WTA

RAPID TRANSIT

Draft Locally Preferred Alternative

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Locally Preferred Alternative (LPA)
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Glossary

Bus bunching	When a bus is not able to stay on schedule and falls behind, other buses catch up; the delay of the first bus is exacerbated as that bus, running late, ends up picking up passengers that would have caught a later bus.
Business access lane	Travel lane that would be exclusive to transit except to allow access to adjacent businesses.
Bus stop balancing	Process of optimizing the spacing between bus stops through consolidating, relocating, eliminating, and implementing new stops.
Headway	The time between vehicles serving a bus stop or transit center.
Inbound	Path that the bus travels as it heads towards Bellingham Station in downtown.
Off-board	Refers to activity occurring outside of the bus.
On-board	Refers to activity occurring on the bus.
Outbound	Path that the bus travels as it heads away from Bellingham Station.
Queue jump	Type of roadway geometry designed to give preference to buses at an intersection, which typically consists of an additional travel lane on the approach to a signalized intersection that is restricted to buses only. The lane allows buses to bypass vehicle traffic and merge into the general travel lanes ahead of other vehicles.
Real-time information	Refers to sharing real-time bus arrival times with passengers at a bus stop.
Run time or running time	The time it takes a bus to make one trip of a route.
Stop balancing	Consolidating and relocating bus stops to achieve more consistent and efficient spacing between stops.
Stop spacing	The distance between bus stops.
Travel time	The time it takes for a bus to make one round trip on a specific route.

1. Executive Summary

The Rapid Transit project and development of this Locally Preferred Alternative (LPA) is a collaboration between WTA and the City of Bellingham. The LPA identifies speed and reliability improvements that support WTA's goal of providing increased frequency (10-minute frequency) along the Go Lines. These improvements are presented as short- or long-term improvements; short-term improvements may cost between $660,000 and $7.9M per Go Line. Long-term improvements are estimated to cost between $3.2M and $17.5M per Go Line. Figure 1 illustrates the improvements identified as part of the LPA.

Figure 1. Go Line LPA Recommended Infrastructure & Signal Changes

Implementing the LPA improvements will require prioritizing projects, identifying funding sources, and collaborating with other agencies and private developers to realize best value projects that are the most feasible given the limited resources of WTA and the City. As part of this process, WTA and the City will be entering into a Memorandum of Understanding

(MOU) to streamline implementation and are committed to working together to identify funding opportunities.

2. WTA Rapid Transit Project Overview

WTA, in partnership with the City of Bellingham, has been exploring opportunities to enhance existing transit services along high frequency routes by implementing speed and reliability improvements alongside changes that support further frequency enhancements. This Rapid Transit project has focused on WTA's high frequency network made up of four (4) transit lines operating within Bellingham city limits. These Go Lines were created to serve the community's most significant destinations, including Downtown, Western Washington University, Whatcom Community College, Cordata, Barkley Village, Sunset Square, Northwest Avenue, and the Lakeway commercial area. By operating on key community corridors, the Go Lines serve the greatest concentrations of WTA's designated priority populations and carry the vast majority of system riders.

Figure 2 provides a timeline of the efforts that have been completed for the Rapid Transit project. The Rapid Transit project began with an initial Rapid Transit Feasibility Study in 2023, the adoption of a Preliminary Locally Preferred Alternative (see Appendix A – Preliminary LPA) in early 2025 after the completion of early Phase 2 efforts in 2024, and the development of this draft Locally Preferred Alternative (LPA) in late 2025. Development of this draft LPA built on the previous efforts as well as two workshops conducted with key stakeholders in June and October of 2025 (see Appendix B – Stakeholder Workshops). A Locally Preferred Alternative (LPA) refers to the transit project option that is considered the best choice by a local community and/or governing body after evaluating various alternatives. The LPA represents the preferred project based on local needs, resources, and input during the planning process. When comparing alternatives, the preferred LPA is the best option for addressing the purpose and need for the project. The LPA is a general description of the transit location, improvements, and service plan. LPA design specifics and the definition of additional elements of the project will be refined during subsequent engineering and planning efforts.

Figure 2. Timeline of Rapid Transit Study Efforts

The goals and objectives in Figure 3 were developed as part of the 2023 Feasibility Study. The measures were used to assess how well the alternatives meet the goals and objectives as well as provide a comparison of the alternatives. These goals, objectives, and measures continue to be relevant for the LPA.

Goal	Objective	Measure
Improve safety and comfort for bus riders, pedestrians, and bicyclists along corridor	• Meet all ADA requirements for stop/station locations • Improve accessibility along the corridor specifically targeting to/from transit • Enhance stops along the corridor for rider comfort and ease of use • Reduce conflicts between buses and other modes along the corridor	• Reduce transit conflicts with other modes • Pedestrian access
Provide for more efficient transit operation along the proposed rapid transit corridor	• Reduce bus dwell time at stops • Maintain or improve on-time performance for transit • Optimize the bus travel route to minimize delays related to congestion • Provide bus treatments to enhance efficiency (e.g., queue jumps, transit signal priority, bus stop islands)	• Increase transit speed and reduce running time
Use transit to increase access to higher density land uses and activity opportunities along the corridor	• Increase ease of transit use to and from key land uses and specifically those with higher activity such as grocery stores, malls, medical facilities etc. • Consider existing and future land use patterns in the placement of transit stops • Ensure partner agencies have coordinated plans that consider transit accessibility in future corridor improvements and redevelopment of parcels • Ensure that land use regulations along the corridor reflect/supports/ requires transit-oriented communities	• Increase ridership • Presence of transit supportive land use • Development of streetscape designed for non-motorized use

Source: Whatcom Transportation Authority Rapid Transit Study – Feasibility, November 2023

Figure 3. Rapid Transit Feasibility Study Goals, Objectives, and Measures

3. Enhanced Go Lines

3.1 Purpose and Need

Bus delays are a significant issue on all Go Lines at certain times of the day. Bus delays are worsening due to increased congestion from traffic growth both inside and outside the city. This bus delay increases the cost for WTA to maintain scheduled frequencies. Highly variable bus arrivals also reduce the reliability of service and cause riders to miss transfers or avoid using WTA service. Mid-route bus transfers are also difficult, because 15-minute headways limit route connections. Ultimately, bus delays, difficult transfers, and overall poor rider experience can cause rider frustration, resulting in reduced ridership and more driving. Figure 4 illustrates the on-time performance for the weekday PM peak hour in June 2025 and shows the percentage of bus trips that are late during that period.

Figure 4. On-Time Performance for Weekday PM Peak Hour June 2025

In 2018, WTA increased the number of buses on the Green and Gold Go Lines to address slower run times and delay caused by congestion. However, it is not financially sustainable to continually increase the number of buses, and the usefulness of extra buses is limited when all vehicles are delayed, causing bus bunching. Bus bunching occurs when, as a bus cannot stay on schedule and falls behind, other buses catch up.

The Whatcom Council of Governments' (WCOG) travel demand model for the year 2045 estimates future travel based on an anticipated increase of approximately 30% in households and 43% in employment, compared to 2023 conditions. These population and employment forecasts are developed collaboratively by all Whatcom County local governments and informed by projections from the Washington State Office of Financial Management and analyses of land use patterns. WCOG's model uses these agreed-upon forecasts to estimate resulting travel demand for both base and future years. This growth is expected to increase congestion along arterials and at intersections during peak hours, including on all Go Line corridors.

Transit signal priority (TSP) exists at many signals along Go Lines routes, but there is no evidence that the current TSP configuration reduces bus travel times (see Transit Signal Priority and Signal Coordination for more information). In addition to impacts from intersections, the transit service is also constrained by limited right-of-way. The arterial and collector streets outside of the downtown area do not provide many options for dedicated running ways. In some areas, there are pinch points or hotspots that further hamper efficient movement.

The City of Bellingham is committed to strong support for land use development that fosters frequent transit service. This commitment has been reflected in adoption of policies prioritizing transit and transit-oriented development. Development is rapidly occurring in Bellingham's designated Urban Villages, located along key transit corridors. The City's seven Urban Villages (see Figure 5) comprise less than 4% of the city's land area but are expected to accommodate 30% of future population growth.

Figure 5. Existing Urban Villages

While Bellingham is experiencing densification, much of the existing development pattern outside of the Urban Villages has been low-density single-family residential or auto-oriented commercial development. Several elements of the recently updated Comprehensive Plan, including the Transportation chapter (along with the accompanying Multimodal Transportation Plan) and the Land Use, Urban Design, and Housing chapter, include goals and policies supporting transit-oriented development (TOD) and increased mixed-use development intensity along transit corridors. The Bellingham Comprehensive Plan, adopted in December 2025, continues strong support for TOD and increased density. The Plan includes a TOD corridor growth concept, which could accommodate approximately 1,275 additional housing units and 640 additional jobs along key high frequency corridors. The Plan provides a reprioritization of the modal hierarchy, prioritizing transit travel over bicycle travel in transit corridors. The City passed an interim ordinance to allow more infill housing and density throughout most of the community, as well as removing parking minimums citywide. Both policies are transit friendly.

The City has also invested substantially in pedestrian and bicycle infrastructure to support access to transit (opportunity), but there are still many areas where improvements are needed to provide dedicated pedestrian and bicycle connections to transit stops, which limits access and ridership potential (challenge).

The overall intent of this project is to improve speed and reliability of transit along key corridors in Bellingham, which will enable WTA to increase bus frequency to 10 minutes. Ten-minute frequency will make transit a viable travel mode for even more of the community and help reduce dependency on single-occupancy private vehicle travel.

4. Locally Preferred Alternative

This section describes solutions that were identified through performance analysis and the activities shown in Figure 2. Solutions range from those that are relatively low effort to those that are complicated and have a high level of effort, and from those that will address the highest priority existing performance challenges to those that will help prevent future performance deterioration. Solutions are presented first for the whole Go Line network and then for each individual Go Line. Features of the Enhanced Go Lines include:

- Increased Frequency
- Transit Spot Improvements
- Advanced Transit Signal Priority
- Enhanced Bus Stops
- Pedestrian and Bicycle Infrastructure Changes
- Transit Supportive Land Uses

Strategies included in the Locally Preferred Alternative include those for which WTA, the City of Bellingham, or both, have responsibility and authority. As described in the sections that follow, solutions in the LPA support WTA's ability to maintain the reliability and current frequency of Go Lines and to introduce higher frequencies (10-minute headways) in the future.

4.1 Network

In addition to solutions at a corridor, stop, and intersection level, this LPA includes network-wide solutions to improve transit performance. Solutions include infrastructure and technology changes, in addition to WTA operating changes and City of Bellingham policy and planning changes. Recommended treatments include those that WTA can act on in the short-term and those that will require more extensive analysis and planning and/or that require changes that are likely to take place over an extended time period. Figure 6 represents the locations of the infrastructure and technology changes recommended in this LPA.

Figure** 6. **Go Line LPA Recommended Infrastructure & Signal Changes

4.1.1 WTA Service & Operations

WTA can undertake service maintenance and enhancement strategies, outside of any changes to broader local policy and infrastructure, to maintain and improve the frequency of the Go Lines. Service maintenance and enhancement strategies implemented by WTA can only improve transit service to a certain point, so these must be coupled with infrastructure improvements to achieve the overall goal of 10-minute frequences. WTA is committed to implementing more frequent service once treatments have achieved a travel

time savings of 5 to 10 minutes (in other words, buses can travel the route 5-10 minutes faster) and/or when on-time performance is being met during the peak periods.

Service Maintenance

WTA has already begun and will continue to implement bus stop balancing to reduce running time for each route. Specific bus stop recommendations are included by line, and WTA will continue to monitor and evaluate other opportunities in the future. Bus stops identified in this study for potential elimination or consolidation are considered preliminary and are based on an initial review by WTA of stop spacing. Prior to eliminating or consolidating specific stops, WTA will review the potential impacts of the changes and consider other factors such as ridership, accessibility, etc.

Bus Stop Balancing Example

WTA is proposing to eliminate the inbound and outbound stops on the Green Go Line at Northwest Ave and Connecticut, as they are close to other stops along the line.

To support bus stop balancing, the LPA recommends that WTA update their Bus Stop Design Guidelines stop spacing for Enhanced Go Lines. The current August 2022 Bus Stop Design Guidelines provide stop spacing guidance for urban and rural conditions. The guidelines also note that deciding on the distance between stops should consider presence of pedestrian facilities, trip generators, route frequency, and the ability for the bus to safely stop. For Enhanced Go Lines the LPA recommends that WTA strive for a spacing of ¼ to ½ mile between bus stops. In addition, along with elements already noted in the guidelines, WTA should evaluate stop ridership to understand if routes are local serving and the impact that increasing stop spacing could have on ridership.

WTA is currently investing in new technology to improve the boarding process as part of recently approved fare increases. By fall 2026, WTA will have completed the installation of new contactless multimedia ticket readers on buses, improving reading performance with the aim of quicker, easier boardings. The readers will also enable credit card payments directly on the devices.

WTA is exploring ways to reduce the time a bus waits at a stop during passenger boarding and fare payment. Solutions under examination include all-door boarding and off-board fare collection. Initial review has shown that off-board fare collection may not be significantly advantageous to the boarding process, given increasing use of mobile ticketing and improved on-board fare readers, like the ones mentioned above. The

additional capital and maintenance costs of off-board fare collection devices may also not justify their deployment.

In addition, WTA continuously monitors on-time performance of routes and stops to identify if there are schedule adjustments needed. WTA may adjust bus schedules in response to service needs.

WTA will work directly with City staff to develop transit-supportive right-of-way and stop design guidelines for the City to reference in future planning and parcel development/redevelopment.

Service Enhancements

WTA takes many factors into consideration when determining if, where, and when to adjust frequencies along the Go Lines. Increasing frequency requires WTA to have sufficient drivers and staff available and to ensure that any retiming of the routes is operationally efficient. However, if the route under consideration for increased frequency already experiences delays, adding another vehicle to the route is not likely to result in improved frequency due to bus bunching.

By implementing the recommendations in the LPA, WTA can count on more reliable travel times for Go Line buses, allowing WTA to continue to improve frequency while providing reliable service. WTA will monitor on-time performance and travel time savings as the LPA treatments are completed. As described previously, WTA is committed to implementing more frequent service once treatments have achieved a travel time savings of 5 to 10 minutes and/or when on-time performance is being met during the peak periods.

Bus Stop Enhancements

At a minimum, stops are provided with a pole containing route sign and schedule posting ("flat") and an ADA-accessible pad. Many, but not all, stops have a shelter, bench, and trash receptable. Enhanced bus stop amenities, such as real-time signage and lighting, improve the overall experience and safety of riders and improve rider confidence in the reliability of buses. There are also enhancements that improve speed and reliability by decreasing dwell time at bus stops. All-door boarding, off-board fare collection, and level boarding are examples of enhancements that decrease dwell time for buses. This LPA recommends two levels of improvements for bus stops on enhanced Go Lines.

Tier 1 (Transit Hubs): High activity and major transfer bus stops. These stops will have all the elements of a regular Tier 2 stop, in addition to the following:

- Real-time bus arrival signage
- Wayfinding information

- A second shelter and bench
- Public art and placemaking
- Mobility elements tailored to the location, such as bike racks, bike lockers, parking, etc.

Tier 1 will also consider near-level or level boarding platforms as a secondary element. The ability to provide near-level or level boarding will be determined during the design phase of Tier 1 stops in coordination with the City of Bellingham. WTA will work with the City on a cost benefit analysis considering travel time savings for providing level boarding versus the cost of implementation including how it impacts ADA access to the surrounding network.

Tier 2: Most bus stops on a Go Line. Standard stop elements include:

- Bus stop sign and schedule flat
- 5X8 ADA boarding pad and rear pad, if necessary
- Shelter
- Bench
- Trash receptacle
- Bicycle rack
- Lighting

Figure 7 and Figure 8 illustrate examples of Tier 1 and 2 stops along the Gold Line. The following outlines recommended locations for Tier 1 stops along the Go Lines.

Blue Go Line

- Billy Frank Jr. At Holly St.
- Performing Arts Center and Haggard Hall (VU)
- Bill McDonald at the Rec Center
- Bill McDonald at Samish Way
- Lincoln Creek Park and Ride
- Lincoln and Potter

Gold Go Line:

- Barkley Transit Hub
- Bellis Fair Mall
- Orleans/Sunset stops
- Alabama/James stops

Green Go Line:

- Northwest at Bakerview
- Northwest at Birchwood

Plum Go Line

- Lakeway at Lincoln St
- Lakeway Dr at Fred Meyer

WTA will seek a variety of funding sources, including grant funding, to improve stops to these two levels. Stops may also be enhanced in conjunction with implementation of the various LPA treatments and through City capital construction projects.

Figure 7. Rendering of Tier 1 Hub along Gold Line

Figure 8. Example of Tier 2 Stop along Gold Line

4.1.2 City of Bellingham Infrastructure, Technology, and Policy Changes

While WTA owns and operates the buses that provide service along the Go Lines, WTA's bus stops are located largely on City of Bellingham property, the buses run on roads and through intersections owned and managed by the City of Bellingham (and in some locations, Washington State Department of Transportation (WSDOT)), bus riders access the bus stops using sidewalks and crosswalks owned and managed by the City of Bellingham (and in some locations, WSDOT), and the buses serve private and public destinations with a range of travel needs that change throughout the day and seasonally.

Infrastructure

Several recommendations along the Go Lines include infrastructure treatments in the public right-of-way. These include bus stop islands, bus lanes, extended turning lanes or pockets, and changes to bicycle and/or pedestrian infrastructure to reduce conflicts with transit. These solutions will be identified for specific areas along each of the Go Lines. The design and decision-making around the implementation of these treatments is a topic addressed in the LPA Memorandum of Understanding (MOU), and follow-through actions are expected to occur from other planning efforts. Examples of these solutions are included here for reference but do not represent any specific planned treatment.

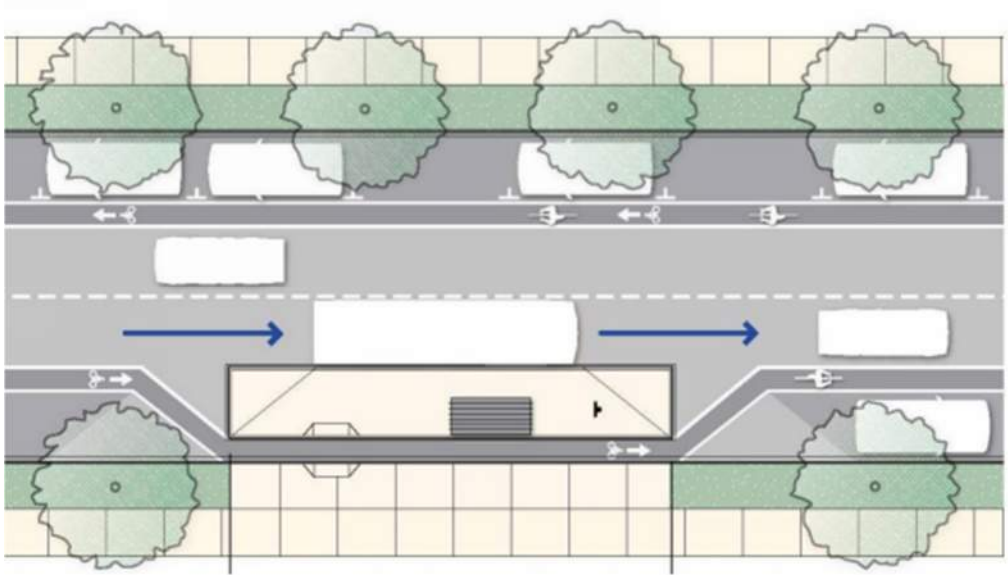
Bus Stop Island

Bus stop islands are designed to allow buses to stop "in-lane" where passengers use a crossing to reach the bus. Typically, the bus stop island separates the buses and passengers from the bike lane. This configuration eliminates conflicts between buses, cyclists, and drivers, as buses no longer need to cross bike and traffic lanes to pull in and out of the curb. Pedestrians must cross the bike lane to access the stop, so cyclists are instructed to yield to them, slowing down and stopping to allow safe passage.

Bus Stop Island Example

As part of the Rapid Transit Study, WTA has identified Holly St near Billy Frank Jr St as a potential candidate for a bus stop island treatment.

Bus stop islands remove conflicts and weaving that may occur when bikes and buses share the same space. Providing a bus stop island can improve bike operations because conflicts are reduced with buses. In addition, transit reliability and speed can be increased by reducing delay that is incurred as a result of buses needing pull in and out of the travel lane when making stops. This type of treatment may require additional right-of-way and has moderate cost.



Source: Whatcom Transportation Authority Bus Stop Design Guidelines, August 2022

Figure 9. Example of Bus Stop Island Treatment

Bus Lane

Bus lanes are travel lanes that are reserved for exclusive or prioritized use of buses. The lanes may be shared with bikes or exclusively for buses. The lanes are signed and have specific pavement markings that alert other drivers of the lane use. While the bus-only lanes are restricted, at intersections vehicles may be allowed to use these lanes for right-turns.

Bus-only lanes remove conflicts with other vehicles and allow buses to bypass traffic congestion by providing a dedicated space for buses. The reduced conflicts for buses can improve travel speeds, efficiency, and reliability. This treatment may require right-of-way and could be costly depending on the improvements required for implementation and the need for right-of-way. Bus-only lanes can cause increased delays and congestion for other vehicles, if

Source: Whatcom Transportation Authority

Figure 10. Example of Bus Lane

a general-purpose lane is converted to a bus-only lane, or could result in the removal of parking if a parking area is converted to a bus-only lane. Removal of parking will require City Council action before implementation.

Extended Turning Lane or Pocket

Extending a turning lane or pocket refers to left- or right-turn lanes at intersections being lengthened to reduce the potential for turn lanes being blocked by traffic congestion, causing delay. This treatment allows buses to enter the turn lane or pocket and bypass congestion that may otherwise block the turn lane/pocket.

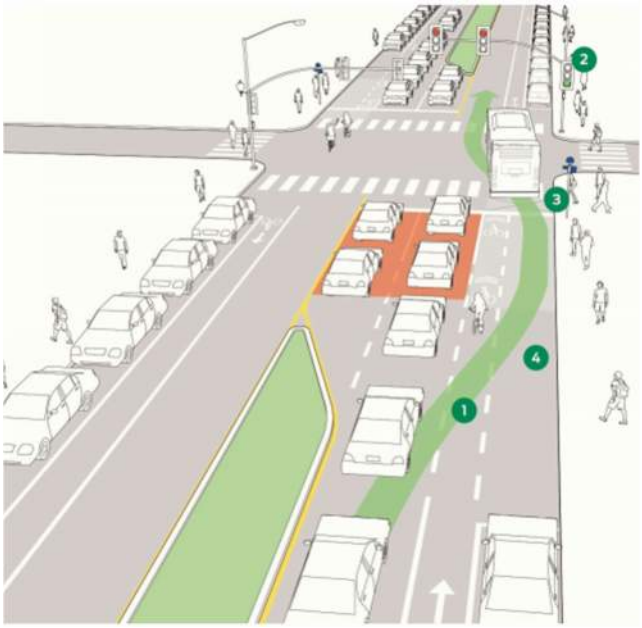
Extended Turning Lane Example

WTA is proposing an extended turning lane at Sunset and Orleans towards Cordata Station.

Extending turn lanes or pockets could require additional right-of-way, and the project cost would vary between low and high depending on the improvements required for implementation and need for right-of-way. The benefit of extending the turn lane may be limited and will depend on how often congestion blocks buses from using these turn lanes; however, extending turn lanes would benefit both buses and other vehicles on the roadway system using these lanes.

Queue Jump Lane

A queue jump is a type of roadway geometry that provides preference to buses at intersections. This treatment provides a turn pockets at an intersection, allowing the bus to jump in front of through-traffic at the intersection using a special signal phase. Figure 11 illustrates a queue jump at an intersection. Queue jumps can improve the speed and reliability of buses by allowing them to bypass congestion.



Source: North American Cities and Transit Agencies (NACTO), 2023

Figure 11. Bus Queue Jump Lane

Bicycle and Pedestrian Infrastructure

Bicycle and pedestrian infrastructure refers to the roads, paths, and sidewalks (and street crossings) that are designed for travel by people walking or biking. There are sections of the Go Lines where the buses share space with bicycle traffic, sometimes causing delays to the buses. In other areas, the location of pedestrian crossing areas creates delay for the buses. WTA and the City understand there are tradeoffs between modes as applied to the design of a multimodal street system. The City's adopted Comprehensive Plan outlines a modal hierarchy and discusses prioritizing transit in transit corridors. This LPA recommends identifying Go Lines as transit corridors and within these corridors making improvements that prioritize transit and minimize conflicts and delays between transit movements and biking and walking.

Transit Signal Priority and Signal Coordination

The City has a total of 34 signals along existing Go Lines that are preemption-capable traffic signals, with 3 along the Blue Go Line, 14 on the Gold Go Line, 4 on the Green Go Line, and 13 along other WTA transit routes. While several of the traffic signals located along the Go Lines are programmed to provide transit signal priority (TSP), the 2023 Rapid Transit Feasibility determined that the current signal technology and programming provide "preemption" not "priority" and do not provide the needed coordination to connect signals and support improved transit performance. The current TSP system requires frequent cleaning of infrared equipment and relies on equipment that is on the buses and at the traffic signals, which are reaching end of life, and most importantly, do not provide insight on how or if the TSP system is working properly.

Current Signal Technology – Preemption

There are key differences between "preemption" and "priority" that impact the overall operations of the street system. TSP (priority) allows for the extension of green time, shortening of a cycle, and, with advanced capabilities, may provide communication to hold a traffic signal in red for cross traffic, allowing a transit vehicle that is one stop away to advance through the intersection as it travels across the corridor.

Signal preemption is a form of priority that is typically used for emergency vehicles or where general traffic mixes with light rail or trams. Signal preemption immediately turns all directions red except for the direction from which the emergency vehicle is traveling. After the preempted vehicle passes, it takes time for the intersection traffic signal to recover back to normal operations, resulting in delays at the intersection and through the street system. Signal preemption is an effective strategy for emergency vehicles, because it creates the desired outcome of having the full intersection cleared for these vehicles, and the occurrence of emergencies is less frequent.

When signal preemption is used to provide priority for buses, as in the case of the signals in the city of Bellingham, it can cause unnecessary delays in the street system, as all other directions of travel are given a red light and the intersection takes time to recover to normal operations. Along high frequency routes, this can be particularly impactful, resulting in the use of the preemption many times a day, creating high delay on major and side streets.

Conversely, with transit signal priority, only the cross-direction traffic is stopped, allowing traffic to continue to flow in the opposing direction on the same street, allowing the bus to travel through without creating cumulative impacts across the whole intersection.

Transit signal priority (TSP) reduces travel times for buses by avoiding the need to stop and start at a signalized intersection. TSP makes it more likely that the light is green when a bus reaches a signalized intersection. It can either extend green times so an approaching bus can get through the intersection without stopping or shorten red times so a stopped vehicle can get moving again.

The LPA recommends, for WTA operations along city streets, the controllers be upgraded/updated to be TSP capable and that TSP be deployed at key intersections and corridors. The TSP system upgrade project recommended through this LPA will address these challenges by implementing a GPS/location-based TSP system with centralized

performance reporting capabilities, with access provided to WTA and the City. The project will include a systems engineering approach to document agency needs and system architecture of the new TSP system, a competitive request for proposal (RFP) process to select a TSP system that best meets agency needs and requirements, and implementation and validation of the TSP system once installed. The LPA recommends the project scope include the entire WTA fixed-route fleet (approximately 70 vehicles) and the four Go Line routes (assuming approximately 40 signalized intersections).

This recommendation does not preclude the continuation of preemption for emergency vehicles. Implementing TSP across the system also does not mean that it needs to be activated at all times. Further studies should be conducted to determine specific locations where TSP should be activated to ensure the most benefit to transit operations and consider the impact on general vehicle traffic. There are cases where poor operations on side streets or at all approaches at an intersection limit the ability for TSP to be effective, such that it would not be appropriate to activate the system. Traffic analysis would focus on determining the system that is appropriate based on intersection operations and the desire to provide 10-minute frequency along the Go Lines. The City and WTA can leverage WSDOT transportation systems management and operations (TSMO) steps to determine the TSP application and what equipment is needed, including if there is a need for coordination as described in the following section.

Coordinated Traffic Signals

Most agencies that are investing in signal priority use advanced controllers that can allow for coordination of traffic signals along corridors. The traffic signals are interconnected for the communication of the equipment both in the bus and at the intersections, allowing for coordinating the entire corridor for transit vehicles and general vehicles.

Current Coordination and Controllers – Master Clock

The City of Bellingham typically uses a master clock system for signal coordination along corridors. The master clock system provides a time-of-day schedule that does not change without manual adjustments. There are traffic signal controllers that allow for more advanced coordination, like adaptive signal systems, providing real-time adjustment to signal timing considering traffic flows. The City's signal controllers are currently not equipped for these advanced functions.

Coordinating traffic signals with a master clock often provides benefit-cost ratios near 20:1 compared to no coordination. However, using adaptive signals can reduce the number of times vehicles stop at traffic signals and the amount of time they wait at a red light by another 10% compared to traffic signals coordinated only by a master clock.

Implementing TSP and interconnecting traffic signals may require upgrading the traffic signal controllers. Interconnected traffic signals along corridors are recommended to provide communication that allows for transit vehicle progression through traffic signals to achieve 10-minute frequencies. Coordinating the corridor allows for better flow of both general and transit vehicles and reduces the instances where general vehicle congestion impacts transit travel times. There are areas of the Go Line routes where interconnected traffic signals may not be necessary. Corridor-wide traffic operations studies will be conducted to determine specific locations where TSP is needed and if signal controllers need to be upgraded.

As noted for the TSP application, WSDOT TSMO provides a list of steps to determine if a corridor should be coordinated; WTA and the City can use this WSDOT resource to evaluate needs. The evaluation would consider whether adaptive signals, master clock, or other coordination is most appropriate, as well as what equipment is needed for both TSP and interconnection based on the corridor characteristics.

Policy

Because successful operation of the transit services requires on-going coordination between WTA and the City of Bellingham, this LPA suggests broader policy revisions that support not just the recommendations in the LPA, but also the ability to better coordinate, identify, and implement solutions needed in the future. These needs are also reflected in the MOU that supports this LPA.

General Land Use & Street Design Approaches

Street design significantly impacts if and/or how a bus can travel along a route. Examples of elements that should be considered in the context of improving transit, and especially in the design of transit corridors, are:

- On-street parking may create delay as the bus waits for vehicles to enter or leave parking spaces; additionally, removing space for on-street parking areas could, in some instances, provide needed right-of-way for bus infrastructure like extended turn lanes, pull-outs, or bus-only travel lanes.
- Pedestrian bump-outs, often used at intersections to reduce the distance that pedestrians must travel to cross lanes of traffic, can have both positive and negative impacts. Pedestrian bump-outs can enhance pedestrian movement and access to bus stops but also reduce the width of the travel lane in a way that creates bus delay, makes right turns more difficult, and limits the ability to provide queue jumps at intersections.
- Lane width reductions below 11' in width to provide traffic calming or otherwise improve corridor safety and function for people walking and biking may impact the ability of a bus to travel through the corridor and limit the potential for future transit infrastructure like pull-outs and travel lanes.
- Turning restrictions can improve traffic safety and reduce congestion but may also eliminate the opportunity for a bus to use the corridor. Transit routing potential should be considered before new turning restrictions are implemented.
- Roundabout designs can improve traffic safety at intersections but can eliminate the opportunity for bus use of a corridor if the roundabout is not designed to accommodate the turning radius of the bus.
- Sidewalk, roadway, and intersection improvements in conjunction with land parcel development or redevelopment can enhance transit operations. Once development agreements are in place, the opportunity to implement further right-of-way changes can be costly; considering the needs of transit from the beginning is the most efficient way to address site-specific needs.
- The City will coordinate with WTA to identify bus stop and transit-supportive right-of-way design standards for adoption into the City's Development Guidelines and Improvement Standards. These standards may address bus stop amenities, ADA accessibility, and related site and street design elements. Adoption of these standards will enable the City to require private development projects along transit corridors to construct, upgrade, or contribute funding toward bus stop infrastructure and amenities.

Comprehensive Plan Integration

There are several opportunities within the Bellingham Comprehensive Plan to support effective and efficient transit. As an example, King County Metro has developed a helpful list of transit supportive elements to be included in comprehensive plans.[1] Bellingham's 2025 Comprehensive Plan was reviewed for alignment with the recommendations.

Transportation Element Recommendations

- Categorize streets that prioritize transit to improve speed and reliability and that can be included as part of a multi-modal level of service standard.
- Consider transit speed, transit reliability, and safe access to transit as factors in including and prioritizing relevant transit projects from the LPA in the Transportation Improvement Program/Capital Improvement Program.
- Update policies that prioritize improvements for people to walk, bike, and roll safely to connect to transit service to emphasize biking and rolling improvements within one-half mile and bike access improvements within three miles of transit service.
- Develop policies to accommodate additional bus layover locations to support growth in service.
- Develop policies to accommodate charging needs to support continued electrification of the bus fleet.

Land Use Element

- Once Transit Corridors have been defined, create incentives and regulations to encourage a mix of residential, commercial, and institutional uses within at least one-quarter mile of transit service.

Bicycle Master Plan

The City of Bellingham Bicycle Master Plan, adopted in 2024, largely mentions transit in relation to providing bicycle access to transit and bicycle parking facilities at transit stops. The City's modal hierarchy previously prioritized bicycling over transit, but the hierarchy was updated as part of the 2025 Comprehensive Plan to prioritize transit over bikes along transit corridors. The specific transit corridors have yet to be identified by the City. The Bicycle Master Plan also includes this language: "Per Policy 1.1, the City will prioritize building higher comfort bikeways that provide separation from motor vehicles and/or integrate traffic calming to reduce vehicle speeds unless it is deemed infeasible, or in

[1] https://cdn.kingcounty.gov/-/media/king-county/depts/metro/documents/about/policies/comprehensive-plan-checklist.pdf?rev=1fc8682f8bc346f18f94652a89df3dab&hash=39F14B20200DD2CB854B3B44CC292408

conflict with other objectives such as maintaining reliable transit service and freight access." Through this LPA process, participants have identified conflicts with planned bicycle infrastructure and the Go Lines, particularly along Woburn and Northwest Avenue. The LPA recommends that the recommendations in the Bicycle Master Plan be modified to identify the Go Line transit corridors as corridors where transit infrastructure is prioritized.

Pedestrian Master Plan

The City of Bellingham Pedestrian Master Plan, adopted in 2024, identifies the importance of safe pedestrian access to transit and the need for reasonably spaced, low-stress crossings near transit stops. The Go Lines in particular are highlighted. The Plan includes "Policy 3.2 Improve ADA connections to transit for people walking and rolling by aligning safe crossings with WTA transit stops and completing sidewalk gaps. Complete sidewalks on at least one side of transit corridor streets and provide safe and convenient ADA crossings and access at transit stops." Through the LPA process, it was noted transit performance could benefit from bus stop balancing if the pedestrian infrastructure was improved to support access to the stops.

4.1.3 Benefits and Costs

Implementing the network changes described would allow WTA to provide reliable 10-minute service along the Go Lines. The LPA is intended to provide transit within Bellingham that serves the existing and future community and makes travel by transit competitive with auto travel. The benefits and costs are described in more detail in Section 5. Benefits and Costs. A key benefit to making transit a competitive mode of transportation will be improvement in travel times to allow WTA to increase frequency. Travel time savings vary based on the treatments and changes implemented by WTA and the City but could result in time savings between 2 to 10 minutes per run.

The cost of implementing the LPA includes both the cost of operations to provide 10-minute frequencies and the capital cost of infrastructure improvements. Section 5. Benefits and Costs describes costs in more detail, including WTA service costs ranging between $2M to $4M and capital costs of implementing treatments in the short- and long-term.

4.1.4 Other Partner Implications

Schools

Several of the intersections where Go Lines experience travel delays are located near schools. Vehicle traffic and pedestrian activity, especially around the beginning and the end of the school day or class periods, can create significant delays. Examples of these

areas include Sehome High School at Bill McDonald and Samish or at WWU as the bus travels across the campus.

WTA buses serve WWU directly, traveling through and along the outside of campus. On High Street in particular, the bus is often delayed due to several factors. While WTA and the City of Bellingham can address many of the factors, WWU is an important partner for ensuring that High Street is used in a way that supports effective transit. One recommendation of this LPA is for WTA, the City of Bellingham, and WWU to partner to complete a multimodal study along High Street.

4.2 Blue Go Line

Factors affecting on-time performance along the Blue Go Line are especially complicated and involve multiple responsible parties. Safety and congestion along the route may improve from the recent restriping of travel lanes in the area of Samish and I-5. The operations of the Blue Go Line will benefit from the already-funded roundabout that the City of Bellingham will construct at the intersection of Lincoln and Potter.

The Blue Go Line travels outbound from the Bellingham Station towards the Bellingham Visitor's Center on Potter Street via WWU and Bill McDonald Parkway. It travels inbound in the opposite direction, heading back to the Bellingham Station.

Figure 12 shows the locations for the recommended treatments along the Blue Go Line.

Bus stop balancing (removal and relocation)

- Billy Frank Jr at Chestnut inbound and outbound (removal)
- High St at Nash Hall outbound (removal)
- High St at Higginson Hall inbound (removal)
- Viking Union outbound – relocation to a new stop at the Performing Arts Center
- Bill McDonald at Campus Services inbound and outbound (removal)
- Lincoln at Maple inbound and outbound (removal)
- Lincoln St at Mobile Estates outbound (removal)
- Lincoln at Potter inbound – relocation to a new stop across street and add bus layover space

Add bus stop island

- Holly St at Billy Frank Jr St inbound
- Billy Frank Jr St at Laurel St inbound Highland Dr at Ridgeway outbound
- Bill McDonald Pkwy at Buchanan Towers inbound

- Bill McDonald Pwky at Ferry Way inbound and outbound
- Bill McDonald Pwky at Birnam Wood inbound
- Bill McDonald Pwky at Samish Way inbound and outbound
- Lincoln St at Viking Circle outbound
- Performing Arts Center (PAC) outbound

Tier 1 transit hubs

- Billy Frank Jr. at Holly St
- Performing Arts Center and Haggard Hall (VU)
- Bill McDonald at the Rec Center
- Bill McDonald at Samish Way
- Lincoln Creek Park and Ride
- Lincoln and Potter

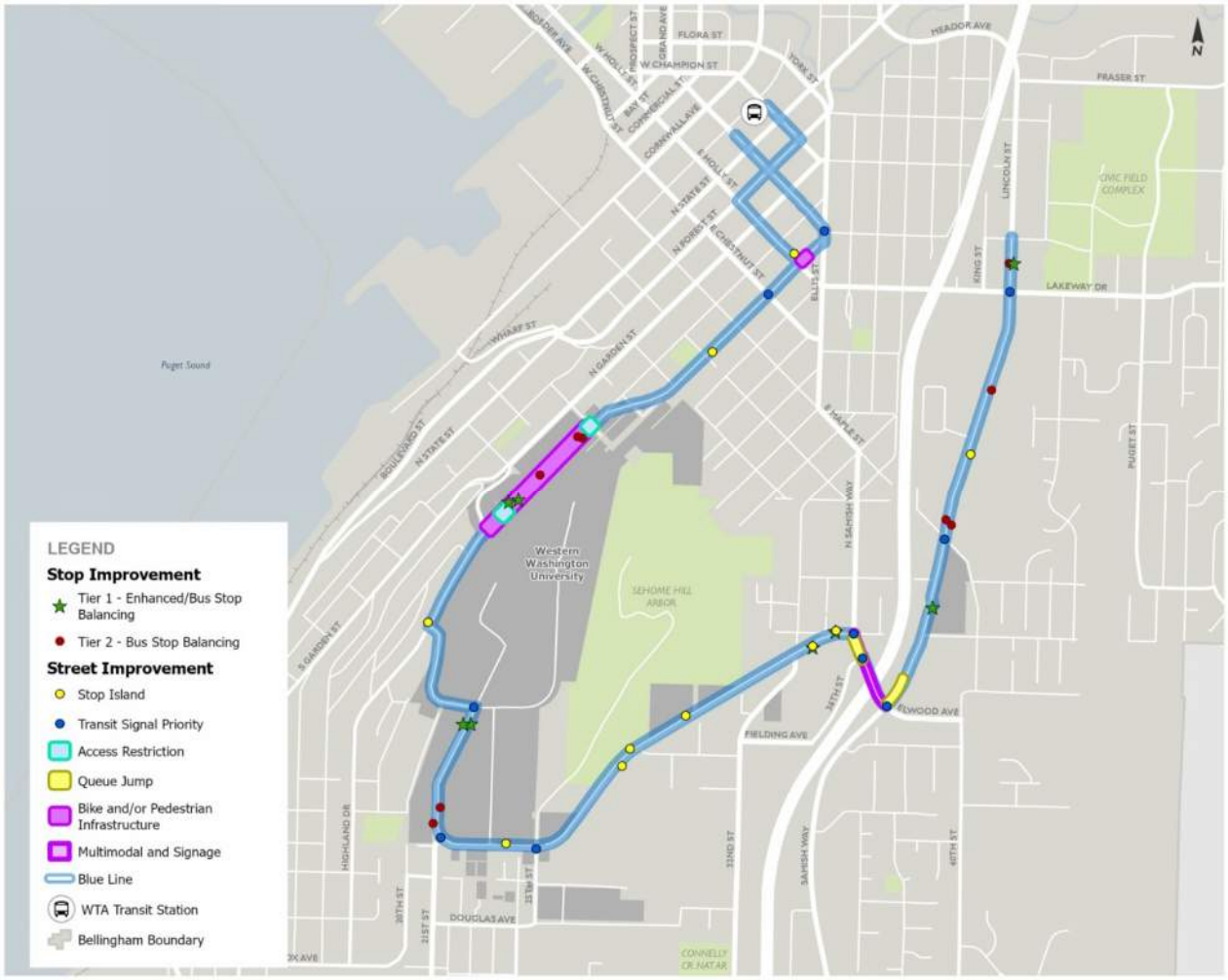


Figure 12. Blue Go Line LPA Recommendations

New or improved signal operations (TSP and potential corridor coordination)

Specific locations for potential TSP are listed below; however, corridor-wide operations should be evaluated along Bill McDonald and Samish to determine if upgrades should occur to provide interconnect allowing for signal communication and corridor signal coordination.

- E Magnolia St at Ellis St outbound (existing)
- Billy Frank Jr St at E Chestnut St inbound and outbound
- Bill McDonald Pkwy at W College Dr inbound and outbound TSP
- Bill McDonald Pkwy at 21st St inbound and outbound
- Bill McDonald Pkwy at 25th St inbound and outbound
- S Samish Way at Bill McDonald Pkwy inbound and outbound
- S Samish Way at 36th St inbound and outbound
- Lincoln St at S Samish Way inbound and outbound
- Lincoln St at Maple St (existing) inbound and outbound
- Lakeway Dr at Lincoln St inbound and outbound

Bicycle and/or pedestrian infrastructure

- Billy Frank Jr St at Holly St outbound pedestrian bulb-out (may require parking removal)
- Conduct a multimodal analysis on High Street corridor to plan for reducing conflicts between the modes. Potential strategies identified during LPA development include:
    - Techniques to consolidate crossings
    - Alternative options to restrict general vehicle traffic; the current gates at either end of High Street restrict transit movements in addition to general vehicle traffic
    - Consider bike lanes on the uphill side, because bike traffic moves more slowly going uphill; downhill direction can use a sharrow, since bikes can keep up with automobile traffic

Access restrictions

- As part of the High St multimodal study, explore alternatives to the current gates. Alternatives may include vertical barriers, such as high-speed traffic control gates.

Lane or other significant right-of-way solutions

- Complete corridor operations study that includes analysis of signal timing and coordination, travel lanes, turn restrictions, and queue jumps. Some initial options identified include:
    - Bus-only lane and queue jump Lincoln St at S Samish Way inbound
    - Queue jump on S Samish Way between Bill McDonald Pkwy and 36th St outbound

Land use

- Revisit land use designations along the Blue Go Line to identify where zoning should be changed to support high frequency transit as discussed in the Comprehensive Plan and the City's housing and employment infill goals.

Other solutions

- Complete multimodal study to identify solutions for High Street.
- Add guide signs and/or markings for destinations to help drivers better understand the travel lane they should be in when coming to and from Samish Way and I-5. The signage will help drivers better organize and reduce weaving that occurs when drivers are in the wrong lane. Pavement markings could include the I-5 shields and/or other striping to guide drivers.

4.2.1 Blue Go Line Treatment Timelines

Because of the length of the Blue Go Line and the number of treatments proposed, treatments are presented within segments of the route. Short-term recommendations are those that are likely to be achievable with local resources or readily available grant funds, while long-term recommendations are likely to require more extensive regional, state, and/or federal resources.

Short-term recommendations (see Figure 13)

Along the full length of the Blue Go Line:

- All stop balancing changes
- Revisit land use designations along the Blue Go Line to identify where zoning should be changed to support high frequency transit as discussed in the Comprehensive Plan and the City's housing and employment infill goals

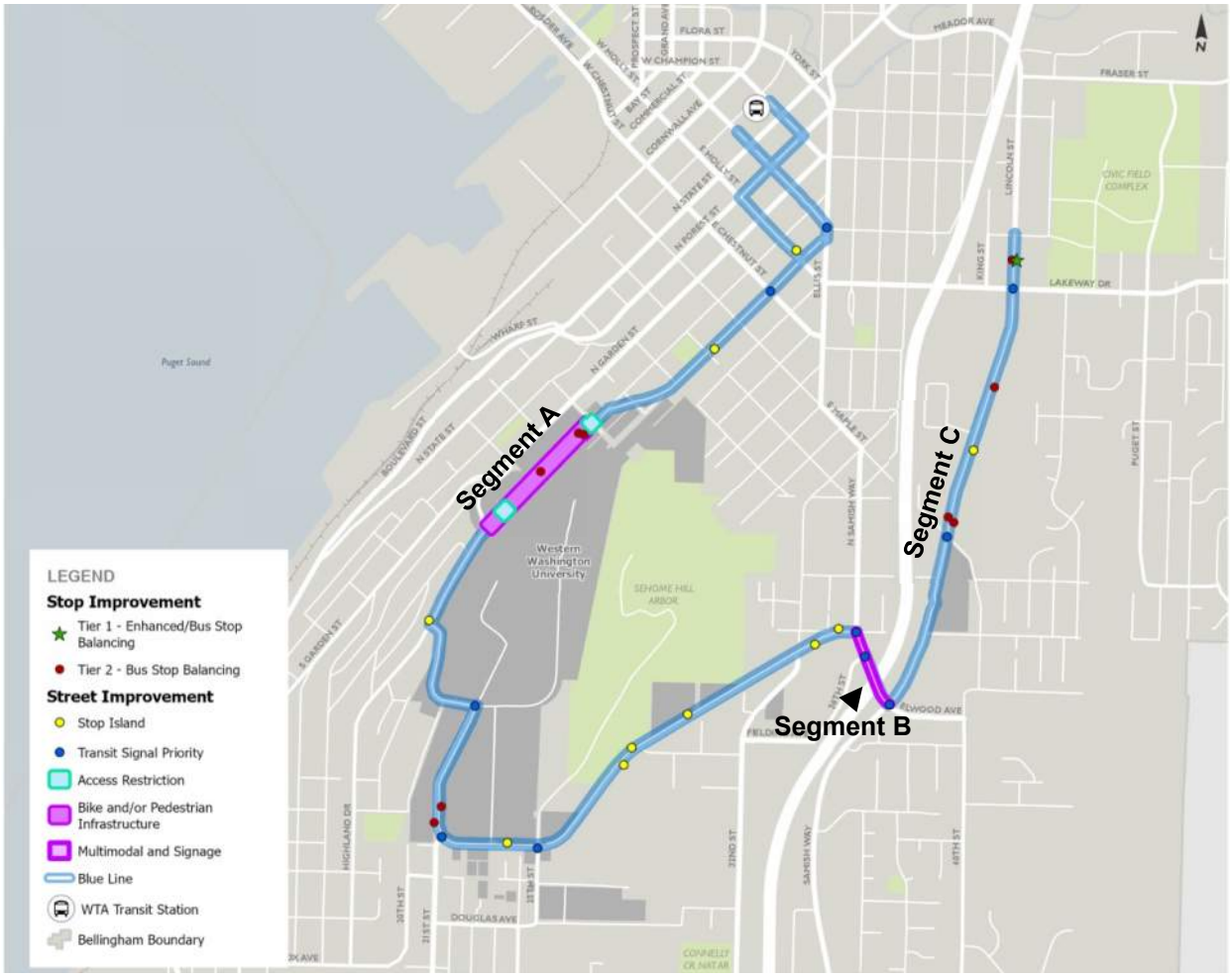


Figure 13. Blue Go Line LPA Short-Term Recommendations

Segment A: Blue Go Line between downtown and Samish:

- Multimodal analysis on High Street corridor
  - Implement access restrictions
- Bus stop islands
  - Holly St at Billy Frank Jr
  - Billy Frank Jr at Laurel
  - Highland Dr at Ridgeway outbound
  - Bill McDonald Pkwy at Samish Way inbound
  - Bill McDonald Pkwy at Ferry Way outbound
  - Bill McDonald Pwky at Birnam Wood inbound
  - Bill McDonald Pwky at Samish Way outbound
- Samish Way/I-5 guide signs and pavement markings

Segment B: Blue Go Line along Samish Way between Bill McDonald Pwky and Lincoln

- Corridor operations study

Segment C: Blue Go Line along Lincoln from Samish to Potter

- Bus stop Island
    - Lincoln St at Viking Circle outbound
- Lincoln and Potter Tier 1 transit hub

Long-term recommendations (see Figure 14)

Segment A: Blue Go Line between downtown and Samish:

- Billy Frank Jr. at Holly St Tier 1 transit hub
- Billy Frank Jr St at Holly St outbound pedestrian bulb-out (may require parking removal)
- Performing Arts Center and Haggard Hall (VU) Tier 1 transit hub
- Bill McDonald at the Rec Center Tier 1 transit hub
- Bill McDonald at Samish Way Tier 1 transit hub

Segment B: Blue Go Line along Samish Way between Bill McDonald Pwky and Lincoln

- Lincoln Creek Park and Ride Tier 1 transit hub
- Improvements identified in Samish Way corridor study, such as queue jumps

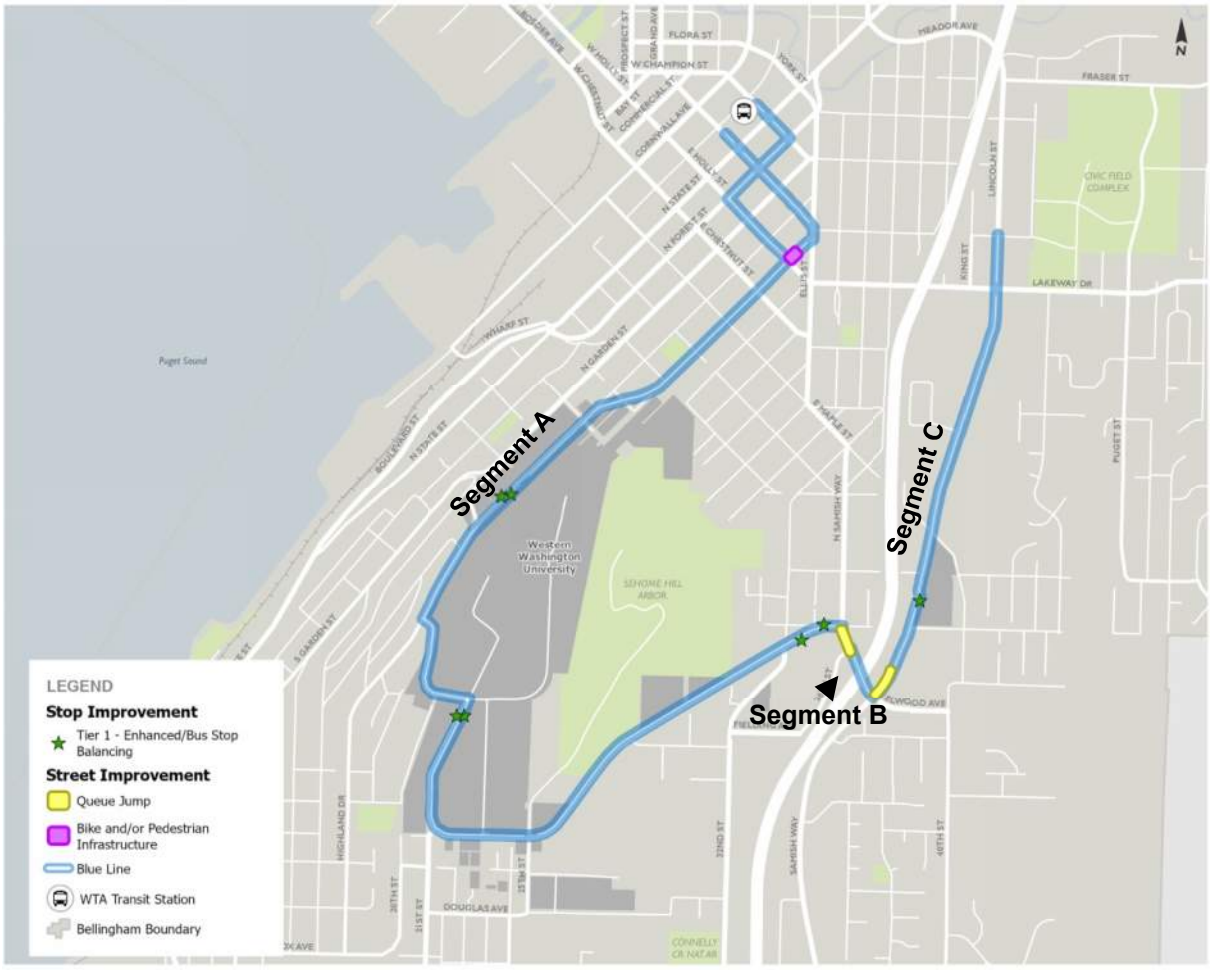


Figure 14. Blue Go Line LPA Long-Term Recommendations

4.3 Gold Go Line

The Gold Go Line travels outbound from the Bellingham Transit Center to Whatcom Community College, with service to Sunnyland Square, Barkley Village, Sunset Square, Winco, and Bellis Fair Mall along the way. It travels inbound in the opposite direction, heading back to the Bellingham Transit Center.

On-time performance on the Gold Go Line is affected, in part, by several factors: the route travels along a freight corridor, passes through rapidly developing and increasingly dense areas of Bellingham, and requires multiple turning maneuvers.

Several projects are planned or underway that will benefit the Gold Go Line. The City plans to add a multimodal trail from Telegraph to Gooding Avenue along the west side of James Street, potentially connecting a new community of riders to enhanced transit service. The

intersection at Telegraph & Deemer, formerly an intersection that caused bus delay, was recently improved and is now signalized with three marked crossings. The intersection of James & Telegraph will be updated with crossing enhancements and a bike lane extension. In addition, there is an unfunded City project, the James Street Multimodal Safety Improvements between Orchard St and Telegraph Rd (Segments 1 & 2), that will continue the multimodal trail on the west side of James Street. WSDOT is working on a complete streets project along Meridian Street (SR 539) between E Kellogg Road and the I-5 southbound ramps. The project is analyzing and retiming this section of the Meridian corridor in 2027, which will improve traffic flow at the intersection of Meridian Street and Bellis Fair Pkwy. The project will also review pedestrian and bicycle access along this section of Meridian.

The Barkley Subarea Plan and the City's Transportation Improvement Program (TIP) both identify a future Railroad Trail pedestrian bridge over Woburn Street. Barkley's Planned Action Ordinance links construction of this bridge to PM peak-hour trip thresholds. This project is currently unfunded in the City's TIP, however, once built, the pedestrian bridge will help improve transit reliability traveling in both directions on Woburn Street.

Finally, WTA is working with the Talbot Group to identify and design a transit hub just north of Rimland Drive on Woburn to better facilitate in-route transfers.

Figure 15 shows the locations for the recommended treatments along the Gold Go Line.

Figure 15. Gold Go Line LPA Recommendations

Bus stop balancing (removal and relocation)

- W Champion St at Unity Ave inbound/ outbound (remove)
- Cornwall Ave at Flora St inbound (remove)
- Cornwall Ave at York St outbound (remove)
- Cornwall Ave at New St inbound (remove)
- Cornwall Ave at Virginia St outbound (remove)Relocate Alabama St and Dean Ave outbound to just east of the pedestrian crossing at Grant
- Alabama St at Humboldt St outbound (remove)
- Alabama St at Queen St outbound
- Consolidate Woburn St at North St outbound and Woburn St at Maryland St outbound (remove) to Woburn St at Connecticut St (add)
- Relocate Woburn St at Rimland Dr inbound stop to new transit hub north of the intersection
- Woburn St at Sunset Dr inbound (remove)
- Sunset Dr at Woburn St outbound (remove)
- Relocate James St at Sunset Pond inbound and outbound to James St at Orchard Dr
- Cordata Pkwy at Westerly Rd outbound (remove)
- Cordata Pkwy at Whatcom Community College inbound (remove)

Add bus stop islands and other stop improvements

- Cornwall Ave at Kentucky outbound
- Cornwall Ave at Texas St outbound
- Woburn St at Connecticut St outbound (new)
- James St at Mcleod inbound and outbound – improve to Tier 2 level as part of the James St Multimodal Improvements Segments 1 & 2

Tier 1 transit hubs

- Barkley Transit Hub
- Bellis Fair Mall
- Orleans/Sunset stops
- Alabama/James stops

New or improved signal operations (TSP and potential corridor coordination)

Specific locations for potential TSP are listed below; however, corridor-wide operations should be evaluated along Cornwall, Alabama, Woburn, Sunset, and Meridian to determine if upgrades should occur to provide interconnect allowing for signal communication and corridor signal coordination.

- Cornwall Ave at York St inbound and outbound (existing)
- Cornwall Ave at Ohio St inbound and outbound (existing)
- Cornwall Ave at Alabama St inbound and outbound (existing)
- Alabama St at James St inbound and outbound (existing queue jump lane and TSP)
- Alabama St at Orleans St inbound and outbound (existing)
- Alabama St at Pacific St inbound and outbound (existing)
- Woburn St at Premier Way inbound and outbound
- Woburn St at Barkley Blvd inbound and outbound (existing)
- Woburn St at Rimland Dr inbound and outbound (existing)
- Sunset Dr at Woburn St inbound and outbound (existing)
- E Sunset Dr at Racine St inbound and outbound (existing)
- Sunset Dr at Orleans St inbound and outbound (existing)
- James St at Birchwood Dr inbound and outbound
- Telegraph Rd at James St inbound and outbound
- Deemer Rd at Telegraph Rd inbound and outbound
- Bellis Fair Pkwy at Meridian St inbound and outbound
- W Bakerview Rd at Cordata Pkwy inbound and outbound (existing)

Bicycle and/or pedestrian infrastructure changes

- Bike lane Cornwall Ave from York St to Ohio St (install bicycle lanes remove on-street parking)
- Grade separated crossing Woburn St & Railroad trail, as described in existing plans and required (through the Barkley Village Plan Environmental Impact Statement (EIS)) once total development levels generated by the Barkley project reach 1,770 total PM peak-hour trips.
- James St Telegraph to Orchard Segment 1 & 2 multimodal trail consistent with City TIP

Access restrictions and restriping

- Left turn restriction Woburn St at E Connecticut St inbound
- Left turn restriction Woburn St at E Maryland St inbound
- Turn restrictions on Alabama from Queen to Undine
- Improve channelization for left turns northbound Orleans St into Safeway parking lot inbound and outbound and consider striping "Do Not Block" along Orleans St at driveway

Lane or other significant right-of-way solutions

- Bus lane on Alabama St between Dean Ave and Iron St outbound (peak hour outbound bus lane in center turn lane or curb lane)
- Add bus curb side loading zone on the east side of Cornwall Ave between E Champion St and York St outbound by removing parking
- Restriping of Woburn St to two through lanes in the southbound direction between Newmarket St and Alabama St as required by the Barkley Village Plan EIS once total development levels generated by the Barkley project reach 1,770 total PM peak-hour trips.
- Multimodal corridor study of Woburn St between Sunset Dr and E Illinois St to determine potential for bus-only lane during peak periods, a business access transit lane, or other bus street design improvements that could be implemented in conjunction with those identified as part of the Barkley Village Urban Plan
    - In addition, the study would assess the potential for an alternative bike corridor to Woburn St between Sunset Dr and Alabama St. Woburn St is currently identified for a separated bike lane on Woburn between Sunset Dr and Illinois St and a bike lane on Woburn between Illinois St and Texas St in the Bicycle Master Plan, but there may insufficient right-of-way for both bus and bicycle lanes.
- Lane extension Sunset Dr at Orleans St outbound (extend right turn pocket)
- Evaluate a roundabout for the Alabama St/Woburn St intersection as part of Woburn Street Multimodal Corridor Study
- Queue jump James St/Birchwood Ave/Orchard Dr intersection outbound
- Queue jump Cordata Pkwy at W Bakerview Rd intersection inbound

Land use

- Revisit land use designations along the Gold Go Line to identify where zoning should be changed to support high frequency transit as discussed in the Comprehensive Plan and the City's housing and employment infill goals

- Sunset Square, in particular, is an area along the Gold Go Line that has significant opportunity for redevelopment to host more transit-supportive land uses

Other solutions

- Complete multimodal study for Alabama Street between Dean and Iron

4.3.1 Gold Go Line Treatment Timelines

Because of the length of the Gold Go Line and the number of treatments proposed, treatments are presented within segments of the route. Short-term recommendations are those that are likely to be achievable with local resources or readily available grant funds, while long-term recommendations are likely to require more extensive regional, state, and/or federal resources.

Short-term recommendations (see Figure 16)

Segment B**:** Gold Go Line along Alabama west of I-5 corridor

- All bus stop balancing
- Alabama St Dean Ave to Iron Corridor Study
- Bus lane on Alabama St between Dean Ave and Iron St outbound

Segment C: Gold Go Line along Alabama (east of I-5) and Woburn up to Sunset

- All bus stop balancing
- Turn restrictions on Alabama from Queen to Undine
- Turn restrictions on Woburn at E Connecticut and E Maryland
- Barkley Tier 1 transit hub
- Grade separated crossing Woburn St & Railroad trail, as described in existing plans

Segment D: Gold Go Line from Sunset and Woburn to Cordata Transit Station

- All bus stop balancing
- Queue jump at Bakerview and Cordata
- Channelization improvements on Orleans St into Safeway parking lot
- Bellis Fair Mall Tier 1 transit hub

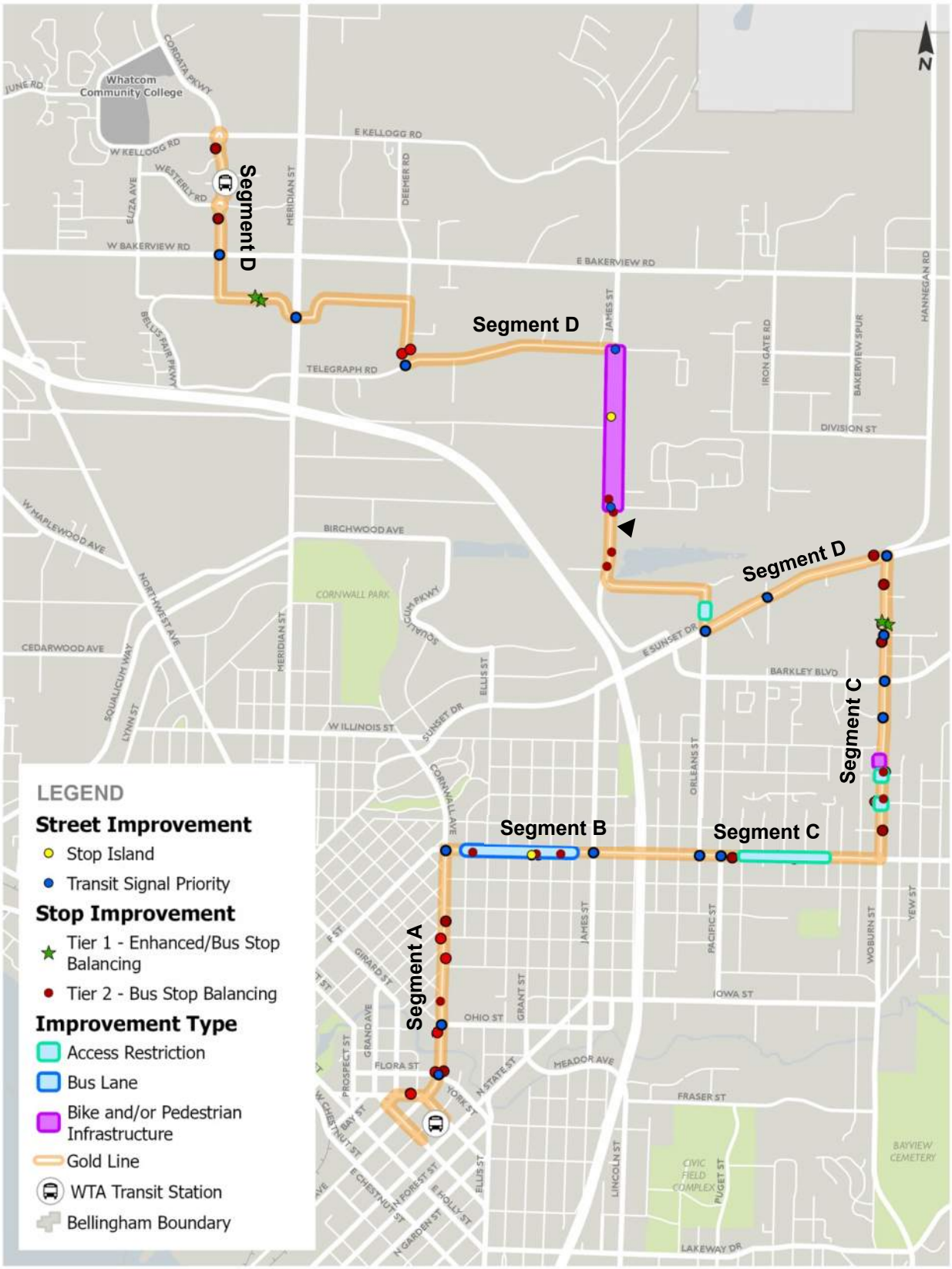


Figure 16. Gold Go Line LPA Short-Term Recommendations

Long-term recommendations (see Figure 17)

Segment A: Gold Go Line from Bellingham Transit Station to Alabama (along Cornwall)

- All treatments, due to upcoming City of Bellingham planning efforts
    - Bike lane Cornwall Ave from York St to Ohio St
    - Add curbside bus loading zone on Cornwall Ave between E Champion St and York St outbound

Segment C: Gold Go Line along Alabama (east of I-5) and Woburn up to Sunset

- Multimodal corridor study along Woburn to determine potential for bus-only lane during peak periods only, other treatments, and potential for alternative bike corridor
- Multimodal corridor study of bus lanes along Alabama west of James Street
- Evaluate a roundabout for the Alabama St/Woburn St intersection
- Alabama/James stops Tier 1 transit hub

Segment D: Gold Go Line from Sunset and Woburn to Cordata Transit Station

- Orleans and Sunset turn pocket extension
- Orleans/Sunset stops Tier 1 transit hub
- Queue jump East Bellis Fair Pkwy at Guide Meridian Road intersection inbound and outbound
- Queue jump James St/Birchwood Ave/Orchard Dr intersection outbound with relocation of stops from Sunset Ponds area to the intersection, potentially as part of the James St Multimodal Safety Improvement project segments 1 & 2 implementation

Figure 17. Gold Go Line LPA Long-Term Recommendations

4.4 Green Go Line

Recommended treatments along the Green Go Line include those that WTA can act on in the short-term and those that will require more extensive analysis and planning and/or that require changes that are likely to take place over an extended time period. Factors affecting on-time performance along the Green Go Line include the sections of route that travel along a freight corridor and congestion along the Northwest Avenue corridor.

The Green Go Line travels outbound from the Bellingham Station to Whatcom Community College via Dupont, Elm, Northwest, and Bakerview. It travels inbound along the same streets in the opposite direction, heading back to the Downtown Bellingham Transit Station.

Figure 18 shows the locations for the recommended treatments along the Green Go Line.

Bus stop balancing (removal and relocation)

- W Champion at Unity St outbound (remove)
- W Champion St at Grand Ave outbound (remove)
- Dupont St at D St inbound (remove)
- Dupont St at C St outbound (remove)
- Dupont St at G St outbound – relocate closer to F St (might require right-of-way)
- Dupont St at H St inbound – relocate closer to F St (might require right-of-way)
- Elm St at Broadway inbound (remove)
- Relocate stop Northwest Ave at Lynn St inbound (move closer to Lynn St , might require right-of-way)
- Relocate stop Northwest Ave at Shuksan Middle School outbound to Northwest Ave at Alderwood Ave near the pedestrian crossing
- Northwest Ave at 3400 block inbound (remove)
- Relocate Northwest Ave at McLeod Rd inbound to south of roundabout at Northwest Ave at McLeod Ave
- Northwest Dr at Sterling Dr inbound and outbound (remove)
- Relocate W Bakerview Rd at Palisade Way inbound and outbound to future pedestrian crossing
- Relocate W Bakerview Rd at Eliza Ave outbound closer to the intersection
- Cordata Pkwy at Whatcom Community College inbound (remove)

Figure 18. Green Go Line LPA Recommendations

Add bus stop island

- Elm St at Jefferson St outbound
- Northwest Ave at Connecticut outbound
- Prospect St at Flora St outbound
- Prospect St at Central Ave inbound

Tier 1 transit hubs

- Northwest Ave at Birchwood Center
- Northwest Ave at W Bakerview Rd

New or improved signal operations (TSP and Interconnect)

Specific locations for potential TSP are listed below; however, corridor-wide operations should be evaluated along Northwest and Bakerview to determine if upgrades should occur to provide interconnect allowing for signal communication and corridor signal coordination.

- Dupont St at F St inbound and outbound
- Dupont St at Broadway inbound and outbound (existing)
- Northwest Ave at W Illinois St inbound and outbound
- Northwest Ave at Lynn St inbound and outbound (existing)
- Northwest Ave at Birchwood Ave inbound and outbound (existing)
- W Bakerview Rd at Northwest Ave inbound and outbound
- W Bakerview Rd at Eliza Ave inbound and outbound (existing)

Bicycle and/or pedestrian infrastructure

- Extend the crossing median at outbound stop Northwest Ave and Bakerview Rd (in front of Belleau apartments)
- Install HAWK (high-intensity activated crosswalk) signalized pedestrian crossing on W Bakerview Road at Palisade Way

Access restrictions

- Study the potential for driveways/access points to be consolidated to help reduce congestion (especially on Northwest between E Victor St and W Maplewood Ave)

Lane or other significant right-of-way solutions

- Consider removing parking along Northwest Ave between Illinois St and Elm St to provide a bus lane

- Queue jump at Northwest Ave between E Maplewood Ave and Birchwood Ave outbound (left turn lane queue jump lane)

Land use

- Revisit land use designations along the Green Go Line to identify where zoning should be changed to support high frequency transit as discussed in the Comprehensive Plan and the City's housing and employment infill goals

4.4.1 Green Go Line Treatment Timelines

Short-term recommendations are those that are likely to be achievable with local resources or readily available grant funds, while long-term recommendations are likely to require more extensive regional, state, and/or federal resources.

Short-term recommendations (see Figure 19)

- All bus stop balancing changes
- Bus stop islands
    - Elm St at Jefferson St outbound
- Prospect St at Flora St outbound
- Prospect St at Central Ave inbound
- Extend the crossing median at outbound stop Northwest Ave and Bakerview Rd (in front of Belleau apartments)
- Revisit land use designations along the Green Go Line to identify where zoning should be changed to support high frequency transit as discussed in the Comprehensive Plan and the City's housing and employment infill goals

Long-term recommendations (see Figure 20)

- Study potential for queue jump at Northwest and Birchwood
- Study the potential for driveways/access points to be consolidated to help reduce congestion (especially on Northwest between E Victor St and W Maplewood Ave)
- Consider removing parking along Northwest Ave between Illinois St and Elm St to provide a bus lane
- Northwest Ave at Birchwood Center Tier 1 transit hub
- Northwest Ave at W Bakerview Rd Tier 1 transit hub

Figure 19. Green Go Line LPA Short-Term Recommendations

Figure 20. Green Go Line LPA Long-Term Recommendations

4.5 Plum Go Line

Plum Go Line recommendations are limited to bus stop balancing and signal changes, though WTA is also exploring rerouting options near the Downtown Bellingham Transit Station. In October 2021, the City of Bellingham completed the Lincoln-Lakeway Multimodal Transportation Study, which evaluated and identified a suite of multimodal solutions to support future development and changing needs of land uses in the area. Solutions along the Plum Go Line route identified in the October 2021 study included upgrading traffic signals along Lakeway Drive, providing a multimodal path on the north side, and consolidating and restricting access along Lakeway Drive. The signals along Lakeway near I-5 are controlled by WSDOT. The City and WSDOT are currently undertaking a joint operations evaluation of Lakeway to improve eastbound congestion. Additionally, the City is completing a Civic Complex Master Planning process to redesign park facilities and potentially relocate an elementary school within the complex. This planning process includes designing pedestrian facilities along Lincoln and Lakeway, which may provide a valuable opportunity for transit-supportive improvements in the area including at intersections. Finally, WTA is exploring the concept of transit hubs to better facilitate in-route transfer points, and the area along Lakeway between Ellis and Lincoln is under consideration. A transit hub in this location could facilitate more convenient transfers between the Plum and Blue Go Lines, providing easier access between the Lakeway corridor and WWU.

The Plum Go Line travels outbound on Lakeway Drive between Downtown Bellingham and Woburn Street. It travels inbound in the opposite direction, heading back to the Downtown Bellingham. In the future, the Plum Go Line is recommended to extend to Birch Street. In this alignment, the route would return via Birch Street and Electric Avenue before proceeding onto Lakeway Drive.

Figure 21 shows the locations for the recommended treatments along the Plum Go Line.

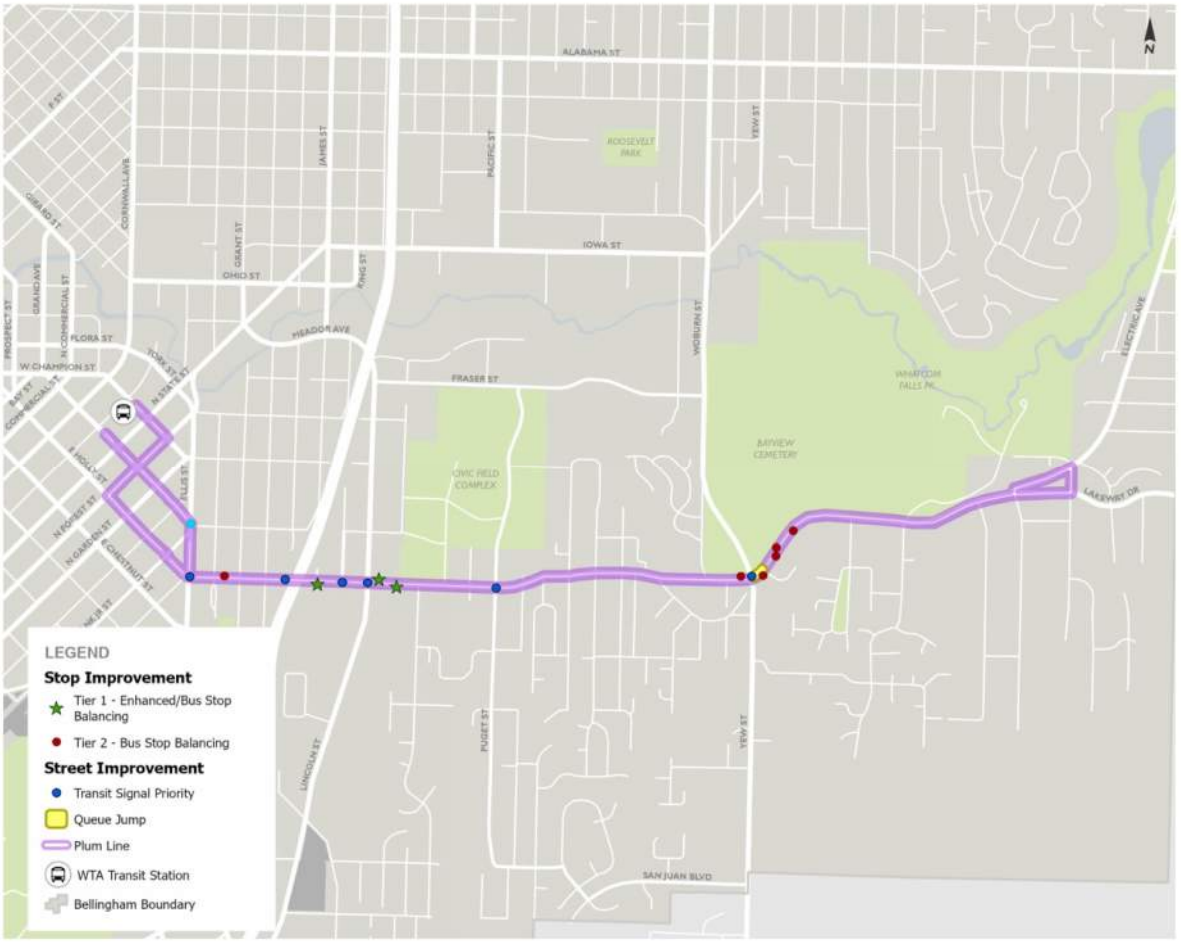


Figure 21. Plum Go Line LPA Recommendations

Bus stop balancing (removal and relocation)

- Lakeway Dr at Franklin St inbound
- Consider stop balancing in Lakeway Center and near Civic Athletic complex based on pedestrian infrastructure developments identified under "Bicycle and/or pedestrian infrastructure changes"
- Add bus stops at Lakeway Dr and Woburn St/Yew St
- Lakeway Dr at Woburn St outbound and Lakeway Dr at Bayview Cemetery inbound (remove)

Tier 1 transit hubs

- Lakeway at Lincoln St inbound and outbound
- Lakeway Dr at Fred Meyer outbound

New or improved signal operations (TSP and interconnect)

Specific locations for potential TSP are listed below; however, corridor-wide operations should be evaluated along Lakeway to determine if upgrades should occur to provide interconnect allowing for signal communication and corridor signal coordination.

- Lakeway Dr at E Holly St inbound and outbound (existing)
- Lakeway at Interchange (I-5 south on-ramp) inbound and outbound (existing)
- Lakeway Dr at King St inbound and outbound (existing)
- Lakeway Dr at Puget St inbound and outbound (existing)
- Lakeway Dr at Lincoln St inbound and outbound (existing)
- Lakeway Dr at Woburn St inbound and outbound (existing)
- E Magnolia St at Ellis St inbound and outbound (Plum Go Line re-route, existing)

Lane or other significant right-of-way solutions

- Queue jump Lakeway Dr at Woburn St inbound

Land use

- Revisit land use designations along the Plum Go Line to identify where zoning should be changed to support high frequency transit as discussed in the Comprehensive Plan and the City's housing and employment infill goals.

Bicycle and/or pedestrian infrastructure changes

- Improve pedestrian environment along Lakeway to support stop consolidation
    - Traffic calming
    - Additional pedestrian crossing islands
    - Pedestrian crossing along west side of Yew St at Lakeway Dr intersection
    - Multimodal path north side of Lakeway Dr per Lincoln Lakeway Multimodal Study
    - Consolidate driveways between James St and Lincoln St per Lincoln Lakeway Multimodal Study
    - Pedestrian crossing on Lakeway Dr at Clearbrook Dr (planned)

4.5.1 Plum Go Line Treatment Timelines

Short-term recommendations are those that are likely to be achievable with local resources or readily available grant funds, while long-term recommendations are likely to require more extensive regional, state, and/or federal resources.

Short-term recommendations (see Figure 22)

- Revisit land use designations along the Plum Go Line to identify where zoning should be changed to support high frequency transit as discussed in the Comprehensive Plan and the City's housing and employment infill goals
- All bus stop balancing
- TSP

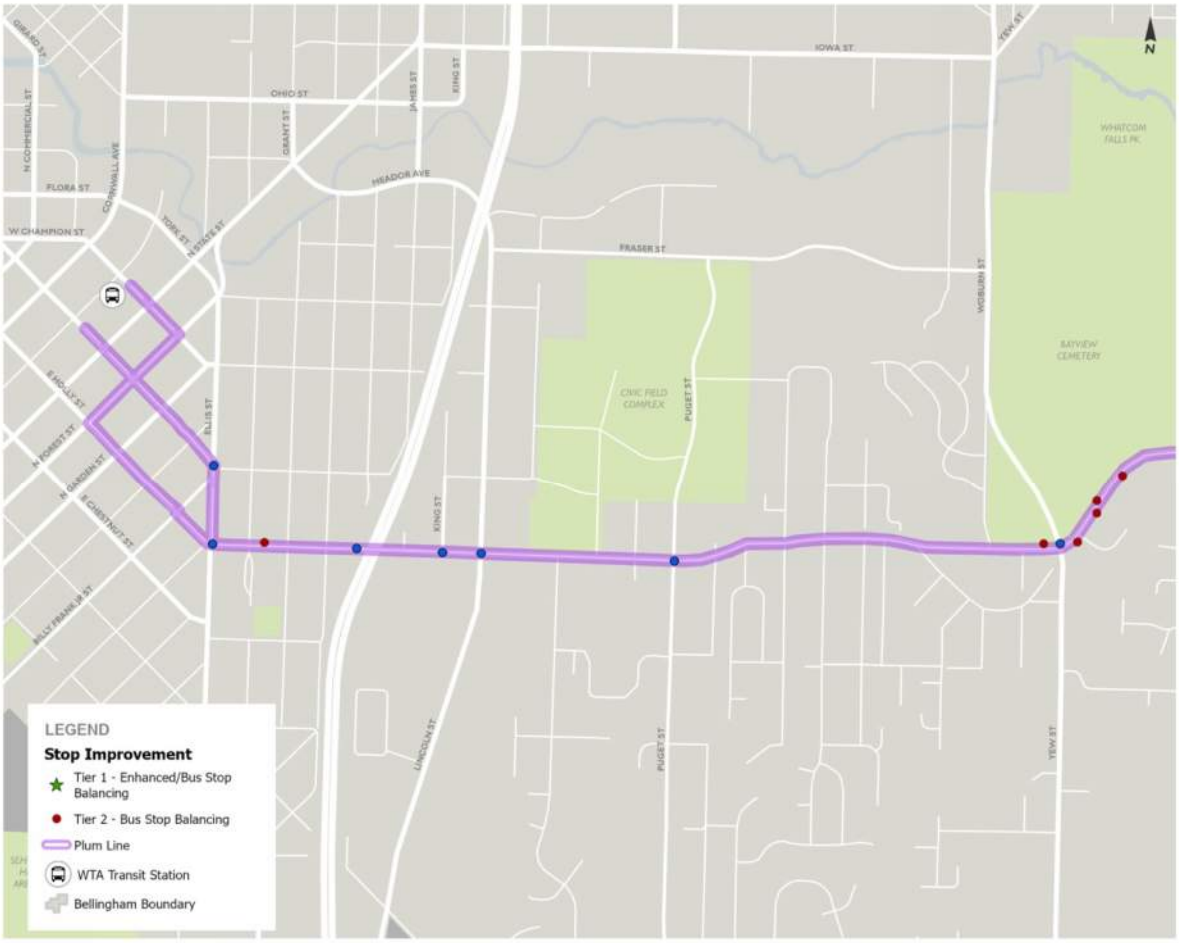


Figure 22. Plum Go Line LPA Short-Term Recommendations

Long-term recommendations (see

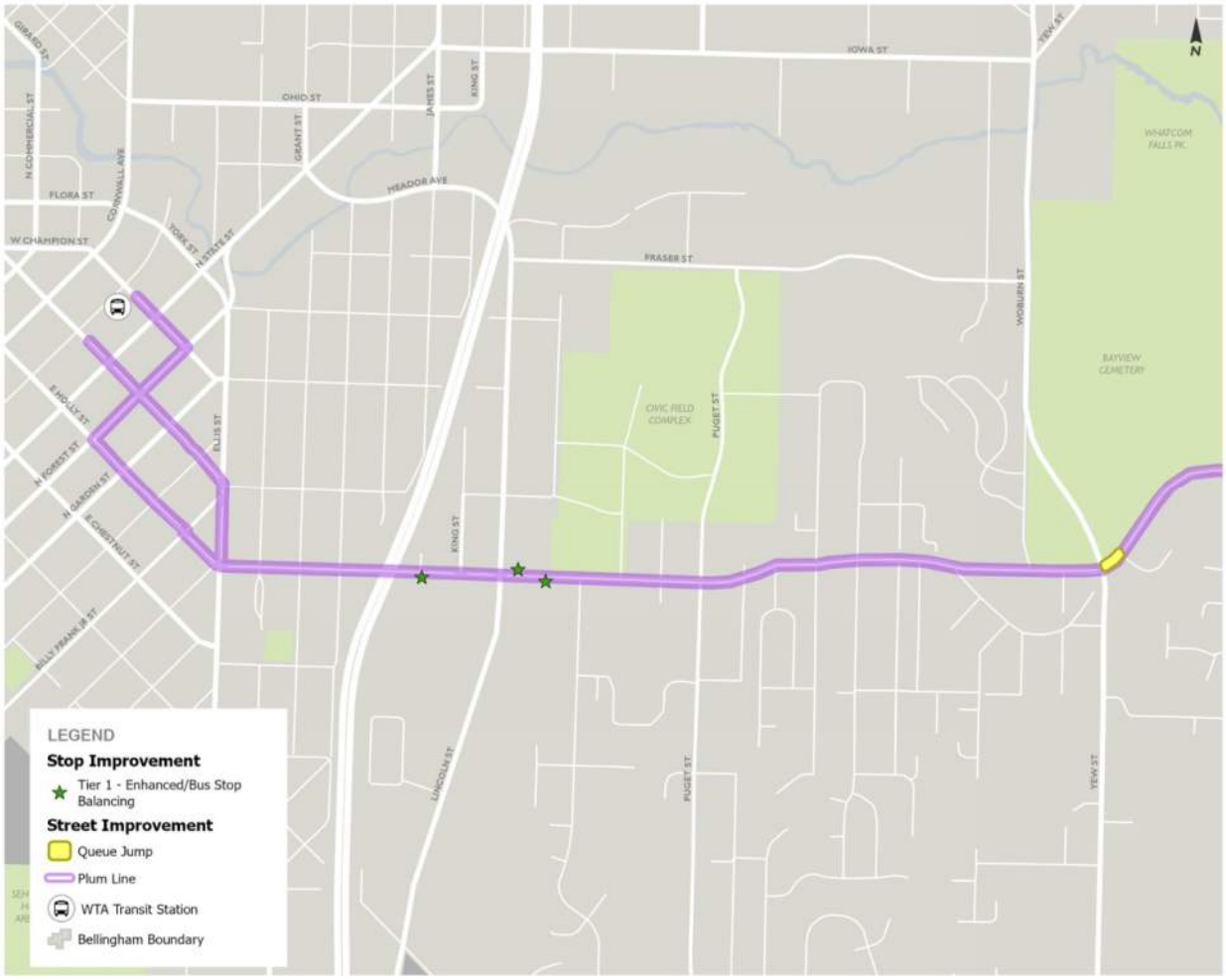


Figure 23. Plum Go Line LPA Long-Term Recommendations**)**

- Queue jump at Lakeway and Woburn inbound
- Improve pedestrian environment along Lakeway and revisit stop consolidation/placement, if needed
- Lakeway at Lincoln St inbound and outbound Tier 1 transit hub
- Lakeway Dr at Fred Meyer outbound Tier 1 transit hub

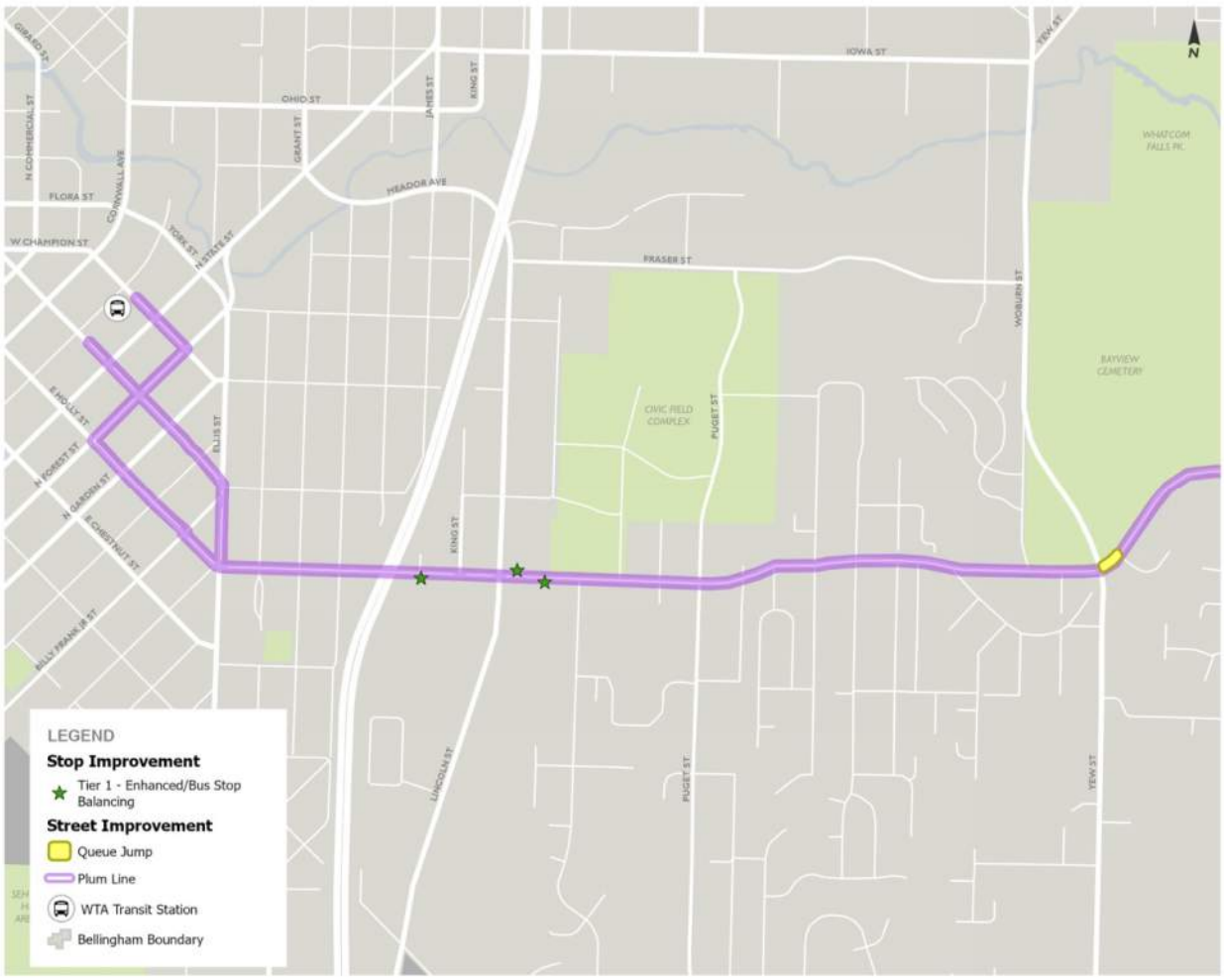


Figure 23. Plum Go Line LPA Long-Term Recommendations

5. Benefits and Costs

This section describes the benefits and costs of implementing the LPA.

5.1 Benefits of the LPA

Implementing a rapid transit system has mobility, accessibility, and sustainability benefits. It improves mobility within the community by making transit a more competitive travel option compared to personally owned vehicles. The improved transit system results in increased ridership and decreases the vehicle miles travelled within the community. The rapid transit system will also increase access to destinations within Bellingham and is a more efficient mode for moving a larger number of people. Rapid transit promotes sustainable development by encouraging the use of public transportation and reducing greenhouse gases with fewer single-occupancy vehicle trips.

One of the key benefits of implementing the LPA will be travel time savings, which will allow WTA to implement 10-minute or better service frequencies. The savings vary based on the treatment, and travel time savings would be cumulative as multiple treatments are applied to each Go Line. Table 1 summarizes the existing travel time characteristics of the Go Lines. The table shows that a significant amount of the travel time for the Go Lines is related to dwell time at the bus stops. This means that treatments like bus stop balancing, bus islands, and other improvements related to decreasing time at stops will be critical to the success of the LPA.

Table 1. Travel Time Characteristics of Go Line Routes

Go Line Route	Average Run Time (minutes)[1]		Overall Average Dwell Time (minutes)[2]
	Inbound	Outbound	
Gold	30	30	19.7
Green	21	21	13.1
Plum	15	15	4.6
Blue	30	20	19.3

Source: Whatcom Transportation Authority

1. Per Rapid Transit Feasibility Study, 2023 and WTA input on Plum Line run time in 2025

2. Represents weekday October 2025

Research was reviewed to understand potential travel time savings of treatments being proposed. Appendix C – Travel Time Savings Calculations provides additional detail on the potential travel time saving by treatment and the calculated travel time savings with implementation of the LPA recommendations.

Table 2 provides a summary of the estimated travel times saving by Go line.

Table 2. Estimated Travel Time Savings by Go Line with LPA Implementation

Go Line Route	Travel Times Savings (minutes)	
	Inbound	Outbound
Gold	7.9	8.9
Green	5.9	5.9
Plum	2.3	2
Blue	7.6	7.2

As described previously, WTA is committed to implementing more frequent service once treatments have achieved a travel time savings of 5 to 10 minutes and/or when on-time performance is being met during the peak periods. Implementation of the treatments described in the LPA could result in travel times savings of approximately 2 to 9 minutes per run. This reduction does not account for additional treatments that could be identified through the corridor studies identified in the LPA. The travel times savings analysis shows that implementation of the LPA would allow WTA to provide more frequent service (i.e., 10-minute service) along the Go Line corridors. It is noted that the Plum Line travel times savings is less than 5 minutes; however, there is a potential that additional treatments could be identified, or a greater savings could come from the City's Lakeway Drive signal coordination project.

5.2 Costs to Implement the LPA

Cost for implementing the LPA include operational costs incurred by WTA in providing 10-minute frequency as well as capital cost to construct the treatments identified. There will also be costs to perform the studies identified.

5.2.1 Operational Costs

An overall cost to WTA will be implementing more frequent service along the corridors. Table 3 summarizes potential cost to implement 10-minute frequency along the Go Line corridors.

Table 3. Estimated Cost to Implement 10-minute Frequency

Go Line Route	Net New Revenue Hours	Cost Range (2027 Dollars)	
		High[1]	Low[2]
Gold	7,248	$1,744,764	$745,461
Green	5,189	$1,249,089	$ 533,681
Subtotal	**12,438**	**$2,993,852**	**$1,279,142**
Plum	4,901	$1,179,785	$ 504,070
Blue	1800	$433,272	$185,118
Total	**19,139**	**$4,606,910**	**$1,968,331**

Source: Whatcom Transportation Authority, November 2025

1. Represents fully allocated cost including administrative, direct operating cost, fuel, wages, maintenance, etc.

2. Represents marginal increase in cost assuming some of the staff supporting operations now would be able to also support the increased frequency.

5.2.2 Capital Costs

A structured approach for construction cost estimates was adopted. The methodology is similar to what peer transit agencies, such as King County Metro and Pierce Transit, have applied for planning level alternative evaluations at a similar level of design.

Methodology and Cost Estimate

Quantities for typical treatments as defined at a planning level design were measured, and construction costs were established for typical treatments, such as station upgrades, roadway modifications, and lane striping changes. The cost estimates are based on concept-level designs, with potential investments established through the planning process and confirmed by WTA in the fall of 2025.

WTA – Typical Treatment Unit Prices

Unit prices for this effort were established as described in Appendix D – Cost Analysis Method. These unit prices are for typical locations within WTA's service area and not site specific. These typical treatment costs were established through review of historic construction costs, market trends, and peer agency cost assumptions for similar work. The methodology uses the term "base construction costs" for all unit costs and treatment quantities for this study.

Miscellaneous Costs Considerations

Contractors are compensated for their efforts to support construction of infrastructure. This compensation includes activities such as traffic control, erosion

control, mobilization, surveying, and quality control. A 30% factor was applied on the base construction costs to account for these miscellaneous costs.

Agency General/Soft Costs (e.g., permitting, design, construction management) were estimated at approximately 50% of construction subtotal (unit prices x quantity + contractor's miscellaneous costs). See Table 4 below for build up by tasks.

Contingency and Allowances

To address uncertainties inherent in planning-level estimates, contingency and allowance factors were applied uniformly across all cost items including:

Contingency at 40%, covering design evolution and unknowns for civil investments. The 40% general contingency allocation accounts for "design allowance" or "design risk;" this allowance mitigates factors that are not yet resolved but will be through project design. This contingency considers items such as design refinement to meet jurisdictional partners direction, right-of-way costs, utility relocations, environmental mitigation, and other considerations.

Risk Allocation at 25%, accounting for unknown risk not identified at this time. This risk is "surprises" that are not typical of this type of work and cannot be determined at this planning level stage.

Table 4 below presents cost markup percentages used by the study to estimate the full costs of project implementation.

Table 4. Soft Cost and Allowances Markup Assumptions

Item	
General/Soft Costs	50%
Planning	2%
Permits	5%
Design	15%
CM	10%
Construction Contingency	10%
Admin Staff	5%
Project Closeout	3%
Miscellaneous Costs	30%
Traffic Control	10%
Erosion Control	3%
Staging	4%
Mobilization	10%
Survey	3%
Contingency Allowance	40%
Risk Allocation	25%

Table 5. Cost Build Up Example

Example Cost Estimate	
Measured Treatment Quantity	2 Units
Treatment Cost per Unit	$1,000 per Unit
Treatment Cost	$2,000
Miscellaneous Construction Cost @30%	$2,000*30% = $600
Contractor Cost (Treatment Cost + Misc. Construction Cost)	$2,600
Agency Soft Costs @50%	$1,300
Implementation cost without contingency or allowance (Contractor Cost + Agency Soft Cost)	**$3,900**
Contingency Allowance @ 40%	$3,900*40% = $1,560
Risk Allowance @25%	$3,900*25% = $975
Full Cost of Implementation with Allowances	**$6,435**

WTA Full Cost of Implementation

Based on the methodology listed in above, the full cost of implementation has been developed by corridor and split into short-term and long-term treatments.

Short-term treatments include bus islands, turn restrictions, bus lane (striping of lanes), and other treatments as listed in Appendix D – Cost Analysis Method. Long-term treatments or systematic treatments include roundabouts, transit signal prioritization, and queue jumps, as listed in Appendix D – Cost Analysis Method.

See Table 6 for the full cost of implementation by corridor. For a more detailed cost estimate broken out by corridor and segment, see Appendix D – Cost Analysis Method.

Table 6. Full Implementation Costs by Corridor (Short-Term vs. Long-Term)

	Cost (2025 Dollars)	
Go Line Route	**Short Term**	**Long Term**
Gold	$ 7,941,200.00	$ 17,454,700.00
Green	$ 659,600.00	$ 3,217,500.00
Blue	$ 2,229,800.00	$ -
Plum	$ -	$ 3,217,500.00

Planning Level Cost Estimating Confidence

Cost estimates have been developed at a very early stage of design. Based on the level of design, the consultant team established a cost estimating confidence range at the Class 5 level as defined by the Association for the Advancement of Cost Engineering (AACE)

International practice No. 18R-97. The expected accuracy based on an estimate class 5 is between -50% and +100%.

5.2.3 Other Capital Costs

In addition to the capital costs described previously, TSP and other studies are proposed. TSP is suggested to be implemented systemwide as one project and not corridor by corridor. WTA and the City do not need to activate the TSP at all the intersections where it is implemented; however, it is more efficient and cost effective to implement the full system at one time. The cost for engineering, procurement, installation, and five years of technical support is estimated at $2.0M (2025 dollars).

The following corridor studies are also identified as part of the LPA:

- High Street Corridor $100,000
- Samish Way Corridor $50,000 to $75,000
- Woburn Corridor $75,000 to $150,000
- Alabama Corridor $75,000 to $150,000

6. Implementation

Implementing the improvements identified in this LPA requires prioritizing projects, identifying funding sources, and collaborating with other agencies and private developers to realize best value projects that are the most feasible given the limited resources of WTA and the City. It is recommended that the implementation strategy for the LPA be consistent with the City's Pedestrian and Bicycle Master Plans, and other City plans, which have a proven track record. The strategy includes how projects are prioritized, mechanisms used for implementation, and performance measures for tracking implementation progress.

The timeline for the LPA has been categorized as short- and long-term for each of the projects and treatments identified. A more detailed implementation plan that includes a fiscally constrained prioritized project list should be developed separate from the LPA. Project implementation is a dynamic process that can change from year-to-year based on the agency fiscal outlook and opportunities that arise from grant funding, utility and other project coordination, and private development. The implementation plan should be revisited and updated on an annual basis.

6.1 Prioritization

Project prioritization is a multifaceted effort to identify the highest value projects in terms of the LPA's goals balanced with the fiscal constraints. Prioritization of projects should consider the following factors to inform implementation:

- **Goal alignment** centers on criteria tied to the LPA goals, specifically to improve safety and comfort, provide more efficient transit operations, and use transit to increase access to higher density. Examples of criteria that could be used to assess goal alignment would be travel times savings that enable increased frequency, proximity to existing or future higher density land uses and transit-oriented development, and proximity to low-income housing or population/employment.
- **Project scale and complexity** considers the relative size of the project in terms of length, impact to development, right-of-way needs, or environmental factors which can increase design and permitting timelines, regardless of funding source. Environmental factors include multimodal, traffic operations, parking, and other impacts to the transportation system and surrounding areas.
- **Project cost** accounts for the reality of the fiscal resource limitations.
- **Funding opportunities, or grant competitiveness,** identifies projects that are likely to rank well in highly competitive state and federal grant funding programs or have a higher opportunity for implementation with partner funding opportunities like private developer funding.
- **Project readiness, or timeframe,** considers whether additional study or stakeholder coordination is needed to implement a project. The projects have already been ranked for short- and long-term improvements with long-term improvements being less ready for implementation.

WTA and the City will work together to prioritize projects that were identified through the LPA process. A scoring system will be developed to identify projects that have the potential to realize the most value in terms of the LPA goals, as determined by the goal alignment, and that are the most feasible to implement, given the resource constraints that are captured by the other factors. Prioritization of projects could assume projects are being constructed independently or bundled into packages or segments. Independent construction of projects would likely be conservative, because there will be opportunities to construct projects as part of larger roadway projects, utility maintenance activities that impact roadways, or as part of development or redevelopment projects. If projects are incorporated into development or redevelopment, some of the cost burden may be shared by private development partners. Grouping projects into packages could also realize

efficiencies of mobilization permitting, stormwater management, utilities impacts, and cost of materials and labor.

6.2 Implementation Strategies

Three key strategies are recommended for implementation of the LPA based on strategies that have worked for other projects in Bellingham and partnerships with WTA and the City.

1. **Develop fundable project packages** – The LPA begins to develop packages by identifying segments for short-term projects. Developing packages will help reduce costs, reduce internal management, and provide a more deliberate process that increases ranking in grant funding competitions. Key actions to be taken for this strategy include:
    - Organize project packages and consider known WTA projects, City projects, development, utility improvements, or legislative priorities.
    - Limit project package construction costs to feasible and fundable amounts based on the intention to fund locally or via an identified grant program, in consideration of the grant program's typical funding limitations.
    - Pursue grant funding for higher-priority packages.
    - Consider identifying a 5-year grant plan around expected grant opportunities, determining if the grant pursual would be led by the City or WTA, and engage with grant program managers to present the planned nature of the applications.
2. **Identify opportunity projects** – Inclusion of transit improvements in other roadway, utility, and/or maintenance projects is an important method of implementing the prioritized project list. Bundling transit improvements into other projects can potentially lower costs and shorten anticipated schedules, due to economies of scale, when compared to an approach where projects were to be individually funded, designed, and completed. Key actions to be taken for this strategy include:
    - Work with the City's departments to identify opportunities for inclusion of transit projects in other project types.
    - Where grant requirements or construction in conjunction with another roadway project make construction of a lower priority project possible or required by law, pursue funding sources for that project regardless of priority.
3. **Explore partnerships** – WTA and the City should continue to explore partnerships that have been previously successful in leveraging local funding, including with each other and with other organizations. This can be accomplished by receiving funding from other agencies, providing support to other agencies, or other methods. This approach demonstrates to grant funding agencies the viability and importance of a

project. Potential organizations to engage include Bellingham School District and Western Washington University, among others.

- Approach partnership agencies with a list of high priority projects directly affecting their constituency.
- Gather formal support letters and financial support where feasible ahead of grant funding applications for projects serving partner agencies.
- Identify non-traditional grant funding opportunities for schools, transit, etc. that could have a transit infrastructure component and provide City support letters, in-kind support or funding commitments, etc. to those grant applications.
- Encourage inclusion of projects in capital improvements by other partner agencies.
- Maintain and develop new strategic partnerships with community agencies and businesses to promote programs that build support for transit and provide economic development potential.

6.3 Potential Funding Sources

It is anticipated that the LPA would be funded through a variety of sources ranging from local, state and federal resources. Potential sources of funding include:

- City transportation levy
- WTA capital
- Funding sources used for the City's Transportation Improvement Program (TIP), such as grants and impact fees for project that are within the program
- Washington State Regional Mobility Grants
- Washington State 5339 Bus and Bus Facilities Grants
- Federal grants

7. LPA Next Steps

The next step for the LPA is to present it to the public and then have formal adoption by the WTA Board and Bellingham City Council. Once the LPA is adopted, WTA, with the support of the City and community, will seek funding through the Washington State Department of Transportation (WSDOT) mobility grant program to implement portions of the LPA. The activities and the anticipated timing for the LPA next steps are presented below.

Activity	**Date(s)**
LPA Draft Finalized	Feb 2026
Public Engagement	Feb-March 2026
Bellingham City Council Adoption	April 2026
WTA Board Adoption	April 2026
WSDOT Regional Mobility Grant Application	June-July 2026

Appendix A – Preliminary LPA

WTA

RAPID TRANSIT

Preliminary Locally Preferred Alternative

April 2025

RAPID TRANSIT
Preliminary Locally Preferred Alternative (PLPA)
April 2025

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The Whatcom Transportation Authority provides services and employment on a non-discriminatory basis, and complies with Section 504 of the Rehabilitation Act of 1973, Title VI of the Civil Rights Act, and the Americans with Disabilities Act of 1990. WTA also complies with the State of Washington Freedom from discrimination—Declaration of civil rights, RCW 49.60.030 To read these policies visit: http://www.ridewta.com/business/about-wta/non-discrimination and http://www.ridewta.com/getting-around/accessibility/ada

What are WTA Go Lines?

Whatcom Transportation Authority's Rapid Transit project focuses on its high frequency network made up of four (4) transit lines operating within Bellingham. These "Go Lines" were created to serve the community's most significant destinations, including downtown, Western Washington University, Cordata, Barkley Village, Sunset Square, Birchwood, and Northwest, and the Lakeway commercial area. By operating on key community corridors, the lines serve the greatest concentrations of WTA's designated priority populations and carry the vast majority of riders in the system.

The Go Lines are also the most cost effective of WTA's services based on cost per passenger trip. Each passenger trip costs approximately $5.50 per trip on the Go Lines, compared to $10 per trip on the entire system.

Two Go Lines are made up of one numbered WTA route; the Green Go Line is Route 232, and the Gold Go Line is Route 331. The other two Go Lines are made up of multiple different numbered WTA routes, and the combination of service along these different routes combines to provide higher frequencies along the Blue Go Line (Routes 105, 107, 108, 190, 196, and 197) and the Plum Go Line (Routes 512, 525, 533, and 540). Figure 1 summarizes Go Line service and frequency. All Go Lines provide 15-minute weekday frequency, with generally longer hours of operation and more service than other routes on weekends. Because start and end times and frequency differ by service direction and by the routes that make up the Go Lines, this information is intended to provide a high-level overview of available service.

Figure 2 shows the location of the Go Lines.

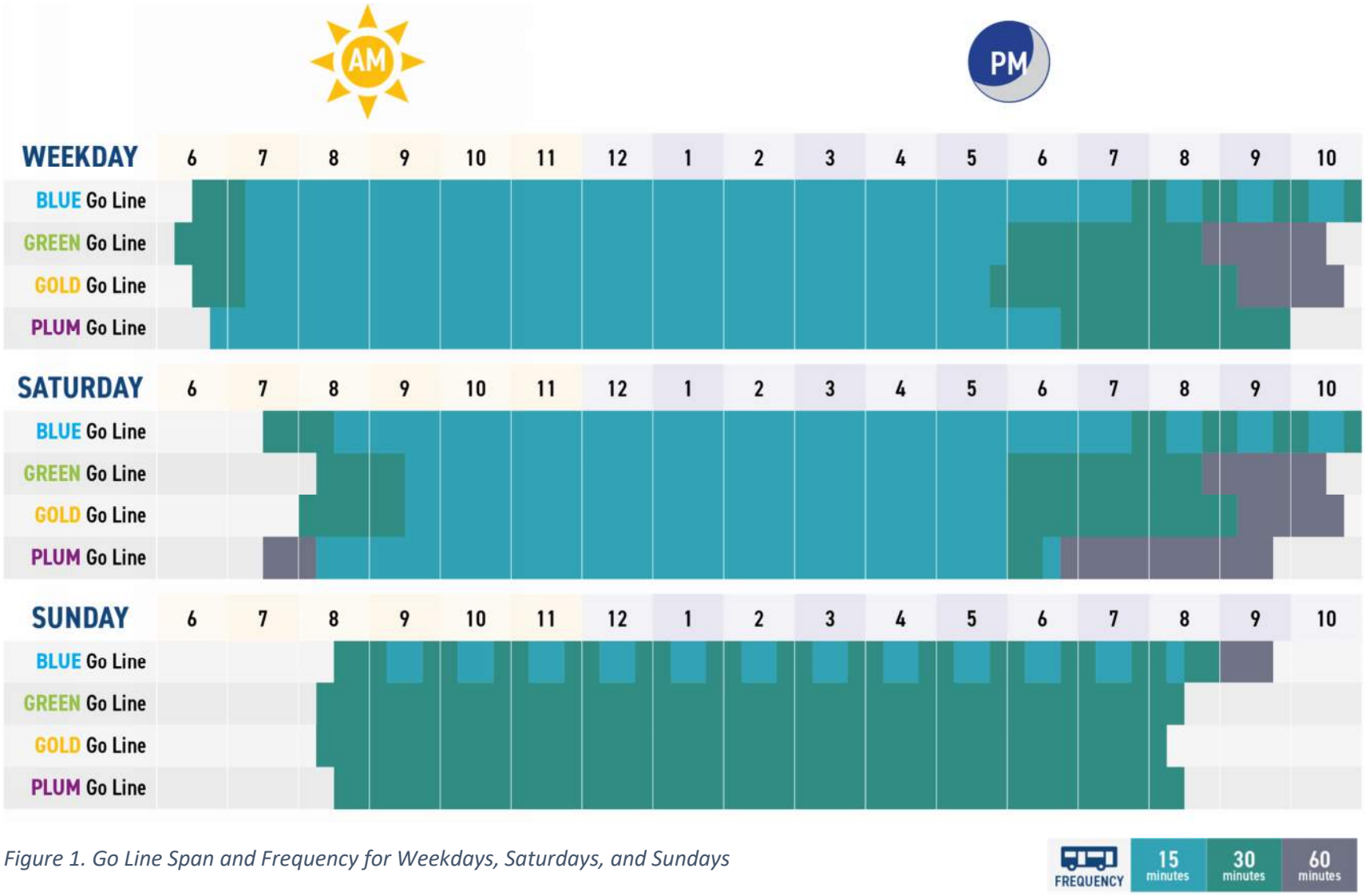


Figure 1. Go Line Span and Frequency for Weekdays, Saturdays, and Sundays

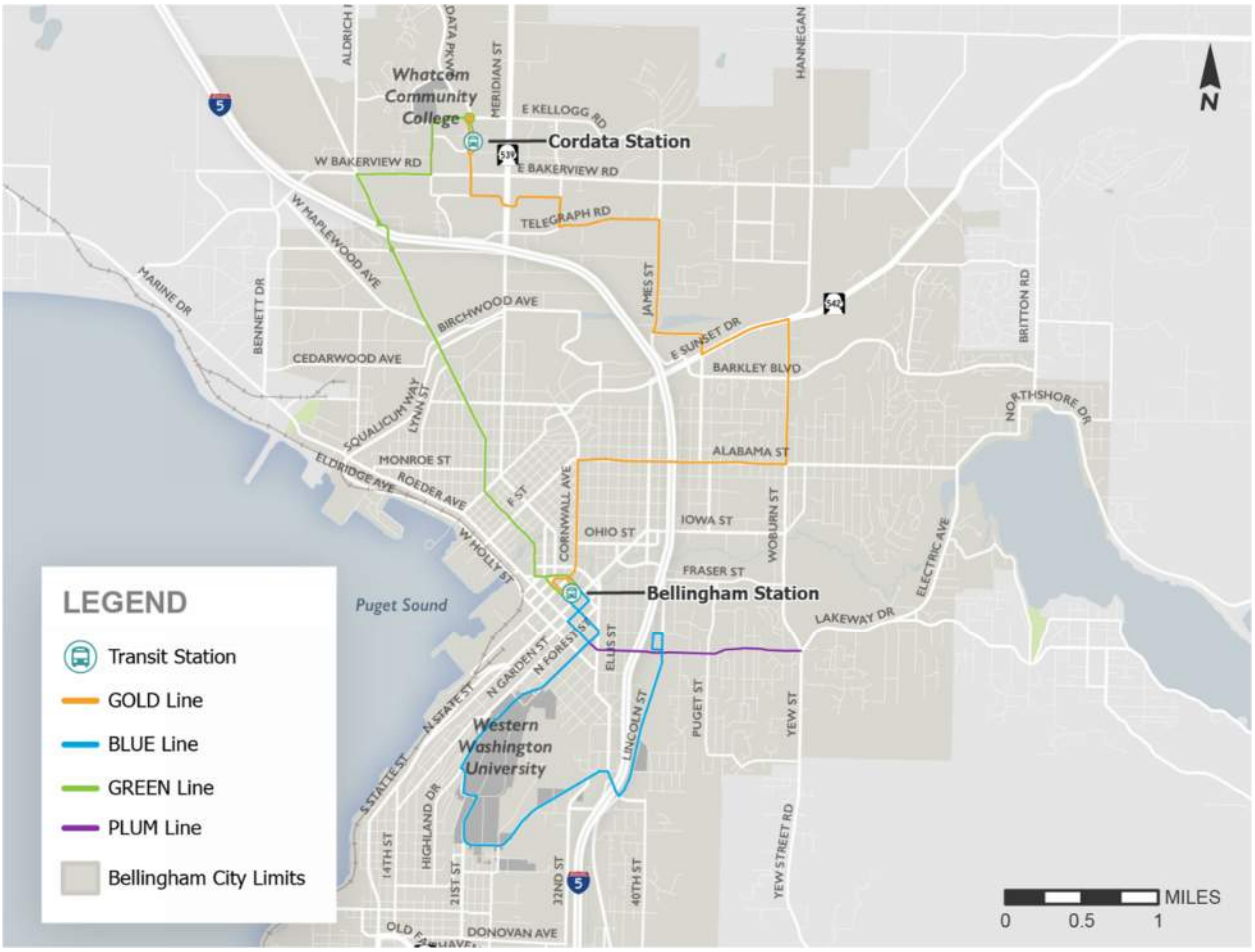


Figure 2. WTA Go Lines

Note: WTA is currently reviewing service changes to the Blue Go Line, which would increase frequencies along Lincoln Street and extend Go Line service to Lakeway Avenue.

The Blue Go Line offers transit service between downtown Bellingham and Samish Way via Western Washington University (WWU). The Blue Go Line comprises several routes, including the 105, 107, 108, 190, 196 and 197. While these routes all continue past Bill McDonald at Samish, only the section between downtown station and Bill McDonald at Samish currently has 15-minute service and Go Line classification. Future service changes could extend the Blue Go Line to Lakeway Avenue. The Blue Go Line has the highest ridership of all the Go Lines. It currently serves an estimated 5,227 average weekday boardings. Blue Go Line ridership is driven by WWU students going to campus or traveling between campus locations. Routes also provide connections to commercial/retail areas at Bill McDonald Parkway/Samish Way and at Lincoln Street/Lakeway Drive through campus.

The Green Go Line offers service between downtown Bellingham and Cordata Station/Whatcom Community College via Dupont, Elm, Northwest, and Bakerview. The Green Go Line, or Route 232, currently serves an estimated 1,509 average weekday boardings.

The Gold Go Line offers service between downtown Bellingham and Cordata/Whatcom Community College, with service to Sunnyland Square, Barkley Village, Sunset Square, Winco, and Bellis Fair Mall along the way. The Gold Go Line, or Route 331, currently has an estimated 2,243 average weekday boardings and is WTA's highest ridership individual route.

The Green and Gold Go Lines are interlined, meaning that after the last stop, one route turns into the other route. Changes in one route directly affect the other route.

The Plum Go Line offers service on Lakeway Drive between downtown Bellingham and Woburn Street. The Plum Go Line comprises Routes 512, 525, 533 and 540. The westbound Plum Go Line operates on 15-minute headways during weekday service between downtown and Woburn Street, while the eastbound service operates on 20-minute headways between Lakeway and Woburn. The Plum Go Line currently serves an estimated 641 average weekday boardings. This Go Line has the lowest average weekday ridership of the four Go Lines.

The Go Lines serve as a backbone to the entire WTA transit network, providing convenient service for riders traveling for work, education, medical visits, shopping, and recreation. The routes that make up these Go Lines accounted for approximately 69% of the total system ridership in 2024. WWU generates the highest ridership demand of any destination in Bellingham. During school breaks, among the Go Lines, the Gold Go Line carries the most passengers.

Figure 3 summarizes key operating characteristics of the Go Lines.

LINE	REVENUE HOURS	PASSERGER BOARDINGS	PASSENGERS PER REVENUE HOUR
Blue	16,525	976,656	52.71
Gold	21,666	596,676	27.54
Green	15,068	401,620	26.65
Plum	5,779	151,593	26.23

Figure 3. Go Line Operating Statistics

On-time performance of each of the Go Lines differs across the day, with the Plum Go Line experiencing the largest difference in on-time performance throughout the day and the Plum and Blue Go Lines experiencing the most delay of the Go Lines. On-time performance differs between each stop along each route as well, and these stop-specific delays will be explored in greater detail during the next steps of the Locally Preferred Alternative development process. Average on-time performance for each Go Line is shown in Figure 4-7.

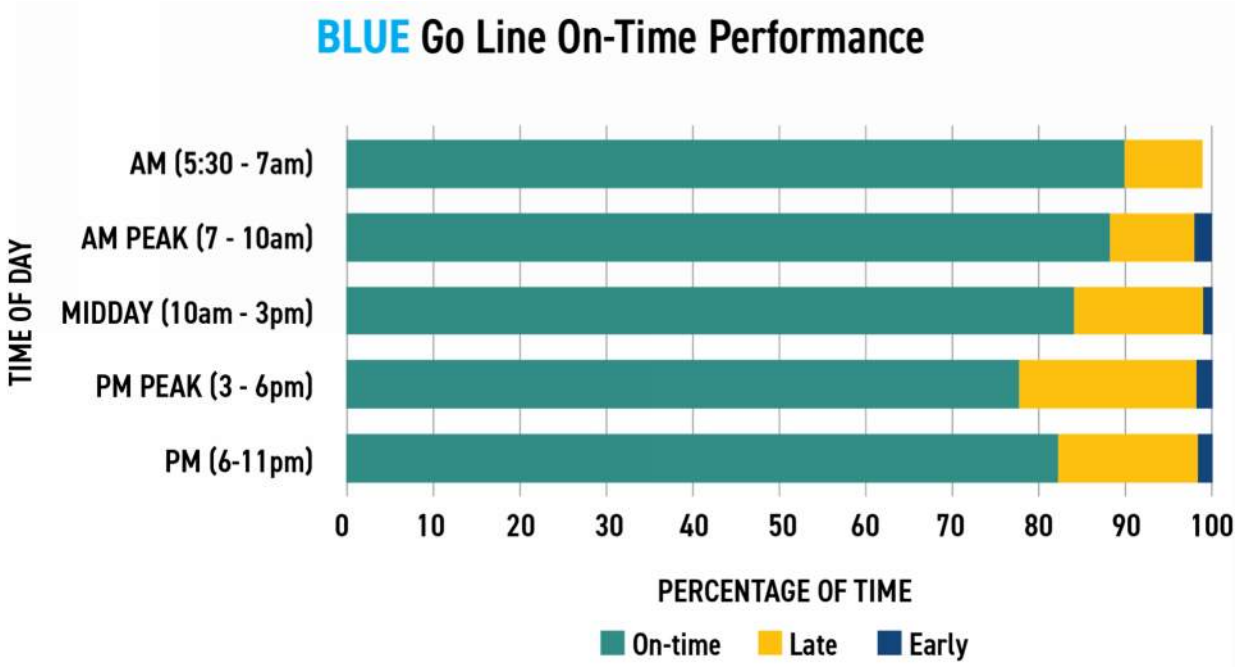


Figure 4. Blue Go Line Average On-Time Performance

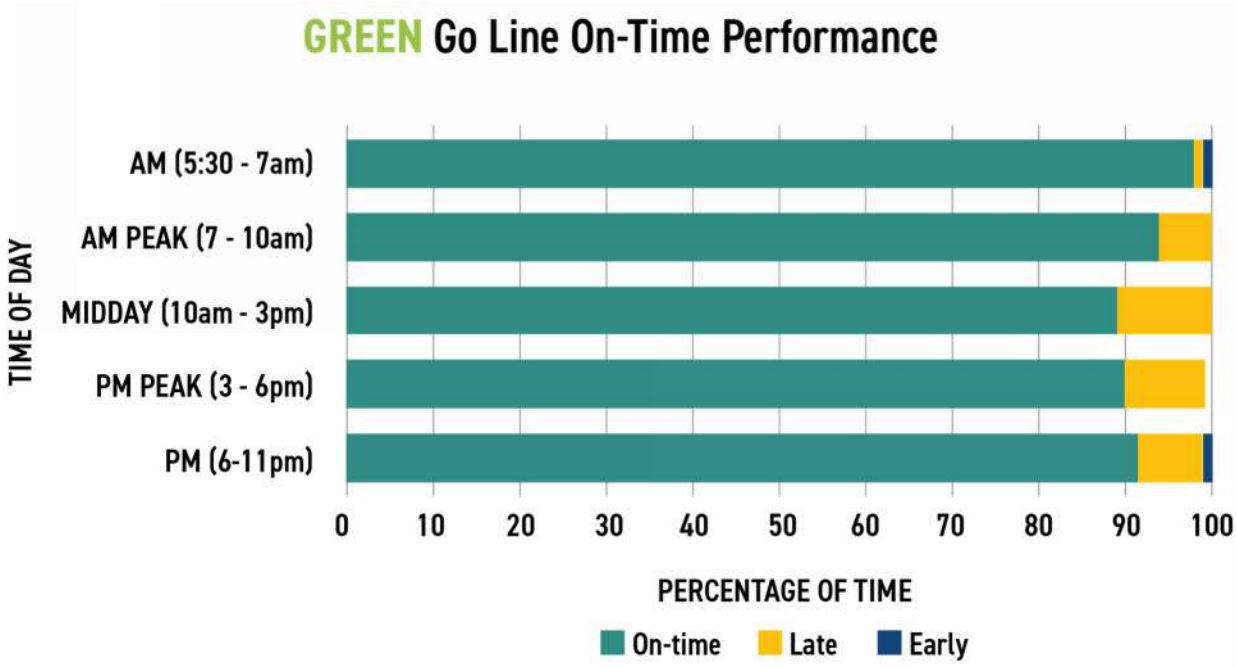


Figure 5. Green Go Line Average On-Time Performance

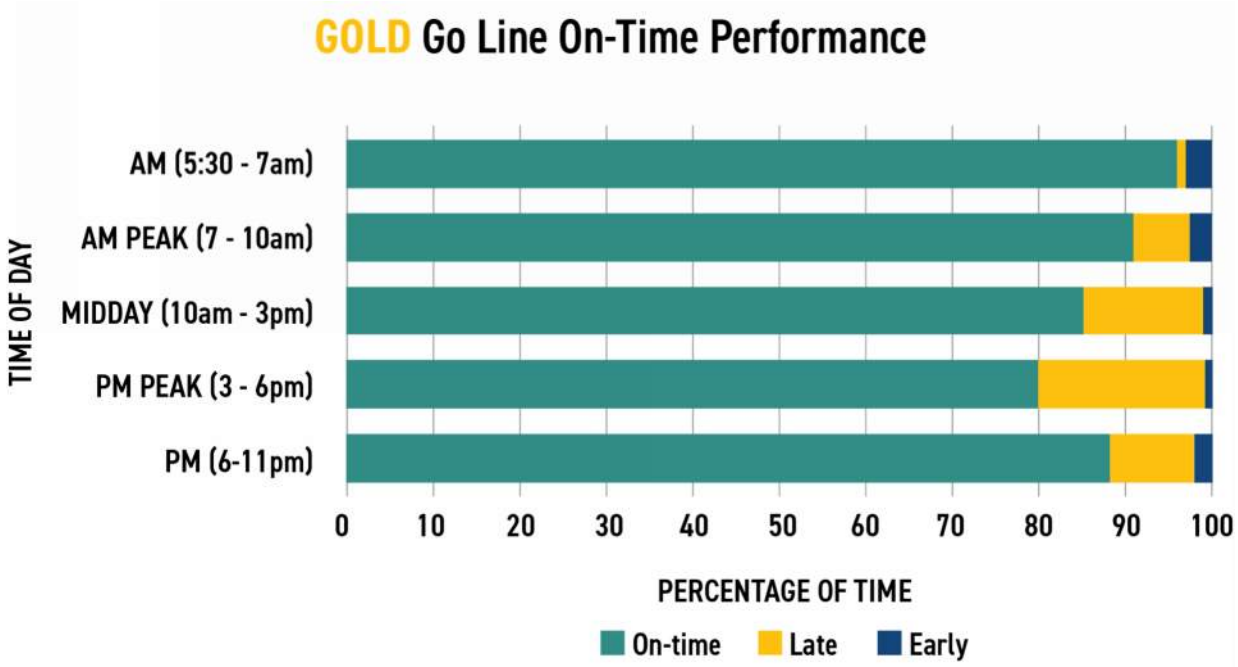


Figure 6. Gold Line Average On-Time Performance

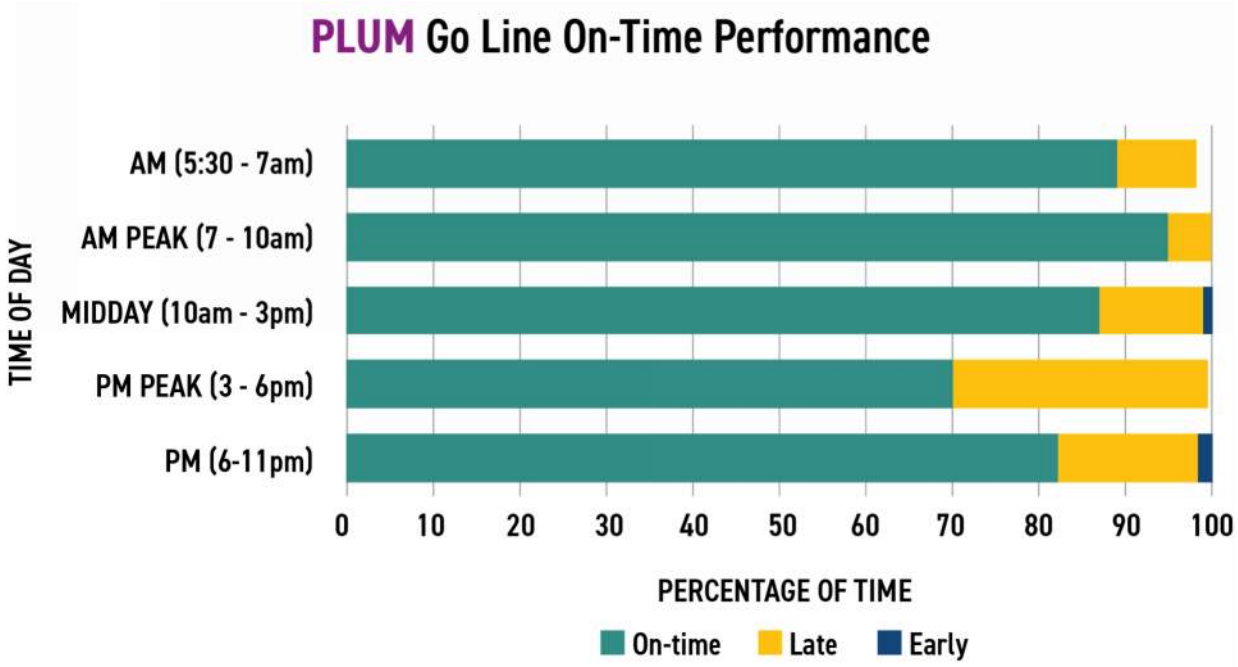


Figure 7. Plum Go Line Average On-Time Performance

What are the challenges, opportunities, and project need?

Despite high ridership on Go Line routes, mid-route transfers are difficult. Headways of 15 minutes impact route connections; missed connections lead to rider frustration and impact the rider experience. In addition, increased congestion from growth both inside and outside the city is causing delays, steadily decreasing runtimes, decreasing service reliability, and reducing the benefits of busses that have been added to improve frequency. Bus arrivals can be highly variable, reducing the reliability of the service and potentially causing riders to miss transfers or avoid using the service altogether. Delays can cause a spiraling effect where former bus riders switch to driving, causing even more congestion and thus greater delays. In 2018, WTA had to increase the number of buses on the Green and Gold Go Lines to maintain the same level of service due to increasing runtimes.

The Washington Council of Governments' (WCOG) travel demand model for the year 2045 estimates future travel based on an anticipated increase of approximately 30% in households and 43% in employment compared to 2023 conditions. These population and employment forecasts are developed collaboratively by all Whatcom County local governments and informed by projections from the Washington State Office of Financial Management and analyses of land use patterns. WCOG's model uses these agreed-upon forecasts to estimate resulting travel demand for both base and future years. This growth is expected to increase congestion along arterials and at intersections during peak hours, including on all Go Line corridors.

Transit signal priority (TSP) exists at many signals, but there is no evidence that current TSP configuration and operator use of TSP reduces bus travel times. The existing transit service is also constrained by limited right of way. The arterial and collector street cross-section outside of the downtown area does not provide many options for dedicated running ways. In some areas, there are pinch points or hot spots (see Figure 9) that hamper efficient movement.

The City of Bellingham has shown strong policy support for land use development that supports frequent transit service. Development is rapidly occurring in the designated Urban Villages, located along key transit corridors. The City's seven Urban Villages (see Figure 8) comprise less than 4% of the city's land area but are expected to accommodate 30% of future growth.

Figure 8. Existing Urban Villages

While Bellingham is experiencing densification, much of the existing development pattern outside of the Urban Villages is low-density single-family residential or auto-oriented commercial development. Several Comprehensive Plan elements, including the Multimodal Transportation chapter and the Land Use, Urban Design and Housing chapter, include goals and policies supporting Transit-Oriented Development (TOD) and increasing mixed-use development intensity along transit corridors. The Bellingham Comprehensive Plan update currently underway is anticipated to continue strong support for TOD and increased density. The Comprehensive Plan update proposes a TOD corridor growth concept, which could accommodate approximately 1,275 additional housing units and 640 additional jobs along key high frequency corridors. The City has also recently passed interim ordinances to allow more infill housing and density throughout most of the community, as well as an ordinance removing parking minimums citywide. Both policies are transit friendly. The City has also invested substantially in pedestrian and bicycle infrastructure to support access to transit (opportunity), but there are still many areas where pedestrian and bicycle access to transit needs more work which limits access and ridership potential (challenge).

Figure 9. Go Line Hot Spots

What is the Locally Preferred Alternative?

A Locally Preferred Alternative (LPA) refers to the transit project option that is considered the best choice by a local community and/or governing body after evaluating various alternatives, representing the preferred project based on local needs and input during the planning process. When comparing alternatives, the chosen LPA is the best option for addressing the purpose and need for the project. The LPA is a general description of the transit location, improvements, and service plan. LPA design specifics and the definition of additional elements of the project will be refined during subsequent engineering and planning efforts.

The recommendation of WTA and City staff is to proceed with Enhanced Go Line service rather than a Bus Rapid Transit (BRT) project as the Locally Preferred Alternative. This approach will still enable implementation of many of the features of a BRT but without the high costs, lengthy process, and challenging FTA grant securement and approval process. It would allow for phasing of individual transit improvement features rather than a large and complex package of features. Finally, while losing access to the potential for federal Capital Improvement grant funding may limit the scale of improvements, the Enhanced Go Line service could use other sources of local, state, and federal funding for transit, on a timeframe that aligns with WTA and City priorities.

A preliminary LPA is needed to obtain guidance from decision-makers over the direction of the next steps in the process to make the best use of planning funds and begin design work. It is intended to ensure that project staff and decision-makers, including the WTA Board of Directors and Bellingham City Council, are "on the same page" prior to continued work on further analysis and community engagement.

WTA's 2025 adopted budget recognizes this effort to develop a locally preferred alternative to direct future work around enhanced transit design concepts and priorities for corridor operating and capital investments.

What have we done so far?

WTA, in partnership with the City of Bellingham, has been exploring opportunities to enhance existing transit services along high frequency routes by implementing speed and reliability improvements and changes that support further frequency enhancements.

Feasibility Study

In November 2023, WTA completed the Rapid Transit Corridor Feasibility Study, a year-long study to determine the viability of rapid transit in Bellingham on two key Go Line corridors. The purpose of that study was to identify desired rapid transit features, prioritize one corridor for further planning and design, and provide several design options for addressing key areas of bus delay. The Feasibility Study concluded that rapid transit is feasible within Bellingham and that WTA should move forward with additional planning and eventual implementation. The Green/Blue Go Line Alternative scored highest for compatibility of a rapid transit corridor. It was recommended WTA conduct outreach and refine the rapid transit alternatives as a next step in the planning process.

The goals and objectives in Figure 10 were developed as part of the Feasibility Study. The measures were used to assess how well the alternatives meet the goals and objectives as well as provide a comparison of the alternatives. New measures will be developed as part of the LPA.

GOAL	OBJECTIVE	MEASURE
Improve safety and comfort for bus riders, pedestrians, and bicyclists along the corridor	• Meet all ADA requirements at stop and station locations • Improve accessibility along the corridor, specifically targeting routes to and from transit stops and stations • Enhance stops along the corridor for rider comfort and ease of use • Reduce conflicts between buses and other modes along the corridor	• Reduce transit conflicts with other modes • Improve rider access
Provide for more efficient transit operation along the proposed rapid transit corridor	• Reduce bus dwell time at stops • Maintain or improve on-time performance for transit • Optimize bus travel routes to minimize delays related to congestion • Provide bus rapid transit treatments (e.g., managed lanes, queue jumps, transit signal priority, etc.)	• Increase transit speed and reduce running time
Use transit to increase access to higher density land uses and activity opportunities along the corridor	• Increase ease of transit use to and from key land uses and specifically those with higher activity such as grocery stores, malls, medical facilities, etc. • Consider existing and future land use patterns in the placement of transit stops • Ensure partner agencies have coordinated plans that consider transit accessibility in future corridor improvements and redevelopment of parcels • Ensure that land use regulations along the corridor reflect/ support/require transit-oriented communities	• Increase ridership • Presence of transit-supportive land uses • Development of streetscape designed for non-motorized use

Source: Whatcom Transportation Authority Rapid Transit Study – Feasibility, November 2023

Figure 10. Rapid Transit Feasibility Study Goals, Objectives, and Measures

Locally Preferred Alternative Study – Step 1

While the Feasibility Study focused on the Green, Blue, and Gold Go Lines, this study expands the evaluation to the Plum Go Line as well. Through Step 1, the project team conducted public and stakeholder engagement and analysis to understand the impacts now, and in the future, of potential changes to the Go Line corridors and operations.

Outreach

Outreach during Step 1 included:

- WTA's project website Rapid Transit Study | Engage WTA with opportunities for feedback
- Engagement with a project Steering Committee, including representatives from the City of Bellingham, WTA, WCOG, WWU, and Washington State Department of Transportation (WSDOT)
- Additional meetings with WWU and City staff
- Interviews with Downtown Business Partnership, Bellingham School District, Whatcom Community College, and the Whatcom Council on Aging

- Discussion group with invited local developers and business owners (also open to the public)

Key themes identified through the outreach include:

- Balancing the needs of people riding bikes and people using the bus will be a critical component of successful Go Line enhancement.
- Frequency and reliability are the highest priority improvements for riders.
- Updates to the City's Comprehensive Plan and Street Standards will provide policy support for transit improvements.
- With driving considered easy and much faster, and parking considered inexpensive, transit will have difficulty attracting new riders.
- Riders would like to see safety and comfort improvements, particularly related to the downtown bus station and weather protection at bus stops.

Alternatives Analysis

Step 1 LPA cost benefit analysis compared two alternatives:

1. Bus Rapid Transit (BRT) – High-capacity bus-based transit system delivering fast, frequent, reliable, and high-quality service. Speed and reliability improvements are achieved through dedicated bus lanes along all or most of a corridor, off-board fare collection, bus stops converted to amenity-rich stations, and enhanced transit priority at intersections.

2. Enhanced Go Line – Enhancements to existing Go Lines to improve speed and reliability using a flexible approach to implementing improvements. Key upgrades would include more frequent service, targeted upgrades at key intersections, efficient stop spacing, improved transit signal priority, and expanded amenities at stops.

Many features for improving service are common to both alternatives. Figure 11 shows some of the potential features that may be included in both a BRT or an Enhanced Go Line. The primary feature includes increasing (or in the case of the Blue Line, maintaining) service frequency. Other shared features included enhanced bus stop amenities, elements to reduce boarding times, and improved transit signal priority. The primary difference is the scale of improvements, particularly regarding bus running ways. The BRT alternative includes exclusive bus lanes in many areas, while the Enhanced Go Line alternative limits bus lanes to hot spot areas.

Ultimately, while there are likely significant operational benefits of BRT, some key BRT treatments, such as dedicated bus lanes, will be costly, complicated, and impactful on all right of way users. For example, in some areas, providing the 22 feet of right of way needed for a transit-only lane will require purchasing new right of way or reconfiguring existing right of way, resulting in the possible conversion of parking, travel lanes, and/or bicycle lanes into bus lanes. These costs and complications, paired with the challenging funding environment, have resulted in WTA and the City of Bellingham recommending Enhanced Go Lines as the locally preferred alternative for further planning and design work. Pursuing Enhanced Go Lines will allow partners to provide improved transit service while avoiding the complication, uncertainty, and cost of pursuing the BRT alternative. These avoided costs and uncertainties include:

- BRT project costs of tens of millions of dollars,
- Highly competitive FTA Small Starts competitive grant application to offset costs,

- Lengthy planning and construction timeline (6 – 8 years), and
- Inability to make interim improvements on Go Lines during Small Starts process.

Figure 11. Bus Rapid Transit and Enhanced Go Line Potential Features

Where do we go from here? – Step 2

Pending the WTA Board and Bellingham City Council review and formal adoption of this preliminary LPA, WTA and the City are planning to begin more detailed work on the Enhanced Go Line alternative. This will include identification of the Go Line enhancements that will make up the final locally preferred alternative. The key outcomes from Step 2 will be as follows.

- City and WTA have shared understanding about:
    - Routes that, from a market demand perspective, would be the best candidates for enhanced Go Line service,
    - Challenges and opportunities along those routes,
    - Potential solutions for addressing those challenges and opportunities, and
    - Solutions categorized by ease of implementation.
- City and WTA have clear agreement on:
    - Locations where the City and WTA can plan for enhanced Go Line service for one or more Go Lines based on:
        - Go Line is good candidate for enhanced service from a market demand perspective and

        - The City can agree to a sufficient number/level of treatments to support the functioning of the Enhanced Go Line.
    - Prioritization of enhancements and approach to implementation (e.g., focus on improvements for one line at a time or focus on similar types of treatments and complete larger improvement opportunistically).
    - Process for identifying candidates in the future.
        - Balance of public outreach, market demand, infrastructure needs, modal trade-offs, partnership opportunities, cost
- City & WTA have a memorandum of understanding (MOU) to guide future coordination on planning and investments to improve transit.
- City & WTA have agreed upon recommendations (including identification of potential funding sources for capital and operating costs) to bring forward to the public (i.e., the LPA), along with conceptual costs for the recommendations.

To accomplish these outcomes, WTA, the City, and WWU will participate in facilitated workshops to develop a shared understanding about the challenges and opportunities along each route, identify solutions to those challenges, determine solution priorities and approach to implementing solutions, and define the policies and tools needed to cooperatively plan for and implement the transit enhancements (MOU framework).

These efforts will begin concurrently with the process to have this preliminary LPA accepted and should be completed by the end of 2025.

The final LPA will document the estimated cost, timeline, and scope of the recommended improvements, including factors related to service and operations, infrastructure, and funding.

Appendix B – Stakeholder Workshops

RAPID TRANSIT

Developing Shared Understanding Workshop

June 16, 2025

Table of Contents

Workshop #1 Agenda

1. Icebreaker (5 minutes)
2. Priority hotspot discussions – agree on challenges and brainstorm solutions (60 minutes)
    a. Gold Line – Woburn/Alabama to Barkley
    b. Green Line – Northwest/Birchwood
    c. Blue Line – Samish Way/Bill McDonald to Lincoln
    d. Blue Line – Viking Union (High Street)
    e. Gold Line – Sunset/Orleans
3. Policies & tools needed to support solutions (20 minutes)
4. Next steps (5 minutes)

Purpose of the Workshop and Your Role

WTA, in partnership with the City of Bellingham, has been exploring opportunities to enhance existing transit services along high frequency routes by implementing speed and reliability improvements and changes that support further frequency enhancements. Exploration has included consideration of two alternatives to improve transit service and operations: 1. Bus Rapid Transit and 2. Enhanced Go Line. The recommendation of the WTA and City staff is to proceed with Enhanced Go Line service rather than BRT, pending formal adoption by the WTA Board and City Council.

As a next step, WTA and the City are beginning more detailed work on the Enhanced Go Line alternative in developing a locally preferred alternative (LPA) and a memorandum of understanding (MOU). Combined, the LPA and MOU will help in implementing the vision of the Enhanced Go Line alternative. The MOU will guide future coordination on planning and investments to improve transit.

This first workshop is key to developing the draft MOU between WTA and the City. We will work together to brainstorm solutions, identify key policies and tools, and help lay the groundwork for a draft MOU, as well as recommendations for enhanced Go Lines. Your participation is critical to ensuring that the solutions we develop are effective, feasible, and supported by key partners.

Pre-Workshop Homework

To ensure that we can get the most out of our time together in person on June 16th, we are asking all participants to complete some homework ahead of time. Please plan to spend about an hour familiarizing yourself with the information in this packet, with a particular focus on the information in the High Priority Areas of Concern section. These are the areas (corridors and intersections) that we will talk through during the workshop.

We have provided information covering the existing challenges to transit operations in these areas. During the workshop, we will first make sure these challenges are fully understood and then work to identify ideas and concepts that could help address those challenges. Please come ready to share your thoughts and ideas, including any past experiences you have with these areas and any work or plans in place that may contribute to addressing these areas.

Background

The following sections provide some background information to familiarize you with the WTA Go Lines, the studies that have been conducted related to this Rapid Transit project, and areas along the Go Lines that are of concern for transit operations.

WTA's Go Line Network

WTA's Rapid Transit project focuses on its high frequency network made up of four (4) transit lines operating within Bellingham (see Figure 1). These "Go Lines" were created to serve the community's most significant destinations, including downtown, Western Washington University, Cordata, Barkley Village, Sunset Square, Birchwood, Northwest, and the Lakeway commercial area. By operating on key community corridors, the lines serve the greatest concentrations of WTA's designated priority populations and carry the vast majority of riders in the system.

Figure 1. WTA Go Lines

The Go Lines are also the most cost effective of WTA's services based on cost per passenger trip. Each passenger trip costs WTA approximately $5.50 per trip on the Go Lines, compared to $10 per trip on the entire system.

Two of the Go Lines are made up of one numbered WTA route; the Green Go Line is Route 232, and the Gold Go Line is Route 331. The other two Go Lines are made up of multiple different numbered WTA routes, and the service along these different routes combines to provide higher frequencies along the Blue Go Line (Routes 105, 107, 108, 190, 196, and 197) and the Plum Go Line (Routes 512, 525, 533, and 540). Go Line service span and frequency, in addition to other details for each Go Line, are provided in Appendix A. All Go Lines provide 15-minute weekday frequency, with generally longer hours of operation and more service than other routes on weekends.

Rapid Transit Study Overview

In November 2023, WTA completed the Rapid Transit Corridor Feasibility Study, a year-long study to determine the viability of rapid transit in Bellingham on two key Go Line corridors. The purpose of that study was to identify desired rapid transit features, prioritize one corridor for further planning and design, and provide several design options for addressing key areas of bus delay. The Feasibility Study concluded that rapid transit is feasible within Bellingham, and that WTA should move forward with additional planning and eventual implementation. Figure 2 presents goals and objectives from Phase 1 of the study.

GOAL	OBJECTIVE	MEASURE
Improve safety and comfort for bus riders, pedestrians, and bicyclists along the corridor	• Meet all ADA requirements at stop and station locations • Improve accessibility along the corridor, specifically targeting routes to and from transit stops and stations • Enhance stops along the corridor for rider comfort and ease of use • Reduce conflicts between buses and other modes along the corridor	• Reduce transit conflicts with other modes • Improve rider access
Provide for more efficient transit operation along the proposed rapid transit corridor	• Reduce bus dwell time at stops • Maintain or improve on-time performance for transit • Optimize bus travel routes to minimize delays related to congestion • Provide bus rapid transit treatments (e.g., managed lanes, queue jumps, transit signal priority, etc.)	• Increase transit speed and reduce running time
Use transit to increase access to higher density land uses and activity opportunities along the corridor	• Increase ease of transit use to and from key land uses and specifically those with higher activity such as grocery stores, malls, medical facilities, etc. • Consider existing and future land use patterns in the placement of transit stops • Ensure partner agencies have coordinated plans that consider transit accessibility in future corridor improvements and redevelopment of parcels • Ensure that land use regulations along the corridor reflect/ support/require transit-oriented communities	• Increase ridership • Presence of transit-supportive land uses • Development of streetscape designed for non-motorized use

Figure 2. Goals and Objectives from Phase 1

Based on further consideration of the Phase 1 Rapid Transit outcomes and initial work during the current Phase 2, WTA and the City of Bellingham developed a Preliminary Locally Preferred Alternative (LPA) focused on enhancing existing Go Lines. This workshop, and the workshop that will follow later this autumn, will result in agreed-on solution concepts. The consultant team will further refine these concepts into a draft Locally Preferred Alternative (LPA), including designs and cost estimates, and supporting Memorandum of Understanding between WTA and the City of Bellingham.
Figure 3 illustrates the draft timeline for the Phase 2 work that will result in an adopted LPA.

Figure 3. DRAFT Timeline for Phase 2 Study

Areas of Concern

During Phase 1, WTA, the City of Bellingham, and other key partners identified locations where transit operations encountered challenges (related to congestion, safety, or other factors) (see Figure 4). Phase 1 represented the “hotspots” as specific intersections along the Go Line routes to identify potential locations as a starting point where improvements could be addressed; however, many of the locations are closely spaced and representative of corridor-wide challenges that impact transit operations. These hotspot locations were reviewed and refined at the beginning of Phase 2 and in some cases combined to allow for addressing corridor or system improvements rather than individual intersections. For the focus of this workshop, this refined hotspot list was prioritized by WTA and City of Bellingham staff to include the most challenging to solve areas.

Figure 4. All Go Line hotspots Identified in the Phase 1 Rapid Transit Study

Overall, some of the key challenges for WTA's Go Lines include:

- Current Go Lines are not frequent and reliable enough for many travelers
- Physical and operational improvements are needed to improve frequency and reliability
- Slow boarding process causes delays
- Go Line mid-route transfers are difficult
- Limited right-of-way is available for dedicated transit travel lanes
- Benefits of transit signal priority are limited

Opportunities that will benefit the effectiveness of WTA's Go Lines include:

- Concentrations of destinations along Go Line corridors
- Transit-supportive City policies
- City investments in bicycle and pedestrian infrastructure
- Urban Villages attracting new housing and investment

Example of Collaboration Success

WTA and the City's history of coordination has already resulted in benefits to Go Line operations. As an example, to help kick off our thinking for this workshop, consider the intersection of Lincoln and Potter on the Blue Go Line.

This location is currently the end of the line for several WTA routes, which requires buses to turn around. Service currently circles the block from Lincoln Street to Potter Street to King Street to Lakeway Dr, which adds about 3 minutes of extra travel time to the routes. The funded roundabout at the intersection of Lincoln and Potter Street will reduce current and future transit travel delays for WTA Blue Go Line by allowing WTA buses to avoid one left turn and two right turns and eliminating the need to travel through the Lakeway/King signalized intersection.

This project was identified in the multi-agency 2021 Lincoln-Lakeway Multimodal Transportation Study and WTA's 2023 Rapid Transit Feasibility Study. The agencies partnered to pursue grant funding.

Figure 5. Turnaround for Current Service Using Lincoln St, Potter St, and King St

High Priority Areas of Concern

These areas of concern along the Go Lines have been prioritized to give workshop participants the opportunity to work through the particularly challenging solutions together in person. These high priority areas of concern are not necessarily more important or more impactful than the lower priority areas shared later in the document; they are the ones most likely to benefit from a focused discussion and likely to include concepts or solutions that may be applicable to other areas of concern.

Key Terms
Bus rapid transit (BRT) – transit services that use features (such as dedicated lanes, traffic signal priority, off-board fare collection, and enhanced stations) to provide more reliable services than conventional fixed route bus services. BRT is typically higher cost than conventional fixed route bus service but lower cost than rail alternatives.

Queue jump – short bus-only lane at an intersection. These are designed to allow buses to get a head start when the light turns green, and they are often paired with transit signal priority.

Transit signal priority – modifications to traffic signal timing to give transit vehicles extra green light time or shortened red light time, reducing transit delays at intersections.

Gold Go Line – Woburn/Alabama to Barkley

Woburn is one of the longer north-south arterials in Bellingham, and the Gold Go Line travels on Woburn between Alabama St and E Sunset Dr. Woburn is a two-lane road (except for the section between E Sunset Dr and Illinois St) with sidewalks in both directions and limited marked crosswalks. Woburn is slated to include a bike facility in the future. Woburn has a dividing median from Illinois St to just south of Burns St. As part of the Barkley Village EIS, Woburn corridor challenges and potential mitigation options were explored.

Gold Go Line buses head northbound on Woburn from Alabama St (eastbound) at a signalized intersection with a left turn lane and then head west on E Sunset Drive at a signalized intersection with a left turn lane. On average, 11% of Gold Go Line trips to Cordata/WCC are late, with as many as 26% of trips delayed at midday and 24% of trips during the PM peak.

Figure 6. Woburn and Alabama

Southbound Gold Go Line buses turn right onto Woburn from E Sunset Drive and right onto Alabama from Woburn. The right turn onto Alabama from Woburn uses a short right-turn pocket lane that is often blocked by other southbound traffic on Woburn, creating significant delay for southbound buses turning westbound onto Alabama.

On average, 24% of Gold Go Line trips to downtown are late. That figure increases to as many as 43% of trips during the PM peak at Alabama and Woburn. City staff have noted that implementing transit signal priority at the Alabama/Woburn intersection would be possible but not easy.

The Barkley Village EIS determined three alternative treatments – widening Woburn, reconfiguring the southbound approach, and widening plus reconfiguring – would improve transit operations.

Figure 7. Woburn and Illinois

In addition to turning lane challenges that create delays, buses traveling along Woburn may be delayed by the heavily used trail crossing at Railroad trail that causes increased congestion. The Barkley Village EIS identified two alternatives treatments that would improve transit operations – rerouting the trail or developing a grade-separated crossing. Buses traveling southbound may be further delayed by the congestion that occurs as Woburn transitions from 2 southbound lanes to 1 southbound lane after the intersection with Illinois. The Barkley Village EIS determined that only one of the treatment alternatives – implementing right-in/right-out restrictions along Illinois St and widening Woburn to two lanes in the southbound direction – would improve transit operations.

Green Go Line – Northwest/Birchwood

The Green Go Line travels along Northwest Avenue between W Bakerview Road and Elm Street. Northwest is one lane in each direction with turn lanes at major intersections such as Birchwood Avenue. Some areas of the Northwest corridor also include bike lanes like at the Birchwood intersection. On-street parking is provided in some areas as well. During peak periods, the Northwest Avenue corridor becomes congested, and buses are delayed. During midday, 25% of the southbound trips are late. There is a northbound right-turn lane along Northwest Avenue at Birchwood that would provide an opportunity for transit signal priority, but there is limited space within the existing right-of-way in the southbound direction for transit signal priority.

The challenges at the Northwest/Birchwood intersection are similar to those faced by the Green Go Line throughout the Northwest Avenue corridor.

Figure 8. Northwest and Birchwood

Blue Go Line – S Samish Way/Lincoln to Bill McDonald

This section of S Samish Way includes the intersections on either side of I-5, which S Samish Way passes over. It generally has two through-lanes in each direction in addition to turn lanes. There is a striped bicycle lane and sidewalks in both directions. There are three closely spaced signalized intersections along this stretch. Samish Way is one of the main travel routes in the city, and congestion in the area results from I-5 access, the main route to Western Washington University (WWU), and the density of housing and commercial uses.

Figure 9. Samish Way between Lincoln & Bill McDonald

The Blue Go Line (which is made up of multiple numbered WTA routes) travels along S Samish Way between Lincoln St and Bill McDonald Pkwy. Heading towards WWU and downtown from Lincoln St, the Blue Go Line turns right onto S Samish Way and then left onto Bill McDonald Pkwy. There is a four-way crosswalk and a bike lane along both roads at the intersection. City staff have indicated that transit signal priority may be possible for the right-turn lane from Lincoln St onto S Samish way.

Heading from WWU to the Lincoln Creek Park and Ride from Bill McDonald Pkwy, the Blue Go Line turns right onto Samish Way and then left onto Lincoln St. There are crosswalks on the east and north legs of the Bill McDonald Pkwy intersection and bike lanes along both roads at the intersection.

Figure 10. Lincoln St and S Samish Way

As an example of performance issues that are faced today, for the 197 route traveling through Lincoln Street and Samish Way intersection, almost 35% of trips between the Lincoln Park and Ride and the next stop at Samish and Bill McDonald arrive late during the PM peak.

Figure 11. S Samish Way and Bill McDonald Pkwy

36th St is about 500 feet north of Lincoln St 200 feet south of Bill McDonald Pkwy. Given this close spacing, for transit signal priority or other improvements to be effective, consideration needs to be given to this intersection. Without consideration of 36th St, bus operation may be improved at one intersection only to face challenges at 36th St. There is a right-turn lane southbound at 36th Street that could also be considered for transit signal priority. Traffic progression and signal coordination, along with transit signal priority, would need to be considered in this area to make sure any signal strategies are effective.

Around 42% of trips serving the stops at Bill McDonald and Samish are late during the PM peak, with about 21% of trips late overall. Buses typically make up time traveling from Bill McDonald and Samish to Bill McDonald at the Rec Center, but those traveling in the opposite direction accumulate delay.

Blue Go Line - Viking Union (High Street)

The Blue Go Line operates within the WWU campus along High Street. High Street is challenging for transit service due to the narrow road and parking that occurs with the sidewalk zone on the southeast side. The width of the road, especially near the Viking Union, is such that buses need to yield for buses to pass in the opposite direction. Along with the design of High Street, the location of the Viking Union stop can also cause delays to the Blue Go Line, because it is in an area of high pedestrian crossing activity and where more than just transit riders gather. Of the areas of concern we are discussing during this first workshop, this has the best on-time performance with an average of 3% of trips delayed and 8% during the times of highest delay.

Figure 12. High St within the WWU campus

As part of the Phase 1 Rapid Transit Study, WTA explored improvements to High Street. One option was widening High Street, allowing buses to travel both north and south without conflicts, and providing pocket areas along the road for parking. Another option was to provide spot widening in some areas of the road so buses can pass each other; however, with this option, narrow areas would still require buses to yield the right of way. A full widening of High Street would reduce conflicts between buses, provide designated parking and reduce conflicts between buses and parking.

As part of campus planning, WWU envisions High Street as a festival or mall type street where priority is given to pedestrian movements and vehicular traffic is limited. High Street is a key connection within campus for pedestrians, bikes and other micromobility needs. WWU is working on plans to have “wheeled” transportation outside the campus core and instead using the perimeter of the campus. This street serves as a bike corridor for WWU and the Bellingham community. It is also important to WWU to have parking along High Street for service vehicles, as this is the only way to access the central campus.

Gold Go Line - Sunset/Orleans

The Gold Go Line travels westbound on Sunset Drive and makes a right-turn onto Orleans St. This intersection is congested, and the number of vehicles making a right-turn is more than can be accommodated in the 300-foot right-turn lane. Buses get stuck waiting through multiple cycles of the traffic signal to enter the right-turn lane and make the turn. A similar issue exists in the southbound direction, with buses waiting multiple cycles to make the left turn onto Sunset.

Figure 13. Sunset and Orleans

With this congestion, on average, buses travelling northbound (from Sunset turning right onto Orleans) are late 10% of the time, and this worsens in the PM peak period to 20%. The buses are also impacted by congestion in the southbound direction making a left turn from Orleans onto Sunset. On average, buses are late 22% of the time, and during the PM peak hour this is significantly worse, with 53% of the trips late.

Analyzing and retiming the Sunset corridor is on the City's work plan for next year, which will improve some of the issues related to congestion that transit faces in this area. Transit signal priority could be detrimental and cause more congestion issues during the peak periods if it is not implemented with a system that considers corridor coordination and progression.

Lower Priority Areas of Concern

As noted earlier, these areas are not necessarily less important than those prioritized for discussion during the workshop. They will still need to be addressed in the future to improve Go Line operations. The following provides a high-level summary of these areas.

Blue Go Line – WWU Rec Center

Bill McDonald and College Way congestion comes from surge of students getting off of the bus and crossing the road. A plan for a pedestrian scramble signal will reduce this congestion, but current compliance with the pedestrian signal is limited. If pedestrian have limited compliance with the new pedestrian scramble signal, the reduction in bus delay will be limited as well.

Potential solutions could include phasing the pedestrian signal with bus arrival and exploring a different drop-off area, including through alternative routing that does not require students to cross the arterial. In addition, service changes planned for the Blue Go Line may begin to address some of these challenges.

Figure 14. Bill McDonald and College Way (WWU Rec Center)

Green Go Line Northwest/Bakerview

Key challenges and potential solutions for this area of concern were described in the previous discussion of Northwest and Birchwood. In this area, the northbound trips have much better on-time performance than the southbound trips, 27% of which are delayed during midday. Transit signal priority would be difficult given the high volume of the intersection, and reconstruction would be costly.

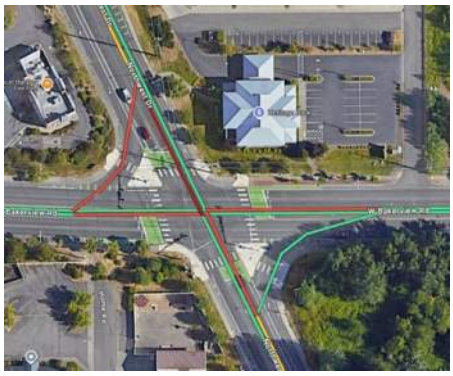


Figure 15. Northwest and Bakerview

Green Go Line – Northwest/McLeod

In this area of concern, buses heading northbound are delayed by long queueing just before the roundabout. The intersection includes a roundabout and crosswalks and bike lanes throughout. Changes are not currently recommended in this area due to high costs (from right-of-way constraints and stormwater needs).

Figure 16. Northwest and McLeod

Gold Go Line – Alabama/James

On average, 5% of eastbound transit trips serving this area are delayed, and 12% are delayed during the PM peak. Westbound, 23% are delayed on average, rising to 39% during the PM peak. There is an existing queue with a transit-only signal heading westbound. With transit signal priority in place, further evaluation and potential operational changes are needed to ensure transit operations are benefitting effectively from the TSP.

Figure 17. Alabama and James

Gold Go Line – Woburn/Sunset

In this area, buses turning right from Sunset onto Woburn are delayed. There is no right-turn-only lane on the south side of Sunset. On the north side of Sunset, buses heading westbound may have challenges merging back into traffic from the bus pullout. Transit signal priority would be challenging here.

Figure 18. Woburn and Sunset

Gold Go Line – Bellis Fair/Meridian

The Meridian corridor, especially around Bellis Fair Pkwy and the I-5 interchange, is congested, and transit service is delayed during peak periods in this area. The Meridian corridor is the highest traffic volume corridor in the city. There is no transit signal priority. Overall improvements would need to be considered with transit signal priority to provide corridor wide coordination and progression. Meridian St and the I-5 ramps are under the Washington State Department of Transportation jurisdiction.

On average, 18% of northbound trips are delayed, and 26% are delayed during midday. Southbound, on average only 2% of trips are delayed with 3% during the PM peak. Retiming the corridor is on the City's workplan for 2027; the retiming is likely to reduce congestion in the corridor.

Figure 19. Bellis Fair and Meridian

Plum Go Line – Lakeway/Ellis to Lincoln

The Lakeway Drive corridor between Ellis St and Lincoln Street is congested, resulting in delays to transit service. Transit signal priority and queue jumps are already provided along this corridor; however, consideration is likely needed to the corridor-wide coordination and signal progression and how transit signal priority interacts with this progression.

Figure 20. Lakeway from Ellis to Lincoln

Figure 21. Lakeway and Ellis

The intersection of Ellis and Lakeway currently includes transit signal priority that appears to effectively improve transit operations. There is a joint evaluation project underway to improve eastbound congestion.

Figure 22. Lakeway and I-5

At the intersection of Lakeway and I-5, signals are controlled by the Washington Department of Transportation. The intersection typically sees heavy traffic, especially coming off of I-5 southbound and turning left onto Lakeway. This intersection is part of the joint evaluation project underway to improve eastbound congestion.

Figure 23. Lakeway and Lincoln

At this intersection, eastbound transit trips are 13% late on average, with 36% delayed during the PM peak. On average, 14% of westbound trips are late, with 41% delayed during the PM peak. Transit signal priority is already in place at this intersection, but it may need to be evaluated for effectiveness at improving transit operations.

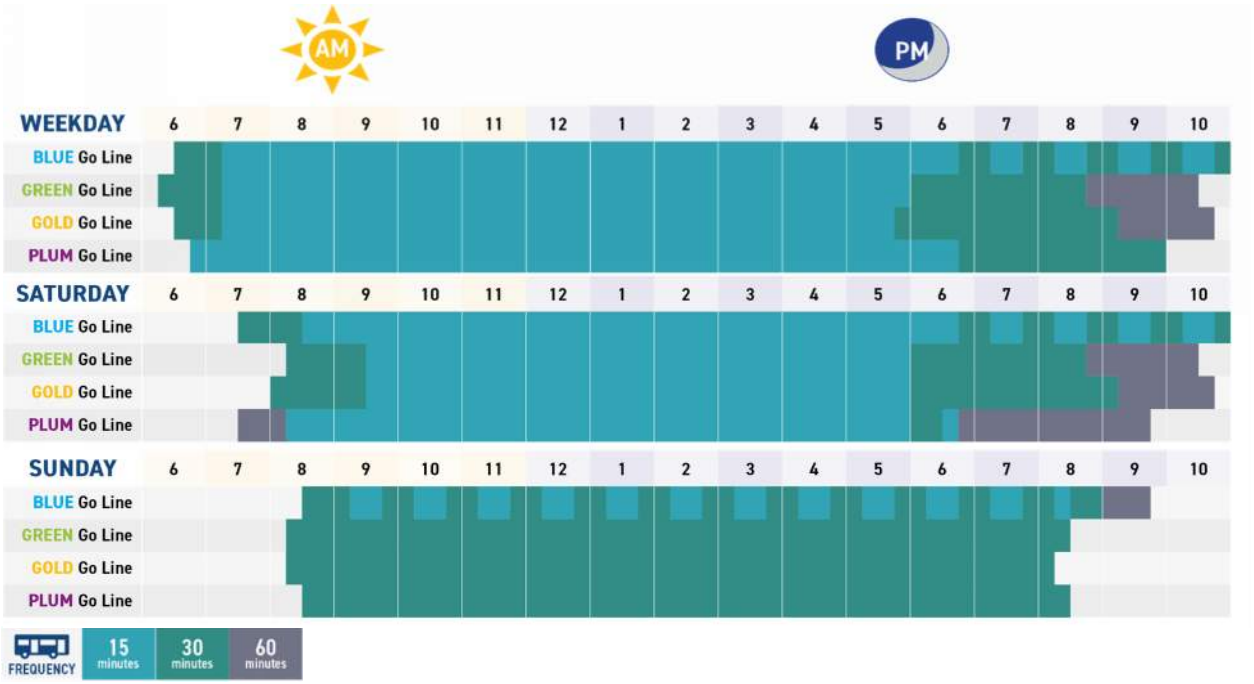
Policies & Tools

For each solution identified – what are the steps that will be needed (for example, inclusion in particular plan, coordination with specific organizations & departments, buy-in from particular groups) to support planning for and implementing the solution? These will be a conversation during the workshop and the foundation of the draft MOU.

Appendix A – Go Line Overviews

Go Line Frequencies

As noted previously, the Go Lines typically operate on 15-minute frequencies during weekdays and Saturdays until the evenings.



Blue Go Line Overview

- Ridership primarily driven by WWU students/employees
- 5,227 average weekday boardings
- PM peak is consistently the lowest performing on-time performance on this line
- Bike lane is present for much of the route
- No traffic signal priority after downtown portion of this route

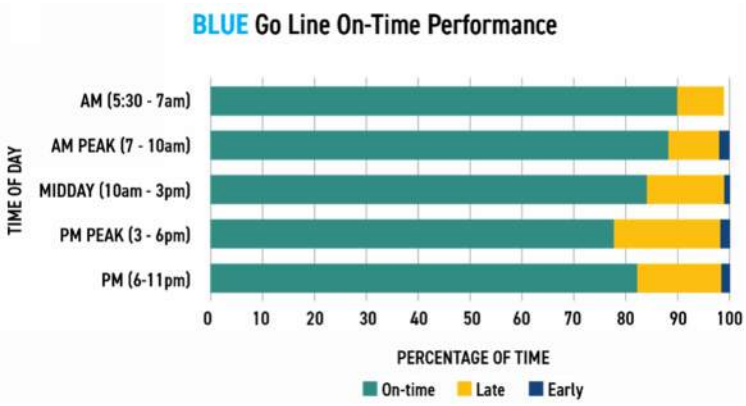


Figure 24. Blue Go Line On-Time Performance

Green Go Line Overview

- Serves Downtown/Cordata - west side
- 1,509 average weekday boardings
- Southbound/Downtown direction is less on time than northbound direction
- Faster than gold line to get to Cordata from downtown
- Northwest Ave is a "Food Desert" with few services and large lots
- City Master Bike Plan indicates a proposed separated bike lane along Northwest and Bakerview

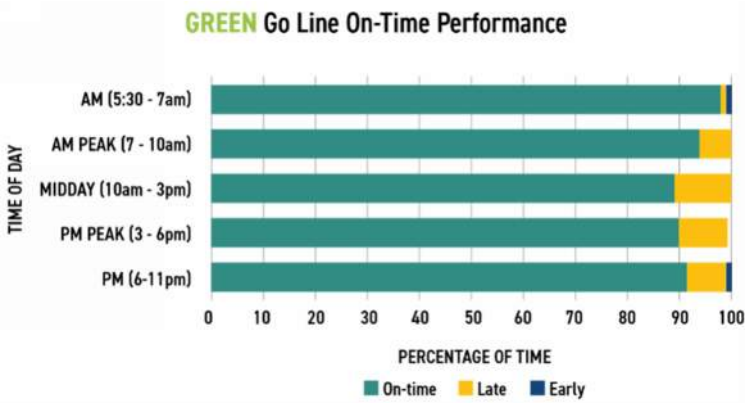


Figure 25. Green Go Line On-Time Performance

Gold Go Line Overview

- Serves Downtown/Cordata and commercial areas on east side
- 2,243 average weekday boardings
- Southbound/Downtown direction is less on time than northbound direction
- Line is circuitous - many turns slow the vehicle
- Closely spaced stops
- Poor walkability along route (James St and Telegraph)

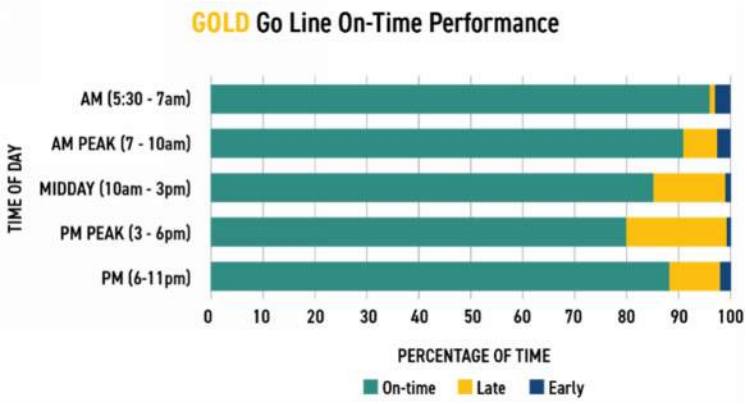


Figure 26. Gold Go Line On-Time Performance

- City planning on adding sidewalks.
- City adding multimodal trail from Telegraph to Gooding Ave along west side of James.
- WTA is designing a transit hub between Sunset and Barkley on Woburn
- The City Master Bike Plan indicates bike lanes on Woburn from Alabama to Illinois and separated bike lanes afterwards on Woburn
- Has potential to serve more senior housing and low-income populations (Cordata Station, James St, Telegraph St)

Plum Go Line Overview

- Lakeway Dr between downtown and Woburn St
- 641 average weekday boardings
- Hotspots determined only by intersection delay (no qualitative measures)
- Lack of transit supportive land uses
- Low pedestrian use along Lakeway Dr (Based on Lincoln-Lakeway Final Report)
- Higher bike activity
- Lakeway and Lincoln St intersection could provide key transfer point between routes.
- City Bike Master Plan
  - Future separated bike lane on Lakeway to Puget St - most congested part of the route
  - Future Multi-use trail from Puget St to Yes St/Woburn St

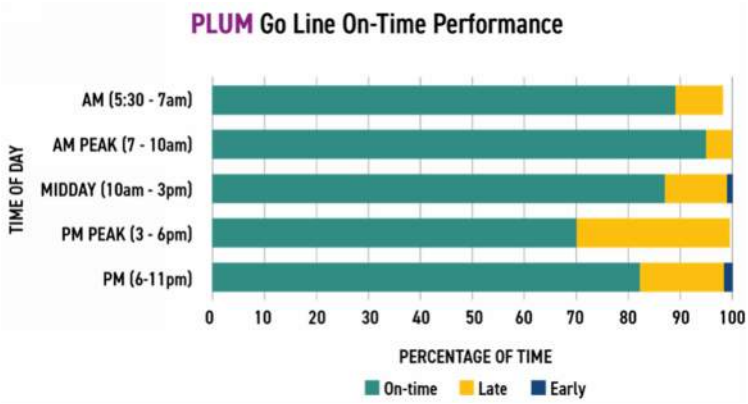


Figure 27. Plum Go Line On-Time Performance

RAPID TRANSIT

Developing Shared Understanding Workshop

October 8, 2025

Table of Contents

Workshop #2 Agenda

1. Icebreaker (5 minutes)

2. Recent efforts & background (10 minutes)

3. Solutions (55 minutes)
    - Full network
    - Gold Go Line
    - Green Go Line
    - Blue Go Line
    - Plum Go Line

4. Draft MOU (40 minutes)

5. Next steps (10 minutes)

1. Purpose of the Workshop and Your Role

WTA, in partnership with the City of Bellingham, has been exploring opportunities to enhance existing transit services along high frequency routes by implementing speed and reliability improvements and changes that support further frequency enhancements. Exploration has included consideration of two alternatives to improve transit service and operations: 1. Bus Rapid Transit and 2. Enhanced Go Lines. WTA and the City of Bellingham decided to move forward with the Enhanced Go Lines as the Preliminary Locally Preferred Alternative (PLPA).

Since the acceptance of the PLPA, WTA and the City have worked on developing the details of a the Locally Preferred Alternative (LPA) and a Memorandum of Understanding between WTA and the City to support the implementation of the LPA solutions in the future.

This second workshop is key to finalizing the draft LPA and MOU between WTA and the City. For areas of delay where we do not yet have an agreed upon solution, we will discuss potential approaches and determine which belong in the LPA. We will ensure that the MOU sufficiently reflects the different efforts that WTA and the City will need to undertake to support the implementation of the Enhanced Go Lines. Your participation is critical to ensuring that the solutions we develop are effective, feasible, and supported by key partners.

Pre-Workshop Homework

To ensure that we can get the most out of our time together in person on October 8th, we are asking all participants to complete some homework ahead of time. Please plan to spend about an hour familiarizing yourself with the information in this packet, with a particular focus on the information in Sections 3.1-4 if you have limited review time. These sections present the line-by-line solutions and the MOU.

2. Background

WTA, in partnership with the City of Bellingham, has been exploring opportunities to enhance existing transit services along high frequency routes by implementing speed and reliability improvements alongside changes that support further frequency enhancements. This Rapid Transit project has focused on WTA's high frequency network made up of four (4) transit lines operating within Bellingham city limits. These Go Lines were created to serve the community's most significant destinations, including Downtown, Western Washington University, Cordata, Barkley Village, Sunset Square, Birchwood, Northwest Avenue, and the Lakeway commercial area. By operating on key community corridors, the lines serve the greatest concentrations of WTA's designated priority populations and carry the vast majority of system riders.

The Rapid Transit project began with an initial Rapid Transit Feasibility Study in 2023, the adoption of a Preliminary Locally Preferred Alternative in early 2025 after the completion of early Phase 2 efforts in 2024, and the development of this draft Locally Preferred Alternative (LPA) in late 2025. This LPA will be shared with the public for feedback in early 2026.

Figure 1. Timeline of Rapid Transit Study Efforts

The goals and objectives in Figure 2 were developed as part of the 2023 Feasibility Study. The measures were used to assess how well the alternatives meet the goals and objectives as well as provide a comparison of the alternatives. These goals, objectives and measures continue to be relevant for the LPA.

Goal	Objective	Measure
Improve safety and comfort for bus riders, pedestrians, and bicyclists along corridor	• Meet all ADA requirements for stop/station locations	• Reduce transit conflicts with other modes • Pedestrian access
	• Improve accessibility along the corridor specifically targeting to/from transit	
	• Enhance stops along the corridor for rider comfort and ease of use	
	• Reduce conflicts between buses and other modes along the corridor	
Provide for more efficient transit operation along the proposed rapid transit corridor	• Reduce bus dwell time at stops	• Increase transit speed and reduce running time
	• Maintain or improve on-time performance for transit	
	• Optimize the bus travel route to minimize delays related to congestion	
	• Provide bus treatments to enhance efficiency (e.g., queue jumps, transit signal priority, bus stop islands)	
Use transit to increase access to higher density land uses and activity opportunities along the corridor	• Increase ease of transit use to and from key land uses and specifically those with higher activity such as grocery stores, malls, medical facilities etc.	• Increase ridership • Presence of transit supportive land use • Development of streetscape designed for non-motorized use
	• Consider existing and future land use patterns in the placement of transit stops	
	• Ensure partner agencies have coordinated plans that consider transit accessibility in future corridor improvements and redevelopment of parcels	
	• Ensure that land use regulations along the corridor reflect/supports/ requires transit-oriented communities	

Figure 2. Rapid Transit Feasibility Study Goals, Objectives, and Measures

Source: Whatcom Transportation Authority Rapid Transit Study – Feasibility, November 2023

2.1 Purpose and Need

Increased congestion from growth both inside and outside the city is causing delays on the Go Lines, steadily decreasing runtimes, decreasing service reliability, and reducing the benefits of buses that have been added to improve frequency. Bus arrivals can be highly variable, reducing the reliability of the service and potentially causing riders to miss transfers or avoid using the service altogether. Figure 3 illustrates the on-time performance for the weekday PM peak hour in June 2025 and shows the percentage of bus trips that are late during that period. Bus delays can cause a spiraling effect where former bus riders switch to driving, causing even more congestion and thus greater delays. To reduce delays being experienced, in 2018, WTA increased the number of buses running on the Green and Gold Go Lines. However, it will not be sustainable to continually increase the number of buses to reduce delays in the future, and bus bunching, limits the usefulness of extra buses when all vehicles are delayed. Mid-route bus transfers are also difficult. Headways of 15 minutes impact route connections; missed connections lead to rider frustration and negatively impact the rider experience.

Figure 3. On-Time Performance for Weekday PM Peak Hour June 2025

The Whatcom Council of Governments' (WCOG) travel demand model for the year 2045 estimates future travel based on an anticipated increase of approximately 30% in households and 43% in employment, compared to 2023 conditions. These population and employment forecasts are developed collaboratively by local governments and informed by projections from the Washington State Office of Financial Management and analyses of land use patterns. Travel demand growth is expected to increase congestion along arterials and at intersections during peak hours, including on all Go Line corridors.

Transit signal priority (TSP) exists at many signals, but there is no evidence that current TSP configuration and operator use of TSP reduces bus travel times. The transit service is also constrained by limited right of way. The arterial and collector street cross-section outside of the downtown area does not provide many options for dedicated running ways. In some areas, there are pinch points or hotspots that further hamper efficient movement.

The City of Bellingham has shown strong policy support for land use development that fosters frequent transit service. Development is occurring rapidly in Bellingham's designated Urban Villages, located along key transit corridors. The City's seven Urban Villages (see Figure 4) comprise less than 4% of the city's land area but are expected to accommodate 30% of future population growth.

Figure 4. Existing Urban Villages

While Bellingham is experiencing densification, much of the existing development pattern outside of the Urban Villages is low-density single-family residential or auto-oriented commercial development. Several Comprehensive Plan elements, including the Transportation chapter (along with the accompanying Multimodal Transportation Plan) and the Land Use, Urban Design, and Housing chapter, include goals and policies supporting Transit-Oriented Development (TOD) and increasing mixed-use development intensity along transit corridors. The Bellingham Comprehensive Plan update currently underway is anticipated to continue strong support for TOD and increased density. The Comprehensive Plan update proposes a TOD corridor growth concept, which could accommodate approximately 1,275 additional housing units and 640 additional jobs along key high frequency corridors. The Plan update includes a reprioritization of the modal hierarchy, prioritizing transit travel over bicycle travel in transit corridors. The City has also recently passed interim ordinances to allow more infill housing and density throughout most of the community, as well as an ordinance removing parking minimums citywide. Both policies are transit friendly. The City has invested in pedestrian and bicycle infrastructure to support access to transit, but there are still many areas where pedestrian and bicycle access to transit need more work, which limits access and ridership potential.

3. Locally Preferred Alternative

In this section, solutions identified through performance analysis and discussions with WTA and City of Bellingham staff are described. Solutions range from those that are relatively low effort to those that are complicated and have a high level of effort, and from those that will address the highest priority existing performance challenges to those that will help prevent future performance deterioration. Solutions are presented first for the whole network and then for the specific Go Line.

Figure 5. Enhanced Go Line Potential Features

Strategies included in the Locally Preferred Alternative include those for which WTA, the City of Bellingham, or both have responsibility and authority. As described in the sections that follow and illustrated in Figure 6, solutions in the LPA support WTA's ability to maintain the reliability and current frequency of Go Lines and to introduce higher frequencies in the future.

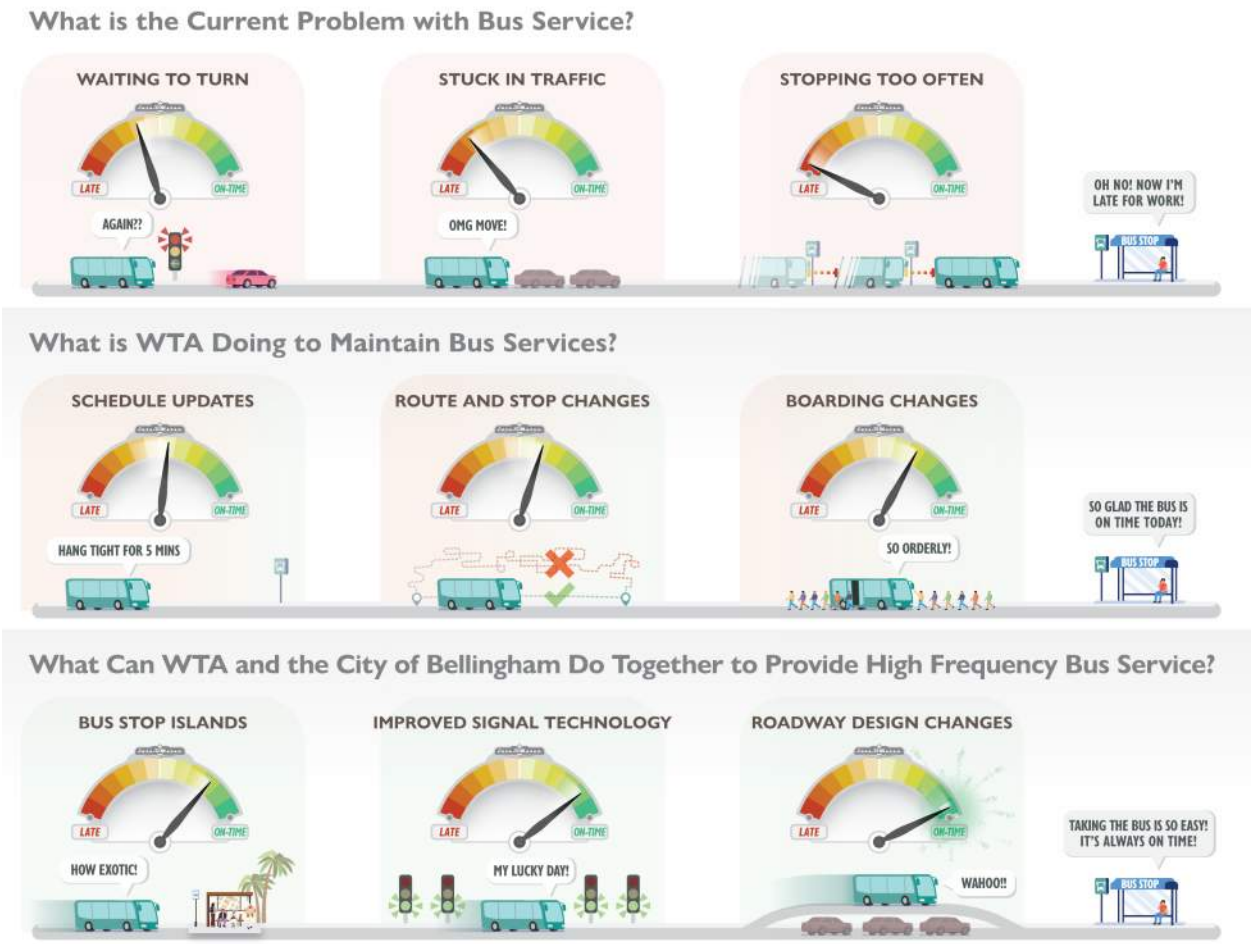


Figure 6. How WTA and City of Bellingham Strategies Together Can Improve Frequency

3.1 Network

In addition to solutions at a corridor, stop, and intersection level, this LPA includes network-wide solutions to improve transit performance. Solutions include infrastructure and technology changes in addition to WTA operating changes and City of Bellingham policy and planning changes. Recommended treatments include those that WTA can act on in the short-term and those that will require more extensive analysis and planning and/or that require changes that are likely to take place over an extended time period. Figure 7 represents the locations of the infrastructure and technology changes recommended in this LPA.

Figure 7. Go Line LPA Recommended Infrastructure & Signal Changes

WTA Service & Operations

There are several strategies that WTA can undertake, outside of any changes to broader local policy and infrastructure, to maintain and improve the frequency of the Go Lines.

Service Maintenance

WTA has already begun and will continue to implement bus stop balancing to reduce running time for each route. Specific recommendations are included by line, and WTA will continue to monitor and evaluate other opportunities in the future.

WTA is exploring ways to reduce the time a bus waits at a stop during passenger boarding and fare payment. Solutions under examination include all-door boarding and off-board fare collection. In addition, WTA continuously monitors on-time performance of routes and stops to identify if there are schedule adjustments needed. To continue to improve frequency, WTA adds new buses into service.

WTA will develop transit-supportive right-of-way design guidelines for the City to reference in future planning and parcel development/redevelopment.

Service Enhancements

WTA takes many factors into consideration when determining if, where, and when to adjust frequencies along the Go Lines. Increasing frequency requires WTA to have sufficient drivers and staff available and to ensure that any retiming of the routes is operationally efficient. However, if the route under consideration for increased frequency already experiences delays, adding another vehicle to the route is not likely to result in improved frequency due to bus bunching.

By implementing the recommendations in the LPA, WTA can count on more reliable travel times for Go Line buses, allowing WTA to continue to improve frequency while providing reliable service.

City of Bellingham Infrastructure, Technology, and Policy Changes

While WTA owns and operates the buses that provide service along the Go Lines, WTA's bus stops are located largely on City of Bellingham property, the buses run on roads and through intersections owned and managed by the City of Bellingham (in some locations WSDOT), bus riders access the bus stops using sidewalks and crosswalks owned and managed by the City of Bellingham (in some locations WSDOT), and the buses serve private and public destinations with a range of travel needs that change throughout the day and seasonally.

Infrastructure

Several recommendations along the Go Lines include infrastructure treatments in the public right-of-way. These include bus stop islands, bus lanes, extended turning lanes or

pockets, and changes to bicycle and/or pedestrian infrastructure to reduce conflicts with transit. These solutions will be identified for specific areas along each of the Go Lines, and the design and decision-making around the implementation of these treatments is a topic that WTA and the City of Bellingham will address in the LPA Memorandum of Understanding (MOU) and through further planning efforts. Examples of these solutions are included here for reference but do not represent any specific planned treatment.

Bus Stop Island

Bus stop islands are designed to allow buses to stop "in-lane" where passengers use a crossing to reach the bus. Typically, the bus stop island separates the buses and passengers from the bike lane. This configuration eliminates conflicts between buses, cyclists, and drivers as buses no longer need to cross bike and traffic lanes to pull in and out of the curb. Pedestrians must cross the bike lane to access the stop, so cyclists are instructed to yield to them, slowing down and stopping to allow safe passage.

Bus stop islands remove conflicts and weaving that may occur when bikes and buses share the same space. Providing a bus stop island can improve bike operations because conflicts are reduced with buses. In addition, transit reliability and speed can be increased by reducing delay that is incurred as a result of buses needing to weave in and out of the travel lane. This type of treatment may require additional right-of-way and has moderate cost.

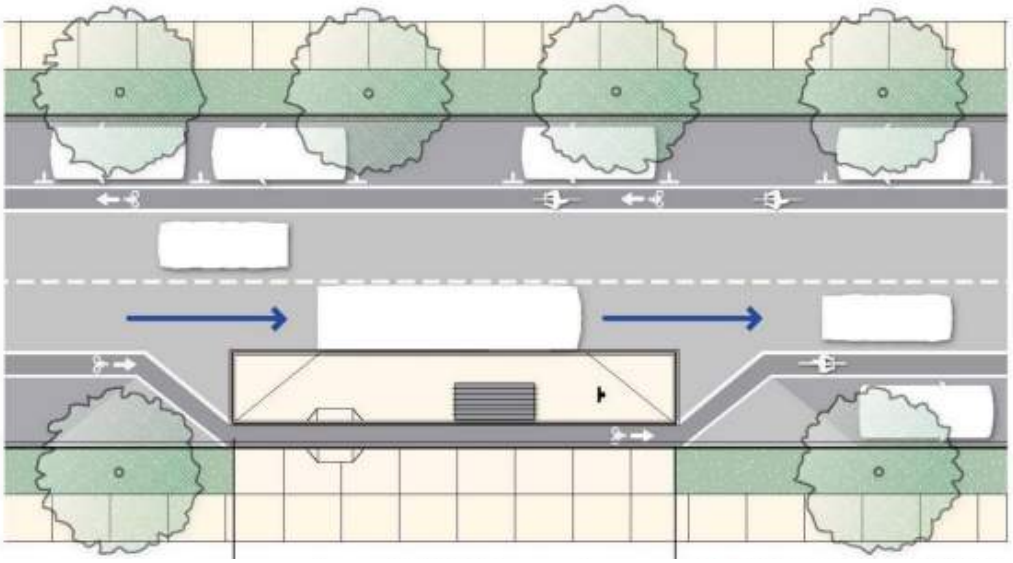


Figure 8. Example of Bus Stop Island Treatment

Source: Whatcom Transportation Authority Bus Stop Design Guidelines, August 2022

Bus Lane

Bus lanes are travel lanes that are reserved for exclusive or prioritized use of buses. The lanes may be shared with bikes or exclusively for buses. The lanes are signed and have specific pavement markings that alert other drivers of the lane use. While the bus only

lanes are restricted, at intersections vehicles may be allowed to use these lanes for right-turns.

Bus only lanes remove conflicts with other vehicles and allow buses to bypass traffic congestion by providing a dedicated space for buses. The reduced conflicts for buses can improve travel speeds, efficiency and reliability. This treatment may require right-of-way and has a cost they could be on the high side depending on the need for right-of-way. Bus only lanes can cause increased delays and congestion for other vehicles.

Figure 9. Example of Bus Lane

Source: Whatcom Transportation Authority

Extended Turning Lane or Pocket

Extending a turning lane or pocket refers to left- or right-turn lanes at intersections being lengthened to reduce the potential for turn lanes being blocked by traffic congestion. This treatment allows buses to enter the turn lane or pocket and bypass congestion that may otherwise block the turn lane/pocket.

Extending turn lanes or pockets could require additional right-of-way and the project cost would vary between low and high cost depending on the need for right-of-way. The benefit of extending the turn lane may be limited and will depend on how often congestion blocks buses from using these turn lanes; however, extending turn lanes would benefit both buses and other vehicles on the roadway system using these lanes.

Queue Jump Lane

A queue jump is a type of roadway geometry that provides preference to buses at intersections. This treatment provides turn pockets at intersection allowing the bus to jump in front of through-traffic at the intersection using a special signal phase. Figure 6 illustrates a queue jump at an intersection. Queue jumps can improve the speed and reliability of buses by allowing them to bypass congestion.

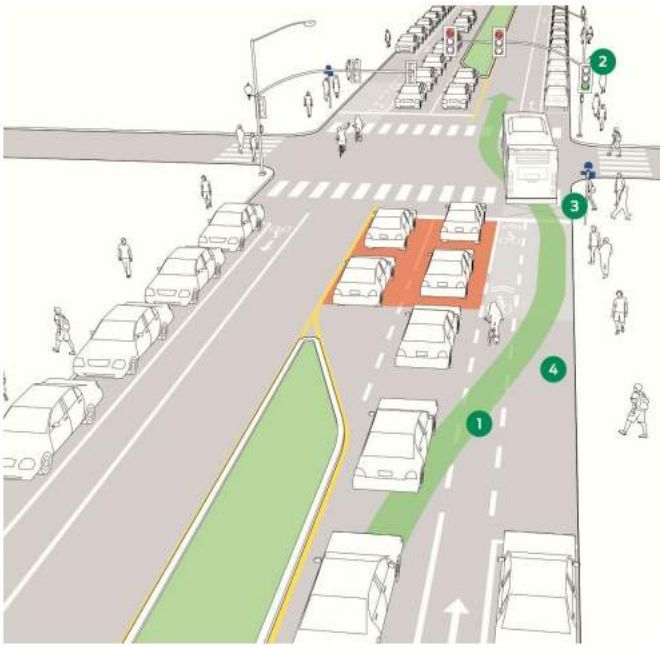


Figure 10. Bus Queue Jump Lane

Source: North American Cities and Transit Agencies (NACTO), 2023

Bicycle and Pedestrian Infrastructure

Bicycle and pedestrian infrastructure refers to the roads, paths, and sidewalks (and street crossings) that are designed for travel by people walking or biking. There are sections of the Go Lines where the buses share space with bicycle traffic, sometimes causing delays to the buses. In other areas, the location of pedestrian crossing areas creates delay for the buses.

Technology

For the purposes of this LPA, the technology referenced is related to upgrading or updating traffic signal equipment and programming directing traffic flow through intersections. The

City has a total of 34 signals that are preemption capable traffic signals, with 3 along the Blue Go Line, 14 on the Gold Go Line, 4 on the Green Go Line, and 13 along other WTA transit routes. While several of the traffic signals located along the Go Lines are programmed to provide transit signal priority, the 2023 Rapid Transit Feasibility determined that the current signal technology and programming provide "preemption" not "priority" and do not provide the needed coordination to connect signals and support improved transit performance.

Transit Signal Priority (TSP)

Transit signal priority (TSP) reduces travel times for buses by avoiding the need to stop and start at a signalized intersection. TSP makes it more likely that the light is green when a bus reaches a signalized intersection. It can either extend green times so an approaching bus can get through the intersection without stopping or shorten red times so a stopped vehicle can get moving again.

The LPA recommends that for WTA operations along city streets, the controllers be upgraded/updated to be TSP capable and that TSP be evaluated at key intersections and corridors. This recommendation does not mean that preemption cannot be incorporated for emergency vehicles. Further studies should be conducted to determine specific locations where TSP could be provided to ensure the most benefit to transit operations and consider the impacts on general vehicle traffic. There are cases where poor operations on side streets or at all approaches at an intersection limit the ability for TSP to be effective such that it would not be appropriate to install the system. Traffic analysis will focus on determining the system that is appropriate based on intersection operations and the desire to provide 5-to-10-minute headways along the Go Lines. The City and WTA can leverage WSDOT Transportation Systems Management and Operations (TSMO) steps to determine the TSP application and what equipment is needed, including if there is a need for coordination as described in the following section.

Interconnected Traffic Signals and Corridor Coordination (Upgrading Signal Controllers)

Most agencies that are investing in signal priority use advanced controllers that can be interconnected along corridors. Interconnected traffic signals allow for the communication of the equipment both in the bus and at the intersections, allowing for coordinating the entire corridor for the transit vehicle and general vehicles.

Implementing TSP and interconnecting traffic signals may require upgrading the traffic signal controllers. Interconnected traffic signals along corridors are recommended to provide communication that allows for transit vehicle progression through traffic signals to achieve 5-to-10-minute headways. There are areas of the routes where interconnected traffic signals may not be necessary. Corridor-wide traffic operations studies will be conducted to determine specific locations where TSP and interconnected signals are needed and if signal controllers need to be upgraded.

Current Signal Technology – Preemption

There are key differences between “preemption” and “priority” that impact the overall operations of the street system. TSP (priority) allows for the extension of green time, shortening of a cycle, and, with advanced capabilities, may provide communication to hold a traffic signal in red for cross traffic, allowing a transit vehicle that is one stop way to advance through the intersection as it traverses the corridor.

Signal preemption is a form of priority that is typically used for emergency vehicles or where general traffic mixes with light rail or trams. Signal preemption immediately turns all directions red, except for the direction the emergency vehicle is traveling from. After the preempted vehicle passes, it takes time for the intersection traffic signal to recover back to normal operations, resulting in delays at the intersection and through the street system. Signal preemption is an effective strategy for emergency vehicles, because it creates the desired outcome of having the full intersection cleared for these vehicles, and the occurrence of emergencies is less frequent.

When signal preemption is used to provide priority for buses, as in the case of the signals in the City of Bellingham, it can cause unnecessary delays in the street system as all other directions of travel are given a red light and the intersection takes time to recover to normal operations. Along high frequency routes, this can be particularly impactful, resulting in the use of the preemption many times a day, creating high delay on major and side streets.

Conversely, with transit signal priority, only the cross-direction traffic is stopped, allowing traffic to continue to flow in the opposing direction on the same street, allowing the bus to travel through without creating cumulative impacts across the whole intersection.

As noted for the TSP application, WSDOT TSMO provides a list of steps to determine if a corridor should be interconnected that could be used by WTA and the City to evaluate needs. The evaluation would consider whether adaptive signals, master clock, or other coordination is most appropriate, as well as what equipment is needed for both TSP and interconnection based on the corridor characteristics.

Current Coordination and Controllers – Master Clock

The City of Bellingham typically uses a master clock system for signal coordination along corridors. The master clock system provides a time-of-day schedule that does not change without manual adjustments. There are traffic signal controllers that allow for more advanced coordination, like adaptive signal systems, providing real-time adjustment to signal timing considering traffic flows.

Coordinating traffic signals with a master clock often provides benefit-cost ratios near 20:1 compared to no coordination. However, using adaptive signals can reduce the number of times vehicles stop at traffic signals and the amount of time they wait at a red light by another 10% compared to traffic signals coordinated only by a master clock.

Policy

Because successful operation of the transit services requires on-going coordination between WTA and the City of Bellingham, this LPA suggests broader policy revisions that support not just the recommendations in the LPA but the ability to more easily identify and implement solutions needed in the future. These needs are also reflected in the MOU that supports this LPA.

General Land Use & Street Design Approaches

Street design significantly impacts if and/or how a bus can travel along a route. For example:

- On-street parking may create delay as the bus waits for vehicles to enter or leave parking spaces; additionally, space for on-street parking areas could, in some instances, provide needed right-of-way for bus infrastructure like extended turn lanes, pull-outs, or bus-only travel lanes.
- Pedestrian bump-outs, often used at intersections to reduce the distance that pedestrians must travel to cross lanes of traffic, can also reduce the width of the travel lane in a way that creates bus delay or eliminates the ability of the bus to travel through altogether.
- Lane width reductions to provide traffic calming or otherwise improve corridor safety and function for people walking and biking may impact the ability of a bus to travel through the corridor and limit the potential for future transit infrastructure like pull-outs and travel lanes.
- Turning restrictions can improve traffic safety and reduce congestion but may also eliminate the opportunity for a bus to use the corridor. Transit routing potential should be considered before new turning restrictions are implemented.
- Roundabout designs can improve traffic safety at intersections but can eliminate the opportunity for bus use of a corridor if the roundabout is not designed to accommodate the turning radius of the bus.
- As land parcels are developed or redeveloped, sidewalk, roadway, and intersection improvements can be considered to enhance transit operations. Once these

agreements are in place, the opportunity to implement further changes can be costly; including transit from the beginning is the most efficient way to address site-specific needs.

- WTA will develop transit–supportive right-of-way design guidelines. The City can collaborate in shaping these guidelines to ensure they are practical, align with City processes, and are incorporated into the City's design standards. This partnership will help the City continue supporting improved transit performance as the guidelines are implemented.

Comprehensive Plan Integration

There are several opportunities within the Bellingham Comprehensive Plan to support effective and efficient transit. King County Metro has developed a helpful list of transit supportive elements to be included in comprehensive plans.[1] Bellingham's Comprehensive Plan was reviewed for alignment with the recommendations.

Transportation Element Recommendations

- Street classifications have a category that prioritizes transit to improve speed and reliability and that can be included as part of a multi-modal level of service standard.
- The TIP/CIP use transit speed and reliability and safe access to transit as a factor in prioritization and includes relevant transit projects from the LPA.
- Update policies that prioritize improvements for people to walk, bike and roll safely to connect to transit service to emphasize biking and rolling improvements within one-half mile and bike access improvements within three miles of transit service.
- Develop policies to accommodate additional bus layover to support growth in service.
- Develop policies to accommodate electric charging needs to support electrifying the bus fleet.

Land Use Element

- Once Transit Corridors have been defined, ensure a mix of residential, commercial and institutional uses within at least one-quarter mile of transit service?

Bicycle Master Plan

The City of Bellingham Bicycle Master Plan, adopted in 2024, largely mentions transit in relation to providing bicycle access to transit and bicycle parking facilities at transit stops. The City's modal hierarchy prioritizes bicycling over transit, but the Plan also includes this language: "Per Policy 1.1, the City will prioritize building higher comfort bikeways that provide separation from motor vehicles and/or integrate traffic calming to reduce vehicle speeds unless it is deemed infeasible, or in conflict with other objectives such as maintaining reliable transit service and freight access." Through this LPA process,

[1] https://cdn.kingcounty.gov/-/media/king-county/depts/metro/documents/about/policies/comprehensive-plan-checklist.pdf?rev=1fc8682f8bc346f18f94652a89df3dab&hash=39F14B20200DD2CB854B3B44CC292408

participants have identified conflicts with planned bicycle infrastructure and the Go Lines, particularly along Woburn and Northwest Avenue. The LPA recommends that the Bicycle Master Plan be amended to identify the Go Line transit corridors as corridors where transit infrastructure is prioritized.

Pedestrian Master Plan

The City of Bellingham Pedestrian Master Plan, adopted in 2024, identifies the importance of safe pedestrian access to transit and the need for reasonably spaced, low-stress crossings near transit stops. The Go Lines in particular are highlighted. The Plan includes "Policy 3.2 Improve ADA connections to transit for people walking and rolling by aligning safe crossings with WTA transit stops and completing sidewalk gaps. Complete sidewalks on at least one side of transit corridor streets and provide safe and convenient ADA crossings and access at transit stops." Through the LPA process, WTA noted at least one area where transit performance could benefit from stop consolidation if the pedestrian infrastructure was improved.

Network Results

Implementation of these treatments will result in travel times savings. The savings vary based on the treatment, and travel time savings would be cumulative as multiple treatments are applied to each Go Line. For example, research shows bus lanes may reduce the route runtimes by up to 55%, while bus stop consolidation may result in a 5-15% reduction in the overall route travel time. Having these travel time savings will allow WTA to implement more frequent transit service.

3.2 Blue Go Line

Factors affecting on-time performance along the Blue Go Line are especially complicated and involve multiple responsible parties. Safety and congestion along the route may improve from the recent restriping of travel lanes in the area of Samish and I-5. The operations of the Blue Go Line will benefit from the already-funded roundabout that the City of Bellingham will construct at the intersection of Lincoln and Potter.

The Blue Go Line travels outbound from the Bellingham Transit Center towards the Bellingham Visitor's Center via WWU and Bill McDonald Parkway. It travels inbound in the opposite direction, heading back to the Bellingham Transit Center.

Inbound and Outbound

In the recommendations that follow, inbound refers to the path that the bus travels as heads towards the Bellingham Transit Center, and outbound refers to the path that it travels as heads away from the transit center.

Figure 11 shows the locations for the recommended treatments along the Blue Go Line.

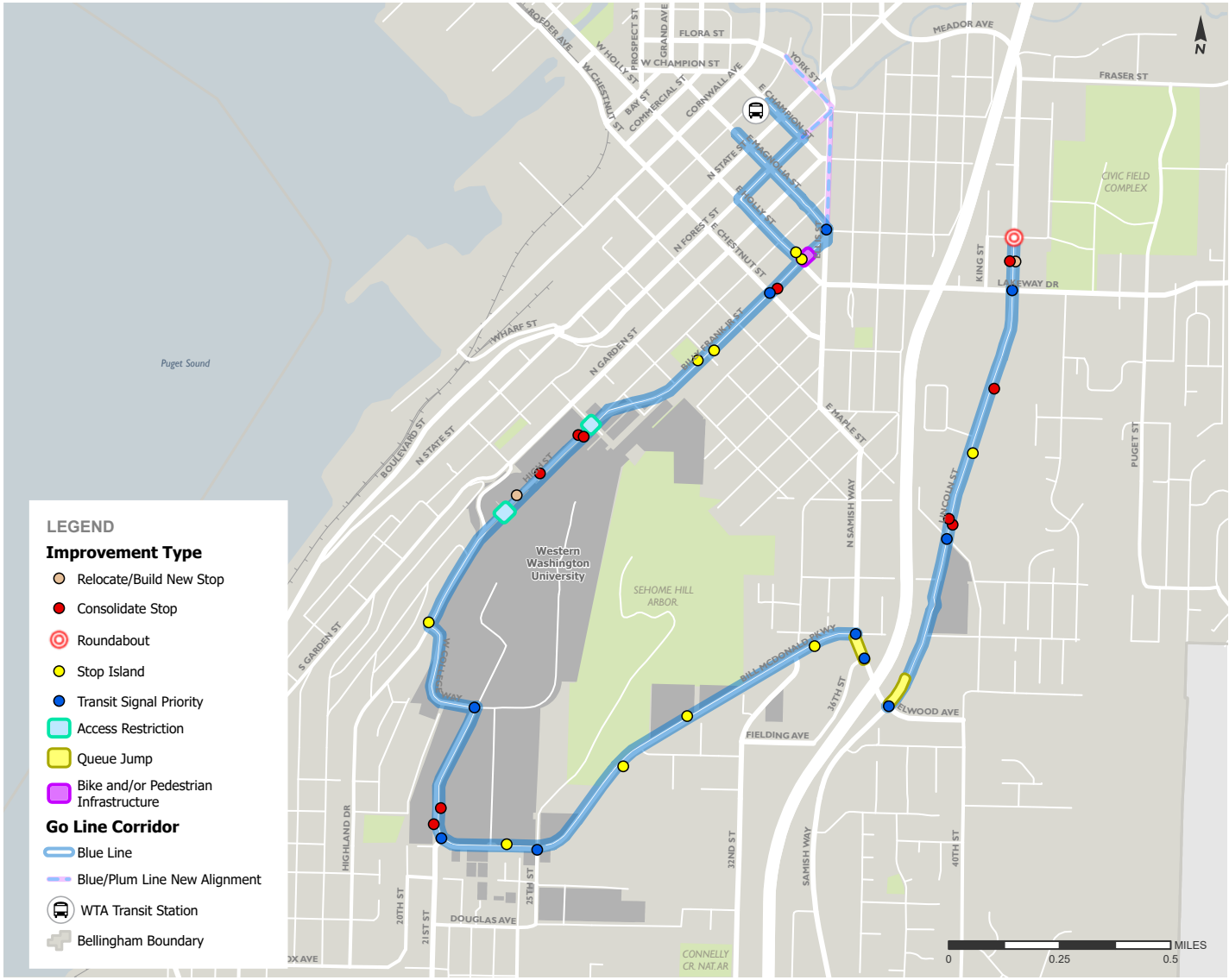


Figure 11. Blue Go Line LPA Recommendations

Remove (and/or relocate) stop

- Billy Frank Jr at Chestnut inbound
- High St at Nash Hall outbound
- High St at Higginson Hall inbound
- Viking Union outbound
- New stop Viking Union outbound across from performing art center
- Bill McDonald at Campus Services inbound and outbound
- Lincoln at Maple inbound and outbound
- Lincoln St at Mobile Estates outbound
- Relocate Lincoln at Potter inbound stop across street (outbound) and add bus layover space

Add bus stop island

- Holly St at Billy Frank Jr St inbound
- Billy Frank Jr St at Laurel St inbound and outbound
- Highland Dr at Ridgeway outbound
- Bill McDonald Pkwy at Samish Way inbound
- Bill McDonald Pkwy at Ferry Way outbound
- Bill McDonald Pkwy at Birnam Wood inbound
- Bill McDonald Pkwy at Samish Way outbound
- Lincoln St at Viking Circle outbound

New or improved signal operations (TSP and Interconnect)

Specific locations for potential TSP are listed below; however, corridor-wide operations should be evaluated along Bill McDonald and Samish to determine if upgrades should occur to provide interconnect allowing for signal communication and corridor signal coordination.

- E Magnolia St & Ellis St outbound (existing)
- Billy Frank Jr St at E Chestnut St inbound and outbound
- Bill McDonald Pkwy at W College Dr inbound and outbound TSP
- Bill McDonald Pkwy at 21st St inbound and outbound
- Bill McDonald Pkwy & 25th St inbound and outbound
- S Samish Way at Bill McDonald Pkwy inbound and outbound
- S Samish Way at 36th St inbound and outbound
- Lincoln St at S Samish Way inbound and outbound
- Lincoln St at Maple St (existing) inbound and outbound
- Lakeway Dr at Lincoln St inbound and outbound

Bicycle and/or pedestrian infrastructure

- Billy Frank Jr St at Holly St outbound pedestrian bulb-out (may require parking removal)

- Conduct a multimodal analysis on High Street corridor to plan for reducing conflicts between the modes. Potential strategies identified during LPA development include:
    - Techniques to consolidate crossings
    - Relocating bus stops away from major pedestrian crossing areas to convenient downstream locations
    - Options for restricting general vehicle traffic besides the current gates at either end of High Street, which restrict transit movements
    - Considering bike lanes on the uphill side b/c they go slower but can be sharrow going downhill, since they can keep up with traffic.

Access restrictions

- Remove gates at either end of High Street, which restrict transit movements and discourage general vehicle traffic from using this street through other means such signs, lights designated for transit only, decorative pavement, landscaping and other placemaking techniques to show this street is not for general vehicles.

Lane or other significant right-of-way solutions

- Complete corridor operations study that includes analysis of signal timing and coordination, channelization, turn restrictions, and queue jumps. Some initial options identified include:
    - Bus only lane and queue jump Lincoln St at S Samish Way inbound
    - Queue jump Bill S Samish Way between McDonald Pkwy and 36th St outbound

Land use

- Revisit land use designations along the Blue Go Line to identify where zoning should be changed to support high frequency transit and discussed in the Comprehensive Plan and the City's housing and employment infill goals.

Other solutions

- Complete multimodal study to identify solutions for High Street.
- Add signage to help drivers better understand how to safely travel from the off ramps onto Samish.

Recommendation Results

An initial planning level estimate of the benefit of the solutions proposed above was calculated to provide an understanding of the potential benefit of such improvements. Implementation of all the treatments described above could result in travel times savings of 35-45%, or a reducing in travel time of up to 8-9 minutes, which would allow WTA to provide more frequent service.

3.3 Gold Go Line

On-time performance on the Gold Go Line is affected, in part, by several factors: the route travels along a freight corridor, passes through rapidly developing and increasingly dense areas of Bellingham, and requires multiple turning maneuvers.

Several projects are planned or underway that will benefit the Gold Go Line. The City plans to add a multimodal trail from Telegraph to Gooding Avenue along the west side of James, potentially connecting a new community of riders to enhanced transit service. The intersection at Telegraph & Deemer, formerly an intersection that caused bus delay, was recently improved and is now signalized with three marked crossings. The intersection of James & Telegraph will be updated with crossing enhancements and a bike lane extension. WSDOT is working on a complete streets project along Meridian Street (SR 539) between E Kellogg Road and the I-5 southbound ramps. The project is analyzing and retiming this section of the Meridian corridor in 2027, which will improve traffic flow at the intersection of Meridian Street and Bellis Fair Pkwy. The project will also review pedestrian and bicycle access along this section of Meridian.

The Barkley Subarea Plan and the City's Transportation Improvement Plan (TIP) both identify a future Railroad Trail pedestrian bridge over Woburn Street. Barkley's Planned Action Ordinance links construction of this bridge to PM peak-hour trip thresholds. This project is currently unfunded in the City's TIP, however once built, the pedestrian bridge will help improve transit reliability traveling both directions on Woburn Street.

Finally, WTA is working with the Talbot Group to identify and design a transit hub just north of Rimland Drive on Woburn to better facilitate in-route transfers.

The Gold Go Line travels outbound from the Bellingham Transit Center to Whatcom Community College, with service to Sunnyland Square, Barkley Village, Sunset Square, WinCo and Bellis Fair Mall along the way. It travels inbound in the opposite direction, heading back to the Bellingham Transit Center.

Figure 12 shows the locations for the recommended treatments along the Gold Go Line.

Figure 12. Gold Go Line LPA Recommendations

Remove (and/or relocate) stop

- W Champion St at Unity Ave inbound/outbound
- Cornwall Ave at Flora St inbound
- Cornwall Ave at York St outbound
- Cornwall Ave at Halleck St inbound
- Cornwall Ave at Kentucky St outbound
- Cornwall Ave at Virginia St outbound
- Cornwall Ave at Kearney St inbound
- Relocate Alabama St and Dean Ave outbound to just east of the pedestrian crossing at Grant
- Alabama St at Queen St outbound
- Alabama St at St Paul St inbound and outbound
- Woburn St at E North St outbound
- Woburn St at E Connecticut St inbound
- Woburn St at E Maryland St outbound
- Relocate Woburn St at Rimland Dr inbound stop to north of the intersection
- Woburn St at Sunset Dr inbound
- Sunset Dr at Woburn St outbound
- Deemer Rd at Telegraph Rd inbound and outbound
- Cordata Pkwy at Westerly Rd outbound
- Cordata Pkwy at Whatcom Community College inbound

Add bus stop island

- Alabama St at Dean Ave (relocated stop)

New or improved signal operations (TSP and Interconnect)

Specific locations for potential TSP are listed below; however, corridor-wide operations should be evaluated along Cornwall, Alabama, Woburn, Sunset, and Meridian to determine if upgrades should occur to provide interconnect allowing for signal communication and corridor signal coordination.

- Cornwall Ave at York St inbound and outbound (existing)
- Cornwall Ave at Ohio St inbound and outbound (existing)
- Cornwall Ave at Alabama St inbound and outbound (existing)

- Alabama St at James St inbound and outbound (existing queue jump lane and TSP)
- Alabama St at Orleans St inbound and outbound (existing)
- Alabama St at Pacific St inbound and outbound (existing)
- Woburn St at Premier Way inbound and outbound
- Woburn St at Barkley Blvd inbound and outbound (existing)
- Woburn St at Rimland Dr inbound and outbound (existing)
- Sunset Dr at Woburn St inbound and outbound (existing)
- E Sunset Dr at Racine St inbound and outbound (existing)
- Sunset Dr at Orleans St inbound and outbound (existing)
- James St at Birchwood Dr inbound and outbound
- Telegraph Rd at James St inbound and outbound
- Deemer Rd at Telegraph Rd inbound and outbound
- Bellis Fair Pkwy at Meridian St inbound and outbound
- W Bakerview Rd at Cordata Pkwy inbound and outbound (existing)

Bicycle and/or pedestrian infrastructure changes

- Bike lane Cornwall Ave from York St to Ohio St (install bicycle lanes remove on-street parking)
- Grade separated crossing Woburn St & Railroad trail, as described in existing plans

Access restrictions

- Left turn restriction Woburn St at E Connecticut St inbound
- Left turn restriction Woburn St at E Maryland St inbound
- Left turn restriction northbound Orleans St into Safeway parking lot inbound and outbound

Lane or other significant right-of-way solutions

- Bus lane on Alabama St between Dean Ave and Iron St outbound (peak hour outbound bus lane in center turn lane or c curb)
- Add bus lane on Cornwall Ave between E Champion St and York St outbound
- Southbound general-purpose lane on Woburn St from E Illinois to Alabama St for inbound bus operations
- Further study on Woburn to determine potential for bus only lane during peak periods only
- Lane extension Sunset Dr at Orleans St outbound (extend right turn pocket)
- Evaluate a roundabout for the Alabama St/Woburn St intersection
- Queue jump James St/Birchwood Ave/Orchard Dr intersection outbound
- Queue jump Cordata Pkwy at W Bakerview Rd intersection inbound

- Queue jump East Bellis Fair Pkwy at Guide Meridian Road intersection inbound and outbound
- Develop Barkley transit hub

Land use

- Revisit land use designations along the Gold Go Line to identify where zoning should be changed to support high frequency transit and discussed in the Comprehensive Plan and the City's housing and employment infill goals.
    - Sunset Square, in particular, is an area along the Gold Go Line that has significant opportunity for redevelopment to host more transit-supportive land uses.

Recommendation Results

An initial planning level estimate of the benefit of the solutions proposed above was calculated to provide an understanding of the potential benefit of such improvements. Implementation of all the treatments described above could result in travel times savings of 25-35%, or a reduction in travel time of up to 10 minutes, which would allow WTA to provide more frequent service.

3.4 Green Go Line

Factors affecting on-time performance along the Green Go Line include that the sections of route travel along a freight corridor and congestion along the Northwest Avenue corridor. WTA has identified an alternative routing option for the Green Go Line that would travel along Commercial and Girard from the downtown station to better serve the Fountain District and provide coverage along the Meridian corridor.

The Green Go Line travels outbound from the Downtown Bellingham to Whatcom Community College via Dupont, Elm, Northwest and Bakerview. It travels inbound in the opposite direction, heading back to the Downtown Bellingham.

Figure 13 shows the locations for the recommended treatments along the Green Go Line.

Figure 13. Green Go Line LPA Recommendations

Remove (and/or relocate) stop

- W Champion St at Grand Ave outbound
- W Champion St at Prospect St inbound
- Elm St at Broadway inbound
- Northwest Ave at Connecticut St inbound and outbound
- Relocate stop Northwest Ave at Lynn St inbound (better pad & location)
- Relocate stop Northwest Ave at Shuksan Middle School outbound to Northwest Ave at Alderwood Ave
- Northwest Ave at 3400 block inbound
- Relocate Northwest Ave at McLeod Rd inbound to south of roundabout at Northwest Ave at McLeod Ave
- Relocate W Bakerview Rd at Palisade Way stops closer to Darby Dr
- Relocate W Bakerview Rd at Eliza Ave outbound closer to the intersection
- Cordata Pkwy at Whatcom Community College inbound

Add bus stop island (only if the Green Go Line does not realign to Girard Street)

- Dupont St at C St outbound
- Dupont St at G St outbound
- Elm St at Jefferson St outbound

New or improved signal operations (TSP and Interconnect)

Specific locations for potential TSP are listed below; however, corridor-wide operations should be evaluated along Northwest and Bakerview to determine if upgrades should occur to provide interconnect allowing for signal communication and corridor signal coordination.

- Dupont St at F St inbound and outbound
- Dupont St at Broadway inbound and outbound (existing)
- Northwest Ave at W Illinois St inbound and outbound
- Northwest Ave at Lynn St inbound and outbound (existing)
- Northwest Ave at Birchwood Ave inbound and outbound (existing)
- W Bakerview Rd at Northwest Ave inbound and outbound
- W Bakerview Rd at Eliza Ave inbound and outbound (existing)

Bicycle and/or pedestrian infrastructure

- Extend the crossing median at outbound stop Northwest Ave and Bakerview Rd

Access restrictions

- Study the potential for driveways/access points to be consolidated to help reduce congestion (especially on Northwest between E Victor St and W Maplewood Ave)

Lane or other significant right-of-way solutions

- Roundabout redesign at Meridian St at W Illinois St (for Green Go Line re-route)
- Remove parking along Northwest Ave between Illinois St and Elm St
- Extend right turn along Northwest Ave at W Bakerview Rd as bus and business access only lane
- Queue jump at Northwest Ave between E Maplewood Ave and Birchwood Ave outbound (left turn lane queue jump lane)

Land use

- Revisit land use designations along the Green Go Line to identify where zoning should be changed to support high frequency transit and discussed in the Comprehensive Plan and the City's housing and employment infill goals.

Recommendation Results

An initial planning level estimate of the benefit of the solutions proposed above was calculated to provide an understanding of the potential benefit of such improvements. Implementation of all the treatments described above could result in travel times savings of 25-35%, or a reduction in travel time of 5 to 8 minutes, which would allow WTA to provide more frequent service.

3.5 Plum Go Line

Plum Go Line recommendations are limited to bus stop balancing and signal changes, though WTA is also exploring rerouting options near the transit center. The signals along Lakeway near I-5 are controlled by WSDOT. The City and WSDOT are undertaking a joint operations evaluation of Lakeway to improve eastbound congestion. Additionally, the City is completing a Civic Complex Master Planning process to redesign park facilities and an elementary school. This planning process includes designing pedestrian facilities along Lincoln and Lakeway, which may provide a valuable opportunity for transit-supportive improvements in the area including at intersections. Finally, WTA is exploring the concept of transit hubs to better facilitate in-route transfer points, and the area along Lakeway between Ellis and Lincoln is under consideration. A transit hub in this location could facilitate more convenient transfers between the Plum and Blue Go Lines, providing easier access between the Lakeway corridor and WWU.

The Plum Go Line travels outbound on Lakeway Drive between Downtown Bellingham and Woburn Street. It travels inbound in the opposite direction, heading back to the Downtown Bellingham.

Figure 14 shows the locations for the recommended treatments along the Plum Go Line.

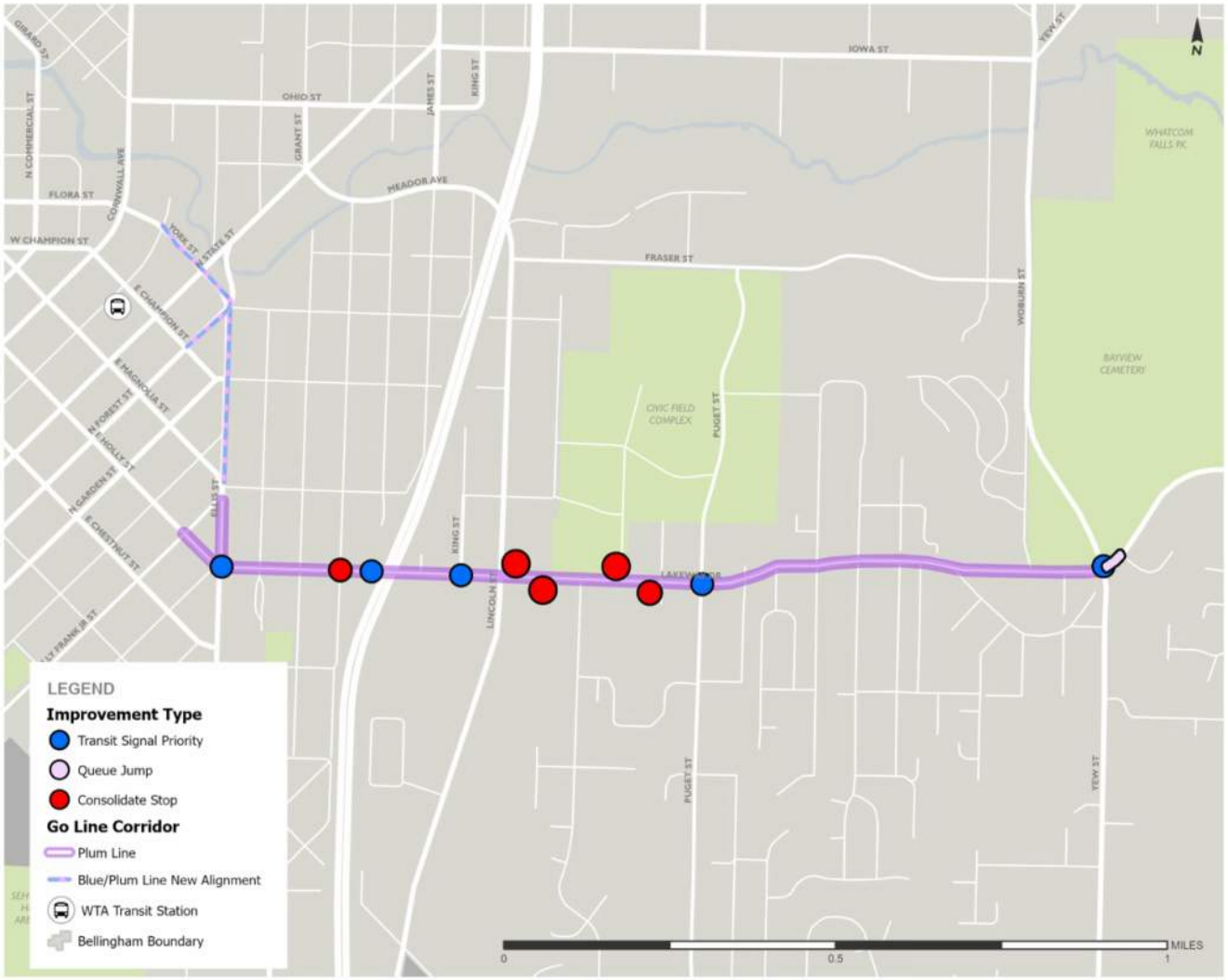


Figure 14. Plum Go Line LPA Recommendations

Remove (and/or relocate) stop

- Lakeway Dr at Humboldt St inbound
- Consider stop balancing in Lakeway Center and near Civic Athletic complex based on pedestrian infrastructure developments identified under "Bicycle and/or pedestrian infrastructure changes"

New or improved signal operations (TSP and Interconnect)

Specific locations for potential TSP are listed below; however, corridor-wide operations should be evaluated along Lakeway to determine if upgrades should occur to provide interconnect allowing for signal communication and corridor signal coordination.

- Lakeway Dr at E Holly St inbound and outbound (existing)
- Lakeway at Interchange (I-5 south on-ramp) inbound and outbound (existing)
- Lakeway Dr at King St inbound and outbound (existing)
- Lakeway Dr at Puget St inbound and outbound (existing)
- Lakeway Dr at Lincoln St inbound and outbound (existing)
- Lakeway Dr at Woburn St inbound and outbound (existing)
- E Magnolia St at Ellis St inbound and outbound (Plum Go Line re-route, existing)

Lane or other significant right-of-way solutions

- Queue jump Lakeway Dr at Woburn St inbound

Land use

- Revisit land use designations along the Plum Go Line to identify where zoning should be changed to support high frequency transit and discussed in the Comprehensive Plan and the City's housing and employment infill goals.

Bicycle and/or pedestrian infrastructure changes

- Improve pedestrian environment along Lakeway to support stop consolidation
    - Traffic calming
    - Additional pedestrian crossing islands
    - Pedestrian crossing along west side of U St at Lakeway Dr intersection

Recommendation Results

An initial planning level estimate of the benefit of the solutions proposed above was calculated to provide an understanding of the potential benefit of such improvements. Implementation of all the treatments described above could result in travel times savings of 15-25%, or a reduction in travel time 2 to 3 minutes, which would allow WTA to provide more frequent service.

4. Memorandum of Understanding

INITIAL PRELIMINARY DRAFT

MEMORANDUM OF UNDERSTANDING

Between
City of Bellingham
And
Whatcom Transportation Authority

Enhanced Go Line Locally Preferred Alternative (LPA) Implementation and Prioritization

Purpose: The purpose of this memorandum of understanding (MOU) is to outline how the City of Bellingham (City) and Whatcom Transportation Authority (WTA) will work together to prioritize and implement service and infrastructure improvements along Go Lines. The MOU defines roles and responsibilities for the City and WTA as it pertains to how improvements will be prioritized and implemented and how plans and policies can be refined or reconsidered to meet the goals and objectives of the Enhanced Go Line Project. The Enhanced Go Line Project provides improvements to existing Go Lines to increase speeds and provide better service reliability such that service is convenient and frequent enough to not require passengers to use a schedule.

Scope of Agreement: This agreement covers all transportation planning and improvements related to the Enhanced Go Line Project within the jurisdiction of the City of Bellingham. A flexible approach will be used to implement improvements where treatments may be completed in different stages and along different Go Line routes based on ease of implementation, priorities identified in the LPA, and funding opportunities. Key upgrades will include more frequent service, targeted infrastructure upgrades at key intersections and along corridors, efficient stop spacing, improved signal operations and integration, and expanded amenities at stops.

Agreement:

Problem and Need. Increased congestion from growth both inside and outside Bellingham is causing delays to bus service, steadily decreasing runtimes, decreasing service reliability, and reducing the benefits of buses that have been added to improve frequency. Bus arrivals can be highly variable, reducing the reliability of the service and causing riders to miss transfers or avoid using the service altogether. Delays can cause a spiraling effect where former bus riders switch to driving, causing even more congestion and thus greater delays. Frequent and efficient transit is critical to support future growth and reduce reliance on personal vehicles for travel in the City of Bellingham. Implementing the Enhanced Go Line Project requires collaboration between WTA and the City to provide

treatments that result in travel times savings for buses to support providing frequent and efficient transit.

Enhanced Go Line Location. WTA and the City agree on the Enhanced Go Line service locations based on the following:

- Definition of Enhanced Go Lines per the Locally Preferred Alternative (LPA)
- Go Lines are a good candidate for enhanced service from a market demand perspective
- Transit corridors have been identified in the Bellingham Comprehensive Plan
- The LPA adopted by WTA and the City Bellingham and reviewed by the public outlines the intent of the Enhanced Go Lines and potential treatment options that constitute Enhanced Go Line service and priorities for implementing treatments
- The City of Bellingham and WTA have agreed to a sufficient number/level of treatments to support the functioning of the Enhanced Go Line

Improvement Priorities. WTA and the City will establish cost/benefit criteria that can be used to categorically evaluate and prioritize future proposed improvements. The criteria will include measures such as:

- Ridership increase projections
- Transit delay/on-time performance quantification
- Multimodal impacts
- ROW constraints
- Improvement cost
- Travel time savings of Enhanced Go Line compared to existing Go Line.
- Traffic operations impacts

WTA and City Coordination. WTA and City of Bellingham are to regularly meet at least one time per quarter (until completion of the Enhanced Go Line Project) so WTA and the City can have a shared understanding of the Enhanced Go Line service, transit project priorities, and overall transit system needs.

WTA Responsibilities. WTA will continue to provide maintenance for the Enhanced Go Line routes as part of regular upkeep for maintaining or enhancing service levels, such as:

- Schedule changes
- Route alignment
- Stop consolidation
- Boarding strategies (i.e., all door boarding, off-board payment, etc.)
- Unique brand identity

WTA will develop transit-supportive right-of-way design guidelines for the City to reference in future planning and parcel development/redevelopment.

City of Bellingham Responsibilities. The City will involve WTA when discussing the following:

- Public works department and Washington State Department of Transportation (WSDOT) discussions on issues/locations that could affect the functionality of the transit system
- Updates to the Bicycle Master Plan
- Land use planning changes along major transit corridors
- Identifying potential funding sources for capital and operating costs specifically related to transit

The City will assist in implementing Enhanced Go Line improvements that are agreed upon through the cost/benefit criteria and are in City right-of-way, including:

- Assisting or leading the permitting of such improvements depending on the scope and scale
- Leading discussions with WSDOT if required to implement improvements
- Updating modal plans to be consistent with the transit corridors and priorities identified in the Bellingham Comprehensive Plan and the LPA
- Assisting or leading additional studies and cost benefit evaluation as identified in the LPA
- Prioritizing transit facilities in the Enhanced Go Line corridors
- Identifying Enhanced Go Line corridors as transit corridors in the Bellingham Comprehensive Plan.

Shared Responsibilities.

- The City and WTA will work together on implementing the Enhanced Go Lines as set forth in the previous statements.
- The City and WTA will adopt the improvement concepts outlined in the LPA.
- The City and WTA will work together to identify and secure funding for implementing the LPA.
- The City and WTA will work together to prepare cost benefit analyses for proposed improvements including WTA identifying benefits and the City identifying costs.

Appendix C – Travel Time Savings Calculations

Appendix C – Travel Time Savings Calculations

Research was reviewed to understand potential travel time savings of treatments being proposed. Table C-1 summarizes the potential travel time saving by treatment and how it was estimated for the LPA.

Table C-1 Travel Time Savings by Treatment

Treatment	Potential Travel Time Savings	Travel Times Saving Calculations (per trip)	Source
Bus Stop Consolidation	17% - 19% faster than original run time	Average dwell time in seconds x number of stops removed	Characteristics of Bus Rapid Transit for Decision-Making, Federal Transit Administration, US Department of Transportation, August 2004. Accessed October 2025 - https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/CBRT.pdf
Bus Island	NA	Savings per trip = Number of bus islands x dwell time for route x 20%	No research found; calculations assumed small reduction in dwell time.
Bus Lane	55% reduction in total run time for segment with lane	55% x total run time for segment with lane	Characteristics of Bus Rapid Transit for Decision-Making, Federal Transit Administration, US Department of Transportation, August 2004. Accessed October 2025 - https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/CBRT.pdf
Extended Turning Lane	Savings will depend on congestion and delays currently being experienced at an intersection.	NA	
Queue Jump Lane	9 seconds per intersection per queue jump	Number of queue jump lanes x 9 seconds	Queue Jump Lane, Transit Signal Priority, and Stop Location Evaluation of Transit Preferential Treatments Using Microsimulation, Transportation Research Board, January 2015. Accessed October 2025 - https://www.researchgate.net/publication/288666648_Queue_Jump_Lane_Transit_Signal_Priority_and_Stop_Location_Evaluation_of_Transit_Preferential_Treatments_Using_Microsimulation
Transit Signal Priority	2.1 minutes per trip 8% reduction in travel time per trip	Total Travel Time x 0.08	Transportation Systems Management and Operations Benefit-Cost Analysis Compendium: Transit Operations, FHWA Office of Operations, May 20, 2020. Accessed October 2025 - https://www.sciencedirect.com/science/article/pii/S2046043023000035#:~:text=With%20TSP%2C%20the%20study%20corridor,buses%20and%20all%20other%20vehicles
All Door Boarding	38% reduction in boarding times (2.5 to 1.5 sec per passenger with two door channels)	Total dwell time in seconds x .38	Characteristics of Bus Rapid Transit for Decision-Making, Federal Transit Administration, US Department of Transportation, August 2004. Accessed October 2025 - https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/CBRT.pdf

Notes: NA = not applicable. No research was available for bus island travel time savings, and savings from extending turn lanes will depend on delays experienced by transit vehicles with current congestion.

Table C-2 provides a review of bus stop balancing and bus stop islands travel time savings. The analysis was prepared by WTA staff.

Table C-2 Go Line Proposed Bus Stop Balancing and Bus Stop Island Time Savings

Go Line	Overall Average Dwell Time*	Bus Stop Balancing Time Savings**	Bus Stop Island Time Savings***	Total Bus Stop Improvements Total Time Savings
Blue	19 minutes, 18 seconds	3 minutes, 26 seconds	51 seconds	4 minutes, 17 seconds
Gold	19 minutes, 42 seconds	3 minutes, 32 seconds	12 seconds	3 minutes, 44 seconds
Green	13 minutes, 8 seconds	2 minutes, 6 seconds	15 seconds	2 minutes, 21 seconds
Plum	4 minutes, 38 seconds	10 seconds	0 seconds	10 seconds
*weekdays, October 2025 ** round trip *** average dwell time * 20%				

Table C-3 to C-6 summarize the potential travel time savings based on the proposed LPA. The travel time savings for bus stop balancing and bus islands was based on the WTA calculations presented above.

Table C-3 Plum Line Travel Time Savings by Treatment

Treatment	Inbound	Outbound	Inbound Savings (sec)	Outbound Savings (sec)
Bus Stop Balancing	1	0	10	0
Transit Signal Priority	7	7	72	72
Queue Jump	1	0	9	0
All Door Boarding	6	6	50	50
Total Reduction (sec)	N/A	N/A	**141 (2.3 mins)**	**122 (2 mins)**
Runtime Reduction (%)	N/A	N/A	**16%**	**14%**
Assumes Current Inbound and Outbound Runtime of 15 mins				

Table C-4 Green Line Travel Time Savings by Treatment

Treatment	Inbound	Outbound	Inbound Savings (sec)	Outbound Savings (sec)
Bus Stop Balancing	5	4	70	56
Bus Island	1	3	4	13
Transit Signal Priority	7	7	101	101
Queue Jump	0	1	0	9
All Door Boarding	21	21	176	176
Total Reduction (sec)	N/A	N/A	**351 (5.9 mins)**	**355 (5.9 mins)**
Runtime Reduction (%)	N/A	N/A	**28%**	**28%**

Assumes Current Inbound and Outbound Runtime of 21 mins

Table C-5 Gold Line Travel Time Savings by Treatment

Treatment	Inbound	Outbound	Inbound Savings (sec)	Outbound Savings (sec)
Bus Stop Balancing	5	8	82	130
Bus Island	1	4	4	18
Transit Signal Priority	17	17	144	144
Queue Jump	1	1	9	9
All Door Boarding	28	28	234	234
Total Reduction (sec)	N/A	N/A	**473 (7.9 mins)**	**535 (8.9 mins)**
Runtime Reduction (%)	N/A	N/A	**26%**	**30%**
Assumes Current Inbound and Outbound Runtime of 30 mins				

Table C-6 Blue Line Travel Time Savings by Treatment

Treatment	Inbound	Outbound	Inbound Savings (sec)	Outbound Savings (sec)
Bus Stop Balancing	4	5	92	114
Bus Island	6	5	31	26
Transit Signal Priority	9	10	158	96
Queue Jump Lane	1	1	9	9
All Door Boarding	17	19	168	188
Total Reduction (sec)	N/A	N/A	**458 (7.6 mins)**	**433 (7.2 mins)**
Runtime Reduction (%)	N/A	N/A	**23%**	**36%**
Assumes Current Inbound Runtime of 33 mins Assumes Current Outbound Runtime of 20 mins				

Appendix D – Cost Analysis Method

Whatcom Transit Authority (WTA) - Order of Magnitude Cost Estimate Assumptions

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WTA - Programmatic Costs

30%	**MISCELLANEOUS COSTS**	
	10%	TRAFFIC CONTROL %
	3%	EROSION CONTROL %
	4%	STAGING %
	10%	MOBILIZATION %
	3%	SURVEY %
50%	**GENERAL/SOFT COSTS**	
	2%	PLANNING %
	5%	PERMITTING %
	15%	DESIGN %
	10%	CONSTRUCTION MANAGEMENT %
	10%	CONSTRUCTION CONTINGENCY %
	5%	ADMIN STAFF %
	3%	PROJECT CLOSEOUT %
	OTHER	
	40%	GENERAL CONTINGENCY ALLOCATION % (KNOWN AND UNKNOWN COSTS)
	25%	RISK ALLOCATION CONTINGENCY % (UNKNOWN RISK COSTS)

Soft Cost Assumptions

General/Soft Costs

ITEM	PERCENTAGE	NOTES/REFERENCE DOCUMENTATION
PLANNING %	2%	Similar transit work (KC Metro, Pierce Transit)
PERMITTING %	5%	Similar transit work (KC Metro, Pierce Transit)
DESIGN %	15%	Similar transit work (KC Metro, Pierce Transit)
CONSTRUCTION MANAGEMENT %	10%	Similar transit work (KC Metro, Pierce Transit)
CONSTRUCTION CONTINGENCY %	10%	Similar transit work (KC Metro, Pierce Transit)
ADMIN STAFF %	5%	Similar transit work (KC Metro, Pierce Transit)
PROJECT CLOSEOUT %	3%	Similar transit work (KC Metro, Pierce Transit)

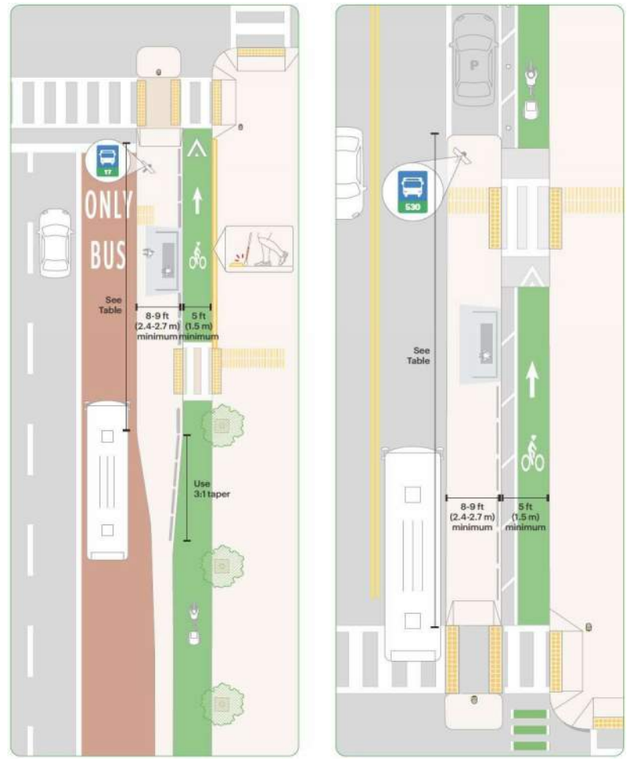
Whatcom Transit Authority - Order of Magnitude Cost Estimate Assumptions

Treatment Item	Quantity	Unit	Unit Cost	Notes/Source(s)
Large bus island (14 FT X 200 FT)		Each	$ 110,000	See backup data.
Medium bus island (14 FT X 150 FT)		Each	$ 90,000	See backup data.
Small bus island (14 FT X 100FT)		Each	$ 60,000	See backup data.
Bus bulb		Each	$ 60,000	See backup data.
Right of Way (urban/dense)		SF	$ 123	Assumed value in 2025 $.
Right of Way (suburban)		SF	$ 94	Assumed value in 2025 $.
Utility relocation		3%		
Sidewalk (8' wide with curb)		LF	$ 100	WSDOT UBA, includes sidewalk conc., top course, curb.
Bicycle facilities		Est.	$ 1,500,000	Not used.
Full lane construction, per mile		Mile	$ 3,500,000	From similar project work and estimates. Includes roadway, sidewalk, drainage.
Half-lane construction, per mile		Mile	$ 2,250,000	From similar project work and estimates. Includes roadway, sidewalk, drainage.
Queue Jump		EA	$ 1,000,000	Lump sum estimate from similar projects.
Rechannelization		LF	$ 12	WSDOT UBA data.
Signal System, Complete		EA	$ 500,000	Not used.
Roundabout		EA	$ 2,175,000	From similar project work and estimates. Includes roadway, sidewalk, drainage.
Median treatment		EA	$ 25,000	10' wide with 2-0.5' curbs and 6" HMA, WSDOT UBA.
Mid-block treatment		EA	$ 60,000	Not used.
C Curb		LF	$ 52	WSDOT UBA data.
Remove Gates		EA	$ 1,500	Lump sum estimate from similar projects.

WTA Treatment Backup Costs

This sheet is used to determine approximate treatment costs based on UBA data and similar project work.

Treatment name	Item Name	Quantity	Unit	Unit Cost	Total	Cost Source	Assumptions
Bus Bulb					**$ 55,585**		
	Removing Sidewalk	89	SY	$ 25	$ 2,225	WSDOT UBA	
	Removing Curb	100	LF	$ 20	$ 2,000	WSDOT UBA	
	Roadway Ex	60	CY	$ 80	$ 4,800	WSDOT UBA	100' by 16' and 1' deep
	Sidewalk	178	SY	$ 20	$ 3,560	WSDOT UBA	100' length, 16' width
	Curb	100	LF	$ 20	$ 2,000	WSDOT UBA	
	Lighting	1	LS	$ 20,000	$ 20,000	Recent estimate from lighting designer	$200/LF
	Signing	1	LS	$ 2,000	$ 2,000	Estimate based on similar project	4 signs @ $500 each
	Drainage	1	LS	$ 15,000	$ 15,000	WSDOT UBA	100 LF of pipe at $50/LF, 3 CB at $3,000 EA, and $2,000 for ex & backfill 45 CY of excavation (assume 4' x 2' x 100' for pipe and 6' dia x 5' deep for CBs)
	Curb Ramp	1	EA	$ 4,000	$ 4,000	WSDOT UBA	
Median Treatment					**$ 24,720**		
	Curb	140	LF	100	$ 14,000	WSDOT UBA	
	Roadway pavement (6" HMA)	67	SY	160	$ 10,720		10' wide, 60' long
Bus Island (Small)					**$ 57,286**		Small bus island 100 FT X 14 FT
	Roadway ex	26	CY	$ 80	$ 2,074	WSDOT UBA	
	Remove sidewalk	0	SY	$ 25	$ -	WSDOT UBA	
	Remove curb	0	LF	$ 20	$ -	WSDOT UBA	
	Sidewalk	100	SY	$ 20	$ 2,000	WSDOT UBA	Small bus island less than 100 LF
	Curb	218	LF	$ 20	$ 4,360	WSDOT UBA	
	HAM CL 1/2 IN	19	TON	200	$ 3,852	WSDOT UBA	
	Lighting	1	LS	$ 20,000	$ 20,000	WSDOT UBA	
	Signage/channelization	1	LS	$ 2,000	$ 2,000	WSDOT UBA	
	Drainage	1	LS	$ 15,000	$ 15,000	WSDOT UBA	
	Curb Ramp	2	EA	$ 4,000	$ 8,000	WSDOT UBA	
Bus Island (Medium)					**$ 82,749**		
	Roadway ex	39	CY	$ 80	$ 3,111	WSDOT UBA	
	Remove sidewalk	0	SY	$ 25	$ -	WSDOT UBA	
	Remove curb	0	LF	$ 20	$ -	WSDOT UBA	
	Sidewalk	150	SY	$ 20	$ 3,000	WSDOT UBA	Medium bus island 150 LF X 14 FT
	Curb	318	LF	$ 20	$ 6,360	WSDOT UBA	
	Roadway pavement	29	TON	200	$ 5,778	WSDOT UBA	
	Lighting	1	LS	$ 25,000	$ 25,000	WSDOT UBA	
	Signage/channelization	1	LS	$ 3,500	$ 3,500	WSDOT UBA	
	Drainage	1	LS	$ 20,000	$ 20,000	WSDOT UBA	
	Curb Ramp	4	EA	$ 4,000	$ 16,000	WSDOT UBA	
Bus Island (Large)					**$ 100,212**		
	Roadway ex	52	CY	$ 80	$ 4,148	WSDOT UBA	
	Remove sidewalk	0	SY	$ 25	$ -	WSDOT UBA	
	Remove curb	0	LF	$ 20	$ -	WSDOT UBA	
	Sidewalk	200	SY	$ 20	$ 4,000	WSDOT UBA	Large bus island 200 LF X 14 FT
	Curb	418	LF	$ 20	$ 8,360	WSDOT UBA	
	Roadway pavement	39	TON	200	$ 7,704	WSDOT UBA	
	Lighting	1	LS	$ 30,000	$ 30,000	WSDOT UBA	
	Signage/channelization	1	LS	$ 5,000	$ 5,000	WSDOT UBA	
	Drainage	1	LS	$ 25,000	$ 25,000	WSDOT UBA	
	Curb Ramp	4	EA	$ 4,000	$ 16,000	WSDOT UBA	



TYPES OF IMPROVEMENTS	DESRIPTION OF IMPROVEMENTS / NOTES
Bus stop island	Bus stop islands are designed to allow buses to stop in lane where passgengers use a crossing to reach the bus. Includes removal of existing materials above utilities, curb/roadway asphalt, installation of concrete sidewalk area for bus island, raised bike lane, illumination, permenant signanage, and drainage.
Bus lane	Travel lanes reserved for exclusive or prioritized use of buses.
Queue jump	Roadway geometry that provides perference to buses at intersections. Includes striping and signing at a location with an existing right turn pocket and receiving lane.
Turn restrictions (c-curb or similar)	Concrete curb used in roadway to prevent turning movements across road.
TSP (Transit Signal Prioritization)	TSP reduces travel times for buses by avoiding the need to stop and start at signalized intersections. TSP will not be included in estimate due to system-wide nature of improvements.
Median	A raised median can be either curb height or higher. They can range from a narrow raised concrete island to a landscaped area. Raised medians extend for most or all of a street block. They reduce turning movements, provides traffic calming, and doscourages mid-block crossings. This will include 6" traffic curb on each side, and a variable width of landscaping.
Bike lane	Assumed min. 6' wide.
Sidewalk	Assumed 8' wide with curb.
Real time signage	Real time signage costs to be provided by WTA.
Turn pocket extension	Extending a left or right turn lane at a signal to reduce the potential for turn lanes being blocked by traffic.
Roundabout	The roundabout cost includes roadway removals, demo, new HMA pavement, sidewalk, curb ramps, splitter islands, drainage improvements.
Bus bulbs	Includes removal of ex materials above utility, curb and asphalt, installation of sidewalk with curb, illumination, curb ramp (1), and permenant signing, drainage
Gate removal	Gate removals assumed as "removal of structures and obstructions".

Treatments	Short Term									Long Term			
	Gold A*	Gold B**	Gold C	Gold D	Green	Blue A	Blue B	Blue C	Plum	Gold	Green	Blue	Plum
Large Bus Island (EA)		1				2		1					
Medium Bus Island (EA)						4							
Small Bus Island (EA)					3								
C Curb (LF)			1870	290									
Bus Only Lane - Constructed (LF)*	340									4900			
Bus Only Lane - Rechannelized (LF)**		1700											
Queue Jump (EA)				2							1		1
Extend Crossing Median (EA)					1								
Gates (EA)						2							
Turn Pocket Extension (LF)										150			
Roundabout (EA)										1			
Contractor Cost (with Misc. 30%)	*$ 292,992*	*$ 169,520*	*$ 126,412*	*$ 2,619,604*	*$ 266,500*	*$ 757,900*	*$ -*	*$ 143,000*	*$ -*	*$ 7,052,378*	*$ 1,300,000*	*$ -*	*$ 1,300,000*
Implementation Cost (w/o contingency or allowance)	*$ 439,489*	*$ 254,280*	*$ 189,618*	*$ 3,929,406*	*$ 399,750*	*$ 1,136,850*	*$ -*	*$ 214,500*	*$ -*	*$ 10,578,567*	*$ 1,950,000*	*$ -*	*$ 1,950,000*
Full Cost of Implementation	**$ 725,156**	**$ 419,562**	**$ 312,870**	**$ 6,483,520**	**$ 659,588**	**$ 1,875,803**	**$ -**	**$ 353,925**	**$ -**	**$ 17,454,635**	**$ 3,217,500**	**$ -**	**$ 3,217,500**

Assumptions
* Requires construction of a lane
** Requires rechannelization of a lane

Full Implementation Costs by Corridor (Short Term vs Long Term)

WTA Corridor	Cost ($)	
	Short Term	Long Term
Gold	$ 7,941,200	$ 17,454,700
Green	$ 659,600	$ 3,217,500
Blue	$ 2,229,800	$ -
Plum	$ -	$ 3,217,500

Corridor	Segment	Opportunity	Number/Measure	System wide/Long term/Short term	Notes
Gold	N/A	TSP	10.00	System wide	TSPs to not be included in take-offs and estimate, TSPs will require transit-system wide improvements.
Gold	A	BTS to Alabama	1.00	Short term	Longer term projects due to bike/ped plans and downtown study
Gold	B	Bus stop island	1.00	Short term	Bus stop island at Alabama and Dean
Gold	B	Bus lane	1.00	Short term	Bus lane on Alabama St between Dean Ave and Iron St outbound (peak hour outbound bus lane in center turn lane or c curb)
Gold	C	C Curb	-	Short term	Turn restrictions (C curbs) on Alabama from Queen to Undine
Gold	C	Turn restrictions	-	Short term	Turn restrictions on Woburn at E Connecticut and E Maryland
Gold	C	Transit hub	1.00	Short term	Develop Barkley transit hub - WTA has cost estimate and initial design
Gold	C	Grade seperated crossing	1.00	Short term	Grade separated crossing Woburn St & Railroad trail, as described in existing plans - This is funded and constructed by Talbot once PM peak hour trips warrant (no need for cost estimate)
Gold	D	Queue jump	1.00	Short term	Queue jump at Bakerview and Cordata
Gold	D	Turn restrictions	-	Short term	Turn restriction on Orleans St into Safeway parking lot
Gold	D	Queue jump	1.00	Short term	Queue jump James St/Birchwood Ave/Orchard Dr intersection outbound
Green	N/A	TSP	7.00	System wide	TSPs to not be included in take-offs and estimate, TSPs will require transit-system wide improvements.
Green	N/A	Bus stop island	3.00	Short term	Bus stop islands at Dupont and C St (outbound), Dupont and G St (outbound), and Elm St at Jefferson St (outbound)
Green	N/A	Median	-	Short term	Extend the crossing median at outbound stop Northwest Ave and Bakerview Rd (in front of Belleau apartments)
Blue	N/A	TSP	10.00	System wide	TSPs to not be included in take-offs and estimate, TSPs will require transit-system wide improvements.
Blue	A	Gate	2.00	Short term	Gates at high street
Blue	A	Bus stop island	7.00	Short term	Holly St at Billy Frank Jr (inbound), Billy Frank Jr at Laurel (inbound and outbound), Highland Dr at Ridgeway outbound, Bill McDonald Pkwy at Samish Way inbound, Bill McDonald Pkwy at Ferry Way outbound, Bill McDonald Pwky at Birnam Wood inbound ,Bill McDonald Pwky at Samish Way outbound
Blue	B	Unknown	-	Short term	Samish Way between BMD and Lincoln
Blue	C	Bus stop island	1.00	Short term	Lincoln St at Viking Circle outbound
Blue	C	Real time signage	1.00	Short term	To be provided by WTA (known costs)
Plum	N/A	TSP	7.00	System wide	TSPs to not be included in take-offs and estimate, TSPs will require transit-system wide improvements.
Gold	N/A	Turn pocket extension	1.00	Long term	Orleans and Sunset turn pocket extension
Gold	N/A	Bike/ped plan	1.00	Long term	Cornwall long term due to COB plan projects - Bike/ped plan and Downtown Transp plan
Gold	N/A	Bus only lane	1.00	Long term	Further study on Woburn to determine potential for bus only lane during peak periods only
Gold	N/A	Roundabout	1.00	Long term	Evaluate a roundabout for the Alabama St/Woburn St intersection
Green	N/A	Queue jump	1.00	Long term	Queue jump at Northwest and Birchwood
Blue	N/A	Operations study	1.00	Long term	Samish corridor operations study between Lincoln and BMD Pkwy improvements
Plum	N/A	Queue jump	1.00	Long term	Queue jump at Lakeway and Woburn inbound