

NORTH COUNTIES TRANSPORTATION COALITION PILOT MOBILITY SERVICES REPORT

Final Report 10/13/2020

CONTENTS

Executive Summary	4
Purpose and Need	4
Type of Service, Routing, and Destinations	4
Vehicle Considerations	5
Operating Entity	5
Costs	6
Funding	7
Recommendations	8
Purpose and Need	10
Type of Service, Routing, and Destinations	12
Transit Service Types	12
Service Area	13
Key Destinations	14
Similar Service Providers	17
Operating Scenarios	17
Vehicle Considerations	26
Vehicle Types	26
Vehicle Availability and Sources	28
Operating Entity	32
Factors to consider	32
Costs	35
Scheduling Software Options	36
Revenue Collection	36
Funding	38
COVID-19 Outbreak Response	38
Local Funding Resources	38
Regional Funding Opportunities	39
State Funding Opportunities	39
Federal Funding Opportunities	43
Other Agencies, Corporate Funding, and Private Foundations	44

EXECUTIVE SUMMARY AND RECOMMENDATIONS

EXECUTIVE SUMMARY

PURPOSE AND NEED

The North Counties Transportation Coalition (NCTC) is made up of community and senior centers, tribes, transit agencies, and municipal governments focused on addressing mobility gaps in Camano Island and North Snohomish County. This report outlines mobility service options and includes recommendations related to a pilot mobility service to connect Camano Island, Stanwood, and Smokey Point. Catering to vulnerable populations, including people with disabilities, older adults, and those who are low income is a key focus of the mobility services outlined and recommendations made in this report. Funding for this effort was provided by a state grant to study the development of the pilot mobility service. This report is intended to support funding requests, including the Washington State Department of Transportation (WSDOT) Consolidated Grant.

TYPE OF SERVICE, ROUTING, AND DESTINATIONS

The project team conducted a review of transit service types applicable to this pilot study, which include fixed route service and Demand Response (paratransit) service. While fixed route transit offers predictability in terms of the route and schedule, it can be a challenge in low-density and rural areas. Paratransit service, which offers pickup and drop-off for riders who must provide advance notice of their trip needs, offers more flexibility but does not scale well due to costs and wait times. Hybrid services offer a blend of these two approaches. Hybrid approaches can be structured to offer route deviations or a zone approach that provides regularly scheduled service to geographic areas that are served by additional Demand Response service.

Service area recommendations, informed by a mobility needs survey conducted by NCTC, include Camano Island, Stanwood, Marysville, and Arlington. Within these communities, key destinations are identified, which include a focus on grocery stores in addition to transit centers and other social service providers.

A number of agencies throughout the state offer transit service that is similarly targeted to senior populations and/or rural areas, which offers additional insight into viable service types. Most of these agencies offer a mix of fixed route and paratransit service, with fixed routing that focus on connecting high-activity areas and paratransit providing supplementary coverage. A variation of this model uses loop routes to provide one-way circulation within high-activity areas which complements fixed route and paratransit access *to* these locations. Another variation is a zone service program which circulates on designated days to connect riders to fixed route service.

Two different operating scenarios are considered for the pilot project, outlined below.

SCENARIO 1: HYBRID FIXED ROUTE SERVICE

This scenario envisions a version of fixed route service that connects significant destinations in Camano Island, Stanwood, Smokey Point, and Arlington. While the schedule would have fixed stops and a set timetable, the service would allow for deviations to pick up and drop off passengers within the communities receiving service. Advantages of this scenario include a seamless experience, by which a

user can get door-to-door service with a predictable schedule that serves important regional centers. Challenges of this scenario include a significant total operating time and an operating burden posed by Camano Island's size and remote location.

SCENARIO 2: HYBRID ZONE SERVICE

This scenario rests upon a backbone of a fixed route service between Camano Island, Stanwood, Smokey Point, and Arlington. Because the route deviations for off-route service are removed, the fixed route portion of this service is much more efficient. Zones are defined on Camano Island, Stanwood, and Arlington. A zone service operates within these zones to provide a last-mile connection to the fixed route backbone. In addition to efficiency (the operating time is about half that of scenario 1), advantages to this scenario include scalability—the zone service and fixed route service components can be separately adjusted to accommodate demand as needed. The need for transfers is a drawback of this scenario. In addition, depending on the schedule, overall access may be diminished by offering service only on certain days or parts of day in some locations.

VEHICLE CONSIDERATIONS

Two vehicle categories are explored—including accessible vans and small buses with cut-away chassis. Cut-away chassis offer more capacity and multiple seating layouts that can accommodate a range of accessibility needs. These are higher cost when compared to accessible vans but are expected to have a slightly longer useful life. Accessible vans offer a cheaper option with more limited capacity and a slightly shorter useful life. Access to the rear seats of full-size vans can be difficult, while mini-vans and Transit Connect vehicles provide easier entry.

Vehicle procurement options are explored and include purchasing, leasing, and other ad-hoc opportunities such as Community Transit's Van GO surplus vehicle program and Island Transit's RideLink Service. In addition, known existing NCTC partner vehicle availability is outlined—additional coordination will help clarify if the vehicle needs for the pilot program can be met by leveraging existing vehicle supplies.

OPERATING ENTITY

Public and private providers, including Transportation Network Companies and Not for Profit transportation providers, are explored as potential operators. Table 1 offers a high-level overview of each provider type's relative strength according to key factors for consideration including flexibility, cost, grant requirements, customer service, and understanding of target users.



Table 1. High-level Comparison of Potential Operating Entities

COSTS

Approximate costs were estimated to reflect both a system that is owned, maintained, and operated by a Not for Profit Transportation Provider (Stakeholder Organization) as well as one that is privately owned, maintained, and operated. Cost estimates for the Stakeholder Organization owned and operated system are based on hourly operational costs informed by reported 2018 operating expenses per vehicle revenue hour costs from similar service providers in Washington State. Cost estimates for the privately owned and operated system are based on an hourly operating cost provided by an informal survey of private operators. Key assumptions inherent in each cost estimate are documented on page 36. Costs based on two different service characteristics are outlined in Table 2 and Table 3, below. Please refer to the Cost and Funding section of this report for complete information on assumptions and sources.

Table 2. Annual Total Cost Comparison of a One-way Service

Operator	Hybrid Fixed Route Service	Hybrid Zone Service
	(1 bus)	(1 bus + 1 Demand Response vehicle)
Stakeholder Organization	\$291,573	\$528,986
Private	\$242,000 - \$330,000	\$484,000 - \$660,000

Table 3. Annual Total Cost Comparison of a Two-way Service

Operator	Hybrid Fixed Route Service	Hybrid Zone Service
	(2 buses)	(2 buses + 2 Demand Response
		vehicles)
Stakeholder Organization	\$583,147	\$1,057,973
Private	\$484,000 - \$660,000	\$968,000 - \$1,320,000

In general, a Stakeholder Organization-operated system is anticipated to cost in the middle of the estimated ranges of the privately-operated system. Additional costs, such as installation and maintenance of signs and stop amenities, as well as logo development and marketing materials are not factored into these cost assumptions. A variety of scheduling software is available to provide dispatching, routing, scheduling, GPS tracking, and other features. Revenue collection can be supported using grants, community-level partnerships and sponsorships, and fares.

FUNDING

A variety of funding opportunities are available at the local, regional, state, and federal level. However, the COVID-19 pandemic has created some uncertainty as governments are re-organizing budgets to address critical public health needs. Funding programs should be regularly monitored for updates over the next year. Funding options are listed below:

- Local Funding Opportunities
 - Transportation Benefit Districts
 - o Regular Capital Improvement/Investment Programs
 - Coordinated project delivery planning efforts
- Regional Funding Opportunities
 - Opportunities administered by the Puget Sound Regional Council and Island Regional Transportation Planning Organization, including:
 - Various grants eligible through regional planning documents
 - Surface Transportation Program Block Grant Program
 - Congestion Mitigation and Air Quality Improvement Program
 - Transportation Improvement Program

• State Funding Opportunities

- WSDOT biennium budget
- Washington's Statewide Transportation Improvement Program
- Public Transportation Grants:
 - Consolidated Grant Program
- Safe Routes to School
- Pedestrian and Bicyclist Program
- Washington State Transportation Improvement Board
- o Traffic Safety Grants
- Federal Funding Opportunities
 - o Annual and One-Time Grant Opportunities
 - Tribal Transit Formula Program and Grant Opportunities
 - Other Agencies, Corporate Funding, and Private Foundations
 - Robert Wood Johnson Foundation
 - Feet First and the Cascade Bicycle Club

RECOMMENDATIONS

Based on the analysis conducted for the purposes of this report, as well as the findings of the North Counties Transportation Coalition Mobility Project Needs Assessment (Triangle Associates, September 2020), it is recommended that:

- Transportation services to key destinations in Camano Island and North Snohomish County be provided to the public, but particularly for older adults, people with mobility challenges, and low-income earners.
- Stanwood, Camano Island, and Smokey Point be the primary service areas.
- A Hybrid form of service be offered to include a combination of some fixed, regular stops as well as flexibility to serve additional destinations on an on-demand basis.
- Service to medical, grocery and other essential services be provided.
- A cutaway chassis-type vehicle be used for its capacity, ease of loading and unloading
 passengers who are likely to have mobility challenges, its length of useful life, and the ability to
 brand the vehicle making it recognizable to riders. In the short term, readily available vehicles
 should be used during an initial period (while awareness of and demand for the service is
 building).
- A stakeholder organization, such as the Stanwood Community and Senior Center or similar, oversee and operate the pilot program.
- The entity that oversees and operates the pilot program regularly update NCTC and coordinate on efforts related to marketing and funding.
- In implementing the mobility pilot, the NCTC and its partner agencies should coordinate with the Tulalip Tribes and the Stillaguamish Tribes of Indians, who operate their own transit services in the surrounding region, on the pilot's plans and implementation strategies. This service coordination will assist the NCTC and the Tribes in filling existing service gaps for community and tribal members in the region.
- All applicable federal, state, and local grant funding opportunities be considered to support both capital and operating needs.
- NCTC or the Stanwood Community and Senior Center, as appropriate immediately apply for funding from the WSDOT Consolidated Grant Program. It should be noted that the current application cycle closes October 30, 2020.

Collecting a fare should be considered to offset operating costs and to link value to the service for the customer. However, the benefits should be weighed against the security risks, boarding delays associated with on-board payment, and that some similar systems find that the cost of collecting fares is sometimes higher than the total fares collected. Collecting a fare is therefore not a direct recommendation.

PURPOSE AND NEED

PURPOSE AND NEED

The North Counties Transportation Coalition (NCTC) is made up of community and senior centers, tribes, transit agencies, and municipal governments focused on addressing mobility gaps in Camano Island and North Snohomish County. NCTC was awarded a state grant to study the development of a pilot mobility service, such as a shuttle van, to connect Camano Island with North Snohomish County, particularly for vulnerable populations, including people with disabilities, older adults, and those who are lower income.

For purposes of this effort, the Stanwood Community and Senior Center is the lead organization and point of



contact. Toole Design was hired to evaluate multiple mobility service options and recommend a pilot mobility service to connect Camano Island, Stanwood, and Smokey Point. This evaluation and the resulting recommendations are detailed in this report.

This report will be used to support one or more requests for funding for a two-to-four year mobility service pilot. An initial potential funding source has been identified by the NCTC: The Washington State Department of Transportation Consolidated Grant. This is a competitive grant with an application deadline of October 30, 2020. This report will contain supporting information needed for this and other potential grant applications, including an evaluation of alternative operating and management scenarios, as well as a recommendation for the route, service level, operator, and general operating plan.

The service will be structured based upon the recommendations in this report; however, the NCTC is encouraged to adjust service within reasonable considerations (such as budgetary constraints) based on real-time user feedback during the course of the pilot.

TYPE OF SERVICE, ROUTING, AND DESTINATIONS

TYPE OF SERVICE, ROUTING, AND DESTINATIONS

The question of where to extend transit service and the form that service takes has major implications for funding, service costs, and grant opportunities. In addition, service details affect the types and amount of equipment and facilities needed.

This section describes the possible types of transit service that could be employed in the mobility pilot as well as any pertinent service details. In addition, two recommended operational scenarios are outlined for consideration of NCTC and its partners in implementing the pilot.

TRANSIT SERVICE TYPES

Transit is generally offered as either a fixed-route service or a door-to-door arrangement commonly referred to as Demand Response transit or "paratransit".

FIXED ROUTE

Fixed route transit relies on a predetermined schedule and follows the same predictable route. Routes are determined by the operating agency and are generally selected to balance convenient access to destinations with residential service near population centers. Typically fixed-route service only assumes or discharges passengers at specified stop locations, although some providers allow for "flag stops" in which a passenger notifies the driver of their intent to board or alight.

Fixed route service offers predictability, as schedule adherence is paramount and service locations are fixed. These same characteristics can be a challenge in low-density and rural areas because the long distances between destinations and the dispersed population cannot be efficiently served by the limited geography of a fixed line.

PARATRANSIT

Paratransit service is a more flexible form of transit. Typically, a rider notifies an agency of their intent to travel and their desired destination. The agency then coordinates pickup and drop-off for all riders, attempting to economize by grouping riders based on geographic areas. Paratransit provides more flexibility for routes and destinations compared with fixed routes. This flexibility does not scale well, however. The need to individually coordinate rides results in relatively costly service and can impose long wait times on riders who must wait on the agency to determine the schedule ad hoc.

HYBRID

It is possible to blend fixed route service with the flexible service of paratransit through a hybrid form. Blending the two can happen in many ways. For example, a general route, a schedule, and specific stop locations could be defined, with deviations allowed to pick up or drop off passengers within some distance of the route. Another example consists of service "zones"—geographic boundaries—between which service is provided at a predictable schedule. Riders would still have to request a pickup or drop-off, but service can follow a predictable schedule and general route pattern.

SERVICE AREA

Earlier this year NCTC commissioned a survey of mobility needs. The goals of the survey were "to better understand [respondents'] transportation patterns, mobility gaps, and interest in a proposed Community Shuttle Van"¹. The report and accompanying data reveal important transportation needs, some of which are unmet by the current system. The survey was targeted toward "Likely Transit Users" and particularly the aging population, people with low incomes, and residents with disabilities.



Figure 1. NCTC Mobility Needs Survey Results on Where Respondents Live

A significant majority of survey respondents lived on Camano Island and in Stanwood. This highlights the importance of serving these two areas. Marysville and Arlington were also well-represented population centers.

On the question of destinations respondents desired to access the distribution is more even. The survey included distant destinations such as Seattle and Skagit County. Although these travel markets are of some importance to residents of the NCTC area, their distance makes them unsuitable destinations for this pilot. The local destinations of interest are summarized below.

¹ Triangle NCTC report



Figure 2. NCTC Mobility Needs Survey Results on Where Respondents Want to Travel

Stanwood is the most commonly listed destination by survey respondents. Smokey Point is clearly of outsize importance, given its small representation in the number of residents surveyed and its position as the third-most commonly listed destination. The Tulalip Reservation appears to be another important location owing to the high number of mentions as a destination relative to the few residents in the survey.

KEY DESTINATIONS

Depending on the service model of the pilot, some destinations may need to be identified for scheduled stops. Each of the communities outlined above have activity centers that will be considered as fixed stop locations. The survey revealed significant desire for service to grocery stores so special attention has been given here. Following is a discussion of important destinations in the top service areas indicated by survey respondents.

STANWOOD

Stanwood was the top local destination identified in the survey data. It is a commercial center for surrounding areas and also home to the Stanwood Community and Senior Center. Possible stop locations include:

- West Downtown Stanwood
- Grocery Outlet/Stanwood Hardware
- Stanwood Amtrak station
- Everett Clinic/Haggen/Ace Hardware
- Stanwood Community and Senior Center

CAMANO ISLAND

Camano Island was identified as another major destination, but it offers very little in the way of commercial destinations and is very sparsely developed. The road network does form a natural loop that could be the focus of service. Possible stop locations could include:

- Terry's Corner
- IGA
- Camano Center
- Madrona Beach
- Camano Chapel/His Pantry Food Bank

SMOKEY POINT

This is a major commercial center for the region and was identified by survey respondents as an important destination. Given the density of commercial activity there is no single point that stands out as the most significant stop location. The difficulty of crossing 172d St NE, coupled with the lack of crossings on I-5 would likely require direct service to all four quadrants of the interchange.

Additional stop locations could be:

- Stillaguamish Senior Center
- Smokey Point Transit Center

MARYSVILLE

Marysville is another civic and commercial center for surrounding areas. It is at the southern extent of the North County area and may be too distant from the focus of this pilot to warrant regular service. Possible stop locations could include:

- Fred Meyer/Grocery Outlet/Haggen
- Safeway/Grove St
- Downtown Marysville

ARLINGTON

Arlington was another notable community identified in the survey data. Its proximity to Smokey Point makes it a natural extension of service. Stop locations could include:

- Safeway
- Cascade Hospital/Medical Center
- Downtown Arlington

A map of the NCTC region and each of the destinations listed here follows:



Figure 3. Key Destinations in the NCTC Region

SIMILAR SERVICE PROVIDERS

There are a number of agencies throughout the state who provide service similar to that anticipated for the pilot project. Among them are:

- Mount Adams Transportation Service (Klickitat County)
- Snoqualmie Valley Transportation (North Bend/Mt. Si Senior Center)
- Skamania County Senior Services
- Rural Resources Community Action (Stevens County)
- Whatcom Transportation Authority (Whatcom County)

These agencies provide service that is targeted to senior populations, or rural areas, or both. Operating models are quite similar and raise important questions about the shape and scope of the pilot program.

Most of these providers offer a mix of fixed route and paratransit service. Limited fixed route service is focused on connecting high-activity areas while paratransit is offered to cover the remainder. Mount Adams Transportation Service (MATS) in Klickitat County is an example of this approach. Through a grant from the WSDOT MATS offers two fixed route runs with set schedules and specific stop locations. In addition, MATS provides paratransit service throughout the county, and even into Portland/Vancouver and Yakima. Users call a service number to schedule a ride at least one business day in advance of their trip.

Snoqualmie Valley Transportation (SVT) also operates on this model with one extra feature. In addition to fixed route and paratransit, SVT operates three "Loop Routes". These loop routes provide one-way circulation in three high-activity portions of their service area. The purpose is to facilitate movement within a small area of concentrated activity as a complement to the fixed route and paratransit service that connects riders *to* these locations.

Whatcom Transportation Authority (WTA) offers a different model to consider. As the transit provider for a more populous region, its primary focus is on fixed route service. However, its "Zone Service" program is worth consideration as one aspect of the pilot project. Through Zone Service, WTA provides a circulator in designated zones on specific days of the week. The circulator does not provide service outside of its assigned zone. Instead, the focus is on connecting riders to and from regular fixed route service where they can access the rest of the city.

OPERATING SCENARIOS

Two different operating scenarios are offered here for consideration in constructing the pilot project.

SCENARIO 1: HYBRID FIXED ROUTE SERVICE

This scenario envisions a version of fixed route service that connects significant destinations in Camano Island, Stanwood, Smokey Point, and Arlington. While the schedule would have fixed stops and a set timetable, the service would allow for deviations to pick up and drop off passengers within the communities receiving service.

For example, a qualifying resident who lives in the neighborhoods north of Stanwood Community and Senior Center would schedule an at-home pickup, which would occur around a scheduled stop at the Community and Senior Center, requiring only a small deviation from the regular route.

Depending on demand for route deviations, it may be necessary to require significant advance notice for scheduling purposes, perhaps 24 hours in advance. If too many people request deviated pickups or dropoffs the operating schedule could be severely impacted. The advance notice will allow for demand smoothing and route planning. On the other hand, if demand is low enough it may be reasonable to allow for real-time route adjustments for deviations. The sample schedule below includes 20 minutes built in at community centers for route deviations. If this scenario is adopted for the pilot, the demand profile of route deviations will be an important aspect to watch and make necessary adjustments to service.

Fixed stops and a rough operating schedule are provided in the table and map below. Operating times are based on regular driving times plus an assumed two minute dwell time at each stop location for loading/unloading, and the additional 20 minutes in certain community centers to deviate for picking up riders off-route. The sample schedule below assumes service starts at Terry's Corner and loops around Camano Island in a one-way pattern.

Table 4. Hybrid Fixed Route Service Sample Schedule

					Time elapsed at
		Estimated	Time elapsed at	Dwell/route	departure
	Stop location	travel time	arrival (hh:mm)	deviation time	(hh:mm)
Camano Island	Terry's Corner				00:00
	Camano IGA	00:05	00:05	00:02	00:07
	Camano Center	00:05	00:12	00:02	00:14
	Madrona Beach	00:10	00:24	00:02	00:26
	Camano Chapel/His Pantry Food Bank	00:05	00:31	00:02	00:33
	Camano route deviations		00:33	00:20	00:53
	Camano IGA	00:30	01:23	00:02	01:25
	Terry's Corner	00:05	01:30	00:02	01:32
Stanwood	West Downtown Stanwood	00:10	01:42	00:02	01:44
	Stanwood Amtrak*	00:05	01:49	00:02	01:51
	West Stanwood route deviations		01:51	00:20	02:11
	Stanwood Community and Senior Center	00:05	02:16	00:02	02:18
	Stanwood Layover	00:20	02:38		02:38
	Everett Clinic/Haggen/Ace Hardware	00:05	02:43	00:02	02:45
	East Stanwood route deviations		02:45	00:20	03:05
Arlington/Smokey	Smokey Point, NW/Hobby Lobby	00:20	03:25	00:02	03:27
Point	Smokey Point, SW/Target	00:05	03:32	00:02	03:34
	Smokey Point, SE/Walmart	00:05	03:39	00:02	03:41
	Smokey Point, NE/Smokey Point Transit Center	00:05	03:46	00:02	03:48
	Stillaguamish Senior Center	00:05	03:53	00:02	03:55
	Cascade Hospital/Medical Center	00:05	04:00	00:02	04:02
	Arlington route deviations		04:02	00:02	04:04
	Stillaguamish Senior Center	00:10	04:14	00:02	04:16
	Smokey Point, NE/Smokey Point Transit Center	00:05	04:21	00:02	04:23
	Transit Center Layover	00:20	04:43		04:43
	Smokey Point, NW/Hobby Lobby	00:05	04:48	00:02	04:50
	Smokey Point, SW/Target	00:05	04:55	00:02	04:57
	Smokey Point, SE/Walmart	00:05	05:02	00:02	05:04
Stanwood	Everett Clinic/Haggen/Ace Hardware	00:20	05:24	00:02	05:26
	East Stanwood route deviations		05:26	00:20	05:46
	Stanwood Community and Senior Center	0:05	05:51	00:02	05:53
Camano Island	Terry's Corner	0:10	06:03		06:03

*Service for Amtrak station only provided when coinciding with scheduled train service



Figure 4. Hybrid Fixed Route Service Sample Map

The total operating time for this example scenario is significant. There are ways to reduce this, for example by splitting service into sections (e.g. east and west operating services), or skipping some stop locations, or even entire areas on certain days.

This scenario addresses some transit needs very well but includes its own challenges. Camano Island's size and remote location add a significant operating burden compared to the number of people and regionally important destinations being served. In addition, the route deviations add significant time for regional travel. For example, a trip from the Terry's Corner to Smokey Point based on this schedule could take upwards of an hour and a half, and that assumes a rider's origin is the senior center itself.

The primary advantage to this scenario is its seamless experience. A user can potentially get door-todoor service with a predictable schedule and service across important regional centers. Direct service can be especially important to riders with mobility impairments for which transferring vehicles can be more challenging and potentially unpleasant.

SCENARIO 2: HYBRID ZONE SERVICE

This scenario employs the same Zone Service approach as that used by Whatcom Transportation Authority. The zones rest upon a backbone of a fixed route service between Camano Island, Stanwood, Smokey Point, and Arlington. Because the route deviations for off-route service are removed, the fixed route portion of this service is much more efficient.

To provide additional coverage in the vicinity of the fixed route, zones are defined on Camano Island, Stanwood, and Arlington. The zone service operates by providing the last-mile connection between passengers and the fixed route service.

This scenario is more easily scalable than Scenario 1. The zone service can be ramped up or down by increasing the days or hours of zone service in each zone separately. And fixed route service can likewise be increased or reduced separate from the zone service.

The following service table describes an example fixed route service under this scenario:

			Time elapsed	Dwell/route	Time elapsed
		Estimated	at arrival	deviation	at departure
	Stop location	travel time	(hh:mm)	time	(hh:mm)
Camano Island	Terry's Corner				00:00
	Camano IGA	00:10	00:10	00:02	00:12
	Camano Center	00:05	00:17	00:02	00:19
Stanwood	Stanwood Community and Senior Center	00:05	00:24	00:02	00:26
	Everett Clinic/Haggen/Ace Hardware	00:05	00:31	00:02	00:33
Smokey	Smokey Point, NW/Hobby Lobby	00:20	00:53	00:02	00:55
Point/Arlington	Smokey Point, SW/Target	00:05	01:00	00:02	01:02
	Smokey Point, SE/Walmart	00:05	01:07	00:02	01:09
	Smokey Point, NE/Smokey Point Transit Center	00:05	01:14	00:02	01:16
	Transit Center Layover	00:20	01:36		01:36
	Stillaguamish Senior Center	00:05	01:41	00:02	01:43
	Cascade Hospital/Medical Center	00:05	01:48	00:02	01:50
	Stillaguamish Senior Center	00:10	02:00	00:02	02:02
	Smokey Point, NE/Smokey Point Transit Center	00:05	02:07	00:02	02:09
	Smokey Point, NW/Hobby Lobby	00:05	02:14	00:02	02:16
	Smokey Point, SW/Target	00:05	02:21	00:02	02:23
	Smokey Point, SE/Walmart	00:05	02:28	00:02	02:30
Stanwood	Everett Clinic/Haggen/Ace Hardware	00:20	02:50	00:02	02:52
	Stanwood Community and Senior Center	00:05	02:57	00:02	02:59
Camano Island	Terry's Corner	00:10	03:09		03:09

Table 5. Hybrid Zone Service Sample Schedule

The operating time for fixed route service in this scenario is roughly half that of Scenario 1. This doesn't account for the operation of zone service, each of which would have its own operating needs and costs. The zone structure would encompass regional centers as depicted in the following map:



Figure 5. Hybrid Zone Service Sample Map

Zone service introduces the need for transfers, which may impact some riders more than others. Depending on the zone service schedule, it may also reduce overall access by making transit service available in some locations only on certain days or for certain parts of the day. On the other hand, riders living at or near one of the fixed route stops benefit from faster, more frequent service.

SCENARIO FLEXIBILITY

Either of these scenarios could be adjusted to fit operating needs or budgets. Some example strategies are:

- Eliminating locations (e.g. removing Arlington from service)
- Reducing service in some locations (e.g. only serving Camano Island on certain days)
- Combining zone service and scheduled route deviations (e.g. operating Camano Island as a zone and the rest of the service as in Scenario 1)

VEHICLE CONSIDERATIONS

VEHICLE CONSIDERATIONS

There are a range of transit vehicle types can meet the needs of the proposed transit service conditions. Due to the short-term and low-cost nature of the proposed pilot program, leveraging existing vehicle inventory and/or short-term leases may be the most feasible option compared to purchasing new vehicles. However, pending specific vehicle availability and funding, purchasing vehicles may be a worthwhile option to consider and would ensure that the pilot program reflects a high-quality shuttle service that sets the program up for success. Based on the target transit users, vehicle accessibility for older adults who may have limited mobility is a primary consideration. This section offers an overview of two viable vehicle types and includes information on fuel efficiency, useful life, licenses required to operate, maintenance requirements, lifecycle cost, and availability. In addition, this section provides a summary of the options available for sourcing these vehicles, including purchasing, leasing, and seeking opportunities to leverage existing NCTC partner resources.

VEHICLE TYPES

Two main vehicle categories are presented – accessible vans and small buses with cut-away chassis. Larger vehicles, such as medium-duty transit vehicles, have not been included due to larger than necessary capacity in combination with more significant costs. Expected capacity, funding availability and accessibility accommodation should be considered when selecting vehicles. In addition, the operating scenario ultimately chosen may inform the vehicle type selected. If the Hybrid Zone Service operating scenario is implemented, there may be an opportunity to utilize more than one vehicle size/type. For instance, an accessible van could be utilized for the last mile connection in combination with a larger cutaway chassis vehicle for the main circulator.

Non-accessible vans are not recommended, and any vehicles utilized should be accessible to persons with disabilities. In Washington State, Commercial Driver Licenses are required for vehicles designed to transport 16 or more people. As such, neither of the vehicle types presented will typically require a Commercial Driver License to operate.²

Providing excess capacity to allow for physical distancing is a new consideration that has risen out of the COVID-19 pandemic. Prior to the pandemic, many transit agencies erred on the side of excess capacity to accommodate expected ridership, and this is even more applicable now.

² Washington State Department of Licensing. "Who Needs a CDL?" <u>https://www.dol.wa.gov/driverslicense/cdlrequired.html</u>. Accessed: 09/17/2020.

CUT-AWAY CHASSIS

These vehicles are built with a bus body on top of a truck chassis, commonly made by Ford or Chevrolet, and are commonly used as feeder buses, Americans with Disabilities Act (ADA) paratransit service, and light volume fixed routes. These vehicles generally have a wheelchair lift and can seat up to 15 passengers, including the driver. In some cases, these vehicles can be configured into multiple seating layouts—layouts can vary in order to maximize wheelchair securement positions or maximize overall capacity. Typical configurations offer capacity for 12 ambulatory users and 2 wheelchair users. These vehicles are readily accessible for those with mobility limitations given they are easy to step up into, can come equipped with a walker



https://cz.pinterest.com/pin/758926974686571246/

storage rack and offer grab handles along the aisle. Fuel economy generally ranges between 8 mpg and 12 mpg.³ Costs for new vehicles typically range from \$65,000 to \$78,000, although options are available that can cost up to \$130,000^{4,5}. To accommodate those with limited mobility, these vehicles provide wheelchair lifts or low floors with ramps. Newer versions offer low-floor cutaways to ensure riders with limited mobility can easily enter the vehicle, however these options are more expensive. These low-floor models also offer a kneeling feature to lower the vehicle when the door opens and usually utilize a wheelchair ramp in lieu of a wheelchair lift. ⁶ The useful life of these vehicles typically ranges from 5 to 7 years.⁷ Table 6 identifies the age and Life To Date mileage at which life-cycle costs for these vehicles reach their minimum.

Table 6. Minimum Life-Cycle Cost Replacement Points⁸

Agency Performs: Continuous Vehicle Rehabilitation				
Annual Vehicle Mileage	Minimum Cost Age Minimum Cost Mileage Full Drive Train			
			Replacement?*	
20,000	7	140,000	No	
30,000	6	180,000	No	
40,000	5	200,000	No	

*This analysis selects the minimum cost age and mileage for the drive train replacement option (i.e., replace or do not replace) that provides the lowest minimum total life-cycle cost.

³ Call with Schetky Sales Representative.

⁴ Based on currently available vehicles available through WSDOT contract 04115 for light to medium duty transit buses, accessed 09/17/2020. https://apps.des.wa.gov/DESContracts/Home/ContractSummary/04115

⁵ Call with Schetky Sales Representative.

⁶ Transit Wiki. "Paratransit Vehicles." <u>https://www.transitwiki.org/TransitWiki/index.php/Paratransit_Vehicles</u>. Accessed 09/13/2020. ⁷FTA. "Useful Life of Transit Buses and Vans." April 2007.

https://www.transitwiki.org/TransitWiki/images/6/64/Useful Life of Buses.pdf. These vehicles have an FTA minimum service-life category of 4- or 5-years and an average retirement age of 5.9 years.

⁸ Reproduced from FTA's Useful Life of Transit Buses and Vans Report (2007), Table 7-5 (5-Year, Light-Duty, Mid-Size Buses and Vans)

ACCESSIBLE VANS

Accessible vans, including mini-vans and full-size vans, can be fully accessible with wheelchair ramps. Mini-van capacity typically allows for three ambulatory passengers and one wheelchair passenger, not including the driver. Mini vans can offer rear entry or side entry for wheelchairs. Although fullsize vans can accommodate up to two wheelchair users, these vehicles present more limitations for accessibility, as the step to enter the vehicle is high and those with limited mobility may require a foot stool. Entry into the rear seats of full-size vans can also be difficult for ambulatory users. Another option is the Ford Transit Connect, which has the same seating capacity as mini-vans but sliding doors on



Source: https://www.driverge.com/vehicles/mobility-vans/

either side and rear wheelchair entry, providing easier accessibility compared to mini-vans. Costs for mini-vans range from \$35,000⁹ to \$51,000¹⁰, while full size vans can range from \$55,000 to \$58,000¹¹, excluding hybrid or electric options, which are more expensive. The useful life of these vehicles typically ranges from 4 to 6 years.¹² Table 7 identifies the age and Life To Date mileage at which life-cycle costs for these vehicles reach their minimum. Fuel efficiency may range from 12 mpg¹³ to 25 mpg.¹⁴

Table 7. Minimum Life-Cycle Cost Replacement Points¹⁵

Annual Vehicle Mileage	Minimum Cost Age	Minimum Cost Mileage	Full Drive Train
			Replacement?*
20,000	6	120,000	No
30,000	5	150,000	No
40,000	4	160,000	No

*This analysis selects the minimum cost age and mileage for the drive train replacement option (i.e., replace or do not replace) that provides the lowest minimum total life-cycle cost

VEHICLE AVAILABILITY AND SOURCES

PURCHASING

Based on funding availability and the expected timeline of the pilot, purchasing of vehicles may not be feasible at this stage. However, purchasing may become more viable if the transit shuttle program transitions to a long-term program once the pilot is complete. In addition to private vehicle sales available at companies such as Kersey Mobility and MobilityWorks, WSDOT offers a process to purchase transit

⁹ Based on currently available models shown in WSDOT Contract Automobile Request System, Accessed 09/11/2020. https://apps.des.wa.gov/CARS/

¹⁰ Call with Schetky Sales Representative.

¹¹ Call with Schetky Sales Representative.

¹² FTA. "Useful Life of Transit Buses and Vans." April 2007.

https://www.transitwiki.org/TransitWiki/images/6/64/Useful Life of Buses.pdf. These vehicles have an FTA minimum service-life category of 4-years and an average retirement age of 5.6 years.

¹³ Ford Transit T150 Wagon estimate from <u>https://www.fueleconomy.gov/feg/findacar.shtml</u>. Accessed 09/17/2020.

¹⁴ Ford Transit Connect Wagon estimate from <u>https://www.fueleconomy.gov/feg/findacar.shtml</u>. Accessed 09/17/2020.

¹⁵ Reproduced from FTA's Useful Life of Transit Buses and Vans Report (2007), Table 7-6 (4-Year, Light-Duty, Small Buses and Vans).

vehicles sourced from Washington State's Statewide Contracts.¹⁶ Washington State agencies, colleges, universities, political subdivisions, and non-profits are eligible to purchase vehicles by submitting a Master Contract Use Agreement (MCUA) to establish eligibility to use state contracts.¹⁷ As of September 2020, several options for ADA mini-vans, full-size vans, and light duty chassis vehicles for transit service are available for purchase through WSDOT.^{18,19} If purchased through private vendors outside of WSDOT's contract, vehicles are typically available with a 4-6 week delivery time, however delivery time is currently running at approximately 8 weeks during the pandemic. Wait times may be longer if custom specifications are needed.²⁰

LEASING

Although WSDOT offers long term fleet rentals to eligible agencies, agencies utilizing MCUA's are not eligible for this opportunity. Private companies offer leasing options, though these are more similar to financing options than a typical passenger car lease. For instance, Schetky Bus and Van Sales offers a leasing option available for 4- or 5-year terms—Schetky will guarantee the residual and buy the vehicle back at the end of the lease. For these leases, annual mileage needs to stay below 10,000 or 12,000 miles, depending on the lease specifics. This leasing option does not include any ongoing maintenance, however other companies such as Enterprise Fleet Management offers more robust leases that can include these options.²¹

OTHER OPPORTUNITIES

In addition to purchasing or leasing vehicles, there may be other potential avenues available to procure vehicles. Both Pierce County and Community Transit periodically auction surplus transit vehicles.^{22,23} Community Transit also offers Van GO: Surplus Vehicle Grant program which donates vehicles earmarked for surplus auctions to non-profit agencies. The application deadline for the 2020 award period was on September 30, 2020. There were 12 15-passenger vans available for this grant period. Up to one vehicle is awarded to eligible organizations, which includes non-profit organizations who primarily serve residents of the Snohomish County Public Transportation Benefit Area. Although wheelchair accessible mini-vans have been donated in years past, the passenger vehicles available in this year's program were not wheelchair accessible and would need to be repurposed in order to be accessible for those with limited mobility.²⁴

Another potential opportunity is offered by Island Transit's RideLink service. The service makes vans already owned by the agency available to social service organizations to provide transportation for their participants. The program is designed for Island County's service organizations who assist elderly, disabled, veterans, low income, and people with limited English proficiency who need access to services

VehiclePurchaseRequestInstructions.pdf. Accessed 09/11/2020.

- ¹⁷ Washington State Department of Enterprise Services. "Vehicle Frequently Asked Questions."
- https://www.des.wa.gov/services/travel-cars-parking/vehicle-purchasing/vehicle-frequently-asked-questions. Accessed 09/11/2020. ¹⁸ Washington State Department of Enterprise Services. "Contract Automobile Request System (CARS)."

¹⁶ Washington State Department of Enterprise Services. "Purchasing Transit Vehicles from Washington State's Statewide Contracts." <u>https://wsdot.wa.gov/sites/default/files/2019/09/24/PT-Guide-TransitAssetProcurement-DES-</u>

https://apps.des.wa.gov/CARS/. Accessed 9/11/2020.

¹⁹ Washington State Department of Enterprise Services. "Contract Summary – Light to Medium Duty Transit Buses." <u>https://apps.des.wa.gov/DESContracts/Home/ContractSummary/04115</u>. Accessed 9/11/2020.

²⁰ Call with Schetky Sales Representative.

²¹ Call with Schetky Sales Representative.

²² Community Transit. "Surplus Vehicle Auctions." <u>https://www.communitytransit.org/about/procurement/surplus-vehicle-auctions</u>. Accessed 9/16/2020.

²³ Pierce County. "Fleet Services." <u>https://www.co.pierce.wa.us/1825/Fleet-Services</u>. Accessed 09/16/2020.

²⁴ Community Transit. "VAN GO: Surplus Vehicle Grant Program." <u>https://www.communitytransit.org/programs/van-go</u>. Accessed 9/16/2020.

outside of the scope of Island County's Fixed Route and Paratransit Specialized Services. In addition to providing vehicles, Island Transit also provides maintenance and driver training. RideLink vans are operated with a shared insurance agreement.^{25,26}

Vehicle upgrades and provider changes at transportation agencies and providers may offer opportunities to obtain vehicles that are no longer needed. Everett Transit and Homage may have vehicles available for these reasons.

Further verification is needed to determine the NCTC pilot transit shuttle's eligibility for the opportunities identified above, particularly given the pilot's multi-jurisdictional scope.

EXISTING PARTNER VEHICLES

Leveraging NCTC partners' existing and available vehicle supply is likely the most viable option for the short-term transit pilot. The pilot will help to provide an understanding of the needed capacity that can inform future vehicle purchases if permanent shuttle service is deemed viable. A high-level inventory of known NCTC partner existing vehicle capacity is provided below, however there may be additional availability. NCTC partners should continue to coordinate to gain a full understanding of available vehicles.

- Stanwood Community and Senior Center vehicles: Several vehicles owned by the Center are not in use and are available for the pilot. This includes a cutaway chassis vehicle that can seat up to 14 passengers and can be configured to accommodate two wheelchair users. In addition, a wheelchair accessible Nissan van that can seat four passengers is available. In addition, a Van GO 14 passenger van is available, however this vehicle is likely not appropriate for the pilot given that it is difficult for passengers to load and unload from. Other vehicles owned by the Center but not currently available include six Hopelink vans. However, as these age out beyond the requirements for Hopelink service, there may be an opportunity to repurpose them for the pilot shuttle in the future.
- **Camano Center:** Although the Camano Center does have one van, it is frequently out of service for mechanical issues and as such is not a viable option.
- **Stillaguamish Tribe of Indians**: Specific vehicle inventories of the Stillaguamish Tribe is not known and should be confirmed.
- Other NCTC Partners: It is not expected that other NCTC partners have vehicles available for use in this pilot.

https://www.whidbeynewstimes.com/news/island-transit-starts-ridelink/. Accessed 09/16/2020. ²⁶ Island Transit. "Island Transit Introduces a New Pilot Program-RideLink." <u>https://www.islandtransit.org/ADDITIONAL-SERVICES/RideLink</u>. Accessed 09/16/2020.

²⁵ Felice, Dave. Whidbey News-Times. "Island Transit starts Ridelink." 05/29/2018.

OPERATING ENTITY

OPERATING ENTITY

There are a variety of operating models for transit services, including both public and private providers.

Public transportation agencies are operated by local or regional authorities, are typically designated recipients of federal funding, and are required to comply with federal regulations associated with that funding.

Private transportation providers such as taxi companies provide on-demand service for market rates. They are typically required to pay for permits and special insurance, own fleets of vehicles, and utilize dispatch software to efficiently connect an available driver with a ride request.

Transportation Network Companies (TNCs) provide on-demand rides by acting as a virtual broker to distribute trips to transportation providers (in the case of TNCs like Uber and Lyft, these are usually individual, independent contractors). Vehicle type is not standard nor required to be wheelchair accessible. There are some TNCs that provide non-emergency medical transportation.

While the TNC model works relatively well for able-bodied people, they can pose accessibility challenges for older adults and those with mobility limitations. They can also be expensive. Private companies and not-for-profits can provide service more tailored to this community's needs by providing dedicated accessible vehicles and specialized training for their drivers, as well as routing and schedules that meet their needs.

FACTORS TO CONSIDER

A variety of factors should be considered in determining what entity should operate the pilot.

FLEXIBILITY

The operating structure of this pilot service will be based on this technical analysis, the community survey results, and best practices associated with similar services in other areas. After the service has been operating for some period of time, certain patterns of use may emerge and/or certain gaps in service (either in schedule or in routing) may become clear. The ultimate success of the service depends on it offering a clear benefit to potential users. It will be in NCTC's best interest to ensure some degree of flexibility is present in the structure of operations so that adjustments can be made during the course of the pilot to better respond to riders' needs.

COST

Cost of service is typically among the primary determinants of operating entity. Cost is comprised of a variety of factors, including capital costs for vehicles, signage, and any facilities; and operating costs such as payroll, fuel, maintenance, and insurance.

GRANT REQUIREMENTS

Funding agencies and individual grants have varying types of requirements to be met by the funding recipient or awardee. The organization, entity, or person responsible for operating the service should be both aware of operating and reporting requirements tied to the funding and have the authority to ensure those requirements are met.

CUSTOMER SERVICE

Customer services can vary widely from entity to entity. Some service providers have dedicated customer service departments ready to assist customers with scheduling a ride, interpreting schedule information, or retrieving a lost item, as well as drivers prepared to assist with wheelchairs, baggage, and entering and disembarking from the vehicle. Others provide more limited service. As it is anticipated that this pilot will serve many older adults and people with mobility limitations, customer service designed to assist with service-related questions, as well as physical assistance will be most appropriate. Adequate customer service is crucial to ultimate customer satisfaction; satisfied riders are more likely to use the service regularly, and a popular service is more likely to secure funding in the long term.

UNDERSTANDS TARGET USERS

While this pilot mobility service will be open to anyone, target users include older adults, people with limited mobility, and people with low incomes in the Camano Island and North Snohomish County areas. These people are more likely to need varying forms of assistance, vehicles with accessibility accommodations, and are less likely to rely alone on an app for trip planning and/or customer service.

	Public Transportation Agency	Private Transportation Provider (3rd Party)	TNC	Not For Profit Transportation Provider (Stakeholder Organization)
Flexibility	Because public transportation agencies are subject to strict federal regulations and are accountable to elected officials representing the region, flexibility to adjust service is likely lesser than other providers. Often, union contracts limit frequency or number of changes.	Private transportation providers tend to have great flexibility in service characteristics and changes.	TNCSs will tailor service to the specifications of the requestor of the service, however vehicles or drivers that can accommodate and/or assist riders in wheelchairs or have other physical limitations may be challenging.	A stakeholder organization already serving the target population is likely to have some customer service resources in-house
Cost	Public transportation agencies may have captial assets (such as vehicles) available for use, and may be both more aware of and eligible to apply for a greater variety of grants than other transportation providers.	Cost of service can be relatively higher for private providers. Adjustments to service characteristics, such as routes or schedules, greater levels of customer service, and/or grant reporting may cost a premium.	Cost of service can be relatively higher. Greater levels of customer service, wheelchair-accessible vehicles, or grant reporting duties may cost a premium.	A stakeholder organization may have capital assets (such as vehicles) available for use, as well as available drivers. The ability to utilize existing, underutilized resources may reduce relative costs
Grant Requirements	Transit agency staff are typically well- versed in tracking and compliance requirements.	Some third party private providers may be familiar with grant requirements and reporting, however, this would need to be evaluated on a case-by-case basis.	TNCs are less likely to be familiar with grant compliance requirements, or eligible to receive certain types of grant funds.	Some stakeholder organizations would likely be familiar and experienced with grant requirements and reporting, however, this would need to be evaluated on a case-by- case basis.
Customer Service	Existing customer service staff could likely handle trip planning requests.	Customer service would be built into the contract. Level of service provided, as well as physical assistance would be determined by contractual requirements.	Customer service is built into the per trip cost and may be limited to online/in-app communication methods	Existing customer service staff could likely handle trip planning requests and because the organization is already serving the target population, staff are more likely to be trained to assist with their needs.
Understands the unique needs of older adults, people who have limited mobility or need assistance, and people with low incomes	Yes, these are groups public transit agencies regularly serve today.	Not determined.	Not determined.	Yes, these are groups a stakeholder organization is likely already serving.

Table 8. A Comparison of Potential Operating Entities

Based on a general comparison of operating entities, all entities have advantages, however there are distinct advantages to a stakeholder organization in operating the service for the duration of the pilot.

COSTS AND FUNDING

COSTS

Approximate cost estimates reflect a system that is owned, maintained, and operated by a Not for Profit Transportation Provider ("Stakeholder Organization") as well as a privately owned, maintained, and operated service are included below. Both the Stakeholder Organization-operated and privately-operated cost estimates are based on the operator provided hourly operational costs multiplied by the service hours that would be needed to accommodate different headways and hours of operation.

The cost estimates for the Stakeholder Organization owned and operated system are based on an hourly operational cost of \$59.96/hour for Demand Response vehicles, and \$66.27/hour for buses. This estimate is based off reported 2018 agency operating expenses per vehicle revenue hour costs from similar service providers in Washington State, as listed on the National Transit Database.²⁷ The reported operating expenses include both capital and salary expenses, including routing software expenses, computers, and dispatcher salaries.

The cost estimates for the privately-owned and operated system are based on an hourly operating cost provided by an informal survey of private operators who provide similar services to those recommended for the mobility pilot. The hourly rate varies between \$55/hour to \$75/hour depending on vehicle type.²⁸

Assuming the route operates with 30 stops, a travel time of 4 hours and 44 minutes (based on Google Maps) with a dwell time of two minutes per stop, and a 15% layover time at each terminal (20 minutes), the total cycle time is estimated to be just over 6 hours and 44 minutes.²⁹

The tables below include cost estimates for the annual costs needed for Stakeholder Organization and private operation of the circulator. The costs are presented based on different service characteristics. The estimates for the privately-operated system are provided in a range which will vary based on the type of vehicle selected, and the number of vehicles operating. While the estimates are derived from rounded operating hours, these were based on the below proposed operating schedule:

- Monday Thursday: 7am 7pm
- Friday: 7am 9pm
- Saturday: 9am 9pm
- Sunday: 7am 4pm

²⁷ The similar service providers included in this analysis include Klickitat County Senior Services, Mt Si Senior Center, Skamania County Senior Services, Rural Resources Community Action, and Whatcom Transportation Authority.

²⁸ The hourly cost estimates can be used to consider the costs of additional vehicles or service hours.

²⁹ These estimates are derived from the Hybrid Fixed Route Services presented in this report.

Operator	Hybrid Fixed Route Service	Hybrid Zone Service (1 hus + 1 Demand Response vehicle) ^b
Stakeholder Organization	\$201 573	\$528.086
	\$231,575 \$242,000 \$220,000	\$020,900 \$494,000 \$660,000
Private	\$242,000 - \$330,000	\$484,000 - \$660,000
	^a 4,400 hours of service ^b 8	,800 hours of service
Table 10. Annual Total Cost C	omparison of a Two-way Serv	ice
Operator	Hybrid Fixed Route Service	Hybrid Zone Service
	(2 buses) ^c	(2 buses + 2 Demand Response
		vehicles) ^d
Stakeholder Organization	\$583,147 ^e	\$1,057,973 ^f
Private	\$484,000 - \$660,000 ^e	\$968,000 - \$1,320,000 ^f
	° 8,800 hours of service ^d 1	7,600 hours of service

Table 9. Annual Total Cost Comparison of a One-way Service

As shown in the tables above, generally, a Stakeholder Organization-operated system is anticipated to cost in the middle of the estimated ranges of the privately-operated system. It should be noted though that a privately-operated circulator will likely have additional costs that fall outside of the scope of the estimates outlined above. These additional costs include installation and maintenance of signs and other stop amenities as well as the one-time costs associated with developing a logo and marketing materials, which will vary based on the reach of this campaign. The Stakeholder Organization may choose to develop marketing materials in-house or could seek in-kind donations or advertising to support marketing efforts.

SCHEDULING SOFTWARE OPTIONS

There are a variety of software types and applications that provide dispatching, routing, scheduling, GPS tracking, and other features. A detailed software evaluation is not included in this report, however it is recommended that before investing, candidate software or applications be evaluated for cost and ease of use, existing customers be contacted for an unbiased opinion of performance, and ideally a demonstration of the product be performed. Features and costs will vary. Examples of potential candidates include Trapeze Pass (trapezegroup.com), RideCo (rideco.com), TripSpark (tripspark.com), and Onde (Onde.app). Capterra.com is a website that provides summaries and reviews of various software.

REVENUE COLLECTION

The mobility pilot can be support through the securing of grants, community-level partnerships and sponsorships, and the collection of fares. The mix of these revenue sources can be used in combination to help offset the mobility pilot's costs.

GRANTS

The mobility pilot will be competitive for multiple grant opportunities managed by WSDOT, regional planning organizations, and private funders. WSDOT's upcoming Consolidated Grant Program in particular is a strong grant opportunity for the pilot. The Consolidated Grant Program is described in the State Funding Opportunities starting on page 40.

COMMUNITY-LEVEL PARTNERSHIPS AND SPONSORSHIPS

The NCTC and its partner agencies should identify and reach out to their community partners to identify sponsorship opportunities. Community-level partnerships and sponsorships may include advertisement opportunities on the mobility pilot vehicles and promotional marketing materials, or routing to serve partner locations such as health care service locations and grocery stores.

FARES

The mobility pilot can also be support through the collection of fares, sale of tickets, or volunteer-based donations. Local transportation agencies' costing strategies for similar shuttle and fixed route services vary. For example, while Community Transit charges a fee for their transit services, Island Transit operates on a no-fare system. Additionally, the Snoqualmie Valley Transportation's Valley Shuttle operates their service on a volunteer donation basis. The suggested donation for the Valley Shuttle is one dollar.³⁰ The collection of fares, or volunteer donations, can be conducted through either on-board or preboarding methods. On-board, the fares or donations can be handled by the driver or a self-service paybox at the front of the vehicle. Additional delays will likely be generated at stops if the driver is responsible for managing the collection of fares are established, they should be set not be too high to create an economic burden on riders, nor too low that the fares collected do not cover the costs of managing the fares.

³⁰ Snoqualmie Valley Transportation, "Valley Shuttle." <u>https://svtbus.org/valley-shuttle/</u>.

FUNDING

The NCTC and its partner agencies can leverage local, regional and state funding opportunities to stretch transportation project budgets, and work towards supporting the mobility pilot through the short- and intermediate-terms. Over time, long-term financial planning will be required to support the mobility pilot in future iterations as it transitions into a regular service.

COVID-19 OUTBREAK RESPONSE

In response to the novel COVID-19 pandemic, local, regional, state, and federal governments are currently re-organizing their budgets to address critical public health needs. During this time of unprecedented change in revenue and funding streams, it is expected that shifts in funding sources will follow. This document was developed based on the understanding of relevant funding programs as of September 2020. The NCTC and its partner agencies should regularly monitor updates in the identified funding programs over the next year, as funding partners respond to the pandemic. Additionally, the NCTC and its partner agencies should highlight the critical nature of the mobility pilot to connect community members with mobility barriers and access challenges to health care services, grocery stores, pharmacies, and other essential services in grant applications and communication documents.

LOCAL FUNDING RESOURCES

The NCTC should work with its partner agencies to identify local funding sources to support the mobility pilot. The local funding sources could be used as a required local match for regional, state, and federal grant programs, or to support local infrastructure projects to support the pilot. Local communities may be able to support the mobility pilot through Transportation Benefit Districts (TBDs), regular Capital Improvement/Investment Programs (CIPs), and through coordinated project delivery planning efforts. The NCTC should work closely with its local partner agencies to identify local funding sources that can be used to support the pilot both in securing initial grant funding and in supporting short- and immediate-term needs.



REGIONAL FUNDING OPPORTUNITIES

The mobility pilot's service area will serve community members within the Puget Sound Regional Council (PSRC) and the Island Regional Transportation Planning Organization (IRTPO). The IRTPO covers Island County and is also included within the PSRC's Metropolitan Planning Organizations (MPO) planning umbrella. Given the pilot's position within two regional transportation planning organizations (RTPOs) and one metropolitan planning organization (MPO), the NCTC and it partner agencies should work closely with its partners at IRTPO and PSRC to include the pilot in both regional planning documents and identify potential grant opportunities. Through this regional coordination, the NCTC and its partner agencies can leverage its local resources towards regional, state, and federal funding opportunities that can stretch local vehicles and staff resources further.

PSRC, as the Region's Metropolitan Planning Organization, delivers several transportation programs and administers state and federal transportation funds, including the Surface Transportation Program Block Grant Program (STP) and the Congestion Mitigation and Air Quality Improvement Program (CMAQ), at the regional level. Communities in the Puget Sound Region are eligible for CMAQ funds. Additionally, the region's biannual Transportation Improvement Program (TIP).³¹ is used to inform the state level TIP and project eligibility for state-level grant programs.

STATE FUNDING OPPORTUNITIES

WSDOT BIENNIUM BUDGET

WSDOT has a biennium budget approved by the State legislature every two years. The current 2019-21 biennium budget includes approximately \$6.7 billion for transportation planning, operations, and capital investments across the state. As the state prepares to develop the next biennium budget, the NCTC and its partner agencies should carefully track potential changes and announcements related to competitive grant applications and pursue them as they become available.³²

WSDOT STATEWIDE TRANSPORTATION IMPROVEMENT PROGRAM

Washington's Statewide Transportation Improvement Program (STIP) is a compilation of local, metropolitan, and regional transportation improvement programs that represents the highest priority projects at these levels, across the state, in a fiscally constrained plan. Only projects included in the STIP are authorized to access federal funds through either the FHWA or the Federal Transit Administration (FTA). The 2020-2023 STIP includes \$3.3 billion in federal funding, and over 1,200 transportation projects. The STIP is developed annually and is typically approved in January. To be eligible for STIP funding, projects identified in this Plan must first be incorporated into a local, regional, tribal, or metropolitan planning process, such as a Transportation Improvement Program.³³ To help secure future funding through the STIP, the NCTC and its partner agencies should identify opportunities to include the

³¹ The Region's TIP is submitted by PSRC to the State, and then to the U.S. Department of Transportation for funding approval. The TIP is developed every two years, with updates occurring on an annual basis.

³² Washington State Department of Transportation, "2019 Supplemental budget for 2017-2019 and 2019-2021 Enacted Budget." https://wsdot.wa.gov/sites/default/files/2020/04/06/2019-21EnactedBudgetBook.pdf.

³³ Washington State Department of Transportation, "Statewide Transportation Improvement Program (STIP)." <u>https://wsdot.wa.gov/LocalPrograms/ProgramMgmt/STIP.htm</u>.

mobility pilot into partner agencies' planning documents and coordinate with regional and WSDOT contacts on highlighting the importance of the mobility service for the region.

PUBLIC TRANSPORTATION GRANTS

WSDOT operates three competitive Public Transportation Grant programs that seek to improve the access, mobility, independence and transportation options for community members. These grant programs, the Consolidated Grant Program, the Formula Grant Program, and the Regional Mobility Grant Program, can be used to fund and support transit services and amenities, including: mobility management services, transit studies and mobility plans, bus shelters, transit vehicles, and park and ride lots and expansions. The grants are awarded in alignment with the state biennium.

Consolidated Grant Program

WSDOT's Consolidated Grant Program is supported by state and federal funding, and it is intended to improve public transportation within and between rural communities, and to provide paratransit/special needs services to people who cannot provide transportation to themselves due to age, disability, or income. The Consolidated Grant Program funds also support mobility management activities, provide planning funds for research on public transportation issues, and can be used to purchase new or replacement vehicles and other equipment. For the 2019-2021 grant period, WSDOT awarded approximately \$77 million in Consolidated Grant Program funds, which are apportioned via a mix of formula-based and competitive processes. The grant provides FTA funds from the following programs:

- Section 5310 Enhanced Mobility of Seniors and Individuals with Disabilities,
- Section 5311 Formula Grants for Rural Areas, and
- Section 5339(a) Grants for Buses and Bus Facilities Formula Program.

The grant also provides state funds sourced from the Paratransit/Special Needs Grant Program as well as the Rural Mobility Grant Program. Nonprofits, tribes, public transit agencies and local agencies are eligible to apply. In addition, other government agencies are eligible if their projects benefit the greater public. Eligible project types include operations, mobility management, capital, and planning. Matching funds are required, with new projects requiring a five percent match. Applicants for Consolidated Grant funding must participate in the regional Human Services Transportation Plan planning process, and the current application period closes on October 30, 2020.³⁴

SAFE ROUTES TO SCHOOL (SRTS)

SRTS funding is available to local governments through a competitive grant program; WSDOT has allocated \$19 million in federal and state funding to SRTS projects between 2019 and 2021. The goal of SRTS funding is to increase the number of students walking and biking to school safely. Safe Routes to School program funds may be used for infrastructure improvements within two miles of a school and/or local transportation safety programs serving students from kindergarten to 12th grade. Establishing walking school buses and bicycle trains,³⁵ and delivering bicycle and pedestrian educational programming are considered eligible education/encouragement activities. All public agencies, and nonprofit entities that are responsible for administering local transportation safety programs are eligible to apply.³⁶

³⁴ Washington State Department of Transportation, "Public Transportation – Consolidated Grant Notice of Funding Opportunity." <u>https://wsdot.wa.gov/transit/grants/consolidated-grant-notice-funding-opportunity</u>.

³⁵ Eligible costs include those related to recruiting adult leaders, training, and safety equipment.

³⁶ Washington State Department of Transportation, "Call for Projects – Pedestrian and Bicycle Program and Safe Routes to School. <u>www.wsdot.wa.gov/LocalPrograms/saferoutes/callforprojects.htm</u>.

SRTS program funds may be used for infrastructure improvements within two miles of a school and/or local transportation safety programs serving students from kindergarten to 12th grade. The improvements must be for improving the safety and/or increasing the number of students walking or biking to school. Establishing walking school buses and bicycle trains,³⁷ and delivering bicycle and pedestrian educational programming are considered eligible education/encouragement activities.³⁸

PEDESTRIAN AND BICYCLIST PROGRAM

WSDOT also oversees the Pedestrian and Bicycle Program, which distributes grants for projects that enhance safety and mobility for people who choose to walk and bike. WSDOT has allocated over \$18.3 million in state funding through this program between 2019 and 2021. This funding may be for construction of safety infrastructure improvements; or, design-only projects that lead to a constructionready pedestrian or bicyclist improvement projects. Eligible infrastructure and design projects include:

- Crossing/intersection improvements
- Traffic calming/speed reduction
- Signage and pavement markings
- Pedestrian-scale lighting
- On-road bicycle facilities
- Bicycle parking facilities
- Shared-use paths and trails
- Network planning and analysis
- Preliminary right of way acquisition activities, environmental analysis, and engineering design

- Vehicle speed feedback signs and photo enforcement
- Sidewalks, sidewalk buffer zones, curbs, curb ramps, and gutters
- Walking and bicycle count programs
- Public engagement and encouragement campaigns
- Tactical urbanism techniques, as part of a planning process³⁹

³⁷ Eligible costs include those related to recruiting adult leaders, training, and safety equipment.

³⁸ Washington State Department of Transportation, "Call for Projects – Pedestrian and Bicycle Program and Safe Routes to School. <u>www.wsdot.wa.gov/LocalPrograms/saferoutes/callforprojects.htm</u>.

³⁹ Ibid.



WASHINGTON STATE TRANSPORTATION IMPROVEMENT BOARD (TIB)

The Washington State Transportation Improvement Board (TIB) is an independent state agency that funds high priority transportation projects across 320 cities and urban counties throughout the state. Created by the Washington State legislature, the TIB distributes and manages street construction and maintenance grants that seek to enhance the movement of people, goods, and services. Funding for the TIB's grant programs comes from revenue generated by three cents of the statewide gas tax. As a community of more than 5,000 residents, the City of Stanwood is eligible to apply to two of the TIB's competitive Urban Funding programs, the Urban Arterial Program and the Urban Sidewalk Program. While the Urban Sidewalk Program is currently suspended, the Urban Arterial Program will be distributing \$60 million in FY2020 to communities around Washington State. The TIB typically releases an annual call for projects in June, with project awards given in November.⁴⁰ As the mobility pilot evolves, the NCTC and its partner agencies should identify opportunities to support on-road transit roadway elements (e.g. queue jumps and transit only lanes) and pedestrian access to the service's pick-up and drop-off locations through the Urban Arterial, and potentially also, the Urban Sidewalk Program.

The TIB also hosts the Complete Streets Award grant program. The Complete Streets program was established in 2015 by the State's Complete Streets Act (House Bill 1071) with the goal of encouraging local governments to adopt Complete Streets ordinances and to encourage projects incorporating Complete Streets principles. Only counties and local communities with adopted Complete Streets policies are eligible for the \$125,000 to \$500,000 grant awards. Eligible projects include local government streets or state highways that "provide street access with all users in mind, including pedestrians, bicyclists, and public transportation users". Additional points are awarded to communities with a proven track-record of planning and implementing projects using a Complete Streets approach. Eligible communities must be nominated by an Established Nominating Partner, such as WSDOT and the Washington State

⁴⁰ Transportation Improvement Board, "Overview of TIB Grant Programs." <u>http://www.tib.wa.gov/grants/grants.cfm</u>.

Department of Health, to be considered for the grant. NCTC's partner agency Snohomish County is eligible to be nominated for the grant.

In response to changes in the State's budget, the Complete Streets Award program is currently suspended until 2021.⁴¹ While funding through this award program is not currently available, the NCTC and its partner agencies should monitor the TIB's website and communication channel for grant award updates in 2021 that may be used to support future iterations of the mobility pilot.

TRAFFIC SAFETY GRANTS

The Washington Traffic Safety Commission (WTSC) offers annual state grants to projects that help reach "Target Zero" goals of reducing roadway injury and fatalities. The grants have typically ranged from \$5,000 to \$150,000; and, cities, counties, non-profits, public schools, and private schools with non-profit status are eligible to apply. In response to program funding changes from WTSC's Federal funding partner, the National Highway Traffic Safety Administration, the WTSC has decided not to open a call for grant applications in 2020. Future grant applications calls will be made for targeted program areas and as additional funding becomes available.⁴² The NCTC and its partner agencies should monitor the WSTC website and communication channels for future grant opportunity announcements.

FEDERAL FUNDING OPPORTUNITIES

Federal transportation funds are overseen by the US Department of Transportation (USDOT) – there are several agencies within USDOT (e.g. Federal Highway Administration, Federal Transit Administration, National Highway Traffic Safety Administration), that each have their own funding programs, procurement rules, and eligibility requirements. Most Federal funding programs are administered by State Departments of Transportation (e.g. Surface Transportation Block Grant), although some funds are distributed by the USDOT themselves (e.g. BUILD), and some are sub-allocated directly to regional or local governments (e.g. CMAQ). States and MPOs, whose primary function is to distribute Federal funds, may co-mingle and re-name funds so it may not be clear which or if Federal funds are being used. Typically, Federal grant programs will require a 50 percent local match for operational and a 20 percent local match for capital (such as vehicles, equipment, bus stops) projects. Federal funds distributed by MPOs, including STP and CMAQ, are described on page **Error! Bookmark not defined.**. Federal funds distributed by the State, including section 5310, 5311, and 5339(a) programs are described on page **Error! Bookmark not defined.**.

Direct funding recipients need to be designated recipient for Federal grant programs, comply with Federal transit regulations, and manage grants through the established Federal financial management systems. These same requirements will apply even if the Federal funds are administered by WSDOT. Federal grant management typically requires a significant administration time, especially if the awarded grant type is new to the grant recipient. NCTC partner agencies with experience in managing Federal grant programs, such as the Stanwood Community and Senior Center, will be better positioned than other agencies to serve as a designated recipient given their familiarity with grant reporting processes and procedures.

CURRENT FEDERAL FUNDING UNCERTAINTY

Federal transportation funding is managed by the Federal Transportation Bill Fixing America's Surface Transportation Act (FAST Act). The current FAST Act was signed into law in December 2015 and

⁴¹ Ibid.

⁴² Washington Traffic Safety Commission, "New for 2020." <u>https://wtsc.wa.gov/grants/annual-grants/</u>.

provides over \$305 billion from 2016 through 2020. The current authorization expires on September 30, 2020, however it's not unusual for Congress to shift this deadline with extension bills that move the expiration date. The "Invest in America Act" was released by the House Committee on Transportation and Infrastructure and is one step of a longer process of reauthorizing the current FAST Act.

There is continuing discussion of a federal "infrastructure initiative" that would be focused on stimulating the economy and employment in light of the COVID-19 pandemic, however the likelihood that this initiative will move forward is still uncertain. The existing transportation bill could be used as the funding mechanism by which either stabilization or stimulus funding is managed.

Due to the COVID-19 pandemic, forthcoming reauthorization of the FAST Act, and potential funding changes based on the 2020 Census, uncertainty limits the ability to predict future Federal transit funding amounts.

ANNUAL AND ONE-TIME GRANT OPPORTUNITIES

The FTA periodically announces new annual or one-time grant opportunities to fund targeted transit purposes. As an example, Innovative Coordinated Access & Mobility Grants have been allocated in years past to innovative capital projects for transportation disadvantaged that improve the coordination of non-emergency medical transportation services.

BUILD grants (formerly known as TIGER grants) are a notable funding opportunity. In FY2019, 17 percent of funds were allocated to transit projects.⁴³ Rural areas are also eligible, and in FY2020, 50 percent of BUILD funds are intended to be allocated to rural areas. This is an on-going grant process which can be used to procure vehicles, facilities, and other capital needs.

TRIBAL TRANSIT FORMULA PROGRAM AND GRANT OPPORTUNITIES

Through the FAST Act, the FTA supports tribal transit services through a dedicated funding program and an annual competitive grant program. The FAST Act allocated \$30 million to the Tribal Transit formula program, and additional \$5 million in FY2019 to the competitive grant program.⁴⁴ The NCTC should work with its partners at the Tulalip Tribes and the Stillaguamish Tribes of Indians to identify such grant opportunities to support the mobility pilot's service for local tribal community members. In FY2018, the Tulalip Tribes secured over \$120,000 and the Stillaguamish Tribes \$117,000 through the grant program to purchase new buses to provide access to employment, healthcare, and essential services.⁴⁵

OTHER AGENCIES, CORPORATE FUNDING, AND PRIVATE FOUNDATIONS

There is a broad range of private funding available to support active transportation projects. Active transportation projects can be supported by funding aimed at a variety of areas including economic

 ⁴³ Wanek-Libman, Mischa. "More than \$154 million in FY19 BUILD grants awarded to transit projects." Mass Transit. <u>https://www.masstransitmag.com/management/article/21114227/more-than-154-million-in-fy19-build-grants-go-to-transit-projects</u>.
 ⁴⁴ Federal Transit Administration, "U.S. Department of Transportation Announces \$5 Million in FY2019 Funding Opportunity for Tribal Transit Projects Nationwide." <u>https://www.transit.dot.gov/about/news/us-department-transportation-announces-5-million-fy2019-funding-opportunity-</u>

tribal#:~:text=FTA's%20Tribal%20Transit%20Program%20is,areas%20where%20transit%20is%20sparse. ⁴⁵ Federal Transit Administration, "Fiscal Year 2018 Tribal Transit Competitive Projects."

https://www.transit.dot.gov/funding/grants/grant-programs/fiscal-year-2018-tribal-transit-competitive-projects.

development, community health and fitness, transportation, transit mobility and access, and public infrastructure. Additionally, creative use of private grants can leverage federal, state, regional, and county grants and be used in combination with local funds to meet local match requirements. While private grants are not a reliable or consistent source of revenue, they can be used to stretch and supplement public funds. The following organizations provide grants of different sizes for active transportation infrastructure and programmatic activities.

ROBERT WOOD JOHNSON FOUNDATION

The Robert Wood Johnson Foundation is dedicated to improving the "health and health care of all Americans," including public education, prevention, communications activities, and investing in vulnerable populations. Municipalities are eligible for these funds and many active transportation related projects including greenway plans, trail projects, advocacy initiatives and policy development efforts have been funded through the Foundation. The Foundation offers the annual Culture of Health Prize to communities that have improved community members' access to healthy choices, and created positive changes in the local public health climate. Cities, counties, federally-recognized tribes, and state-designated Indian reservations are eligible for the \$25,000 prize. Applications are due on October 15 through the Foundation's website.⁴⁶

FEET FIRST AND THE CASCADE BICYCLE CLUB

Through the support of WSDOT grant funding, Feet First and the Cascade Bicycle Club have historically offered Walk & Bike Mini grants to Washington State schools. Schools with active walking school buses and bike trains have received funding priority in previous years. Both event and project proposals have been eligible for funding.⁴⁷ The NCTC should connect with Feet First and Cascade Bicycle Club to learn about upcoming grant opportunities and to identify opportunities to connect local schools in the mobility pilot. The Cascade Bicycle Club is also an eligible nominating organization for the Transportation Improvement Board's Complete Streets grant.

⁴⁶ Robert Wood Johnson Foundation, "2021 Culture of Health Prize." <u>https://www.rwjf.org/en/library/funding-opportunities/2020/2021-culture-of-health-prize.html</u>.

opportunities/2020/2021-culture-or-nealtn-prize.ntm. ⁴⁷ Cascade Bicycle Club, "Walk & Bike Mini Grants." <u>https://cascade.org/blog/2016/04/walk-bike-mini-grants-still-available-apply-today</u>.