



TCTD INTERCITY TRANSIT ENHANCEMENT PLAN

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Project #: 20111

To: Doug Pilant, TCTD

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Project: Intercity Transit Enhancement Plan

Subject: Recommended Enhancements

OBJECTIVE

The objective of the TCTD Intercity Transit Enhancement Plan is to improve intercity connections to/from/within Tillamook County and increase opportunities for interlining service with Greyhound and Amtrak, resulting in increased ridership for TCTD and its partners.

INTRODUCTION

The Tillamook County Transportation District (TCTD) developed an Intercity Transit Service Enhancement Plan to improve its connections to coordinating service partners, including Greyhound and Amtrak (in Portland and Salem), Sunset Empire Transportation District (in Cannon Beach), Lincoln County Transit Service District (in Lincoln City), Salem Area Mass Transit District (in Grand Ronde), and Yamhill County Transit Area (in Grand Ronde). This effort builds off the July 2016 Transit Development Plan which proposed near- and mid-term service recommendations to improve transit service. To develop the intercity Transit Service Enhancement Plan, TCTD coordinated with each of its' service partners in a series of meetings to further vet concepts from the TDP, develop additional concepts, and identify ways to enhance intercity service and connections. This coordination effort resulted in near-term recommendations for Routes 3, 5, and 6 (Coastal Connector) for schedule modifications as well as service additions that could be implemented as soon as summer of 2017 with additional funding. Pending funding for these recommendations, complimentary schedule modifications would also be implemented for Routes 1, 2, and 4 to maximize connection opportunities between TCTD routes as well as with their partner agencies.

BACKGROUND

TCTD's intercity routes include Route 3 (Tillamook – Manzanita/Cannon Beach), Route 4 (Tillamook - Lincoln City), Route 5 (Tillamook – Portland), and Route 6 (Coastal Connector). Based on the 2016

TDP, a customer survey specific to intercity connections conducted on Routes 5 and 6, and a worksession with TCTD staff, several opportunities to enhance intercity connections were identified for each of the intercity routes. These are described in Technical Memorandum #1 along with route descriptions, performance and financial characteristics, and demographic information.

The opportunities identified in Technical Memorandum #1 were discussed with two separate working groups; North County and South County. These meetings resulted in refinements and additional opportunities to be considered. These opportunities were assessed in Technical Memorandum #2 which includes descriptions of the alternatives for each route, detailed potential schedules, and an evaluation of each alternative to determine its consistency with ODOT's criteria for evaluating intercity transit grants and its projected performance and financial characteristics. The criteria applied in Technical Memorandum #2 include:

ODOT Grant Criteria

- **New or improved special connection.** Provides additional connection to social services or destinations and origins either not currently or poorly served.
- **New or improved temporal connection.** Evaluates existing travel time of each run relative to proposed travel time per alternative. Evaluate based on percent change.
- **Close a gap in the intercity network.**
- **Demonstrated need.** The alternative addresses a need or opportunity identified through the TDP process, Technical Memorandum #1, Customer Survey, or Working Group meetings.
- **Improve service to low income areas.** Low income persons within 1/2 mile of existing route alignment relative to proposed route alignment. Evaluate based on percent change.
- **Increase potential for interline agreement with Greyhound or Amtrak.**
- **Improve access to employment.** Employment within 1/2 mile of existing route alignment relative to proposed route alignment. Evaluate based on percent change.
- **Type of trip benefiting.** Evaluates whether the alternative benefits work, non-work, tourism, intercity, and interstate trips.

Performance and Financial Characteristics

- **Cycle Time.** Includes round trip time and layover.
- **Frequency.** Number of existing versus number of proposed daily trips by origin/destination.
- **Ridership.** Estimated change based on the proposed alternative.
- **Service Revenue.** Based on existing fare revenue per passenger and change in estimated ridership.
- **Service Miles.** Calculated based on the change in services miles from existing trips.

- **Administration Cost.** Calculated based on existing admin costs per passenger and change in estimated ridership.
- **Operating Cost.** Calculated based on existing operating cost to service miles ratio and proposed service miles.
- **Capital Cost.** An estimate of the capital cost to provide the additional service.
- **Total Annual Costs.** An estimate of the increase in annual costs to operate the route with the proposed changes.
- **Cost per Mile.** An estimate of cost per mile of the route with the proposed changes.
- **Cost per Ride.** An estimate of the cost per ride of the route with the proposed changes and assuming the estimated ridership increase.
- **Revenue as Percentage of Cost (Farebox Return).** An estimate of the farebox return of the route with the proposed changes and assuming the estimated ridership increase.

The assessments in Technical Memorandum #2 were discussed in one additional meeting with the North County Working Group and two additional meetings with the South County working Group.

North County Working Group

The North County Working Group met two times to identify and review the assessments of service enhancements in the northern portion of the County that would improve coordination with SETD and provide additional interline opportunities with Greyhound and Amtrak in Portland. The meeting participants included representatives from the following organization:

- Sunset Empire Transportation District (SETD)
- City of Manzanita
- City of Cannon Beach

South County Working Group

The South County Working Group met three times to identify and review the assessments of service enhancements in the southern portion of the County that would improve coordination of SKT, YCT, and LCTSD services, and provide additional interline opportunities with Greyhound and Amtrak in Salem. The meeting participants included representatives from the following organization:

- Confederated Tribes of Siletz
- Confederated Tribes of Grand Ronde
- Lincoln City Transportation Service District (LCTSD)
- Yamhill County Transit (YCT)
- Salem-Keizer Transit (SKT)

SERVICE RECOMMENDATIONS

This section identifies the recommended alternatives to enhance intercity connections based on input from the Working Groups.



The service enhancement recommendations are categorized as three different types of recommendations, as follows:

 Schedule change;  Additional service


There is more than one recommendation for Route 3 and Route 5. The Route 3 recommendations are complimentary and are recommended to be implemented together. The recommendations for Route 5 are two potential alternatives depending upon funding. If funding is not obtained for Alternative 5B, Alternative 5A is recommended.

Potential schedules for these recommendations are included in the Appendix of Technical Memorandum #2.



Route 1 – Tillamook Town Loop

-  Modify schedule so that all trips depart at :05 and arrive at :00 to facilitate Route 3/SETD connections in Cannon Beach.
-  Extend service later in the evening, to allow connections from intercity routes arriving in Tillamook after 6:00 p.m.


Route 2 – Tillamook – Oceanside/Netarts

-  Modify schedule so that all trips depart at :15 and arrive at :00 to match changes to Route 1.

Route 3 - Tillamook – Manzanita/Cannon Beach


-  [3A] Modify Route 3 schedule to provide more reliable connections in Cannon Beach and Tillamook.
-  [3C] Extend all trips (a total of six per day) to Cannon Beach. The SETD Route 20 midday trip to Manzanita could be eliminated and used to provide an extra round trip between Seaside and Cannon Beach.

Route 4 – Tillamook – Lincoln City


-  [4A] Provide a faster trip between Tillamook and Lincoln City by eliminating the diversion into Pacific City on all trips except the first northbound and last southbound trip (to serve work trips originating in Pacific City). Coordinate the schedule for transfers to Route 6. Provide several roundtrips each day from Lincoln City to Pacific City.

Feasibility of this recommendation will depend upon funding for other route recommendations and the availability of a bus.

Route 5 – Tillamook - Portland

-  [5B] Provide three round trips per day to Portland (morning, midday, and late afternoon/evening) and modify the scheduled times to increase the number of interline opportunities with Greyhound and Amtrak and increase the practicality of Route 5 for more types of trips (provides more hours in Portland for a daytrip from Tillamook as well as a same day return trip for trips from Portland to Tillamook).

Feasibility of this recommendation will depend upon funding. If additional funding is not feasible, implement Alternative 5A.

-  [5A] Reschedule the midday trip to Portland to late afternoon/evening, allowing the route to serve more types of trips between Tillamook and Portland. Schedule a longer layover in Portland to increase the number of potential connections with Greyhound and Amtrak.

Route 6 – Coastal Connector


-  [6G] Extend all three daily trips to Salem to provide interline opportunities with Amtrak and Greyhound throughout the day. Implement the same schedule 7 days per week. Two to three weekday SKT 2X trip could be eliminated due to trips provided by TCTD allowing this to be roughly cost neutral but with funding shifted from SKT to TCTD.

Table 1 shows the evaluation matrix for each recommended service enhancement. Each recommendation was evaluated by evaluation criteria and compared to other alternatives documented in Technical Memorandum #2. The criteria utilize a three category rating system identifying if the alternative has a negative impact on the criteria, no impact, or a positive impact (-, 0, +). Some criteria have a Yes or No response or have a stated answer.

ATTACHMENTS

Technical Memorandum #1 - Existing Conditions and Opportunities

Technical Memorandum #2 - Opportunities Assessment and Prioritized Recommendations

Table 1: Service Enhancement Evaluation Matrix

Route/ Alternative #	3C		4A		5A		5B		6G	
	Extend all trips to Cannon Beach		Bypass Pacific City most trips, Provide LC-PC Roundtrips		Reschedule midday trip as late afternoon/evening trip		Three round trips per day		Three through trips per day from Lincoln City to Salem with schedule similar to weekend schedule	
Detailed description	All Route 3 trips (6/day) serve Cannon Beach, up from 2/day at present. SETD's 1 trip/day to Manzanita discontinued. Implement clockface schedule.		All trips bypass Pacific City to provide faster travel times to/from Lincoln City, except the first NB and last SB trip (to serve work trips originating in Pacific City). Provide 2 midday trips per day from Lincoln City to Pacific City.		Schedule changes to serve a greater variety of trips to/from Portland and increase connection opportunities with Greyhound/Amtrak		Adds a third round trip and increases scheduled time for connections with Greyhound and Amtrak.		All three trips per day go all the way to Salem and serve Amtrak/Greyhound and Salem Transit Center on a schedule similar to the weekend schedule. Eliminates 2-3 daily SKT 2X Trips.	
New/improved spatial connection?	+	Improved connections between TCTD and SETD by providing consistent transfer point.	-	On most trips riders to/from Pacific City need to use stop at US 101 or transfer in Lincoln City	0		0		+	Provides three daily one-seat trips in each direction between Lincoln City and Salem. One transfer currently required to travel between Lincoln City and Salem and two to Greyhound/Amtrak.
New/improved temporal connection?	+	Connects TCTD riders directly Cannon Beach 6 times per day without a transfer.	+	Reduces travel time between Tillamook and Lincoln City by approximately 20%.	+	Provides later return from Portland than current schedule.	+	Provides 3 trips per day. Provides later return from Portland than currently.	+	Reduces early morning transfer time in Lincoln City, gets riders to Salem by 9:30 am, similar to existing conditions.
Closes gap in intercity network?	0		-	Would reduce number of direct trips to/from Pacific City/Tillamook to 1 time per day. Additional trips would be provided to/from Lincoln City.	0		0		+	Provides 3 daily one-seat trips from Lincoln City to Salem on weekdays.
Demonstrated need?	Yes	Desire expressed in interviews for a Cannon Beach trip arriving in Tillamook by 9 am to serve jobs and provide access to increasing cancer treatment trips in future to Astoria.	Yes	Deviation to Pacific City raised as an issue in the TDP, increasing travel time, impacting convenience of connecting to Route 6 and LCTSD routes.	Yes	Later trip from Portland requested.	Yes	More and later trips to Portland requested.	Yes	Desire expressed for fewer weekday transfers to get to Salem.
Type of trip(s) benefitting?	Work & non-work	Route 3 would be better able to serve a variety of work and non-work trips.	Inter city	Reduces travel time for trips to/from points south of Pacific City. Provides more midday trips in corridor north of Pacific City.	All	Allows more time in Portland for a variety of trips, allows more intercity/interstate connection opportunities.	All	Allows more time in Portland (if needed) for a variety of trips, allows more intercity/interstate connection opportunities	All	No transfers required from Salem to Lincoln City, three times per day and provides direct trip to/from Greyhound/Amtrak.
Potential interline with Greyhound & Amtrak?	No		No		Yes	Increases connections in Portland.	Yes	Increases connection in Portland.	Yes	18 daily Amtrak and Greyhound interline opportunities (currently zero) due to required transfers.
Improves Service to Low Income Areas?	+	More travel options	+/-	Better travel times in southern half of corridor, less convenient travel from Pacific City	0	Better serves trips to Portland region for education, medical.	+	Better serves trips to Portland region for education, medical.	+	More travel options in corridor
Improves Access to Employment?	+	Provides early morning and early evening trips in both directions, serving job-related trips	+	Reduces commute time for the longest-distance trips. Preserves work trip access to Pacific City.	+	Later return from Portland may benefit work trips	+	Later return from Portland may benefit work trips	0	

Table 2: Financial and Performance Evaluation

Alternative	Change in Cycle Time (min)	Additional Frequency (round trips per day)	Change in Ridership (annual)	Change in Service Revenue (annual)	Change in Service Miles (annual)	Change in Admin Costs (annual)	Change in Operating Cost (annual)	Capital Cost (one-time)	Change in Total Costs (annual)	Route Cost per Mile (w/ alt.)	Route Cost per Ride (w/ alt.)	Route Revenue as a % of Cost (w/ alt.)	Route Admin as a % of Cost (w/ alt.)
3C	65	4	30%	\$ 15,874	43,442	\$ 24,201	\$ 98,556	\$ 250,000	\$ 122,757	\$ 2.82	\$ 10.87	12.9%	19.6%
4A	-30	0	0%	\$ -	-7,018	\$ -	\$(13,897)	\$ -	\$ (13,897) ¹	\$ 2.58	\$ 25.22	7.6%	23.4%
5A	30	0	5%	\$ 6,088	0	\$ 2,961	\$ -	\$ 250,000	\$ 2,961	\$ 2.76	\$ 25.14	40.8%	19.8%
5B	30	1	40%	\$ 48,704	37,800	\$ 23,690	\$ 83,768	\$ 250,000	\$ 107,457	\$ 2.76	\$ 25.14	40.8%	19.8%
6G	115 ²	0 to Grand Ronde +3 to Salem	30%	\$ 2,982	80,027	\$ 11,173	\$157,769	\$ -	\$ 168,943	\$ 2.27	\$ 54.96	3.6%	13.3%

1 Savings to be allocated to providing service to/from Lincoln City and Pacific City.

2 Change in cycle time for trips to Salem only. Travel time from Lincoln City to Grand Ronde unchanged.