

CITY OF MERCER ISLAND

COMMUNITY PLANNING & DEVELOPMENT

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PLANNING COMMISSION

TO: Planning Commission

FROM: Adam Zack, Senior Planner Michael Lapham, KPG Psomas

DATE: July 15, 2022 Meeting Date: July 27, 2022

SUBJECT: Comprehensive Plan Update
Transportation Element – First Draft

Attachments:

- A. Draft Transportation Element showing the proposed revisions (track changes)
- B. Draft Transportation Element (clean version)

SUMMARY

The City has retained a transportation consultant, KPG Psomas, to assist with the update of the Transportation Element of the Comprehensive Plan. The consultant's scope of work is to provide a surgical update of the Transportation Element document. A more significant update to the Transportation Element and overall Comprehensive Plan is scheduled for 2026. At the July 27 meeting, staff and the consultant will provide an overview of the draft Transportation Element amendments and answer questions.

PUBLIC COMMENTS

Please submit written public comments or questions on the Transportation Element by 4:00 PM on August 31. Please send comments to comp.plan@mercerisland.gov. Public comments submitted by the deadline will be provided to the Planning Commission at their next meeting scheduled for September 28.

BACKGROUND

The Transportation Element provides policies and projects to guide the development of the Mercer Island transportation system and the City's vision for the future. The document includes the goals and policies, description of the existing transportation system, analysis of future transportation conditions, a list of recommended transportation projects, and an assessment of the City's funding capability to complete the projects.

Primary updates to the Transportation Element include incorporating changes to the transportation system since the 2018 update, adjusting the planning horizon year from 2035 to 2044, incorporating the King County 2021 Countywide Planning Policies, and updating the Recommended Improvements

list with revised cost estimates. The Recommended Improvement list was based on a future transportation needs analysis and projects from the City's Six-Year 2023-2028 Transportation Improvement Program (TIP), Pedestrian and Bicycle Facilities Plan (2010), and Transportation Impact Fee program (2022).

SCOPE OF WORK

The City Council approved a scope of work for the Comprehensive Plan periodic review with [Resolution 1621](#). The adopted scope of work for the Transportation Element primarily focuses on the technical amendments needed to maintain GMA compliance. Table 1 lists the Transportation Element tasks listed in the scope of work. The amendments in the first draft of the Transportation Element were based on the scope of work tasks listed in Table 1.

Table 1. Transportation Element Tasks from the Comprehensive Plan Scope of Work.

Task Number	Task Description	Required or Local Choice
T-1	Ensure that the 10-year traffic forecast is consistent with growth projections	Required
T-2	Update Transportation Element Section V to ensure future funding capability will be consistent with current conditions and growth projections	Required
T-3	Ensure that the multiyear transportation financing plan is consistent with updated growth projections	Required
T-4	Update the transportation inventory	Required
T-5	Add policy under Transportation Element Goal 12 to adopt the Pedestrian and Bicycle Facilities Plan by reference	Local Choice
T-6	Add policy under Transportation Element Goal 12 that establishes a timeline for reviewing the Pedestrian and Bicycle Facilities Plan	Local Choice
T-7	Amend Town Center intersections list in Transportation Element Section III Table 1	Local Choice
T-8	Adopt the streetscape manual by reference	Local Choice

PLANNING COMMISSION FEEDBACK

For your review, we have provided two drafts of the Transportation Element document. The first version shows the proposed revisions and the second is a clean version (maps have not yet been updated). While there will be time available for Q&A at the July 27 meeting, staff are requesting that Commissioners hold their feedback on the Transportation Element. Instead, staff will request the Commissioners' written input on the following by August 31, 2022:

1. Feedback on the draft Transportation Element update; and,
2. Additional information that the Planning Commission will need to form a recommendation.

Staff anticipates returning to the Planning Commission to discuss your feedback and questions on September 28, 2022. Staff welcome your questions, as well as identification of topics that you would like covered during the September 28th meeting. If you provide questions in advance, staff will attempt to address them at the meeting. Please reach out to Adam at adam.zack@mercerisland.gov or 206-275-7719.

4 TRANSPORTATION ELEMENT

I. INTRODUCTION

The ~~intent of the~~ Transportation Element ~~is to provide~~provides policies and projects to guide the development of the Mercer Island transportation system in support of the City's vision for the future. The policies guide the actions of the City, as well as the decisions related to individual developments.

The Transportation Element provides an inventory of ~~all of~~ Mercer Island's existing transportation system and includes auto, truck, bicycle, ~~bus~~transit, and pedestrian. ~~This update to the Transportation Element reflects the changes to circulation and operations related to the closure of the I-90 reversible lanes and related ramps.~~

OBJECTIVES OF THE TRANSPORTATION ELEMENT

The City of Mercer Island has three main objectives within its Transportation Element:

- Develop ~~multi-modal~~multimodal goals, policies, programs, and projects which support implementation of the Land Use Element of the Comprehensive Plan,
- Define policies and projects that encourage the safe and efficient development of the transportation system, and
- Comply with legislative requirements for ~~multi-modal~~multimodal transportation planning.

Washington State's Growth Management Act (GMA) outlines specific requirements for the Transportation Element of ~~the city's comprehensive plan~~Comprehensive Plan. It calls for a balanced approach to land use and transportation planning to ensure that a city's transportation system can support expected growth and development. In addition, it mandates that capital facilities funds be adequate to pay for any necessary improvements to the transportation system. Finally, a city must adopt specific standards for the acceptable levels of congestion on its streets; these standards are called level of service (LOS) standards.

At the federal level, transportation funds have been focused on the preservation and improvement of transportation facilities and creating a ~~multi-modal~~multimodal approach to transportation planning. For Mercer Island, transportation projects that combine improvements for auto, buses, bicycles, and pedestrians have a much greater chance of receiving state and federal grant funds than those that focus solely on widening the road to carry more single-occupant vehicles.

Other legislative requirements addressed by the Transportation Element include the King County ~~2012~~2021 Countywide Planning Policies, the 1991 Commute Trip Reduction Act, the Americans with Disabilities Act (ADA) and the 1990 federal Clean Air Act Amendments. Each of these laws emphasizes closer coordination between a jurisdiction's land use planning and its approach to transportation planning.

TRANSPORTATION TODAY

Most of Mercer Island's streets are two lane residential streets with low to moderate volumes of traffic. Island Crest Way, a north-south arterial which runs the length of the Island, is an exception because it is a principal feeder route to I-90 and the Town Center. East and West Mercer Way ring the Island and provide

two more connections with I-90. SE 40th Street and Gallagher Hill Road also carry high traffic volumes in the north-central portion of the Island. In addition to arterial streets, the local street network provides access to private residences and properties. Public transit serves the Mercer Island Park and Ride and other locations on the Island.

The new light rail station located north of the Town Center, on the I-90 corridor between 77th Avenue SE and 80th Avenue SE, provides access to destinations in Seattle, Bellevue and other cities that are part of the Sound Transit system.

Mercer Island has over 56 miles of trails, sidewalks and bicycle lanes for non-motorized travel. ~~A~~The regional ~~trail~~Mountains-to-Sound Trail runs ~~across the north end of the Island~~ along the I-90 corridor providing a convenient connection to Seattle and Bellevue for pedestrians and bicyclists.

UPCOMING CHANGES

~~The Sound Transit East Link light rail line, scheduled for completion in 2023, will change how Mercer Island residents travel and live. A new light rail station located north of the Town Center, on the I-90 corridor between 77th Avenue SE and 80th Avenue SE, will provide access to destinations in Seattle, Bellevue and other cities that are part of the Sound Transit system. As part of this change, many of the buses from the east side of Lake Washington will terminate at Mercer Island and bus riders will transfer to light rail. The existing park and ride at North Mercer Way is frequently at or near capacity, and parking demand will increase with light rail. As part of the mitigation agreement with Sound Transit, additional parking for the light rail station will be added in the Town Center.~~

~~In sum, these regional changes will likely affect travel and land use development patterns, particularly for the north end of the Island. The changes will also provide new opportunities for the Island and will support the vision and development of the Town Center.~~

LAND USE ASSUMPTIONS — THE COMPREHENSIVE PLAN

Mercer Island's Comprehensive Plan, of which the Transportation Element is a part, must be internally consistent. This means that the various requirements in each element must not contradict one another. Of particular importance is the relationship between the Transportation Element and the Land Use Element.

The transportation forecasts used in this element are based on Mercer Island growth targets for housing and employment, regional traffic forecasts by the Puget Sound Regional Council, and local traffic counts. Within the 20-year planning period, the City's growth target is ~~2,320~~1,239 new housing units and ~~1,160~~1,300 new jobs to be generated on the Island by ~~2035~~2044.

The Land Use Element defines Mercer Island's strategy for managing future growth and physical land development for the 20-year planning period. Proposed transportation improvements, policies and programs are consistent with the vision of the Land Use Element. The Land Use vision emphasizes continued reinvestment and redevelopment of the Town Center to create a mixed-use pedestrian-friendly and transit-oriented environment. Most of the forecasted housing units and jobs will be located in and around the downtown core. Outside of the Town Center, the lower density residential nature of the remainder of the Island will be maintained with low forecasted changes in household growth.

TOWN CENTER PLAN

The 1994 Town Center Plan for Mercer Island was updated in 2016 through a cooperative effort of City staff, consultants and many citizens over a two-year long process. Specific goals and policies related to transportation and mobility are in the Land Use element.

The Sound Transit Link Light Rail station located on the I-90 corridor between 77th Avenue SE and 80th Avenue SE will continue to focus multimodal development and population growth within the Town Center area.

II. TRANSPORTATION GOALS AND POLICIES

The following transportation goals and policies have been developed to guide transportation decisions for Mercer Island. They have been crafted to be consistent with all other Comprehensive Plan elements, including ~~most importantly,~~ the Land Use Element. They also serve to further articulate and implement the City's vision for the future.

GOAL 1:

Encourage the most efficient use of the transportation system through effective management of transportation demand and the transportation system.

- 1.1 Encourage measures to reduce vehicular trips using Transportation Demand Management strategies such as preferential parking for carpools/vanpools, alternative work hours, bicycle parking, and distribution of information and promotion of non-motorized travel, transit and ridesharing options.
- 1.2 Encourage businesses and residential areas to explore opportunities for shared parking and other parking management strategies.
- 1.3 Employ transportation system management (TSM) techniques to improve the efficient operation of the transportation system including, but not limited to: traffic through and turn lanes, management of street parking, signals and other traffic control measures.

GOAL 2:

Receive the maximum value and utility from the City's investments in the transportation system.

- 2.1 Place a high priority on maintaining the existing transportation facilities and the public rights-of-way.
- 2.2 ~~Continue to prioritize~~Prioritize expenditures in the transportation system recognizing the need to maintain existing transportation assets, meet adopted service level goals, and emphasize continued investments in non-motorized transportation facilities. Make transportation investments that improve economic and living conditions so that businesses and workers are retained and attracted to Mercer Island.
- 2.3 ~~Pursue opportunities for~~Encourage partnerships with nonprofit providers and the private sector ~~participation~~ in the provision, operation, and maintenance of the transportation system.

- 2.4 Coordinate street improvement projects with utilities, developers, neighborhoods, and other parties in order to minimize roadway disruptions and maintain pavement integrity.
- 2.5 Explore all available sources for transportation funding, including grants, impact fees, and other local options as authorized by the state legislature.
- 2.6 Prioritize transportation investments in the Town Center that promote mixed-use and compact development and provide ~~multi-modal~~ multimodal access to regional transit facilities.
- 2.7 Apply technologies, programs, and other strategies to optimize the use of existing infrastructure and reduce congestion, vehicle miles traveled, and greenhouse gas emissions.

GOAL 3:

Minimize negative transportation impacts on the environment.

- 3.1 Use design, construction and maintenance methods, and low impact development strategies to minimize negative health and environmental impacts related to water quality, noise, and ~~neighborhood impacts, pollution for all communities.~~
- 3.2 Work with WSDOT and other agencies to minimize impacts on Island facilities and neighborhoods from traffic congestion on regional facilities, implementation of ramp metering, and provision of transit services and facilities.
- 3.3 Construct transportation improvements with sensitivity to existing trees and vegetation.
- 3.4 Promote the expanded use of alternative fuel and zero emission vehicles by the general public with measures such as converting public and private fleets, applying incentive programs, and providing for electric vehicle charging stations.

GOAL 4:

Provide transportation choices for travelers through the provision of a complete range of transportation facilities, and services.

- 4.1 Work with King County Metro, Sound Transit and other providers to ensure adequate transit services to meet the needs of the Island, including:
 - maintain existing and encourage new public transit service on the Island;
 - maintain convenient transit connections to regional activity centers, including the Seattle CBD, Bellevue, University of Washington and other centers;
 - provide convenient transit service for travel on Mercer Island and enhance connections to regional transit stations including the future Link light rail station; and
 - continue to expand innovative transit services including demand responsive transit for the general public, subscription bus, or custom bus services.
- 4.2 Provide for and encourage non-motorized travel modes consistent with the Parks and Recreation Plan and Pedestrian and Bicycle Facilities Plan.

- 4.3 Support opportunities to facilitate transfers between different travel modes through strategies such as:
- providing small park and ride facilities throughout the Island; and
 - improving pedestrian access to transit with on and off-road pedestrian improvements.
- 4.4 Investigate opportunities for operating, constructing and/or financing park and ride lots for Mercer Island residents only.
- 4.5 Encourage site and building design that promotes pedestrian activity, ridesharing opportunities, and the use of transit.
- 4.6 Promote the development of ~~pedestrian-multimodal~~ linkages ~~between public and private development and~~to transit in the Town Center District.
- 4.7 Promote the mobility of people and goods through a ~~multi-modal~~multimodal transportation system consistent with the Pedestrian and Bicycle Facilities Plan.
- 4.8 Implement transportation programs and projects that address the needs of and promote access to opportunity for Black, Indigenous, and other People of Color, people with low and no incomes, and people with special transportation needs, while preventing and mitigating displacement of these groups.
- 4.9 Address the needs of people who do not drive, either by choice or circumstances (e.g., elderly, teens, low-income, and persons with disabilities), in the development of transportation programs and projects.

GOAL 5:

Comply with local, regional, state and federal requirements related to transportation.

- 5.1 Comply with the requirements of the federal and state Clean Air Acts, and work with other jurisdictions in the Puget Sound region to achieve conformance with the State Implementation Plan.
- 5.2 Meet the requirements of the Americans with Disabilities Act (ADA) and apply these standards to development of the transportation system.
- 5.3 Comply with the Commute Trip Reduction requirements through the continued implementation of a CTR plan.
- ~~5.4 Assist regional agencies in the revisions and implementation of the Transportation 2040 (PSRC), WSDOT Highway System Plan, and the Washington Transportation Plan 2030 and subsequent versions of these documents.~~

5.4 Advocate for state policies, actions, and capital improvement programs that promote safety, equity, and sustainability, and that are consistent with the Regional Growth Strategy, VISION 2050, and the Countywide Planning Policies.

- 5.5 Work with the participants of the Eastside Transportation Partnership (ETP) to coordinate transportation planning for the Eastside subarea.
- 5.6 Comply with state initiatives and directives related to climate change and greenhouse gas reduction. Identify implementable actions that improve air quality, reduce air pollutants and promote clean transportation technologies.

GOAL 6:

Ensure coordination between transportation and land use decisions and development.

- 6.1 Ensure compatibility between transportation facilities and services and adjacent land uses, evaluating aspects such as:
- potential impacts of transportation on adjacent land use;
 - potential impacts of land development and activities on transportation facilities and services; and
 - need for buffering and/or landscaping alongside transportation facilities.
- 6.2 Develop strategies to manage property access along arterial streets in order to preserve their function.
- 6.3 In the project development review process, evaluate transportation implications including:
- congestion and level of service;
 - connectivity of transportation facilities and services from a system perspective;
 - transit needs for travelers and for transit operators; and
 - non-motorized facilities and needs.
- 6.4 Ensure that transportation improvements, strategies and actions needed to serve new developments shall be in place at the time new development occurs or be financially committed and scheduled for completion within six years.
- 6.5 As part of a project's SEPA review, review the project's impact on transportation and require mitigation of on-site and off-site transportation impacts. The City shall mitigate cumulative impacts of SEPA-exempt projects through implementation of the Transportation Improvement Program.
- 6.6 Develop/Maintain standards and procedures for measuring the transportation impact of a proposed development and for mitigating impacts.
- 6.7 Participate in the review of development and transportation plans outside the City boundaries that may have an impact on the Island and its transportation system, and consider the effect of the City's transportation plans on other jurisdictions.

6.8 Encourage transit, bicycle and pedestrian principles in the design of projects including:

- locating structures on the site in order to facilitate transit and non-motorized travel modes;
- placing and managing on-site parking to encourage travel by modes other than single occupant vehicles;
- provision of convenient and attractive facilities for pedestrians and bicyclists; and
- provision of public easements for access and linkages to pedestrian, bicycle, and transit facilities.

6.9 Require adequate parking and other automobile facilities to meet anticipated demand generated by new development.

GOAL 7:

Provide a safe, convenient and reliable transportation system for Mercer Island.

7.1 Include requirements in the City's roadway design standards, ~~requirements~~ for facilities to safely accommodate travel by all travel modes.

7.2 Provide a safe transportation system through maintenance and upkeep of transportation facilities.

7.3 Reduce the number of deaths and serious injuries caused by vehicle collisions on Mercer Island to zero by 2030.7.34 Monitor the condition and performance of the transportation system to compare growth projections with actual conditions, assess the adequacy of transportation facilities and services, and to identify locations where improvements may become necessary.7.45 Monitor traffic collisions, citizen input/complaints, traffic violations, and traffic volumes to identify and prioritize locations for safety improvements.7.56 Where a need is demonstrated, consider signage, traffic controls, or other strategies to improve the safety of pedestrian crossings.7.67 Verify the policies, criteria and a process to determine when, and under what conditions, private roads and privately maintained roads in the public right-of-way should be accepted for public maintenance and improvement.7.78 Coordinate with local and regional emergency services to develop priority transportation corridors and develop coordinated strategies to protect and recover from disaster.7.89 ~~Emphasize Strive to create a complete, connected active~~ transportation connectivity and avoid closing streets to provide system allowing direct and safe access for active transportation modes and to minimize travel distances and emergency vehicle response times.

- 7.910 New or remodeled public ~~institution~~institutions, commercial mixed use and multifamily facilities should have sufficient storage for bicycles and other active transportation modes.

GOAL 8:

Preserve adequate levels of accessibility between Mercer Island and the rest of the region.

- 8.1 Continue to recognize I-90 as a highway of statewide significance.
- 8.2 Work with King County Metro and Sound Transit to ensure mobility and adequate levels of transit service linking Mercer Island to the rest of the region.
- 8.3 Work with WSDOT, King County Metro, and Sound Transit to ensure the provision of adequate Park and Ride capacity for Island residents.
- 8.4 Maintain an effective role in regional transportation planning, decision-making and implementation of transportation system improvements.

GOAL 9:

Balance the maintenance of quality Island neighborhoods with the needs of the Island's transportation system.

- 9.1 Strive to minimize traffic impacts to neighborhoods and foster a "pedestrian-friendly" environment.
- 9.2 Address parking overflow impacts on neighborhoods caused by major traffic generators such as schools, businesses, parks, and multifamily developments.
- 9.3 Provide facilities for pedestrians and bicyclists designed in keeping with individual neighborhood characteristics.
- 9.4 Work with King County Metro to provide public transit vehicles and services that are more in scale with the City's neighborhoods and its local road network.
- 9.5 Maintain comprehensive street design guidelines and standards that determine the appropriate function, capacity, and improvement needs for each street/roadway, while minimizing construction and neighborhood impacts.

GOAL 10:

Maintain acceptable levels of service for transportation facilities and services on Mercer Island.

- 10.1 The City of Mercer Island Level of Service (LOS) at arterial street intersections shall be a minimum of "C" within and adjacent to the Town Center and "D" for all other intersections.
- 10.2 Use the level of service standard to evaluate the performance of the transportation system and guide future system improvements and funding. Emphasize projects and programs that focus on the movement of people and provide alternatives to driving alone.

- 10.3 Implement the following strategy when vehicle capacity or funding is insufficient to maintain the LOS standard: (1) seek additional funding for capacity improvements, (2) explore alternative, lower-cost methods to meet level-of-service standards (e.g., transportation demand management program, bicycle corridor development or other strategies), (3) reduce the types or size of development, (4) restrict development approval, and (5) reevaluate the level of service standard to determine how it might be adjusted to meet land use objectives.
- 10.4 Ensure that the City's level of service policies are linked to the land use vision and comply with concurrency requirements.
- 10.5 Revise the Transportation Element if the Land Use and/or Capital Facilities Element of the Comprehensive Plan are changed to maintain a balanced and consistent plan.
- 10.6 Levels of service for pedestrian, bicycle, and transit transportation modes should be established.

GOAL 11:

Ensure parking standards support the land use policies of the Comprehensive Plan.

- 11.1 Continue to implement flexible parking requirements for Town Center development based on the type and intensity of the proposed development; site characteristics; likelihood for parking impacts to adjacent uses; opportunities for transit, carpooling and shared parking; and potential for enhancements to the pedestrian environment.
- 11.2 Maintain the current minimum parking requirements of three off-street spaces for single family residences, but may consider future code amendments that allow for the reduction of one of the spaces provided that the quality of the environment and the single family neighborhood is maintained.
- 11.3 Support business development in the downtown area by prioritizing on-street parking spaces in the Town Center for short-term parking, and encourage the development of off-street shared parking facilities for long-term parking in the Town Center.

GOAL 12:

Promote bicycle and pedestrian networks that safely access and link commercial areas, residential areas, schools, and parks within the City.

- 12.1 Maximize the safety and functionality of the bicycle system by enhancing road shoulders which are to be distinguished from designated bicycle lanes.
- 12.2 Implement the Pedestrian and Bicycle Facilities Plan to meet existing and anticipated needs for nonmotorized transportation. This Plan should be coordinated with other transportation planning efforts and periodically updated.
- 12.3 Study opportunities for use of innovative methods for pedestrians crossing streets, including use of colored and textured pavements within the City.

12.4 Strive to build community through the in-person interactions facilitated by active transportation at community connection points (schools, library, community centers, bikeshare hubs, etc.).

12.5 Prioritize areas near schools and commercial areas for a higher level of service for pedestrians, bicycles, and transit.

III. TRANSPORTATION SYSTEM—EXISTING CONDITIONS

This section describes and inventories the current ~~travel patterns and~~ transportation system serving Mercer Island, ~~including land, water and air transportation.~~ Major transportation modes serving Mercer Island include automobiles, non-motorized modes such as walking and biking, and public and school transit.

~~TRAVEL PATTERNS HOW MERCER ISLANDERS MOVE ABOUT~~

~~Mercer Island has relatively high levels of vehicle ownership and personal mobility. Approximately 70 percent of the households on Mercer Island have two or more vehicles, while less than five percent of households have no vehicle at all. Comparing the 2016 American Community Survey (US Census) data with the 2000 US Census data, a number of changes are observed.~~

~~The percent of Mercer Island residents who commute to work by driving alone has dropped from 76 percent to 72 percent, those who take a bus or carpool to work decreased from 17 percent to 14 percent, and those who work at home increased from seven percent to ten percent. The average travel time to work for Mercer Island residents is 25 minutes, which is below the regional average of 32 minutes.~~

~~A November 2013 WSDOT Mercer Island Travel Survey found that 55 percent of commute trips originating on the Island traveled west towards Seattle and 45 percent traveled east towards Bellevue.~~

ROADWAY NETWORK

Mercer Island has over 75 miles of public roads. Interstate 90 (I-90) runs east-west across the northern end of Mercer Island, providing the only road and transit connection to the rest of the Puget Sound region. Access to the I-90 on-ramps and off-ramps is provided at West Mercer Way, 76th Avenue SE, 77th Avenue SE, 80th Avenue SE, Island Crest Way, and East Mercer Way.

Most of the road network is comprised of two-lane local streets serving the Island's residential areas. Arterial roadways comprise approximately 25 miles, or one-third, of the system. In addition to public roads, there are numerous private roads serving individual neighborhoods and developments on the Island.

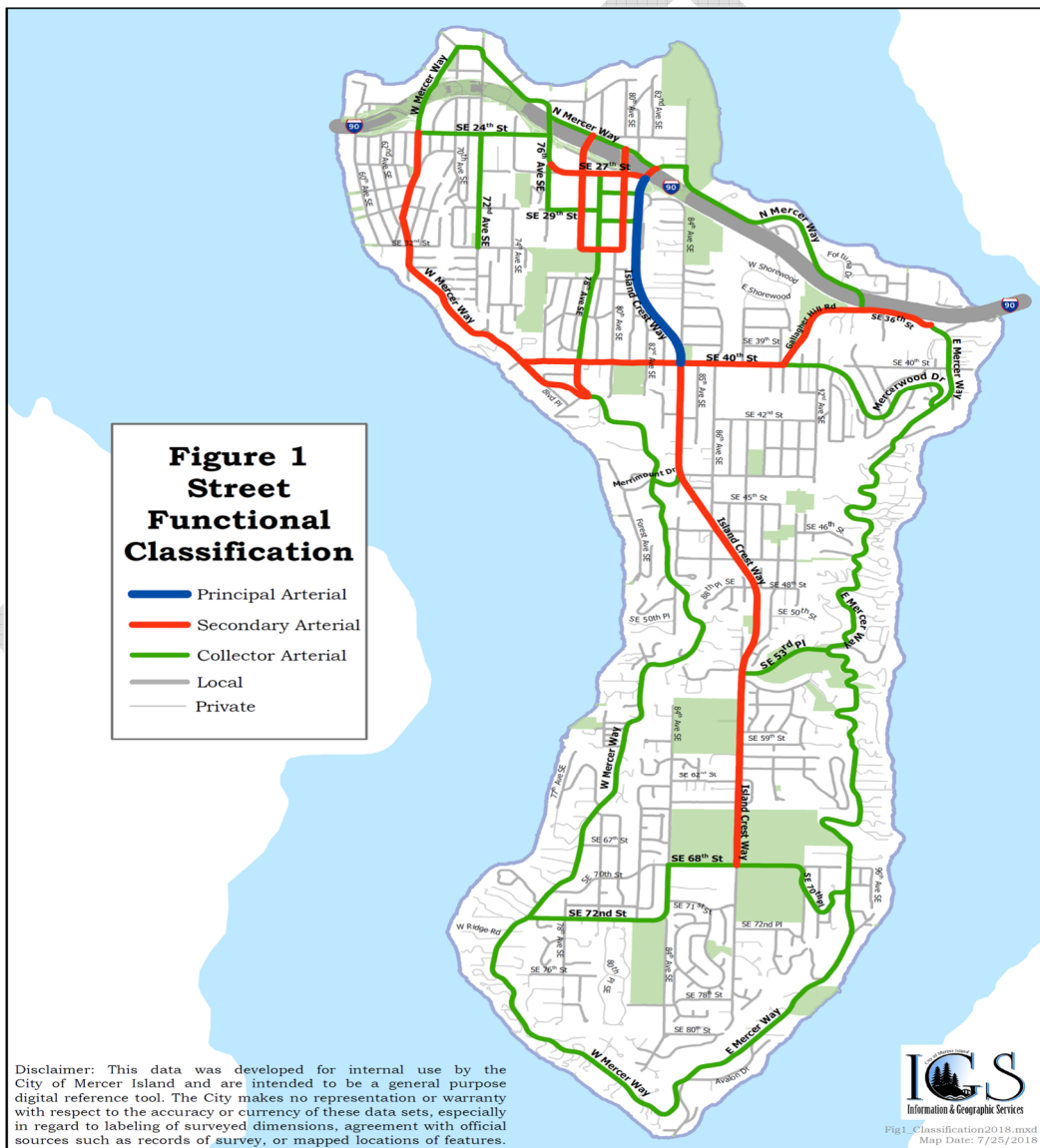
Roadways on the Island are classified into different categories according to their purpose and physical characteristics. The categories are:

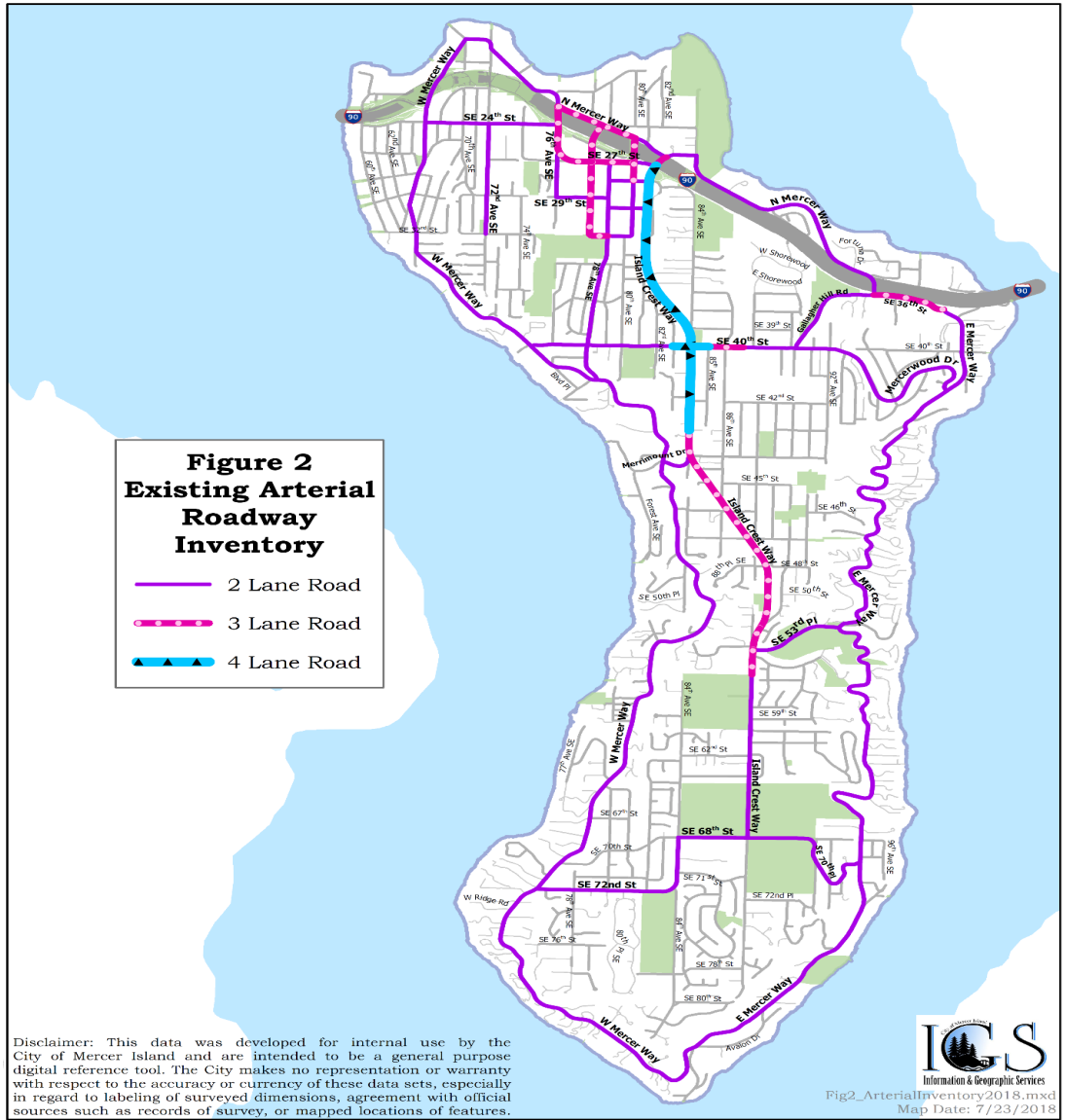
- **Principal arterials** carry the highest volumes of traffic and provide the best mobility in the roadway network. These roads generally have higher speed limits, higher traffic volumes, and limit access to adjacent land uses.
- **Secondary arterials** connect with and augment principal arterials and generally have a higher degree of access to adjacent land, lower traffic volumes and lower travel speeds.

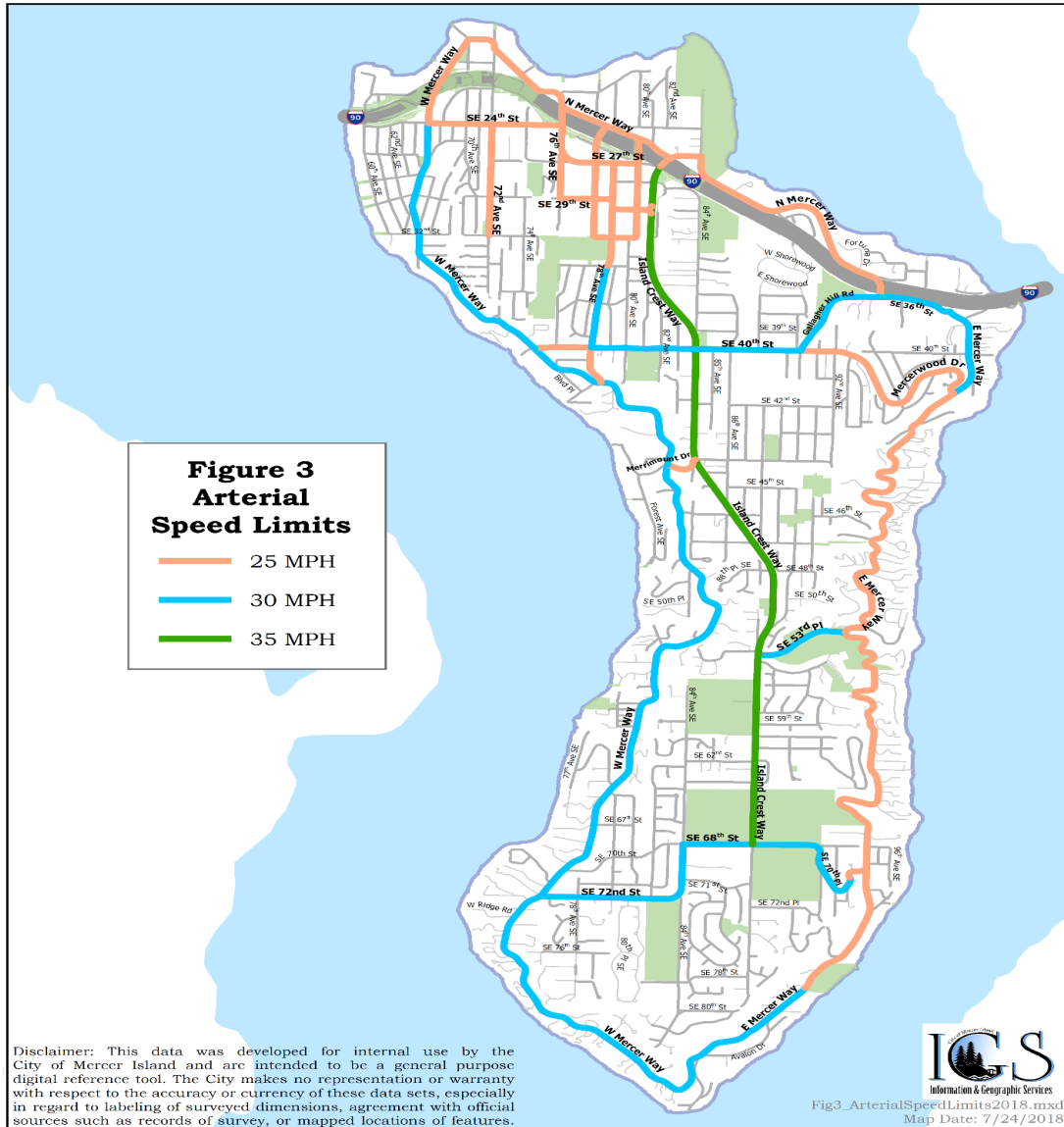
- **Collector arterials** provide for movement within neighborhoods, connecting to secondary and principal arterials; and typically have low traffic volumes and carry little through traffic.
- **Local streets** provide for direct access to abutting properties and carry low volumes of traffic at low travel speeds. Local streets are usually not intended for through traffic.

Individual streets are assigned classifications based on several criteria, including the type of travel to be served, the role of the street in the overall street network and transportation system, physical characteristics, traffic characteristics, and adjacent land uses. Based on City staff recommendations, the City Council periodically reviews and updates the street classification system, its criteria and specific street classification designations.

Figure 1 shows the street functional classifications. Figure 2 shows the number of travel lanes and Figure 3 shows the posted speed limits of arterial roadways.







LEVEL OF SERVICE STANDARDS

Level of Service (LOS) is a measurement of the quality of traffic flow and congestion at intersections and roadways. LOS is defined by the amount of delay experienced by vehicles traveling through an intersection or on a roadway. LOS is based on an A-F scale with LOS A representing little or no delay and LOS F representing very long delays.

Under the Growth Management Act, each local jurisdiction is required to establish a minimum threshold of performance for its arterial roadways. Cities use this standard to identify specific actions to maintain the adopted LOS standard. The City of Mercer Island has established its Level of Service standard at intersections of two arterial streets as LOS C within and adjacent to the Town Center and LOS D elsewhere. This standard applies to the operation during either the AM or PM peak periods. The intersection of SE 53rd Place/Island Crest Way does not have sufficient volumes on SE 53rd Street to warrant a signal and is exempt from the LOS D standard until traffic volumes increase and signal warrants are met.

To be consistent with the WSDOT standard for I-90 and its ramp intersections, the City will accept LOS D at those intersections. I-90 is designated as a Highway of Statewide Significance under RCW 47.06.140.

TRAFFIC OPERATIONS

For transportation planning purposes, traffic operations are typically analyzed during the busiest hour of the street system, when traffic volumes are at peak levels. On Mercer Island, the peak hour of traffic operations typically corresponds with the afternoon commute, which falls between 4:00 PM and 6:00 PM in the afternoon (PM peak hour). Traffic counts were collected and analyzed at 39 intersections throughout the Island.

Select intersections for the AM peak hour were counted and analyzed to provide an understanding of the transportation system during the morning commute, which typically peaks between 7:30 AM and 8:30 AM.

For this update, select traffic counts were conducted in 2022 to compare 2022 and 2018 AM and PM peak hour volumes. Results of the analysis found no growth in the last four years. This is primarily due to the COVID pandemic and advances in technology which have increased the number of people working from home. It was determined that the 2018 counts continue to be accurate for planning purposes.

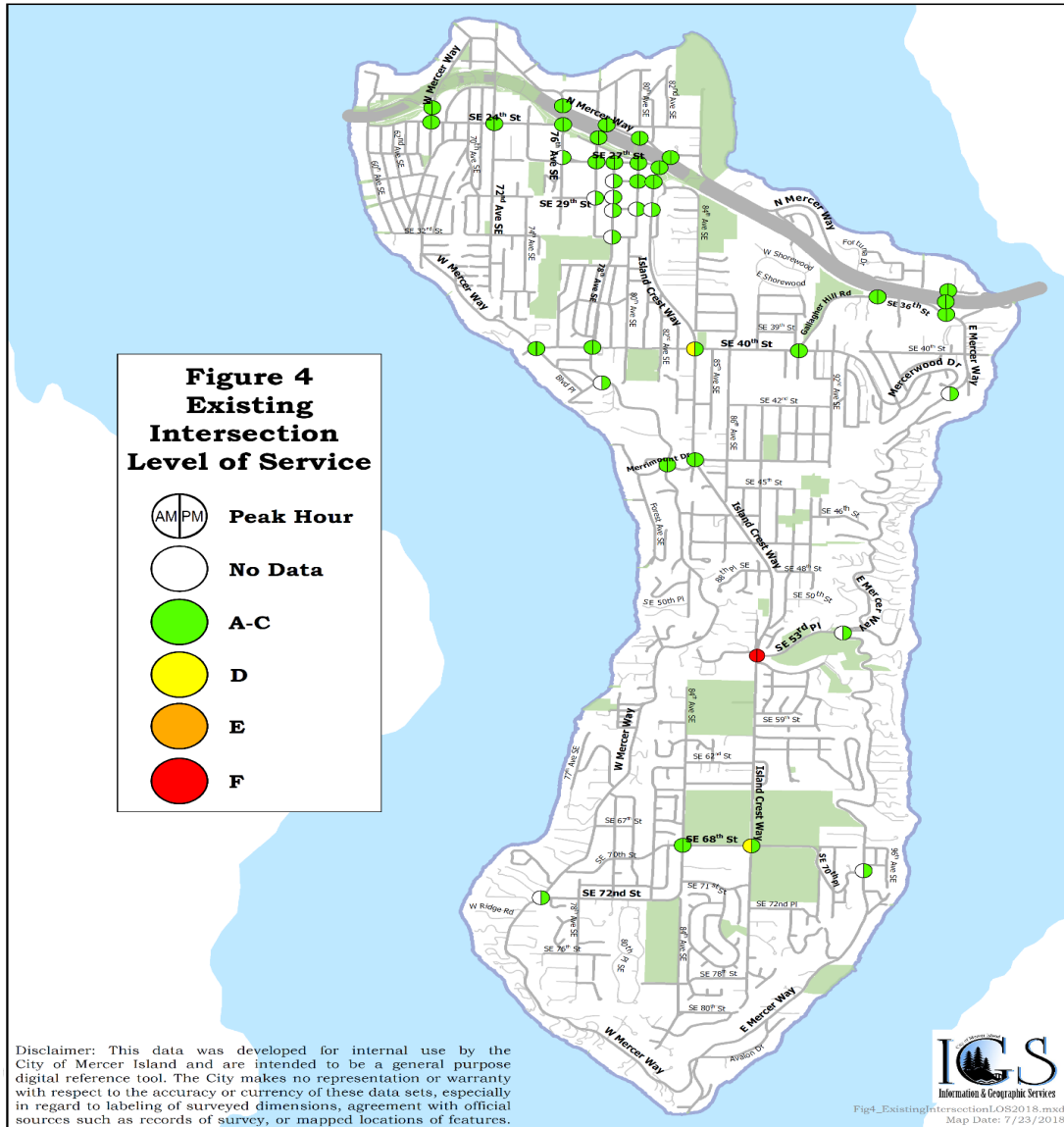
Table 1 and Figure 4 show the AM and PM peak hour operations for each of the study intersections. Outside of the Town Center, the analysis shows that during the AM and PM peak hour, all intersections operate at LOS D or better for existing conditions, except the intersection of SE 53rd Place/Island Crest Way operates at LOS F during the morning and afternoon peak hours.

Within the Town Center, where the LOS C standard applies, all intersections operate within this standard during the morning and afternoon peak hours.

Table 1. 2018 Existing Intersection Operations

Intersection	AM Peak Hour	PM Peak Hour
Town Center Intersections (LOS C Standard)		
SE 24th St/76th Ave SE	B	B
N Mercer Way/77th Ave SE	A	A
N Mercer Way/Park & Ride/80th Ave SE	C	C
SE 27th St/76th Ave SE	—	A
SE 27th St/77th Ave SE	B	B
SE 27th St/78th Ave SE	A	B
SE 27th St/80th Ave SE	B	C
SE 28th St/78th Ave SE	—	A
SE 28th St/80th Ave SE	B	B
SE 28th St/Island Crest Way	B	B
SE 29th St/77th Ave SE	—	B
SE 29th St/78th Ave SE	—	B
SE 30th St/78th Ave SE	—	B
SE 30th St/80th Ave SE	—	A
SE 30th St/Island Crest Way	—	B
SE 32nd St/78th Ave SE	—	B

WSDOT Intersections (LOS D Standard)		
I-90 EB off-ramp/I-90 WB on-ramp/W Mercer Way	B	B
I-90 WB on-ramp/N Mercer Way/76th Ave SE	A	A
I-90 EB off-ramp/77th Ave SE	B	B
I-90 WB off-ramp/N Mercer Way/Island Crest Way	D	C
I-90 EB on-ramp/SE 27th St/Island Crest Way	B	B
I-90 WB ramps/100th Ave SE	B	A
I-90 EB off-ramp/100th Ave SE/E Mercer Way	B	B
I-90 EB on-ramp/SE 36th St/E Mercer Way	B	B
Outside of Town Center Intersections (LOS D Standard)		
SE 24th St/W Mercer Way	B	B
SE 24th St/72nd Ave SE	A	B
SE 36th St/N Mercer Way	C	C
SE 40th St/W Mercer Way	B	A
SE 40th St/78th Ave SE	A	B
SE 40th St/Island Crest Way	D	C
SE 40th St/SE Gallagher Hill Rd	C	B
Mercerwood Dr/E Mercer Way	—	A
W Mercer Way/78th Ave SE	—	B
Merrimount Dr/W Mercer Way	B	B
Merrimount Dr/Island Crest Way	C	C
SE 53rd Place/Island Crest Way	F	F
SE 53rd Place/E Mercer Way	—	A
SE 68th St/84th Ave SE	C	B
SE 68th St/Island Crest Way	D	C
SE 70th Place/E Mercer Way	—	A
SE 72nd St/W Mercer Way	—	A



PARKING

Most parking in the City is provided by off-street parking lots, along residential access streets, or by on-street spaces in select areas of the Town Center.

In 2001, the City implemented a permit parking program for on-street parking in the Town Center in response to overflow conditions at the Mercer Island Park and Ride lot. This program preserves selected public on-street parking spaces for Mercer Island resident use, between the hours of 7:00 AM and 9:00 AM, Monday through Friday. All Mercer Island residents are eligible for a Town Center District permit which will allow them to park on Town Center streets during the specified hours.

An additional permit parking program was developed for residential streets north of the park and ride lot on North Mercer Way. This program only allows residents of the area to park on City streets between 7:00 AM and 4:00 PM, weekdays.

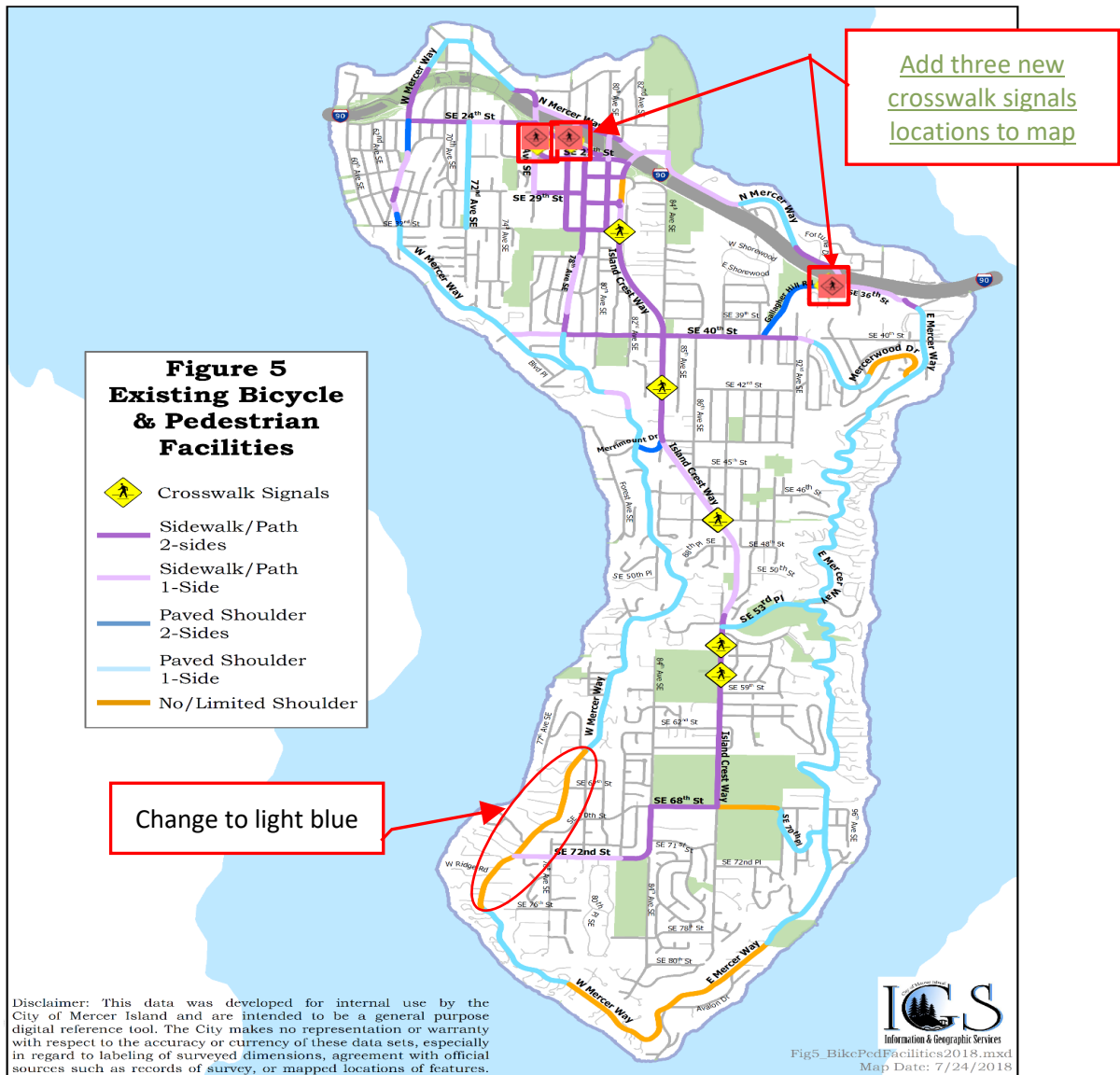
BICYCLE AND PEDESTRIAN FACILITIES

Bicycle and pedestrian facilities are a valuable asset for the residents of Mercer Island. These facilities are used for basic transportation, recreation, going to and from schools, and the facilities contribute to our community's quality of life. In 1996, the City developed a Pedestrian and Bicycle Facilities Plan to provide a network of bicycle and pedestrian facilities. The plan focused on encouraging non-motorized travel and improving the safety of routes near the Island's elementary schools. Of the 47 projects identified in the plan, 38 of the projects were either fully or partially completed during the first 12 years of the plan.

A 2010 update to the plan included vision and guiding principles, goals and policies, an existing and future network, a list of completed projects, revised facility design standards, and a prioritized list of projects. The plan emphasizes further development of safe routes to schools, completion of missing connections, and application of design guidelines.

A regional trail runs across the north end of the Island along the I-90 corridor providing a convenient connection to Seattle and Bellevue for pedestrians and bicyclists. The majority of streets in the Town Center include sidewalks. In addition, there are sidewalks near schools and select streets. Throughout the Island there are paved and unpaved shoulders and multiuse trails that provide for pedestrian mobility.

The bicycle network is made up of designated bicycle facilities including bicycle lanes and sharrows, and shared non-motorized facilities including shared use pathways, off-road trails, and paved shoulder areas. Figure 5 shows the pedestrian and bicycle facilities on the Island's arterial network.



PUBLIC TRANSPORTATION

The King County [Metro Transit](#) Department of Metropolitan Services (Metro) and the regional transit agency, Sound Transit, provide public transportation services for Mercer Island and throughout King County. There are four major types of service offered on the Island: local fixed route service, regional express service, custom bus service, and access service.

Local fixed route service operates on the arterial roadway system, and provides public transit service connecting residential and activity areas.

Regional express service, which also operates on fixed routes, is oriented toward peak hour commuter trips between the Mercer Island Park and Ride and major employment and activity centers off the Island. Sound Transit and Metro provide express service west and east along I-90 into Seattle and Bellevue.

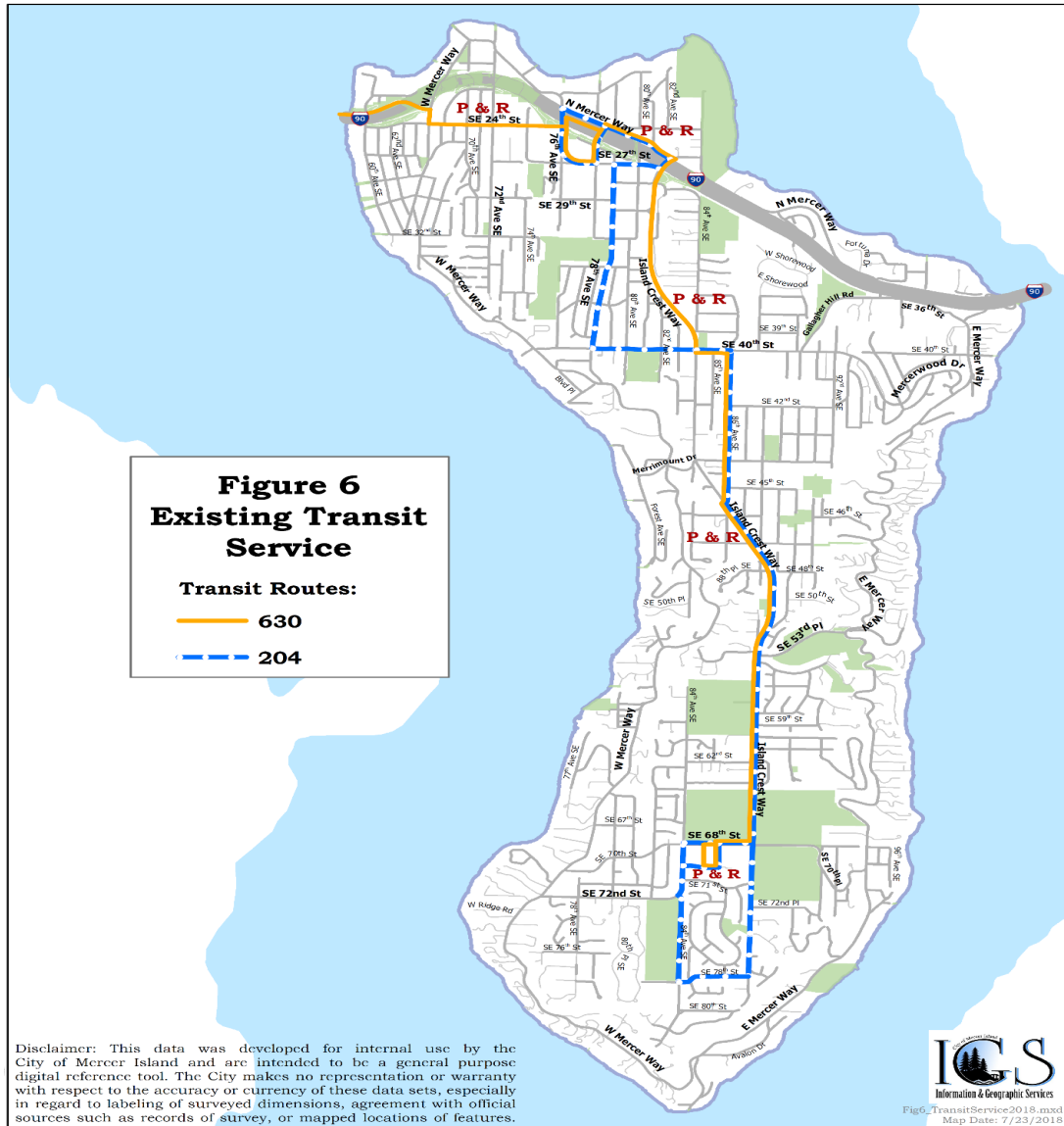
Custom bus service includes specially designed routes to serve specific travel markets, such as major employers, private schools, or other special destinations. These services are typically provided during peak commute hours, and operate on fixed routes with limited stops. Custom bus service is currently provided between the Mercer Island Park and Ride and Lakeside School and University Prep in Seattle.

Access service provides door-to-door transportation to elderly and special needs populations who have limited ability to use public transit. Access covers trips within the King County Metro transit service area.

Figure 6 shows the current transit routes serving the Island. On Mercer Island, there are two routes that circulate throughout the City (Metro routes 204 and 630). At the Mercer Island Park and Ride, Sound Transit routes 550 and 554 connect Mercer Island to Seattle, Bellevue, and Issaquah; and Metro route 216 provides service to Redmond and Seattle.

Route 204 provides service between the Mercer Island Park and Ride lot and the Mercer Village Center. This route travels on 78th Avenue SE, SE 40th Street, 86th Avenue SE, Island Crest Way, and SE 68th Street to the Mercer Village Center. ~~The route operates every 30–60 minutes from approximately 6:00 AM to 7:00 PM on weekdays. Metro plans to increase this route's service frequency in 2019, including additional service on Saturdays.~~

Route 630 is a community shuttle which provides service between downtown Seattle and the Mercer Village Center. ~~It provides five trips toward downtown Seattle in the morning and five trips toward Mercer Village in the evening.~~



PARK AND RIDE

The Mercer Island Park and Ride is located north of I-90 on N Mercer Way near Mercer Island's Town Center. The Park and Ride has 447 spaces and is served by Metro and Sound Transit buses.

According to the Fourth Quarter 2017 Park and Ride Utilization Report prepared by King County, the Mercer Island lot is typically fully occupied during weekdays. A number of the users of this lot do not reside on the Island.

To supplement park and ride capacity on the Island, Metro has leased four private parking lots for use as park and ride lots, located at the Mercer Island Presbyterian Church, Mercer Island United Methodist Church, Congregational Church of Mercer Island and at the Mercer Village Center. These lots are described in Table 2. Together, they provide an additional 81 parking spaces for use by Island residents.

Table 2: Mercer Island Park and Ride Locations and Capacities

Lot	Location	Capacity	Cars Parked	% Spaces Occupied
Mercer Island Park and Ride	8000 N Mercer Way	447	447	100%
Mercer Island Presbyterian Church	3605 84th Ave SE	14	13	93%
United Methodist Church	70th Ave SE & SE 24th St-	18	17	96%
Mercer Village Center	84th Ave SE & SE 68th St-	21	7	32%
Congregational Church of Mercer Island	4545 Island Crest Way	28	3	11%

Source: Metro Transit P&R Utilization Report Fourth Quarter 2017.

SCHOOL TRANSPORTATION

The Mercer Island School District (MISD) provides bus transportation for public kindergarten through 12th grade students on Mercer Island. The MISD operates approximately 40 scheduled bus routes during the morning and afternoon. In addition, the District provides free Orca cards to high school students who live more than one mile from Mercer Island High School and who neither have a parking pass nor are assigned to a district bus.

RAIL SERVICES & FACILITIES

There are no railroad lines or facilities on Mercer Island. In the region, the Burlington Northern Railroad and Union Pacific Railroad companies provide freight rail service between Seattle, Tacoma, Everett, and other areas of Puget Sound, connecting with intrastate, interstate and international rail lines. Amtrak provides scheduled interstate passenger rail service from Seattle to California and Chicago. Major centers in Washington served by these interstate passenger rail routes include Tacoma, Olympia, Vancouver, Everett, Wenatchee, and Spokane.

AIR TRANSPORTATION

Mercer Island does not have any air transportation facilities or services. Scheduled and chartered passenger and freight air services are provided at Seattle-Tacoma International Airport in SeaTac, and at the King County International Airport in south Seattle.

WATER TRANSPORTATION

Mercer Island does not have any public water transportation services. The City's public boat launch is on the east side of the Island, off of East Mercer Way, under the East Channel Bridge.

IV. TRANSPORTATION SYSTEM—FUTURE NEEDS

This section describes the future transportation conditions and analysis used to identify future transportation needs and improvements.

FUTURE TRAVEL DEMAND

The future traffic volumes were forecast for the year ~~2035~~2044 based on the City's land use and zoning, as well as the housing and employment growth targets, as identified in the 2021 King County Urban Growth Capacity Buildable Lands (2014) report. More than 70 percent of new households and 76 percent of new jobs are forecasted to occur within the Town Center.

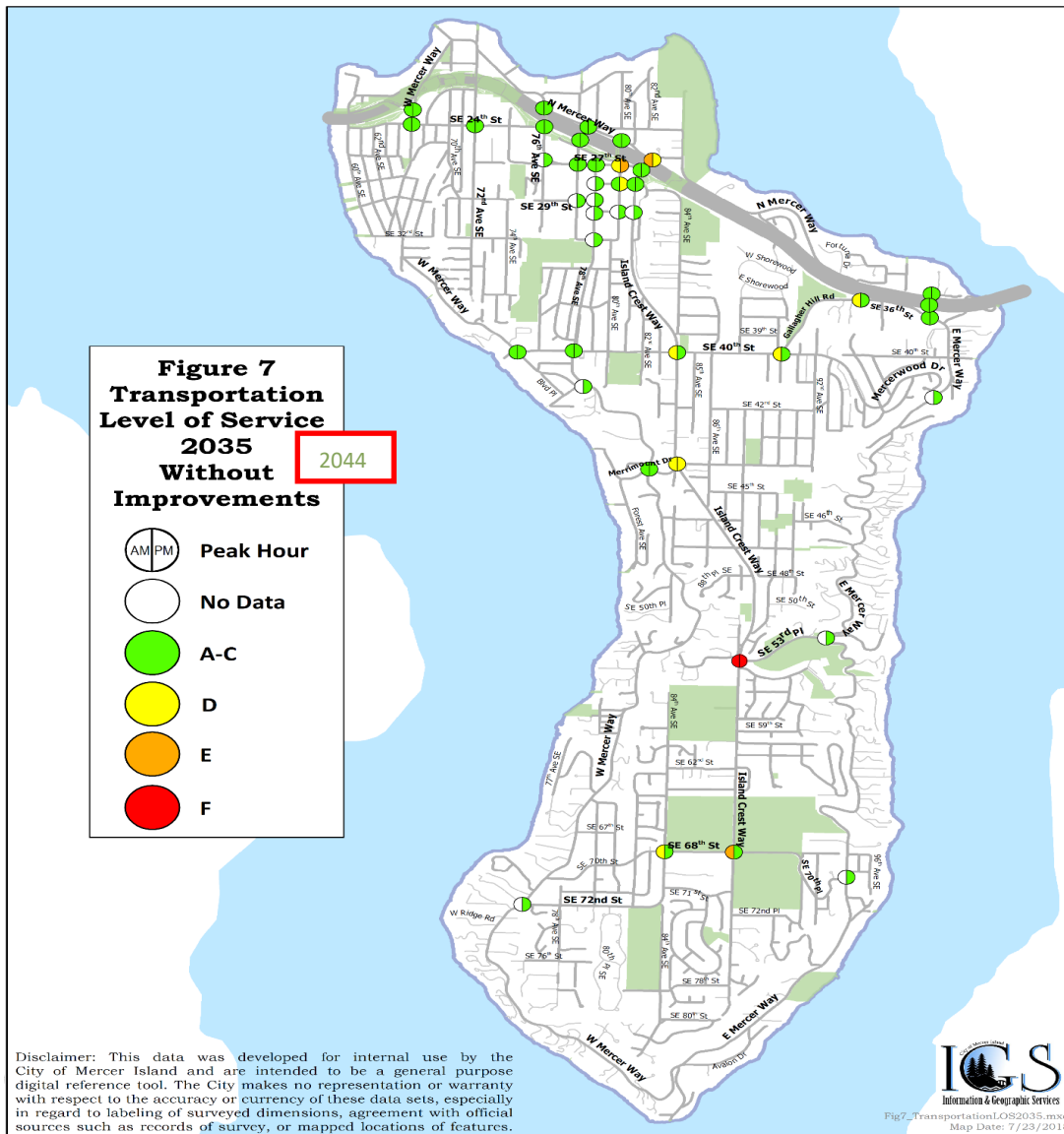
~~The analysis assumes the opening of the East Link light rail line in 2023, which will result in~~ provides an additional travel option between the Town Center and regional destinations.

Town Center traffic growth reflects the higher potential for pedestrian and transit trips. Overall, the traffic growth in the Town Center is forecast to increase by ~~an average of 28 percent between 2018—2035~~2024 and 2044, an annual growth rate of 1.54 percent. For areas outside the Town Center, traffic growth is expected to be lower with approximately ten percent growth between ~~2018—2035~~2024 and 2044, an annual growth rate of 0.5 percent. The resulting forecasted traffic volumes directly reflect the anticipated land use, housing, and employment growth assumptions for the Island.

TRAFFIC OPERATIONS WITHOUT IMPROVEMENTS

The ~~2035~~2044 traffic analysis uses the forecasted growth in traffic and planned changes to the regional transportation system ~~(light rail station and associated I-90 projects)~~. Figure 7 shows the future traffic operations at the study intersections without any changes to roadway capacity on Mercer Island.

Results of the ~~2035~~2044 traffic operations analysis show that five intersections would operate below the LOS standards by ~~2035~~2044 if improvements are not made to the intersections. In the Town Center, the two intersections of SE 27th Street/80th Avenue SE and SE 28th Street/80th Avenue SE, would operate at LOS D or worse during either the AM or PM peak hours, without improvements. Outside of the Town Center, the intersections of SE 53rd Place/Island Crest Way and SE 68th Street/Island Crest Way would operate below the LOS D standard during either the AM or PM peak hours. The WSDOT-controlled intersection at the I-90 westbound off-ramp/N Mercer Way/Island Crest Way intersection would operate at LOS E during ~~2035~~2044 AM peak hour. The City will work with the WSDOT to explore improvements at this intersection.



RECOMMENDED IMPROVEMENTS

In addition to the projects identified in the City's [2019—2024 Six-Year 2023 – 2028 Transportation Improvement Program \(TIP₇\)](#), a future transportation needs analysis recommended additional projects based on the long-range mobility and safety needs through [2035-2044](#). These include [projects from the City's Transportation Impact Fee program](#) and select projects from the City's Pedestrian and Bicycle Facilities Plan. Figure 8 shows the locations of the recommended improvement projects. Table 3 provides a map identification, describes the location and details for each of the projects, and estimates a project cost. The table is divided into two main categories of project types:

Non-Motorized Projects — The listed projects include new crosswalk improvements and pedestrian and bicycle facilities. These include projects from the City's Pedestrian and Bicycle Facilities Plan that connect residential areas to schools, parks, regional transit and other destinations.

Intersection/Road Projects — These projects increase the capacity and safety of an intersection or roadway segment. The projects include the maintenance of existing roadway segments to ensure that the City's current street system is maintained.

The recommended improvements identify a total of approximately \$48.360 million of transportation improvements over the next 20 years. About 62.50 percent (\$30.0 million) of the total is for street preservation and resurfacing projects to maintain the existing street system. Another 24.37 percent (\$10.422 million) is for non-motorized system improvements. About 11.13 percent (\$5.48 million) is for traffic operational intersection and roadway improvements at intersections that maintain LOS. Approximately five percent (\$2.5 million) is for vehicle and non-motorized improvements that enhance access to the future light rail station and address issues related to the closure of the I-90 center roadway.

TRAFFIC OPERATIONS WITH RECOMMENDED IMPROVEMENTS

With the recommended improvements, the intersection operations will meet the City's LOS standard for intersection operation and the transportation system will provide a better network for pedestrian and bicycle travel, allowing greater mobility for Island residents. In addition, improvements to regional transportation facilities will accommodate growth in housing and employment, which will be focused in the Town Center, where residents can be easily served by high-capacity transit. Table 4 compares the 2035/2044 intersection study locations without and with the recommended improvements for each of the AM and PM study locations.

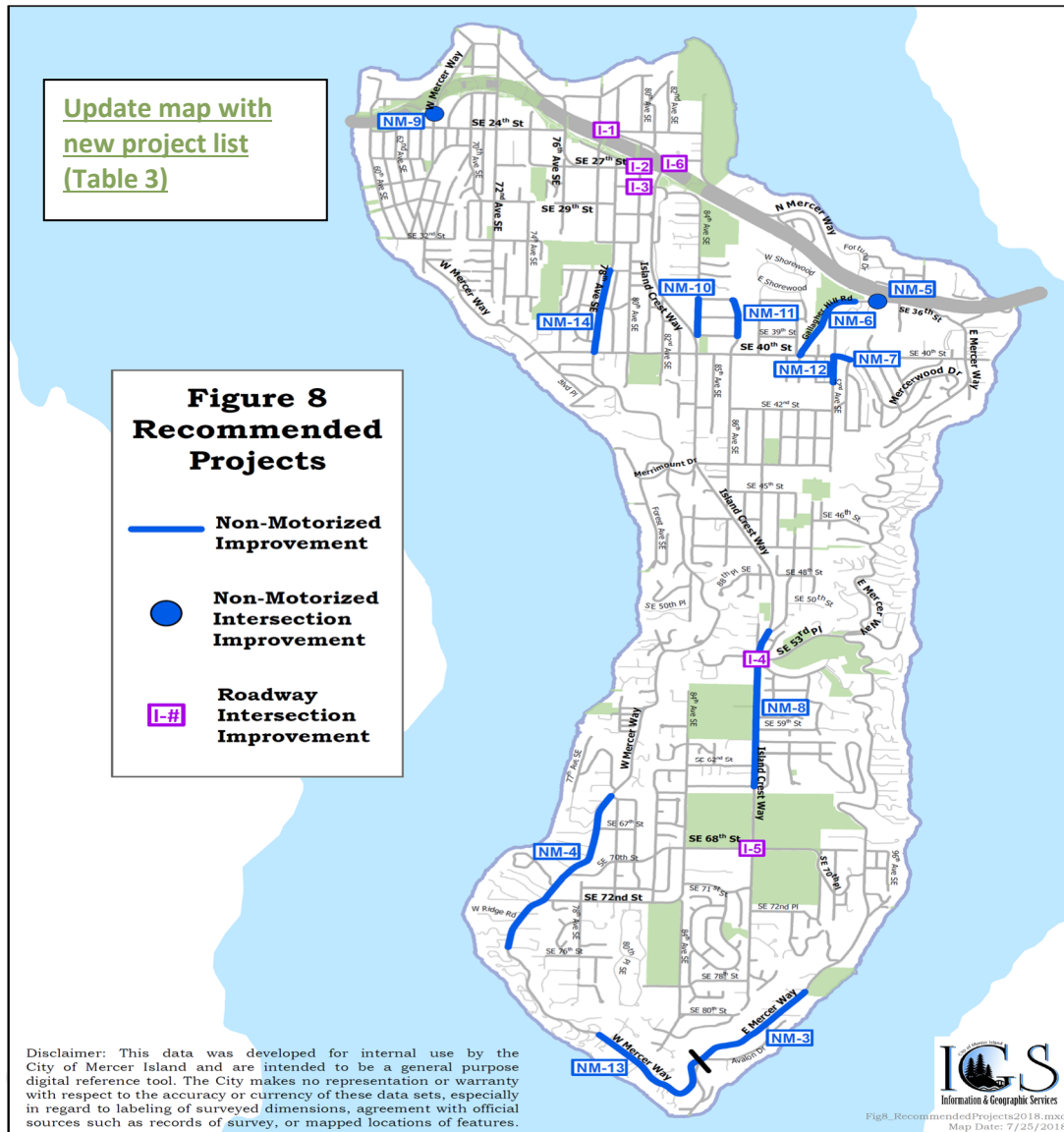


Table 3. Recommended Project List 2018—20352022—2044

ID	Location	Description	Justification	Cost (\$)
Non-Motorized Projects (NM)				
NM-1	Pedestrian and Bicycle Facilities Plan Implementation	Annual funding for non-motorized improvements.	2019—2024 TIP: Project D1	810,000 (\$45,000 per year)
NM-2	ADA Compliance Plan Implementation — Biennial	Design and construct improvements to meet ADA	2019—2024 TIP: Project D2	675,000 (\$75,000 every other year)

		compliance standards.		
NM-3	East Mercer Way Roadside Shoulders (Clarke Beach to Avalon Drive)	Add paved shoulders for non-motorized users.	2019—2024 TIP: Project D3	483,000
NM-4	West Mercer Way Roadside Shoulders Phase 2 (SE 70th Street to 7400 Block) and Phase 3 (SE 65th Street to SE 70th Street)	Add a shoulder on the east side of West Mercer Way for non-motorized users.	2019—2024 TIP: Project D4	796,000
NM-5	Crosswalk Improvement at SE 36th Street and North Mercer Way Intersection	Add pedestrian crossing with refuge island, ADA improvements, and rectangular rapid flashing beacons (RRFBs)	2019—2024 TIP: Project D5	100,000
NM-6	Gallagher Hill Road Sidewalk Improvement	Construct concrete curb, gutter, and sidewalk along east side of street.	2019—2024 TIP: Project D6	540,000
NM-7	Mercerwood Drive between 92nd Avenue SE and 93rd Avenue SE	Safe routes to school pedestrian facility along south side of street.	2019—2024 TIP: Project D7	200,000
NM-8	Island Crest Way Bike Route between 90th Avenue SE and SE 63rd Street	Complete missing gap in north-south bike route.	East Link mitigation/2019—2024 TIP: Project E1 (design only \$300,000)	2,000,000
NM-9	I-90 Trail Crossing at West Mercer Way	Construct enhanced trail crossing.	East Link mitigation/2019—2024 TIP: Project E2	300,000
NM-10	84th Avenue SE Sidewalk between SE 33rd Street and SE 36th Street	Construct sidewalk.	Safe routes to school	350,000
NM-11	86th Avenue SE Sidewalk Phase 2	Add sidewalk along east side of street.	Safe routes to school	340,000

	between SE 36th Street and SE 39th Street			
NM-12	92nd Avenue SE Sidewalk between SE 40th Street to SE 41st Street	Construct sidewalk along west side of street.	Safe routes to school	200,000
NM-13	West Mercer Way Roadside Shoulders (8100 block to Avalon Drive)	Add a paved shoulder (east side) for non-motorized users.	Pedestrian and Bicycle Facilities Plan: Project WMW8	2,000,000
NM-14	78th Avenue SE between SE 34th Street and SE 40th Street	Improve pedestrian and bicycle facilities to connect with Town Center.	Pedestrian and Bicycle Facilities Plan: Project N15 and N16	1,560,000
Intersection Projects (I)/Road Projects (R)				
I-1	77th Avenue SE/N Mercer Way	Roundabout or traffic signal.	East Link bus-rail integration/fails to meet LOS standard	Sound Transit Mitigation
I-2	SE 27th Street/80th Avenue SE	Traffic signal.	East Link mitigation/fails to meet LOS standard	Sound Transit Mitigation
I-3	SE 28th Street/80th Avenue SE	Traffic signal.	Fails to meet LOS standard	1,810,000
I-4	SE 53rd Place/Island Crest Way	Traffic signal.	Fails to meet LOS standard	1,450,000
I-5	SE 68th Street/Island Crest Way	Traffic signal or roundabout.	Fails to meet LOS standard	1,660,000 ¹
I-6	N Mercer Way/I-90 Westbound Off-Ramp/Island Crest Way	Add exclusive westbound left turn lane at I-90 off-ramp.	Fails to meet WSDOT LOS Standard	500,000 ²
I-7	Light Rail Station Access Improvements and Mitigation for I-90 Center Roadway Closure	Vehicle and non-motorized improvements that enhance access to station and address issues related to I-90 center roadway closure.	Light rail station scheduled to open in 2023	2,500,000
R-1	Street Preservation/Maintenance	Resurfacing arterial and residential streets based on PCI rating.	2019—2024 TIP: Projects A1, B3, C1—C10	30,000,000

¹ Cost estimate reflects higher cost option of alternative actions. ² Cost estimate represents a 10% City share; total cost is \$5,000,000.	Total 2018—2035 Projects	\$48,274,000	
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ID	Location	Description	Justification	Cost (\$)
Non-Motorized Projects (NM)				
NM-1	80th Ave SE Sidewalk (SE 27th St - SE 32nd St)	Replace existing curb, sidewalk, ADA ramps, trees, and lighting.	2023-2028 TIP (SP136)	1,376,000
NM-2	78th Ave SE Sidewalk (SE 32nd St - SE 34th St)	Replace existing curb, sidewalk, ADA ramps, trees, and lighting.	2023-2028 TIP (SP137)	779,488
NM-3	West Mercer Way Roadside Shoulders (8100 WMW - 8400 EMW)	Add shoulder along the east side of West Mercer Way for nonmotorized users.	2023-2028 TIP (SP138)	690,979
NM-4	Gallagher Hill Road Sidewalk Improvement	Construct sidewalk.	2023-2028 TIP (SP139)	508,455
NM-5	SE 40th St Sidewalk Improvement (Gallagher Hill Road - 93rd Ave SE)	Replace/improve existing sidewalks and construct bike lanes.	2023-2028 TIP (SP140)	997,639
NM-6	ADA Transition Plan Implementation	Construct pedestrian facility improvements to comply with the City's ADA Transition Plan.	2023-2028 TIP (SP141)	5,000,000
NM-7	Island Crest Way Corridor Improvements (90th Ave SE - SE 68th St)	Implementation of recommendations from Island Crest Way Corridor Safety Analysis.	2023-2028 TIP (SP142)	1,526,375
NM-8	North Mercer Way - MI Park and Ride Frontage Improvements	Remove bus bay on north side of NMW, widen trail, and construct safety improvements.	2023-2028 TIP (SP144)	1,203,081
NM-9	Pedestrian and Bicycle Facilities Plan Implementation	Annual program to identify, prioritize, design, and construct spot improvements and gap completion projects.	2023-2028 TIP (SP145)	1,340,000
NM-10	SE 32nd St Sidewalk Replacement (77th Ave SE - 78th Ave SE)	Replace sidewalk and trees adjacent to Mercerdale Park due to tree damage.	2023-2028 TIP (SP147)	324,719

NM-11	East Mercer Way Roadside Shoulders (SE 79th St - 8400 block)	Add shoulder along the west side of East Mercer Way for nonmotorized users.	2023-2028 TIP (SP148)	531,105
NM-12	78th Ave SE Nonmotorized Improvements (SE 34th St - SE 40th St)	Improve pedestrian and bicycle facilities to connect with Town Center.	2022 Transportation Impact Fee (#3)	1,697,000
NM-13	84th Ave SE Sidewalk (SE 33rd St - SE 36th St)	Construct sidewalk.	2022 Transportation Impact Fee (#4)	597,000
NM-14	86th Ave SE Sidewalk Phase 2 (SE 36th St - SE 39th St)	Construct sidewalk along east side of street.	2022 Transportation Impact Fee (#5)	1,141,000
NM-15	92nd Ave SE Sidewalk (SE 40th St - SE 41st St)	Construct sidewalk along west side of street.	2022 Transportation Impact Fee (#6)	803,000
NM-16	Merrimount Dr Sidewalk (ICW - Mercer Way)	Construct sidewalk along both sides of street.	2022 Transportation Impact Fee (#8)	632,000
NM-17	78th Ave SE Sidewalk (SE 40th St - SE 41st St)	Construct sidewalk along west side of street.	2022 Transportation Impact Fee (#9)	250,000
NM-18	86th Ave SE Nonmotorized Improvements (SE 42nd St - ICW)	Construct bike facilities and sidewalk along west side of street.	2022 Transportation Impact Fee (#10)	2,666,000
Intersection Projects (I)/Road Projects (R)				
I-1	Minor Capital - Traffic Operations Improvements	Minor improvements to address traffic operation and safety issues.	2023-2028 TIP (SP143)	313,295
I-2	SE 28th St/80th Ave SE	Install traffic signal.	2022 Transportation Impact Fee (#1)	1,464,000
I-3	80th Ave SE/North Mercer Way	Add turn lane to improve traffic operations at the intersection.	2022 Transportation Impact Fee (#14)	754,000
I-4	North Mercer Way/I-90 Westbound Off-Ramp/Island Crest Way	Add exclusive westbound left turn lane at I-90 off-ramp.	2022 Transportation Impact Fee (#15)	650,000
I-5	SE 53rd Pl/Island Crest Way	Install traffic signal.	Fails to meet LOS standard	1,907,130
I-6	SE 68th St/Island Crest Way	Install traffic signal or roundabout.	Fails to meet LOS standard in the future	2,151,590

R-1	77th Ave SE Channelization (SE 32nd - North Mercer Way)	Rechannelization of the roadway to comply with street design standards.	2023-2028 TIP (SP146)	53,324
R-2	Signal Coordination Along Island Crest Way (North Mercer Way – SE 28th St) and at the North Mercer Way/80th Ave SE intersection.	Coordinate four existing traffic signals along Island Crest Way and North Mercer Way.	2022 Transportation Impact Fee (#11)	690,000
R-3	Street Preservation/Maintenance	Resurfacing arterial and residential streets based on pavement conditions.	2023-2028 TIP	30,000,000
Total 2022—2044 Projects				60,047,180

Table 4. 20352044 Intersection Operations — Without and With Recommended Improvements

Intersection	20352044 AM Peak Hour		20352044 PM Peak Hour	
	Without Improvements	With Recommended Improvements	Without Improvements	With Recommended Improvements
Town Center Intersections (LOS C Standard)				
SE 24th St/76th Ave SE	B	B	B	B
N Mercer Way/77th Ave SE	A	B	A	A
N Mercer Way/Park & Ride/80th Ave SE	C	C	C	C
SE 27th St/76th Ave SE	—	—	B	B
SE 27th St/77th Ave SE	B	B	C	C
SE 27th St/78th Ave SE	B	B	B	B
SE 27th St/80th Ave SE	D	B	E	B
SE 28th St/78th Ave SE	—	—	B	B
SE 28th St/80th Ave SE	B	B	D	B
SE 28th St/Island Crest Way	B	B	C	C
SE 29th St/77th Ave SE	—	—	B	B
SE 29th St/78th Ave SE	—	—	C	C
SE 30th St/78th Ave SE	—	—	C	C
SE 30th St/80th Ave SE	—	—	B	B
SE 30th St/Island Crest Way	—	—	B	B

SE 32nd St/78th Ave SE	—	—	C	C
WSDOT Intersections (LOS D Standard)				
I-90 EB off-ramp/I-90 WB on-ramp/W Mercer Way	B	B	B	B
I-90 WB on-ramp/N Mercer Way/76th Ave SE	B	B	A	A
I-90 EB off-ramp/77th Ave SE	B	B	B	B
I-90 WB off-ramp/N Mercer Way/Island Crest Way	E	C	D	C
I-90 EB on-ramp/SE 27th St/Island Crest Way	C	C	C	C
I-90 WB ramps/100th Ave SE	C	C	B	B
I-90 EB off-ramp/100th Ave SE/E Mercer Way	B	B	B	B
I-90 EB on-ramp/SE 36th St/E Mercer Way	B	B	B	B
Outside of Town Center Intersections (LOS D Standard)				
SE 24th St/W Mercer Way	B	B	C	C
SE 24th St/72nd Ave SE	B	B	B	B
SE 36th St/N Mercer Way	D	D	C	C
SE 40th St/W Mercer Way	B	B	B	B
SE 40th St/78th Ave SE	B	B	B	B
SE 40th St/Island Crest Way	D	D	C	C
SE 40th St/SE Gallagher Hill Rd	D	D	C	C
Mercerwood Dr/E Mercer Way	—	—	B	B
W Mercer Way/78th Ave SE	—	—	B	B
Merrimount Dr/W Mercer Way	C	C	C	C
Merrimount Dr/Island Crest Way	D	D	D	D

SE 53rd Place/Island Crest Way	F	B	F	B
SE 53rd Place/E Mercer Way	—	—	A	A
SE 68th St/84th Ave SE	D	D	B	B
SE 68th St/Island Crest Way	E	A	C	A
SE 70th Place/E Mercer Way	—	—	B	B
SE 72nd St/W Mercer Way	—	—	B	B

V. FINANCIAL ANALYSIS

Since incorporation in 1960, the City has consistently made (or required through private development) transportation investments that have preceded and accommodated population and employment growth and its associated traffic growth. This strategy has enabled the City to make significant improvements in the community's neighborhood streets, arterial roads, pavement markings, streets signs, and pedestrian and bicycle facilities.

In ~~2017~~2022, the City's primary funding sources for local transportation projects included: gas tax revenues (~~\$510,000.00~~429,000), real estate excise tax (~~\$2,845,000.00~~2,253,000), Transportation Benefit District vehicle fees (~~\$370,000.00~~375,000) and transportation impact fees (~~\$237,000.00~~75,000). In total, the City received approximately \$~~2.73.1~~ million (~~2016~~) and \$4.0 million (~~2017~~) in annual transportation revenues.

In addition, Sound Transit mitigation for the closure of the I-90 center roadway is providing up to \$5.1 million in funds for operational and safety improvements.

Combined with supplemental federal and state grant funding, Mercer Island has sufficient resources to maintain and improve its transportation system over the next 20 years and will be able to accomplish the following:

- Maintain the City's arterial street system on a 25-year (average) life cycle.
- Maintain the City's residential system on a 35-year (average) life cycle.
- Maintain, improve, and expand the City's pedestrian and bicycle system over the next 20 years.
- Maintain and improve the transportation system to meet the forecasted housing and employment growth targets.

VI. IMPLEMENTATION STRATEGIES

The following actions by the City of Mercer Island and other jurisdictions will be necessary to effectively implement the programs and policies of this transportation element:

TRANSPORTATION SYSTEM STREETS, TRANSIT, NON-MOTORIZED

- Implement local neighborhood traffic control strategies as necessary to address specific issues.
- Implement Transportation System Management techniques to control traffic impacts.

PLANNING STANDARDS, POLICIES, PROGRAMS

- Periodically update the City's inventory of transportation conditions, existing level of service and projected level of service.
- Complete the plan for non-motorized transportation improvements consistent with the City's Comprehensive Plan, including a review of the Pedestrian and Bicycle Facilities Plan and its design standards.
- Develop a neighborhood parking program to address parking overflow impacts from schools, businesses, parks and multi-family housing.
- Revise design standards as necessary to comply with ADA requirements.
- Continue to involve the public in transportation planning and decisions.
- Create "transit friendly" design guidelines for new development projects in the Town Center.
- Develop policies, criteria and a process to determine when, and under what conditions, private roads and privately-maintained roads in public rights-of-way should be accepted for public maintenance and improvement.
- Implement the City's adopted Commute Trip Reduction program.

FINANCIAL STRATEGIES

- Secure funding to implement the adopted ~~six-year~~Six-Year Transportation Improvement Program.
- Actively pursue outside funding sources to pay for adopted transportation improvements and programs.

TRANSIT PLANNING

- Work with Metro to reinstate and improve transit services. Explore alternative methods of providing service, such as developing a demand responsive service.
- Work with Sound Transit to ~~site~~ design and construct high-capacity transit and parking facilities consistent with Land Use and Transportation Policies contained in the Comprehensive Plan that will be available for use by Mercer Island residents.

VII. CONSISTENCY WITH OTHER PLANS & REQUIREMENTS

The Growth Management Act of 1990 requires that local comprehensive plans be consistent with plans of adjacent jurisdictions and regional, state and federal plans. Further, there are several other major statutory requirements with which Mercer Island transportation plans must comply. This section briefly discusses the relationship between this Transportation Element and other plans and requirements.

OTHER PLANS

The Transportation Element of the Mercer Island Comprehensive Plan is fully consistent with the following plans:

Mercer Island Comprehensive Plan — The Transportation Element is based on the needs of, and is ~~fully~~ consistent with the Land Use Element.

King County and Multicounty Planning Policies — Mercer Island's proposed transportation policies are ~~fully~~ consistent with PSRC's multi-county and King County's countywide planning policies.

Vision ~~2040~~2050 — Vision ~~2040-2050~~ is the region's Metropolitan Transportation Plan and builds upon Vision 2020 ~~and~~ Destination 2030, and Vision 2040 to articulate a coordinated long-range land use and transportation growth strategy for the Puget Sound region. Mercer Island Comprehensive Plan's Land Use and Transportation Elements ~~supports~~ support this strategy by accommodating new growth in the Town Center, which is near existing and proposed future transportation improvements along the I-90 corridor.

Metropolitan Transportation Plan — The Puget Sound Regional Council (PSRC) has updated its long-term vision of the future transportation system through the Vision 2040 and Transportation 2040 plans. The Transportation Element is consistent with these plans.

Regional Transit System Plan — Sound Transit's Regional Transit System Plan (RTP) lays out the Puget Sound region's plans for constructing and operating a regional high-capacity transit system. Both the Land Use and Transportation Elements directly support regional transit service and facilities, and are consistent with the RTP.

PLAN REQUIREMENTS

The Transportation Element of the Mercer Island Comprehensive Plan meets the following regulations and requirements:

Growth Management Act — The Growth Management Act, enacted by the Washington State Legislature in 1990 and amended in 1991, requires urbanized counties and cities in Washington to plan for orderly growth for 20 years into the future. Mercer Island's Transportation Element conforms to all of the components of a Comprehensive Transportation Element as defined by GMA.

Commute Trip Reduction — In 1991, the Washington State Legislature enacted the Commute Trip Reduction Law which requires implementation of transportation demand management (TDM) programs to reduce work trips. In response to these requirements, Mercer Island has developed its own CTR program to reduce work trips by City employees. There are two other CTR-affected employers on the Island; both have developed CTR programs.

Air Quality Conformity — Amendments to the federal Clean Air Act made in 1990 require Washington and other states to develop a State Implementation Plan (SIP) which will reduce ozone and carbon monoxide air pollutants so that national standards may be attained. The Central Puget Sound area, including King County and Mercer Island, currently meets the federal standards for ozone and carbon monoxide. The area is designated as a carbon monoxide maintenance area, meaning the area has met federal standards, but is required to develop a maintenance plan to reduce mobile sources of pollution.

4 TRANSPORTATION ELEMENT

I. INTRODUCTION

The Transportation Element provides policies and projects to guide the development of the Mercer Island transportation system in support of the City's vision for the future. The policies guide the actions of the City, as well as the decisions related to individual developments.

The Transportation Element provides an inventory of Mercer Island's existing transportation system and includes auto, truck, bicycle, transit, and pedestrian.

OBJECTIVES OF THE TRANSPORTATION ELEMENT

The City of Mercer Island has three main objectives within its Transportation Element:

- Develop multimodal goals, policies, programs, and projects which support implementation of the Land Use Element of the Comprehensive Plan,
- Define policies and projects that encourage the safe and efficient development of the transportation system, and
- Comply with legislative requirements for multimodal transportation planning.

Washington State's Growth Management Act (GMA) outlines specific requirements for the Transportation Element of the city's Comprehensive Plan. It calls for a balanced approach to land use and transportation planning to ensure that a city's transportation system can support expected growth and development. In addition, it mandates that capital facilities funds be adequate to pay for any necessary improvements to the transportation system. Finally, a city must adopt specific standards for the acceptable levels of congestion on its streets; these standards are called level of service (LOS) standards.

At the federal level, transportation funds have been focused on the preservation and improvement of transportation facilities and creating a multimodal approach to transportation planning. For Mercer Island, transportation projects that combine improvements for auto, buses, bicycles, and pedestrians have a much greater chance of receiving state and federal grant funds than those that focus solely on widening the road to carry more single-occupant vehicles.

Other legislative requirements addressed by the Transportation Element include the King County 2021 Countywide Planning Policies, the 1991 Commute Trip Reduction Act, the Americans with Disabilities Act (ADA) and the 1990 federal Clean Air Act Amendments. Each of these laws emphasizes closer coordination between a jurisdiction's land use planning and its approach to transportation planning.

TRANSPORTATION TODAY

Most of Mercer Island's streets are two lane residential streets with low to moderate volumes of traffic. Island Crest Way, a north-south arterial which runs the length of the Island, is an exception because it is a principal feeder route to I-90 and the Town Center. East and West Mercer Way ring the Island and provide two more connections with I-90. SE 40th Street and Gallagher Hill Road also carry high traffic volumes in the north-central portion of the Island. In addition to arterial streets, the local street network provides access to private residences and properties. Public transit serves the Mercer Island Park and Ride and other locations on the Island.

The new light rail station located north of the Town Center, on the I-90 corridor between 77th Avenue SE and 80th Avenue SE, provides access to destinations in Seattle, Bellevue and other cities that are part of the Sound Transit system.

Mercer Island has over 56 miles of trails, sidewalks and bicycle lanes for non-motorized travel. The regional Mountains-to-Sound Trail runs along the I-90 corridor providing a convenient connection to Seattle and Bellevue for pedestrians and bicyclists.

LAND USE ASSUMPTIONS — THE COMPREHENSIVE PLAN

Mercer Island's Comprehensive Plan, of which the Transportation Element is a part, must be internally consistent. This means that the various requirements in each element must not contradict one another. Of particular importance is the relationship between the Transportation Element and the Land Use Element.

The transportation forecasts used in this element are based on Mercer Island growth targets for housing and employment, regional traffic forecasts by the Puget Sound Regional Council, and local traffic counts. Within the 20-year planning period, the City's growth target is 1,239 new housing units and 1,300 new jobs to be generated on the Island by 2044.

The Land Use Element defines Mercer Island's strategy for managing future growth and physical land development for the 20-year planning period. Proposed transportation improvements, policies and programs are consistent with the vision of the Land Use Element. The Land Use vision emphasizes continued reinvestment and redevelopment of the Town Center to create a mixed-use pedestrian-friendly and transit-oriented environment. Most of the forecasted housing units and jobs will be located in and around the downtown core. Outside of the Town Center, the lower density residential nature of the remainder of the Island will be maintained with low forecasted changes in household growth.

TOWN CENTER PLAN

The 1994 Town Center Plan for Mercer Island was updated in 2016 through a cooperative effort of City staff, consultants and many citizens over a two-year long process. Specific goals and policies related to transportation and mobility are in the Land Use element.

The Sound Transit Link Light Rail station located on the I-90 corridor between 77th Avenue SE and 80th Avenue SE will continue to focus multimodal development and population growth within the Town Center area.

II. TRANSPORTATION GOALS AND POLICIES

The following transportation goals and policies have been developed to guide transportation decisions for Mercer Island. They have been crafted to be consistent with all other Comprehensive Plan elements, including the Land Use Element. They also serve to further articulate and implement the City's vision for the future.

GOAL 1:

Encourage the most efficient use of the transportation system through effective management of transportation demand and the transportation system.

- 1.1 Encourage measures to reduce vehicular trips using Transportation Demand Management strategies such as preferential parking for carpools/vanpools, alternative work hours, bicycle parking, and distribution of information and promotion of non-motorized travel, transit and ridesharing options.
- 1.2 Encourage businesses and residential areas to explore opportunities for shared parking and other parking management strategies.
- 1.3 Employ transportation system management (TSM) techniques to improve the efficient operation of the transportation system including, but not limited to: traffic through and turn lanes, management of street parking, signals and other traffic control measures.

GOAL 2:

Receive the maximum value and utility from the City's investments in the transportation system.

- 2.1 Place a high priority on maintaining the existing transportation facilities and the public rights-of-way.
- 2.2 Prioritize expenditures in the transportation system recognizing the need to maintain existing transportation assets, meet adopted service level goals, and emphasize continued investments in non-motorized transportation facilities. Make transportation investments that improve economic and living conditions so that businesses and workers are retained and attracted to Mercer Island.
- 2.3 Encourage partnerships with nonprofit providers and the private sector in the provision, operation, and maintenance of the transportation system.
- 2.4 Coordinate street improvement projects with utilities, developers, neighborhoods, and other parties in order to minimize roadway disruptions and maintain pavement integrity.
- 2.5 Explore all available sources for transportation funding, including grants, impact fees, and other local options as authorized by the state legislature.
- 2.6 Prioritize transportation investments in the Town Center that promote mixed-use and compact development and provide multimodal access to regional transit facilities.
- 2.7 Apply technologies, programs, and other strategies to optimize the use of existing infrastructure and reduce congestion, vehicle miles traveled, and greenhouse gas emissions.

GOAL 3:

Minimize negative transportation impacts on the environment.

- 3.1 Use design, construction and maintenance methods, and low impact development strategies to minimize negative health and environmental impacts related to water quality, noise, and pollution for all communities.
- 3.2 Work with WSDOT and other agencies to minimize impacts on Island facilities and neighborhoods from traffic congestion on regional facilities, implementation of ramp metering, and provision of transit services and facilities.
- 3.3 Construct transportation improvements with sensitivity to existing trees and vegetation.
- 3.4 Promote the expanded use of alternative fuel and zero emission vehicles by the general public with measures such as converting public and private fleets, applying incentive programs, and providing for electric vehicle charging stations.

GOAL 4:

Provide transportation choices for travelers through the provision of a complete range of transportation facilities, and services.

- 4.1 Work with King County Metro, Sound Transit and other providers to ensure adequate transit services to meet the needs of the Island, including:
 - maintain existing and encourage new public transit service on the Island;
 - maintain convenient transit connections to regional activity centers, including the Seattle CBD, Bellevue, University of Washington and other centers;
 - provide convenient transit service for travel on Mercer Island and enhance connections to regional transit stations including the future Link light rail station; and
 - continue to expand innovative transit services including demand responsive transit for the general public, subscription bus, or custom bus services.
- 4.2 Provide for and encourage non-motorized travel modes consistent with the Parks and Recreation Plan and Pedestrian and Bicycle Facilities Plan.
- 4.3 Support opportunities to facilitate transfers between different travel modes through strategies such as:
 - providing small park and ride facilities throughout the Island; and
 - improving pedestrian access to transit with on and off-road pedestrian improvements.
- 4.4 Investigate opportunities for operating, constructing and/or financing park and ride lots for Mercer Island residents only.
- 4.5 Encourage site and building design that promotes pedestrian activity, ridesharing opportunities, and the use of transit.
- 4.6 Promote the development of multimodal linkages to transit in the Town Center District.

- 4.7 Promote the mobility of people and goods through a multimodal transportation system consistent with the Pedestrian and Bicycle Facilities Plan.
- 4.8 Implement transportation programs and projects that address the needs of and promote access to opportunity for Black, Indigenous, and other People of Color, people with low and no incomes, and people with special transportation needs, while preventing and mitigating displacement of these groups.
- 4.9 Address the needs of people who do not drive, either by choice or circumstances (e.g., elderly, teens, low-income, and persons with disabilities), in the development of transportation programs and projects.

GOAL 5:

Comply with local, regional, state and federal requirements related to transportation.

- 5.1 Comply with the requirements of the federal and state Clean Air Acts, and work with other jurisdictions in the Puget Sound region to achieve conformance with the State Implementation Plan.
- 5.2 Meet the requirements of the Americans with Disabilities Act (ADA) and apply these standards to development of the transportation system.
- 5.3 Comply with the Commute Trip Reduction requirements through the continued implementation of a CTR plan.
- 5.4 Advocate for state policies, actions, and capital improvement programs that promote safety, equity, and sustainability, and that are consistent with the Regional Growth Strategy, VISION 2050, and the Countywide Planning Policies.
- 5.5 Work with the participants of the Eastside Transportation Partnership (ETP) to coordinate transportation planning for the Eastside subarea.
- 5.6 Comply with state initiatives and directives related to climate change and greenhouse gas reduction. Identify implementable actions that improve air quality, reduce air pollutants and promote clean transportation technologies.

GOAL 6:

Ensure coordination between transportation and land use decisions and development.

- 6.1 Ensure compatibility between transportation facilities and services and adjacent land uses, evaluating aspects such as:
 - potential impacts of transportation on adjacent land use;
 - potential impacts of land development and activities on transportation facilities and services; and
 - need for buffering and/or landscaping alongside transportation facilities.

- 6.2 Develop strategies to manage property access along arterial streets in order to preserve their function.
- 6.3 In the project development review process, evaluate transportation implications including:
- congestion and level of service;
 - connectivity of transportation facilities and services from a system perspective;
 - transit needs for travelers and for transit operators; and
 - non-motorized facilities and needs.
- 6.4 Ensure that transportation improvements, strategies and actions needed to serve new developments shall be in place at the time new development occurs or be financially committed and scheduled for completion within six years.
- 6.5 As part of a project's SEPA review, review the project's impact on transportation and require mitigation of on-site and off-site transportation impacts. The City shall mitigate cumulative impacts of SEPA-exempt projects through implementation of the Transportation Improvement Program.
- 6.6 Maintain standards and procedures for measuring the transportation impact of a proposed development and for mitigating impacts.
- 6.7 Participate in the review of development and transportation plans outside the City boundaries that may have an impact on the Island and its transportation system, and consider the effect of the City's transportation plans on other jurisdictions.
- 6.8 Encourage transit, bicycle and pedestrian principles in the design of projects including:
- locating structures on the site in order to facilitate transit and non-motorized travel modes;
 - placing and managing on-site parking to encourage travel by modes other than single occupant vehicles;
 - provision of convenient and attractive facilities for pedestrians and bicyclists; and
 - provision of public easements for access and linkages to pedestrian, bicycle, and transit facilities.
- 6.9 Require adequate parking and other automobile facilities to meet anticipated demand generated by new development.

GOAL 7:

Provide a safe, convenient and reliable transportation system for Mercer Island.

- 7.1 Include requirements in the City's roadway design standards for facilities to safely accommodate travel by all travel modes.
- 7.2 Provide a safe transportation system through maintenance and upkeep of transportation facilities.

- 7.3 Reduce the number of deaths and serious injuries caused by vehicle collisions on Mercer Island to zero by 2030.
- 7.4 Monitor the condition and performance of the transportation system to compare growth projections with actual conditions, assess the adequacy of transportation facilities and services, and to identify locations where improvements may become necessary.
- 7.5 Monitor traffic collisions, citizen input/complaints, traffic violations, and traffic volumes to identify and prioritize locations for safety improvements.
- 7.6 Where a need is demonstrated, consider signage, traffic controls, or other strategies to improve the safety of pedestrian crossings.
- 7.7 Verify the policies, criteria and a process to determine when, and under what conditions, private roads and privately maintained roads in the public right-of-way should be accepted for public maintenance and improvement.
- 7.8 Coordinate with local and regional emergency services to develop priority transportation corridors and develop coordinated strategies to protect and recover from disaster.
- 7.9 Emphasize transportation connectivity and avoid closing streets to provide direct and safe access for active transportation modes and to minimize travel distances and emergency vehicle response times.
- 7.10 New or remodeled public institutions, commercial mixed use and multifamily facilities should have sufficient storage for bicycles and other active transportation modes.

GOAL 8:

Preserve adequate levels of accessibility between Mercer Island and the rest of the region.

- 8.1 Continue to recognize I-90 as a highway of statewide significance.
- 8.2 Work with King County Metro and Sound Transit to ensure mobility and adequate levels of transit service linking Mercer Island to the rest of the region.
- 8.3 Work with WSDOT, King County Metro, and Sound Transit to ensure the provision of adequate Park and Ride capacity for Island residents.
- 8.4 Maintain an effective role in regional transportation planning, decision-making and implementation of transportation system improvements.

GOAL 9:

Balance the maintenance of quality Island neighborhoods with the needs of the Island's transportation system.

- 9.1 Strive to minimize traffic impacts to neighborhoods and foster a "pedestrian-friendly" environment.
- 9.2 Address parking overflow impacts on neighborhoods caused by major traffic generators such as schools, businesses, parks, and multifamily developments.
- 9.3 Provide facilities for pedestrians and bicyclists designed in keeping with individual neighborhood characteristics.
- 9.4 Work with King County Metro to provide public transit vehicles and services that are more in scale with the City's neighborhoods and its local road network.
- 9.5 Maintain comprehensive street design guidelines and standards that determine the appropriate function, capacity, and improvement needs for each street/roadway, while minimizing construction and neighborhood impacts.

GOAL 10:

Maintain acceptable levels of service for transportation facilities and services on Mercer Island.

- 10.1 The City of Mercer Island Level of Service (LOS) at arterial street intersections shall be a minimum of "C" within and adjacent to the Town Center and "D" for all other intersections.
- 10.2 Use the level of service standard to evaluate the performance of the transportation system and guide future system improvements and funding. Emphasize projects and programs that focus on the movement of people and provide alternatives to driving alone.
- 10.3 Implement the following strategy when vehicle capacity or funding is insufficient to maintain the LOS standard: (1) seek additional funding for capacity improvements, (2) explore alternative, lower-cost methods to meet level-of-service standards (e.g., transportation demand management program, bicycle corridor development or other strategies), (3) reduce the types or size of development, (4) restrict development approval, and (5) reevaluate the level of service standard to determine how it might be adjusted to meet land use objectives.
- 10.4 Ensure that the City's level of service policies are linked to the land use vision and comply with concurrency requirements.
- 10.5 Revise the Transportation Element if the Land Use and/or Capital Facilities Element of the Comprehensive Plan are changed to maintain a balanced and consistent plan.
- 10.6 Levels of service for pedestrian, bicycle, and transit transportation modes should be established.

GOAL 11:

Ensure parking standards support the land use policies of the Comprehensive Plan.

- 11.1 Continue to implement flexible parking requirements for Town Center development based on the type and intensity of the proposed development; site characteristics; likelihood for parking

impacts to adjacent uses; opportunities for transit, carpooling and shared parking; and potential for enhancements to the pedestrian environment.

- 11.2 Maintain the current minimum parking requirements of three off-street spaces for single family residences, but may consider future code amendments that allow for the reduction of one of the spaces provided that the quality of the environment and the single family neighborhood is maintained.
- 11.3 Support business development in the downtown area by prioritizing on-street parking spaces in the Town Center for short-term parking, and encourage the development of off-street shared parking facilities for long-term parking in the Town Center.

GOAL 12:

Promote bicycle and pedestrian networks that safely access and link commercial areas, residential areas, schools, and parks within the City.

- 12.1 Maximize the safety and functionality of the bicycle system by enhancing road shoulders which are to be distinguished from designated bicycle lanes.
- 12.2 Implement the Pedestrian and Bicycle Facilities Plan to meet existing and anticipated needs for nonmotorized transportation. This Plan should be coordinated with other transportation planning efforts and periodically updated.
- 12.3 Study opportunities for use of innovative methods for pedestrians crossing streets, including use of colored and textured pavements within the City.
- 12.4 Strive to build community through the in-person interactions facilitated by active transportation at community connection points (schools, library, community centers, bikeshare hubs, etc.).
- 12.5 Prioritize areas near schools and commercial areas for a higher level of service for pedestrians, bicycles, and transit.

III. TRANSPORTATION SYSTEM—EXISTING CONDITIONS

This section describes and inventories the current transportation system serving Mercer Island. Major transportation modes serving Mercer Island include automobiles, non-motorized modes such as walking and biking, and public and school transit.

ROADWAY NETWORK

Mercer Island has over 75 miles of public roads. Interstate 90 (I-90) runs east-west across the northern end of Mercer Island, providing the only road and transit connection to the rest of the Puget Sound region. Access to the I-90 on-ramps and off-ramps is provided at West Mercer Way, 76th Avenue SE, 77th Avenue SE, 80th Avenue SE, Island Crest Way, and East Mercer Way.

Most of the road network is comprised of two-lane local streets serving the Island's residential areas. Arterial roadways comprise approximately 25 miles, or one-third, of the system. In addition to public

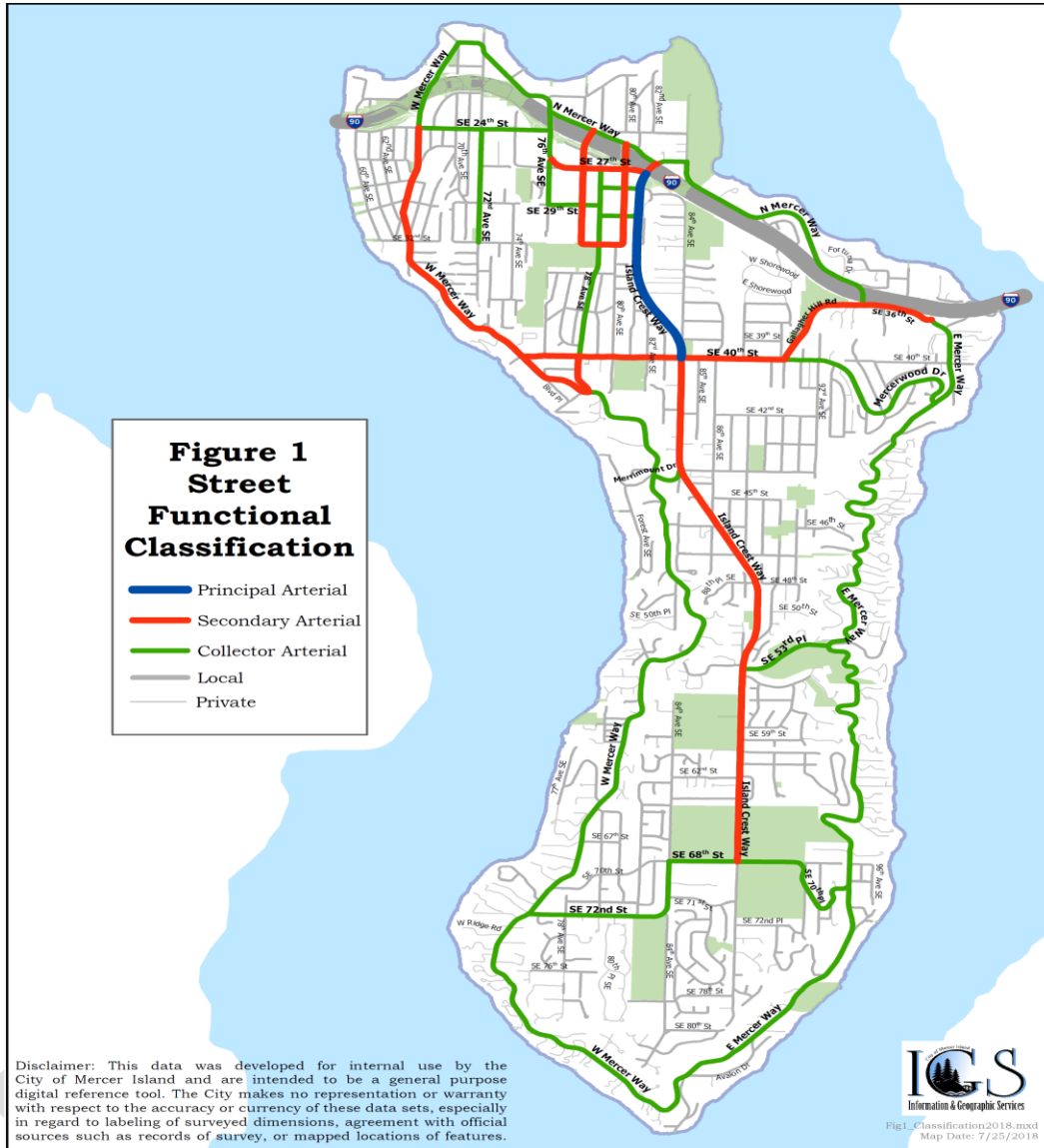
roads, there are numerous private roads serving individual neighborhoods and developments on the Island.

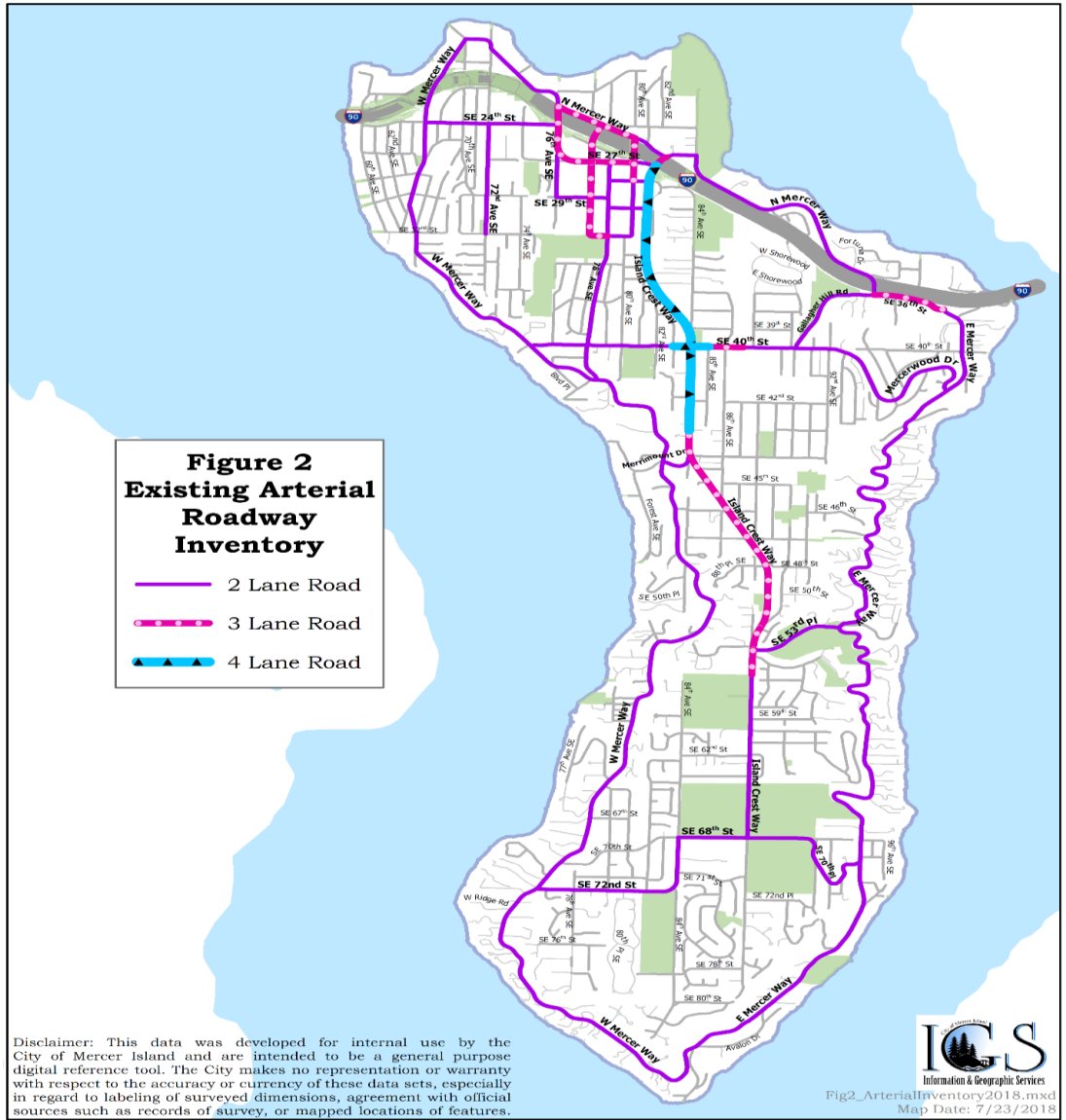
Roadways on the Island are classified into different categories according to their purpose and physical characteristics. The categories are:

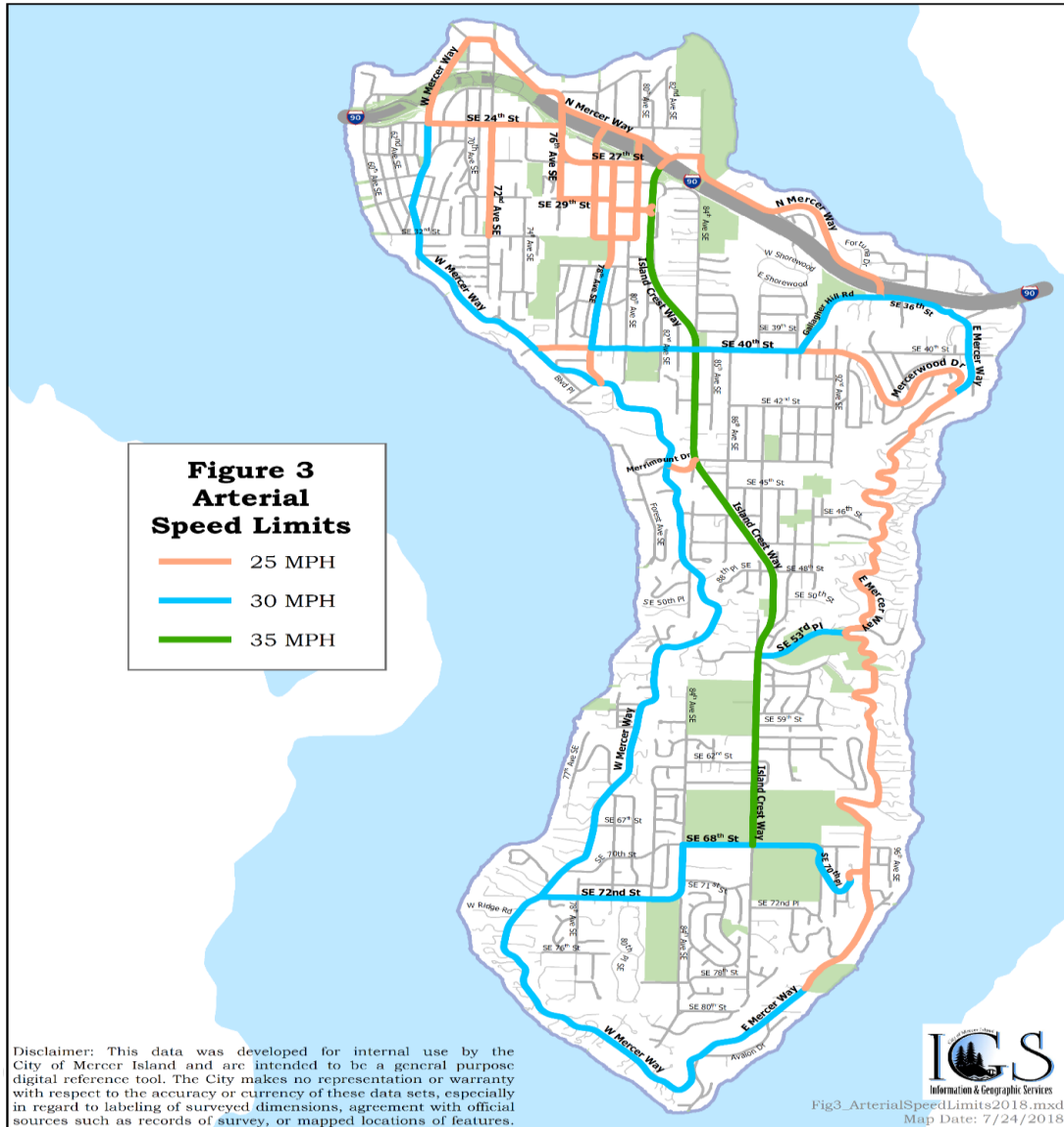
- **Principal arterials** carry the highest volumes of traffic and provide the best mobility in the roadway network. These roads generally have higher speed limits, higher traffic volumes, and limit access to adjacent land uses.
- **Secondary arterials** connect with and augment principal arterials and generally have a higher degree of access to adjacent land, lower traffic volumes and lower travel speeds.
- **Collector arterials** provide for movement within neighborhoods, connecting to secondary and principal arterials; and typically have low traffic volumes and carry little through traffic.
- **Local streets** provide for direct access to abutting properties and carry low volumes of traffic at low travel speeds. Local streets are usually not intended for through traffic.

Individual streets are assigned classifications based on several criteria, including the type of travel to be served, the role of the street in the overall street network and transportation system, physical characteristics, traffic characteristics, and adjacent land uses. Based on City staff recommendations, the City Council periodically reviews and updates the street classification system, its criteria and specific street classification designations.

Figure 1 shows the street functional classifications. Figure 2 shows the number of travel lanes and Figure 3 shows the posted speed limits of arterial roadways.







LEVEL OF SERVICE STANDARDS

Level of Service (LOS) is a measurement of the quality of traffic flow and congestion at intersections and roadways. LOS is defined by the amount of delay experienced by vehicles traveling through an intersection or on a roadway. LOS is based on an A-F scale with LOS A representing little or no delay and LOS F representing very long delays.

Under the Growth Management Act, each local jurisdiction is required to establish a minimum threshold of performance for its arterial roadways. Cities use this standard to identify specific actions to maintain the adopted LOS standard. The City of Mercer Island has established its Level of Service standard at intersections of two arterial streets as LOS C within and adjacent to the Town Center and LOS D elsewhere. This standard applies to the operation during either the AM or PM peak periods. The intersection of SE 53rd Place/Island Crest Way does not have sufficient volumes on SE 53rd Street to warrant a signal and is exempt from the LOS D standard until traffic volumes increase and signal warrants are met.

To be consistent with the WSDOT standard for I-90 and its ramp intersections, the City will accept LOS D at those intersections. I-90 is designated as a Highway of Statewide Significance under RCW 47.06.140.

TRAFFIC OPERATIONS

For transportation planning purposes, traffic operations are typically analyzed during the busiest hour of the street system, when traffic volumes are at peak levels. On Mercer Island, the peak hour of traffic operations typically corresponds with the afternoon commute, which falls between 4:00 PM and 6:00 PM in the afternoon (PM peak hour). Traffic counts were collected and analyzed at 39 intersections throughout the Island. Select intersections for the AM peak hour were counted and analyzed to provide an understanding of the transportation system during the morning commute, which typically peaks between 7:30 AM and 8:30 AM.

For this update, select traffic counts were conducted in 2022 to compare 2022 and 2018 AM and PM peak hour volumes. Results of the analysis found no growth in the last four years. This is primarily due to the COVID pandemic and advances in technology which have increased the number of people working from home. It was determined that the 2018 counts continue to be accurate for planning purposes.

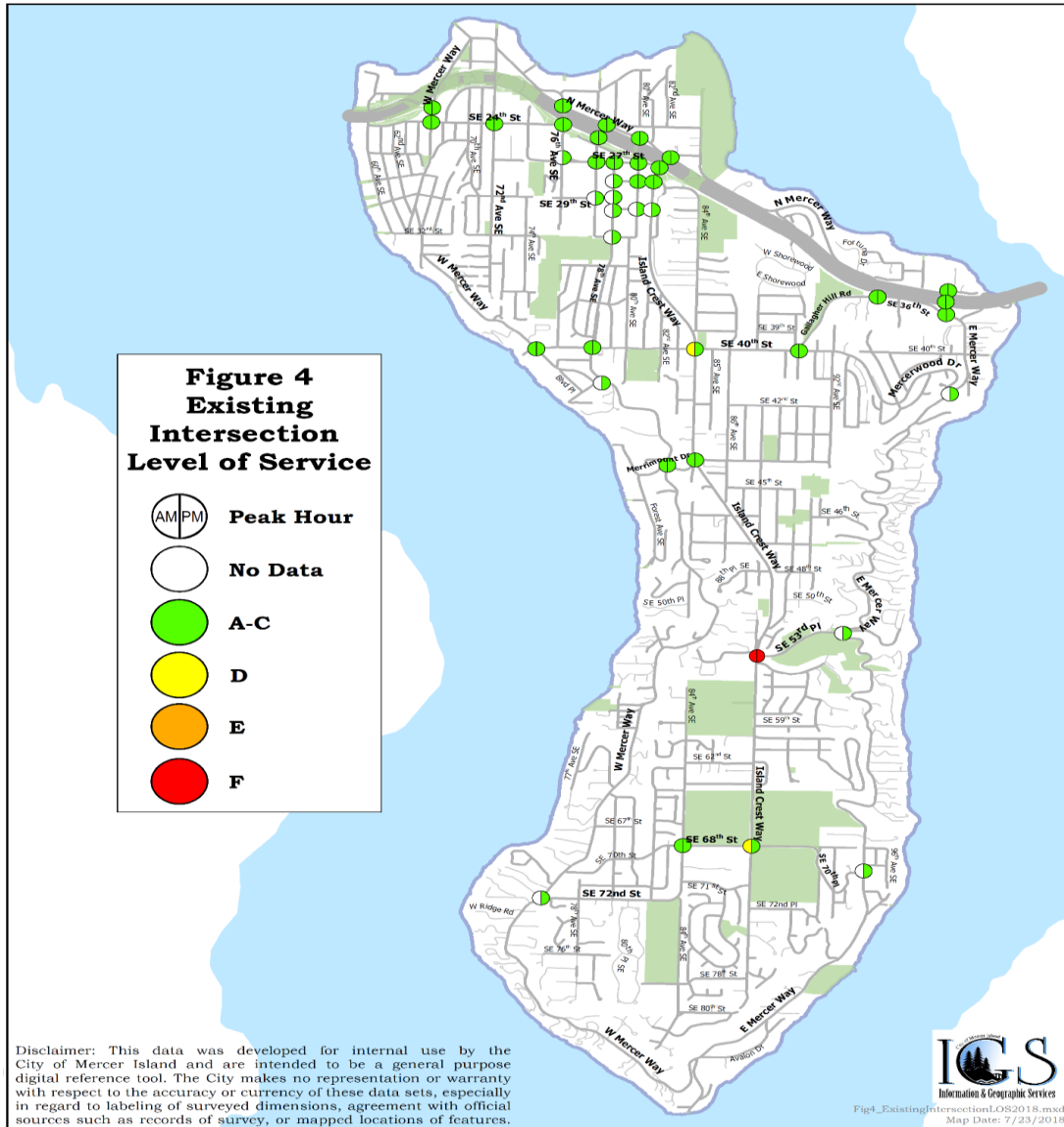
Table 1 and Figure 4 show the AM and PM peak hour operations for each of the study intersections. Outside of the Town Center, the analysis shows that during the AM and PM peak hour, all intersections operate at LOS D or better for existing conditions, except the intersection of SE 53rd Place/Island Crest Way operates at LOS F during the morning and afternoon peak hours.

Within the Town Center, where the LOS C standard applies, all intersections operate within this standard during the morning and afternoon peak hours.

Table 1. Existing Intersection Operations

Intersection	AM Peak Hour	PM Peak Hour
Town Center Intersections (LOS C Standard)		
SE 24th St/76th Ave SE	B	B
N Mercer Way/77th Ave SE	A	A
N Mercer Way/Park & Ride/80th Ave SE	C	C
SE 27th St/76th Ave SE	—	A
SE 27th St/77th Ave SE	B	B
SE 27th St/78th Ave SE	A	B
SE 27th St/80th Ave SE	B	C
SE 28th St/78th Ave SE	—	A
SE 28th St/80th Ave SE	B	B
SE 28th St/Island Crest Way	B	B
SE 29th St/77th Ave SE	—	B
SE 29th St/78th Ave SE	—	B
SE 30th St/78th Ave SE	—	B
SE 30th St/80th Ave SE	—	A
SE 30th St/Island Crest Way	—	B
SE 32nd St/78th Ave SE	—	B
WSDOT Intersections (LOS D Standard)		
I-90 EB off-ramp/I-90 WB on-ramp/W Mercer Way	B	B

I-90 WB on-ramp/N Mercer Way/76th Ave SE	A	A
I-90 EB off-ramp/77th Ave SE	B	B
I-90 WB off-ramp/N Mercer Way/Island Crest Way	D	C
I-90 EB on-ramp/SE 27th St/Island Crest Way	B	B
I-90 WB ramps/100th Ave SE	B	A
I-90 EB off-ramp/100th Ave SE/E Mercer Way	B	B
I-90 EB on-ramp/SE 36th St/E Mercer Way	B	B
Outside of Town Center Intersections (LOS D Standard)		
SE 24th St/W Mercer Way	B	B
SE 24th St/72nd Ave SE	A	B
SE 36th St/N Mercer Way	C	C
SE 40th St/W Mercer Way	B	A
SE 40th St/78th Ave SE	A	B
SE 40th St/Island Crest Way	D	C
SE 40th St/SE Gallagher Hill Rd	C	B
Mercerwood Dr/E Mercer Way	—	A
W Mercer Way/78th Ave SE	—	B
Merrimount Dr/W Mercer Way	B	B
Merrimount Dr/Island Crest Way	C	C
SE 53rd Place/Island Crest Way	F	F
SE 53rd Place/E Mercer Way	—	A
SE 68th St/84th Ave SE	C	B
SE 68th St/Island Crest Way	D	C
SE 70th Place/E Mercer Way	—	A
SE 72nd St/W Mercer Way	—	A



PARKING

Most parking in the City is provided by off-street parking lots, along residential access streets, or by on-street spaces in select areas of the Town Center.

In 2001, the City implemented a permit parking program for on-street parking in the Town Center in response to overflow conditions at the Mercer Island Park and Ride lot. This program preserves selected public on-street parking spaces for Mercer Island resident use, between the hours of 7:00 AM and 9:00 AM, Monday through Friday. All Mercer Island residents are eligible for a Town Center District permit which will allow them to park on Town Center streets during the specified hours.

An additional permit parking program was developed for residential streets north of the park and ride lot on North Mercer Way. This program only allows residents of the area to park on City streets between 7:00 AM and 4:00 PM, weekdays.

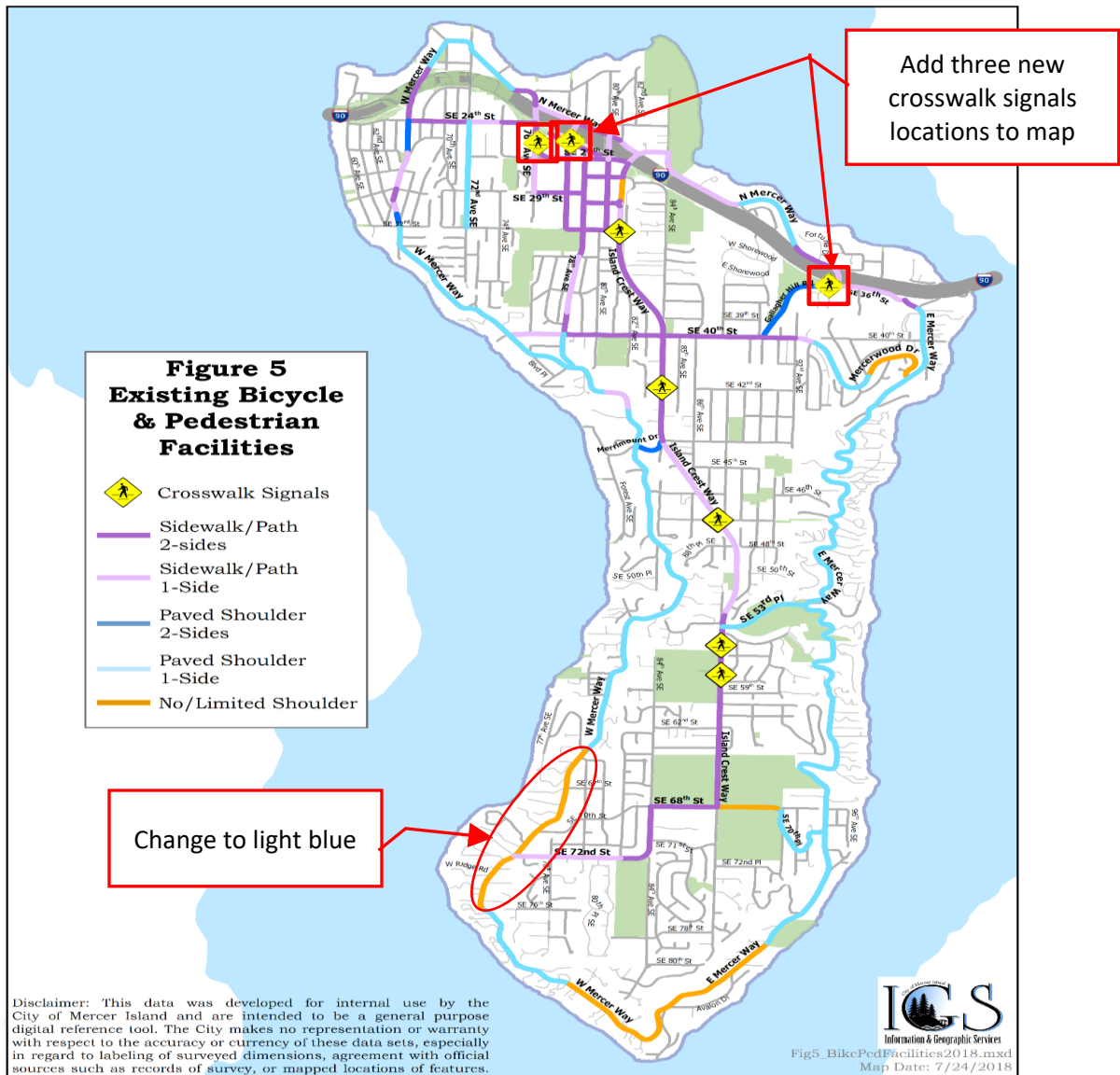
BICYCLE AND PEDESTRIAN FACILITIES

Bicycle and pedestrian facilities are a valuable asset for the residents of Mercer Island. These facilities are used for basic transportation, recreation, going to and from schools, and the facilities contribute to our community's quality of life. In 1996, the City developed a Pedestrian and Bicycle Facilities Plan to provide a network of bicycle and pedestrian facilities. The plan focused on encouraging non-motorized travel and improving the safety of routes near the Island's elementary schools. Of the 47 projects identified in the plan, 38 of the projects were either fully or partially completed during the first 12 years of the plan.

A 2010 update to the plan included vision and guiding principles, goals and policies, an existing and future network, a list of completed projects, revised facility design standards, and a prioritized list of projects. The plan emphasizes further development of safe routes to schools, completion of missing connections, and application of design guidelines.

A regional trail runs across the north end of the Island along the I-90 corridor providing a convenient connection to Seattle and Bellevue for pedestrians and bicyclists. The majority of streets in the Town Center include sidewalks. In addition, there are sidewalks near schools and select streets. Throughout the Island there are paved and unpaved shoulders and multiuse trails that provide for pedestrian mobility.

The bicycle network is made up of designated bicycle facilities including bicycle lanes and sharrows, and shared non-motorized facilities including shared use pathways, off-road trails, and paved shoulder areas. Figure 5 shows the pedestrian and bicycle facilities on the Island's arterial network.



PUBLIC TRANSPORTATION

The King County Metro Transit Department (Metro) and the regional transit agency, Sound Transit, provide public transportation services for Mercer Island and throughout King County. There are four major types of service offered on the Island: local fixed route service, regional express service, custom bus service, and access service.

Local fixed route service operates on the arterial roadway system, and provides public transit service connecting residential and activity areas.

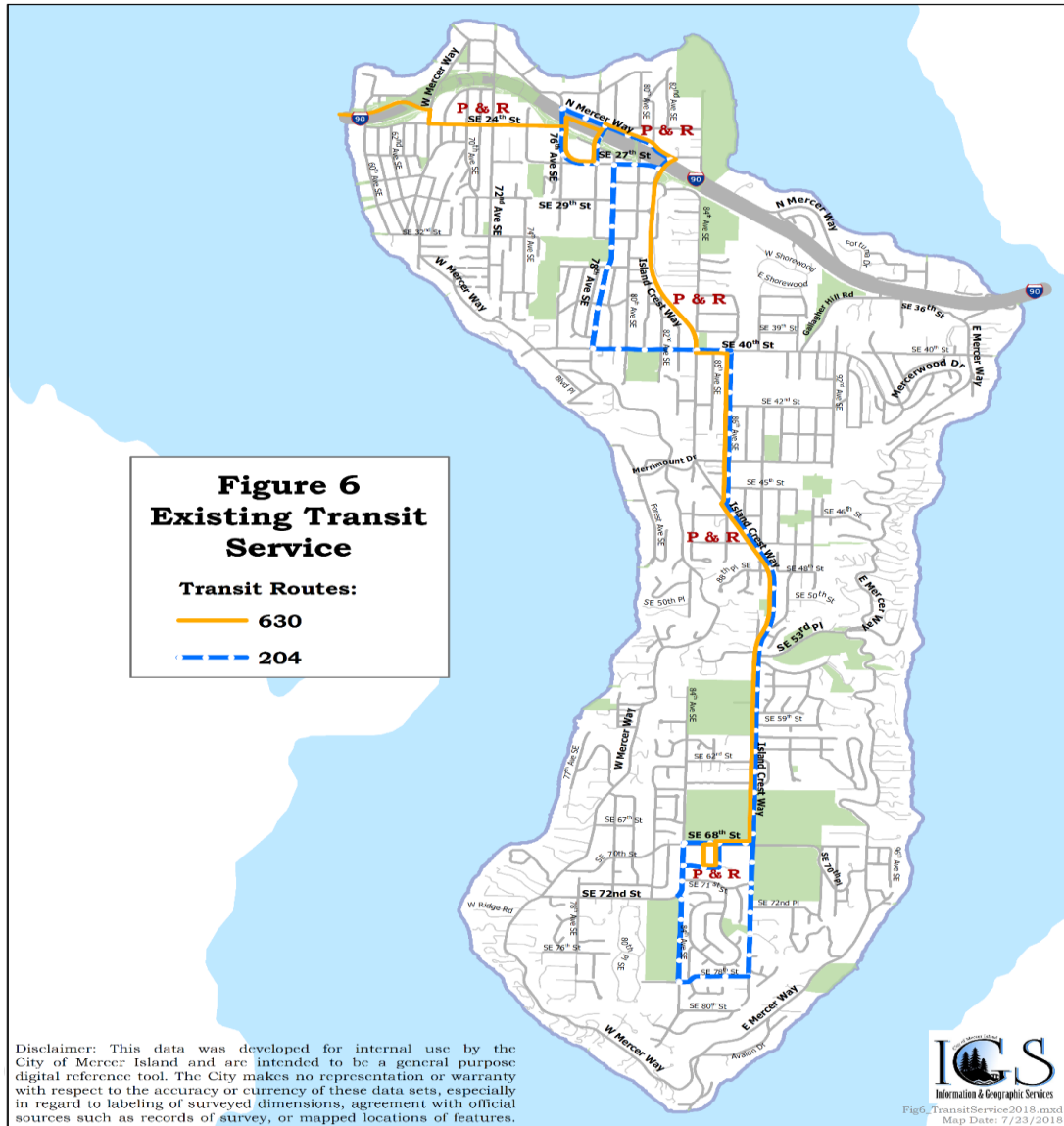
Regional express service, which also operates on fixed routes, is oriented toward peak hour commuter trips between the Mercer Island Park and Ride and major employment and activity centers off the Island. Sound Transit and Metro provide express service west and east along I-90 into Seattle and Bellevue.

Custom bus service includes specially designed routes to serve specific travel markets, such as major employers, private schools, or other special destinations. These services are typically provided during peak commute hours, and operate on fixed routes with limited stops. Custom bus service is currently provided between the Mercer Island Park and Ride and Lakeside School and University Prep in Seattle.

Access service provides door-to-door transportation to elderly and special needs populations who have limited ability to use public transit. Access covers trips within the King County Metro transit service area.

Figure 6 shows the current transit routes serving the Island. On Mercer Island, there are two routes that circulate throughout the City (Metro routes 204 and 630). At the Mercer Island Park and Ride, Sound Transit routes 550 and 554 connect Mercer Island to Seattle, Bellevue, and Issaquah; and Metro route 216 provides service to Redmond and Seattle.

Route 204 provides service between the Mercer Island Park and Ride lot and the Mercer Village Center. This route travels on 78th Avenue SE, SE 40th Street, 86th Avenue SE, Island Crest Way, and SE 68th Street to the Mercer Village Center. Route 630 is a community shuttle which provides service between downtown Seattle and the Mercer Village Center.



PARK AND RIDE

The Mercer Island Park and Ride is located north of I-90 on N Mercer Way near Mercer Island's Town Center. The Park and Ride has 447 spaces and is served by Metro and Sound Transit buses.

According to the Fourth Quarter 2017 Park and Ride Utilization Report prepared by King County, the Mercer Island lot is typically fully occupied during weekdays. A number of the users of this lot do not reside on the Island.

To supplement park and ride capacity on the Island, Metro has leased four private parking lots for use as park and ride lots, located at the Mercer Island Presbyterian Church, Mercer Island United Methodist Church, Congregational Church of Mercer Island and at the Mercer Village Center. These lots are described in Table 2. Together, they provide an additional 81 parking spaces for use by Island residents.

Table 2: Mercer Island Park and Ride Locations and Capacities

Lot	Location	Capacity	Cars Parked	% Spaces Occupied
Mercer Island Park and Ride	8000 N Mercer Way	447	447	100%
Mercer Island Presbyterian Church	3605 84th Ave SE	14	13	93%
United Methodist Church	70th Ave SE & SE 24th St	18	17	96%
Mercer Village Center	84th Ave SE & SE 68th St	21	7	32%
Congregational Church of Mercer Island	4545 Island Crest Way	28	3	11%

Source: Metro Transit P&R Utilization Report Fourth Quarter 2017.

SCHOOL TRANSPORTATION

The Mercer Island School District (MISD) provides bus transportation for public kindergarten through 12th grade students on Mercer Island. The MISD operates approximately 40 scheduled bus routes during the morning and afternoon. In addition, the District provides free Orca cards to high school students who live more than one mile from Mercer Island High School and who neither have a parking pass nor are assigned to a district bus.

RAIL SERVICES & FACILITIES

There are no railroad lines or facilities on Mercer Island. In the region, the Burlington Northern Railroad and Union Pacific Railroad companies provide freight rail service between Seattle, Tacoma, Everett, and other areas of Puget Sound, connecting with intrastate, interstate and international rail lines. Amtrak provides scheduled interstate passenger rail service from Seattle to California and Chicago. Major centers in Washington served by these interstate passenger rail routes include Tacoma, Olympia, Vancouver, Everett, Wenatchee, and Spokane.

AIR TRANSPORTATION

Mercer Island does not have any air transportation facilities or services. Scheduled and chartered passenger and freight air services are provided at Seattle-Tacoma International Airport in SeaTac, and at the King County International Airport in south Seattle.

WATER TRANSPORTATION

Mercer Island does not have any public water transportation services. The City's public boat launch is on the east side of the Island, off of East Mercer Way, under the East Channel Bridge.

IV. TRANSPORTATION SYSTEM—FUTURE NEEDS

This section describes the future transportation conditions and analysis used to identify future transportation needs and improvements.

FUTURE TRAVEL DEMAND

The future traffic volumes were forecast for the year 2044 based on the City's land use and zoning, as well as the housing and employment growth targets, as identified in the 2021 King County Urban Growth Capacity (report. More than 70 percent of new households and 76 percent of new jobs are forecasted to occur within the Town Center.

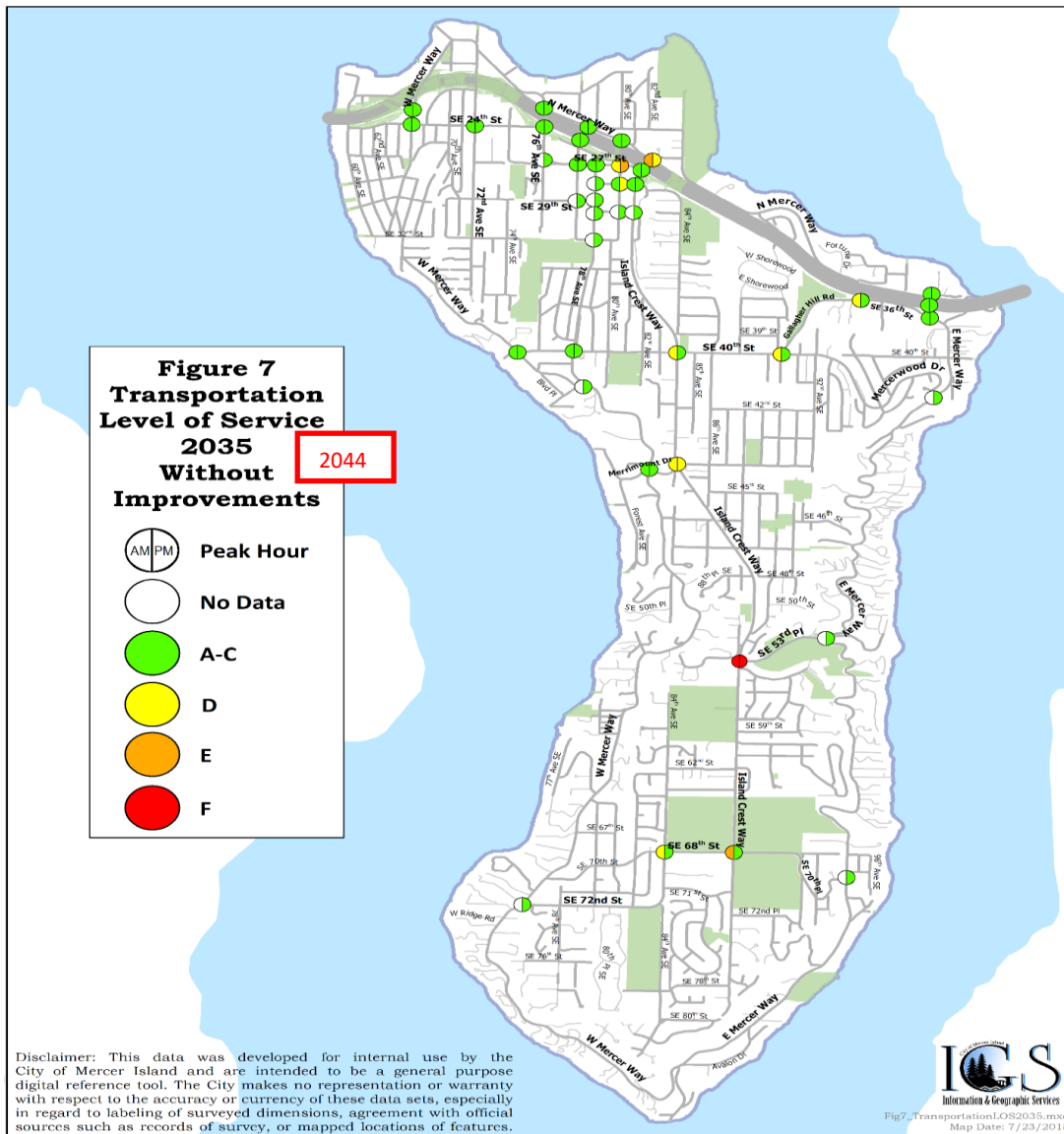
The opening of the East Link light rail line provides an additional travel option between the Town Center and regional destinations.

Town Center traffic growth reflects the higher potential for pedestrian and transit trips. Overall, the traffic growth in the Town Center is forecast to increase by 28 percent between 2024 and 2044, an annual growth rate of 1.4 percent. For areas outside the Town Center, traffic growth is expected to be lower with approximately ten percent growth between 2024 and 2044, an annual growth rate of 0.5 percent. The resulting forecasted traffic volumes directly reflect the anticipated land use, housing, and employment growth assumptions for the Island.

TRAFFIC OPERATIONS WITHOUT IMPROVEMENTS

The 2044 traffic analysis uses the forecasted growth in traffic and planned changes to the regional transportation system. Figure 7 shows the future traffic operations at the study intersections without any changes to roadway capacity on Mercer Island.

Results of the 2044 traffic operations analysis show that five intersections would operate below the LOS standards by 2044 if improvements are not made to the intersections. In the Town Center, the two intersections of SE 27th Street/80th Avenue SE and SE 28th Street/80th Avenue SE, would operate at LOS D or worse during either the AM or PM peak hours, without improvements. Outside of the Town Center, the intersections of SE 53rd Place/Island Crest Way and SE 68th Street/Island Crest Way would operate below the LOS D standard during either the AM or PM peak hours. The WSDOT-controlled intersection at the I-90 westbound off-ramp/N Mercer Way/Island Crest Way intersection would operate at LOS E during 2044 AM peak hour. The City will work with the WSDOT to explore improvements at this intersection.



RECOMMENDED IMPROVEMENTS

In addition to the projects identified in the City's Six-Year 2023 – 2028 Transportation Improvement Program (TIP), a future transportation needs analysis recommended additional projects based on the long-range mobility and safety needs through 2044. These include projects from the City's Transportation Impact Fee program and select projects from the City's Pedestrian and Bicycle Facilities Plan. Figure 8 shows the locations of the recommended improvement projects. Table 3 provides a map identification, describes the location and details for each of the projects, and estimates a project cost. The table is divided into two main categories of project types:

Non-Motorized Projects — The listed projects include new crosswalk improvements and pedestrian and bicycle facilities. These include projects from the City's Pedestrian and Bicycle Facilities Plan that connect residential areas to schools, parks, regional transit and other destinations.

Intersection/Road Projects — These projects increase the capacity and safety of an intersection or roadway segment. The projects include the maintenance of existing roadway segments to ensure that the City's current street system is maintained.

The recommended improvements identify a total of approximately \$60 million of transportation improvements over the next 20 years. About 50 percent (\$30 million) of the total is for street preservation and resurfacing projects to maintain the existing street system. Another 37 percent (\$22 million) is for non-motorized system improvements. About 13 percent (\$8 million) is for intersection and roadway improvements.

TRAFFIC OPERATIONS WITH RECOMMENDED IMPROVEMENTS

With the recommended improvements, the intersection operations will meet the City's LOS standard for intersection operation and the transportation system will provide a better network for pedestrian and bicycle travel, allowing greater mobility for Island residents. In addition, improvements to regional transportation facilities will accommodate growth in housing and employment, which will be focused in the Town Center, where residents can be easily served by high-capacity transit. Table 4 compares the 2044 intersection study locations without and with the recommended improvements for each of the AM and PM study locations.

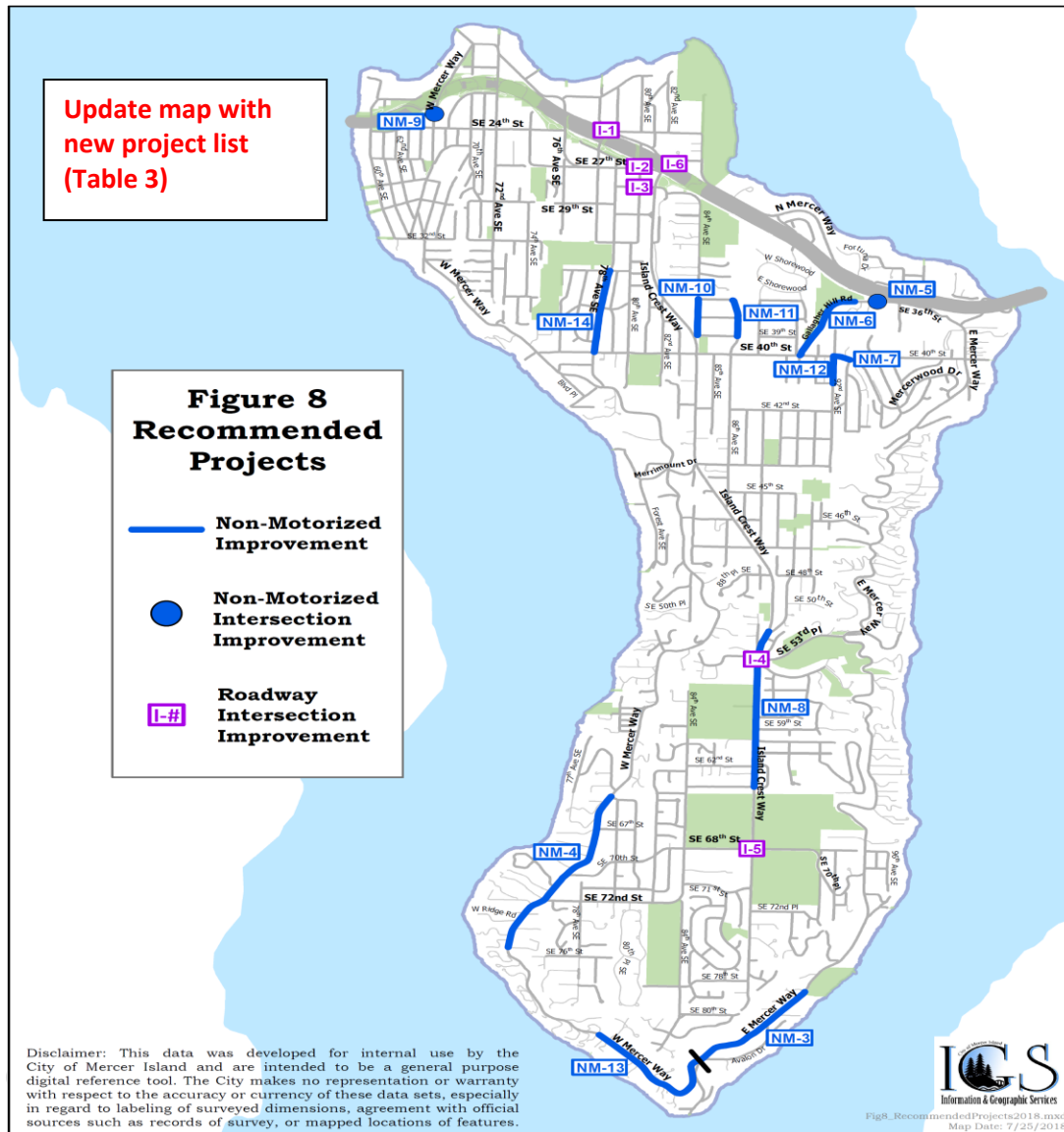


Table 3. Recommended Project List 2022—2044

ID	Location	Description	Justification	Cost (\$)
Non-Motorized Projects (NM)				
NM-1	Pedestrian and Bicycle Facilities Plan Implementation	Annual funding for non-motorized improvements.	2019—2024 TIP: Project D1	810,000 (\$45,000 per year)
NM-2	ADA Compliance Plan Implementation — Biennial	Design and construct improvements to meet ADA	2019—2024 TIP: Project D2	675,000 (\$75,000 every other year)

		compliance standards.		
NM-3	East Mercer Way Roadside Shoulders (Clarke Beach to Avalon Drive)	Add paved shoulders for non-motorized users.	2019—2024 TIP: Project D3	483,000
NM-4	West Mercer Way Roadside Shoulders Phase 2 (SE 70th Street to 7400 Block) and Phase 3 (SE 65th Street to SE 70th Street)	Add a shoulder on the east side of West Mercer Way for non-motorized users.	2019—2024 TIP: Project D4	796,000
NM-5	Crosswalk Improvement at SE 36th Street and North Mercer Way Intersection	Add pedestrian crossing with refuge island, ADA improvements, and rectangular rapid flashing beacons (RRFBs)	2019—2024 TIP: Project D5	100,000
NM-6	Gallagher Hill Road Sidewalk Improvement	Construct concrete curb, gutter, and sidewalk along east side of street.	2019—2024 TIP: Project D6	540,000
NM-7	Mercerwood Drive between 92nd Avenue SE and 93rd Avenue SE	Safe routes to school pedestrian facility along south side of street.	2019—2024 TIP: Project D7	200,000
NM-8	Island Crest Way Bike Route between 90th Avenue SE and SE 63rd Street	Complete missing gap in north-south bike route.	East Link mitigation/2019—2024 TIP: Project E1 (design only \$300,000)	2,000,000
NM-9	I-90 Trail Crossing at West Mercer Way	Construct enhanced trail crossing.	East Link mitigation/2019—2024 TIP: Project E2	300,000
NM-10	84th Avenue SE Sidewalk between SE 33rd Street and SE 36th Street	Construct sidewalk.	Safe routes to school	350,000
NM-11	86th Avenue SE Sidewalk Phase 2	Add sidewalk along east side of street.	Safe routes to school	340,000

	between SE 36th Street and SE 39th Street			
NM-12	92nd Avenue SE Sidewalk between SE 40th Street to SE 41st Street	Construct sidewalk along west side of street.	Safe routes to school	200,000
NM-13	West Mercer Way Roadside Shoulders (8100 block to Avalon Drive)	Add a paved shoulder (east side) for non-motorized users.	Pedestrian and Bicycle Facilities Plan: Project WMW8	2,000,000
NM-14	78th Avenue SE between SE 34th Street and SE 40th Street	Improve pedestrian and bicycle facilities to connect with Town Center.	Pedestrian and Bicycle Facilities Plan: Project N15 and N16	1,560,000
Intersection Projects (I)/Road Projects (R)				
I-1	77th Avenue SE/N Mercer Way	Roundabout or traffic signal.	East Link bus-rail integration/fails to meet LOS standard	Sound Transit Mitigation
I-2	SE 27th Street/80th Avenue SE	Traffic signal.	East Link mitigation/fails to meet LOS standard	Sound Transit Mitigation
I-3	SE 28th Street/80th Avenue SE	Traffic signal.	Fails to meet LOS standard	1,810,000
I-4	SE 53rd Place/Island Crest Way	Traffic signal.	Fails to meet LOS standard	1,450,000
I-5	SE 68th Street/Island Crest Way	Traffic signal or roundabout.	Fails to meet LOS standard	1,660,000 ¹
I-6	N Mercer Way/I-90 Westbound Off-Ramp/Island Crest Way	Add exclusive westbound left turn lane at I-90 off-ramp.	Fails to meet WSDOT LOS Standard	500,000 ²
I-7	Light Rail Station Access Improvements and Mitigation for I-90 Center Roadway Closure	Vehicle and non-motorized improvements that enhance access to station and address issues related to I-90 center roadway closure.	Light rail station scheduled to open in 2023	2,500,000
R-1	Street Preservation/Maintenance	Resurfacing arterial and residential streets based on PCI rating.	2019—2024 TIP: Projects A1, B3, C1—C10	30,000,000

¹ Cost estimate reflects higher cost option of alternative actions. ² Cost estimate represents a 10% City share; total cost is \$5,000,000.	Total 2018—2035 Projects	\$48,274,000	
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ID	Location	Description	Justification	Cost (\$)
Non-Motorized Projects (NM)				
NM-1	80th Ave SE Sidewalk (SE 27th St - SE 32nd St)	Replace existing curb, sidewalk, ADA ramps, trees, and lighting.	2023-2028 TIP (SP136)	1,376,000
NM-2	78th Ave SE Sidewalk (SE 32nd St - SE 34th St)	Replace existing curb, sidewalk, ADA ramps, trees, and lighting.	2023-2028 TIP (SP137)	779,488
NM-3	West Mercer Way Roadside Shoulders (8100 WMW - 8400 EMW)	Add shoulder along the east side of West Mercer Way for nonmotorized users.	2023-2028 TIP (SP138)	690,979
NM-4	Gallagher Hill Road Sidewalk Improvement	Construct sidewalk.	2023-2028 TIP (SP139)	508,455
NM-5	SE 40th St Sidewalk Improvement (Gallagher Hill Road - 93rd Ave SE)	Replace/improve existing sidewalks and construct bike lanes.	2023-2028 TIP (SP140)	997,639
NM-6	ADA Transition Plan Implementation	Construct pedestrian facility improvements to comply with the City's ADA Transition Plan.	2023-2028 TIP (SP141)	5,000,000
NM-7	Island Crest Way Corridor Improvements (90th Ave SE - SE 68th St)	Implementation of recommendations from Island Crest Way Corridor Safety Analysis.	2023-2028 TIP (SP142)	1,526,375
NM-8	North Mercer Way - MI Park and Ride Frontage Improvements	Remove bus bay on north side of NMW, widen trail, and construct safety improvements.	2023-2028 TIP (SP144)	1,203,081
NM-9	Pedestrian and Bicycle Facilities Plan Implementation	Annual program to identify, prioritize, design, and construct spot improvements and gap completion projects.	2023-2028 TIP (SP145)	1,340,000
NM-10	SE 32nd St Sidewalk Replacement (77th Ave SE - 78th Ave SE)	Replace sidewalk and trees adjacent to Mercerdale Park due to tree damage.	2023-2028 TIP (SP147)	324,719

NM-11	East Mercer Way Roadside Shoulders (SE 79th St - 8400 block)	Add shoulder along the west side of East Mercer Way for nonmotorized users.	2023-2028 TIP (SP148)	531,105
NM-12	78th Ave SE Nonmotorized Improvements (SE 34th St - SE 40th St)	Improve pedestrian and bicycle facilities to connect with Town Center.	2022 Transportation Impact Fee (#3)	1,697,000
NM-13	84th Ave SE Sidewalk (SE 33rd St - SE 36th St)	Construct sidewalk.	2022 Transportation Impact Fee (#4)	597,000
NM-14	86th Ave SE Sidewalk Phase 2 (SE 36th St - SE 39th St)	Construct sidewalk along east side of street.	2022 Transportation Impact Fee (#5)	1,141,000
NM-15	92nd Ave SE Sidewalk (SE 40th St - SE 41st St)	Construct sidewalk along west side of street.	2022 Transportation Impact Fee (#6)	803,000
NM-16	Merrimount Dr Sidewalk (ICW - Mercer Way)	Construct sidewalk along both sides of street.	2022 Transportation Impact Fee (#8)	632,000
NM-17	78th Ave SE Sidewalk (SE 40th St - SE 41st St)	Construct sidewalk along west side of street.	2022 Transportation Impact Fee (#9)	250,000
NM-18	86th Ave SE Nonmotorized Improvements (SE 42nd St - ICW)	Construct bike facilities and sidewalk along west side of street.	2022 Transportation Impact Fee (#10)	2,666,000
Intersection Projects (I)/Road Projects (R)				
I-1	Minor Capital - Traffic Operations Improvements	Minor improvements to address traffic operation and safety issues.	2023-2028 TIP (SP143)	313,295
I-2	SE 28th St/80th Ave SE	Install traffic signal.	2022 Transportation Impact Fee (#1)	1,464,000
I-3	80th Ave SE/North Mercer Way	Add turn lane to improve traffic operations at the intersection.	2022 Transportation Impact Fee (#14)	754,000
I-4	North Mercer Way/I-90 Westbound Off-Ramp/Island Crest Way	Add exclusive westbound left turn lane at I-90 off-ramp.	2022 Transportation Impact Fee (#15)	650,000
I-5	SE 53rd Pl/Island Crest Way	Install traffic signal.	Fails to meet LOS standard	1,907,130
I-6	SE 68th St/Island Crest Way	Install traffic signal or roundabout.	Fails to meet LOS standard in the future	2,151,590

R-1	77th Ave SE Channelization (SE 32nd - North Mercer Way)	Rechannelization of the roadway to comply with street design standards.	2023-2028 TIP (SP146)	53,324
R-2	Signal Coordination Along Island Crest Way (North Mercer Way – SE 28th St) and at the North Mercer Way/80th Ave SE intersection.	Coordinate four existing traffic signals along Island Crest Way and North Mercer Way.	2022 Transportation Impact Fee (#11)	690,000
R-3	Street Preservation/Maintenance	Resurfacing arterial and residential streets based on pavement conditions.	2023-2028 TIP	30,000,000
Total 2022—2044 Projects				60,047,180

**Table 4. 2044 Intersection Operations —
Without and With Recommended Improvements**

Intersection	2044 AM Peak Hour		2044 PM Peak Hour	
	Without Improvements	With Recommended Improvements	Without Improvements	With Recommended Improvements
Town Center Intersections (LOS C Standard)				
SE 24th St/76th Ave SE	B	B	B	B
N Mercer Way/77th Ave SE	A	B	A	A
N Mercer Way/Park & Ride/80th Ave SE	C	C	C	C
SE 27th St/76th Ave SE	—	—	B	B
SE 27th St/77th Ave SE	B	B	C	C
SE 27th St/78th Ave SE	B	B	B	B
SE 27th St/80th Ave SE	D	B	E	B
SE 28th St/78th Ave SE	—	—	B	B
SE 28th St/80th Ave SE	B	B	D	B
SE 28th St/Island Crest Way	B	B	C	C
SE 29th St/77th Ave SE	—	—	B	B
SE 29th St/78th Ave SE	—	—	C	C
SE 30th St/78th Ave SE	—	—	C	C
SE 30th St/80th Ave SE	—	—	B	B
SE 30th St/Island Crest Way	—	—	B	B

SE 32nd St/78th Ave SE	—	—	C	C
WSDOT Intersections (LOS D Standard)				
I-90 EB off-ramp/I-90 WB on-ramp/W Mercer Way	B	B	B	B
I-90 WB on-ramp/N Mercer Way/76th Ave SE	B	B	A	A
I-90 EB off-ramp/77th Ave SE	B	B	B	B
I-90 WB off-ramp/N Mercer Way/Island Crest Way	E	C	D	C
I-90 EB on-ramp/SE 27th St/Island Crest Way	C	C	C	C
I-90 WB ramps/100th Ave SE	C	C	B	B
I-90 EB off-ramp/100th Ave SE/E Mercer Way	B	B	B	B
I-90 EB on-ramp/SE 36th St/E Mercer Way	B	B	B	B
Outside of Town Center Intersections (LOS D Standard)				
SE 24th St/W Mercer Way	B	B	C	C
SE 24th St/72nd Ave SE	B	B	B	B
SE 36th St/N Mercer Way	D	D	C	C
SE 40th St/W Mercer Way	B	B	B	B
SE 40th St/78th Ave SE	B	B	B	B
SE 40th St/Island Crest Way	D	D	C	C
SE 40th St/SE Gallagher Hill Rd	D	D	C	C
Mercerwood Dr/E Mercer Way	—	—	B	B
W Mercer Way/78th Ave SE	—	—	B	B
Merrimount Dr/W Mercer Way	C	C	C	C
Merrimount Dr/Island Crest Way	D	D	D	D

SE 53rd Place/Island Crest Way	F	B	F	B
SE 53rd Place/E Mercer Way	—	—	A	A
SE 68th St/84th Ave SE	D	D	B	B
SE 68th St/Island Crest Way	E	A	C	A
SE 70th Place/E Mercer Way	—	—	B	B
SE 72nd St/W Mercer Way	—	—	B	B

V. FINANCIAL ANALYSIS

Since incorporation in 1960, the City has consistently made (or required through private development) transportation investments that have preceded and accommodated population and employment growth and its associated traffic growth. This strategy has enabled the City to make significant improvements in the community's neighborhood streets, arterial roads, pavement markings, streets signs, and pedestrian and bicycle facilities.

In 2022, the City's primary funding sources for local transportation projects included: gas tax revenues (\$429,000), real estate excise tax (\$2,253,000), Transportation Benefit District vehicle fees (\$375,000) and transportation impact fees (\$75,000). In total, the City received approximately \$3.1 million in annual transportation revenues.

In addition, Sound Transit mitigation for the closure of the I-90 center roadway is providing up to \$5.1 million in funds for operational and safety improvements.

Combined with supplemental federal and state grant funding, Mercer Island has sufficient resources to maintain and improve its transportation system over the next 20 years and will be able to accomplish the following:

- Maintain the City's arterial street system on a 25-year (average) life cycle.
- Maintain the City's residential system on a 35-year (average) life cycle.
- Maintain, improve, and expand the City's pedestrian and bicycle system over the next 20 years.
- Maintain and improve the transportation system to meet the forecasted housing and employment growth targets.

VI. IMPLEMENTATION STRATEGIES

The following actions by the City of Mercer Island and other jurisdictions will be necessary to effectively implement the programs and policies of this transportation element:

TRANSPORTATION SYSTEM STREETS, TRANSIT, NON-MOTORIZED

- Implement local neighborhood traffic control strategies as necessary to address specific issues.

- Implement Transportation System Management techniques to control traffic impacts.

PLANNING STANDARDS, POLICIES, PROGRAMS

- Periodically update the City's inventory of transportation conditions, existing level of service and projected level of service.
- Complete the plan for non-motorized transportation improvements consistent with the City's Comprehensive Plan, including a review of the Pedestrian and Bicycle Facilities Plan and its design standards.
- Develop a neighborhood parking program to address parking overflow impacts from schools, businesses, parks and multi-family housing.
- Revise design standards as necessary to comply with ADA requirements.
- Continue to involve the public in transportation planning and decisions.
- Create "transit friendly" design guidelines for new development projects in the Town Center.
- Develop policies, criteria and a process to determine when, and under what conditions, private roads and privately-maintained roads in public rights-of-way should be accepted for public maintenance and improvement.
- Implement the City's adopted Commute Trip Reduction program.

FINANCIAL STRATEGIES

- Secure funding to implement the adopted Six-Year Transportation Improvement Program.
- Actively pursue outside funding sources to pay for adopted transportation improvements and programs.

TRANSIT PLANNING

- Work with Metro to reinstate and improve transit services. Explore alternative methods of providing service, such as developing a demand responsive service.
- Work with Sound Transit to design and construct high-capacity transit and parking facilities consistent with Land Use and Transportation Policies contained in the Comprehensive Plan that will be available for use by Mercer Island residents.

VII. CONSISTENCY WITH OTHER PLANS & REQUIREMENTS

The Growth Management Act of 1990 requires that local comprehensive plans be consistent with plans of adjacent jurisdictions and regional, state and federal plans. Further, there are several other major statutory requirements with which Mercer Island transportation plans must comply. This section briefly discusses the relationship between this Transportation Element and other plans and requirements.

OTHER PLANS

The Transportation Element of the Mercer Island Comprehensive Plan is fully consistent with the following plans:

Mercer Island Comprehensive Plan — The Transportation Element is based on the needs of, and is consistent with the Land Use Element.

King County and Multicounty Planning Policies — Mercer Island's proposed transportation policies are consistent with PSRC's multi-county and King County's countywide planning policies.

Vision 2050 — Vision 2050 is the region's Metropolitan Transportation Plan and builds upon Vision 2020, Destination 2030, and Vision 2040 to articulate a coordinated long-range land use and transportation growth strategy for the Puget Sound region. Mercer Island Comprehensive Plan's Land Use and Transportation Elements support this strategy by accommodating new growth in the Town Center, which is near existing and proposed future transportation improvements along the I-90 corridor. The Transportation Element is consistent with these plans.

Regional Transit System Plan — Sound Transit's Regional Transit System Plan (RTP) lays out the Puget Sound region's plans for constructing and operating a regional high-capacity transit system. Both the Land Use and Transportation Elements directly support regional transit service and facilities, and are consistent with the RTP.

PLAN REQUIREMENTS

The Transportation Element of the Mercer Island Comprehensive Plan meets the following regulations and requirements:

Growth Management Act — The Growth Management Act, enacted by the Washington State Legislature in 1990 and amended in 1991, requires urbanized counties and cities in Washington to plan for orderly growth for 20 years into the future. Mercer Island's Transportation Element conforms to all of the components of a Comprehensive Transportation Element as defined by GMA.

Commute Trip Reduction — In 1991, the Washington State Legislature enacted the Commute Trip Reduction Law which requires implementation of transportation demand management (TDM) programs to reduce work trips. In response to these requirements, Mercer Island has developed its own CTR program to reduce work trips by City employees. There are two other CTR-affected employers on the Island; both have developed CTR programs.

Air Quality Conformity — Amendments to the federal Clean Air Act made in 1990 require Washington and other states to develop a State Implementation Plan (SIP) which will reduce ozone and carbon monoxide air pollutants so that national standards may be attained. The Central Puget Sound area, including King County and Mercer Island, currently meets the federal standards for ozone and carbon monoxide. The area is designated as a carbon monoxide maintenance area, meaning the area has met federal standards, but is required to develop a maintenance plan to reduce mobile sources of pollution.