2015 to explore unprecedented transportation innovation opportunities. OEI is tasked with identifying, evaluating, developing, and implementing new approaches such as public-private capital partnerships and cutting-edge new technologies. To carry out this work, OEI has prioritized three tools:

1. **Unsolicited Proposals:** This tool allows private-sector companies working on transportation innovations to present new ideas directly to Metro for review and evaluation, jump-starting the traditional public procurement process. The most exciting proposals could lead to a demonstration, a pilot project, or, in the most successful cases, full deployment across Metro's system.
2. **Metro Vision 2028:** Metro Vision 2028 is the result of more than 17 months of research, discussion, and outreach by OEI. It provides a big-picture plan for what the public can expect in terms of improved mobility over the next 10 years. The intent of this plan is to align creativity, resources, and political will to shape the city's mobility future.
3. **Internal Consulting:** OEI, acting as an internal consultant to Metro, can flexibly and strategically engage in Metro initiatives. OEI can provide capacity and support or innovative and collaborative approaches to develop and implement ideas that will positively impact Metro and the region.

Lessons Learned

As the change agent within a large, established agency, the OEI group has faced challenges with internal buy-in on new programs and ideas. Strong support at the executive level of the organization has helped to move select programs and projects forward.

Measurable Results and Impacts

The unsolicited proposal tool has had the greatest impact to date, although OEI does not have the resources to evaluate (or advance) the majority of the proposals received. Metro has received 113 unsolicited proposals, and only 13 of those have advanced to proof of concept or implementation. The Dodger Stadium gondola, which will be open by 2022, was the result of an unsolicited proposal.

Applicability to KCM

King County Metro could use unsolicited proposals as a tool to generate ideas for new types of products and services. Incorporating equity and sustainability-centered performance metrics in the evaluation of proposals would support Metro's goals and encourage proposals that address the needs of traditionally underserved and underrepresented communities.



The Metro Vision 2018 Plan sets Metro's strategic direction and serves as the foundation for all other Metro plans, programs, and services. (Image courtesy of Metro)



Metro is designing a new demand-responsive service to improve the experience of its customers. The new service will be on-demand, connecting more people and places to the existing system. (Image courtesy of FASTLinkDTLA)

Impact:



TriMet New Mobility Strategy Assessment

Portland, OR (2018)

Tri-Metropolitan Transportation District (TriMet) provides bus, light rail, and commuter rail service to residents in the Portland region. TriMet's recent New Mobility Strategy Assessment (June 2018) states, "New mobility tools and techniques offer a unique opportunity to broaden TriMet's ability to deliver on its vision, mission, and values in ways beyond simply providing direct bus and light rail service."

To that end, TriMet has begun exploring strategies to evolve and proactively incorporate new mobility services into its business model. The agency is using a "Mobility Manager Model," which means that TriMet will play an integral role in evolving with new product offerings and changing customer expectations. TriMet will own and support customer experience from traveler origin to their destination, even if they are not the service provider for all parts of the trip. TriMet will work to make its principles meaningful through three efforts: grow services, leverage assets, and influence policy.

TriMet will play Partner/Information Provider, Broker, and Mobility Service Provider within the Mobility Manager Model.

Lessons Learned

Findings from the New Mobility Strategy Assessment Services report suggest that TriMet should develop its program structure and priorities in the following three areas:

- **Grow Services:** TriMet has a strong, established bus and rail system that will continue to serve as the backbone of Portland's transportation network. To further improve mobility for residents, TriMet can extend the reach of its existing transportation system by incorporating multimodal services.
- **Leverage Assets:** While new mobility companies have an advantage in their nimble ability to attract new people to their services, TriMet has the advantage of owning and operating transit centers, park-and-ride locations, and dedicated right-of-way. TriMet can leverage its ownership of these spaces by requiring new mobility services to connect to their facilities.
- **Influence Policy:** TriMet can address legal and legislative questions by sharing information around new mobility services.

Measurable Results and Impacts

To further advance its new mobility efforts, TriMet recently released a multimodal trip planner that incorporates new mobility service providers such as car2go, Lyft, and Uber. The trip planner uses open source technology and data so that other transit agencies can easily adjust the platform for their systems. TriMet intends to track improvements from other agencies and incorporate them into their own system.

Applicability to KCM

King County Metro is transitioning from a transit agency to a mobility agency and reorganizing its internal operations accordingly. Metro could continue shifting its focus by taking a stronger multimodal role, particularly in integrating mobility products and services.



TriMet's NMS directs the agency to leverage emerging mobility services like Portland's BIKETOWN to better connect people to transit. (Image courtesy of Bike Portland)



TriMet is in the process of developing a new trip planner designed to incorporate first- and last-mile connections on emerging mobility modes including bike share and car share. (Image courtesy of TriMet)

Impact:



Transit and Bike Share Integration Pilot

Pittsburgh, PA (2017)

In late 2017, Pittsburgh Bike Share partnered with the Port Authority of Allegheny County, the transit provider for the greater Pittsburgh region, to pilot expanded bike share access to all Port Authority ConnectCard pass holders. During the pilot, ConnectCard pass holders received free access to bikeshare for trips lasting 15 minutes or less. Pittsburgh Bike Share took the following steps to ensure the pilot program was a success and that the Port Authority would be on board:

- Execute a six-month pilot program and evaluate upon completion
- Use existing Port Authority ConnectCard RFID reader technology
- Do not require any accounting integration between partners

To support broad participation in the program, people who are unbanked can purchase a ConnectCard with cash at any of the Port Authority's automated payment machines or retail partners. Once a person has a transit pass, they can link it with Pittsburgh Bike Share and automatically receive unlimited free 15-minute trips.

Lessons Learned

Pittsburgh Bike Share and the Port Authority developed a messaging strategy to inform transit riders that this benefit was available. The strategy included bus ads, radio, digital, a campaign website, outreach events, and earned media. However, a stronger transit agency partnership will be required for ongoing success. For example, the bike share benefit is not currently listed on the ConnectCard website; information is only available on the Pittsburgh Bike Share site.

Integration with Pittsburgh's ConnectCard system made bikeshare use easy and intuitive for transit riders without additional steps.

There is demand for bike share and transit integration, and bike share is a logical first/last mile solution. Bike share and transit can be mutually supportive and are more competitive with other modes when they are packaged seamlessly. Locating bike share stations near frequent transit routes could support greater integration of the services.

Measurable Results and Impacts

Pittsburgh Bike Share used quantitative and qualitative measures to evaluate the program: total bike share trips, number of registered users, revenue impact of free ride time for all ConnectCard users, awareness of the bike share system and benefits of the program

The pilot performed well on these measures and was expanded into a permanent program in 2018. Results from the pilot included the following:

- Almost 20% of all bike share trips were taken by ConnectCard transit pass holders during the pilot program.
- The first three months of the pilot saw a 16.5% increase in new bike share riders and a 4.3% increase in bike share trips.

Applicability to KCM

Metro can work with municipal and private partners to develop creative first/last mile solutions, such as providing free, short-duration bicycle rides to ORCA card holders. While Pittsburgh uses a 15-minute or less ride duration, Metro would need to work with its partners to determine a suitable duration to ensure rides are primarily used for transit access.



By offering free Healthy Ride bike share access to transit riders, the partnership allows riders to transfer between both systems as if they were transferring between transit rides. (Image courtesy of Better Bike Share)



The program used a multi-pronged messaging strategy to increase awareness. (Image Courtesy of SPC Region)

Impact:



Mobility as a Service: Whim Mobile Application

Helsinki, Finland (2016)

Mobility as a Service (MaaS) is an approach to providing mobility services by integrating planning and payment into a single platform, typically accessed through a mobile phone application. The app allows customers to plan a trip using different modes of transportation and to pay for these services all in the same place.

Since 2016, the Whim mobile app has helped Helsinki residents plan, access, and pay for all modes of public and private transportation within the city. This includes travel with local public transportation agencies, taxi companies, and carshare and bikeshare operators. Whim subscribers choose between three options: all-inclusive service for €499 per month (about \$560), unlimited bus service and short bike trips for €49 per month (about \$55), and a pay-per-ride option with no monthly cost.

Lessons Learned

The Whim application works particularly well in Helsinki because the city has:

- An expansive and high-quality transit system
- Limited space for vehicle travel and parking
- Legislative support for mobility services

The Finnish Government's 2017 Act on Transport Services requires transportation providers to make all pass products and fare categories available to third parties. This legislation cleared a major hurdle for

Whim and other mobility apps—Whim initially required customers to purchase individual trip tickets but now can offer the full discounts available for monthly and daily transit passes.

Measurable Results and Impacts

In its first year of operation in Helsinki, Whim users made over 2.5 million multimodal trips. Of these trips, about 120,000 were taken on Helsinki City Bike bikeshare, and about 100,000 were made using taxi reservations managed through the app. Whim also helps to bridge the first-last-mile challenge of connecting to and from transit stops and stations. For example, 12% of bike trips are taken within 30 minutes before a transit trip, and an additional 30% of bike trips are taken within 90 minutes after a transit trip.

Applicability to KCM

Integrated trip planning and payment apps have been introduced in cities throughout Europe and are gaining momentum in North America, with recent pilot projects in Los Angeles and Denver. An app similar to Whim could be successful in King County given the strong transit network, dense urban core in Seattle, and availability of on-demand transportation services including Jump, Lime, Lyft, Uber, and Car2Go.

While Metro could lead the exploration of an integrated app, public and private partnerships would be needed. The Seattle Department of Transportation's New Mobility Program, developed in coordination with King County Metro, establishes plans and policies related to mobility as a service. Collaboration between the City of Seattle and King County Metro would be a logical approach to explore pilot programs for MaaS companies and ensure an approach focused on equity and sustainability.



HSL, the transit provider in Helsinki, provides over 375 million transit trips per year and is integrated with the Whim mobile application. (Image courtesy of CityLab)



The Whim mobile application allows customers to plan, access, and pay for all private and public transportation services available in the city of Helsinki in one platform. (Image Courtesy of New Mobility News)

Impact:



Emerging Mobility Evaluation

San Francisco, CA (2017)

In June 2017, the San Francisco County Transportation Authority (SFCTA) and San Francisco Municipal Transportation Agency (SFMTA) adopted 10 guiding principles to serve as a framework for evaluating emerging mobility services and pilot programs: Safety, Transit, Equitable Access, Disabled Access, Sustainability, Congestion, Accountability, Labor, Financial Impact, and Collaboration.

SFCTA and SFMTA collaborated with the emerging mobility industry and community stakeholders to develop a process for evaluating how emerging mobility services were helping the City to meet its goals. They began by developing evaluation metrics for each guiding principle, including objective measures that assess how well an emerging mobility service is aligned with and helps to achieve a Guiding Principle. The evaluation metrics were used to score all emerging mobility services operating in San Francisco.

Lessons Learned

Pilots and Permits: Pilots provide data that helps inform development of permit systems, leading to better performance.

Inadequate Data: Though valuable information can be gleaned from pilots, in general, the City of San Francisco does not have adequate data from emerging mobility companies. Traveler trip data and surveys can help explain people's travel behavior.

Opportunities for Equitable Access: Many emerging mobility services operate during late-night hours, on weekends, and in areas that aren't as well served by transit; therefore, they can provide opportunity to increase mobility for those underserved by public transit.

Conflicts with Public Transit: While San Francisco is a transit-first city, the availability of data makes it difficult to understand how the emerging mobility sector is impacting transit ridership.

Safety Impacts: Training is not consistent among emerging mobility services, and that can decrease road safety for everyone.

Congestion: The modes that people choose for travel and the resulting congestion impacts are not fully understood. San Francisco's TNCs Today study found that ride-hailing trips (such as Uber and Lyft) are concentrated during heavy traffic hours and in areas where traffic is most congested.

Measurable Results and Impacts

The emerging mobility evaluation process led to recommendations for policy updates, implementation strategies, and additional research and pilots to better align services with the City's goals:

- Proactively partner
- Collect emerging mobility data and conduct research
- Regulate and recover costs
- Bridge mobility and access gaps
- Support and prioritize public transit
- Enforce safe streets
- Manage congestion on city roadways and at curbs

Applicability to KCM

SFCTA and SFMTA's evaluation framework could be used as a model for Metro and for jurisdictions within King County to evaluate emerging mobility service providers and potential pilot projects or partnerships. King County Metro could partner with jurisdictions and the mobility service providers to design emerging mobility programs that are consistent with the Mobility Framework's Guiding Principles.

Guiding Principles



Collaboration



Safety



Transit



Congestion



Sustainability



Equitable Access



Accountability



Labor



Disabled Access



Financial Impact

Sustainability: Emerging Mobility Services and Technologies must support sustainability, including helping to meet the city's greenhouse gas emissions reduction goals, promote use of all non-auto modes, and support efforts to increase the resiliency of the transportation system.

Equitable Access: Emerging Mobility Services and Technologies must promote equitable access to services. All people, regardless of age, race, color, gender, sexual orientation and identity, national origin, religion, or any other protected category, should benefit from Emerging Mobility Services and Technologies, and groups who have historically lacked access to mobility benefits must be prioritized and should benefit most.

SFCTA and SFMTA's Guiding Principles assist in the evaluation of new mobility projects. Equitable Access and Sustainability are closely related to the King County Metro Mobility Framework.

Impact:



Seattle's New Mobility Playbook

Seattle, WA (2017)

In September 2017, the Seattle Department of Transportation (SDOT) published a New Mobility Playbook that established the city's strategic direction and rules of engagement for public, private, and emerging mobility innovations. The Playbook outlines policies and strategies to foster new mobility options while prioritizing safety, equity, affordability, and sustainability within the city's transportation system.

The Playbook includes 20 First Moves that represent foundational and strategic actions to help Seattle address new and emerging mobility over the long-term, including:

- Develop integrated shared mobility hubs to seamlessly connect people to and between mobility services. (Strategy 1.6)
- Ensure shared mobility initiatives promote equity by using the City's Racial Equity Toolkit. (Strategy 3.1)
- Better understand challenges and opportunities by hosting conversations with transportation advocates, social justice-oriented community-based organizations, and community members. (Strategy 3.3)

Lessons Learned

Clarify Expectations: The Playbook established clear expectations for private mobility interests and rooted innovative mobility partnerships in Seattle's values and principles.

Convey the Challenges: The Playbook positions new mobility technologies along a spectrum of outcomes from significant benefits to severe risks for cities and the people that navigate them.

Coordinate with Public Interest Partners:

Successful development of new services requires collaboration with community organizations, cities that manage the right-of-way, and public transit agencies.

Establish Metrics for Project and Pilot Evaluation:

SDOT took a "wait-and-see" approach to developing metrics that define and measure success. While the Playbook does not include key metrics, SDOT, King County Metro, and Sound Transit developed a joint innovative mobility pilot scorecard with a racial equity lens.

Measurable Results and Impacts

The Playbook has guided several programs and pilots:

- Partnering with King County Metro and Sound Transit to develop a microtransit policy framework, which led to a collaborative first/last mile pilot between Via and the three public agencies.
- Electric vehicle charging in the public right-of-way pilot program, including strategically siting fast-charging infrastructure at shared mobility hubs to support electric shared mobility.
- Bike share permit program that established service requirements and expectations in exchange for access to the public right-of-way.

Applicability to KCM

Developing a playbook or guidance document could help to articulate Metro's goals for new mobility services and pilot programs. This type of document would help Metro establish rules of engagement for private partners and jurisdictions with whom Metro might develop programs.



Seattle's New Mobility Playbook provided the direction and policy framework that led to the Via microtransit pilot program. (Image courtesy of Curbed)



Lime is one of the bike share companies operating in Seattle following a pilot program that set fleet limits and allowed for small, incremental expansion. (Image courtesy Curbed)

Impact:



Austin Smart Mobility Roadmap

Austin, TX (2017)

Austin is home to some of the earliest autonomous mobility testing in the nation. To respond to this testing, the City of Austin and the Capital Metropolitan Transportation Authority (Capital Metro) developed a roadmap in 2017 to direct smart mobility technologies and services for the Austin region. The roadmap focuses on the outcomes the technologies can provide to their constituents, not just the technologies alone, and covers five areas:

- Shared-Use Mobility
- Electric Vehicles (EV)
- Autonomous Vehicles
- Data and Technology
- Land Use and Infrastructure

The roadmap contains actions related to each of the five areas with a timeline for implementation.

Lessons Learned

Focus on Test-Ready Technologies: Austin is looking at the convergence of autonomous, electric, and shared fleets. In the short term, shared mobility can have the biggest immediate impact.

Establish a Policy Framework Early: To avoid congestion and sprawl, Austin linked policy areas to shape shared, electric, and autonomous fleets.

Focus on Outcomes: Instead of technology, the roadmap focuses on outcomes the technologies provide, such as safety, mobility, access, affordability, and equity.

Build Partnerships: Collaborating with partners, such as universities, cities, or other agencies, can help produce better results.

Establish Data Needs: There is a large gap between the public and private sectors when it comes to data and technology.

Measurable Results and Impacts

The Smart Mobility Roadmap has been implemented, however, early results are primarily adopted policies rather than technological outcomes.

- Austin's public agencies are working together to plan for the future of mobility. Austin City Council has adopted several policies and plans that intersect with the new mobility roadmap such as Imagine Austin and Vision Zero.
- The roadmap has set the stage for the development of coordinated mobility metrics across city planning efforts.
- The public sector must change to keep pace with the private sector, and the roadmap outlines an approach to shared, electric, and autonomous vehicle technologies for the City of Austin.

Applicability to KCM

The Austin Smart Mobility Roadmap is a good example of agency partnerships to prepare for future technologies. King County Metro could work with key partner agencies and jurisdictions to focus on one or more of the five key areas for collaboration.



The Smart Mobility Roadmap provides direction for the city on emerging technologies in transportation. (Image courtesy of the City of Austin)



The City of Austin is home to some of the earliest autonomous mobility testing in the nation. (Image courtesy of the City of Austin)

Impact:



ADDITIONAL INNOVATION STRATEGIES

As cities and regions continue to grow and transform, the need for innovative transportation solutions has never been greater. New tools and approaches are continually being tested to make it easier for people to use a variety of mobility services that best meet their needs. Mobility innovation encompasses the ways people travel, the services they use, how people connect with and understand their travel options and how agencies test new mobility services and technologies.

Mobility as a Service

Mobility as a Service (MaaS) represents a shift in how people consume mobility trips--from transit, car share, taxi and transportation network company (TNC) services such as Uber, Lyft, and Moovn, to bike share and microtransit services-- based on consumer preferences and real-time availability instead of buying the means of transportation.

This consumer-centric transportation model allows people to plan, book, and pay for trips on public and/or private transportation services using a service provider's mobile application or an integrated mobile application with a service "stack."

In its ideal form, MaaS provides end-to-end trip integration, enabling a person to enter their trip start and end location, choose from all available transportation options, book, and pay for the service or combination of services that best meets their needs.

If carefully implemented, MaaS has the potential to advance transportation equity by expanding mobility options that don't require car ownership and providing customers with information on those options, including modes and services that are faster and/or cheaper than what they are already using. Additionally, by making public transportation more accessible and allowing people to decrease their reliance on personal vehicles, MaaS has the potential to reduce greenhouse gas (GHG) emissions.

Cities around the world have begun to explore the potential benefits of MaaS through the implementation of pilot programs such as moovel and UbiGo, which are described below.

- **moovel (Germany):** moovel is a MaaS application that allows people to search, book, and pay for rail, carshare, public bus, bikeshare, and taxi rides all within one mobile application. The moovel application serves residents in German cities such as Hamburg, Stuttgart, and Karlsruhe and is being tested in Boston and Portland. The application is free to download and can be paired with various payment options including PayPal, Google, and Apple Pay.
- **UbiGo (Stockholm, Sweden):** UbiGo is a MaaS application that combines public transportation, car-sharing, rental car services, and taxi services. UbiGo operates on a monthly subscription that can be shared among multiple members of a household and allows any excess funds to roll over into the following month.

MOBILITY AS A SERVICE



Source: Scandia

EXAMPLE MOBILITY HUB



Supportive Integrations and Partnerships

For innovative transportation solutions such as Mobility as a Service and Mobility Hubs to be effective, they must be properly introduced and communicated to their intended audiences. Programs that are making it easier for people to use such services include TransitScreen, Transit GO Ticket, and transit agency and ride-hailing partnerships.

- **TransitScreen** is a location-specific software that displays surrounding mobility options including carshare, ride-hailing (Uber/Lyft/taxis), and bikeshare information in real time. Viewers can see arrival times for buses, walk times to transit stations, nearby bikeshare and carshare availability, and other community information including neighborhood coffee shops, restaurants, and other amenities.
- **Transit Go Ticket**, currently used by King County Metro, is a mobile application that allows people to purchase bus, rail, and water taxi tickets with their smartphones. Similar to tickets and fares purchased with cash, Transit GO Tickets can be used to transfer to and from any Metro service for up to two hours after ticket activation.
- **Transit Agency and Ride-Hailing Partnerships** help to address a significant challenge in accessing

public transit, which is making the connection from one's home or job to the bus or train. These challenges are often greatest in suburban areas that are typically designed for vehicle-owning households. Dallas Area Rapid Transit (DART) has partnered with ride-hailing companies Uber and Lyft to help address first and final mile connection issues and expand the reach of public transit services. The agency now includes a trip-planning feature within their mobile application, allowing customers to book an Uber or Lyft ride from the transit app.

TRANSITGO MOBILE TICKET APPLICATION

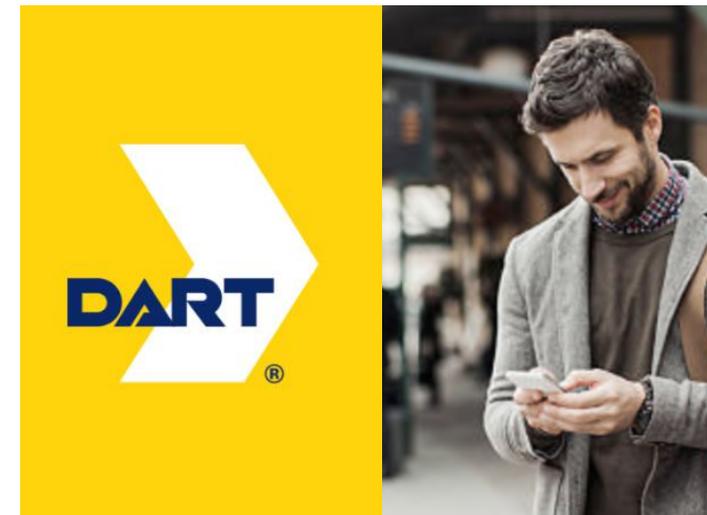


Source: Bytemark

TRANSITSCREEN



DART AND UBERPOOL PARTNERSHIP



Source: DART

WORKFORCE



Relevant Guiding Principles

- Support our workforce



Equity Cabinet Questions

- How can Metro support career paths in a way that makes the workplace more inclusive?
- How can Metro contract for services in a way that advances equity?
- How do we help our workforce prepare for technological and transportation-related advancements?
- How can we reach priority populations for job recruitment and retention?
- What kind of guidelines should Metro have in place when contracting with private providers?



Best Practices Research Questions

- What transit agencies, cities, or other public entities are leading in creating more inclusive workplaces and how are they doing it? How are agencies providing pathways to growth and promotional opportunities, especially from blue collar to white collar jobs?
- What are agencies and cities doing to set parameters for how workers are treated? Is anyone having success moving Uber/Lyft/others into providing living wages or other workforce supports?

Relevant Best Practices & Preliminary Impact Assessment

Best Practice	Description	Impact
Recruitment, training, retention, and inclusive workplaces		
Denver Regional Transportation District Workforce Initiative Now Program (Denver, CO)	Denver Regional Transportation District developed the Workforce Initiative Now (WIN) program to increase recruitment for employment opportunities in underserved communities, providing pre-employment, training and placement, and career and supportive services.	
Los Angeles Vision Zero: Dignity-Infused Community Engagement Strategy (Los Angeles, CA)	Recruitment strategy for engagement “Street Teams” includes creating paid opportunities for young people transitioning out of foster care, survivors of gender-based violence, aging adults, and those experiencing other barriers to employment.	
State of Vermont Agency of Transportation (VTrans) Youth Program	VTrans promotes year-round youth outreach to expose students to careers in the transportation industry, including the agency’s participation in numerous career fairs, panels, and conferences; serving as a host site for students engaged in Community Based Learning or short-term job shadows; and providing an annual two week residential program for high school students each summer as part of FHWA’s National Summer Transportation Institute.	
LA Metro Transportation School (Los Angeles, CA)	LA Metro is in the process of establishing a public boarding school in South Los Angeles with a STEAM curriculum focused on science, technology, engineering, art, and math. The Transportation School is intended to engage the local community and underserved youth while introducing career pathways in the global transportation industry.	
Toronto Regional Immigrant Employment Council Mentorship Program (Toronto, ON)	Founded in 2002, Toronto Regional Immigrant Employment Council (TRIEC) is a Canadian nonprofit that works to better integrate immigrants into the greater Toronto area labor market. TRIEC programs build cross-cultural understanding through diversity and inclusion training for employers and assist newcomers in finding ways to apply their skills in the labor market through mentoring, education, and connection to services.	

 Highlighted best practices are described in greater detail in this document.

Best Practice	Description	Impact
Generation USA Retail Career Advancement Program (Multiple Cities)	The Retail Career Advancement (RCA) program offers a six-week training program designed to help retail employees advance in their field and includes a career coach, mentor, and case manager who create plans for advancement and follow up throughout the program and after completion.	
Duwamish Valley Youth Corps (Seattle, WA)	The Duwamish Valley Youth Corps (DVYC) is a program founded in 2014 by the Duwamish River Cleanup Coalition, which engages youth in the South Park and Georgetown neighborhoods of Seattle to provide education, community service, and job training in the environmental, sustainability, and green infrastructure fields.	
Washington Hospitality Association Education Foundation's Incumbent Worker Training Program (Washington State)	The Incumbent Worker Training (IWT) program was implemented in a five-county area of Washington state, including Grays Harbor, Lewis, Mason, Pacific, and Thurston counties. The program provided the opportunity for workers in the hospitality industry to take free skills improvement courses to advance their careers within the industry and catered to both entry-level and mid-level employees.	
WTS Transportation YOU (Multiple Cities)	The Women's Transportation Seminar (WTS) provides youth programs through their Transportation YOU program that provide education, training, and exposure to the transportation industry for high school, undergraduate, and graduate students.	
LinkedIn Diversity & Inclusion Strategy (Sunnyvale, CA)	LinkedIn, an employment-oriented social networking site with over 500 million users, has been publicly reporting on workplace diversity since 2014. The strategy has focused on increasing gender diversity at LinkedIn, with notable success.	

 Highlighted best practices are described in greater detail in this document.

Best Practice	Description	Impact
New Orleans Regional Transportation Authority Strategic Mobility Plan (New Orleans, LA)	By 2022, the agency is to create a Career Pathways program for employees and ensure competitive pay and benefits. They will explore a partnership with area colleges to create an apprenticeship program.	
Parameters for treatment of workers		
City of Seattle \$15 Minimum Wage (Seattle, WA)	Established minimum wage standards for employees working within Seattle city limits. The ordinance set different minimum wage levels for employers based on the number of total employees, medical benefits, and whether employees earn tips.	

 Highlighted best practices are described in greater detail in this document.

Denver Regional Transportation District Workforce Initiative Now Program

Denver, CO (2011)

Denver's FasTracks project—an ambitious expansion of commuter rail, light rail, and bus rapid transit (BRT)—posed a workforce recruitment, training, and retention challenge for the Regional Transportation District (RTD). In 2011 RTD developed and secured a Federal Transit Agency (FTA) Ladders of Opportunity grant for the Workforce Initiative Now (WIN) program to expand its workforce and increase recruitment for employment opportunities in underserved communities. WIN's model was to partner with a coordinated network of community service providers to offer three types of services: pre-employment, training and placement, and career and supportive services. WIN provided training opportunities for workers to support the construction of FasTracks projects and fill maintenance positions for RTD's expanding bus and rail service and operations.

To reach underserved communities, WIN was advertised by the Urban League and other community partners. Specific communities and neighborhoods were identified as good candidates for program recruitment due to high unemployment and foreclosure rates; educational attainment and a higher population of communities of color were also factors in identifying communities that might benefit from the program.

Lessons Learned

- RTD representatives indicated that word of mouth from participants who successfully completed training and placement was the most effective advertising for the program.
- Partnering with local employers was a critical component to maximize the number of job placements and leverage partner expertise on workforce needs, experience, and relationships.
- Federal contracting and grant requirements were challenging for the program to meet.

Measurable Results and Impacts

The WIN program strengthened the relationship between RTD and the community and helped educate people about the many jobs—beyond transit vehicle operators—required to build and provide transit service. Between 2011 and 2014, WIN served 791 community members and placed nearly half of WIN participants in jobs with RTD or RTD partner organizations.

Applicability to KCM

RTD's WIN provides an example of a transit agency that coordinated a network of community partnerships to improve recruitment and training opportunities spurred by capital investment in transit facilities. Metro could use a similar strategy to establish a more diverse workforce and improve its relationships with the communities it serves.



The RTD FasTracks expansion resulted in a need for the agency to recruit, train, and retain a larger workforce, leading to the WIN program. (Image courtesy of Nelson\Nygaard)



The Community College of Denver was a key partner for recruitment and training during the WIN program. (Image courtesy of CCD.edu)

Impact:



LA Metro Transportation School

Los Angeles, CA (2018)

In June 2018, LA Metro announced their Transportation School, which will prepare Los Angeles County youth for career and college pathways in the transportation industry. The public boarding school's curriculum will teach students transferrable industry skills focused on science, technology, engineering, arts, and math (STEAM). With over 50% of the transportation industry workforce eligible for retirement in the next 10 years, the school will help Metro begin to train and hire a workforce to fill the jobs that these retirements will create.

The Transportation School is the centerpiece of a larger workforce development initiative that Metro has created to address the transportation industry's need for a skilled employee pool. The program expands Metro's existing career pathway programs to include more high-school-aged youth, particularly from underserved communities. The school will be part of a larger mixed-use development in the Vermont/Manchester area of South Los Angeles, intended to improve quality of life, increase safety, and improve community amenities and diverse workforce development.

Lessons Learned

The Transportation School is projected to open in fall 2020, so there are limited lessons learned related to student enrollment, achievement, and impacts to Metro's workforce. However, the Transportation School development site was specifically identified for its capacity to serve a diverse student population, including the high percentage of at-risk youth living in South

Los Angeles. While the effectiveness of this decision is still unknown, Metro has taken an active approach to identify underserved communities that may benefit most from this type of investment.

Measurable Results and Impacts

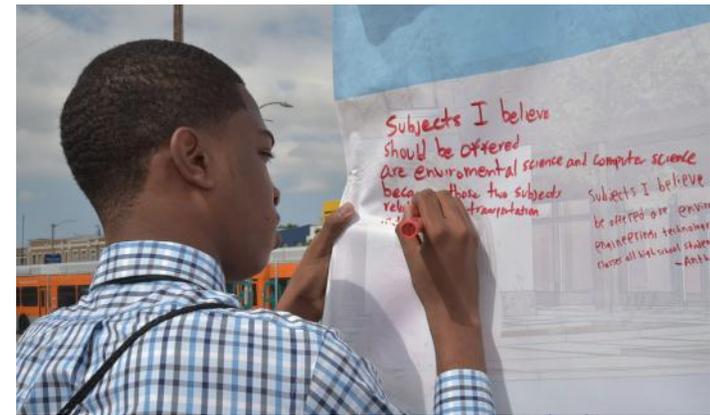
The Transportation School is not yet open, so there are no results related to student achievement available.

Metro has established several quantitative evaluation measures for the Transportation School, including reserving at least 20% of seats for youth from the local community and 30% of seats for youth who are currently receiving services from, or are at risk of entering, the County's child welfare system, probation department/juvenile justice system, or homeless services.

Additionally, the proposed Transportation School site is intended to spark community economic development by anchoring a new mixed-use retail development. The goal of selecting this site is to return more opportunities to the community through future investment.

Applicability to KCM

While King County Metro may not choose to open a public boarding school, LA Metro's targeted outreach and engagement efforts in underserved communities and to at-risk youth is a model King County Metro can follow to foster a more diverse and inclusive workforce. Providing wealth-creation opportunities for residents of underserved communities—through investment in education and training—is a model for King County Metro's current efforts regarding workforce development.



During the kick-off announcement for the Transportation School, LA Metro hosted an outreach event with members of the community and prospective students. (Image courtesy of LA Metro)



The Transportation School is intended to expand on Metro's existing career pathways programs and prepare youth in LA County for new jobs in the global transportation industry. (Image courtesy of LA Metro)

Impact:



Toronto Regional Immigrant Employment Council - Mentoring Partnership

Toronto, ON (2002)

Founded in 2002, Toronto Regional Immigrant Employment Council (TRIEC) is a Canadian nonprofit that works to better integrate immigrants into the greater Toronto-area labor market. TRIEC programs build cross-cultural understanding through diversity and inclusion training for employers and assist immigrants through mentorship, education, and connections to services. TRIEC works across employment sectors and is funded by the federal and provincial governments, as well as corporate and philanthropic sponsorships.

TRIEC manages the Mentoring Partnership, while the day-to-day mentorship work is handled by other organizations. Twelve community partners (employment services organizations) provide recruitment, registration, and coaching for both mentors and mentees. The community partners recruit mentors from 25 organizations. Mentors are trained in skill-coaching, working with people from different cultures, and recruiting. Five settlement and employment agencies help refer clients to the mentoring program.

Lessons Learned

In a review of their participation in the program, the City of Toronto found that allowing mentors to use some work time to participate in the mentorship program has been a key to success. The City is one of the top two employer partners for both matches

and mentors. The City provides opportunities for mentors to share the positive impact of their partnership, including recognition events.

Measurable Results and Impacts

Since the program began in 2002:

- Over 17,000 immigrants have received mentorship
- 77% of mentees find employment
- 96% of mentors say that they are better able to coach and lead after mentoring

The City of Toronto found that participating in the program yielded positive results:

- It has helped to diversify their workforce and fill positions that were historically difficult to staff.
- Over 500 mentors have participated in the program, providing an opportunity for professional development.

Applicability to KCM

Metro could work with partners to create or participate in an existing mentorship program to support its goals related to recruitment, staff development, community partnerships, and cultural-sensitivity training. Mentees would receive guidance and experience that could help them prepare for and navigate a career with Metro, and mentors could benefit from professional development and relationships with a diverse pool of potential employees. The program would not have to be specific to immigrants, although 24% of King County residents are foreign born, representing an important segment of the future King County Metro workforce.



The mentoring partnership program is delivered across the greater Toronto area by 12 community partner agencies and organizations. (Image courtesy of JobStart)



Mentor Orientation helps prepare mentors to understand their role, what support options are available to them, and what type of guidance their mentees may need. (Image courtesy of TRIEC)

Impact:



Generation USA Retail Career Advancement Program

Multiple Cities (2016)

Generation USA is a non-profit organization dedicated to moving youth into self-sustaining careers. The program initially operated in Dallas, TX and Jacksonville, FL but has expanded to include Miami, San Francisco, Atlanta, and Las Vegas. In 2016, Generation USA launched the Retail Career Advancement (RCA) program designed to help retail employees and unemployed youth advance in their field.

RCA offers a six-week training program, 60% of which can be completed online, that includes access to a career coach, mentor, and a case manager who creates advancement plans and follows up with each participant during and after completing the program. The RCA program focuses on both unemployed youth looking for entry-level positions and entry-level employees seeking the skills necessary for career advancement.

Lessons Learned

Program leaders identified recruitment as a primary challenge for enrollment. Much of RCA's success is due to partnerships with employers who are invested in employee advancement, actively advocate for employees, assist in developing the curriculum, and encourage their existing employees to participate. However, employers may not want employees to attend training scheduled during their regular shifts, and programs may need to be no or low-cost to employers to gain initial buy-in. Increasing engagement with employers and potential partners is crucial for long-term success in recruiting students and ensuring the curriculum stays current.

Measurable Results and Impacts

Following completion of the program, 71% of employers reported that RCA graduates were among their best performing employees, and 86% of graduates were considered team players and eager to learn. Additionally, 90% of program graduates were placed into a job within 180 days and 83% retained that job a year after placement; promotion and advancement rate information was not available. The number of program participants was not publicly available.

Applicability to KCM

King County Metro employs a wide range of specialized positions from vehicle operators and maintenance mechanics to administrators, planners, and engineers. Each of these positions requires particular skills and has its own placement criteria and advancement potential. Metro could leverage its existing relationships with community-based organizations (CBOs) to establish a similar workforce development partnership led by one or more CBOs. Such a partnership could be designed to assist in career placement and identify career advancement opportunities to meet the department's future workforce needs. It could also engage the local community and introduce young people to potential careers in transportation.



Walmart, an employer partner of the RCA program, provided a \$4.8 million grant to continue and expand the program in Jacksonville, FL. (Image courtesy of Generation USA)



Generation USA also organizes a banking and finance career advancement and youth training program through a partnership with the Wilmington Leaders Alliance in Wilmington, DE. (Image courtesy of Generation USA)

Impact:



Duwamish Valley Youth Corps

Seattle, WA (2014)

The Duwamish Valley Youth Corps (DVYC), founded in 2014, is led by the Duwamish River Cleanup Coalition (DRCC). The Youth Corps engages primarily low-income youth of color in education, health, equity, community service, and environmental justice by offering paid training and meaningful work experience in ecology, community organizing, public and environmental policy, and green infrastructure. Participants in the DVYC range from 13 to 18 years old and are residents of Seattle’s South Park and Georgetown communities, which are within or adjacent to the Lower Duwamish Waterway Superfund site.

Program participants meet three times a week for 12 weeks and follow a curriculum that includes a public health impact assessment, social and environmental justice programs, and an emphasis on community involvement and making a difference. The program has grown and gained new partnerships since it began, including meeting with Washington Governor Jay Inslee and a partnership with the Port of Seattle. The partnership with the Port, announced in 2019, will provide additional on-the-job training resources in the environmental, sustainability, and green infrastructure fields.

Measurable Results and Impacts

In addition to community service projects—including picking up litter, tree planting, and leading community outreach—the DVYC also played a role in developing the “Hey Duwamish” interactive tool. Community members use the tool to request improvements, projects, and amenities or report hazards within the Lower Duwamish Valley.

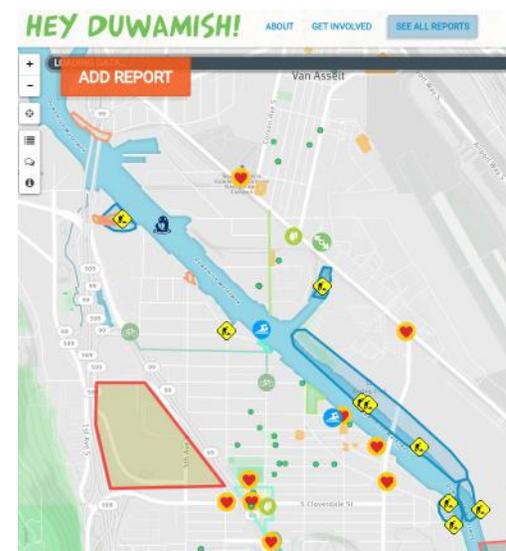
In 2015, the program served 55 participants through three cohorts. Two participants were appointed as student Sustainability Ambassadors for the City of Seattle. Eight participants were offered employment with the City of Seattle or King County and have rejoined DVYC as mentors.

Applicability to KCM

Graduates of the DVYC program have gone on to work for both the City of Seattle and King County. By investing in a more structured partnership with DVYC, including support for programming, Metro could introduce transportation topics to accompany the existing environmental and sustainability emphasis. This local initiative could provide an opportunity for Metro to engage with diverse Seattle-area youth and introduce them to career opportunities in transportation.



The March 2016 Cohort of the Duwamish Valley Youth Corps cleans up trash and litter throughout the South Park and Georgetown neighborhoods. (Image courtesy of The Seattle Globalist)



The Hey Duwamish! online tool is a grassroots, community-led effort to monitor pollution and improve environmental health in the Duwamish Valley. (Image courtesy of Hey Duwamish!)

Impact:



LinkedIn Diversity and Inclusion Strategy

San Francisco, CA (2014)

The tech industry faces a growing need for highly-skilled employees and suffers from a lack of gender and racial diversity in both management and the overall workforce. LinkedIn, an employment-oriented social networking site with over 500 million subscribers, has been publicly reporting on workplace diversity since 2014. The company's diversity and inclusion strategy has had notable success, particularly in gender inclusion.

Starting in 2018, LinkedIn focused on a three-pillar strategy:

1. Hire and grow diverse talent.

LinkedIn has several initiatives to increase recruitment and promotion of underrepresented populations, including the Black Inclusion Group, working to close the opportunity gap for black/African American people in the technology industry, and EnableIn, which generates awareness, fosters inclusion, and supports hiring of people with disabilities.

2. Invest in creating an inclusive environment.

In 2018, LinkedIn created companywide learning programs to educate its employees on race, gender, and disabilities.

3. Create a broader cultural change in the tech industry.

LinkedIn's core business supports the company's ability to lead and influence recruitment across the tech industry. Their Gender Insights product helps recruiters measure gender discrepancies in response to job and candidate outreach.

Lessons Learned

The company has developed programs that focus on retaining and growing people within the company as well as supporting non-profits that work to increase diversity in the technology industry.

Measurable Results and Impacts

- Women now represent 40% of company leadership, a 50% increase in four years. The percentage of women in technical leadership roles has increased 193% in four years.
- The impact of LinkedIn's efforts to hire and retain people of color has been more limited. From 2014 to 2018, black/African American employees have increased from 2% of the company's U.S. employees to 3.3% and Latinx employees have increased from 4% to 5.7% of U.S. employees.
- LinkedIn does not externally report employee demographics or diversity beyond gender and race.

Applicability to KCM

King County Metro could develop a strategy to supplement the countywide Equal Opportunity and Affirmative Action Plan and address unique challenges facing the department. For example, Metro could set a goal to hire and retain more women and people of color in maintenance jobs or transit supervisor roles. Developing an approach like LinkedIn's Employee Resource Groups and using a tool similar to Gender Insights to inform hiring outreach and decisions could be valuable next step.



Members from different Employee Resource Groups at LinkedIn. (Image courtesy of LinkedIn)



DIBs
Diversity.
Inclusion.
Belonging.

LinkedIn's Diversity and Inclusion Strategy focuses on diversity, inclusion, and belonging both internally and across the larger technology industry. (Image courtesy of LinkedIn)

Impact:



City of Seattle \$15 Minimum Wage

Seattle, WA (2015)

The City of Seattle’s Minimum Wage Ordinance took effect on April 1, 2015. It established minimum wage standards for employees working within the Seattle city limits. The ordinance set different minimum wage levels for employers based on the number of total employees, medical benefits, and whether an employee earns tips. Currently, companies with more than 500 employees must pay \$16.00 hourly, which is the highest minimum wage in any U.S. city. For companies with fewer than 500 employees, the minimum wage is \$15.75 for jobs without health benefits or tips and \$12.00 for jobs with benefits or tips. This two-tiered structure balances the goal of increasing earnings for minimum-wage employees with reducing the financial burden on small- and family-operated businesses.

Lessons Learned

- Despite being controversial, a city-specific minimum wage is a tool to provide a living wage in cities with higher costs of living.
- Along with cities such as San Francisco, San Jose, and Chicago, Seattle’s minimum wage is well beyond that of the state’s minimum (which is \$12.00 in Washington).
- Labor dynamics are complex—wages are one factor among many that employers must consider when hiring workers—and a minimum wage ordinance can have different impacts across different sectors. However,

with equity as a City priority, the City of Seattle established its ordinance with ongoing evaluation of impacts, making changes as needed to address unforeseen issues.

Measurable Results and Impacts

Some studies have found that an increase in the minimum wage increases disposable income for people in lower-paid jobs with little to no reduction in employment. In Seattle, for every 10% increase in the city’s minimum wage, there was a 2.3% increase in workers’ pay in the fast-food sector.

A minimum wage increase does not necessarily lead to higher priced products or services. A two-year evaluation of Seattle’s minimum wage ordinance found that the initial increase from \$13.50 to \$15.00 had no impact on local supermarket food prices.

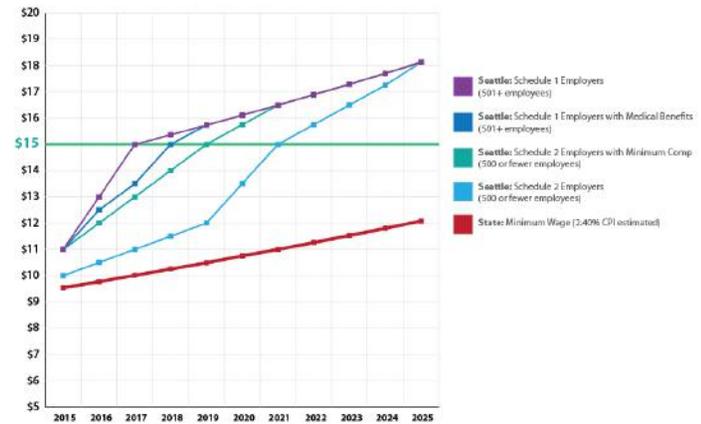
The Seattle minimum wage ordinance increased disposable income for workers making less than the minimum wage and also those making slightly above minimum wage. This suggests that the ordinance is benefitting a larger group of employees (beyond those in minimum-wage jobs).

Applicability to KCM

King County Metro employees are covered by Seattle’s minimum wage ordinance, and most Metro jobs pay above minimum wage. King County also requires contractors (and their subcontractors) awarded a contract valued \$100,000 or more to comply with Seattle’s minimum wage standards. Metro could consider extending this requirement to contracts of lower value.

\$15 Minimum Wage in Seattle

SCHEDULE OF INCREASES



Seattle’s minimum wage depends on size of employer and other benefits provided, but will be aligned for all workers by 2025. (Image courtesy of City of Seattle)



The minimum wage ordinance came after a series of protests surrounding affordability issues and low wages in the city. (Image courtesy of MSNBC)

Impact: ✓✓

ENGAGEMENT



Relevant Guiding Principles

- Engage deliberately and transparently

Equity Cabinet Questions

- What strategies should Metro use to improve our engagement practices?
- How can we demonstrate openness to shared decision-making and co-creation?
- How can we reach people with greatest barriers to access?

Best Practices Research Questions

- What transit agencies and cities are pushing new models for shared decision making, co-creation, and engagement, and what are those models?
- What agencies and cities (and others) are using tools and techniques that help to invite new voices to the conversation? What are people doing to reach a broad audience?

Relevant Best Practices & Preliminary Impact Assessment

Best Practice	Description	Impact
Shared decision making and co-creation		
LA Metro Equity Platform (Los Angeles, CA)	Framework to shape analyses and actions of the agency that centers work on early and continuous community engagement. Seeks to use transportation as a lever to enable access to opportunity and address historical and current inequities in access.	✓✓✓
Mobility Equity Framework (Greenlining Institute)	Framework designed to address structural inequities through an adaptable, customizable process for the community, advocates, and transportation decision-makers, and to elevate values of social equity and community power in transportation planning and decision-making.	✓✓✓
Equity-Centered Community Design Field Guide (Creative Reaction Lab)	Best practice for addressing power dynamics in engagement.	✓✓✓
Metro Transit Transit Assistance Program (Minneapolis-St. Paul, MN)	Invest in community liaisons within neighborhoods to raise awareness and trust in the program.	✓✓
City of Seattle Public Outreach Liaison Program (Seattle, WA)	Community liaisons are embedded community leaders from a variety of immigrant and refugee communities, communities of color, and communities of seniors, youth, and people with disabilities. Community Liaisons bring deep expertise on their communities' needs and concerns, trusted relationships with community members, and an ability to build bridges between city government and community interests.	✓✓

 Highlighted best practices are described in greater detail in this document.

Best Practice	Description	Impact
Tools and techniques		
Community Engagement Toolkit (Public Health Seattle-King County, Futurewise, OneAmerica, El Centro De La Raza)	Best practice for defining purpose of engagement effort and how the agency will use information gathered from the public to implement results; provides a range of engagement tools that are effective for different points along the spectrum for levels of engagement (International Association for Public Participation).	
Seattle Transportation Equity Program (Seattle, WA)	Program that provides safe, environmentally sustainable, accessible, and affordable transportation options that support communities of color, low-income communities, immigrant and refugee communities, people with disabilities, people experiencing homelessness or housing insecurity, LGBTQ people, women and girls, youth, and seniors to thrive in place in vibrant and healthy communities, and mitigate racial disparities and the effects of displacement.	
San Francisco Public Utilities Commission Social Impacts Partnerships (San Francisco, CA)	Within Requests for Proposals (RFPs) for projects over \$5 million, applicants are asked to meet a community benefits criteria, which allocates money toward an improvement for communities who are affected by the proposed project.	
Metro Transit/Porchlight (Community Based Organization) Partnership (Madison, WI)	Metro Transit and Porchlight work with non-profits, city departments, and downtown business groups to ensure a coordinated approach to working with people experiencing homelessness.	
Southeast Pennsylvania Public Transportation Authority/Project HOME (Community Based Organization) Partnership (Philadelphia, PA)	Project HOME, a Philadelphia non-profit homelessness organization, has partnered with SEPTA on a variety of initiatives, including establishing a walk-in outreach center at SEPTA's largest rail center called "Hub of Hope," which provides social and health services to individuals experiencing homelessness.	
Mobility ATX Online Voting Tool (Austin, TX)	Online public engagement tool that allows the public to "upvote" each others' ideas.	

LA Metro Equity Platform

Los Angeles, CA (2018)

In February 2018, the Los Angeles County Metropolitan Transportation Authority (LA Metro) Board approved an Equity Platform aimed at achieving “equality of outcome” versus equal treatment. The four pillars of the framework include the following:

- 1. Define and Measure:** Define a common basis and language for talking about equity, inequity, and how to measure improvements or changes over time.
- 2. Listen and Learn:** Create forums for open conversation about how efforts to achieve equity have historically been problematic and gather input about where partnerships and relationships can be improved and strengthened to advance equitable outcomes going forward.
- 3. Focus and Deliver:** The 2020-2050 Long Range Transportation Plan will focus on equity in terms of 1) Metro-led planning, investments and operations, and 2) partner-based activities beyond Metro’s core transportation responsibilities (e.g., land use, housing, social and economic security).
- 4. Train and Grow:** Train staff at all levels within Metro to learn methodologies to evaluate equity and how to effectively communicate with communities in a way that recognizes and respects equity issues.

This framework is intended to shape specific analyses and actions attached to Metro initiatives and report progress to the Metro Board.

Lessons Learned

Since approving this policy, LA Metro has found that dedicated staff will be required to ensure the framework is applied across all of Metro’s work. Community conversations and forums may produce difficult and uncomfortable feelings among community members and staff and may require professional facilitation.

Measurable Results and Impacts

In 2018, with the support of the Alliance for Community Transit-Los Angeles, the Metro Board adopted a new Transit-Oriented Communities policy to protect transportation access for low-income residents by increasing affordable housing around bus stops and rail stations.

In January 2019, Metro launched *Reimagining LA County: Mobility, Equity, and the Environment* to study traffic management tools that can alleviate traffic congestion and simultaneously generate additional transportation revenue. This initiative can prioritize serving high-need communities, including low-income drivers.

Applicability to KCM

King County Metro has a role similar to LA Metro, with a focus on transit service and capital project delivery as well as community partnerships. Developing an Equity Platform could support Metro’s planning and implementation, guiding specific investments and policies in plan delivery over the coming decades, especially in the form of dedicated equity staff and strategic partnerships.



The LA Metro Equity Platform is aimed at achieving equality of outcome, rather than equal treatment. This represents an important step toward achieving equitable outcomes. (Image courtesy of Robert Wood Johnson Foundation)



LA Metro has determined that dedicated outreach staff and specialized initiatives will be necessary to successfully carry out and apply the Equity Platform. (Image courtesy of LA Metro)

Impact:



Mobility Equity Framework

Greenlining Institute (2018)

The Greenlining Institute’s Mobility Equity Framework was created in spring 2018 to encourage transportation systems that benefit all people, especially communities of color and low-income neighborhoods. The framework is designed for use by planners and community advocates across the country, and offers guidance and tools to define equity, measure impacts and benefits, and apply a three-step framework to identify needs, analyze mobility strategies to address needs, and give decision-making power to the local community.

The framework approach includes:

1. Identify the mobility needs of a specific low-income community of color.
2. Conduct the mobility equity analysis to prioritize transportation modes that best meet those needs while maximizing benefits and minimizing burdens.
3. Place decision-making power in the hands of the local community.

While the framework is relatively new, it has been referenced as a potential tool to inform policies at the local and national levels, including Baltimore’s Complete Streets bill, the Green New Deal, and future bridge connections across the San Francisco Bay.

Lessons Learned

A key strategy to place decision-making power in the hands of the local community is participatory budgeting. While several cities have introduced participatory budgeting into their transportation planning processes (Oakland, Seattle, New York City),

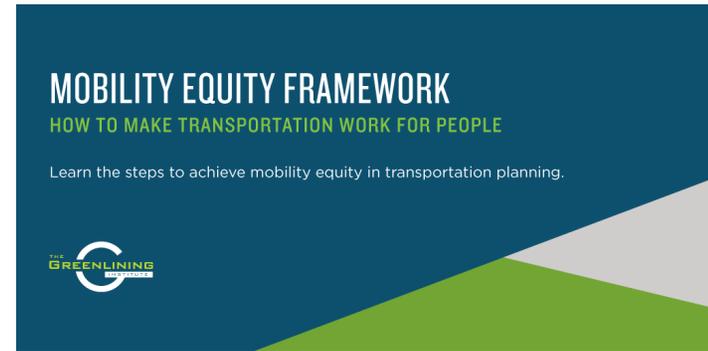
Porto Alegre in Brazil—the birthplace of participatory budgeting—saw the approach fall apart when the political climate changed. Funding that did not require participation discouraged the approach, illustrating the importance of policy in holding agencies accountable to practicing community-led investment.

Measurable Results and Impacts

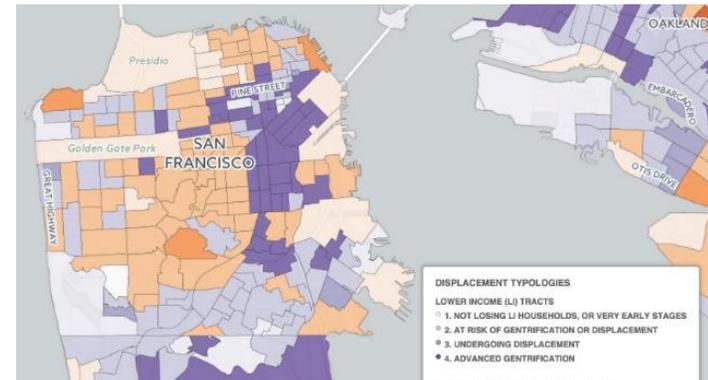
In spring 2018, the San Francisco County Transportation Authority worked with Reflex Design Collective to support transportation improvements in District 10, a rapidly gentrifying area of San Francisco. Reflex adopted the Mobility Equity Framework to expand the project goals to include access to opportunity/employment, public safety, improved air quality, and building community power. They also “co-designed” the decision-making process, including more low-income and long-term residents in small discussions in familiar settings versus large public workshops. Finally, they partnered with local community-based organizations to translate materials and build agency staff awareness of local history, power dynamics, and distrust in government. Ultimately, 150 residents were involved as paid co-designers throughout the planning process.

Applicability to KCM

This framework could be applied to both internal agency initiatives and policies, such as workforce development, as well as customer- and partner-facing initiatives. For example, planning processes can begin by identifying local community-based organizations and their constituents as partners to co-design the engagement approach, foster more information exchange between King County Metro and residents, and create community-driven recommendations.



The Mobility Equity Framework is used to develop transportation systems that work for all people, particularly underserved communities. (Image courtesy of The Greenlining Institute)



The Greenlining Institute’s Mobility Equity Framework was used in San Francisco’s District 10, a rapidly gentrifying area of the city, to include more low-income and long-term residents in the decision-making process for transportation improvements. (Image courtesy of Mission Local)

Impact:



Equity-Centered Community Design Field Guide

Creative Reaction Lab (2018)

Creative Reaction Lab is a non-profit organization in the St. Louis region that developed Equity-Centered Community Design (ECCD) in 2018 as a creative problem-solving process that illuminates power structures in decision making. It begins by identifying current/past decision-makers, unpacks history, and facilitates healing. Steps in the process include:

- **Inviting Diverse Co-Creators:** Bring people with different identities, perspectives, and backgrounds into problem-solving processes and implementation.
- **Building Humility and Empathy:** Recognize the influence of biases and perspectives in understanding another person's emotions, experiences, and actions, and actively attempt to understand their perspective.
- **History and Healing:** Recognize that the media, education and social interactions each person has with their family, friends, and colleagues is taught within the context of structural oppression that has erased certain stories and identities and requires unlearning.
- **Defining and Assessing the Topic/Community Needs:** Understand community needs and explore the root causes of why they are not being met.

Lessons Learned

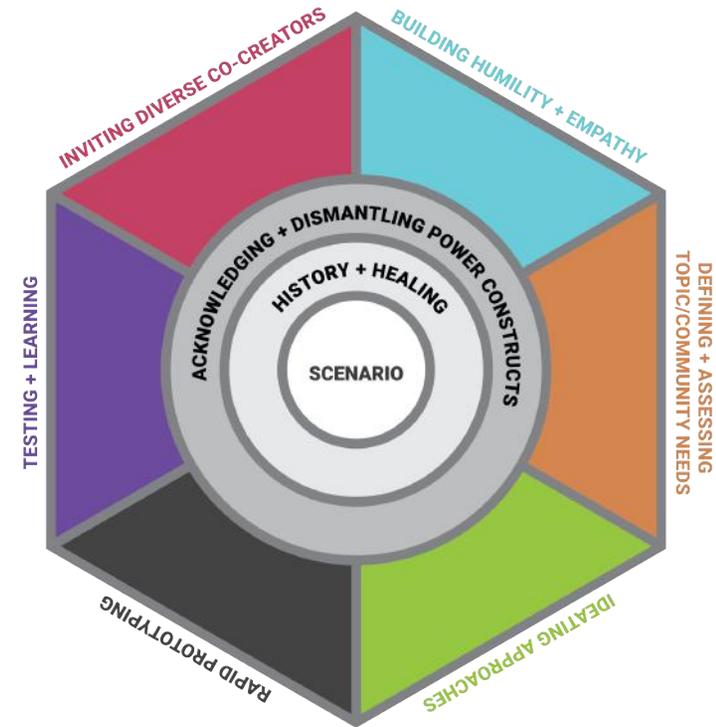
The ECCD Field Guide does not provide a linear process or policy recommendations, but instead focuses on shifting mindsets by building self-awareness and prompting reflection. Agencies seeking to use the guide to inform community engagement work should recognize that its intended use is to facilitate ongoing learning, unlearning, and relearning.

Measurable Results and Impacts

In 2019, Creative Reaction Lab worked on Mobility For All By All, a grant-funded interdisciplinary collaboration to ensure new public transit investments in St. Louis would serve equity and quality of life interests. The project created a metrics system that emphasizes improvements in equity (e.g., growing access to jobs for people in low-income communities) rather than economic development (e.g., creating more jobs), engaged residents around three proposed Metrolink station locations in historically disinvested neighborhoods, and developed site-specific community projects with residents.

Applicability to KCM

As King County Metro works to build its institutional awareness about equity in transportation planning and service delivery, the ECCD Field Guide can serve as a resource to shift cultural norms and mindsets within the agency. As it applies to specific projects, plans, and policies, King County Metro can practice the Field Guide's suggested approach to community engagement.



EQUITY-CENTERED COMMUNITY DESIGN

Equity-Centered Community Design is based around history, healing, acknowledging, and dismantling power constructs. The process builds on this core to identify current and past decision-makers, unpack history, and facilitate healing within the design process. (Image courtesy of Creative Reaction Lab)

Impact:



Seattle Transportation Equity Program

Seattle, WA (2017)

The City of Seattle's Department of Transportation (SDOT) created a Transportation Equity Program in 2017 in alignment with the City's Race and Social Justice Initiative goals and core values. The program is focused on supporting communities of color, low-income communities, immigrant and refugee communities, people with disabilities, people experiencing homelessness or housing insecurity, lesbian, gay, transsexual, bisexual, and queer people, women and girls, youth, and seniors. Efforts to help these groups thrive in place, access their daily needs and destinations, and mitigate racial disparities and the effects of displacement guide the following program activities:

- Form and coordinate a Transportation Equity Workshop
- Provide low-income transit access
- Provide vehicle license rebate program
- Coordinate Community Conversations and an Ambassador Program

Lessons Learned

Creating a Transportation Equity Program is not enough to achieve equity, race, and social justice goals. Beyond the activities listed above, a key program objective and responsibility of the Transportation Equity Workgroup is to create an Equity Agenda: a framework for transportation goals and priorities. This agenda will be developed with community-guided suggestions and in partnership with key city agencies.

Measurable Results and Impacts

Since creating the Transportation Equity Program, SDOT has formed an Equity Workgroup of 10 community members from the communities listed above to inform recommendations for the Equity Agenda. The program has also prompted SDOT to be more intentional and explicit about community engagement goals to reach its specific focus communities and identities and evaluate impacts of plans and policies.

For example, during a bike share pilot, SDOT required operators to ensure at least 10% of all bikes were available in equity-focused neighborhoods, and dedicated 1,500 bike parking spaces to improve sidewalk access. It has slowed hasty action to allow e-scooters on city streets without fully evaluating the health, safety, equity, and financial risks. Dedicated program staff have also helped elevate equity considerations in other SDOT studies and policies, such as managing congestion.

Applicability to KCM

King County Metro could replicate the Transportation Equity Program's model of dedicated staff and compensated community members to foster more inclusive representation focused on activities to provide safe, affordable, accessible, and environmentally sustainable transportation options across King County. Several programs already exist within King County Metro to serve low-income individuals and seniors and could be included within a broader program to affect agency-wide changes and define equity goals and metrics.



The Seattle Transportation Equity Program is focused on supporting traditionally underserved communities and calls for the creation of an Equity Agenda to frame transportation goals and priorities. (Image courtesy of SDOT)



The Seattle Transportation Equity Program distributes Youth ORCA cards to high school and income-qualified middle school students enrolled in Seattle Public Schools. (Image courtesy of King County Metro)

Impact:



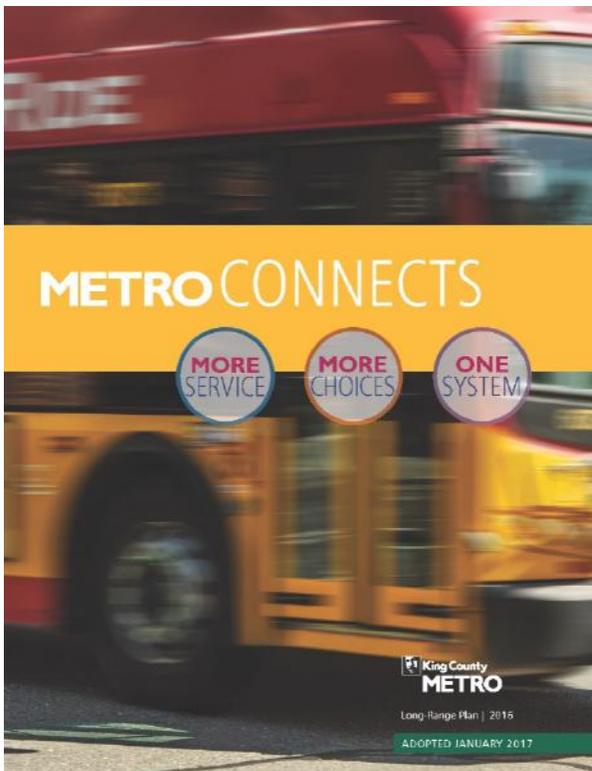
4 Metro's Current Practices

This chapter summarizes Metro's current state compared to the best practices identified through the Mobility Framework. It is organized by the themes used to develop Mobility Framework Recommendations and provides context for the Recommendations as well as the policy updates and other changes that will help to implement those Recommendations.

THEME 1 – INVESTMENTS

Services, Capital Investments, Rider Programs that Meet Broad Traveler Needs

METRO CONNECTS represents the vision for King County Metro through 2040 and calls for a 70 percent increase in service (2.5 million service hours) dedicated to



making transit trips faster, more frequent, and more reliable. The plan also prioritizes capital improvements, including enhanced amenities at passenger facilities, transit centers, and bus stops, purchasing 625 new buses, expanding layover space by 50 percent, and investing in new maintenance and operating bases to support the system's expanding fleet.

METRO CONNECTS recognizes that King County residents have a range of traveler needs and prioritizes improving accessibility to more modes of transportation. The plan encourages the development of new service options like community vans, ridesharing apps, and agency partnerships with carsharing services, as well as accessibility improvements like new and improved sidewalks and bike lanes, dedicated carpool and drop-off spaces, and context-sensitive parking for cars and bikes.

METRO CONNECTS Long-Range Plan

Source: King County Metro

Investments in Underserved/ Underrepresented Communities

A stated priority in the METRO CONNECTS plan is to create more opportunities for all residents in the County. Currently, one in four people in King County live at or near the poverty level. Metro plans to expand access to opportunities by offering frequent, all-day service to jobs, education, and services. A direct outcome of these planned service improvements would be providing frequent transit service near 77 percent of residents of color and 87 percent of low-income residents. In addition to prioritizing investments in underserved communities, Metro is continuing to explore innovations like the ORCA LIFT low-income fare program to reduce or eliminate the financial burden associated with mobility.



ORCA LIFT low-income fare program offers reduced rates for qualifying households

Source: Sound Transit

Values-Based Prioritization

Metro's Service Guidelines call for annual reviews of the transit network to evaluate, design, and modify transit services to meet changing needs and to deliver efficient, high-quality service. Metro assesses service levels for each corridor based on corridor productivity, geographic value, and social equity.

Corridor productivity is measured by accessibility to housing, employment, and education, evaluating the number of housing units, jobs, and college/university enrollment within a quarter-mile walk of each stop in the corridor. Areas with higher

housing and/or employment density within a quarter mile of bus stops receive a higher corridor productivity score.

Geographic value assesses the value of connections made between different “centers” in the transit network. Connections between Regional Growth Centers, Manufacturing/Industrial Centers, and Transit Activity Centers are evaluated based on ridership and travel times. These factors help to determine which corridor a typical rider would choose when traveling between two centers. Faster, higher-ridership corridors have a higher geographic value.

Social equity indicators show how well a corridor serves areas with concentrations of people of color and low-income populations. This is done by comparing boardings in these areas against the systemwide average of all corridor boardings within census tracts that are comprised of predominately people with lower incomes or people of color. Metro assigns the highest value to corridors with concentrations of boardings in census tracts that have a higher than average representation of low-income households or people of color.

This social equity component makes up 25 percent of the total evaluation score. Of the remaining evaluation score, 25 percent is devoted to geographic value indicators, and 50 percent is devoted to corridor productivity.

THEME 2 – SURROUNDING LAND USE

Partnerships to Support Dense, Transit-Supportive Development

King County’s Strategic Plan establishes a goal of encouraging a growing and diverse economy and vibrant, thriving, and sustainable communities, in part through transit-oriented development (TOD). King County has completed or provided input on five major TODs within the County: Thornton Place at Northgate, Metropolitan Place in Renton, the Village at Overlake Station, downtown Redmond, and Burien.

In some cases, like Northgate, King County Metro owns property near major transit centers and can work directly with the municipality and developers to encourage TOD. Where Metro does not own the property near transit, the agency must work more closely with municipalities to encourage TOD. There is currently no department-wide policy for partnering with municipalities on TOD; Metro’s approach is on a project-by-project basis.

Affordability and Displacement Prevention

Metro will continue to prioritize service in low-income communities, but the agency does not have authority over decisions to encourage dense land uses and affordability measures. Though not related to land use and housing affordability, the ORCA LIFT low-income transit pass program provides 50 percent discounts on fares for people under 200 percent of the federal poverty level. This program is intended to reduce the financial burden of transit for low-income residents who may be at risk of displacement. At the direction of the King County Council, Metro is also working

with stakeholders to develop an income-based approach for fares, focusing on providing a further discounted product to individuals for whom ORCA LIFT remains too expensive.

In 2017, the Regional Affordable Housing Task Force brought together representatives from King County, City of Seattle, and other cities to develop a regional plan to address King County's affordable housing crisis.

Regional Affordable Housing Task Force *Five Year Action Plan*

Representatives from King County, City of Seattle, and Sound Cities Association worked together over 18 months to develop the Regional Affordable Housing Five Year Action Plan. The plan includes goals, strategies, and actions to ensure adequate housing supply countywide to meet the needs of low-income individuals and families who are cost burdened. The Action Plan includes the following goals:

- Create and support an ongoing structure for regional collaboration
- Increase construction and preservation of affordable homes for households earning less than 50 percent area median income
- Prioritize affordability accessible within a half mile walkshed of existing and planned frequent transit service, with a particular priority for high-capacity transit stations
- Preserve access to affordable homes for renters by supporting tenant protections to increase housing stability and reduce risk of homelessness
- Protect existing communities of color and low-income communities from displacement in gentrifying communities
- Promote greater housing growth and diversity to achieve a variety of housing types at a range of affordability and improve jobs/housing connections throughout King County
- Better engage local communities and other partners in addressing the urgent need for and benefits of affordable housing

Access to Transit

While Metro's capital program is focused on improving shelters and investing in accessible bus stops and stations, investing in transit-supportive infrastructure is generally the responsibility of local municipalities. Well-resourced jurisdictions are typically better equipped to make these investments than smaller cities and unincorporated areas of the County. Jurisdictions with a larger tax base may be able to afford engineers and planners with the expertise required to plan, design, and implement transit-supportive investments. Metro does not currently have an agency-wide policy for engaging with local jurisdictions regularly and does so on a project-by-project basis.

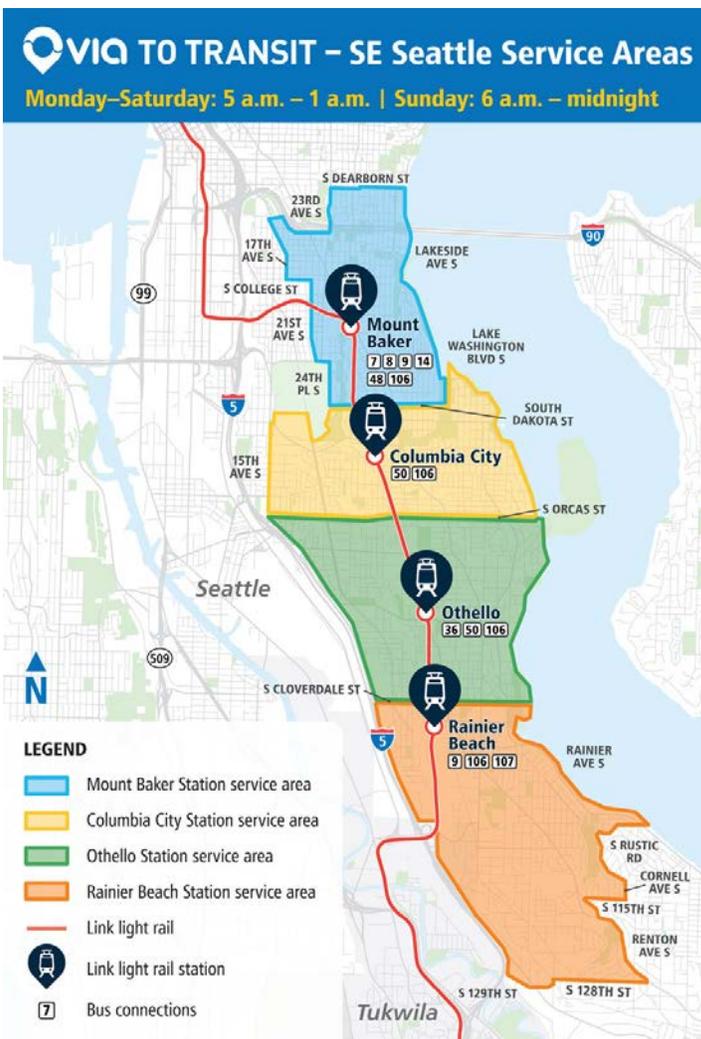
Metro's Mobility Division has an Access to Transit program that includes programs and projects to enhance access to the fixed-route transit network, including park-and-ride and parking management, mobility hubs, and innovative mobility services (covered in Theme 3 – Innovation).

Right-of-Way Management and Investment

Local municipalities manage most of the right-of-way in which King County Metro operates. There is no agency-wide policy for partnering with municipalities to incentivize transit-supportive right-of-way management and investment. Instead, right-of-way improvements are made on a project-by-project basis.

THEME 3 – INNOVATION

Transit and New Mobility Integration and Partnerships



Via to Transit Service Area Map
 Source: King County Metro

King County Metro’s Innovative Mobility Program leverages emerging mobility services and new technologies to give people more transportation options through strategic research initiatives and service pilots. Metro is exploring approaches including shared mobility, mobility as a service, autonomous vehicles, and smart cities and infrastructure. Key partnerships with new mobility providers include Via to Transit, Ride2 On-Demand Shuttle Service, and the Car Share Parking Program evaluation.

Via to Transit is a pilot on-demand service that connects riders to and from five transit hubs in southeast Seattle and Tukwila. People who live, work, or go to school within the service areas can request a ride from Via to Transit to reach the Mount Baker, Columbia City, Othello, Rainier Beach, or Tukwila International Boulevard transit hubs, where they can access Link light rail or one of 14 bus routes.

Ride2 is a similar program currently being piloted in West Seattle and Eastgate (Bellevue). Residents, employees, and visitors can use an app to request a ride on a Ride2 shuttle vehicles to travel to or from transit hubs at the Alaska Junction or Seacrest Doc in West Seattle or the Eastgate Park-and-Ride in Bellevue.

Metro is also piloting a program to reserve parking spaces for carshare vehicles such as Car2Go at the Northgate Park & Ride with the goal of increasing the ways people can get to the busy transit hub.

Additionally, King County Metro's Community Connections program is an outreach effort through which Metro works with local governments and community partners to develop innovative and cost-efficient transportation solutions in areas that lack the infrastructure, density, or land use to support fixed-route transit service. This program has resulted in the implementation of new types of services, such as Community Vans, which are Metro-owned vehicles that can be used for local group trips like shopping or attending a performance. This and other services build upon innovative ideas, unique partnerships, and emerging technology.

Proactive Management and Coordination

King County Metro has generally approached new mobility and innovation through service integration partnerships and pilot projects to test new programs and ideas. The agency has not developed specific policies for actively approaching new mobility initiatives. However, the Seattle Department of Transportation's New Mobility Playbook establishes this type of policy, with active input from King County Metro as a member of the interagency project team. The playbook sets the city's strategic direction and rules of engagement for public, private, and emerging mobility innovations. It also outlines policies and strategies to foster new mobility options while prioritizing safety, equity, affordability, and sustainability.

Preparing for the Future of Mobility

King County Metro, in partnership with the Seattle Department of Transportation, developed the Shared Mobility Technical Report, which summarizes the potential impacts of shared mobility services for the region and identifies policy considerations related to these impacts. The report defines shared mobility as any transportation mode where people pay for an individual trip or for the temporary use of a vehicle. This includes continuous use among multiple passengers (buses and trains) and shared use among individual people at distinct times (taxis, car share, and bike share).

The report assesses the potential impacts of shared mobility—including transit, vanpool, taxis, ridesharing, car sharing, bike sharing, microtransit, and private shuttles—on the transportation network and potential changes in travel behaviors in Seattle and the Puget Sound region. Impacts specifically related to transit include identifying low-ridership bus trips that may be replaced by new mobility options, determining where fixed-route transit service is the most cost effective, and identifying ways to seamlessly integrate fare payment for transit and other shared-mobility services.

THEME 4 – WORKFORCE

Recruitment, Training, Retention, and Inclusive Workplaces

King County Metro is working to become an employer of choice for all people and to hire the best qualified people, including those who have struggled with unemployment or underemployment. To do this, Metro is exploring partnerships with community colleges, secondary schools, training programs, labor unions, military bases, and jails.

King County's "Investing in YOU" initiative includes explicit goals for creating a workplace that embraces talent and passion for public service, provides competitive pay and benefits, promotes racial diversity, cares about employee health and safety (both at and outside of work), and offers equitable development and advancement opportunities. The Investing in YOU program has five priority areas:

- **Learning and Growth:** Providing training and advancement opportunities to help employees plot a career path with the support and resources necessary to get them where their talent and passion lead them.
- **Health, Safety, and Wellbeing:** Providing comprehensive medical coverage and activities and programs to support health.
- **Racially Diverse and Culturally Responsive at All Levels:** Bringing an equity and social justice lens to everything the agency does so every person in the workplace has a fair shot at success and Metro can reflect the diversity of the people they serve at all levels of the organization.
- **Total Compensation:** Recognizing the value of employees through competitive pay and a unique package of flexible employee benefits.
- **Business Systems and Operations:** Continuously improving the connectivity of business processes, data, policies, and contracts to ensure a seamless personnel management experience.



King County Metro bus operator
Source: King County Metro

Metro has recently advanced its Workforce Development efforts through leadership development programming; this includes creating an Aspiring Leaders Mentoring program and investing in apprenticeship programs.

Parameters for Treatment of Workers

King County has many workforce policies that ensure employees are treated fairly. For example, the Fair and Just Principle of the Equity and Social Justice Plan includes focus areas and support for the development of policies and actions that improve fairness and opportunity in County government organizational practices, including all employment practices such as hiring, training, retention, and promotion. The Equity and Social Justice Toolkit also recommends actions and practices that can be used to ensure that hiring processes are as fair, open, and inclusive as possible.

King County Metro employees are covered by the City of Seattle's minimum wage ordinance, which is aimed at providing a living wage for all workers in Seattle. King County also requires contractors (and their subcontractors) awarded a contract valued \$100,000 or more to comply with Seattle's minimum wage standards.

THEME 5 – ENGAGEMENT

Shared Decision Making and Co-Creation

King County Metro has engaged in shared decision making with community and stakeholder-based working groups, such as Sounding Boards and Mobility Boards (e.g., the North Link Mobility Board), and through appointed groups of King County residents, such as the Transit Advisory Commission.

The Transit Advisory Commission works to improve transit services, planning, and programs by advising Metro's staff members, general manager, the King County Executive, the King County Council, local jurisdictions, and subarea transportation boards about transit policy issues. Commission members include residents, business representatives, and other stakeholders concerned with transit service in the County. Most are bus riders and all live in King County and collectively reflect the County's diversity. At least half of the commission members are people who have disabilities, older adults, or people who work with priority populations.

King County has also used an equity cabinet model, including the Open Space Equity Cabinet and the Metro Mobility Framework Equity Cabinet, composed of community leaders and community-based organization staff representing communities and riders countywide, including low- and no-income communities, black, indigenous, and people of color, immigrants and refugees, limited-English speaking people, and people with disabilities. These cabinets provide direction to King County and policy makers on embedding an equity-based approach into the County's processes.

Tools and Techniques

Metro's current approach to public engagement is a continuum that reflects the level of engagement required for the decision, whether it is regarding services, programs, or policies. This continuum includes:

- **Inform** — Metro initiates an effort and coordinates internally and externally, using a variety of channels, to inform the community about its actions. This type of outreach is typically used for service changes, short-term service impacts, service alerts, and cancellations after or as decisions are made.
- **Consult** — Metro gathers information from the community to inform Metro-led interventions. This type of outreach is typically used for capital projects or instances where Metro must change its service because of another jurisdiction's road construction. These projects are characterized by a small set of choices that might mitigate adverse impacts to riders or the community where most of the decisions have already been made.
- **Engage in Dialogue** — Metro engages community members to shape priorities and plans. This level of engagement is typically used for bus service restructures or realignments. Often these changes are initiated by a big investment in the community, such as Light Rail, where Metro is directed by policy to consider how it change its service to complement that investment.
- **Work Together** — Metro and the community share in decision-making to co-create solutions together. This level of engagement is typically used for larger development programs like long-range plans, Community Connections (in which Metro is often designing completely new services), and METRO CONNECTS.
- **Community Directs Action** — Community initiates and directs strategy and action with participation and technical assistance from Metro. This level of engagement is typically used for working groups or task forces, like Sounding Boards or the King County Transit Advisory Commission.

Additional information about Metro's community engagement practices can be found in **Appendix D: Community Engagement**.



Metro staff engaging with a community member
Source: King County Metro

5 Next Steps

POLICY UPDATES

The Mobility Framework includes detailed Recommendations from the Equity Cabinet that will inform policy updates to further advance equity and sustainability and help Metro achieve an innovative, integrated, equitable, and sustainable mobility future. These updates will take place over the coming year and will be informed by additional best practices research and further analysis of Metro's existing practices. Examples of potential policy updates include changes to Metro's Service Guidelines to more clearly define "need" and prioritize equity; updates to the Strategic Plan to reflect the Mobility Framework's Guiding Principles; and the identification of new strategies, such as new land use or pricing tools, to support reaching King County's greenhouse gas (GHG) reduction targets.

The specific elements of the policy updates will be directed by the Regional Transit Committee and King County Council and shaped through ongoing engagement with the Equity Cabinet. Examples of research that may be needed to support this work are provided in the following section.

ADDITIONAL RESEARCH

As discussed above, the Metro staff topic area assessments included key questions to help center Metro's practices, policies, and investments in equity and sustainability. The best practices research described in Chapter 3 of this appendix addressed some of the topic area key questions, but left others unanswered.

Moving forward, Metro will continue to work with the Equity Cabinet, stakeholders, and staff to address topic area key questions through updates to policies, partnership programs, and internal practices. Examples of these questions include the following:

- **Capital Program:** What are appropriate metrics to measure equity of Metro's existing capital assets?
- **Services:** There is a point at which bus service can be negative for greenhouse gas emissions reductions. What is the breakpoint of ridership on fixed-route service that results in greenhouse gas emissions reduction (e.g., how many riders)?
- **Access to Transit:** What are the GHG trade-offs of concentrating transit access in low-density environments with a park-and-ride versus using the land for other purposes?

6 Resources and References

This chapter details resources and references where more information can be found on the best practice examples and case studies included in this appendix.

THEME 1 – INVESTMENTS

Measure M Transportation Funding Ordinance (Los Angeles, CA)

- <http://theplan.metro.net/>

Massachusetts Bay Transportation Authority (MBTA) Late Night Bus Service (Boston, MA)

- <https://www.mbta.com/projects/early-morning-and-late-night-bus-service-pilots>

TriMet Service Guidelines (Portland, OR)

- <https://trimet.org/pdfs/tip/serviceguidelines.pdf>

Los Angeles Department of Transportation DASH Free Student Fares Pilot (Los Angeles, CA)

- <https://www.lamayor.org/mayor-garcetti-announces-program-provide-free-dash-bus-passes-students>

San Francisco Late Night Transportation Working Group (San Francisco, CA)

- <http://nightlifesf.org/getting-around-at-night/san-francisco-late-night-transportation-working-group/>
- <http://nightlifesf.org/wp-content/uploads/2018/04/AllNighter-2018-Report-Final.pdf>

Utah Transit Authority Fare Policy (Salt Lake City, UT)

- https://nacto.org/wp-content/uploads/2016/05/2-9_Thatcher-et-al-Strategy-Guide-to-Enable-and-Promote-the-Use-of-Fixed-Route-Transit-by-People-with-Disabilities-TCRP-Report-163_2013.pdf

Orange County Transportation Authority Safe Transit Stops (Orange County, CA)

- <https://www.octa.net/Projects-and-Programs/Plans-and-Studies/Funding-Programs/Call-for-Projects/CTFP-Calls-for-Projects/Safe-Transit-Stops/>

Metro Transit Equity Approach for Transit Shelters (Minneapolis-St. Paul, MN)

- <https://metro council.org/About-Us/Publications-And-Resources/DIVERSITY-EQUITY/Equity-Approach-Met-Council-and-Metro-Transit.aspx>

VIA Metropolitan Transit Next-Gen Bus Stop Improvement Program (San Antonio, TX)

- <https://www.viainfo.net/nextgen-shelters/>

Oakland Department of Transportation Goal-Aligned Budgeting Process (Oakland, CA)

- <https://www.oaklandca.gov/resources/department-of-transportation-a-strategic-plan>

Portland Bureau of Transportation - 2035 Transportation System Plan Evaluation Criteria (Portland, OR)

- <https://www.portlandoregon.gov/transportation/article/658506>

THEME 2 – SURROUNDING LAND USE

California Senate Bill 375 Sustainable Communities Strategy and Greenhouse Gas Reduction Targets (California)

- <http://www.ca-ilg.org/post/basics-sb-375>

City and County of Honolulu Transit Oriented Development Special District Guidelines (Honolulu, HI)

- <http://www.honoluludpp.org/Portals/0/pdfs/zoning/TOD%20Guidelines%202-5-19.pdf>

New Orleans Regional Transportation Authority Strategic Mobility Plan (New Orleans, LA)

- http://www.norta.com/getattachment/About/StrategicPlan/NORTA-Final-Report_v10-print.pdf.aspx?lang=en-US

Transit Oriented Denver (Denver, CO)

- <https://www.denvergov.org/content/denvergov/en/transit-oriented-development.html>

Portland Metro Transit Oriented Development Program and Strategic Plan (Portland, OR)

- <http://ctod.org/portal/Portland-Metros-TOD-Strategic-Plan>

San Diego Association of Governments Regional Transit Oriented Development Strategy (San Diego, CA)

- <https://www.sandag.org/index.asp?classid=12&projectid=500&fuseaction=projects.detail>

LA Metro Transit-Oriented Communities (Los Angeles, CA)

- <https://www.metro.net/projects/station-design-projects/>

Bay Area Rapid Transit (BART) Station Access Guidelines (San Francisco Bay Area, CA)

- <https://www.bart.gov/about/planning/access>

San Francisco's Transit-First Policy (San Francisco, CA)

- <https://www.sfmta.com/transit-first-policy>

Sound Transit System Access Fund (Seattle, WA)

- <https://www.soundtransit.org/system-expansion/creating-vibrant-stations/connecting-to-stations/system-access-fund>

THEME 3 – INNOVATION

Pinellas Suncoast Transit Authority - Transit Dependent Late Shift (Pinellas County, FL)

- <https://www.psta.net/programs/td-transportation-disadvantaged/>

Massachusetts Bay Transportation Authority On-Demand Paratransit Pilot Project (Boston, MA)

- <https://www.mbta.com/accessibility/the-ride/on-demand-pilot>

Capital Metro's Pickup Service (Austin, TX)

- <https://capmetro.org/metrolink/>

Go Lorain Bike Share Library Parks Partnership (Lorain, OH)

- <https://www.bicycling.com/news/a28102252/free-bike-share-at-library/>

LA Metro Office of Extraordinary Innovation (Los Angeles, CA)

- <https://www.metro.net/projects/oei/>

TriMet New Mobility Strategy Assessment (Portland, OR)

- <https://www.bendoregon.gov/home/showdocument?id=40579>
- <https://trimet.org/mod/>

Transit and Bike Share Integration Pilot (Pittsburgh, PA)

- <https://healthyridepgh.com/connectcard/>

Mobility as a Service: Whim Mobile Application (Helsinki, Finland)

- <https://www.citylab.com/perspective/2018/10/helsinkis-maas-app-whim-is-it-really-mobilitys-great-hope/573841/>
- <https://techcrunch.com/2019/01/24/whim-the-all-in-one-mobility-app-for-ride-sharing-public-transit-and-rentals-is-coming-to-the-us/>
- https://ramboll.com/-/media/files/rfi/publications/Ramboll_whimimpact-2019.pdf

Urban Mobility Collider (Miami-Dade County, FL)

- <https://drive.google.com/file/d/0B-u0ZNzhdVjudGZOb09uTDhYdVk/view>
- <https://cloudblogs.microsoft.com/industry-blog/government/2016/12/13/microsoft-helping-miami-dade-county-achieve-mobility/>

Emerging Mobility Evaluation (San Francisco, CA)

- https://www.sfmta.com/sites/default/files/reports-and-documents/2017/11/final_guiding_principles_emst_factsheet.pdf

Seattle Department of Transportation New Mobility Playbook (Seattle, WA)

- https://www.seattle.gov/Documents/Departments/SDOT/NewMobilityProgram/NewMobility_Playbook_9.2017.pdf
- <http://www.seattle.gov/transportation/projects-and-programs/programs/new-mobility-program>

TriMet Mobility Hub Geofencing (Portland, OR)

- <https://www.bendoregon.gov/home/showdocument?id=40579>

Los Angeles Department of Transportation Technology Action Plan (Los Angeles, CA)

- <https://ladot.io/wp-content/uploads/2019/03/LADOT-TAP-v7-1.pdf>

Austin Smart Mobility Roadmap (Austin, TX)

- http://austintexas.gov/sites/default/files/files/Smart_Mobility_Roadmap_-_Final.pdf

Autonomous Vehicles and the Future of Transit (Nelson\Nygaard and Perkins&Will)

- https://umjp9n8g2j2ft5j5637up17u-wpengine.netdna-ssl.com/wp-content/uploads/2018/10/Our_Views_on_Autonomous_Vehicles_and_The_Future_of_Transit_COMP-1.pdf

THEME 4 – WORKFORCE

Denver Regional Transportation District Workforce Investment Now Program (Denver, CO)

- http://www.norta.com/getattachment/About/StrategicPlan/NORTA-Final-Report_v10-print.pdf.aspx?lang=en-US
- <http://icic.org/transportation/works-workforce-development-model-benefits-impacted-denvers-transit-expansion/>
- https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/FTA_Report_No._009_4.pdf
- <http://rtd.igm2.com/citizens/FileOpen.aspx?Type=1&ID=2143&Inline=True>
- <https://work-now.org/>

Los Angeles Vision Zero: Dignity-Infused Community Engagement Strategy (Los Angeles, CA)

- <http://visionzero.lacity.org/tag/dr-destiny-thomas/>
- <https://vimeo.com/338889154>
- <https://visionzeronetwork.org/centering-community-in-the-public-engagement-process/>

State of Vermont Agency of Transportation Youth Programs (Vermont)

- <https://vtrans.vermont.gov/civil-rights/education/youth-programs>

LA Metro Transportation School (Los Angeles, CA)

- <https://thesource.metro.net/2018/06/18/metro-and-l-a-county-partner-on-transportation-school-to-create-the-next-generation-of-workers/>

Toronto Regional Immigrant Employment Council Mentorship Program (Toronto, Canada)

- <http://www.mentoringpartnership.ca/about-us/>
- <http://www.mentoringpartnership.ca/2019/02/25/our-mentors-gain-personal-growth-and-satisfaction-the-feeling-that-they-are-giving-back-city-of-toronto-on-reaching-1500-matches/>

Generation USA - Retail Career Advancement Program

- <https://www.generation.org/usa-retail-career/>

Duwamish Valley Youth Corps (Seattle, WA)

- <http://duwamishcleanup.org/programs/duwamish-valley-youth-corps/>

Washington Hospitality Association Education Foundation's Incumbent Worker Training Program (Washington)

- https://www.urban.org/sites/default/files/washington_hospitality_association_education_foundations_incumbent_worker_training.pdf

WTS (Advancing Women in Transportation) Transportation YOU

- <https://www.wtsinternational.org/wts-foundation/transportation-you/>

LinkedIn Diversity & Inclusion Strategy (Sunnyvale, CA)

- <https://careers.linkedin.com/diversity-and-inclusion/workforce-diversity-report>
- <https://blog.linkedin.com/2016/10/10/creating-a-culture-where-everyone-feels-they-belong-linkedin-diversity>
- <https://blog.linkedin.com/2016/10/10/creating-a-culture-where-everyone-feels-they-belong-linkedin-diversity>

New Orleans Regional Transportation Authority Strategic Mobility Plan (New Orleans, LA)

- http://www.norta.com/getattachment/About/StrategicPlan/NORTA-Final-Report_v10-print.pdf.aspx?lang=en-US

City of Seattle \$15 Minimum Wage (Seattle, WA)

- *Seattle's Minimum Wage Experience 2015-16*. Center on Wage and Employment Dynamics, UC Berkeley. 2017.
- *The Impact of a City-Level Minimum Wage Policy on Supermarket Food Prices by Food Quality Metrics: A Two-Year Follow Up Study*. International journal of environmental research and public health. 2019.
- *Minimum wage increases, wages, and low-wage employment: Evidence from Seattle*. No. w23532. National Bureau of Economic Research. 2017.

THEME 5 – ENGAGEMENT

LA Metro Equity Platform (Los Angeles, CA)

- <https://boardagendas.metro.net/board-report/2017-0912/>
- <http://metro.legistar1.com/metro/attachments/dabba808-fdf7-4f71-8869-66f2f60d40c7.pdf>
- <https://investinginplace.org/2019/03/13/how-we-rise/>
- <https://boardagendas.metro.net/board-report/2019-0105/>

Mobility Equity Framework (Greenlining Institute)

- <http://greenlining.org/publications/2018/mobility-equity-framework/>
- http://greenlining.org/wp-content/uploads/2019/01/MobilityEquityFramework_8.5x11_v_GLI_Print_End_notes-march-2018.pdf
- <https://www.wri.org/blog/2018/06/what-if-citizens-set-city-budgets-experiment-captivated-world-participatory-budgeting>
- <https://medium.com/reflex-design-collective/co-designing-equitable-transportation-in-southeast-san-francisco-43ac70b4ae55>
- http://greenlining.org/wp-content/uploads/2019/01/R4_AutonomousVehiclesReportSingle_2019_2.pdf

Metro Transit Transit Assistance Program (Minneapolis-St. Paul, MN)

- <https://www.metrotransit.org/tap-riders>

Community Engagement Toolkit (Public Health Seattle-King County, Futurewise, OneAmerica, El Centro De La Raza)

- <http://www.futurewise.org/assets/reports/CET.pdf>

Equity-Centered Community Design Field Guide (Creative Reaction Lab)

- <http://www.creativereactionlab.com/eccd-field-guide>
- <https://static1.squarespace.com/static/55737465e4b048703924b9b5/t/5a9eae053450a4352677984/1520348865673/ECCD+FIELD+GUIDE+FINAL+-+2018+DOWNLOAD.pdf>
- <https://www.npr.org/sections/codeswitch/2018/04/14/602246140/two-takes-on-fighting-racial-discrimination-from-ted-fellows>
- <https://indd.adobe.com/view/b1351bd8-5d75-4dfa-8f7c-cbff9a4c1eae>
- <https://www.mobilityforallbyall.com/team>

Seattle Transportation Equity Program (Seattle, WA)

- <https://www.seattle.gov/transportation/projects-and-programs/programs/transportation-equity-program>
- <https://www.seattle.gov/neighborhoods/community-liaisons>
- <https://www.geekwire.com/2019/seattle-mayor-jenny-durkan-lets-try-scooters-lets-right/>

San Francisco Public Utilities Commission Social Impacts Partnerships (San Francisco, CA)

- <https://sfwater.org/index.aspx?page=643>

Metro Transit/Porchlight (Community Based Organization) Partnership (Madison, WI)

- <http://legistar.cityofmadison.com/attachments/5749.doc>

Southeast Pennsylvania Public Transportation Authority/Project HOME (Community Based Organization) Partnership (Philadelphia, PA)

- <https://projecthome.org/posts/2018/01/release-%E2%80%98hub-hope%E2%80%99-those-need>

Mobility ATX Online Voting Tool (Austin, TX)

- <https://mobilityatx.com/>

King County Metro Mobility Framework

Appendix C: Analysis of Recommendations

October 2019



Table of Contents

	Page
1 Introduction	C-1-1
2 Methodology and Assumptions	C-2-1
Frequency Investments	C-2-3
Speed and Reliability Investments.....	C-2-3
First-Last Mile Investments	C-2-3
Facility Investments	C-2-4
3 Quantitative Results	C-3-1
4 Qualitative Assessment	C-4-1
Investments	C-4-1
Surrounding Land Use	C-4-2
Innovations	C-4-3
Workforce	C-4-4
Engagement.....	C-4-5
5 Conclusion and Next Steps	C-5-1

Table of Figures

	Page
Figure 1 Locations of Priority Population Routes Used for Recommendations Analysis.....	C-2-2
Figure 2 List of Priority Routes Used for Recommendations Analysis	C-2-2
Figure 3 Recommendations Analysis Results	C-3-3
Figure 4 Change in AM (6 AM-9 AM) Job Accessibility with Doubled Morning Frequencies on Priority Routes	C-3-4
Figure 5 Change in Midday (11 AM-1 PM) Job Accessibility with Doubled Midday Frequencies on Priority Routes	C-3-5
Figure 6 Change in Evening (7-9 PM) Job Accessibility with Doubled Evening Frequencies on Priority Routes	C-3-6
Figure 7 Change in AM (6-9 AM) Job Accessibility with Speed and Reliability Improvements on Priority Routes.....	C-3-7
Figure 8 Change in AM (6-9 AM) Job Accessibility with First-Last Mile Investments at Priority Transit Hubs	C-3-8
Figure 9 Qualitative Assessment Approach	C-4-1
Figure 10 Qualitative Assessment of Investment Recommendations	C-4-2
Figure 11 Qualitative Assessment of Surrounding Land Use Recommendations	C-4-3
Figure 12 Qualitative Assessment of Innovations Recommendations.....	C-4-4
Figure 13 Qualitative Assessment of Workforce Recommendations.....	C-4-5
Figure 14 Qualitative Assessment of Engagement Recommendations.....	C-4-6

1 Introduction

The information presented in this appendix was developed to support the Equity Cabinet’s review and confirmation of the Mobility Framework Recommendations. It is a high-level analysis that focuses on the equity and sustainability benefits of select Recommendations. The analysis helps to identify areas where the Recommendations—and subsequent policy updates—have the potential to improve mobility for all King County residents, with a focus on priority populations:

- Limited-English speakers
- Immigrants and refugees
- People with disabilities
- Low- and no-income households
- Black, indigenous, and people of color

The analysis also points to areas where Recommendations could be further strengthened or implemented to have a greater benefit.

The consultant team developed a quantitative approach to evaluating select Recommendations, with a goal of understanding the relative benefit to job accessibility for priority populations and overall transit ridership provided by each recommendation. The quantitative analysis focuses on Recommendations within the investment, land use, and innovation themes.

To support the quantitative analysis, the team used a qualitative analysis based on the best practices framework presented in Appendix B to consider the potential impact of Recommendations that are not yet specific enough for quantitative analysis. The qualitative analysis is used across all five themes and indicates the potential benefits of Recommendations that incorporate national and international best practices.

This analysis is necessarily conceptual and limited in scope based on available data and the level of specificity included in the Recommendations. More detailed modeling and scenario analysis of the final Mobility Framework Recommendations will be conducted in late 2019 and early 2020 as part of updates to Metro’s policy documents described in the Mobility Framework.

2 Methodology and Assumptions

This chapter describes the methodology and assumptions used in the quantitative analysis of the proposed Recommendations for the Mobility Framework.

The consultant team reviewed the proposed Recommendations and determined which could be tested through quantitative analysis. Chapter 3 details the quantitative analysis of the subset of Recommendations while Chapter 4 details the qualitative analysis of all categories of Recommendations.

Two key metrics were used to compare Recommendations: impacts to job accessibility for priority populations and increases in overall ridership (to represent a decrease in greenhouse gas emissions). Job accessibility measures the number of jobs reachable from any given point on transit within 60 minutes, including average wait times, walk times, in-vehicle travel times, and transfer times. Priority populations include the following five population groups:

- Limited-English speakers
- Immigrants and refugees
- People with disabilities
- Low- and no-income households
- Black, indigenous, and people of color

Recommendations that could be tested through quantitative analysis were those focused on changes to the route characteristics or service within priority population areas. For purposes of this analysis alone, “priority routes” were identified by selecting those routes that had the highest proportion of priority populations within their service areas. Routes that ranked in the top 40th percentile of all routes (approximately 60 routes) were deemed “priority routes” to support the analysis of Mobility Framework Recommendations. The priority routes are shown in Figure 1 and are listed in Figure 2.

The project team used a relatively similar investment level (in annual operating or annualized capital expense) across Recommendations to ensure a consistent comparison of each Recommendation’s benefits. Aligned with the Recommendation themes, the team tested four types of investments: frequency increases, speed and reliability improvements, first-last mile services, and facility improvements (both non-motorized¹ and station areas).

¹ The term non-motorized is traditionally meant to represent all non-vehicle access modes, including walk, bike, e-bike, scooters, wheelchairs, motorized assistive devices, and other forms of transportation that are not a personal vehicle.

FREQUENCY INVESTMENTS

Frequency investments are Recommendations to direct funding toward additional transit service on priority routes to address unmet needs. For the purpose of this analysis, the investment level was determined by estimating the service hours needed to double the midday² frequency for all priority routes. This investment level is roughly equivalent to 200,000 annual service hours, which would cost approximately \$30 million per year based on the average operating cost of \$161 per hour used in METRO CONNECTS.

The change in job accessibility was calculated by conducting the job accessibility analysis with the headways of the priority routes reduced in half—equivalent to doubling the frequency—to determine the relative change in midday and evening job accessibility for priority populations compared to current service. The change in daily ridership was calculated by applying the existing off-peak period riders per hour³ for each priority route and estimating the additional riders based on the per-route service hour investment.

SPEED AND RELIABILITY INVESTMENTS

Investments to speed and reliability help riders arrive at their destination in less time and on schedule. Using cost estimates from METRO CONNECTS for speed and reliability investments,⁴ the project team determined that an annual investment of \$30 million⁵ over 15 years would equate to speed improvements of roughly 5 percent to 10 percent if the investments were applied to all priority routes.

The change in accessibility was calculated by running the job accessibility analysis with the speed and reliability improvements applied to the priority routes. And the change in ridership was calculated by applying an elasticity⁶ of 3.5 percent additional riders for every 10 percent increase in speed for the priority routes.

FIRST-LAST MILE INVESTMENTS

Investments in services to provide better first-last mile connections can help improve access to high frequency transit. These investments are typically not fixed-route transit services and can provide an innovative way to improve coverage of the transit system. For the purposes of the Recommendations analysis, implementation of first-last mile services was assumed at 10 transit hubs.⁷ The transit hubs selected for

² The accessibility analysis model measures average job accessibility using transit frequencies during the 11AM-1PM period. However, for purposes of cost estimation, midday frequencies were assumed to be improved throughout the midday time period (10AM-3PM).

³ Factored down by 20 percent to account for the fact that the additional hours likely are not as productive as current hours.

⁴ The average cost per mile was approximately \$800,000 per mile for a 5 percent to 10 percent speed increase based on the investments described (e.g., queue jumps, transit signal priority).

⁵ The \$30 million annual investment is a comparable amount used for the midday frequency improvement Recommendation.

⁶ TCRP 118: Bus Rapid Transit Practitioner's Guide, Transportation Research Board, 2007.

⁷ Ten hubs were determined based on an assumed cost of \$15 per rider and the relative service available using an equivalent investment to match other Recommendations' investment levels.

analysis are those with the highest relative proportion of priority populations within a one-mile radius. These include:

- Angle Lake Light Rail Station
- Renton Transit Center
- Auburn Station
- Federal Way Transit Center
- Starlake Park & Ride
- Tukwila International Boulevard Station
- Kent Transit Center
- Highline Community Center
- Green River College
- State Route 515 and Carr Road

The change in accessibility was calculated by updating the transportation network within the accessibility model to include drive-access links to the transit hubs. An assumed average 7.5-minute wait time was included in drive-access network links. The change in ridership was calculated by determining the ridership potential with an annual investment of \$30 million⁸ and a cost of \$15 per rider using cost estimates from current Metro pilot projects.⁹

FACILITY INVESTMENTS

Investments to facilities, such as non-motorized access to transit and station-area amenities like improved shelters and real-time signage, can both improve the customer experience and increase ridership. Using cost estimates from Metro's 2013 Non-Motorized Connectivity Study, the project team determined an average cost of \$35 per new rider based on a sample of non-motorized investments from the study. A change in accessibility could not be quantitatively established; however, the relative change in ridership was calculated by applying the average cost per rider to an assumed annual investment of \$30 million.⁸

Research on the ridership impact of station-area amenities is less robust than research on non-motorized investments. However, the Transportation Research Board provides relative elasticities for certain station-area investments typically found in Bus Rapid Transit projects.¹⁰

⁸ The \$30 million investment is a comparable amount used for the midday frequency improvement Recommendation.

⁹ VIA and Ride2 costs have ranged from \$10 to more than \$50 per rider. This analysis assumes a slightly conservative amount.

¹⁰ TCRP 118: Bus Rapid Transit Practitioner's Guide, Transportation Research Board, 2007.

3 Quantitative Results

This section details the results of the quantitative analysis described in Chapter 2. A summary of the Recommendations analysis results is provided in the table below (Figure 3) and in the figures referenced in the table.

Recommendations that provide additional transit service through doubling transit frequency have the highest relative benefit to job accessibility for priority populations, with an increase of 20 percent to 30 percent in the number of jobs accessible during the respective time periods. Figure 4 shows the change in AM (6-9 AM) peak period job accessibility with frequency doubled on priority routes, while Figure 5 and Figure 6 display the change in midday (11 AM-1 PM) and evening (7-9 PM) accessibility, respectively. Accessibility generally improves the most in South King County and portions of East King County, with higher percent improvements in areas outside of the regional transit lines (Sounder, Link), such as Southeast King County.

Increasing density, zoning for mixed uses, and constructing affordable housing in urban areas near transit have the strongest sustainability outcomes, generating a 7 percent increase in daily ridership.

While speed and reliability investments for this conceptual analysis show a relatively lower benefit to equity and sustainability outcomes based on an assumed improvement in average speeds, this does not mean that these investments have little effect. The Recommendations were tested by distributing speed and reliability investments across all the priority routes. Many of these routes travel along roadways that do not have substantial congestion; therefore, the investment of funds across many routes decreases the impact of that investment.

Additionally, speed and reliability investments impact not just average travel times, but the reliability of those travel times. Reliability can have a substantial effect on customer experience and the ability for travelers to use transit for trips that are time-sensitive, such as work schedules, childcare, and other appointments. A subsequent and more detailed analysis could target speed and reliability investments on a smaller subset of routes to more accurately measure the true ridership and accessibility impacts. Figure 7 shows the AM peak period job accessibility with transit speed and reliability investments, with overall lower relative change compared to the frequency improvements. However, areas within South King County see a more concentrated benefit.

First-last mile solutions, while not as impactful as frequency improvements, can increase access and coverage of the system where traditional fixed-route service may not be practical. Figure 8 shows the AM peak period job accessibility with the evaluated first-last mile investments at the 10 transit hubs listed in Chapter 2. As expected, the largest benefit is focused around those areas, with benefits less pronounced countywide compared to benefits associated with frequency improvements.

Similarly, there are additional benefits beyond job accessibility and ridership that other investments, such as non-motorized access and passenger amenities, can provide, including improved safety, customer experience, and reliability. For example, providing a safe street to walk to the bus stop and a safe, well-lit shelter to wait for the bus may not have a direct impact on ridership but does improve overall perception of safety and how riders experience the transit system.

This high-level, conceptual analysis provides an initial perspective on the relative benefits to job accessibility for priority populations and overall system ridership and mobility to support the review of Recommendations. A more detailed analysis would highlight additional benefits and more accurately depict the relative change in the outcomes.

Figure 3 Recommendations Analysis Results

Recommendation	Recommendation Tested	Description of Recommendation Tested	Equity Outcomes	Sustainability Outcomes	Figure #
Provide Additional Transit Service in Areas with Unmet Needs	Double Midday and/or Evening Transit Frequency	Increase the frequency for all priority routes* during the midday and evening periods to improve connections during off-peak hours. This would decrease the average time a rider needs to wait for the bus.	20 to 25% increase in job accessibility	2 to 3% increase in daily ridership	5, 6
Support Improvements to Increase Speed and Reliability	Transit Speed and Reliability Investments	Increase the average speed for all priority routes* by a rate of 5-10 percent. This speed increase is based on an estimate of what improvements could be constructed using an investment similar to other Recommendations.	Up to 5% increase in job accessibility	<1% increase in daily ridership	7
Change Metro's Adopted Policies to Assert the Role of Innovation, Address New Mobility Services, and Support Innovative, Integrated, Equitable, Sustainable Mobility	First-Last Mile On-Demand Connections Throughout the Day	Implement a first-last mile pilot, expanding on the current Via pilot by providing on-demand connections to ten priority transit centers that are located within areas with high priority populations and relatively poor bus access to the transit center.	3-5% increase in job accessibility	1 to 2% increase in daily ridership	8
Meet King County's Climate Goals by Reducing Car Use	Double Peak Period Transit Frequency	Increase the frequency for all priority routes during the AM and PM peak periods to improve connections during peak hours. This would decrease the average time a rider needs to wait for the bus.	30% increase in job accessibility	3 to 5% increase in daily ridership	4
Increase Dense, Mixed Use Zoning and Affordable Housing in Urban Areas Near Transit	Transit-Focused Land Use Scenario	Analysis is based on draft results from the PSRC 2050 Vision DEIS. Assumes an increase in density and land use growth particularly in areas well-served by high frequency transit	Up to 10% increase in job accessibility	7% increase in daily ridership	n/a
Develop People-Friendly Street Design near Transit	Increased Non-Motorized Access to Transit Investments within Priority Population Areas	Construct non-motorized access to transit projects using an investment amount similar to other recommendations	Not analyzed	< 1% increase in daily ridership	n/a
Support Investments to Increase Safety	Increased Investments in Stop-based Amenities within Priority Population Areas	Increase the amount of real-time signage and shelters available at stops. Assumes an investment in amenities at a cost similar to other recommendations.	Not analyzed	< 1% increase in daily ridership	n/a

Figure 4 Change in AM (6 AM-9 AM) Job Accessibility with Doubled Morning Frequencies on Priority Routes

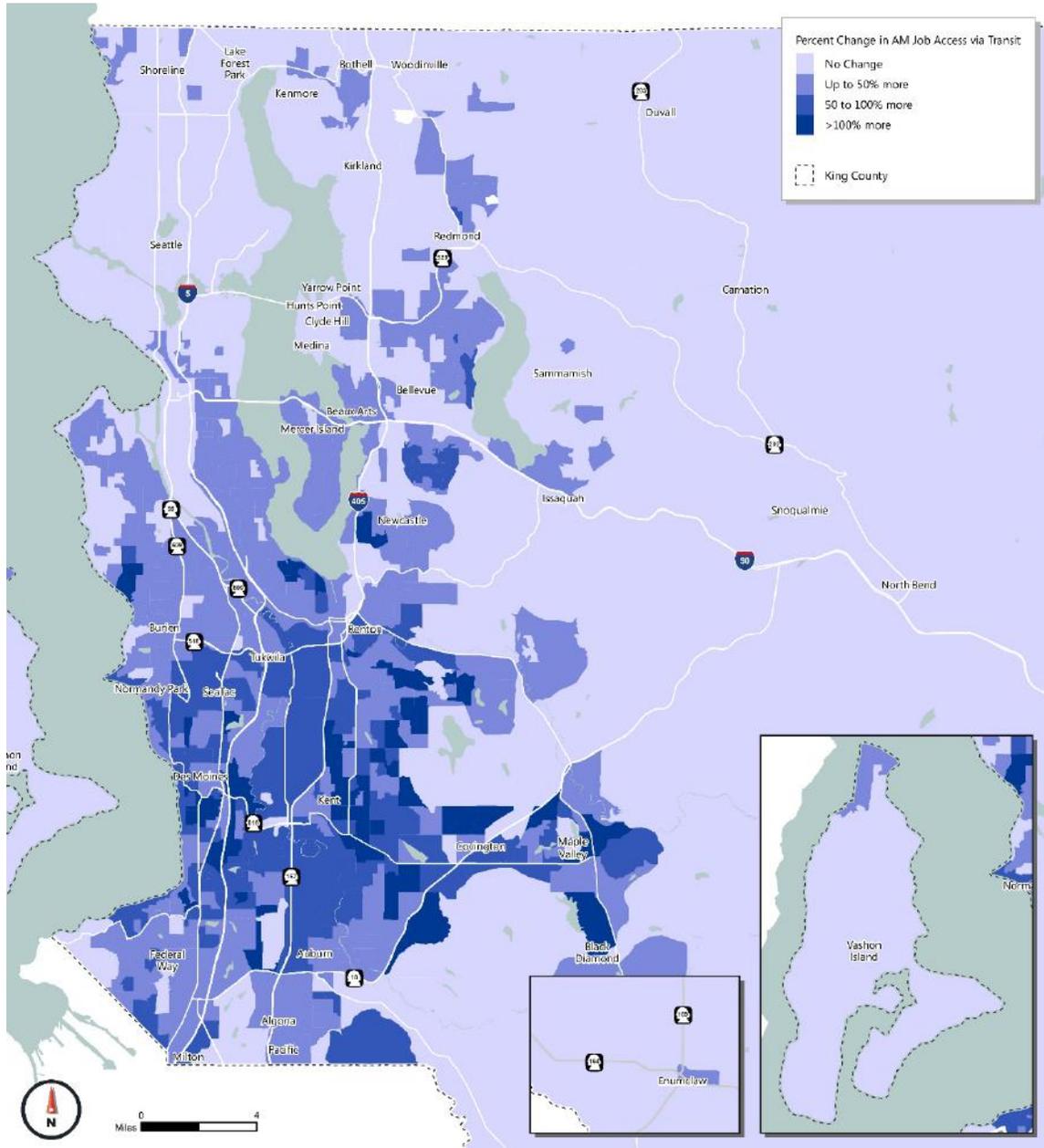


Figure 5 Change in Midday (11 AM-1 PM) Job Accessibility with Doubled Midday Frequencies on Priority Routes

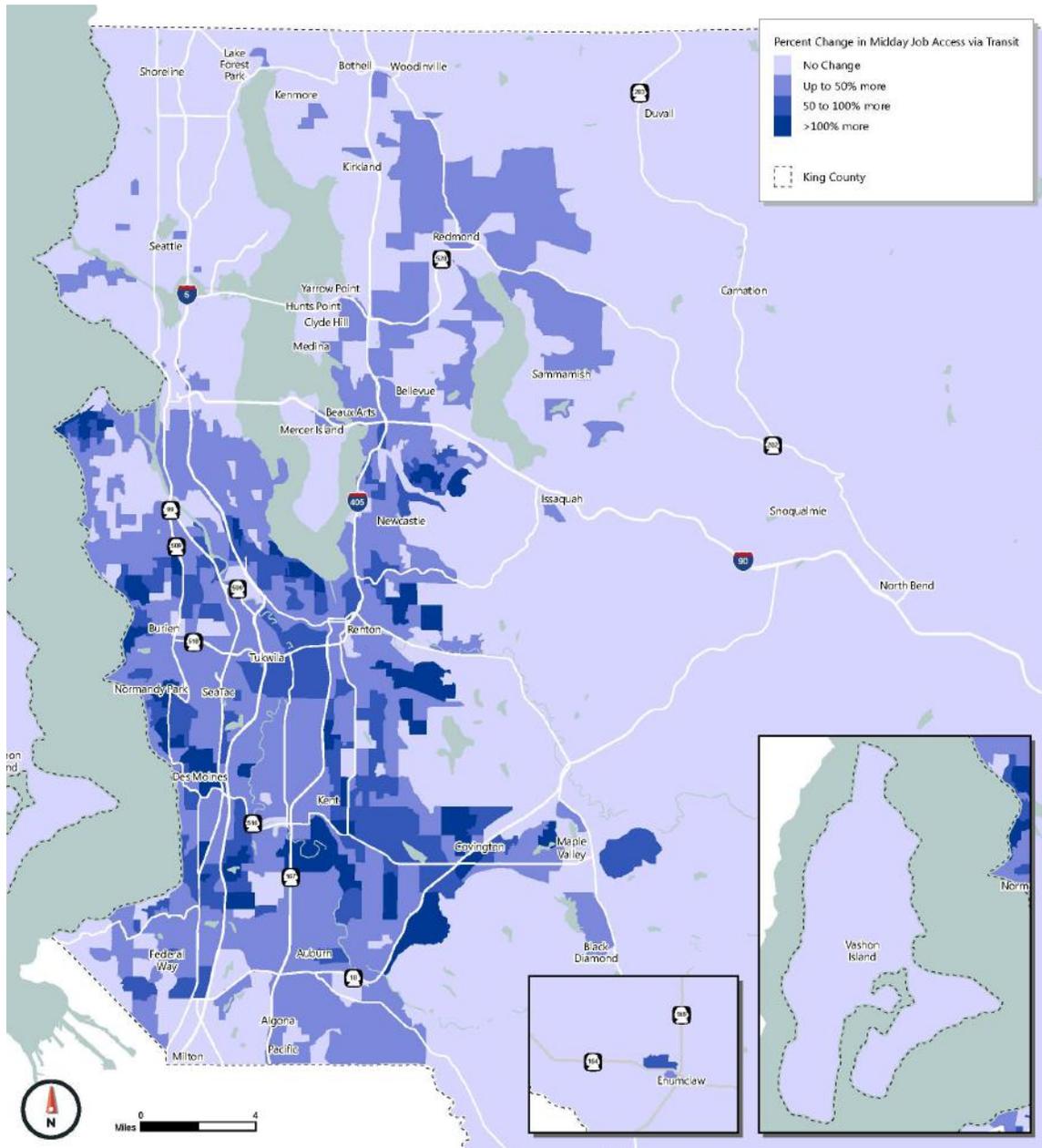


Figure 6 Change in Evening (7-9 PM) Job Accessibility with Doubled Evening Frequencies on Priority Routes

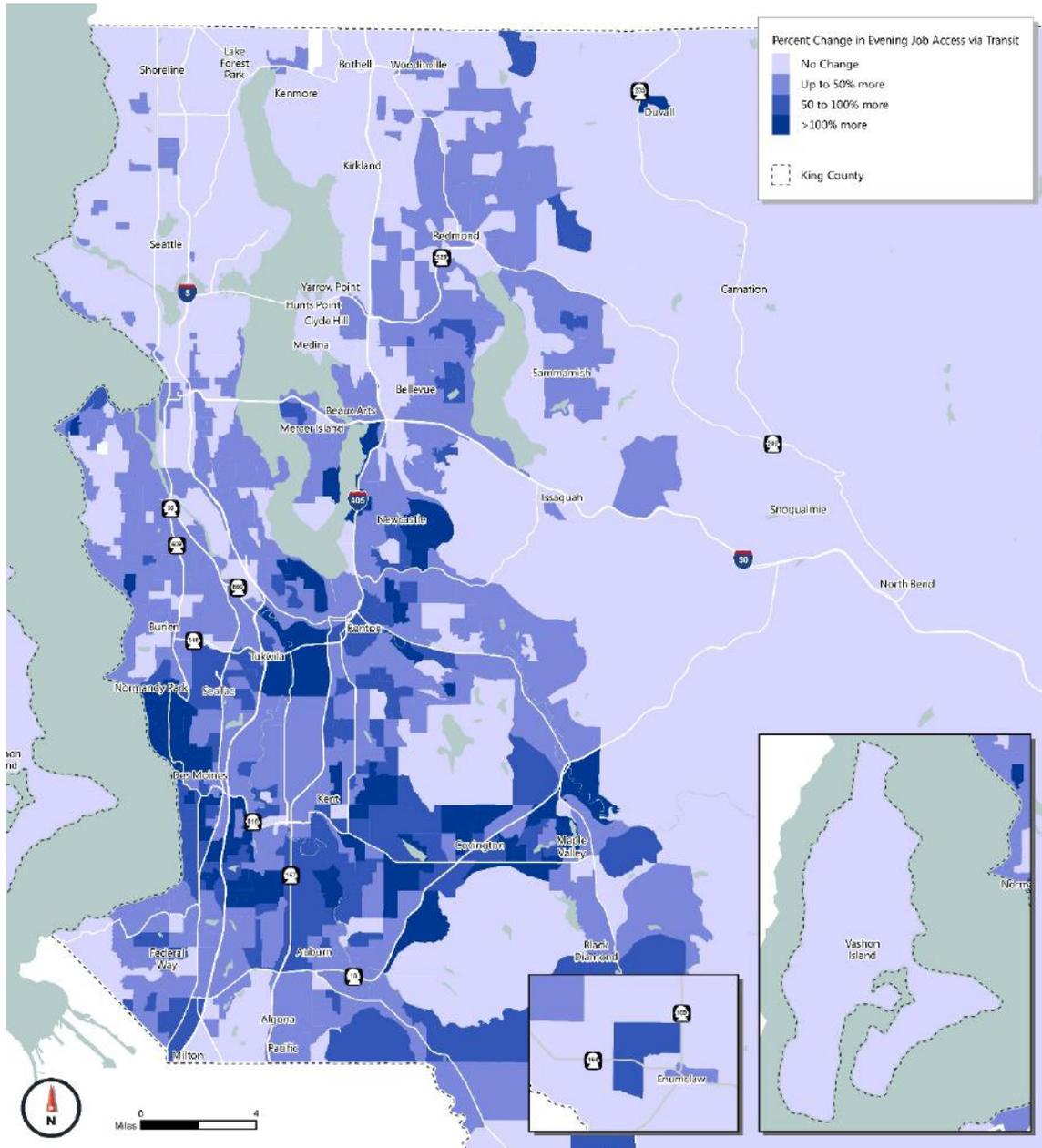
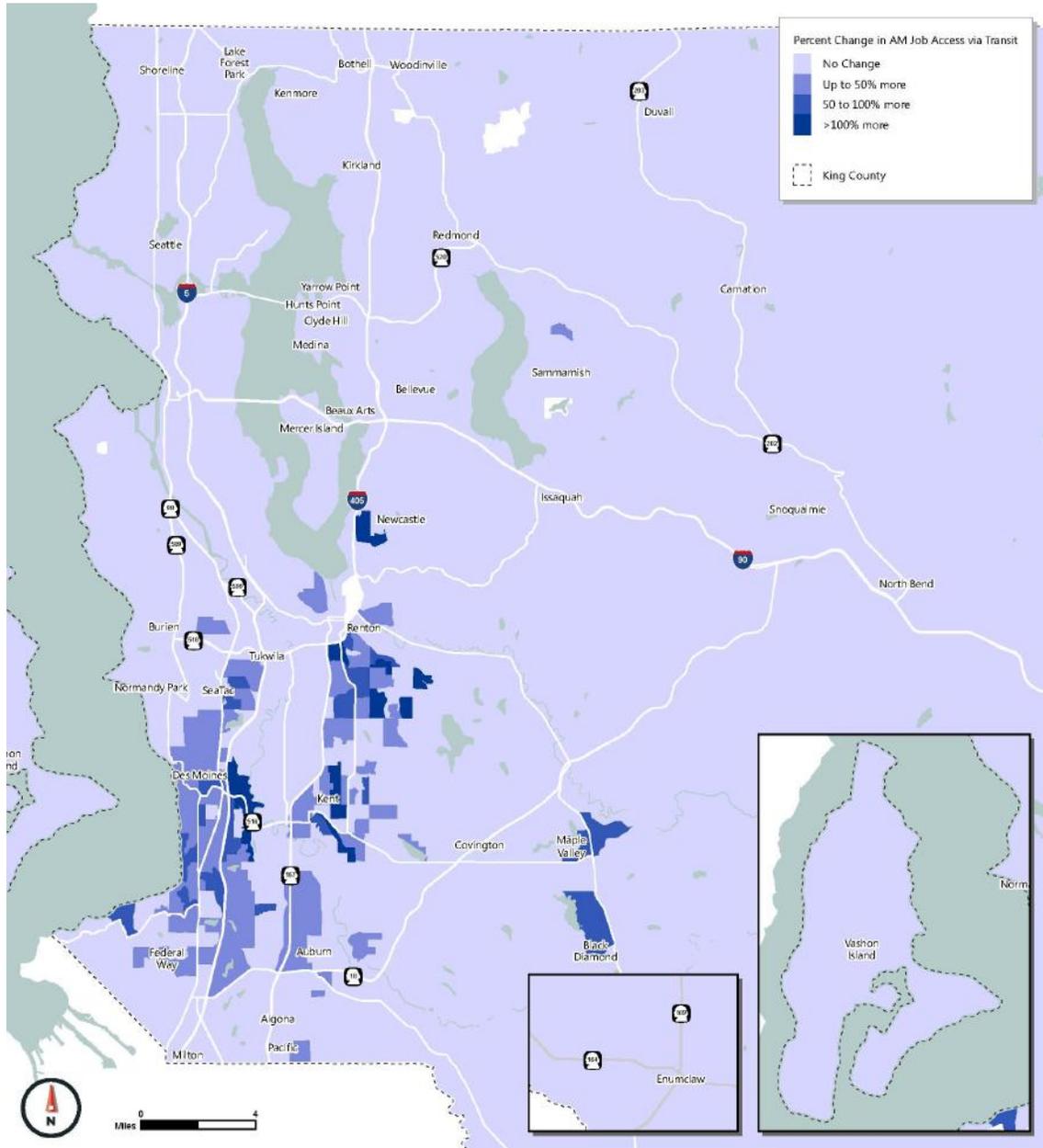


Figure 8 Change in AM (6-9 AM) Job Accessibility with First-Last Mile Investments at Priority Transit Hubs

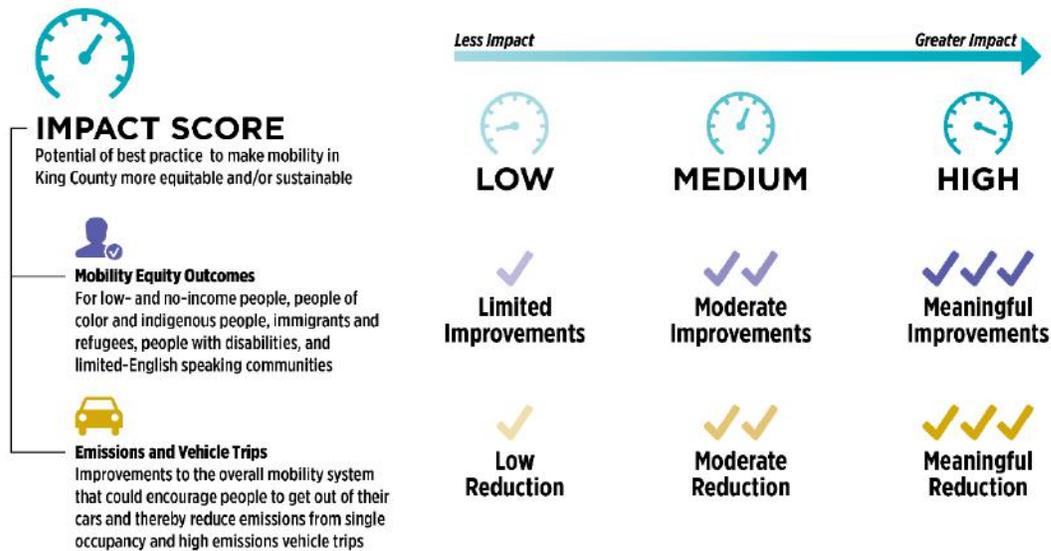


4 Qualitative Assessment

Many of the Mobility Framework Recommendations are necessarily general and do not yet have the level of detail necessary for a quantitative analysis. In many cases, the Recommendations are not attached to a specific geography or timeline, which makes quantitative analysis more challenging.

However, it is possible to provide an initial assessment of the potential equity and sustainability/climate outcomes of each category of Recommendations using a qualitative approach. The project team followed the impact analysis method from the best practices work presented in Appendix B and shown in Figure 9 to consider Recommendations that relate to the national and international best practices reviewed through the Mobility Framework and other leading industry practices. This approach reflects the potential for the Recommendations to impact the overall mobility system, particularly related to reducing emissions and vehicle trips, as well the potential to improve equity outcomes for King County’s priority populations.

Figure 9 Qualitative Assessment Approach



INVESTMENTS

The categories of Recommendations in the investments theme are anticipated to have meaningful impacts on equity and sustainability, as shown in Figure 10. By providing additional service in areas of greatest need, Metro could increase people’s access to jobs, education, and services and reduce the need to use a car to reach those destinations. Improving safety at transit stops and stations could encourage more people to ride

transit and improve the experience for all customers, providing moderate benefits in both categories. And investments in speed and reliability improvements would provide priority populations (and all County residents) with better access to the destinations they need to reach, improving equitable outcomes and encouraging people to travel by transit instead of driving alone.

Figure 10 Qualitative Assessment of Investment Recommendations

Recommendation	Equity Outcomes	Sustainability Outcomes
Provide Additional Transit Service in Areas with Unmet Needs	 Meaningful	 Meaningful
Support Improvements to Increase Safety	 Moderate	 Moderate
Support Improvements to Increase Speed and Reliability	 Meaningful	 Meaningful

SURROUNDING LAND USE

If fully implemented—which would require significant partnerships—the Recommendations in the surrounding land use theme would have the most meaningful impact on sustainability and climate outcomes, including the potential for significant reductions in greenhouse gas emissions. These Recommendations, shown in Figure 11, are critical to King County’s ability to meet its aggressive climate action goals.

Because the impacts of climate change are felt most significantly by communities of color and low-income populations, Recommendations that could have meaningful sustainability outcomes would also have meaningful equity outcomes. Additionally, the opportunity to live in a walkable transit-oriented community—with access to parks and open space as well as frequent transit service—could improve people’s quality of life. Transit-oriented communities also increase connections to jobs and services, which would benefit priority populations as well as all King County residents.

Figure 11 Qualitative Assessment of Surrounding Land Use Recommendations

Recommendation	Equity Outcomes	Sustainability Outcomes
Increase Dense, Mixed-Use Zoning and Affordable Housing in Urban Areas Near Transit	 Meaningful	 Meaningful
Develop Station Area and Right-of-Way Guidelines to Support Access to Transit	 Meaningful	 Meaningful
Develop People-Friendly Street Design Near Transit	 Moderate	 Moderate
Meet King County's Climate Goals by Reducing Car Use	 Meaningful	 Meaningful

The development of people-friendly street design would have moderate equity outcomes depending on the jurisdictions and areas of the County in which they are implemented. In more suburban or unincorporated areas of King County where pedestrian infrastructure is incomplete or missing, such as SeaTac, Skyway, or White Center, making investments in sidewalks and safe crossings could have a significant positive benefit to priority populations. In other areas of the County where the pedestrian network is more complete, such as downtown Renton, benefits might be less significant but still increase connectivity and access to transit.

INNOVATIONS

Revising Metro's policies to focus on equity and sustainability in innovations—including asserting the role of innovation, addressing new mobility services, and supporting innovative, integrated, equitable, sustainable mobility—presents an important opportunity for Metro to use pilots and advance mobility options in ways that truly center equity and sustainability and have meaningful outcomes. For example, pilot programs such as Via to Transit are focused on transit hubs that serve priority populations, which is one approach to centering equity in the design of pilot programs. Enhancing communications about innovations would also have a meaningful impact in both categories of outcomes, as shown in Figure 12.

Similarly, guidelines to shape partnerships between Metro and private providers—such as those developed in San Francisco—could support meaningful equity outcomes and provide opportunities for more sustainable mobility innovations. Metro's support for jurisdictional partnerships may have more moderate equity and sustainability outcomes, as the implementation would likely vary by jurisdiction. For example, some jurisdictions may have specific geographic areas of focus for partnerships based on land uses and development patterns; these areas may not overlap with areas with high concentrations of priority populations.

Figure 12 Qualitative Assessment of Innovations Recommendations

Recommendation	Equity Outcomes	Sustainability Outcomes
Change Metro's Adopted Policies to Assert the Role of Innovation, Address New Mobility Services, and Support Innovative, Integrated, Equitable, Sustainable Mobility	 Meaningful	 Meaningful
Develop New Mobility Guidelines for How Metro Partners with Private Providers	 Meaningful	 Moderate
Enhance Communications and Engagement to Raise Awareness About Innovations	 Meaningful	 Meaningful
Convene and Support Jurisdictions in Developing Partnerships on Innovation	 Moderate	 Moderate

WORKFORCE

Many of the Recommendations in the workforce theme have the potential for meaningful equity outcomes as shown in Figure 13, including establishing opportunities for wealth creation among priority populations. By strengthening Metro's approach to hiring and training new generations of workers—including creating pathways to growth for current employees—Recommendations that incorporate mobility innovations and youth training can support meaningful equity outcomes in the community by increasing the number of people eligible to fill these positions.

While the sustainability outcomes within the workforce theme are expected to be low to moderate, the level of impact would certainly depend on the types of training and development programs that were provided. For example, a transportation "school" that also focuses on sustainability could change the way young people approach jobs in mobility, with new employees who help to enhance Metro's focus on services and programs that reduce greenhouse gas emissions.

Figure 13 Qualitative Assessment of Workforce Recommendations

Recommendation	Equity Outcomes	Sustainability Outcomes
Strategically Partner with the Labor Community to Build New “Communities of Ridership” While Simultaneously Benefitting Metro’s Workforce, Priority Populations, and the Environment	 Meaningful	 Meaningful
Utilize Future Transportation Innovations to Target New Riders as Potential Future Employees	 Meaningful	 Low
Utilize Future Transportation Innovations to Target New Riders as Potential Future Employees	 Meaningful	 Low
Use Strategic and Culturally Specific Communication Methods to Build Sustainable Community Relationships	 Meaningful	 Moderate
Build Infrastructure to Provide Pathways to Mobility-Related Employment	 Moderate	 Meaningful
Utilize Strategic Workforce Planning to Meet Current and Future Workforce Needs	 Limited	 Low
Purposefully Foster a Sustainable Learning Culture within the Metro Organization	 Moderate	 Low
Require the Centering of Equity in All Metro Contracts and Subcontracts	 Meaningful	 Low

ENGAGEMENT

With a focus on centering equity in Metro’s community engagement practices, the Recommendations in the engagement theme would have moderate to meaningful equity outcomes (see Figure 14). Using co-creation approaches to develop Metro’s programs, policies, and practices—such as working with the Mobility Framework Equity Cabinet—provides an opportunity to reshape outreach and engagement with equity (and sustainability) at the forefront.

Outreach practices that strengthen communication efforts about Metro’s services and build lasting relationships in communities are anticipated to have the most meaningful sustainability outcomes. These Recommendations provide opportunities build awareness and get more people riding transit, which could help to reduce climate impacts.

Figure 14 Qualitative Assessment of Engagement Recommendations

Recommendation	Equity Outcomes	Sustainability Outcomes
Strengthen Communication Efforts about Metro's Services	 Moderate	 Meaningful
Build Lasting Relationships in Communities	 Meaningful	 Meaningful
Use a Coordinated, Cross-Departmental Approach to Engagement	 Moderate	 Moderate
Develop an Equity-Centered Engagement Framework	 Meaningful	 Low
Develop a Community Liaison Program	 Meaningful	 Moderate
Identify Metrics to Measure Success and Continually Improve	 Moderate	 Low

5 Conclusion and Next Steps

The high-level analysis of select Recommendations presented in this appendix was developed to support the Equity Cabinet’s work to finalize their draft Recommendations. The quantitative and qualitative analyses help to explain the relative impact of select Recommendations related to equity and sustainability. As previously discussed, because the focus of the quantitative analysis only identified the relative impact to a limited set of evaluation metrics (job accessibility and ridership) discussions on the merits of the different Recommendations must also consider other potential benefits (e.g., safety, customer experience).

When the Recommendations are finalized and the Mobility Framework is adopted, Metro will begin working with the Equity Cabinet to develop updates to several of the department’s guiding policies and plans. Through this work, the Recommendations will gain specificity, which will present additional opportunities for analysis. The focus on equity and sustainability outcomes will continue through this work, and scenarios may be developed to test various approaches.

King County Metro Mobility Framework

Appendix D: Community Engagement

October 2019



Table of Contents

	Page
1 Introduction.....	D-1-1
Four-Part Community Engagement Approach.....	D-1-1
2 Mobility Framework Engagement Plan and Activities	D-2-1
Goals.....	D-2-1
Equity Cabinet.....	D-2-1
Community Engagement.....	D-2-2
Incorporating Community Engagement Findings	D-2-3
3 Community Engagement Methods and Findings	D-3-1
Engagement Populations.....	D-3-1
Engagement Methods: Phase 1	D-3-2
Engagement Methods: Phase 2	D-3-3
Engagement Findings	D-3-8
4 Community Engagement Assessment	D-4-1
Assessment Findings: SWOT Analysis.....	D-4-1
5 Consultant Team Recommendations	D-5-1
6 Next Steps	D-6-1

Table of Figures

Figure 1	Incorporating Community Engagement Findings	D-2-3
Figure 2	Engagement Methods by Population	D-3-2
Figure 3	ZIP Codes of Participants	D-3-8
Figure 4	Investment Preferences.....	D-3-9
Figure 5	Communication Preferences	D-3-10
Figure 6	Engagement Preferences	D-3-10

1 Introduction

King County Metro (Metro) is developing a Mobility Framework to help the agency adapt to a changing transportation system in an equitable and environmentally sustainable way. Orienting Metro's work towards equity and environmental sustainability requires guidance from community members and leaders who understand these issues first-hand.

In response to Motion 15253, Metro and the Nelson\Nygaard consultant team worked to implement a four-part approach for soliciting guidance and feedback from members of the public. Triangle Associates facilitated the community engagement work with guidance and support from the Environmental Coalition of South Seattle (ECOSS), Diverse City, the Greenlining Institute, and Nelson\Nygaard. Below is a summary of the community engagement approach for the Mobility Framework (see **Chapter 2** for more details from the *Metro Mobility Framework Engagement Plan*).

FOUR-PART COMMUNITY ENGAGEMENT APPROACH

1. **Convene and partner with a group of community leaders (known as the Equity Cabinet)** to authentically embed an equity- and sustainability-based approach into how Metro provides mobility services. See Chapter 2 for more details on the Equity Cabinet.
2. **Solicit input from community-based organizations (CBOs), community members and other stakeholders** to inform the Equity Cabinet's work and the Mobility Framework Recommendations. Metro, ECOSS, and Triangle Associates conducted multilingual engagement via tabling at festivals, engagement booths at transit centers, presentations at classes, interviews with CBOs, stakeholder briefings, and an online survey. See Chapter 3 for details regarding the outcomes of these engagement activities.



Tabling at Festivals and Transit Centers



Classroom Presentations



Interviews with CBOs



Stakeholder Briefings



Online Survey

3. **Assess Metro’s existing community engagement practices** to understand how the department might better meet its equity goals. Triangle Associates and Diverse City conducted an assessment with Metro’s internal leadership and external community partners to better comprehend the efficacy and equity of the agency’s current community engagement practices. The consultants synthesized the outcomes of these interviews to recommend ways that Metro might better incorporate community-led engagement into its work. See **Chapter 4** for more details on the community engagement assessment.
4. **Explore best practices in community engagement from around the country** to understand how others approach engagement. Triangle Associates examined the engagement practices of other public agencies, which are summarized in Appendix B: Best Practices.

The community engagement work connected with several hundred community members, leaders, and stakeholders. These results helped the Equity Cabinet and Metro develop the Mobility Framework and will continue to guide Metro as it implements the Mobility Framework recommendations through updates to its plans, policies, budgets, and programs/projects.

This appendix details the full engagement approach used to develop the Mobility Framework. Section B4 of King County Council Motion 15253 requires that the Framework should include information on: “Outreach and engagement with regional partners, transit riders and local communities, including but not limited to low-income populations, communities of color, immigrants and refugees, and limited English-speaking populations.” Consistent with direction in Motion 15253 and the King County Strategic Plan for Equity and Social Justice, Metro prioritized engaging low- and no-income populations, black, indigenous, and people of color, immigrants and refugees, limited English-speaking populations, and people with disabilities. The chapters below describe how Metro conducted these activities with a focus on the populations and groups listed in the motion, as well as the results of the engagement.

2 Mobility Framework Engagement Plan and Activities

Metro developed a *Mobility Framework Engagement Plan* to guide public engagement associated with this project. Below is an overview of the *Engagement Plan*; Chapter 3 provides details about how the plan was implemented and the outcomes of this work.

GOALS

The *Engagement Plan* laid out the following goals:

- **Define Guiding Principles** for equitable and sustainable mobility in King County led by the Equity Cabinet that represents communities and riders countywide, including “priority populations” across King County, defined as people with low- or no-income, black, indigenous, and people of color, limited-English speaking people, immigrants and refugees, and people with disabilities. The Equity Cabinet also included individuals with identities outside these priority populations.
- **Develop Recommendations** for Metro and partners that align with those principles and give direction for future policy updates.
- **Build new relationships and improve existing relationships** with communities that have been traditionally underrepresented in County decision-making.
- **Engage stakeholders, partners, transit riders, Metro employees, and the general public** to inform them about the Mobility Framework process, and to gather feedback to provide to the Equity Cabinet for consideration as they co-create the Mobility Framework with Metro.

EQUITY CABINET

The *Engagement Plan* described how Metro would co-create the Mobility Framework with an Equity Cabinet to practice equitable decision-making and how to authentically embed an equity- and sustainability-based approach into how Metro provides mobility services.

The Equity Cabinet was originally convened to advise the King County Department of Natural Resources and Parks in 2018, and many of the same members returned to

participate in the Equity Cabinet to advise Metro. The Equity Cabinet that advised Metro is comprised of 22 community leaders who represent riders and communities countywide, including people with low- or no-income, black, indigenous, and people of color, limited-English speaking people, immigrants and refugees, and people with disabilities.

The Equity Cabinet met approximately twice per month from May to September 2019, and Cabinet members received compensation for their time. Metro invited the Equity Cabinet to continue engaging with Metro throughout the policy update process (into 2020).

COMMUNITY ENGAGEMENT

The *Engagement Plan* provided an overview of a two-phase approach for conducting community outreach. Phase 1 focused on informing the Guiding Principles and Phase 2 focused on informing the Recommendations. See Chapter 3 for how the *Engagement Plan* was implemented and the resulting outcomes.

Phase 1 Engagement: Guiding Principles (May to July 2019)

Metro worked closely with the Equity Cabinet and held stakeholder briefings to refine and finalize the following Guiding Principles that serve as the foundation for the Mobility Framework:

- Invest where needs are greatest
- Address the climate crisis and environmental justice
- Innovate equitably and sustainably
- Ensure safety
- Encourage dense, affordable housing in urban areas near transit
- Improve access to mobility
- Provide fast, reliable, integrated mobility services
- Support Metro's workforce
- Align Metro's investments with equity, sustainability, and financial responsibility
- Engage deliberately and transparently

To inform the development of these Guiding Principles, Metro held briefings and conducted workshops with established nonprofit organizations, educational institutions, as well as governmental committees, commissions, and boards. See Chapter 3 for the detailed list of entities that Metro engaged.

Phase 2 Engagement: Recommendations (July to August 2019)

During Phase 2 Engagement, Metro and the Equity Cabinet wanted to inform Recommendations related to the following themes:

- **Investments:** Financial support for transit service, new mobility, fares, and capital projects
- **Surrounding land use:** Support for dense, mixed-use neighborhoods near transit, affordable housing, and better access to transit
- **Innovation:** Approaches to developing a regional, integrated network (new technology and services) and the role of/with private providers
- **Workforce:** Metro’s role with both its own employees and contractor employees and its influence on treatment of private providers’ workforces
- **Community engagement:** Policies that guide how Metro engages with the community regarding mobility investments

Metro prioritized engagement with the following populations:

- Black, indigenous, and people of color
- Low- and no-income populations
- Immigrants and refugees
- Limited-English speaking populations
- People with disabilities

In addition, Metro wanted to hear from other key stakeholders and regional partners:

- Transit riders
- General public
- Metro employees
- Jurisdictional and other regional partners

Chapter 3 provides information on the methods that Metro, Triangle, and ECOSSE used to reach these populations.

INCORPORATING COMMUNITY ENGAGEMENT FINDINGS

The *Engagement Plan* explained how Metro intended to incorporate community engagement outcomes into its work. Specifically, community engagement was designed to help the Equity Cabinet develop the Mobility Framework’s Guiding Principles and Recommendations, which in turn shaped the Mobility Framework Report, and in turn will influence subsequent policy updates (see Figure 1).

Figure 1 Incorporating Community Engagement Findings



Metro, Triangle Associates, and ECOSSE implemented the majority of the Community Engagement Plan. See Chapter 3 for detailed information about the findings of community engagement.

3 Community Engagement Methods and Findings



Transit Center Tabling

Source: Triangle Associates

ENGAGEMENT POPULATIONS

Triangle Associates and ECOSSE worked with Metro to design and implement a multifaceted engagement strategy for south King County, where a higher percentage of priority populations (people with low- or no-income, black, indigenous, and people of color, limited-English speaking people, immigrants and refugees, and people with disabilities) live relative to the County as a whole. Figure 2 on the following page summarizes the engagement techniques used to reach priority populations in south King County, as well as other key demographics.

Figure 2 Engagement Methods by Population

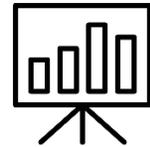
Populations for <u>Intentional</u> Focus	Tabling at Festivals	Tabling at Transit Centers	Surveys During Classes	Interviews with CBOs	Stakeholder Briefings	Online Survey
Black, indigenous, people of color	Yes	Yes	Yes	Yes		
People with low/no incomes	Yes	Yes	Yes	Yes		
Immigrants and refugees	Yes	Yes	Yes	Yes		
Limited-English populations	Yes	Yes	Yes	Yes		
People with disabilities				Yes	Yes	
Transit riders		Yes			Yes	
Metro employees					Yes	
Jurisdictional partners					Yes	
General public	Yes					Yes

The Equity Cabinet recommended that Metro deliberately engage the LGBTQIA+ community and youth as part of the community engagement strategy. ECOSSE engaged youth as part of the Back to School Resource Fair in SeaTac. Metro will work with the consultant team to intentionally engage the LGBTQIA+ community as the department implements the Mobility Framework into policies, plans, and projects.

ENGAGEMENT METHODS: PHASE 1

To inform the development of Guiding Principles, Phase 1 Engagement consisted of briefings to and workshops with the following entities:

- Eastside Easy Rider Collaborative
- King County Mobility Coalition
- North King County Mobility Coalition
- South King County Mobility Coalition
- Seattle Colleges
- Sound Cities Association
- Seashore
- Eastside Transportation Partnership
- Regional Transit Committee
- King County Council Mobility & Environment Committee



- Transportation Choices Coalition
- Forth
- Transit Riders Union
- The Wilderness Society
- National Federation of the Blind
- Climate Solutions
- People for Climate Action
- Clean Energy Transition Institute
- Sound Transit
- Hopelink
- South King County Transportation Options
- Puget Sound Energy
- Sound Generations
- South County Area Transportation Board
- METRO CONNECTS Technical Advisory Commission (King County jurisdictions)
- KC Transit Advisory Commission
- King County Metro Mobility Futures Cabinet
- Internal Metro staff and management
- City of Tukwila
- City of Issaquah
- City of Kirkland
- City of Shoreline

ENGAGEMENT METHODS: PHASE 2

Metro, Triangle, and ECOSS used the methods listed below to reach different populations to inform recommendations related to investments, surrounding land use, innovation, workforce, and community engagement.

- **Method 1 – Tabling at Festivals and Transit Centers:** Triangle Associates and ECOSS set up tables at the Skyway Community Festival, SeaTac Back-to-School Fair, Federal Way Transit Center, and Kent Transit Center. At these locations, ECOSS and Triangle asked participants the question, “**Imagine you have \$10 to invest in Metro’s work. How would you divide up \$10 based on what matters to you?**” To indicate participants’ preferences, ECOSS and Triangle gave participants 10 coins to represent \$10 and asked them to place their coins in buckets with the following labels:
 - Make buses come more frequently during rush hour
 - Increase the parts of King County served by transit
 - Make buses run more often during non-rush-hour times of day
 - Provide new types of services to help connect to transit and meet people’s needs



- Make buses welcoming and safe for customers
- Increase transit stop and station amenities

ECOSS and Triangle then asked participants, “**How do you like to learn about Metro’s services, changes to the bus routes you use, and/or employment opportunities?**” ECOSS and Triangle had a list of communication methods and gave participants three stickers to indicate their preferred communication methods.

Lastly, ECOSS and Triangle asked participants, “**Which of the following methods should Metro use to involve you in its projects, plans, and policies?**” ECOSS and Triangle had a list of engagement methods and gave participants three stickers to indicate their preferred engagement methods.

ECOSS transcreated these activities into Spanish, Vietnamese, Somali, Chinese, and Bhutanese. At all events, participants were compensated with an ORCA card valued for four transit trips. See the “Engagement Findings” section below for the outcomes of this engagement. ECOSS and Triangle conducted these activities at four locations and engaged over 200 people:

Community Festival Booths

- SeaTac Back-to-School Fair at Valley Ridge Park (89)
- Skyway Community Festival (82)

Transit Center Booths

- Kent Transit Center (30)
- Federal Way Transit Center (28)



Tabling at Skyway Community Festival

Source: ECOSS

- **Method 2 – Survey Distribution at Classes:** To inform the recommendations, ECOSS and Triangle distributed surveys with the same questions as the tabling exercise. ECOSS and Triangle handed out these surveys at a Spanish-language computer class, a Spanish-language Promotoras (community health workers) class, a Vietnamese church in the Rainier Valley, a Bhutanese community gathering, and an English Language Learner (ELL) class at the Auburn Library. ECOSS transcreated the survey into Spanish, Vietnamese, Somali, Chinese, and



Bhutanese. ECOSS and Triangle compensated students for their time and input with a Safeway gift card. See the “Engagement Findings” section below for the outcomes of this outreach.

ECOSS and Triangle presented at five classes and gatherings and engaged approximately 75 people:

Classes and Community Gatherings

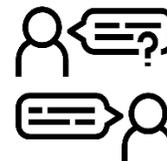
- SPIARC Technology and Computer class; South Park, Seattle (14)
- SPIARC mujeres promotoras meeting; South Park, Seattle (8)
- Auburn Public Library English as a Second Language (ESL) class; Auburn (9)
- Hoi Thanh Tin Lanh Hy Vong, Vietnamese class; Rainier Valley, Seattle (31)
- Pre-hiking Bhutanese meeting; Kent, Tukwila, SeaTac, and Burien (18)



Survey distribution at classes in Vietnamese and Spanish-speaking communities

Source: ECOSS

- **Method 3 – CBO Interviews and Stakeholder Briefings:** Metro, Triangle, and ECOSS provided CBOs and stakeholders with a presentation highlighting findings from the travel trends analyses and best practices research. Following the presentation, the team posed the following 16 questions to the CBOs and stakeholders related to the five key themes listed below.



Investments

1. How can Metro and its partners address the unmet mobility needs?
2. Where are mobility services needed, and at what time of day?
3. How can we ensure these mobility services are accessible and safe for everyone?

Innovation

4. Do you see opportunities for new mobility services to help address equity gaps?
5. What do you think Metro’s role should be versus the private sector’s role?
6. How can we partner to ensure that new mobility services are integrated with public transit and are safe and accessible for all?

Land Use

7. How can Metro use its own resources and work with partners to encourage dense, affordable development near transit?

8. How can Metro work with partners to influence how streets, sidewalks, curbs, and bike lanes are built to improve multi-modal access to transit?
9. What else should be considered to reduce car trips and address climate change?

Workforce

10. How can Metro support career paths in a way that makes the workplace more inclusive?
11. How can we contract for services to advance equity?
12. How do we help our workforce prepare for technological and transportation-related advancements?
13. How can we reach priority populations for job recruitment and retention?

Engagement

14. What strategies should Metro use to improve our engagement practices?
15. How can we demonstrate openness to shared decision-making and co-creation?
16. How can we reach people with greatest barriers to access?

Below are the groups that participated in interviews or stakeholder briefings:

- Access Task Force
- American Institute of Architects (AIA) Seattle
- Asian Counseling and Referral Service (ACRS)
- Casa Latina
- Challenge Seattle
- Chinese Information and Service Center (CISC)
- Clean Energy Transition Institute
- Climate Solutions
- Cowlitz Tribal Health Services
- Eastside Easy Riders Collaborative
- Forth
- King County-Cities Climate Collaboration (K4C)
 - City of Issaquah
 - City of Kirkland
 - City of Shoreline
 - City of Snoqualmie
 - Sound Transit
- King County Mobility Coalition
- King County Transit Advisory Commission
- Lighthouse for the Blind

- Metro Connects Technical Advisory Committee (all 39 jurisdictions and WSDOT, PSRC, and King County Council staff were invited; the following people attended)
 - Cecile Malik, Auburn
 - Sherman Goong, Bothell
 - Franz Lowenherz, Bellevue
 - Lacey Jane Wolfe, Bellevue
 - Thara Johnson, Burien
 - Amber Kellison, Covington
 - Bob Lindskov, Covington
 - Leila Willoughby-Oakes, Federal Way
 - Rick Perez, Federal Way
 - Ryan Medina, Federal Way
 - Steven Padua, Issaquah
 - April Delchamps, Kent
 - Terra Rose, King County Council
 - Kim Scrivner, Kirkland
 - Sarah Gatschow, PSRC
 - Peter Dane, Redmond
 - Jim Seitz, Renton
 - David Tomorowski, SeaTac
 - Jim Hammond, Shoreline
 - Eric Chipps, Sound Transit
 - Jamie Reavis, Tukwila
 - Zack Howard, WSDOT
- Mobility Futures Cabinet
 - Boston Consulting Group
 - City of Auburn
 - City of Bellevue
 - King County Council Staff
 - Port of Seattle
 - Puget Sound Regional Council
 - Seattle Children's Hospital
 - Seattle Dept. of Transportation
 - Sound Cities Association
 - Sound Transit
 - Transportation Choices Coalition
 - Washington State Ferries

- Mother Africa
- National Federation of the Blind
- North King County Mobility Coalition
 - Lake Forest Park Citizen’s Committee
 - North Seattle College
 - Snohomish County Transportation Coalition (SNOTRAC)
- People for Climate Action
- Seattle Colleges
- South King County Mobility Coalition
 - City of Tukwila Department of Human and Social Services
 - Hopelink
 - Puget Sound Energy
 - Sound Generations
- The Wilderness Society
- Transit Riders Union
- Transportation Choices Coalition
- **Method 4 – Online Survey:** Metro disseminated an online survey regarding investments, reducing pollution through surrounding land use, innovation, workforce, and community engagement. The survey was available in Vietnamese, Somali, Chinese and Spanish in addition to English. The survey reached 579 participants in approximately four weeks.



ENGAGEMENT FINDINGS

Findings: Festivals, Transit Centers, and Language-Based Classes

ECOSS and Triangle communicated with approximately 300 people through festival booths, transit center booths, and language-based classes. ECOSS and Triangle focused their efforts in south King County where there is a higher concentration of priority populations compared to other parts of the County, Figure 3 shows the residential ZIP codes of these participants. The team did not ask for specific demographic information due to an inability to guarantee anonymity with this sensitive data given the in-person nature of these engagement methods.

Figure 3 ZIP Codes of Participants

Below is a summary of the percentage of participants who live in the corresponding ZIP codes in south King County:

ZIP Code	Percentage of Participants	Primary Neighborhood within ZIP Code
98188	16%	SeaTac
98178	10%	Skyway
98198	9%	Des Moines
98031	7%	Kent (north)
98002	7%	Auburn
98032	6%	Kent (west)
98023	6%	Federal Way
98168	5%	Boulevard Park
98030	4%	Kent (central)
98003	4%	Federal Way (east)
Other	27%	Various cities throughout south King County

Figure 4 presents the results of how participants believed Metro should invest its resources. There was not an overwhelming preference for how Metro should invest its resources, with just a 7 percent spread between the most favored and least favored investment options. This indicates that there is not strong public support for one form of investment over another.

Figure 4 Investment Preferences

Investment Option	Preference
Make buses come more frequently during rush hour	21%
Increase the parts of King County served by transit	19%
Make buses run more often during non-rush-hour times of day	16%
Provide new types of services to help connect to transit and meet people's needs	16%
Make buses welcoming and safe for customers	15%
Increase transit stop and station amenities	14%

Figure 5 summarizes people's preferences for how Metro should communicate with the public regarding service changes and employment opportunities. The four most preferred communication methods were a mix of digital communication methods (social media and text messages) and physical communication methods (signage at bus stops and ads on buses). This indicates that Metro should continue using both digital and physical communication methods, even though digital engagement can often be more cost-effective.

Figure 5 Communication Preferences

Communication Method	Preference
Social media	15%
Signs at bus stops	15%
Text message	12%
Ads on buses	10%
Email	10%
Tv commercials	7%
Mailings	5%
Radio commercials	4%
Newsletters/blogs	4%
Community liaisons	4%
In-language newspapers	4%
In-person conversations	4%
Internet commercials	3%
Other	3%

And Figure 6 summarizes people's preferences for how Metro should engage community members to shape its projects, plans, and policies. The feedback received via festivals, transit centers, and classes indicated that online surveys were the most preferred engagement method while working with trusted organizations fell to the middle of the options. This feedback is different from that received during CBO Interviews, in which all interviewees felt strongly that working with trusted organizations is critical.

Figure 6 Engagement Preferences

Engagement Method	Preference
Online surveys	23%
Tables at transit centers	14%
In-person large public meetings	13%
Online public meetings	12%
Work with organizations I trust	11%
Focus groups	10%
Small working groups	8%
Meetings I already attend	5%
Other	4%

Findings: Interviews and Stakeholder Briefings

Below is a summary of the input received on these topics.

Investments

Across the interviews and briefings, participants expressed a need for **transit service that can be used for multiple purposes and to reach many destinations**, including those beyond the traditional commute trips. People expressed a desire to better serve older adults and people with disabilities, those who work non-traditional hours, areas not currently served by fixed-route transit, job centers outside of Seattle, health care centers and specialized medical services, school campuses (e.g., high school, college, vocational programs), suburbs, and major activity centers. There was particular interest in improving mobility options throughout South King County.

Stakeholders also expressed an interest in **investing in technology and infrastructure**. Some suggested prioritizing electric bus routes in low-income areas, incentivizing and expediting electric vehicle investments, and working with utility companies to support electric-vehicle infrastructure, such as charging stations.

Many stakeholders emphasized the importance of **improving transit accessibility across different populations**. Examples of the specific ideas that were shared include the following:

- **People with Disabilities:** Reconsider the design of buses so people in wheelchairs and people with strollers do not need to compete for space. Educate bus operators on supporting riders with disabilities.
- **Limited English-Speaking People:** Ensure multilingual accessibility with ORCA card machines. Educate bus operators on supporting limited English-speaking riders.
- **People with Low- or No-Income:** To avoid requiring people to purchase multiple fares, allow Metro paper transfers to be used with Sound Transit, and extend the time bus transfers are valid for those with long commutes. Ensure there are options for accessing services and information that do not require smart phones.
- **American Indian/Alaskan Natives (AIAN):** Members of the AIAN community often prefer to use traditional and culturally-sensitive medical and social service providers. These providers may not be the healthcare centers closest to where they live. Metro could partner with tribes to identify mobility solutions that prioritize tribal healthcare access.
- **General:** Improve safety considerations to make everyone feel safer riding transit. This could mean better lighting near transit stops or working with local jurisdictions to provide community-centered policing near transit stops.

Surrounding Land Use

Stakeholders recommended that Metro—or, in many cases, Metro’s jurisdictional partners—**update zoning to allow greater density**. In particular, Metro could work with other King County departments to upzone unincorporated urban areas such as White Center and South Hill, which have existing bus service.

There was also broad support for encouraging **dense, affordable, transit-oriented development (TOD)**. Metro could support efforts to build affordable and/or workforce housing along high-ridership corridors. Stakeholders recommended that TOD projects include units specifically for individuals who rely on transit due to disabilities or other factors.

Another common theme was **the need to update parking policies**. Stakeholders supported the idea of dedicated parking for carshare, bikeshare, and electric vehicles. Some people suggested that Metro move away from building new park-and-ride lots to discourage people from driving alone. Other ideas included implementing dynamic parking rates, adding more neighborhood parking districts, and reducing parking requirements for new developments.

Stakeholders had many suggestions regarding **improving multimodal access and connections**. These improvements would require action from Metro’s partner municipalities and could include upgraded bike infrastructure (e.g., bike lanes, parking, signals), additional dedicated bus lanes, new transit signal priority features, more street and sidewalk lighting near transit stops, Accessible Pedestrian Signals (APS) at intersections, and other measures to create complete streets. Another idea was to implement congestion pricing in downtown Seattle to make space for more non-auto forms of transportation.

While Metro does not have authority to implement the majority of these suggestions, the department could **seek opportunities to partner** with the public and private sectors.

Innovation

Stakeholders suggested **innovative services**, which could include an emergency ride home program for low-income riders, community-run carshare programs, ride-sharing programs for youth, micromobility options (e.g., scooters), and, eventually, automated vehicles. However, people cautioned against launching too many new or pilot services at the same time and recommended that Metro focus resources on a few innovative models.

Stakeholders recommended that Metro better **integrate technology** into its services. For example, Metro could encourage data-sharing between the private and public sectors to ensure real-time apps are reliable and integrated into Google Maps, Waze, OneBusAway, and other services. In addition, Metro could implement more technological solutions as part of the King County Human Services Bus Ticket Program (e.g., distributing tickets electronically).

To innovate effectively, people suggested a focus on **data-driven decisions**. Metro could collect data on why people do *not* choose transit, employers' perspectives on what transportation services are needed, and future transportation needs based on gentrification and displacement pressures.

Workforce

Stakeholders recommended **hiring students through job apprenticeship programs**, such as at the Lake Washington Institute of Technology, which has a [Bachelor of Science in Transportation, Logistics, and Supply Chain Management](#) and [School of Transportation Technology](#).

A diverse and talented workforce requires **inclusive recruitment**. Stakeholders recommended tailoring job descriptions to attract younger people, people with low- or no-income, black, indigenous and people of color, immigrants, refugees, and people with disabilities. It was suggested that Metro work with community-based organizations, social service agencies, and employment counselors to post multilingual job opportunities. For example, the Port of Seattle currently sends job openings to immigrant and refugee organizations. Furthermore, Metro could work with organizations that promote disability rights to identify positions within Metro that could be filled by individuals with certain kinds of disabilities.

Participants also suggested that Metro should **continue working toward being an inclusive and inviting workplace**. This could mean facilitating mentorships to improve access to professional networks, strengthening the livable wage ordinance, promoting from within the agency when possible, and partnering with the [BlueGreen Alliance](#), which is a coalition of labor and environmental organizations.

Stakeholders also provided suggestions related to **opportunities for career advancement** for operators and other technicians, including training on new transportation technologies, education on transit terminology for employees who do not speak English as their primary language, and job shadowing of transportation planners and engineers.

Stakeholders also identified an opportunity for Metro to **support smaller contractors** by providing proactive, tailored communication to ensure that contracting opportunities are available to minority- and women-owned businesses.

Engagement

Stakeholder recommendations for engagement fell into two groups: 1) ensuring transit information and decisions are accessible to all; and 2) building relationships and trust.

To **ensure transit information and decisions are accessible**, stakeholders recommended providing materials and signs in multiple languages, conducting more outreach to students about the ORCA LIFT program, "game-ifying" engagement, ensuring outreach and online information is accessible for those with visual impairments and other disabilities, educating communities on innovative mobility options as they become available, providing childcare and food at meetings, improving social media engagement, ensuring meeting locations are

accessible by transit, integrating people with disabilities into broad-reaching transit issues (as opposed to just the ACCESS service), partnering with houses of worship to engage communities, providing information at ethnic grocery stores, and coordinating with other agencies collecting feedback (e.g., The Puget Sound Regional Council and Puget Sound Clean Air Agency).

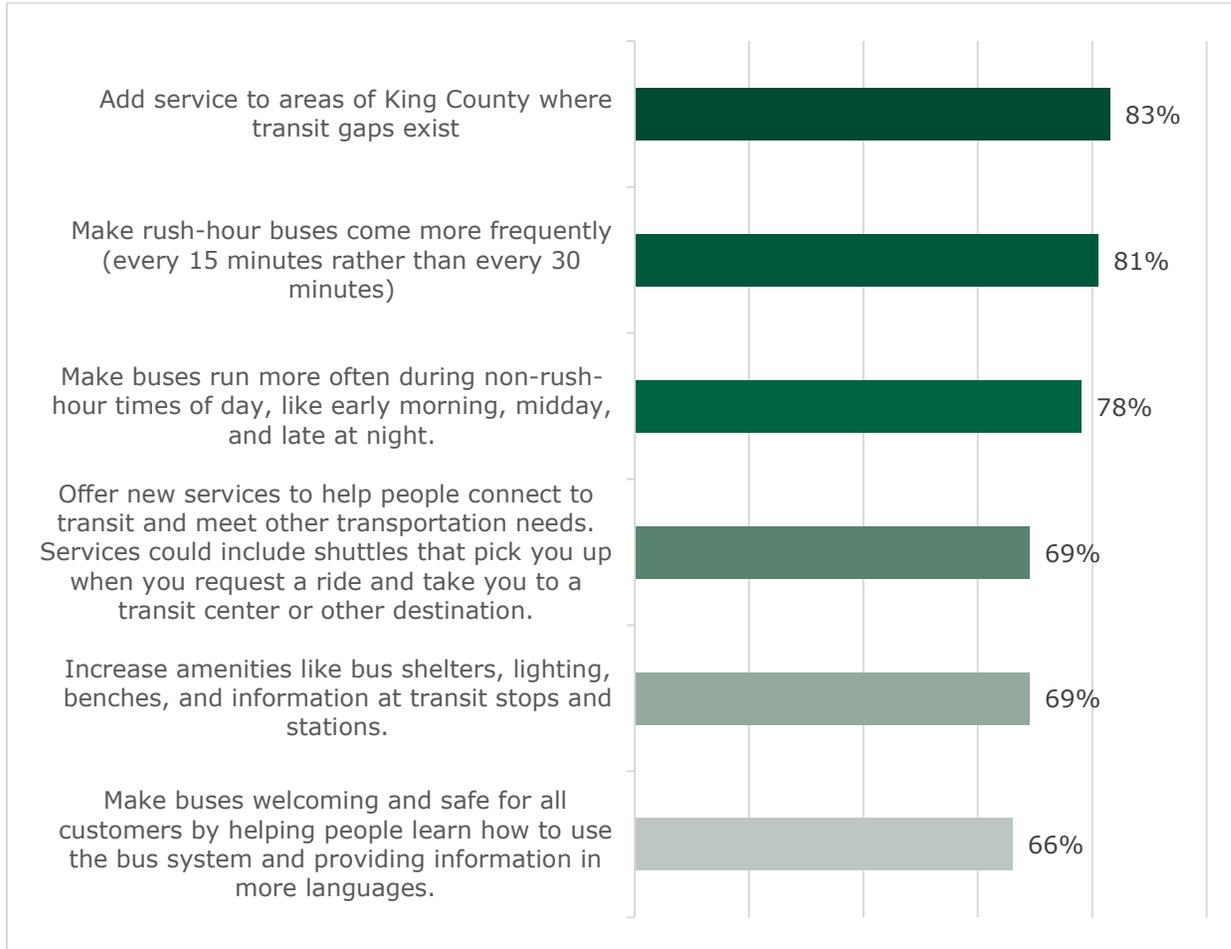
To **build relationships and trust**, people suggested that Metro should reconnect with community members to explain how their feedback was or was not used, have CBOs and/or Tribal agencies lead engagement, acknowledge history and harm the agency may have caused, be transparent with how data is used, invest in long-term relationships (rather than one-off outreach), and ask more qualitative questions during engagement activities. To strengthen partnerships with CBOs and Tribal agencies, stakeholders recommended that Metro compensate these organizations for their time and provide them with translated materials when multilingual outreach is needed.

Findings: Online Survey

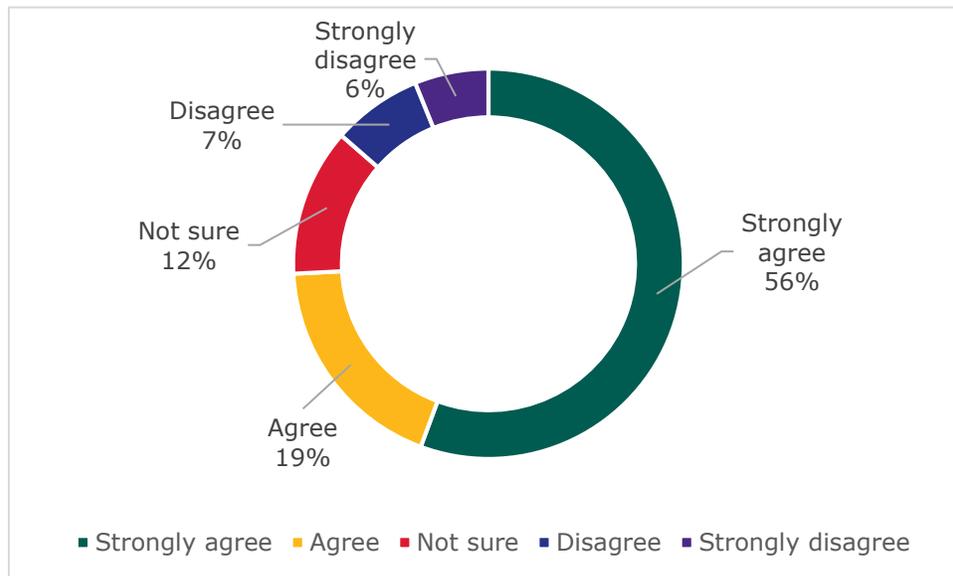
Metro conducted an online survey to gather feedback from members of the public about their priorities for meeting the needs of a growing County in a way that addresses equity and climate change and serves all King County residents. The survey was open from August 16 through September 11, 2019 and generated 579 responses.

Q1: As Metro considers future investments that advance equity and sustainability, we want to hear about your priorities.

In this question, respondents were asked to prioritize up to four of the response options. Over three-quarters of the respondents identified addressing areas in the County where transit gaps exist and increasing bus frequency during both rush and non-rush hours as actions that Metro should consider.



Q2: Metro could encourage and partner with local jurisdictions to give higher priority to transit, bicycles, walking and rolling, and lower priority to single-occupant cars when building streets, sidewalks, and other public infrastructure. How strongly do you support this approach?



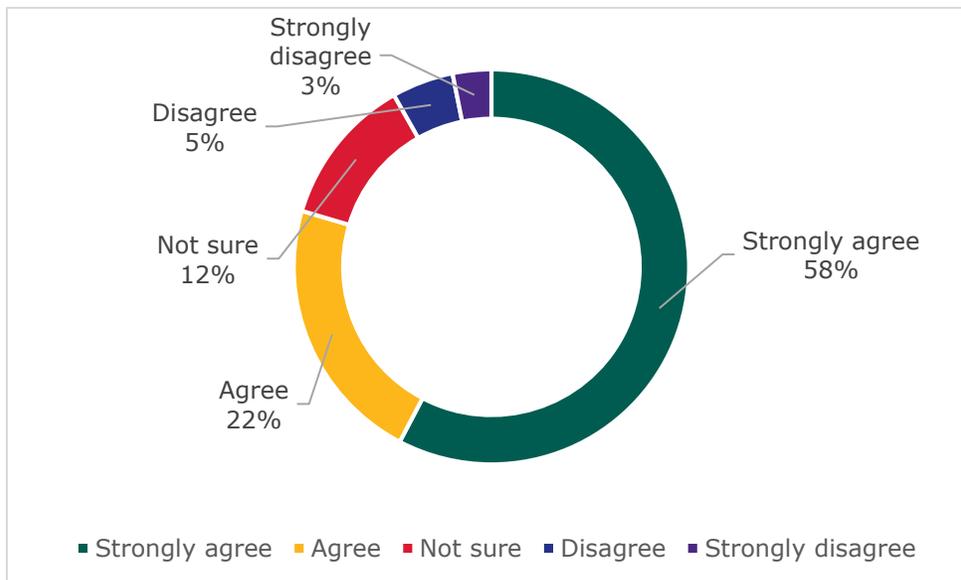
A majority of respondents (75 percent) support the approach of partnering and encouraging local jurisdictions to prioritize transit, biking, and walking over single occupancy cars when building public infrastructure.

In addition to supporting Metro's engagement with local jurisdictions to give higher priority to transit, bicycles, walking, and rolling, participants shared additional feedback through 163 open-ended comments, which included the following themes:

- **Improving and prioritizing transit:** Many of the comments supported prioritizing and promoting transit. More than 15 comments addressed the need for expansion of bus lanes, frequency, and number of buses. Commenters also cited the need for transit-only lane enforcement and an increase in the number of express trips with fewer stops during rush hours.
- **Restrict single occupancy vehicles:** Comments addressed the need to restrict and deprioritize single occupancy vehicles, including preventing cars from blocking bus-only lanes during rush hours.
- **Protected bike lanes:** Providing more protected bike lanes was a popular theme in the comments. Commenters expressed the need to have a comprehensive bike network that connects the suburbs to Link light rail and provides protected bike trails along all major arterials. Some commenters noted the need for biking amenities like increased bike lockers at park-and-rides, safe bicycle parking near bus stops, and proper maintenance of bike facilities. Some comments suggested the need to develop incentives that promote drivers making more trips by bike, potentially by subsidizing the cost of bikes and providing tax breaks.

- **Safe walking and rolling routes:** Connected sidewalks were another common theme. People expressed the need for sidewalks on both sides of the road and curb cuts at intersections. Some commenters stressed the importance of informational signs and other wayfinding.
- **Separate motorized and non-motorized transportation:** Many comments suggested that certain modes be restricted on busy roads or restricting downtown roads to buses and carpools only.
- **Expansion of light rail:** Some commenters stated the need for an expanded light rail system that connects to more lower-income neighborhoods.

Q3. How strongly do you support Metro encouraging and partnering with local jurisdictions and developers to build affordable housing, shopping, community services, and recreation near transit stations?



Eight of ten of respondents (80 percent) agree or strongly agree that Metro should promote and partner with local jurisdictions to develop affordable housing, shopping, and other recreational amenities near transit stations. Although a small portion of the respondents did not agree, their comments addressed concerns regarding an increase in bus fares if Metro was involved in housing projects.

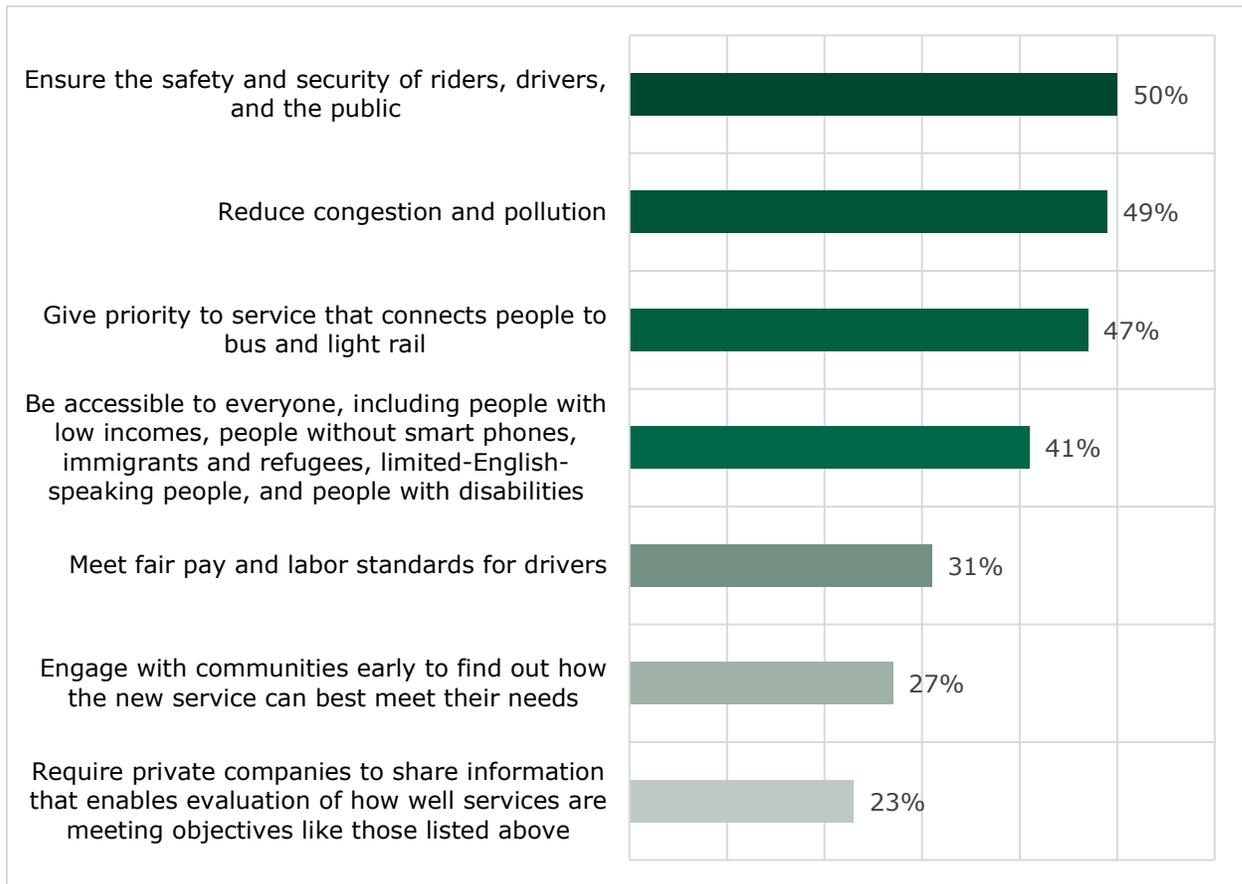
In addition to supporting Metro’s engagement with local jurisdictions to give higher priority to build affordable housing, shopping, community services, and recreation near transit stations, participants also expressed their views through 60 open-ended comments, which have been organized into the following themes.

- **Support for promoting but not funding:** Many comments expressed a great deal of support for Metro encouraging transit-oriented services but less support for Metro being involved in partnerships or funding for development. Some comments also expressed concerns about transit funds being used for community development.

- **Land use:** Commenters stressed promoting land uses consistent with transit plans rather than being automobile-focused and creating more equity-focused communities. A few comments also focused on adding high-density housing around light rail.

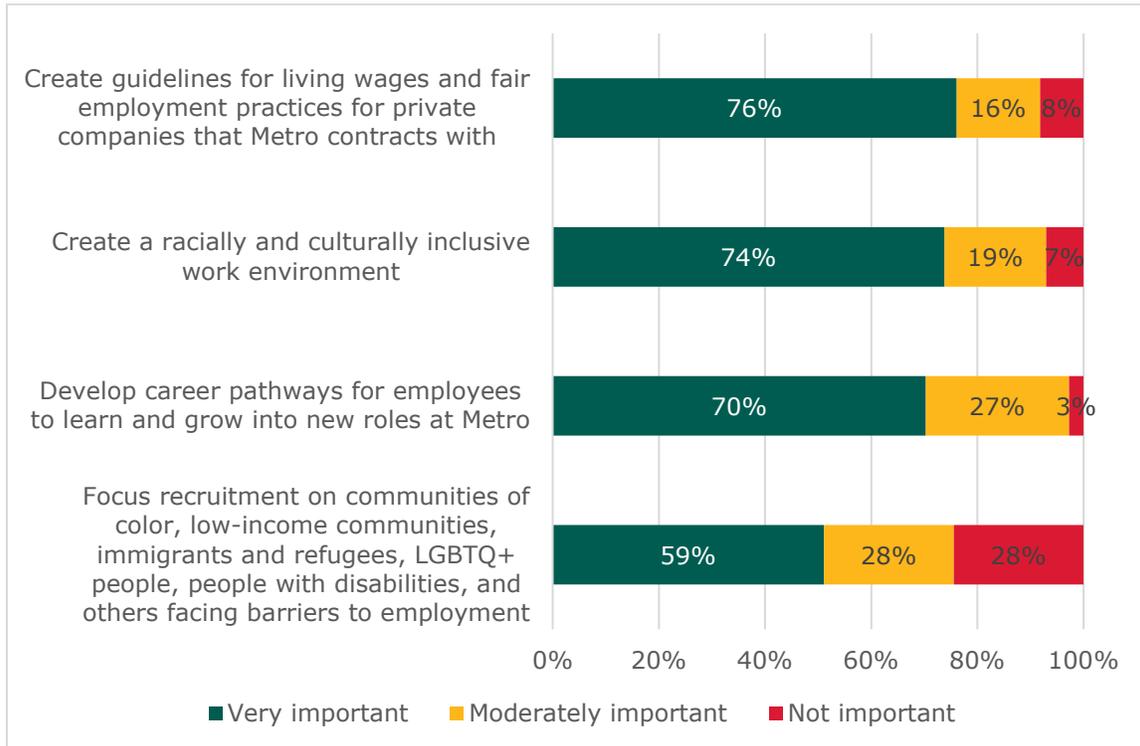
Q4. What do you think is most important for Metro to consider as we develop new types of services or partner with private companies like Uber and Lyft?

Respondents indicated that ensuring safety and security, reducing congestion and pollution, improving accessibility to transit, and transportation equity are the top priorities that Metro should consider while developing new services and partnerships.



Q5. Rate how important the following priorities are for Metro's hiring and workforce practices.

Survey respondents' top priorities for Metro's hiring and workforce practices are to create guidelines for fair employment practices of contractors and to create an inclusive work environment.

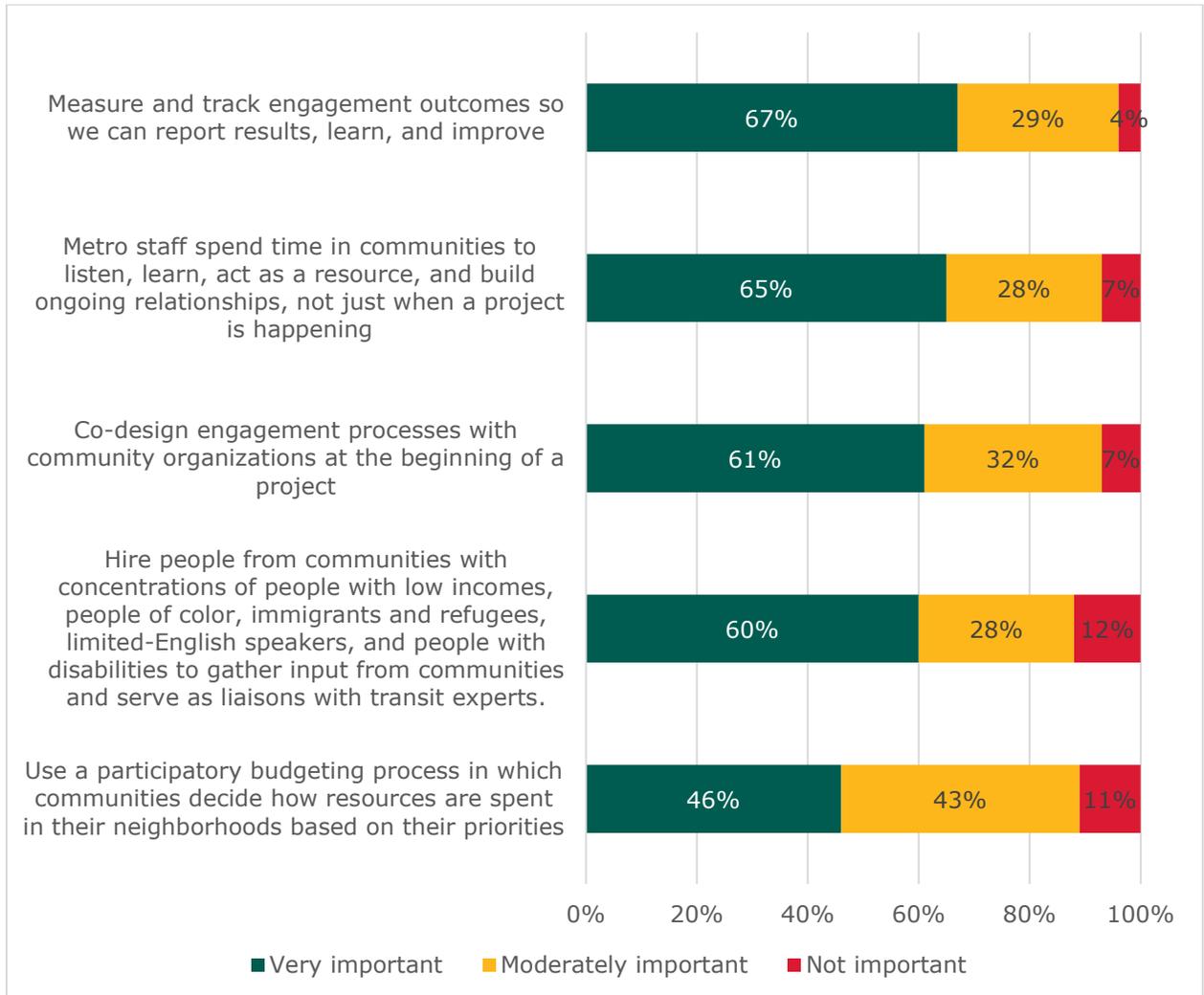


In addition to rating how important the priorities are for Metro's hiring and workforce practices, participants also expressed their views through 38 open-ended comments.

Most of the comments focused on hiring qualified, competent, and customer service-oriented employees. Comments also reflected a need to have a diverse workforce to reflect the community.

Q6. As Metro works with communities to decide how to invest and provide services that advance equity and sustainability, how important are the following community engagement strategies?

According to respondents, Metro should prioritize measuring and tracking engagement outcomes and engaging with communities to build lasting relationships.



Q7. How else can Metro work with communities to participate in decision-making?

In response to this question, participants expressed their views through 49 open-ended comments, which reflected the following themes:

- **Engage thoughtfully with community/neighborhood organizations:** A number of commenters noted that community-based organizations should be just one element of an engagement strategy.
- **Engage with all groups, not a select few:** Many comments stressed the importance of reaching out to all groups, including youth and young adults, teens, parents, refugees, older adults, and people of all income levels.

Respondent Demographics

- **Age:** More than half (53 percent) of the respondents are between the ages of 26 and 45 years old. Seniors (65+) and young adults (18-25) make up 14 percent of respondents.

What is your age?	Number of respondents	Percent of respondents
Under 18	1	0%
18-25	31	7%
26-35	123	29%
36-45	102	24%
46-55	81	19%
56-65	57	14%
66-75	23	5%
Over 75	4	1%

- **Household income:** A significant proportion of respondents declined to answer this question. Of those who responded, annual household income was distributed among all income categories, but higher-income groups made up a larger proportion of respondents than lower-income groups. More than half of the respondents have an annual household income of \$75,000 or more.

What is your annual household income?	Number of respondents	Percent of respondents
Less than \$7,500	11	3%
\$7,500 to \$15,000	2	1%
\$15,001 to \$25,000	11	3%
\$25,001 to \$35,000	17	5%
\$35,001 to \$45,000	20	6%
\$45,001 to \$55,000	21	6%
\$55,001 to \$65,000	17	5%
\$65,001 to \$75,000	24	7%
\$75,001 to \$100,000	51	15%
\$100,001 to \$140,000	71	21%
More than \$140,000	97	28%

- **Race/Ethnicity:** A significant proportion of respondents declined to answer this question. Of those who responded, more than three-quarters (78 percent) identified as white or Caucasian, 12 percent identified as multiple ethnicities, 5 percent identified as Asian American (including South and Southeast Asian), 2 percent identified as black, African, or African American,

2 percent identified as Latino/Latina/Latinx or Hispanic, and 1 percent identified as American Indian or Alaska Native.

What is your race/ethnicity?	Number of respondents	Percent of respondents
American Indian or Alaska Native	2	1%
Asian American (including South and Southeast Asian)	12	5%
Black, African, or African American	4	2%
Latino/Latina/Latinx or Hispanic	4	2%
Multiple ethnicities	31	12%
White or Caucasian	199	78%
Other	3	1%
Total	255	

- **Home ZIP Code:** A large portion (81 percent) of the respondents live within King County with most respondents (78 percent) in the Seattle neighborhoods of West Seattle, Delridge, Georgetown, Capitol Hill, Wedgwood, and Fremont. Residents of Redmond, Renton, Kent, Lynnwood, Tacoma, Federal Way, and other areas of King County were also represented.
- **Gender:** More than half of the respondents (54 percent) identify as female.
- **Primary Language:** The majority of respondents (95 percent) identified English as the primary language spoken at home.
- **Disability:** While most respondents (80 percent) indicated having none of the listed disabilities, 8 percent indicated having a condition that substantially limits one or more basic physical activities and 6 percent indicated a physical, mental, or emotional condition that limits learning, remembering, or concentrating. Other disabilities cited include visual impairments (1 percent), hearing impairments (1 percent), and limited ability to care for oneself (1 percent).

The tables on the next page summarize survey responses for key questions by respondent race/ethnicity and household income. The complete survey data set, including all open-ended responses, is available upon request.

Q1: As Metro considers future investments that advance equity and sustainability, we want to hear about your priorities. [top priority by respondent's race/ethnicity]

The low number of respondents in all groups except white/Caucasian makes it difficult to draw conclusions about the differences in priorities between racial/ethnic groups.

	American Indian or Alaska Native	Asian American	Black, African, or African American	Latino/Latina/ Latinx or Hispanic	Multiple ethnicities	White or Caucasian	Other	Did not specify race/ethnicity	Total
<i>Number of respondents:</i>	1	12	4	4	30	171	3	229	454
Add service to areas of King County where transit gaps exist.	0%	50%	0%	50%	37%	33%	33%	31%	33%
Make rush-hour buses come more frequently (every 15 minutes rather than every 30 minutes).	0%	17%	25%	25%	37%	28%	33%	27%	28%
Make buses run more often during non-rush-hour times of day, like early morning, midday, and late at night.	100%	25%	25%	0%	17%	23%	33%	20%	21%
Offer new services to help people connect to transit and meet other transportation needs. Services could include shuttles that pick you up when you request a ride and take you to a transit center or other destination.	0%	8%	25%	0%	3%	11%	0%	11%	11%
Increase amenities like bus shelters, lighting, benches, and information at transit stops and stations.	0%	0%	0%	25%	7%	3%	0%	5%	4%
Make buses welcoming and safe for all customers by helping people learn how to use the bus system and providing information in more languages.	0%	0%	25%	0%	0%	2%	0%	6%	4%

Q1: As Metro considers future investments that advance equity and sustainability, we want to hear about your priorities. [top priority by respondent's household income]

The relatively low number of respondents in each income category makes it difficult to draw conclusions about differences in priorities for those in different income groups. Generally, those in the lowest income groups placed greater priority than those with higher incomes on services that help people connect to transit and meet other transportation needs and on increasing amenities like bus shelters, lighting, benches, and information at bus stops.

	\$15,000 or less	\$15,001 to \$35,000	\$35,001 to \$55,000	\$55,001 to \$75,000	\$75,001 to \$100,000	\$100,001 to \$140,000	More than \$140,000	Did not specify income	Grand Total
<i>Number of respondents:</i>	11	27	32	36	47	59	79	163	454
Add service to areas of King County where transit gaps exist.	27%	37%	38%	32%	33%	39%	23%	45%	36%
Make rush-hour buses come more frequently (every 15 minutes rather than every 30 minutes).	9%	11%	15%	32%	41%	31%	34%	32%	30%
Make buses run more often during non-rush-hour times of day, like early morning, midday, and late at night.	27%	22%	21%	14%	13%	16%	26%	31%	23%
Offer new services to help people connect to transit and meet other transportation needs. Services could include shuttles that pick you up when you request a ride and take you to a transit center or other destination.	18%	15%	6%	14%	11%	7%	9%	16%	12%
Increase amenities like bus shelters, lighting, benches, and information at transit stops and stations.	18%	7%	3%	3%	2%	2%	4%	7%	5%
Make buses welcoming and safe for all customers by helping people learn how to use the bus system and providing information in more languages.	0%	7%	12%	3%	2%	2%	1%	7%	4%

Q4. What do you think is most important for Metro to consider as we develop new types of services or partner with private companies like Uber and Lyft? [top priority by respondent's race/ethnicity]

The low number of respondents in all groups except white/Caucasian makes it difficult to draw conclusions about the differences in priorities among racial/ethnic groups.

	American Indian or Alaska Native	Asian American	Black, African, or African American	Latino/ Latina/ Latinx or Hispanic	Multiple ethnicities	White or Caucasian	Other	Did not specify race/ethnicity	Total
<i>Number of respondents:</i>	1	12	4	4	30	173	3	189	416
Ensure the safety and security of riders, drivers, and the public	0%	33%	25%	50%	23%	23%	33%	26%	25%
Give priority to service that connects people to bus and light rail	0%	17%	25%	0%	13%	21%	0%	20%	19%
Reduce congestion and pollution	0%	17%	0%	25%	13%	15%	67%	24%	19%
Be accessible to everyone, including people with low incomes, people without smart phones, immigrants and refugees, limited-English-speaking people, and people with disabilities	100%	17%	25%	0%	20%	17%	0%	12%	15%
Meet fair pay and labor standards for drivers	0%	0%	0%	0%	17%	9%	0%	8%	9%
Engage with communities early to find out how the new service can best meet their needs	0%	8%	25%	0%	7%	9%	0%	6%	7%
Require private companies to share information that enables evaluation of how well services are meeting objectives like those listed above	0%	8%	0%	25%	7%	5%	0%	4%	5%

Q4. What do you think is most important for Metro to consider as we develop new types of services or partner with private companies like Uber and Lyft? [top priority by respondent's household income]

The relatively low number of respondents in each income category makes it difficult to draw conclusions about differences in priorities for those in different income groups. Generally, those with the lowest incomes placed greater emphasis than those with higher incomes on accessibility of services for people with low incomes, people without smartphones, immigrants and refugees, limited-English-speaking people, and people with disabilities. Respondents with higher incomes placed greater emphasis on reducing congestion and pollution than those with lower incomes.

	\$15,000 or less	\$15,001 to \$35,000	\$35,001 to \$55,000	\$55,001 to \$75,000	\$75,001 to \$100,000	\$100,001 to \$140,000	More than \$140,000	Did not specify income	Grand Total
<i>Number of respondents:</i>	11	27	34	37	46	61	82	118	416
Ensure the safety and security of riders, drivers, and the public	18%	30%	29%	27%	26%	21%	17%	31%	25%
Give priority to service that connects people to bus and light rail	18%	11%	21%	19%	20%	20%	22%	19%	19%
Reduce congestion and pollution	9%	11%	15%	19%	20%	13%	28%	20%	19%
Be accessible to everyone, including people with low incomes, people without smart phones, immigrants and refugees, limited-English-speaking people, and people with disabilities	36%	22%	15%	14%	17%	16%	12%	13%	15%
Meet fair pay and labor standards for drivers	9%	11%	3%	8%	11%	13%	12%	4%	9%
Engage with communities early to find out how the new service can best meet their needs	9%	11%	12%	8%	2%	13%	4%	7%	7%
Require private companies to share information that enables evaluation of how well services are meeting objectives like those listed above	0%	4%	6%	5%	4%	3%	5%	7%	5%

4 Community Engagement Assessment

Metro understands that working with partners to achieve the Mobility Framework's goals requires listening to the perspectives of community members and CBOs. To improve Metro's engagement practices, the consultant team, acting as a neutral third-party, conducted assessment interviews of 10 individuals representing Metro staff and CBOs that have worked with Metro in the past. The consultants provided CBOs with compensation for their time.

ASSESSMENT FINDINGS: SWOT ANALYSIS

Triangle Associates and Diverse City summarized the assessment outcomes in a Strengths/Weaknesses/Opportunities/Threats analysis. This SWOT is a synopsis of what Triangle and Diverse City heard in their interviews.

Internal Strengths

According to the assessment interviews, below are Metro's key internal strengths related to its community engagement practices (in no particular order):

- Commitment by Metro's leadership to community engagement across the department's various programs/projects
- Willingness to make change and be responsive to community feedback, exemplified by Metro pausing its ACCESS RFP process to rethink the program's needs with a community advisory group
- Willingness to compensate community members with stipends for their time and expertise
- Commitment to transcreation and multilingual communication

Internal Weaknesses

Based on the assessment interviews, below are Metro's key internal weaknesses related to community engagement practices (in no particular order):

- The Division-to-Department transition has resulted in some challenges related to organizational structures and how Community Engagement Planners are integrated into the agency
- Demand for community engagement staff exceeds capacity

- Perception that Metro’s employees, especially the planning and community engagement staff, don’t always reflect marginalized communities, resulting in power imbalances between staff and community members
- Lack of feedback loops in communications with communities after Metro collects input, resulting in community members who don’t understand how their input was used or not used
- Reluctance to share control, power, and information with advisory groups, resulting in advisory group members feeling frustrated at times

External Opportunities

Below are the key external opportunities regarding Metro’s community engagement practices gleaned from the assessment interviews (in no particular order):

- Metro can leverage its great reputation among many community organizations to continue seeking guidance on its policies, plans, and projects
- The ACCESS RFP community engagement work set a new standard that Metro should consider replicating
- Infrastructure and capital projects can have multiple purposes and positively impact communities if they are engaged from the onset (e.g., public meeting rooms in bases, WiFi access on buses, warming shelters for people experiencing homelessness)

External Threats

The assessment interviews indicated the following key external threats related to Metro’s community engagement practices (in no particular order):

- Under-resourced and overextended CBOs cannot always meet Metro’s requests on short timelines
- Lack of public input coordination among partner agencies, including King County Metro, Sound Transit, Seattle Department of Transportation, Pierce Transit, Community Transit, and the Washington State Department of Transportation
- In-person public comments at Council hearings might have influence that outweighs input gathered by surveys, interviews, or other community engagement efforts
- Lack of awareness about how to use transit and what Metro offers, especially with specialized services like ACCESS

5 Consultant Team Recommendations

The consultant team developed the following recommendations to reflect the feedback shared during festival and transit center tabling, English Language Learners' class presentations, CBO interviews, stakeholder briefings, the online survey, assessment interviews, feedback from the Equity Cabinet, and best practices research. These recommendations are starting points for Metro staff to build upon the department's existing engagement strengths.



Recommendation #1: Develop Consistency and Equity in Compensation for Community Members/CBOs

Community members and CBOs that participated in the Mobility Framework engagement appreciated that Metro compensated them for their time and expertise. However, there is inconsistency in Metro's compensation policies related to various engagement tasks, such as filling out surveys, participating in interviews or focus groups, distributing surveys, being a member of an advisory group, helping to convene listening sessions, and other tasks.

For example, a Community Connections project provided CBOs with a \$50 donation (assuming an hour-long interview), while the Mobility Framework provided CBO interviewees with a \$225 donation (assuming 1.5 hours of preparation and 1.5 hours of interview time). Metro should develop a list of compensation amounts for engagement tasks to avoid confusion or bias with compensation. As an additional equity consideration, Metro could adjust compensation amounts depending on the geographic region of the County since there are some well-resourced areas that might not require the same levels of compensation as less-resourced areas.



Recommendation #2: Formalize Systems for Working with CBOs

Community members and CBOs lauded Metro's commitment to engaging with CBOs. However, Metro has an opportunity to create more predictability and transparency around CBO engagement. The department could create a CBO roster with low barriers to entry to provide CBOs with predictable engagement opportunities and consistent compensation agreements. The roster could intentionally solicit involvement by high- and low-resource CBOs that serve a range of demographics. A more formalized roster system would allow Metro to examine if there are gaps in relationships with CBOs.



Recommendation #3: View “Time” as a Social Equity Issue

Many public agencies focus their energy on the “how” of community engagement, or the methods they use. But what is often just as important is the “when” of community engagement, which includes the duration of engagement efforts to allow time for authentic co-creation. The timing of community engagement is frequently dictated by service planning, political, and funding deadlines. However, rushing community engagement efforts to meet these deadlines can perpetuate the perception that the decisions are already made, and community involvement is an afterthought. Additionally, rushed community engagement privileges those who have the resources and ability to quickly respond to requests. As Metro centers social equity in its work, the timing of community engagement should shape the political, planning, and funding timelines. In instances where time is limited, Metro should develop internal policies that identify when it would be better *not* to engage community members if engagement would be rushed and transactional.



Recommendation #4: Recognize and Acknowledge Agency History

A key part of equitable civic engagement is restorative justice work. For public agencies, this means truth-telling campaigns that recognize their history of exclusionary and harmful policies. In practice, it means owning and sharing this history with a public apology.¹ It means starting new projects by researching the history of the agency in the region and acknowledging specific wrongdoings if applicable. It means agency leadership viewing this retrospection not as an admission of fault, but as a positive step toward more authentic relationships. And it means Community Engagement Planners acknowledging their social position in respect to the community with whom they are working, especially if the Planner is not from that community. It means embracing cultural humility across the department to continuously learn and continuously strive to be more equitable in its actions and policies.



Recommendation #5: Create Lasting Benefits for Community Members

Metro is committed to making meaningful and long-term investments in communities. This can be done by investing in ongoing relationships with CBOs (see recommendation #2), but it can also happen through investing in the physical environment of a place through Community Benefit Agreements (CBA).

The San Francisco Public Utilities Commission (SFPUC) embedded environmental justice principles into their mission, prioritized the hiring of local labor, and created a program to develop “social impact partnerships.”

¹ See [similar efforts underway in Evanston, IL](#), and at the [Maryland Institute College of Art](#) in MD

Within Requests for Proposals (RFPs) for projects over \$5 million, applicants are asked to meet a community benefits criterion, which allocates money toward an improvement for communities who are affected by the proposed project. Another example of a CBA focused on ensuring both affordable housing and transit-oriented development comes from Minneapolis. An agreement between the Longfellow Community Council (a community participation group) and the developer Capital Growth Real Estate established a mixed-use affordable complex called Longfellow Station.



Recommendation #6: Develop a Focused Approach for No-Income People/Unhoused People

The Mobility Framework's engagement efforts were focused on priority populations, including low- and no-income individuals. The consultant team observed that engagement strategies for no-income individuals who are unhoused must be different from engagement strategies for low-income individuals. Metro could follow the approach used by other transit agencies to partner with social service agencies that work with the unhoused people who rely on Metro.

For example, the transit agency in Madison, Wisconsin (also called Metro Transit) developed a partnership with Porchlight, a nonprofit organization that serves as a coordinating group for homelessness-related issues. Both agencies work with other nonprofits, city departments, and downtown business groups to ensure that homelessness is addressed, and that safety and security issues are a focus area. Another example of a transit agency working to address the homelessness crisis is the Southeastern Pennsylvania Transportation Authority (SEPTA). Project HOME, a Philadelphia nonprofit homelessness organization, has partnered with SEPTA on a variety of initiatives, including establishing a walk-in outreach center at SEPTA's largest rail center called "Hub of Hope," which provides social and health services to individuals experiencing homelessness.



Recommendation #7: If Faced with Conflicting Input, Just Ask!

Metro often receives conflicting information about the best ways to engage with community members countywide. For example, the feedback received via festivals, transit centers, and classes indicated that online surveys were the most preferred engagement method. However, CBO interviews indicated that working with trusted organizations is preferable to surveys. The likelihood of conflicting information increases when working across King County, as is the case during policy development. However, implementing projects and investments typically occurs in sub-areas, which may have very specific engagement needs. Before Metro embarks on a new project in a smaller geographic area, the department should simply ask the affected populations how they would like to be involved.

The consultant team presented these recommendations to a core team of Metro staff in September 2019. Metro will consider implementing these recommendations in the coming months to continue their efforts to meaningfully engage with those who work, live, learn, and play in King County.

6 Next Steps

The Equity Cabinet and Metro used the outcomes of community engagement to finalize the Mobility Framework. Metro invited the Equity Cabinet to continue working with Metro staff to make policy updates that help to implement the Recommendations of the Mobility Framework. The Equity Cabinet and Metro will refer back to the community engagement outcomes as they update Metro's Strategic Plan for Public Transportation, Service Guidelines, METRO CONNECTS long-range vision, the Pro-Equity Transportation & Mobility Policy Agenda for the Equity and Social Justice Strategic Plan, the Transportation Goal Area for the Strategic Climate Action Plan, the Marine Strategic Plan, and potentially others. Metro will continue to create new opportunities for community engagement as policy updates continue.

King County Metro Mobility Framework

Appendix E: Motion 15253

October 2019



KING COUNTY

1200 King County Courthouse
516 Third Avenue
Seattle, WA 98104

Signature Report

November 14, 2018

Motion 15253

Proposed No. 2018-0543.2

Sponsors Balducci and Kohl-Welles

1 A MOTION outlining a process to develop a regional
2 mobility framework that will ensure that innovations in
3 mobility put people first, use public space equitably and
4 efficiently and are coordinated with transit policies and
5 regional funding strategies.

6 WHEREAS, in addition to an increasing reliance on public transit, the region's
7 residents are turning to mobility and technology options as an alternative to single
8 occupancy vehicles, including: walking; bicycling; telecommuting; ordering online;
9 using taxis, transportation network companies, carpools, vanpools and ride share options;
10 and experimenting with new technologies and opportunities, including bike-share
11 companies and passenger information applications, and

12 WHEREAS, in response to the growth in new mobility options, in September
13 2014 the King County council adopted Ordinance 17892, which set new regulations for
14 for-hire transportation, including taxicabs, for-hire vehicles, for-hire drivers and
15 transportation network companies, and

16 WHEREAS, to outline a shared vision in which all people have equitable
17 opportunities to thrive, in 2016, King County developed an equity and social justice
18 strategic plan, 2016-2022, and

19 WHEREAS, in June 2016, the King County council adopted Ordinance 18301,

20 which adopted updates to the Strategic Plan for Public Transportation 2011-2021 and the
21 King County Metro Service Guidelines, which identify the criteria of corridor
22 productivity, social equity and geographic value in setting transit service levels, and

23 WHEREAS, in January 2017, the King County council adopted Ordinance 18449,
24 which adopted METRO CONNECTS, a long-range transit service and capital plan that
25 outlines a vision for a seventy percent increase in bus service hours by 2040,
26 accompanied by significant capital investments in fleet, operating base capacity,
27 passenger access and facilities, transit pathways and other needs, and

28 WHEREAS, in August 2018, the King County council adopted Ordinance 18777,
29 which established the King County Metro transit department, and

30 WHEREAS, King County Metro has expressed the goal of delivering more and
31 better mobility solutions by making transit easy to use and available to all, building
32 necessary transit infrastructure, partnering with cities and other stakeholders, and
33 enabling Metro employees to do top quality work, and

34 WHEREAS, King County Metro has expressed the goal of embracing and leading
35 on innovations in the transportation market by facilitating new mobility partnerships, and

36 WHEREAS, King County has stated its commitment to increasing equity in
37 mobility by planning, developing and delivering mobility solutions that provide access to
38 opportunities for people with low or no incomes, people of color, seniors, people with
39 limited English proficiency, people with disabilities and those who commute during non-
40 peak travel periods or live or work in rural areas, and

41 WHEREAS, jurisdictions and transit agencies must develop policies around
42 mobility innovations in the context of quickly emerging technologies, and

43 WHEREAS, as these mobility policies are developed, it is essential that
44 jurisdictions and transit agencies learn from the lessons of the past, so that innovations in
45 mobility are implemented with intention, in ways that put people first and use public
46 space efficiently and equitably;

47 NOW, THEREFORE, BE IT MOVED by the Council of King County:

48 A. The Metro transit department, under the leadership of the executive and
49 working in coordination with the council, should begin a planning effort during 2019 to
50 develop a framework for the equitable implementation of innovations in transit service
51 and mobility.

52 B. The framework should include, but is not limited to:

53 1. A review of emerging technologies and local and national best practices;

54 2. Analysis of potential implications for the Metro transit department and
55 opportunities to coordinate mobility innovations with fixed-route and other services;

56 3. Coordination with the regional planning, coordination and funding efforts to
57 address the implementation of METRO CONNECTS, consistent with the strategy
58 identified in Motion XXXX (Proposed Motion 2018-0542);

59 4. Outreach and engagement with regional partners, transit riders and local
60 communities, including but not limited to low-income populations, communities of color,
61 immigrants and refugees, and limited English speaking populations;

62 5. A review of potential policies for the allocation of public space, including
63 streets, sidewalks, transit stops and station areas, focused on efficiency and equity of use;

64 6. A review of industry-wide workforce trends, including the potential
65 implications of new mobility options on labor needs, career opportunities, recruitment,

66 training and economic prospects of transportation workers;

67 7. Guiding principles that will inform the framework development work,
68 including putting people first; and

69 8. Potential revisions and updates to countywide public transit documents
70 including but not limited to the Strategic Plan for Public Transportation, the King County
71 Metro service guidelines and the METRO CONNECTS long-range plan.

72 C. Metro Transit should develop a scoping document outlining the proposed
73 coordination with the regional planning effort outlined in Motion XXXX (Proposed
74 Motion 2018-0542), as well as the timeline, expected work tasks and budget to develop
75 the mobility framework, and should file this scoping document by April 18, 2019, in the
76 form of a paper original and an electronic copy with the clerk of the council, who shall
77 retain the original and provide an electronic copy to all councilmembers, the council chief

78 of staff and the lead staff for the regional transit committee and the lead staff of the
79 mobility committee, or its successor.
80

Motion 15253 was introduced on 11/5/2018 and passed by the Metropolitan King County Council on 11/13/2018, by the following vote:

Yes: 9 - Mr. von Reichbauer, Mr. Gossett, Ms. Lambert, Mr. Dunn,
Mr. McDermott, Mr. Dembowski, Mr. Upthegrove, Ms. Kohl-Welles
and Ms. Balducci
No: 0
Excused: 0

KING COUNTY COUNCIL
KING COUNTY, WASHINGTON



J. Joseph McDermott, Chair

ATTEST:



Melani Pedroza, Clerk of the Council



Attachments: None

King County Metro Mobility Framework

**Appendix F:
Crosswalk to Motion
15253**

October 2019

Crosswalk to Requirements of Motion 15253

Section	Requirement	How Addressed
A	...begin a planning effort during 2019 to develop a framework for the equitable implementation of innovations in transit service and mobility	Innovations recommendations address potential options to equitably implement innovations. Overarching focus of Framework is on increasing equity in mobility.
B.1	A review of emerging technologies and local and national best practices	Best Practices Appendix includes a section on innovative mobility services.
B.2	Analysis of potential implications for the Metro transit department and opportunities to coordinate mobility innovations with fixed-route and other services	Innovations recommendations indicate that Metro will update its Service Guidelines to include criteria for how to pilot and evaluate innovative mobility services, as well as how to integrate these within Metro’s fixed-route service network.
B.3.	Coordination with the regional planning, coordination and funding efforts to address the implementation of METRO CONNECTS, consistent with the strategy identified in Motion 15252	Investments recommendations note the need for additional funding to implement additional service, including to achieve the METRO CONNECTS network. Next Steps section discusses regional planning efforts and the upcoming process to update and implement METRO CONNECTS.
B.4	Outreach and engagement with regional partners, transit riders and local communities, including but not limited to low-income populations, communities of color, immigrants and refugees, and limited English speaking populations	Engagement Appendix describes Metro’s outreach and engagement efforts with the named communities.
B.5	A review of potential policies for the allocation of public space, including streets, sidewalks, transit stops and station areas, focused on efficiency and equity of use	Surrounding Land use recommendations address the need for guidelines for station areas and right-of-way to increase access to transit, make streets and transit stops more accessible, and ensure efficiency and equity. Best Practices Appendix includes descriptions of station area access guidelines, as well as guiding principles for new mobility

Section	Requirement	How Addressed
		that feature equitable access and disability access.
B.6	A review of industry-wide workforce trends, including the potential implications of new mobility options on labor needs, career opportunities, recruitment, training and economic prospects of transportation workers	<p>Workforce recommendations address recruitment, training, advancement, and issues related to the workforces of Metro contractors and private providers.</p> <p>Best Practices Appendix includes a section on best practices related to the transportation workforce.</p>
B.7	Guiding principles that will inform the framework development work, including putting people first	<p>Guiding Principles section includes 10 guiding principles developed by the Equity Cabinet, and informed by the Greenlining Institute’s Mobility Equity Framework, as well as Metro’s adopted Strategic Plan for Public Transportation. The Guiding Principles include language on putting people first.</p>
B.8	Potential revisions and updates to countywide public transit documents including but not limited to the Strategic Plan for Public Transportation, the King County Metro service guidelines and the METRO CONNECTS long-range plan	<p>Next Steps section describes the process that will be used to update these policies for transmittal to the Council during 2020.</p>
C	Metro Transit should develop a scoping document... file by April 18, 2019	<p>Transmitted 2019-RPT0061</p>