JOURNEY 2050

Planning Context Summary for the Long Range Plan Update

January 31, 2022

communitytransit

Focus of the Long Range Plan Update

Journey 2050, Community Transit's Long Range Plan (LRP) update, will build on the agency's established corridor-based vision for bus service, with an expanded plan to meet transportation needs between today and 2050. During this time period, transportation in Snohomish County will undergo immense transition with new light rail connections to the region. The public transit and broader transportation landscape in Snohomish County is fundamentally changing and Community Transit wants to lead that change.

Journey 2050 will incorporate several fundamental changes in the agency's operating context since the development of the 2011 LRP. These include:

- Significant reconfiguration of Community Transit's bus route network and service level during the 2008-2012 recession
- Launch of the *Swift* Green Line and implementations of *Swift* Orange and the Blue Line Expansion in 2024
- Ongoing planning for integration with Sound Transit's Lynnwood Link Light Rail in 2024
- Sound Transit's updated ST3 plans for light rail service to Everett
- Positive outcome of Proposition 1 in 2015, which increased Community Transit's primary funding base by 33%
- COVID-19 environment and a direction for a post-pandemic system
- PSRC's adoption of VISION 2050 which charts the course for regional growth over the next 30 years

Long Range Plan (2011)

Community Transit developed a long range plan articulating a 20+ year vision for transit in Snohomish County. The plan has provided a framework for integration of transit, land use, and infrastructure planning around Transit Emphasis Corridors and the *Swift* network vision. It has been a policy roadmap guiding Community Transit service decisions and influencing planning by local and regional partner agencies.

Its success and the significant changes in service and funding since 2011 results in a need to update elements of the LRP so that it continues to be a valuable guide to the development of the multimodal transportation network.

Journey 2050 will help define Community Transit's role in the community for the next thirty years and will provide a new roadmap to guide near-term service and capital investments through the annual budget process and Transit Development Plans. Three key priorities will help shape this update and will be refined through community feedback:

- Equity - Expanding access to opportunities and services for priority populations, including people with low incomes, people who are Black, people who are Indigenous, People of Color, and other communities who have historically been underserved and underrepresented in transit planning.
- Efficiency - Balancing operational efficiency with serving as many communities as possible across Snohomish County.
- Environment - Reducing transportation greenhouse gas emissions by converting car trips to transit.

Foundational Trends

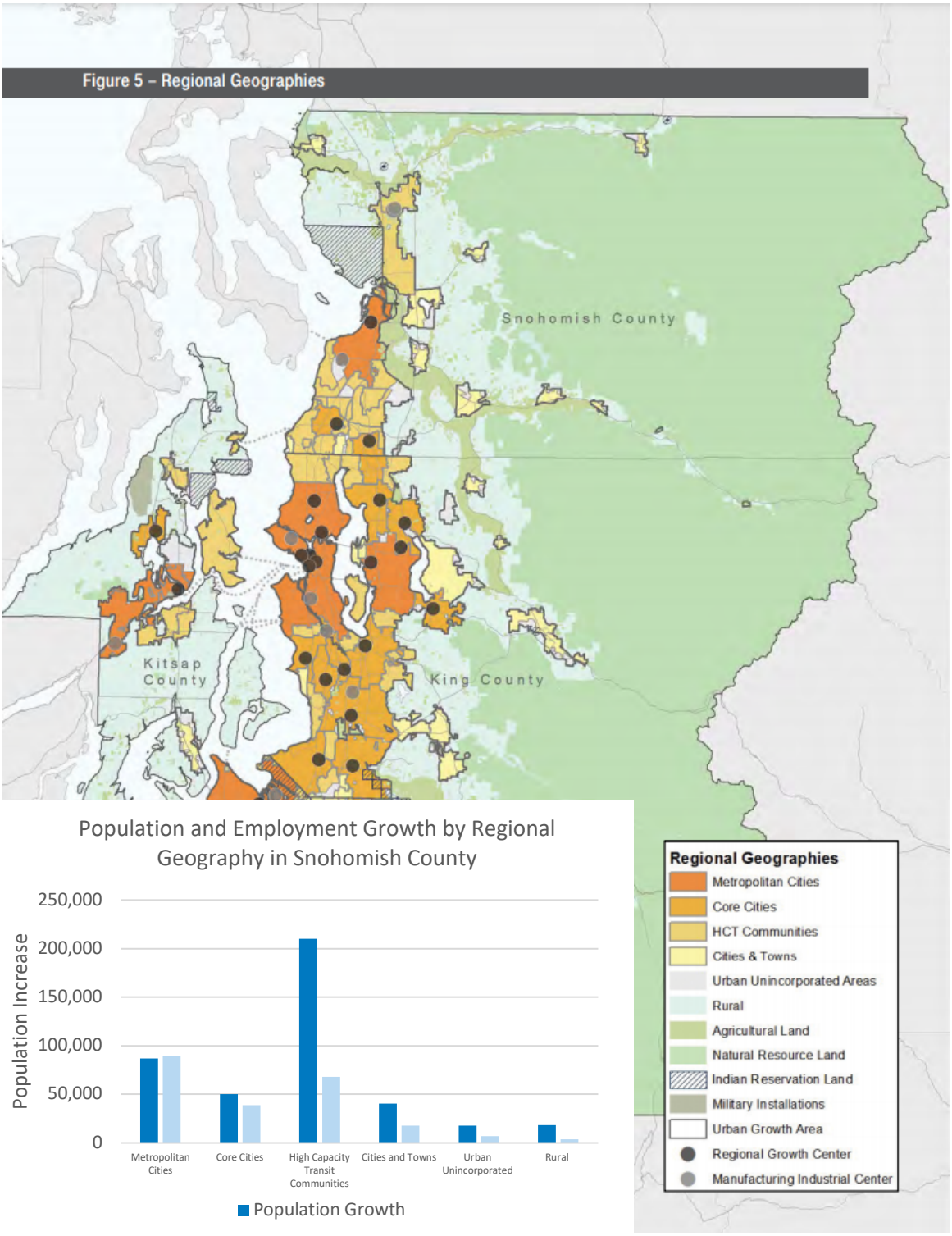
The development of Community Transit's LRP update (Journey 2050) will consider the existing and planned operating environment. These include the regional land use and transit plans in the region, current Community Transit services, and near-term planning efforts like the "Transit in 2024" project. Relevant factors informing Journey 2050 are described below.

Land Use Plans

VISION 2050

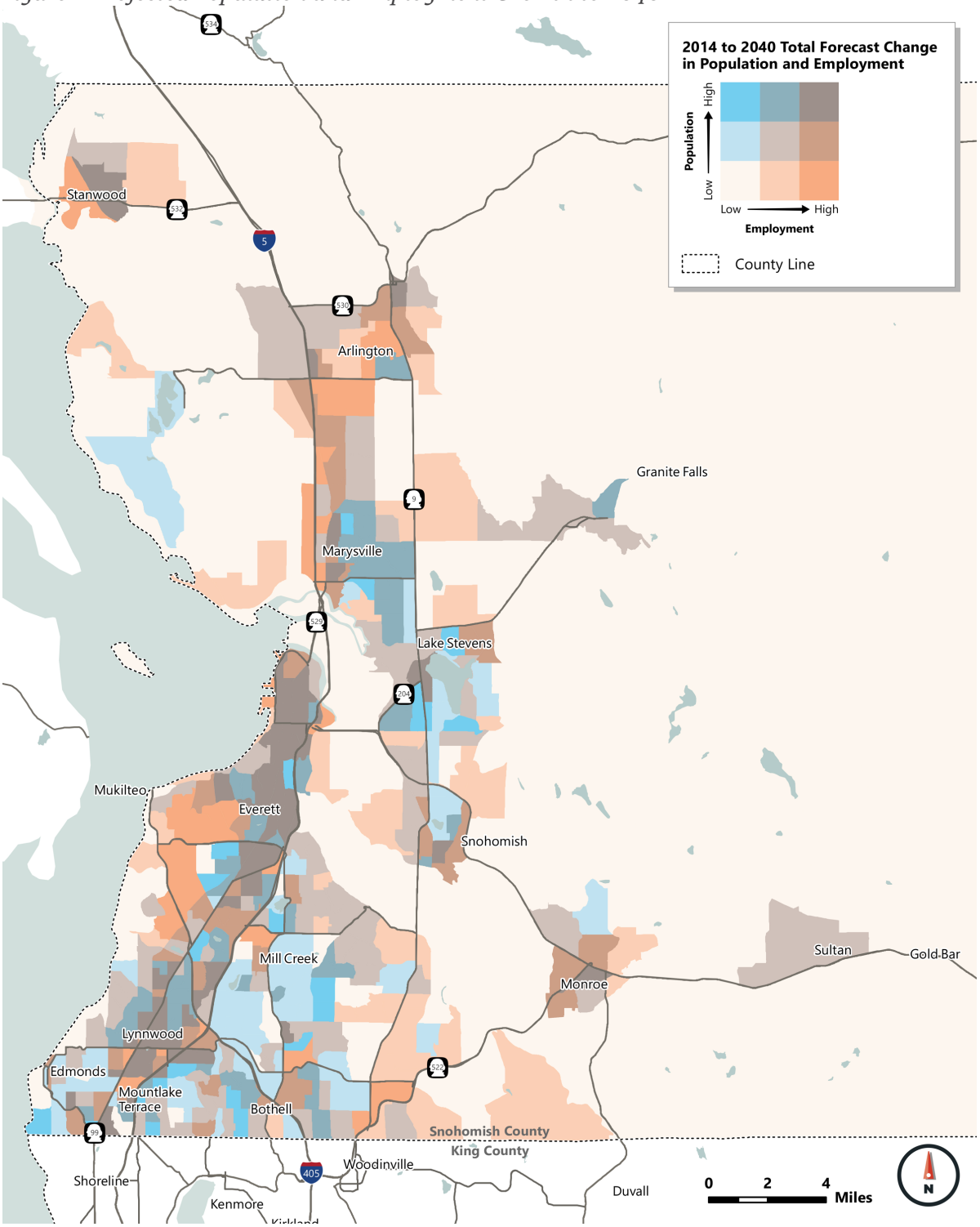
- The Puget Sound Regional Council (PSRC) develops population and employment growth forecasts for the region, and VISION 2050 projects growth by county at regional geographies (see Figure 2). PSRC calls for cities and counties to support the building of more diverse land uses to encourage and accommodate transit supportive environments.
- VISION 2050 specifically calls for the increased focus of communities of color, low- and very low-income households, and historically underserved communities.
- VISION 2050 focuses greater amounts of growth within regional growth centers and high-capacity transit station areas. By 2050, more than 2 million people will be connected by the high-capacity transit system, and transit ridership is expected to more than double.
- VISION 2050 identified Lynnwood, Canyon Park, and Everett as Regional Growth Centers in Snohomish County, with Paine Field/Boeing and Cascade identified as a Manufacturing Industrial Center.
- Land use growth projections at a more-granular scale are not available at this time as local growth allocations are still being finalized in alignment with the recently adopted VISION 2050 plan. A map of projected land use growth in the area from 2014 to 2040 is shown in Figure 2 as that time horizon is the latest data available at a smaller geographic scale.

Figure 1. PSRC Regional Geogrpahies and VISION 2050 Forecast Growth for Snohomish County.



Note: VISION 2050 has not allocated growth projections more granular than at the regional geography level. The Population and Employment growth shown on the following page is from PSRC's Land Use Vision for 2040.
Source: Fehr & Peers, 2022 and PSRC, 2020

Figure 2 Projected Population and Employment Growth to 2040



Note: The population and employment growth totals are normalized by area
Source: Fehr & Peers and PSRC

EXAMPLE LOCAL JURISDICTIONAL COMPREHENSIVE PLANS

Comprehensive Plans for jurisdictions throughout Snohomish County identify key policies and strategies for the cities to support transit while identifying the role that transit has in supporting growth within their boundaries. A summary of a few local plans and their relation to Journey 2050 are summarized below.

- Snohomish County highlights the need to support land use development and transportation facility design that support public transportation in order to increase transit use. The most recent comprehensive plan identifies "Transit Emphasis Corridors" throughout the county to connect key population, job, and activity centers with high levels of transit service and supportive land use density.
- Lynnwood's transportation system goal is to provide mobility options for residents, visitors, and commuters through a balanced transportation system. Lynnwood will work with transit providers to make transit travel an attractive option for users, operate transit efficiently, and work with developers and transit agencies to integrate facilities into new types of developments and centers. There are two Transit Oriented Development (TOD) projects that would rely on the extensions of High Capacity Transit (HCT): City Center and Alderwood Mall.
- Mukilteo supports and encourages Community Transit, Everett Transit, and Sound Transit to expand bus service to meet growing demand along the City's principal and minor arterial streets and to improve regional transportation linkages. Additionally, Mukilteo is investigating the feasibility of a remote Park-and-Ride facility to improve connections to the Waterfront.
- Edmonds seeks to actively coordinate with transit providers to maximize and promote transit opportunities within the Edmonds community while providing links to other communities both within and outside of Snohomish County. This includes promoting mixed-use developments accessible by transit, especially at designated activity centers (Health District, International District, and Gateway District) along SR 99.
- Monroe has a Park-and-Ride and designated bus stops in the city and the city strives to create a welcoming transit environment by partnering with Community Transit to enhance stop amenities and provide safe access to the transit system.
- Bothell has goals to partner with both public and private entities to develop a coordinated and efficient transportation system. The city supports the expansion of the regional transit system, including Park-and-Ride facilities, transit service frequency, and new High Capacity Transportation modes such as Bus Rapid Transit. The city supports transit for both local and through trips and envisions more local circulator service to interconnect residents with the regional transit service.
- Everett objectives include prioritizing transit service into the areas that will see the greatest growth, ensure that level of transit service is supported by future household and job density, and restructure routes to integrate with regional transit investments.

EVERETT TRANSIT LONG RANGE PLAN

- The Everett Transit Long Range Plan envisions a future transit system to support the job and population growth forecast within the City of Everett and the region over the next twenty years. By 2040, local transit service is expected to grow by 20 to 25 percent, with a focus on restructuring service to be more efficient and to leverage future light rail investments

SOUND TRANSIT 3 PLANS

- The Sound Transit 3 (ST3) system plan will improve and expand the regional mass transit system by connecting the major cities in King, Pierce and Snohomish counties with light rail, Bus Rapid Transit (BRT), express bus, and commuter rail.
- Light rail system will more than double again to 116 miles with over 80 stations while also investing in Bus Rapid Transit (BRT) in two corridors.
- Sound Transit 3 extends light rail north from the Lynwood Transit Center to downtown Everett, as well as implements Stride BRT on I-405 connecting Lynnwood to Bellevue, Renton, and Burien.
- In August 2021, the Sound Transit Board concluded a realignment process to adjust some project timelines due to financial constraints. If funding is available, the extension to Everett Station may be complete by 2037. If it is not available the extension may reach SW Everett Industrial Center by 2037, with the Everett Station segment delayed to 2041 (see Figure 3). New park-and-rides may be delayed to 2046

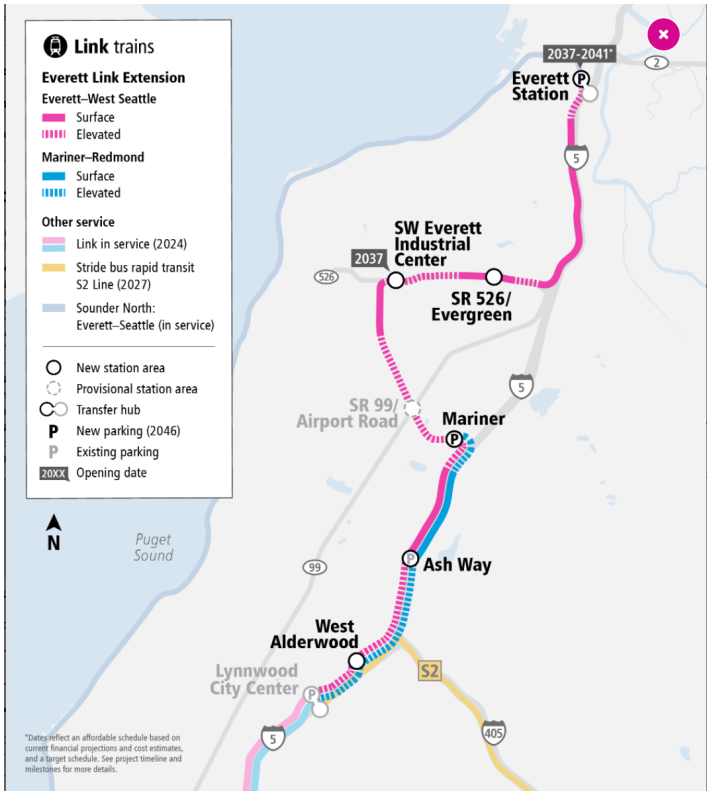


Figure 3. Sound Transit Everett Link Extension.

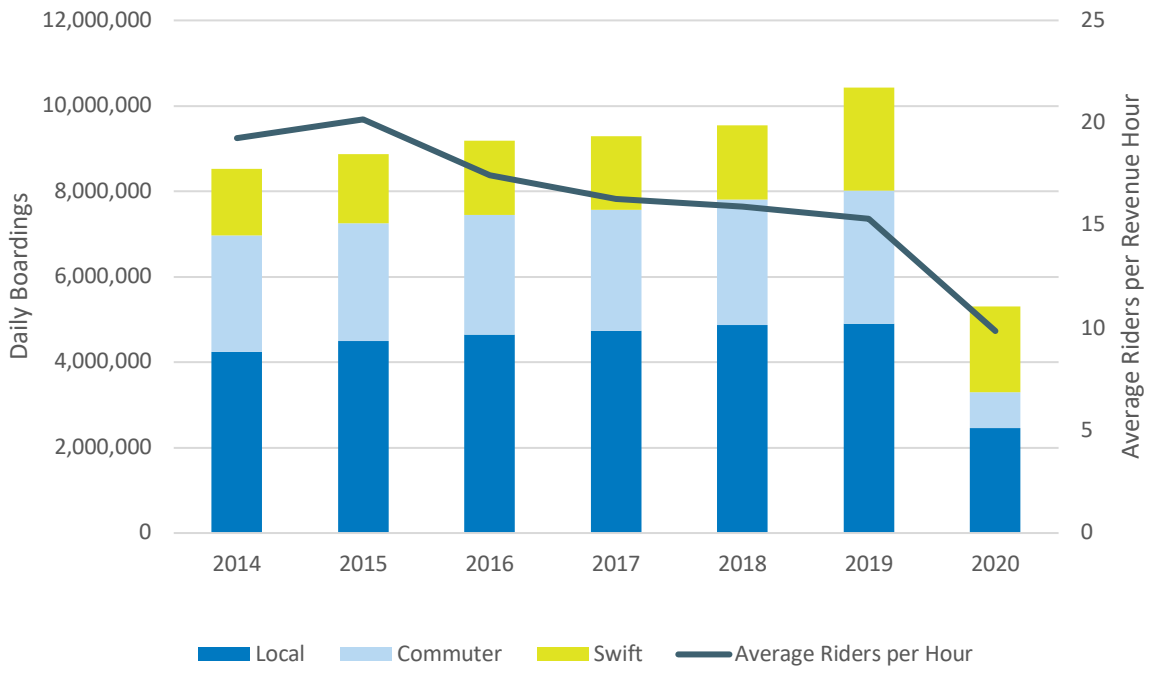
Source: Sound Transit, 2021

Current Service

Community Transit services currently include local bus, commuter bus, *Swift* BRT, paratransit, and vanpool. Recently, Community Transit implemented a major service restructure in October 2021 to integrate express service with the Northgate Link Light Rail Expansion in the City of Seattle. Current transit service and planned major transit investments are shown in Figure 7.

From 2014 through 2019, fixed-route ridership increased with a slight decrease in average riders per vehicle revenue-hour as shown in Figure 4. Before the COVID-19 pandemic, the average annual increase in ridership was approximately three percent with the largest increase due to *Swift* boardings[1]. Nationally, transit agencies observed a decrease in ridership before the 2020. The 2020 decrease in ridership for Community Transit is representative of transit service cuts and decreased ridership due to the COVID-19 pandemic (See Figure 5), similar to trends observed nationwide. Vanpool and paratransit data indicates relatively stable ridership levels through 2019 with a similar sharp decrease in 2020 due to the COVID-19 impacts on transit demand (Figure 6).

Figure 4. Annual Fixed-Route Ridership Trends (2014-2020)[2]

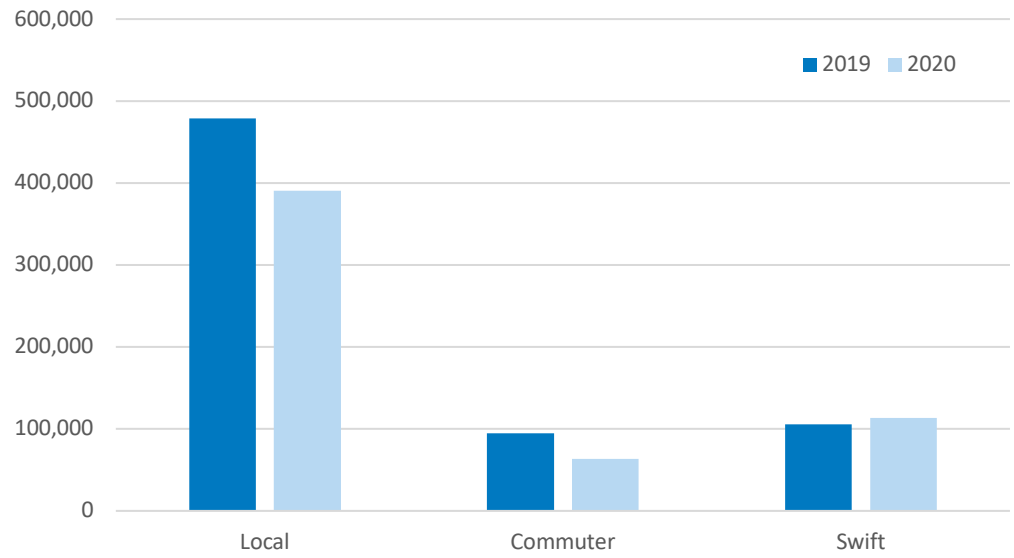


Source: Fehr & Peers and Community Transit, 2022

[1] The *Swift* Green Line launched in 2019

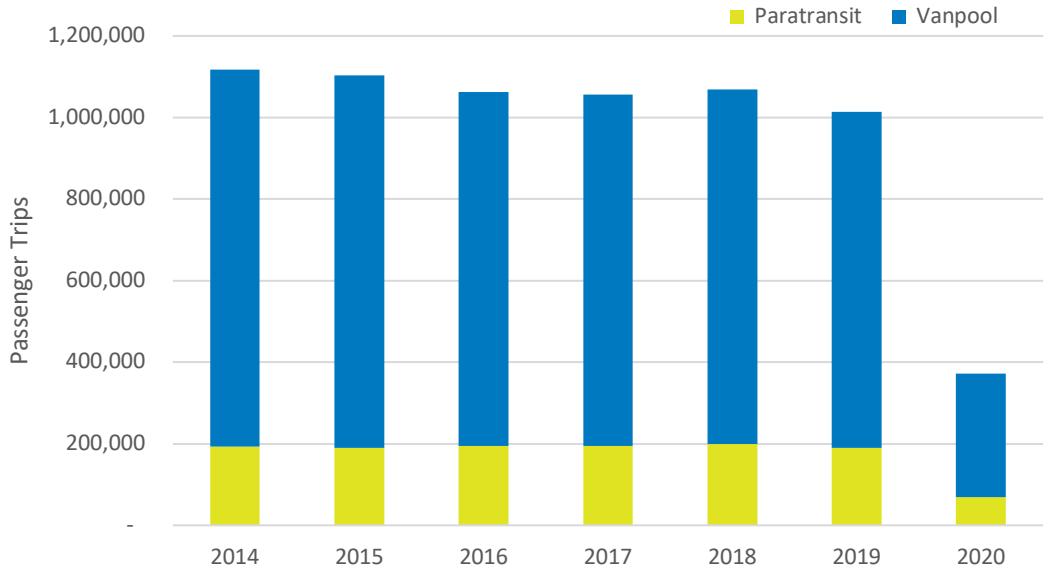
[2] Total annual ridership data for 2021 is only available through October. This chart will be updated upon completion of the 2021 ridership data compilation.

Figure 5. Annual Service Hours by Service Type



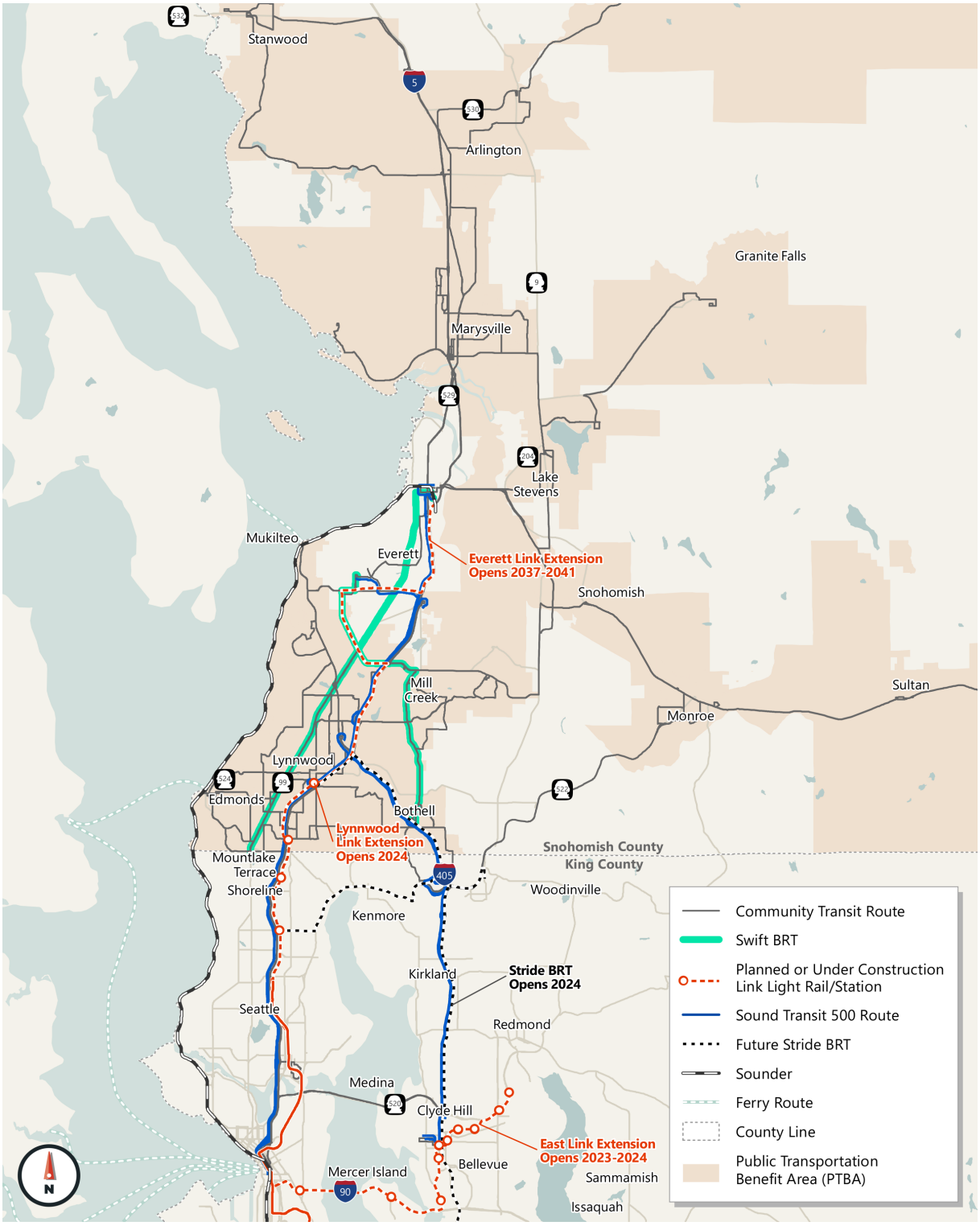
Source: Fehr & Peers and Community Transit, 2022

Figure 6. Annual Vanpool & Paratransit Trips (2010-2020)



Source: Fehr & Peers and Community Transit, 2022

Figure 7. Existing Community Transit Services



Source: Fehr & Peers, 2022.

2024 Network Planning Process Summary

In Fall 2021, Community Transit started the "Transit in 2024" project. By 2024, the Sound Transit Link light rail will extend north from Northgate to Lynnwood with new stations in Seattle, Shoreline, and Mountlake Terrace. A conceptual 2024 transit network is shown in Figure 9. By connecting buses to these stations instead of servicing the whole ride to downtown Seattle, Community Transit will be able to add more local bus service throughout Snohomish County, including frequent service to light rail.

Project goals include:

- Connect buses to light rail.
- Provide frequent service on more routes (buses every 15 minutes).
- Adjust to changing travel needs and expand service into new areas and neighborhoods.
- Focus on equitable transit access for all in our county.

The project is exploring the following four transit service priorities:

- More frequent service.
- Connections to light rail.
- Matching service to local needs.
- Service solutions by area

The decision-making process is shown in Figure 8Figure 9. Schematic 2024 Transit Network in the Transit Development Plan.

Source: Community Transit, 2021

Future changes are expected through 2026 to continue improving our local network, connections with light rail, and our new services.

. A network plan that incorporates public feedback will be finalized in Summer 2022, to be approved by Community Transit Board of Directors in December 2022. The transit network will be implemented in Spring 2023 to mid-2024, with transit service changes in operation when Link light rail to Lynnwood opens. The network implemented by 2025 will serve as the baseline network for Journey 2050to identify future network and service changes from 2025 through 2050.

Figure 8. Transit in 2024 Project Timeline.

Source: Community Transit, 2021

Figure 9. Schematic 2024 Transit Network in the Transit Development Plan.

Source: Community Transit, 2021

Emerging Trends & Opportunities

To develop the guidebook to 2050 for Community Transit, Journey 2050will consider emerging trends and opportunities that may impact or benefit the agency over the next thirty years. This includes the potential Community Transit/Everett Transit merger, technological changes, COVID-related impacts on travel patterns, and longer-term travel demand factors. This section summarizes the key trends and opportunities and highlights the potential implications for Journey 2050.

Community Transit/Everett Transit Merger

Community Transit's Board of Directors and Everett City Council agreed in December 2021 to conduct a joint study to evaluate feasibility of transit system consolidation. This includes exploring the benefits, costs, and other considerations needed for a merger. The consolidation was initially explored in the "Rethink Transit" project by Everett Transit in 2020 to identify options for funding and managing future transit in Everett.

The study will be completed in 2023 with a potential to be included in a 2023/2024 ballot initiative in Everett, with the final decision made by Everett voters. Journey 2050will consider the potential long-term impacts to operations, capital needs, and finances under both scenarios, with and without a merger.

Technological Changes

Transportation choices are rapidly changing, shifting transit riders' travel patterns and expectations. Emerging transportation trends and their associated opportunities and challenges are highlighted below.

ZERO EMISSIONS BUSES

Zero emission technology for transit fleets include battery electric, fuel cell electric and near-zero emission buses. Powering buses with electricity is different than using traditional fuels, requiring transit agencies to think about their operations in a new way, such as by installing charging infrastructure and scheduling time for daily bus charging. Some of the benefits of considering zero emission fleets include operating cost savings, reducing the agency's carbon footprint, and complying with zero-emission policies or targets.[3] Electric buses today average between 100 and 300 miles per charge, depending on topography and weather, and typically need to be charged once a day. While electric buses require a greater initial capital investment because of vehicle and charging infrastructure costs,

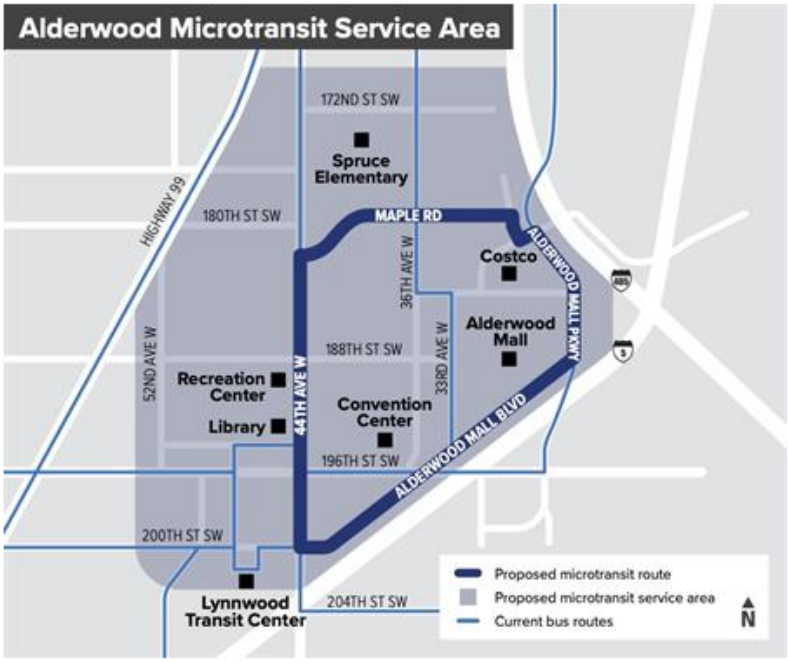
[3] APTA. 2019 Preparing to Plug In Your Bus Fleet: 10 Things to Consider

fuel and maintenance cost savings can be significant and federal funding opportunities may incentivize electric bus purchases. It is important for transit agencies to engage with the utility provider to help develop an effective charging strategy and ensure that infrastructure and bus deployment timelines are aligned.[1] Another zero emission technology under consideration by transit agencies are hydrogen fuel cell buses, which run on renewable energy, can be faster to refuel and offer greater ranges than electric vehicles, but can also have a higher capital and operational cost associated with them.[4]

Source: https://www.wired.com

MICRO-TRANSIT AND ON-DEMAND SERVICES

Micro-transit and other on-demand services can be an option to expand service availability to areas or during time periods that may not have the demand to support a traditional fixed-route vehicle. Micro-transit is an emerging service option for transit agencies that rely on small-scale, on-demand transit with flexible schedules. Similar to paratransit, micro-transit can have a relatively high cost per rider even on relatively high usage routes. Users can travel anywhere in the defined service zone on-demand, which means transit routing can be changed dynamically to connect people travelling in the same direction. Micro-transit can be a strategy to further reduce the number of single-occupancy vehicle trips by providing first-and-last-mile connections to high-frequency transit.[5] Community Transit is partnering with the City of Lynnwood to develop a micro-transit pilot in Alderwood expected to start in 2022. The flexible transit



Source: https://www.communitytransit.org/lynnwoodpilot

[4] https://www.twi-global.com/technical-knowledge/faqs/hydrogen-vs-electric-cars
[5] https://sharedusemobilitycenter.org/four-ways-microtransit-can-influence-the-future-of-public-transportation/

option will take users within the defined Alderwood micro-transit service area, will accept ORCA card or local fare for payment, and will be accessible by wheelchair.

MICRO-MOBILITY

Micro-mobility options such as bike and scooter share have become increasingly popular and have given residents new ways to get around. Micro-mobility can play a key role in providing first/last mile connections to transit. Understanding how people are using these new services and where they could best complement fixed-route transit service, while ensuring equitable access and service, presents opportunities for partnerships to better serve communities. Accessibility for all is a challenge associated with micro-mobility, including to people without a smartphone and geographically to low-income communities through bike and scooter balancing to ensure reliability for accessing the services. In addition, there are safety challenges associated with micro-mobility such as high head injury rates.[6]

Source: Fehr & Peers

AUTONOMOUS TRANSIT

Autonomous (or self-driving) vehicles have the potential to reduce crashes caused by human error, free up driver time, ease congestion and transform mass transit. When part of mass transit systems, autonomous vehicles could minimize transit operating costs, improve safety, and provide expanded service connections to areas traditionally difficult to serve through fixed-route transit. In North America, autonomous transit vehicles are limited to a few demonstration applications in highly controlled environments, such as on campuses. Autonomous vehicles must be able to safely travel through different lighting, weather, and road conditions, making public roadways difficult to navigate. Transit routes, especially Bus Rapid Transit (BRT), is seen as early applications for autonomous driving technology because only a limited set of roads must be learned by the vehicles. With regards to workforce impacts, while autonomous transit could eliminate the need for most traditional bus operators, it could require almost an equivalent workforce transitioned to new positions in customer service (including on the vehicle and at stations) and maintenance and could address some of the labor force constraints that transit agencies are currently facing.[7]

[6] https://www.austintexas.gov/sites/default/files/files/Health/Epidemiology/APH_Dockless_Electric_Scooter_Study_5-2-19.pdf
[7] https://apps.trb.org/cmsfeed/TRBNetProjectDisplay.asp?ProjectID=4658

Source: https://newsdirect.com

RIDER INFORMATION TECHNOLOGY

To seamlessly connect Community Transit riders to the new light rail stations, rider information technology will be crucial to provide information to riders regarding transfers and other trip planning activities. Transit agencies are developing pilots and programs that incorporate payment systems onto one platform and provide real-time data to deliver people to their destinations seamlessly. Some examples of rider information technology include real-time information at bus stops, wayfinding infrastructure, trip planning, mobile ticketing, on-demand trip booking, and integrated payment systems, such as the NextGen ORCA card. The next generation of ORCA will offer a mobile app to manage accounts, pay fares, and offer more retail locations to add value and buy ORCA cards.[8]

Source: https://kingcountymetro.blog

[8] https://www.soundtransit.org/blog/platform/next-generation-orca-way

COVID-Related Impacts on Travel Patterns

In March 2020, many large employers closed their offices, decreasing commute travel and shifting the need for transportation options. The COVID-19 pandemic has greatly influenced travel behavior, and the long-term impacts remain uncertain. While initial research suggests that up to 50 percent of jobs could at least be partially remote longer-term, the rate will vary by job type and income level and the shift of travel to other purposes may dramatically change when and where people need transit service in the future. Continued teleworking may reduce or shift the demand for transit, carpool and vanpool commutes, and there may be increased demand for midday, evening, and weekend travel than what was observed before the pandemic.

Source: Fehr & Peers

Longer-Term Travel Demand Factors

LABOR FORCE CONSTRAINTS

General economic trends have found a post-pandemic deficit of workers in some sectors due to factors such as fear of the virus, stimulus packages, and shifting attitudes about work[9]. Labor force shortages for transit operators and other support staff are impacting transit systems, complicating the recovery of transit in a post-pandemic world. Labor shortages impact transit service, and some bus routes could experience overcrowding. Some transit agencies have been increasing pay or offering bonuses to help attract people to work.[10] While it is difficult to accurately predict whether these near-term constraints will continue through the thirty-year time horizon of Journey 2050, other factors such as an aging population, and a decreasing national population growth rate highlight the need for transit agencies to consider a longer-term trend in labor force constraints.

[9] The Economist, 2021 https://www.economist.com/finance-and-economics/will-the-rich-worlds-worker-deficit-last/21803401
[10] Washington Post, 2021 https://www.washingtonpost.com/business/2021/12/28/worker-shortages-public-transportation/

AUTONOMOUS PERSONAL VEHICLES

The future widespread availability of autonomous personal vehicles is likely to transform the transportation environment. While autonomous vehicles have the potential to reduce crashes caused by human error, free up driver time and ease congestion, they may have the adverse effect of increasing vehicle-miles travelled, greenhouse gas emissions, and congestion. Additionally, autonomous personal vehicles may create more competition with transit because of the reduction in the perception of travel time with driving and potentially decreased parking costs in higher density areas.

Source: Fehr & Peers

FOURTH INDUSTRIAL REVOLUTION

The "Fourth Industrial Revolution" as currently defined is the blurring of the boundaries between the physical and digital words through new technologies such as artificial intelligence, virtual reality and the Internet of Things (IoT). Key trends with this economic and technological shift that may impact transit include:

- Cashless and/or cardless digital payment systems modifying fare collection strategies and reducing dwell time while improving transit service efficiency.
- Mobility-as-a-Service integrating different transport services (such as transit, micro-transit, and micro-mobility) into one digital mobility platform. This can improve efficiency and user experience but can have equity issues for people without access to smartphones or other digital devices.[11]
- 3D printing allowing businesses and households to print their own products, potentially lowering the number of deliveries and retail trips and shifting supply chain dynamics.
- Virtual reality and augmented reality that merges the digital and physical worlds, reducing or shifting travel needs for business, education, medical, or recreation purposes.[12]

AGING POPULATION

The number of Americans over 65 will more than double over the next 40 years, reaching 80 million in 2040.[13] In the Puget Sound, the share of seniors is expected to grow to 18 percent of the region's population by 2030 from 11 percent, and is expected to remain at that level through 2050.[14] Accessible transportation is critical for enabling older adults to live independently. Many older adults are outliving their ability to safely drive, making it critical for them to have access to transit and transit agency's paratransit costs could potentially rise with an aging population. Improving the accessibility of fixed-route services could more efficiently serve aging riders' needs.

[11] https://development.asia/insight/mobility-trends-fourth-industrial-revolution
[12] https://www.salesforce.com/blog/what-is-the-fourth-industrial-revolution-4ir/
[13] Urban Institute https://www.urban.org/policy-centers/cross-center-initiatives/program-retirement-policy/projects/data-warehouse/what-future-holds/us-population-aging
[14] PSRC, 2018 https://www.psrc.org/whats-happening/blog/aging-population-smaller-households-region

Next Steps in the LRP Update Process

The Journey 2050project timeline consists of three phases and is shown below. The Phase 1 visioning and market assessment includes a public outreach effort to gather feedback and guidance on key priorities and elements that should be evaluated in the Phase 2 scenario analysis. The Phase 1 outreach will also help inform the evaluation criteria for the scenarios and will guide the scenario refinement process to develop a preferred plan in Fall 2022.

Community Transit Long Range Plan Timeline