Funding Application

Competition
Regional FHWA

Application Type
Corridors Serving Centers

Status
submitted

Submitted:
April 19th, 2018 12:57 PM

Prepopulated with screening form?
Yes

Project Information

1. Project Title
Swift Orange Line Expansion Buses

2. Regional Transportation Plan ID
5335

3. Sponsoring Agency
Community Transit

4. Cosponsors
N/A

5. Does the sponsoring agency have "Certification Acceptance" status from WSDOT?
No

6. If not, which agency will serve as your CA sponsor?
N/A

Contact Information

1. Contact name
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Project Description

1. Project Scope
Community Transit is currently completing a feasibility study for their third line of Swift Bus Rapid Transit, the Orange Line. The Swift Orange Line will serve the Lynnwood Regional Growth Center and locally designated Ash Way Urban Center and Mill Creek Town Center. The Swift Orange Line will provide all day high capacity transit connections to Lynnwood Transit Center and the future Sound Transit LINK Light Rail service to Lynnwood. Community Transit is requesting funding for the purchase of seventeen (17) 60 foot articulated Swift expansion buses to deliver this service. Community Transit will be entering into the FTA Capital Investment Grant Program Project Development phase at the end of 2018, with a goal to begin revenue service in 2024. Timing for this project is important, the Swift Orange Line needs to be complete in early 2024 in order to service Sound Transit’s LINK Light Rail slated to begin operation in mid 2024. The Swift Orange Line Buses will operate 57,810 annual service hours on a 10.5 mile route serving 26 stations and 2 terminals (Edmonds Community College & McCollum Park & Ride).

2. Project Justification, Need, or Purpose
Community Transit is building a network of Swift BRT service in Snohomish County. We are requesting funding for seventeen (17) - 60 foot expansion buses to operate the Swift Orange Line. The Swift Orange Line will connect the east-west corridors 164th Street and 196th Street with the Lynnwood Regional Growth Center, Ash Way Urban Center, Mill Creek Town Center and Edmonds Community College.

*See attachment Swift Orange Line Alignment

Implementing the Swift Orange Line addresses the following needs in Snohomish County:
• Need for high capacity transit service in areas with high employment and residential density i.e. the Lynnwood Regional Growth Center & Ash Way Park & Ride.
• Lack of east-west mobility options to feed Sound Transit's Link Light Rail coming in 2024.
• Transit service delay on the 164th corridor currently designated by Snohomish County at “ultimate capacity”.
• Local and regional land use and development goals that identify the need for high capacity transit service in the project area.
• Increased access to transit service that removes the need to drive in a single occupant vehicle (SOV)

We have completed a feasibility study and have identified the preferred alignment for the Swift Orange Line. The feasibility study also identified the most appropriate east-west transit priority infrastructure along 164th Street and 196th Street to ensure BRT speed and reliability as well as potential station locations. As Sound Transit completes LINK Light Rail to Lynnwood in 2024, the Swift Orange Line will help provide access to the regional network, connect communities and provide increased economic opportunities. The advent of LINK Light Rail to the Lynnwood will dramatically change travel patterns with the all-day frequency of the Swift Orange Line connecting to all-day frequency of regional light rail service. This is a huge change from what exists today and greatly opens up opportunities to use transit for many purposes. For example a customer will be able to utilize the Swift Orange Line to get to a medical appointment without having to worry about how to get back in the middle of the day or how there might not be parking when they want to go. It also provides greater access for individuals with jobs or classes that aren’t the typical 8-5. The Swift Orange Line will also provide good service on the weekends which is where Community Transit has recently seen the greatest percent growth in ridership for the existing Swift Blue line.

Community Transit received FTA 5307 competitive funds to begin the federally required FTA “Project Development Phase” in order to be eligible for FTA Capital Investment Program, Small Starts funding. Community Transit will begin Project Development in late 2018 which encompasses the environmental approval process, development review, selection of a locally preferred alternative, completion of 100% engineering and design and gaining commitment of all non FTA 5309 funding.

Upon completion of Project Development Community Transit's Swift Orange Line will be rated and eligible for FTA Capital Investment grant funding through the Small Starts program.

Project Location

1. **Project Location**
   164th ST and 196th ST

2. **Please identify the county(ies) in which the project is located.**
   Snohomish

3. **Crossroad/landmark nearest the beginning of the project**
   McCollum Park & Ride

4. **Crossroad/landmark nearest the end of the project**
   Edmonds Community College

5. **Map and project graphics**
   Swift_Orange_Line_Alignment.pdf

Plan Consistency

1. **Is the project specifically identified in a local comprehensive plan?**
   Yes

2. **If yes, please indicate the (1) plan name, (2) relevant section(s), and (3) page number where it can be found.**
   Community Transit's 2011 Long Range Transit Plan
   Chapter 2 Transit Emphasis Corridors
   2017-2022 Transit Development Plan
   Pages 53,64,68,102,110 Table 12.1 Action 8

   City of Mill Creek Comprehensive Plan 2015
   Goal Statements
Encourage local and regional public transportation systems that contribute to the relief of traffic congestion, promote energy conservation, and enhance mobility for the community.

Establish land uses and urban patterns that support public transportation and promote ridership.

Improve public transportation service accessibility for elderly, disabled, low and moderate income, youth, and other mobility-disadvantaged people.

Incorporate public transportation in the design of all major public and private projects.

Improve circulation in and around the community by promoting alternatives to single-occupant auto use.

Residential Development

Create well designed, compact medium and high density residential neighborhoods in appropriate locations, within close proximity to commercial areas that offer facilities, transit, and other urban services.

The City should coordinate with transit agencies on both land development and capital improvement projects to provide increased service and facilities where appropriate.

Mill Creek coordinates with transit agencies, Snohomish County and WSDOT to improve local bus service and plan capital improvement projects on regionally significant corridors such as the RSSH and 164th Street SE.

The City of Lynnwood – Comprehensive Plan – November 2016

Finding LU-13. Sound Transit’s development of the Lynnwood Link Extension and Community Transit’s continued deployment of the Swift Bus service will expand mobility options within and to/from Lynnwood. Voter approval of Sound Transit 3 (ST3) is expected to include an extension of light rail northward through Lynnwood to Everett.

Policy LU-23. Subarea plans should be prepared for light rail and BRT transit stations to advance transit-oriented development (TOD) principles.

Policy CC-18.7 Support Community Transit’s implementation of its Long Range Transit Plan which encourages bus ridership, expansion of Bus Rapid Transit (BRT) Swift Line and the Commute Trip Reduction (CTR) program to continue the reduction of single occupant vehicle trips.

Policy T-3 Work with the transit providers to make transit an attractive travel option for local residents, employees and users of regional facilities.

Strategy T-9.3 Strive to achieve by 2035 a non-single-occupancy vehicle (transit, bicycling, walking, car/vanpooling, telecommuting, or other “virtual” commute) mode split of percent for peak period trips in the City Center Subarea. Do this by providing a pedestrian- and transit-supportive environment, developing supportive land uses, working with regional transit agencies to provide expanded transit options, including light rail and bus rapid transit, enhancing transportation demand management strategies, and implementing a parking development and management plan.

Strategy ER-8.1.2 Cooperate with regional transit authorities (Sound Transit, Community Transit, etc…) to encourage the use of various transit options, including carpools, buses, and light rail.

City Center Sub-Area Plan
Restructure the City Center’s growth toward a more concentrated, mixed-use, pedestrian friendly and transit-supportive center.

Snohomish County Comprehensive Plan
Transportation Element – July 2015
Table 11 Page 44
Core Corridors
196th St SW/Alderwood Mall Blvd/164th St SW/SE

Snohomish County Comprehensive Plan 2015
Section A-9
Primary corridor: Denotes principal arterial roadways that serve designated centers and would have additional design features to accommodate several modes of travel (i.e., transit, auto, bicycle and pedestrian). These design features could include HOV lanes, bus pull-outs, walkways and bikeways, and signal priority for HOV carpools, vanpools, and buses (i.e., 128th Street SW; 164th Street SW).

Coordination
The county will continue working with the transit agencies and cities within the county to coordinate the preparation of land use, circulation, and transit plans, which include: future transit routes and proposed route changes including fixed-route bus service, commuter and light-rail corridor alignments, and bus rapid transit (BRT) services;

In Snohomish County many measures are planned for the next 20 years that will provide positive results in the reduction in per capita VMT. Specific actions include: the expansion of Sound Transit’s light rail system to Lynnwood and eventually to Everett, the designation of Transit Emphasis Corridors and the buildout of Community Transit’s Swift bus rapid transit system, further development of the bicycle network, and programs to provide pedestrian connectivity. Analysis done for this TE has shown that per capita VMT in Snohomish County will be reduced by 6 percent by 2035.

E. Supportive Public Transportation Improvements
Public transportation services and facilities provide support to the county’s plans for land use by offering the public additional choices for travel. Use of public transportation tends to reduce the demand for travel by automobile, thereby mitigating traffic congestion in some of the county’s major corridors. Transit facilities and services are expected to change significantly with the arrival of Sound Transit’s (ST) Link light rail and the expansion of Community Transit’s (CT) Swift BRT.

These light rail extensions together with CT’s BRT corridors provide a HCT framework that will allow future employment and population growth in southwest Snohomish County.

See attached Swift Orange Line Alignment Map
The Swift Orange Line will serve the Lynnwood Regional Growth Center as well as the locally designated Ash Way Urban Center and the Mill Creek Town Center.

Federal Functional Classification

1. Functional class name
   00 Not applicable (transit, enhancements, Etc.)

Support for Centers

1. Describe the relationship of the project to the center(s) it is intended to support. For example, is it located within a designated regional, countywide or local center, or is it located along a corridor connecting to one of these areas?
   See attached Swift Orange Line Alignment Map
   The Swift Orange Line will serve the Lynnwood Regional Growth Center as well as the locally designated Ash Way Urban Center and the Mill Creek Town Center.

Criteria: Benefit to Regional Growth or Manufacturing/Industrial Center
1. Describe how this project will benefit or support the housing and employment development in a regional growth center(s) and/or employment growth in a manufacturing/industrial center(s). Does it support multiple centers? Please provide a citation of the relevant policies and/or specific project references in a subarea plan or in the comprehensive plan.

PSRC DATA for Swift Orange Line:
2017:
Entire Alignment: Population 69,400 Total Employment 33,500
Station Areas: Population 45,600 Total Employment 30,800
2040:
Entire Alignment: Population 74,300 Total Employment 49,100
Station Areas: Population 66,800 Total Employment 44,100

This project supports the Lynnwood Regional Growth Center as well as the locally designated Ash Way Urban Center and the Mill Creek Town Center.

The median house price SW Snohomish County in January 2018 (source NWMLS) was $542,000 with a 12.2% increase from 2017 in comparison neighboring SE Snohomish County shows a median house price $655,000 with 9.2% increase. North King County Ballard/Greenlake and Richmond Beach Shoreline has a median house price of $694,000 with a 14% increase from 2017. Housing growth in SW Snohomish County is still much for affordable and is forecasted to see continued growth for affordable housing in the next 5 years. In Lynnwood’s City Center and Ash Way Urban Center the rental markets are also 20 to 30% less than rents found in Eastside Cities and North Seattle making the 196th and 164th areas affordable for renters.

In the Lynnwood City Center there are 349 apartment units under construction with a majority being affordable. City Center Senior Living Apartments (296) is mixed income.

The Lynnwood Regional Growth Center has the opportunity to capture demand from millennials seeking lower-cost housing that has good transit accessibility.

The City of Lynnwood has incentives for development such as density bonuses, property tax exemptions for 8-12 years for housing projects over 50 units that meet LEED Silver Ratings and impact fee exemptions for multi-family or commercial projects that are a minimum of four stories and accommodate 60% of project parking in above or below grade parking structures.

Lynnwood’s City Center Subarea Plan where the Swift Orange Line will meet LINK light rail is the area designated to have the most growth for the next ten years in the City. Within the Snohomish County portion of the Swift Orange Line, 448 multi-family units are in development, 124 townhouse units, 544 apartment units within 4 different complexes and 130 detached units in 6 separate locations and 17 short plat lots.

The City of Lynnwood continues to see development in the City Center core, 168,445 sq. ft. of new retail and restaurants located at Alderwood Mall adjacent to the old Sears building and another 6,715 sq. ft. of new retail adjacent to Macys. A Sprouts Farmer Market which will be 30,000 sq. ft. for a high end grocery store is slated for 2019. The Hilton Garden chain is building a 150 room hotel along 37th Ave W and a 200,175 sq. ft. mixed use building with retail, office and multi-family is planned along 68th Ave W.

In Mill Creek a planned expansion of the Mill Creek Commons building, 3 additional buildings with 31,000 additional sq. ft. an indoor sports facility at 93,370 sq. ft. and a 77,000 sq. ft. medical building on 164th. ST SW. The Mill Creek Vista Industrial Park will be adding three additional buildings for a total of 31,000 sq. ft.

The Swift Orange Line will provide east-west high capacity transit service within dense residential areas and where future growth is designated to occur. All three jurisdictions, Lynnwood, Snohomish County and Mill Creek's comprehensive plans call for an increase to transit service for planned growth and to mitigate congestion.

2. Describe how the project provides or benefits a range of travel modes to users traveling to/from centers, or if it provides a missing mode.

A high proportion of transit trips begin/end with a walk or bike trip, Community Transit's 2017 On-Board Survey shows that 71% of current Swift Blue line riders access the service via walking and 8% via biking. Swift also has the greatest proportion of non-commuter trips at 48% and 20% of Swift riders are transferring to commuter services. *Data source CT 2017 On-Board Survey conducted by Nelson Nygaard.

The proposed Swift BRT Orange line corridor is well configured for transit service with a dense mixture of residential and commercial development adjacent to the roadway as well as a complete pedestrian network and bicycle lanes on significant portions of the route. Walk shed analysis from our Feasibility Study is .39 av. sq./mile.

What is missing is the east-west high capacity transit service connecting to regional high capacity transit service which will include LINK light rail in Lynnwood, that is what the Swift BRT Orange line will provide.

3. Describe how the project will benefit a variety of user groups, including commuters, residents, and/or commercial users.

Community Transit’s 2017 On-Board Survey provides timely data for our current Swift Blue line which we believe will be replicated on our future Swift lines. In 2017 our Swift Blue Line had a 30% increase in new riders, highlighting the accessibility and convenience of Swift BRT. In 2017, 72% of Swift Riders were Adults, 13% Youth and 11% Senior/Medicare. Swift service shows a good balance of trip purposes, with 35% of all Swift trips used for work and 32% other such as appointments, shopping, accessing services and leisure.
4. **Describe how the project will benefit minority and low-income populations as identified in the President's Order for Environmental Justice, seniors, people with disabilities, those located in highly impacted communities, and/or areas experiencing high levels of unemployment or chronic underemployment; please be specific and provide data where applicable.**

Per our 2017 On-Board Survey:
- 43% of Swift riders identified as being non-White/Caucasian.
- 28% of Swift riders identified as being non-English speaking.
- 84% of Swift weekday riders either don't have access to a vehicle or are unable to drive.
- 48% of Swift riders have an income under the current federal poverty level.

For the Swift Orange Line Corridor, user groups being served include:
- Senior 11.7%
- Youth 22.8%
- Limited English 9.4%
- Minority 13.8%
- Poverty 44.1%
- Median household income is $40,100 which is 25% lower than the City overall and 73% lower than Snohomish County.
- Commuters to and from the Regional Growth Center, will now have improved east-west access high capacity transit connecting to the Lynnwood LINK Light Rail as well as additional regional and local service operating out of the Lynnwood Transit Center.

Residents along the corridor with a population of 69,400 (2017 data) and forecasted to reach 743,000 in population by 2040 will not need to access a car to go to work, medical appointments, school (Edmonds Community College) and other retail and leisure purposes.

*Use of the REMIX tool provides substantive data for the diversity of the Swift BRT Orange Line Corridor.

5. **Describe how the project will support the establishment of new jobs/businesses or the retention of existing jobs/businesses including those in the industry clusters identified in the adopted regional economic strategy.**

Lynnwood's location, highway accessibility and affordable rents makes it attractive to businesses and jobs.

Current business activity areas include the Mill Creek Town Center with over 80 retail stores, boutiques, restaurants and services, City Center Retail, Lynnwood Convention Center and Alderwood Mall. A focus of the City of Lynnwood is connecting to existing assets which Swift BRT Orange Line will provide.

With the advent of LINK Light Rail to Lynnwood a new reverse commute job market opens up. The City of Lynnwood has begun marketing and public outreach efforts using business attraction strategies focused on the cost differential of doing business in Seattle and doing business in Lynnwood.

A targeted approach by the City of Lynnwood for industry employment such as life sciences, aerospace and information technologies opens up employment opportunities in the Regional Growth Center has begun in order to be ready for the advent of Light Rail. Lynnwood's City Center Access Study identifies 15,000 new jobs and 4,000 new dwelling units in the sub-area alone placing significant burden on the street network without additional transit service.

PSRC 2016 Lynnwood City Employment Data breaks down to these categories:
- Construction 1,197
- Fire 1,607
- Manufacturing 578
- Retail 7,942
- Services 11,814
- WTU 988
- Government 1,084
- Education 2,414
- TOTAL JOBS: 27,175

This project supports the industry clusters of:
- Tourism and Visitors
- Life Sciences and Global Health
- Information Technology
- Clean Tech
- Manufacturing

Criteria: System Continuity/Long-Term Benefit and Sustainability

1. **Describe how this project supports a long-term strategy to maximize the efficiency of the corridor, including TDM and activities and ITS improvements that use advanced technologies or innovative approaches to improve traffic flow.**
Describe the problem and how this project will remedy it.

Problem:
Lack of east-west transit options in South Snohomish County
Lack of high capacity transit options drive people into cars even if they are accessing transit service at a Transit Center.
Transit Centers along the corridor at over 100% capacity
Current levels of congestion cannot be mitigated by build out of the roadway network
Lack of feeder service to compliment LINK Light Rail at Lynnwood Transit Center

Strategy:
The Swift Orange Line will provide fast, frequent and reliable high capacity transit service on two of the most congested arterials in Snohomish County (164th & 196th), providing an alternative to driving alone. These corridors are also two primary east/west corridors in south Snohomish County, connecting the cities of Edmonds, Lynnwood and Mill Creek.
The Swift Orange line will connect residential areas to higher education institutions (EdCC & WSLU), a regional shopping mall (Alderwood), jobs and transfer points to other high capacity transit systems that provide connections to job centers in King County and the Everett MIC, reducing the need for single occupant vehicles.

"Snohomish County Urban Center Code: Centers are compact, well-designed areas that concentrate a variety of land uses all in one place. Centers are also people-oriented living and working places that allow residents to walk to shops and perhaps a bus stop or other mass transit stations. Centers have been identified by the county where significant population and employment growth can be located, a community wide focal point can be provided, and the increased use of transit, bicycling, and walking can be supported."

City of Lynnwood's City Center Sub-Area Plan: "Restructure the City Center's growth toward a more concentrated, mixed-use, pedestrian friendly and transit-supportive center."

"Transit will play a much more important role in the City Center than it does today. In addition to the regional transit services, there will be extensive and enhanced local transit to serve residents, employees and visitors within and around the City Center."

As demonstrated in both planning and infrastructure improvements both the City of Lynnwood and Snohomish County have a strategy and understanding that we cannot build ourselves out of congestion. With 164th being designated at ultimate capacity and expansion of the roadway very expensive, high capacity transit is the perfect remedy to mitigate SOV travel and get people where they need to go.
The 196th Street SW Improvement Project currently in construction has a goal to improve access and circulation to/within the City Center with infrastructure improvements such as BAT lanes, center median turn lanes and sidewalk improvements. For full efficiency of this corridor with infrastructure improvements is high capacity transit service to serve more people.
Secondly with LINK Light Rail coming to Lynnwood in 2024 the roadway network cannot support people accessing the rail system by car even if enough parking was built to accommodate the single occupant vehicles. Simply put for the 164th Street and 196th Street Corridors to operate efficiently and handle growth, the Swift BRT Orange Line must be in service.

Community Transit has been providing TDM programs and services in Snohomish County for over 25 years. These programs help reduce traffic congestion making our existing transportation investments perform better, and improve outcomes for new transportation investments by developing the market for Community Transit bus and vanpool services to potential riders throughout the county.

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The logical segment for the Swift BRT Orange Line is the connection of two main east/west corridors - 164th Street and 196th Street as show in Swift Orange Alignment map.

The 164th Corridor between 164th and 196th which was identified because of the high residential market and the roadway improvements the City of Lynnwood is getting ready to implement.

The locally preferred alignment analyzed and balance factors such as:

- Transit Market Served
- Ridership Potential
- Connections to other local and regional transit service
- Connections to residential, employment, medical, government and educational centers.
- Economic development opportunities
- Connection/pathway to Link Light Rail
- Community Transit worked with its jurisdictions, Snohomish County and the Cities of Lynnwood and Mill Creek to ensure that the alignment were shared goals and objectives.
- Which included: Support ST's LINK Light Rail, Serve Edmonds Community College, Alderwood Mall, Mill Creek Town Center, enhance mobility and improve east/west travel to include reliability of travel time and connection to the Swift Blue line along SR 99.

3. Describe how the project fills in a missing link or removes barriers to/from a center.

Current barriers to the Lynnwood Regional Growth Center and Ash Way Urban Center are SOV congestion and lack of east-west access to high capacity transit service.

Currently both the Lynnwood Transit Center and the Ash Way Transit Center operate at 100% capacity, the 164th Corridor has been designated at ultimate capacity and 196th is the second most congested corridor within the Lynnwood Regional Growth Center.

If people aren't able to get to the transit centers by 7 am on weekdays there is no available parking driving people into SOV's to commute. 52% of people parking at the Lynnwood Transit Center live within 2 1/2 miles of it. With to far to walk and no way to access the regional transit service at Lynnwood Transit Center, people drive to Lynnwood transit center. When they are unable to find parking they continue to their destination by driving alone.

The only way to move more people and provide greater access to transit is to increase frequency of service to regional transit service.

The Swift BRT Orange Line will provide that missing link to make transit work without the need for driving in a car to access regional transit service. Residents along the corridor will now have fast/frequent service local and regional transit.

4. Describe how this project will relieve pressure or remove a bottleneck on the regional transportation system and how this will positively impact overall system performance.

196th Street SW in Lynnwood (Swift BRT Orange Line project area) experiences the highest volumes of traffic of any local street in the City (35,000 ADT) it also experiences the highest level of collisions (other than SR 99).

Southwest Snohomish County is a fast growing area with residential, commercial and industrial developments. The 164th Street SW corridor was designated by the County Council at ultimate capacity in 2007. To maintain mobility and preserve capacity in this corridor, Snohomish County Public Works must implement a congestion management strategy including Transit Systems Management (TSM), Transit Demand Management (TDM), and transit access management.

The 164th Street SW/SE corridor (35th Ave SW to SR 527) is also at or near capacity and along with the intersections with Interstate 5 is among the most severe congestion in Snohomish County. The 2035 forecast for this arterial is for a PM peak hour traffic between 3,700 and 4,400 vehicles which gives this road a volume to capacity ratio of 1.3 (LOS F is 1.00, this is 30% beyond “F”). The current LOS for the arterial is 1.11. Improvements recommended by the Snohomish County's East/West Corridor study would add capacity to the arterial by adding a BRT lane in each direction, providing an alternate crossing of I-5 to get transit out of the interchange area, and a realignment of Ash Way to move the intersection with 164th farther away from I-5. Traffic operation analysis for this corridor shows that this set of improvements will improve the 2035 transit travel time by about 7 minutes on this corridor which by the County's calculations equates to a 30% improvement over the 2035 travel time.

In our Swift Orange Line Feasibility Study, transit priority treatments have been identified with the goal to reduce travel time and improve reliability along the corridor. On our Swift Green Line which we are in the process of constructing, treatments such as BAT lanes, queue jumps and signal timing provide relief for both transit and general purpose transit. It will be part of the Swift Orange Line project to implement such treatments as well.

5. Describe how this project addresses safety and security.

Swift Stations are designed to create a sense of place for our customers. They are well lit and placed in locations that are near residential and employment density. Risk assessments are conducted within the station siting phase of the project with Community Transit's Risk staff as well as jurisdictional staff to ensure that stations are placed in areas where there is good pedestrian access, close to crosswalks and signals. Swift also has designated Swift Ambassadors that ride Swift to ensure safety and fare compliance. Our Swift Ambassadors work closely with our Transit Police to communicate any safety concerns or needs of our customers.
Describe how the project provides opportunities for active transportation that can lead to public health benefits.

Swift Bus Rapid Transit represents the pinnacle of public transit in Snohomish County. Swift incorporates key elements of bus rapid transit design such as landmark stations, uniquely branded vehicles, off-board fare collection, real-time customer information, priority bus lanes and fast, frequent and reliable service all to make access and convenience available for our customers. Corridors are chosen for BRT service based on high densities, diversity of land use, pedestrian network improvements, BAT lanes and managed parking. Operational design includes curb boarding, passive restraint wheelchair systems with front door boarding, on board bike racks and off board fare collection to support diverse types of users on the fixed route system.

With the Swift Blue line statistic that 71% of Swift riders access it by walking and 8% by biking it is uniquely designed to improve active transportation.

Air Quality and Climate Change: Element Selection

1. Please select one or more elements in the list below that are included in the project’s scope of work, and provide the requested information in the pages to follow.
   Transit and Ferry Service

Air Quality and Climate Change: Transit and Ferry Service

1. What is the current transit ridership for the affected transit stops or routes?
   The Swift Orange Line will be new service for the agency. Year one ridership is predicted to be 5,300 weekday boardings. Several current routes serve areas of the Swift Orange Line alignment. Existing stops located within the Swift Orange Line alignment currently serve 1,940 weekday boardings and 650 weekend boardings. Additionally the Swamp Creek Park & Ride, Ash Way Park & Ride and Lynnwood Transit Center serve 4,353 weekday boardings and 1,607 weekend boardings.

2. What is the average transit trip length for the affected routes?
   The total trip length for the proposed Swift Orange Line alignment is 10.47 miles. The average trip length for the current service in the Swift Blue line is 3.86 miles (2017 DATA)

3. What is the average transit trip length of the entire system?
   The overall average trip length for the entire Community Transit system is 9.4 miles (2017 DATA). Keep in mind a portion of our bus service is one-way peak direction commuter service to and from Seattle.

4. If the project includes a park and ride, how many new stalls are being provided?
   N/A

5. Are there other amenities included to encourage new transit ridership? If so, please describe.
   Amenities such as unique branding, Swift stations designed to create a sense of place with raised platforms, ticket vending machines, ORCA card readers, shelter seating and real time passenger information create an easy user experience. Off-Board fare collection, passive restraint wheelchair, on board bike racks, spacious seating and frequent service so no need for a schedule provide a safe and efficient experience for the customer.
   2017 On-Board Survey data shows that 30% of the 2017 Swift riders were new to the system supporting the accessibility and convenience of using Swift BRT service.

6. What is the expected increase in transit ridership from the project?
   From our feasibility study the Swift Orange Line is estimated to have 5,300 weekday boardings and 1,900 weekend boardings. Within 3 years of operation our Swift Blue line experiences ridership growth of more than 20% on weekdays and 15% on weekends, keep in mind that is without having a connection to a Light Rail service. Current weekday ridership on our Swift Blue Line is 5,530 boarding’s (January 2018). We anticipate that the Swift Orange line will quickly become our highest ridership Swift line and route in our system.

7. If a new or expanded ferry service, what is the length of the driving route being replaced?
   N/A

8. Please describe the source of the project data provided above (e.g., Environmental Impact Statement, EPA/DOE data, traffic study, survey, previous projects, etc.).
   Community Transit has completed a feasibility study for the Swift Orange Line, modeling was done by our consultant WSP based on the FTA approved Sound Transit ridership model. This model was also used for our Swift Blue and Green Lines.
   Community Transit completed a full fixed route On-Board Survey in November 2017. Data from that survey was used for this project application.
PSRC Funding Request

1. **What is the PSRC funding source being requested?**
   - CMAQ

2. **Has this project received PSRC funds previously?**
   - No

3. **If yes, please provide the project's PSRC TIP ID**
   - CT66

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<tr>
<th>Phase</th>
<th>Year</th>
<th>Alternate Year</th>
<th>Amount</th>
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Total Request: $7,000,000.00

**Total Estimated Project Cost and Schedule**

**Planning**

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**Expected year of completion for this phase:** 2018

**PE**

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**Expected year of completion for this phase:** 2020

**ROW**

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**Expected year of completion for this phase:** 2021

**Construction**

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**Expected year of completion for this phase:** 2023

**Other**

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Other State  Secured $10,000,000.00
CMAQ  Unsecured $7,000,000.00

Expected year of completion for this phase: 2023

Summary

1. **Estimated project completion date**
   6/2023

2. **Total project cost**
   $70,150,000.00

Funding Documentation

1. **Documents**
   Swift_Orange_Line_Bus_Expansion_Project_Local_Match_Documentation.pdf

2. Please describe the secure or reasonably expected funds identified in the supporting documentation. For funds that are reasonably expected, an explanation of procedural steps with milestone dates for completion which will be taken to secure the funds for the project or program should also be included.

   Community Transit received $5 million dollars from the 2016 FTA 5307 competition for Project Development, we have also received $10 million dollars in the State's Connecting Washington Transportation Revenue Package for the build out of our Swift HCT system. Our 2017-2022 Transit Development Plan documents reserve of $25 million dollars for the build out of our Swift BRT network.

   Community Transit's financial strategy is to follow the federally prescribed FTA Capital Investment Grant Program Small Starts process. We will request entry into Project Development in 2018 and if approved will follow the FTA Small Starts process requesting a rating in 2020 for appropriation in the 2021 Federal Budget. In the event that the FTA CIG program is eliminated Community Transit will go to Plan B which would be a combination of other federal funds, state Regional Mobility Funds and bonding capacity in order to begin revenue service of the Swift Orange Line to meet Link Light Rail to Lynnwood by 2024.

   Attached is documentation of our FTA 5307 Competitive Funds, State Connecting Washington Funds and 2017-2022 CT TDP.

Project Readiness: PE

1. Are you requesting funds for ONLY a planning study or preliminary engineering? No

2. Is preliminary engineering complete? Yes

3. What was the date of completion (month and year)?
   03/2018

4. Have preliminary plans been submitted to WSDOT for approval? N/A

5. Are there any other PE/Design milestones associated with the project? Please identify and provide dates of completion. You may also use this space to explain any dates above.
   N/A

6. When are preliminary plans expected to be complete?
   N/A

Project Readiness: NEPA

1. What is the current or anticipated level of environmental documentation under the National Environmental Policy Act (NEPA) for this project? Categorical Exclusion (CE)

2. Has the NEPA documentation been approved? No

3. Please provide the date of NEPA approval, or the anticipated date of completion (month and year).
Project Readiness: Right of Way

1. Will Right of Way be required for this project?  
   No

2. How many parcels do you need?  
   N/A

3. What is the zoning in the project area?  
   N/A

4. Discuss the extent to which your schedule reflects the possibility of condemnation and the actions needed to pursue this.  
   N/A

5. Does your agency have experience in conducting right of way acquisitions of similar size and complexity?  
   N/A

6. If not, when do you expect a consultant to be selected, under contract, and ready to start (month and year)?  
   N/A

7. In the box below, please identify all relevant right of way milestones, including the current status and estimated completion date of each.  
   N/A

Project Readiness: Construction

1. Are funds being requested for construction?  
   No

2. Do you have an engineer’s estimate?  
   N/A

3. Engineers estimate document  
   N/A

4. Identify the environmental permits needed for the project and when they are scheduled to be acquired.  
   N/A

5. Are Plans, Specifications & Estimates (PS&E) approved?  
   N/A

6. Please provide the date of approval, or the date when PS&E is scheduled to be submitted for approval (month and year).  
   N/A

7. When is the project scheduled to go to ad (month and year)?  
   N/A

Other Considerations

1. Describe any additional aspects of your project not requested in the evaluation criteria that could be relevant to the final project recommendation and decision-making process.  
   The Swift Orange Line will be the third line of Swift for Community Transit. We have just executed our first FTA Small Starts Single Year Grant agreement. We feel well versed in our ability to fund, engineer and construct this line of Swift. We have and will continue to work with our local jurisdictions the Cities of Lynnwood and Mill Creek and Snohomish County to ensure coordination and collaboration as the project continues.

2. Describe any innovative components included in your project: these could include design elements, cost saving measures, or other innovations.  
   Community Transit continues to refine our construction of Swift with many lessons learned with our first two lines. Additional attention will be paid to the customer experience as the Swift network builds out on transferring between Swift lines. Stations will have color branding so that customers understand which line they will be on, Orange, Blue, Green. We have done long term procurements for pieces of the project such as buses and station kits to ensure cost containment.
3. **Describe the process that your agency uses to determine the benefits of projects; this could include formal cost-benefit analysis, practical design, or some other process by which the benefits of projects are determined.**

   Community Transit has completed a feasibility study for the Swift Orange Line similar to the one completed for the Swift Green Line. Considerations include: Support of LINK Light Rail at Lynnwood Transit Center, Connections to Edmonds Community College, Alderwood Mall, Lynnwood City Center, Ash Way and Swamp Creek Park & Rides, east-west travel options, annual cost/annual hours and travel time.

   Also attached is documentation from our 2017-2022 Transit Development Plan documenting the useful life of our buses at 15 years which is different from the FTA defined useful life at 12 years.

4. **Final documents**

   Swift_BRT_Orange_Line_Bus_Expansion_Project_Link_Integration_Map.pdf,
   Swift_BRT_Orange_Line_Bus_Expansion_Project_Travel_area_with_Swift_BRT.pdf,
   Swift_BRT_Orange_Line_Bus_Expansion_Project_Travel_Area_without_Swift.pdf,
   Swift_Orange_Line_Expansion_Bus_Project_project_level_emissions_evaluation_tool_0.xlsx,
   Swift_Orange_Line_Bus_Expansion_Project_2018_CMAQ_Cost_Effectiveness.pdf,
   Swift_Orange_Line_Bus_Expansion_Project_TDP_Fleet_Useful_Life_adopted_policy.pdf
Shoreline North
Mountlake Terrace
Lynnwood City Center

ST2 Link Light Rail Station, 2024
ST3 BRT Station, 2024
ST3 Link Light Rail Station, 2036
ST3 Link Light Rail Station (provisional), 2036

Future Network Map

Swift Blue Line
Swift Blue Line extension (planned for 2023)
Swift Green Line
Swift Orange Line (planned for 2023)

Future Swift Lines
Transit Emphasis Corridors

ST2 Link Light Rail Station, 2024
ST3 BRT Station, 2024
ST3 Link Light Rail Station, 2036
ST3 Link Light Rail Station (provisional), 2036

communitytransit
Cost Effectiveness Calculation for 2018 CMAQ grant application
Community Transit _ Swift III Orange - Expansion Buses

Cost effectiveness is the dollars requested per emission reduced.

<table>
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<tr>
<th>Funding Request</th>
<th>Useful Life (1)</th>
<th>Annual Emissions Reduction from calculator (2)</th>
<th>Annual Cost Effectiveness</th>
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<td>15</td>
<td>2,009.26</td>
<td>$ 232.26</td>
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(1)
Useful life for buses is 15 years (note: CT routinely uses buses beyond the standard 12 year useful life before they are replaced)

(2)
Emissions Reductions from PSRC calculator tool "Results Summary" tab:
Column "F" Line 19 "total CO2 Reduction kg/day" [1,865.04]
PLUS
Column "H" Line 20 "Total PM2.5 reduction kg/day" [141.22]
=
2,009.26
### All Capital Projects by Fund

#### Capital Projects by Fund Proposed 2017 Budget

<table>
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<tr>
<th>Project</th>
<th>Description</th>
<th>Fund</th>
<th>Actual Costs Through 2016</th>
<th>2016 Expense Forecast</th>
<th>Expenses Through 2016</th>
<th>Overall Project Budget</th>
<th>2016 Amended Budget</th>
<th>2016 Budget Residual</th>
<th>2017 Grant/Other Funding</th>
<th>2017 CT Local Funding</th>
<th>2017 Proposed Budget</th>
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## Transit Projects

(Dollars in thousands)

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<td>Additional Buses</td>
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<td>San Juan County</td>
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<td>Spokane Central City Line</td>
<td>Spokane Transit</td>
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<td>System Enhancements, Expansion and Safety Improvements</td>
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<td>Tri-County Connector</td>
<td>Island Transit</td>
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<td>67th to Fremont Transit Corridor</td>
<td>King County Metro</td>
<td>36, 43</td>
<td>$3,000</td>
<td>$54,391</td>
</tr>
<tr>
<td>East Bremerton Transfer Center</td>
<td>Kitsap Transit</td>
<td>23, 25</td>
<td>$3,000</td>
<td>$57,391</td>
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<tr>
<td>MLK Way/Rainier Avenue S I/C Improvements</td>
<td>City of Seattle</td>
<td>37</td>
<td>$900</td>
<td>$58,291</td>
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<tr>
<td>Northgate Transit Center Pedestrian Bridge</td>
<td>City of Seattle</td>
<td>46</td>
<td>$10,000</td>
<td>$68,291</td>
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<tr>
<td>Park and Ride Development</td>
<td>Mason Transit</td>
<td>35</td>
<td>$9,335</td>
<td>$77,626</td>
</tr>
<tr>
<td>Route 48 North-University Link Station to Loyal Heights</td>
<td>King County Metro</td>
<td>36, 43</td>
<td>$3,000</td>
<td>$80,626</td>
</tr>
<tr>
<td>Silverdale Transfer Center</td>
<td>Kitsap Transit</td>
<td>23, 35</td>
<td>$2,300</td>
<td>$82,926</td>
</tr>
<tr>
<td>SR 7 Express Service Tacoma to Parkland/Spanaway</td>
<td>Pierce Transit</td>
<td>25, 27, 29</td>
<td>$15,000</td>
<td>$97,926</td>
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<tr>
<td>SWIFT II Bus Rapid Transit</td>
<td>Community Transit, Everett Transit</td>
<td>21, 38, 44</td>
<td>$10,000</td>
<td>$107,926</td>
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<tr>
<td>Vancouver Mall Transit Center Relocation and Upgrade</td>
<td>C-TRAN</td>
<td>17, 18, 49</td>
<td>$3,200</td>
<td>$111,126</td>
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</tbody>
</table>
Facility and Technology Expansion Fund

The Facility and Technology Expansion Fund includes capital funding designated for specific projects related to service or technology expansion. The TDP calls for moving $84 million local funding to the Facility and Technology Expansion Fund. *Swift* Green Line capital construction will require approximately $5 million of this funding. Operating base expansion, forecast for 2020, has been allocated $50 million. Community Transit’s portion of the ngORCA project is allocated $9.2 million. Future development of the Swift Orange Line and Swift Blue Line Extension have been allocated $25 million. Beginning in 2022, the fund begins to accumulate an annual contribution toward another future operating base expansion project, projected in 20 years.

![Facility & Technology Expansion Fund: 2017-2022](image)

**Figure 11-11 Facility & Technology Expansion Fund**
10. Capital Plan

Supporting the 38 percent increase in transit service forecast by 2022 requires an ambitious capital program encompassing fleet, facilities and technology. Fleet plans call for both major replacements and expansion to maintain quality and meet higher service levels. Park & ride and transit center construction will improve opportunities for system access and integration of services. New BRT stations and roadway improvements will be built as part of the Swift Green Line project. Master planning for operating facilities will identify improvements needed to accommodate service growth. Technology projects will replace aging legacy systems as well as provide new capabilities to enhance customer information, fare payment and operational effectiveness.

Fleet Replacement

**Bus:** Regular fleet replacement is a high priority for Community Transit in terms of providing the best possible service as well as a cost-effective vehicle maintenance program. While FTA guidelines provide for fixed-route bus replacement after 12 years or 500,000 miles, Community Transit extends bus life significantly beyond this target due to the work of our award-winning mechanics as well as via mid-life engine rebuilds. The average age of fixed-route buses to be replaced under this plan (2017-2022) is 16 years, a target established during the recent recession to conserve capital funding. The vehicle replacement reserve strategy in this plan returns the agency to bus replacements at 15 years, our pre-recession target, by the year 2021.

Specific bus orders planned to replace older vehicles include 45 40-foot buses, 50 60-foot buses and 6 Double Tall buses (replacing 60-foot buses).

**Vanpool:** Replacements include 54 to 57 vans per year for a total of 334 vehicles, 2017-2022.

**DART:** Fleet replacement will total 52 DART buses over the plan period.

Fleet Expansion

**Bus:** Planned service expansion will require significant growth in the bus fleet. By 2022, Community Transit's fleet will grow by 47 buses over 2016 levels. A portion of this growth reflects vehicle purchases initiated in 2016 that will enter service in 2017. New purchases to be initiated during the 2017-2022 period include 26 expansion buses. These include three 40-foot buses, 15 Swift BRT buses and eight Double Tall buses. New buses require a significant specification process and build times can be long.
## New or Expanded Transit Service

**COLOR KEY & DIRECTIONS:**

**REQUIRED USER INPUTS:** Enter project data in dark orange cells.

**OPTIONAL USER INPUTS:** If project data is available, select “No” to opt out of the PSRC default option and enter project data in light orange cells; otherwise select “Yes” to use default data.

**INTERIM CALCULATION:** Values in light blue are calculated by tool according to project details. In some cases, values may be modified to align with project-specific details if available.

**ASSUMPTIONS/CONSTANTS:** Dark blue values are assumptions and constants used for the emissions calculation and cannot be modified.

**RESULTS:** Emissions reductions are shown in green cells.

### INPUTS

<table>
<thead>
<tr>
<th>Variable</th>
<th>Value</th>
<th>Use PRSC regional default value?</th>
<th>PSRC regional default value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year of project implementation</td>
<td>2024</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anticipated increase in number of boardings per day due to project</td>
<td>5,300</td>
<td>Yes</td>
<td>66.7%</td>
</tr>
<tr>
<td>Percent of transit users who would otherwise drive</td>
<td></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Average transit trip length (mi)</td>
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<td>Yes</td>
<td>8.66</td>
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### CONSTANTS & INTERIM CALCULATIONS

<table>
<thead>
<tr>
<th>Variable</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average auto occupancy (ppl/veh)</td>
<td>1.30</td>
</tr>
<tr>
<td>Number of SOV trips reduced per day</td>
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### EMISSION FACTORS

<table>
<thead>
<tr>
<th>Variable</th>
<th>Value</th>
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<tbody>
<tr>
<td>Light duty vehicle CO2 emissions factor (g/mi)</td>
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</tr>
<tr>
<td>Light duty vehicle CO emissions factor (g/mi)</td>
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</tr>
<tr>
<td>Light duty vehicle PM2.5 emissions factor (g/mi)</td>
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<tr>
<td>Light duty vehicle NOx emissions factor (g/mi)</td>
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<tr>
<td>Light duty vehicle VOC emissions factor (g/mi)</td>
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### RESULTS

<table>
<thead>
<tr>
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<tbody>
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<td>Daily VMT reduction (mi/day)</td>
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<td>Total CO2 reduction (kg/day)</td>
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<tr>
<td>Total CO reduction (kg/day)</td>
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<tr>
<td>Total PM2.5 reduction (kg/day)</td>
<td>0.26</td>
</tr>
<tr>
<td>Total NOx reduction (kg/day)</td>
<td>4.19</td>
</tr>
<tr>
<td>Total VOC reduction (kg/day)</td>
<td>1.00</td>
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