Image: Doug Kerr

Yamhill County Transit Area Transit Development Plan

Volume I Appendices

October 2018

Yamhill County Transit Area

Adopted October 18, 2018

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YCTA Fleet Inventory

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Delivery Year	Agency Vehicle #	Make and Model	Odometer Mileage	Assumed Source	Assumed Year for New Grants	Grant Notes	Type	Vehicle Class	Seating Capacity [1]	Status	Condition	Est. Repl. Year [2]
EXISTING FLEET (As of 10/2018)												
2001	592	Gillig Phantom	458,205	Existing		N/A	Bus - Medium	A	30+	spare	Fair / Marginal / Poor	2014
2001	524	BlueBird	0	Existing		N/A	Bus - Medium	A	35	spare	Good / Excellent	2014
2002	400	ElDorado Escort	339,755	Existing		N/A	Bus - Medium	A	21 / 2	end-of-life	Fair / Marginal / Poor	2015
2002	203	Ford E450 Starcraft Allstar	337,597	Existing		N/A	Cutaway - Small	D	0	active	Good / Excellent	2008
2004	305	Ford E450 ElDorado Aerotech	384,863	Existing		21950	Cutaway - Large	C	16 / 3	end-of-life	Fair / Marginal / Poor	2012
2005	201	Chervrolet Venture	139,530	Existing		N/A	Van	E	5/1	end-of-life	Adequate	2010
2006	102-s	Ford Freestar Liberty	201,400	Existing		FTA	Van	E	5	spare	Fair / Marginal / Poor	2011
2006	601	Freightliner Champion CTE	30,182	Existing		N/A	Bus - Medium	A	0	spare	Good / Excellent	2019
2006	602	Freightliner Champion CTE	7,380	Existing		N/A	Bus - Medium	A	0	spare	Good / Excellent	2019
2006	603	Ford E450 ElDorado Aerotech	234,862	Existing		N/A	Cutaway - Large	C	16	spare	Fair / Marginal / Poor	2014
2007	102	Chevrolet Uplander	127,035	Existing		FTA-OR-03	Van	E	5/2	active	Adequate	2012
2008	114	Ford E450 ElDorado	306,199	Existing		N/A	Cutaway - Large	C	16/2	spare	Fair / Marginal / Poor	2016
2008	116-v	Chevrolet Uplander	118,468	Existing		FTA-OR-04	Van	E	5/1	spare	Adequate	2013
2009	404	Chevy 5500 ElDorado	599,701	Existing		24283	Bus - Medium	A	21 / 2	active	Fair / Marginal / Poor	2022
2010	300	Ford E450 ElDorado Aerotech	319,863	Existing		ARRA 25650-2	Cutaway - Large	C	16 / 2	spare	Fair / Marginal / Poor	2018
2010	401	Eldorado Easy rider	497,910	Existing		25650	Bus - Medium	A	31 / 2	active	Adequate	2023
2010	402	Eldorado Easy rider	526,979	Existing		25650	Bus - Medium	A	31 / 2	active	Adequate	2023
2010	405	Eldorado Easy rider	439,502	Existing		25650	Bus - Medium	A	31 / 2	end-of-life	Adequate	2018
2013	1301	Ford E450 ElDorado Aerotech	179,181	Existing		28542	Cutaway - Small	D	14/2	active	Good / Excellent	2019
2013	1302	Ford E450 ElDorado Aerotech	178,731	Existing		28542	Cutaway - Small	D	14/2	active	Good / Excellent	2019
2013	1303	Ford E450 ElDorado Aerotech	177,792	Existing		28542	Cutaway - Small	D	14/2	active	Good / Excellent	2019
2013	1304	Ford E450 ElDorado Aerotech	165,300	Existing		28542	Cutaway - Small	D	14/2	active	Good / Excellent	2019
2013	1305	Ford E450 ElDorado Aerotech	192,048	Existing		28542	Cutaway - Small	D	14/2	active	Good / Excellent	2019

Delivery Year	Agency Vehicle #	Make and Model	Odometer Mileage	Assumed Source	Assumed Year for New Grants	Grant Notes	Type	Vehicle Class	Seating Capacity [1]	Status	Condition	Est. Repl. Year [2]
2013	1306	Ford E450 ElDorado Aerotech	189,970	Existing		28542	Cutaway - Small	D	14/2	active	Good / Excellent	2019
2014	1307	Chevrolet Champion	88,407	Existing		FTA OR 04-0022	Cutaway - Large	C	17/2	active	Good / Excellent	2022
2017	1701D	Ford Transit 350HD Arboc SOI	2,035	County Purchase		N/A	Cutaway - Small	D	10 / 2	active	Good / Excellent	2023
2017	1702D	Ford Transit 350HD Arboc SOI	4,725	County Purchase		N/A	Cutaway - Small	D	10 / 2	active	Good / Excellent	2023
2017	1703D	Ford Transit 350HD Arboc SOI	4,199	County Purchase		N/A	Cutaway - Small	D	10 / 2	active	Good / Excellent	2023
2017	1704D	Ford Transit 350HD Arboc SOI	2,518	County Purchase		N/A	Cutaway - Small	D	10 / 2	active	Good / Excellent	2023
2018	1805C	Ford E450 Champion LF Transport	2,745	Existing	2018	31460-5339	Cutaway - Large	C	17 / 2	active	Good / Excellent	2026
2018	1806C	Ford E450 Champion LF Transport	2,550	Existing	2018	31460-5339	Cutaway - Large	C	17 / 2	active	Good / Excellent	2026
2018	1807C	Eldorado EZ Rider	1,255	Existing	2018	N/A	Bus - Medium	A	23 / 2	active	Good / Excellent	2031
2018	1808C	Eldorado EZ Rider	1,121	Existing	2018	N/A	Bus - Medium	A	23 / 2	active	Good / Excellent	2031
2018	1809C	Eldorado EZ Rider	1,148	Existing	2018	N/A	Bus - Medium	A	23 / 2	active	Good / Excellent	2031
2018	1810C	Eldorado EZ Rider	1,081	Existing	2018	N/A	Bus - Medium	A	23 / 2	active	Good / Excellent	2031
GRANTS SECURED (As of 10/2018)												
2019		Champion LF, Low-Floor		Grant - Secured	2018	32845-5339	Cutaway - Large	C	17 / 2	active	N/A	2027
2019		Champion LF, Low-Floor		Grant - Secured	2018	32845-5339	Cutaway - Large	C	17 / 2	active	N/A	2027
2019		Champion LF, Low-Floor		Grant - Secured	2018	32856-STP	Cutaway - Large	C	17 / 2	active	N/A	2027
2019		Champion LF, Low-Floor		Grant - Secured	2018	32856-STP	Cutaway - Large	C	17 / 2	active	N/A	2027
2019		TBD Van, Accessible		Grant - Secured	2019	32845-5339	Van	E	5 / 2	active	N/A	2024
2019		TBD Van, Accessible		Grant - Secured	2019	32845-5339	Van	E	5 / 2	active	N/A	2024
2020		El Dorado EZ Rider II, Low-Floor		Grant - Secured	2017	STIP Enhance, 2018-2021	Bus - Medium	A	23 / 2	active	N/A	2033
2020		El Dorado EZ Rider II, Low-Floor		Grant - Secured	2017	STIP Enhance, 2018-2021	Bus - Medium	A	23 / 2	active	N/A	2033
2021		El Dorado EZ Rider II, Low-Floor		Grant - Secured	2018	2019 TBD-5339	Bus - Medium	A	23 / 2	active	N/A	2034
2021		El Dorado EZ Rider II, Low-Floor		Grant - Secured	2018	2019 TBD-5339	Bus - Medium	A	23 / 2	active	N/A	2034
2021		El Dorado EZ Rider II, Low-Floor		Grant - Secured	2018	2019 TBD-5339	Bus - Medium	A	23 / 2	active	N/A	2034
ADDITIONAL FLEET (Assumed)												
2019		Arboc Spirit of Independence, Low-Floor		Grant - Unsecured	2019		Cutaway - Small	D	10 / 2	active	N/A	2025
2019		Arboc Spirit of Independence, Low-Floor		Grant - Unsecured	2019		Cutaway - Small	D	10 / 2	active	N/A	2025
2019		Arboc Spirit of Independence, Low-Floor		Grant - Unsecured	2019		Cutaway - Small	D	10 / 2	active	N/A	2025
2019		Arboc Spirit of Independence, Low-Floor		Grant - Unsecured	2019		Cutaway - Small	D	10 / 2	active	N/A	2025
2020		El Dorado EZ Rider II, Low-Floor		Grant - Unsecured	2020		Bus - Medium	A	23 / 2	active	N/A	2033
2020		Arboc Spirit of Independence, Low-Floor		Grant - Unsecured	2020		Cutaway - Small	D	10 / 2	active	N/A	2026
2020		Arboc Spirit of Independence, Low-Floor		Grant - Unsecured	2020		Cutaway - Small	D	10 / 2	active	N/A	2026
2020		TBD Van, Accessible		Grant - Unsecured	2020		Van	E	5 / 2	active	N/A	2025
2023		Champion LF, Low-Floor		Grant - Unsecured	2022		Cutaway - Large	C	17 / 2	active	N/A	2031
2024		Arboc Spirit of Independence, Low-Floor		Grant - Unsecured	2023		Cutaway - Small	D	10 / 2	active	N/A	2030
2025		Arboc Spirit of Independence, Low-Floor		Grant - Unsecured	2024		Cutaway - Small	D	10 / 2	active	N/A	2031

Delivery Year	Agency Vehicle #	Make and Model	Odometer Mileage	Assumed Source	Assumed Year for New Grants	Grant Notes	Type	Vehicle Class	Seating Capacity [1]	Status	Condition	Est. Repl. Year [2]
2025		Arboc Spirit of Independence, Low-Floor		Grant - Unsecured	2024		Cutaway - Small	D	10 / 2	active	N/A	2031
2025		Arboc Spirit of Independence, Low-Floor		Grant - Unsecured	2024		Cutaway - Small	D	10 / 2	active	N/A	2031
2026		TBD Van, Accessible		Grant - Unsecured	2025		Van	E	5 / 2	active	N/A	2031
2026		TBD Van, Accessible		Grant - Unsecured	2025		Van	E	5 / 2	active	N/A	2031
2027		Arboc Spirit of Independence, Low-Floor		Grant - Unsecured	2026		Cutaway - Small	D	10 / 2	active	N/A	2033
2027		Arboc Spirit of Independence, Low-Floor		Grant - Unsecured	2026		Cutaway - Small	D	10 / 2	active	N/A	2033
2027		Arboc Spirit of Independence, Low-Floor		Grant - Unsecured	2026		Cutaway - Small	D	10 / 2	future	N/A	2033
2027		TBD Van, Accessible		Grant - Unsecured	2026		Van	E	5 / 2	future	N/A	2032
2028		Champion LF, Low-Floor		Grant - Unsecured	2027		Cutaway - Large	C	17 / 2	future	N/A	2036
2028		Champion LF, Low-Floor		Grant - Unsecured	2027		Cutaway - Large	C	17 / 2	future	N/A	2036
2028		Champion LF, Low-Floor		Grant - Unsecured	2027		Cutaway - Large	C	17 / 2	future	N/A	2036
2028		Arboc Spirit of Independence, Low-Floor		Grant - Unsecured	2027		Cutaway - Small	D	10 / 2	future	N/A	2034
2028		Arboc Spirit of Independence, Low-Floor		Grant - Unsecured	2027		Cutaway - Small	D	10 / 2	future	N/A	2034
2029		Gillig 35-foot bus		Grant - Unsecured	2028		Bus - Large	A	32 / 2	future	N/A	2042
2029		Gillig 35-foot bus		Grant - Unsecured	2028		Bus - Large	A	32 / 2	future	N/A	2042
2029		Champion LF, Low-Floor		Grant - Unsecured	2028		Cutaway - Large	C	17 / 2	future	N/A	2037
2029		Champion LF, Low-Floor		Grant - Unsecured	2028		Cutaway - Large	C	17 / 2	future	N/A	2037
2029		Champion LF, Low-Floor		Grant - Unsecured	2028		Cutaway - Large	C	17 / 2	future	N/A	2037
2029		Champion LF, Low-Floor		Grant - Unsecured	2028		Cutaway - Large	C	17 / 2	future	N/A	2037
2029		Champion LF, Low-Floor		Grant - Unsecured	2028		Cutaway - Large	C	17 / 2	future	N/A	2037
2029		Champion LF, Low-Floor		Grant - Unsecured	2028		Cutaway - Large	C	17 / 2	future	N/A	2037
2029		Arboc Spirit of Independence, Low-Floor		Grant - Unsecured	2028		Cutaway - Small	D	10 / 2	future	N/A	2035
2029		Arboc Spirit of Independence, Low-Floor		Grant - Unsecured	2028		Cutaway - Small	D	10 / 2	future	N/A	2035
2029		Arboc Spirit of Independence, Low-Floor		Grant - Unsecured	2028		Cutaway - Small	D	10 / 2	future	N/A	2035
2029		Arboc Spirit of Independence, Low-Floor		Grant - Unsecured	2028		Cutaway - Small	D	10 / 2	future	N/A	2035
2029		TBD Van, Accessible		Grant - Unsecured	2028		Van	E	5 / 2	future	N/A	2034

Notes: [1] Seated / Wheelchairs. [2] End-of-life based on FTA mileage or age criteria.

Source: YCTA Fleet Inventory, Updated October 2018, and TDP Fleet Schedule

Figure A-2 Detailed Vehicle Type Assumptions by Time Frame: Vehicles Operated in Maximum Service

	EXISTING				NEAR-TERM				SHORT-TERM				MID-TERM					LONG-TERM				
ROUTE	Van	Cutaway - Small	Cutaway - Large	Bus - Medium	Van	Cutaway - Small	Cutaway - Large	Bus - Medium	Van	Cutaway - Small	Cutaway - Large	Bus - Medium	Van	Cutaway - Small	Cutaway - Large	Bus - Medium	Bus - Large	Van	Cutaway - Small	Cutaway - Large	Bus - Medium	Bus - Large
McMinnville - 2W (2)			0.5				0.5				0.5				0.5					1		
McMinnville - 2E (4)			0.5				1				1				1					1		
McMinnville - 3N (3)			0.5				1				1				1						1	
McMinnville - 3S (1)			0.5				0.5				0.5				0.5					1		
McMinnville – New (5) (Lafayette Ave/Baker Creek/Hill Rd)																				1		
McMinnville – New (E. of Lafayette Ave)																			1			
Newberg - 5/6 (15/16)			0.5				1				1				1					1		
Newberg - 7/8 (17/18)			0.5				1				1				1					2		
Intercity – 11 (80x)				1				1				1				1					2	
Intercity - 22				1				1				1				1					1	
Intercity - 33				1				1				1				1					2	
Intercity – 44/45x				4				4				4				4						4
McMinnville DAR	2	3			2	3			2	3			2	3				2	3			
Newberg DAR		2				1			1	1			1	1				2	2			
Small City Flex / Shopper Shuttles						2				3				3					5			
Vehicles in Service	2	5	3	7	2	6	5	7	3	7	5	7	3	7	5	7	0	4	11	7	6	4
Spares - Minimum	0	2	1	2	1	2	2	2	1	2	3	3	1	3	3	3	0	1	3	3	2	2
Total with Spares	2	7	4	9	3	8	7	9	4	9	8	10	4	10	8	10	0	5	14	10	8	6
Spare Ratio	0%	40%	33%	29%	50%	33%	40%	29%	33%	29%	60%	43%	33%	43%	60%	43%	0%	25%	27%	43%	33%	50%

Figure A-3 Detailed Fleet Expansion and Replacement Plan, 2018 - 2028

Year and Time Frame	Additional Required Fleet	Required Fleet in Service	Active Fleet [1]	Minus End of Life Vehicles	Plus Vehicles from Existing Grants	Total Fleet Available	Fleet Required with Spares	Net Fleet Req't	Additional Vehicles to be Purchased	Funded by Existing Grants			Funded by New Grants			Total Existing and New Grants			
										Cost of Vehicles [2]	Grant Amount	Local Match	Cost of Vehicles [2]	Total Grant Funding Requirement	Assumed Local Match	Total # of Vehicles	Total Vehicle Costs	Total Grants	Total Local Match
2018 - Existing																			
Bus - Large	0	0	0	0	0	0	0	0		$0			$0	$0	$0	0	$0	$0	$0
Bus - Medium	0	7	7	0	0	7	9	2		$1,360,000	$1,323,346		$0	$0	$0	0	$1,360,000	$1,323,346	$0
Cutaway - Large	0	3	3	0	0	3	4	1		$280,000	$280,000		$0	$0	$0	0	$280,000	$280,000	$0
Cutaway - Small	0	5	11	0	0	11	7	0		$0			$0	$0	$0	0	$0	$0	$0
Van	0	2	1	0	0	1	2	1		$0			$0	$0	$0	0	$0	$0	$0
TOTAL	0	17	22	0	0	22	22	4	0	$1,640,000	$1,603,346	$0	$0	$0	$0	0	$1,640,000	$1,603,346	$0
2019 - Near-Term																			
Bus - Large	0	0	0	0	0	0	0	0		$0			$0	$0	$0	0	$0	$0	$0
Bus - Medium	0	7	7	0	0	7	9	2		$0			$0	$0	$0	0	$0	$0	$0
Cutaway - Large	2	5	3	0	4	7	7	0		$560,000	$486,317	$68,628	$0	$0	$0	4	$560,000	$486,317	$68,628
Cutaway - Small	1	6	11	6	0	5	8	3	4	$0			$340,000	$302,000	$38,000	4	$340,000	$302,000	$38,000
Van	0	2	1	0	2	3	3	0		$100,000	$85,453	$14,547	$0	$0	$0	2	$100,000	$85,453	$14,547
TOTAL	3	20	22	6	6	22	27	5	4	$660,000	$571,770	$83,175	$340,000	$302,000	$38,000	10	$1,000,000	$873,770	$121,175
2020 - Short-Term																			
Bus - Large	0	0	0	0	0	0	0	0		$0	$0		$0	$0	$0	0	$0	$0	$0
Bus - Medium	0	7	7	0	2	9	10	1	1	$696,000	$707,072	$80,928	$348,000	$309,000	$39,000	3	$1,044,000	$1,016,072	$119,928
Cutaway - Large	0	5	7	0	0	7	8	1	1	$0	$0		$143,000	$127,000	$16,000	1	$143,000	$127,000	$16,000
Cutaway - Small	1	7	9	0	0	9	9	0		$0	$0		$0	$0	$0	0	$0	$0	$0
Van	1	3	3	0	0	3	4	1	1	$0	$0		$51,000	$45,000	$6,000	1	$51,000	$45,000	$6,000
TOTAL	2	22	26	0	2	28	31	3	3	$696,000	$707,072	$80,928	$542,000	$481,000	$61,000	5	$1,238,000	$1,188,072	$141,928
2021 - Short-Term																			
Bus - Large	0	0	0	0	0	0	0	0		$0			$0	$0	$0	0	$0	$0	$0
Bus - Medium	0	7	10	0	3	13	10	0		$1,068,000	$960,000	$110,115	$0	$0	$0	3	$1,068,000	$960,000	$110,115
Cutaway - Large	0	5	8	0	0	8	8	0		$0			$0	$0	$0	0	$0	$0	$0
Cutaway - Small	0	7	9	0	0	9	9	0		$0			$0	$0	$0	0	$0	$0	$0
Van	0	3	4	0	0	4	4	0		$0			$0	$0	$0	0	$0	$0	$0
TOTAL	0	22	31	0	3	34	31	0	0	$1,068,000	$960,000	$110,115	$0	$0	$0	3	$1,068,000	$960,000	$110,115
2022 - Short-Term																			
Bus - Large	0	0	0	0	0	0	0	0					$0	$0	$0	0	$0	$0	$0
Bus - Medium	0	7	13	1	0	12	10	0					$0	$0	$0	0	$0	$0	$0
Cutaway - Large	0	5	8	1	0	7	8	1	1				$150,000	$133,000	$17,000	1	$150,000	$133,000	$17,000
Cutaway - Small	0	7	9	0	0	9	9	0					$0	$0	$0	0	$0	$0	$0
Van	0	3	4	0	0	4	4	0					$0	$0	$0	0	$0	$0	$0
TOTAL	0	22	34	2	0	32	31	1	1	$0	$0	$0	$150,000	$133,000	$17,000	1	$150,000	$133,000	$17,000

Year and Time Frame	Additional Required Fleet	Required Fleet in Service	Active Fleet [1]	Minus End of Life Vehicles	Plus Vehicles from Existing Grants	Total Fleet Available	Fleet Required with Spares	Net Fleet Req't	Additional Vehicles to be Purchased	Funded by Existing Grants			Funded by New Grants			Total Existing and New Grants			
										Cost of Vehicles [2]	Grant Amount	Local Match	Cost of Vehicles [2]	Total Grant Funding Requirement	Assumed Local Match	Total # of Vehicles	Total Vehicle Costs	Total Grants	Total Local Match
2023 - Mid-Term																			
Bus - Large	0	0	0	0	0	0	0	0					$0	$0	$0	0	$0	$0	$0
Bus - Medium	0	7	12	2	0	10	10	0					$0	$0	$0	0	$0	$0	$0
Cutaway - Large	0	5	8	0	0	8	8	0					$0	$0	$0	0	$0	$0	$0
Cutaway - Small	0	7	9	4	0	5	10	5	5				$465,000	$413,000	$52,000	5	$465,000	$413,000	$52,000
Van	0	3	4	0	0	4	4	0					$0	$0	$0	0	$0	$0	$0
TOTAL	0	22	33	6	0	27	32	5	5	$0	$0	$0	$465,000	$413,000	$52,000	5	$465,000	$413,000	$52,000
2024 - Mid-Term																			
Bus - Large	0	0	0	0	0	0	0	0					$0	$0	$0	0	$0	$0	$0
Bus - Medium	0	7	10	0	0	10	10	0					$0	$0	$0	0	$0	$0	$0
Cutaway - Large	0	5	8	0	0	8	8	0					$0	$0	$0	0	$0	$0	$0
Cutaway - Small	0	7	10	0	0	10	10	0					$0	$0	$0	0	$0	$0	$0
Van	0	3	4	2	0	2	4	2	2				$112,000	$99,000	$13,000	2	$112,000	$99,000	$13,000
TOTAL	0	22	32	2	0	30	32	2	2	$0	$0	$0	$112,000	$99,000	$13,000	2	$112,000	$99,000	$13,000
2025 - Mid-Term																			
Bus - Large	0	0	0	0	0	0	0	0					$0	$0	$0	0	$0	$0	$0
Bus - Medium	0	7	10	0	0	10	10	0					$0	$0	$0	0	$0	$0	$0
Cutaway - Large	0	5	8	0	0	8	8	0					$0	$0	$0	0	$0	$0	$0
Cutaway - Small	0	7	10	4	0	6	10	4	4				$388,000	$345,000	$43,000	4	$388,000	$345,000	$43,000
Van	0	3	4	1	0	3	4	1	1				$57,000	$50,000	$7,000	1	$57,000	$50,000	$7,000
TOTAL	0	22	32	5	0	27	32	5	5	$0	$0	$0	$445,000	$395,000	$50,000	5	$445,000	$395,000	$50,000
2026 - Mid-Term																			
Bus - Large	0	0	0	0	0	0	0	0					$0	$0	$0	0	$0	$0	$0
Bus - Medium	0	7	10	0	0	10	10	0					$0	$0	$0	0	$0	$0	$0
Cutaway - Large	0	5	8	2	0	6	8	2	2				$328,000	$291,000	$37,000	2	$328,000	$291,000	$37,000
Cutaway - Small	0	7	10	0	0	10	10	0					$0	$0	$0	0	$0	$0	$0
Van	0	3	4	0	0	4	4	0					$0	$0	$0	0	$0	$0	$0
TOTAL	0	22	32	2	0	30	32	2	2	$0	$0	$0	$328,000	$291,000	$37,000	2	$328,000	$291,000	$37,000
2027 - Mid-Term																			
Bus - Large	0	0	0	0	0	0	0	0					$0	$0	$0	0	$0	$0	$0
Bus - Medium	0	7	10	0	0	10	10	0					$0	$0	$0	0	$0	$0	$0
Cutaway - Large	0	5	8	4	0	4	8	4	4				$672,000	$598,000	$74,000	4	$672,000	$598,000	$74,000
Cutaway - Small	0	7	10	0	0	10	10	0					$0	$0	$0	0	$0	$0	$0
Van	0	3	4	0	0	4	4	0					$0	$0	$0	0	$0	$0	$0
TOTAL	0	22	32	4	0	28	32	4	4	$0	$0	$0	$672,000	$598,000	$74,000	4	$672,000	$598,000	$74,000

Year and Time Frame	Additional Required Fleet	Required Fleet in Service	Active Fleet [1]	Minus End of Life Vehicles	Plus Vehicles from Existing Grants	Total Fleet Available	Fleet Required with Spares	Net Fleet Req't	Additional Vehicles to be Purchased	Funded by Existing Grants			Funded by New Grants			Total Existing and New Grants			
										Cost of Vehicles [2]	Grant Amount	Local Match	Cost of Vehicles [2]	Total Grant Funding Requirement	Assumed Local Match	Total # of Vehicles	Total Vehicle Costs	Total Grants	Total Local Match
2028 - Long-Term																			
Bus - Large	4	4	0	0	0	0	6	6	2				$1,104,000	$982,000	$122,000	2	$1,104,000	$982,000	$122,000
Bus - Medium	-1	6	10	0	0	10	8	0					$0	$0	$0	0	$0	$0	$0
Cutaway - Large	2	7	8	1	0	7	10	3	3				$516,000	$459,000	$57,000	3	$516,000	$459,000	$57,000
Cutaway - Small	4	11	10	0	0	10	14	4	4				$416,000	$370,000	$46,000	4	$416,000	$370,000	$46,000
Van	1	4	4	0	0	4	5	1	1				$61,000	$54,000	$7,000	1	$61,000	$54,000	$7,000
TOTAL	10	32	32	1	0	31	43	14	10	$0	$0	$0	$2,097,000	$1,865,000	$232,000	10	$2,097,000	$1,865,000	$232,000

Notes: [1] Active fleet includes existing purchases (funded by existing grants in 2018). [2] Based on unit costs and quantities.

APPENDIX B

Additional Transportation Service Provider Information and Transportation Project Details

APPENDIX B ADDITIONAL TRANSPORTATION SERVICE PROVIDER INFORMATION

Figure B-1 Yamhill County Social Service Agencies Involved in Transportation Services

Organization	Transportation Services	People Services Are Available For
McMinnville		
Yamhill County Health and Human Services - Abacus Program	5 vans/cars in operation for medical treatment and employment	People with disabilities
Yamhill County Health and Human Services – Developmental Disability Service	Not a current provider of transportation services, but may become one if necessary grants can be obtained to fund it	People with disabilities
Yamhill Community Action Partnership	Bus passes provided	Older adults, people with low-income, people with disabilities
Head Start of Yamhill County	Provides bus for students to/from school, as well as bus passes	Children of families with low-income
Yamhill County Special Olympics	Transportation to/from athletic events, provided by rental vehicles	People with disabilities
Yamhill Community Care Organization	Medical and wellness trips provided to members by First Transit, who operates 15 wheelchair accessible vans	Oregon Health Plan (OHP) members
Oregon Mennonite Residential Services (OMRS)	11 vans used for transportation of residents of OMRS group homes	People with disabilities
MV Advancements	Many MV clients use YCTA for transportation. MV also operates 25 vans/min-buses for work crews, community activities, and some medical appointments	People with disabilities
Salem		
Willamette Valley Transport (WVT)	5 wheelchair-accessible vans for general purpose demand response services	People with physical injuries or disabilities preventing them from transporting themselves
United Way of the Mid-Willamette Valley	Bus passes	General public, with specified interest programs

Source: YCTA TDP, TM #2, Figure 3-33 and Yamhill County Coordinated Public Transit – Human Services Transportation Plan, 2016

Figure B-2 Wine Tour Shuttle Services

Wine Tour Service	City / Cities Service is Based In
Yamhill County Based Services	
A Nose for Wine Tours	Hillsboro
A Vineyard Wine Tour	McMinnville
Aspen Limo Tours	Dundee, McMinnville, Newberg, Portland
Backcountry Wine Tours	McMinnville, Newberg, Portland
Beautiful Willamette Tours	Portland, Salem, Vancouver
Black Tie Tours	Newberg
Cellar Door Wine Tours	Lafayette
Embrace Oregon	McMinnville
Insiders Wine Tour	McMinnville
Oregon Select Wine Tours	Newberg
Summit Wine Tours	Newberg
Triangle Wine Country Tours	McMinnville, Newberg, Portland
Wine Country Car Service	Newberg
Multnomah County Based Services	
Evergreen Escapes	Portland
First Nature Treks & Tours	Portland
Grape Escape	Portland
Lucky Limousine & Town Car Service	Portland
My Chauffeur Wine Tours	Portland
Oregon Wine Guides	Portland
Sea to Summit Tours & Adventures	Portland
Tesla Custom Winery Tours	Portland
Uncorked Northwest Wine Tours	Portland
Winemaker Tours	Portland
Washington County Based Services	
Prestige Wine Tours LLC	Beaverton
Vino Ventures	Beaverton
Services Based Out of State	
Main Street Designated Drivers & Wine Tours	New York, NY

Source: Willamette Valley Wineries Association

APPENDIX C

Bus Stop Design Guidelines

APPENDIX C BUS STOP DESIGN GUIDELINES

BUS STOP DESIGN PRINCIPLES

The following principles identify key characteristics of good bus stop design and locations. Bus stops should:

- **Be placed in convenient, comfortable, and safe locations:** Bus stops should ideally be located where passengers will feel comfortable and safe waiting for transit service. Stop locations should be well lit and offset from fast-moving traffic when possible. Transit customers often view stops that are conveniently located near major activity centers (e.g., shopping areas, schools, or and workplaces) as the most attractive and safe.
- **Be visible and easily identifiable:** Bus stops should be located in places where passengers can easily find them. Passengers waiting for the bus should also be easily visible to bus drivers. Bus stops should present a strong brand identity, through signage and other amenities, which assists customers in identifying stop locations and available services. Riders should feel familiar with the elements present at each transit stop, even if the exact amenities vary somewhat between locations.
- **Provide information on available services:** All bus riders and potential riders need basic information in order to use a transit service: Can I get to where I want to go from this stop? Is the route running at this time of day? When will the next bus arrive? While much of this information can now be accessed using a smart phone, transit riders continue to value basic route and schedule information at each bus stop. Such information helps reduce confusion about transit service and can act as low-cost advertising to potential new transit customers. Advanced information systems, such as real-time passenger information, can further enhance the transit experience and increase customer satisfaction.
- **Be easily accessible by people walking, bicycling, and rolling:** Nearly all transit riders are pedestrians or bicyclists at some point in their journey. Therefore, it is important that each bus stop have a safe and defined pathway to and from local destinations that is accessible to riders of all abilities. Most stops should have accessible and safe sidewalk access and be located near a crosswalk. Ideally, this pedestrian infrastructure should extend far beyond the stop location, ensuring that riders can safely travel to their destination. It is also important to consider how bicyclists will access each bus stop, and add infrastructure such as bike lanes and storage racks where appropriate.
- **Be well-integrated with their surroundings:** Bus stops are most effective when actively integrated with surrounding development. Well-placed stops can enhance the transit experience and attract new riders, while poorly placed stops can hinder bus operations and decrease customer safety. Developers and planners should consider bus stop location early in the design process of a new project, rather than placing stops at later stages of construction. Similarly,

planners should consider how road and sidewalk reconstruction and new bicycle infrastructure could affect stop quality and transit operations.

- **Provide amenities to make the wait comfortable:** Providing amenities at or very near stops makes using transit more convenient and comfortable. Well-designed bus stops can actually decrease the amount of time customers perceive they have been waiting for the bus. Chapter 7 of the TDP outlines a wide-range of potential bus stop amenities and the sections below provide additional guidelines for placing these amenities based on stop ridership and location.

BUS STOP LOCATION CONSIDERATIONS

Location Relative to Intersection (Far-Side, Near-Side, Mid-Block)

Bus stop placement directly impacts the convenience and accessibility of the transit system. Determining the proper location of bus stops involves choosing between near-side, far-side, and mid-block stops. While many other factors should be considered when choosing a bus stop location, including adjacent land use, space availability, and pedestrian access, the location of the stop relative to the intersection is an important consideration. If all other factors are equal, far-side stops are preferable.

Figure C-1 illustrates near-side-, far-side, and mid-block stop placement. Key considerations are summarized below, with additional details in Figure C-2

- **Near-side** bus stops are located before an intersection, allowing passengers to load and unload while the vehicle is stopped at a red light or stop sign. Near-side bus stops can minimize interference when traffic is heavy on the far-side of an intersection. At traffic signal-controlled locations, near-side stops eliminate “double stopping” (before and after the traffic signal) as passengers can board the bus while it is stopped. However, buses at near-side stops may create conflicts with right-turning vehicles and restrict sight distances for vehicles and crossing pedestrians. Passengers may also cross the street in front of the bus, increasing bus travel time.
- **Far-side** bus stops are located after an intersection, allowing the bus to travel through the intersection before stopping to load and unload passengers. When the bus pulls away from the stop at an intersection controlled by a traffic signal, the signal generates gaps in traffic allowing buses to more easily re-enter the traffic lane. Far-side stops also encourage pedestrians to cross behind the bus and take up the least amount of curbside space. Although transit signal priority (TSP) is not currently used in Yamhill County, far-side bus stops are preferred in conjunction with TSP. Additionally, far-side stops avoid conflicts between buses and right-turning vehicles. Far-side stops are generally the preferred stop location, if the traffic signal and roadway configuration is favorable.

  Mid-block bus stops are located between intersections. Mid-block stops minimize sight distance problems for vehicles and pedestrians. Additionally passenger waiting areas located mid-block often experience less pedestrian congestion. However, mid-block stops require both deceleration and acceleration areas, requiring additional distances for no parking restrictions or increased turnout construction costs. Mid-block stops also increase walking distances for patrons crossing at intersections, or result in patrons crossing the street mid-block away from a designated crossing. Mid-block stops should generally be used under special circumstances, such as where large destinations justify high-volume access or when the distance between adjacent intersections exceeds stop spacing recommendations.

Figure C-1 Near-Side, Far-Side, and Mid-Block Examples

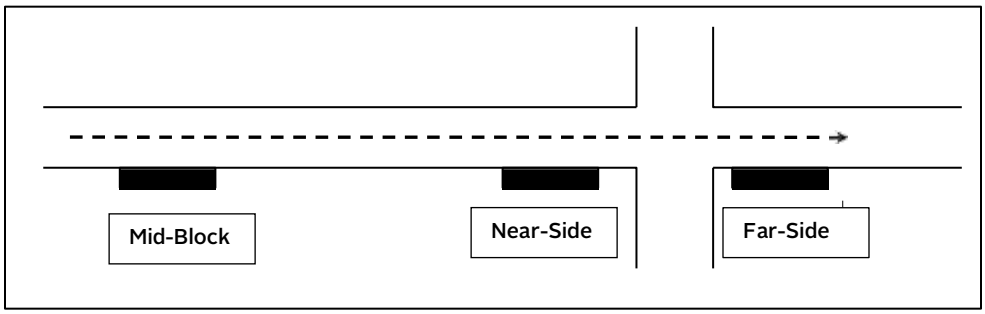


Figure C-2 Near-Side, Far-Side, and Mid-Block Bus Stop Tradeoffs

	Advantages	Disadvantages	Where Recommended
Near-Side Stop	▪ Minimizes interference when traffic is heavy on far side of intersection ▪ Allows bus boarding closest to crosswalk. Pedestrians waiting to cross do so while the bus is stopped and not moving into the stop. ▪ Width of the intersection is available for the bus to pull away from curb and merge with traffic ▪ Allows customers to board/alight while the bus is stopped at a red light	▪ Increases sight line problems for crossing pedestrians ▪ Increases conflicts with right-turning vehicles passing and turning in front of the bus ▪ May result in stopped buses obscuring curbside traffic control devices and crossing pedestrians ▪ May block the through lane during peak periods with queuing buses ▪ May obscure sight lines for vehicles approaching from the side street to the right of the bus	▪ Traffic is heavier on the far-side of the intersection ▪ Pedestrian conditions and movements are better than on the far-side ▪ Bus route continues straight through the intersection or the stop is set back a reasonable distance to enable right-turn ▪ Curb extension prevents vehicles from turning right directly in front of a bus ▪ Multiple concurrent buses at a far-side stop could spill over into the intersection
Far-Side Stop	▪ Minimizes conflicts with turning vehicles ▪ Provides additional right-turn capacity by making curb lane available for traffic ▪ Encourages pedestrians to cross behind the bus, instead of in front of the bus (improved sightlines for approaching vehicles) ▪ Creates shorter deceleration distances for buses and minimizes area needed for curbside bus zone ▪ Buses can take advantage of the gaps in traffic flow created at signalized intersections behind the stop	▪ May result in traffic queued into intersection when a bus is stopped in travel lane (near-side stop preferred at non-signalized intersections where bus would block a single travel lane) ▪ May obscure/increase sight distance at the far-side crosswalk and for side streets ▪ Pedestrians stepping off the curb to cross the street as the bus approaches the bus stop (applies to unsignalized intersections) ▪ Vehicles occupying right-turn only lanes and deciding to proceed straight instead of turning, and cutting off bus ▪ Can result in the bus stopping twice; at a red light and then at the far-side stop	▪ Traffic is heavier on the near-side of an intersection ▪ At heavy right-turns on major approach, or heavy left and through movements from side street ▪ Pedestrian conditions are better than the near-side ▪ Intersections with priority treatments including queue jump lanes and transit signal priority (TSP), e.g., extending green time at a signal to allow a bus to make it through the intersection (not currently used in Yamhill County) ▪ Removes buses from conflicts at complex intersections with multi-phase signals or dual turn lanes
Mid-Block Stop	▪ Minimizes sight line obstructions for vehicles and pedestrians ▪ Conflicts with intersection traffic minimized	▪ Encourages unsafe pedestrian crossing unless a crosswalk or other crossing opportunity is provided ▪ Increases walking distance to intersection crossing ▪ Requires greatest amount of curb space and potential parking restrictions	▪ Traffic or street/sidewalk conditions at the intersection are not conducive to a near or far-side stop ▪ Customer traffic generators are located mid-block and/or adjacent intersections are too far apart

Bus Pullouts

Bus pullouts provide an area for buses to pull out of the traffic flow to stop. Bus pullouts have both advantages and disadvantages in that they can be helpful for overall roadway operations, but can cause delays for transit passengers because the bus must exit and re-enter the traffic stream. To balance the advantages and disadvantages, bus pullouts are most often used on higher-speed roadways (urban arterials and rural highways with speeds of 40 mph or more and/or traffic volumes of 250 or more vehicles per hour) and at stops with higher passenger volumes. Key locations include:

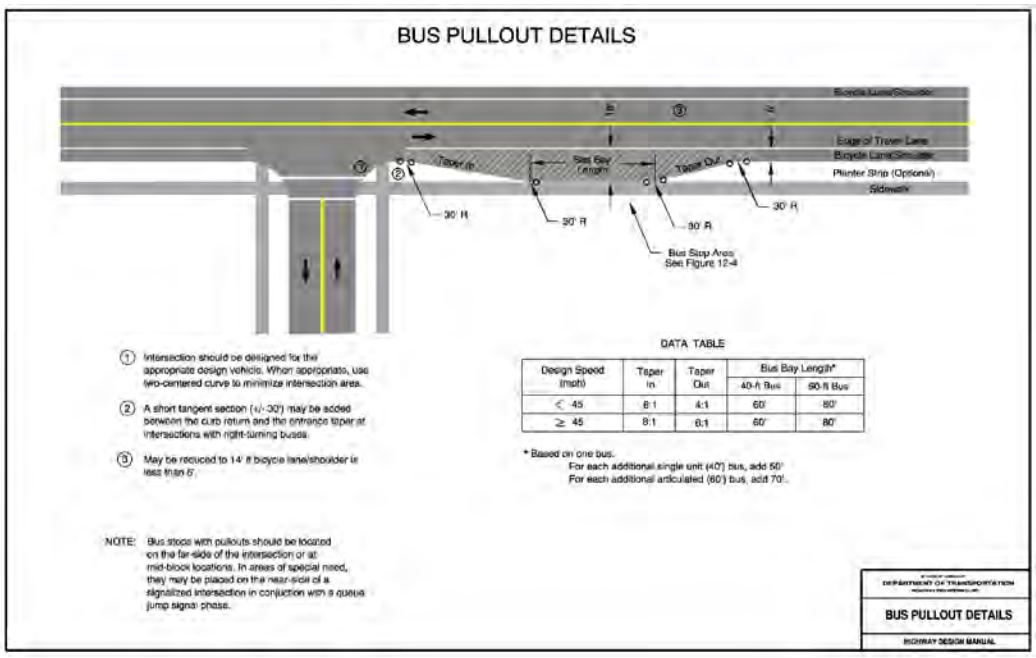
- Stops located at the intersection of major urban arterials (such as near OR-99W and Lafayette Avenue in McMinnville or OR-99W and Springbrook Road in Newberg)
- Stops located along major urban arterial and collector roads at or near a major activity center
- Rural bus stops along state highways

To avoid delays to right-turning traffic, bus pullouts should be developed at the far side of intersections. Where possible, they should also be located within existing auxiliary lanes (for example, a right-turn lane into a shopping center) or merge lanes.

Figure C-3 Bus Pullout Examples

Source: Left – Google Maps, Island Transit, Whidbey Island, WA. Right – OR 99W & SW Langer Drive, Sherwood

Figure C-4 ODOT Bus Pullout Sample Drawing

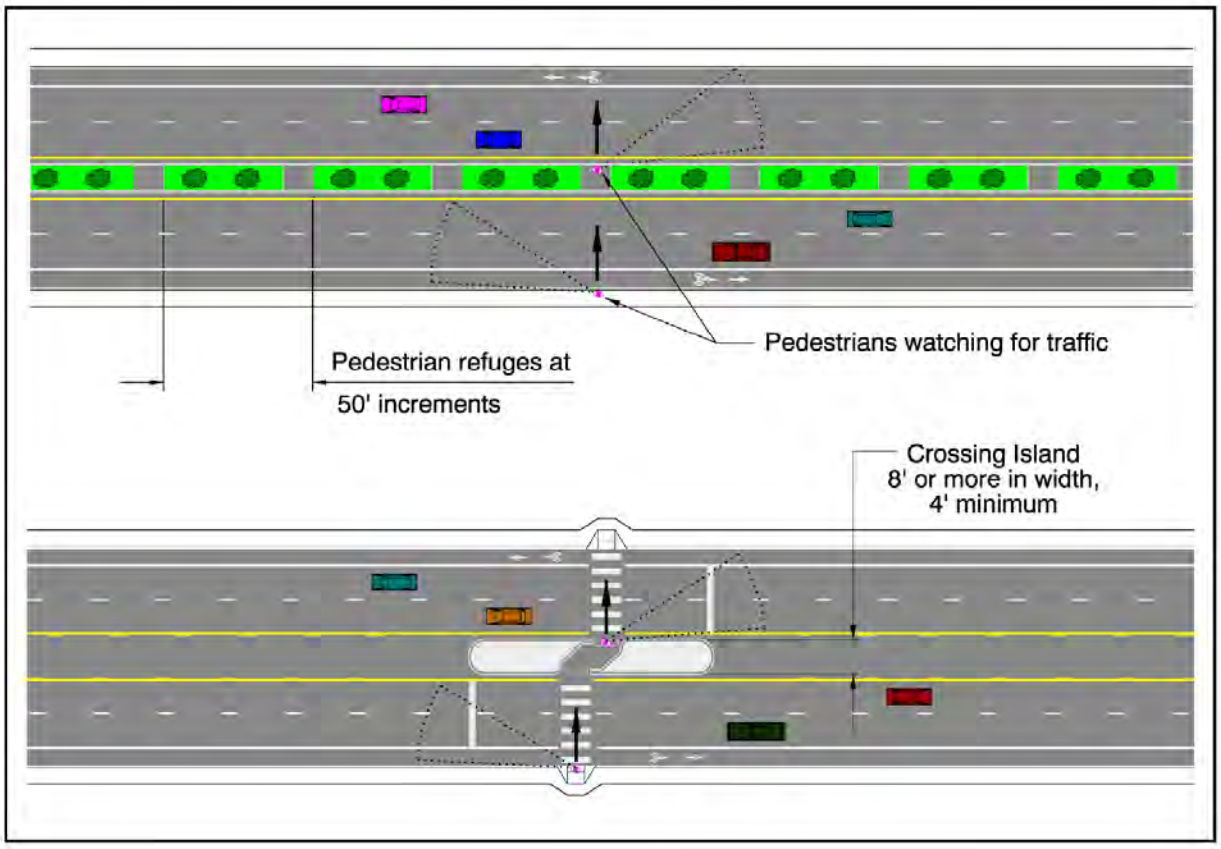


Source: ODOT, Highway Design Manual, Figure 12-1: Minimum Bus Pullout Details. https://tinyurl.com/yawlrujx

Pedestrian Crossings away from Intersections

On major arterials, bus stops should be located at signalized intersections (preferably the far-side as discussed above) to make it easy for transit passengers to cross the street. At locations where there are no nearby signalized or stop sign-controlled intersections (such as along many parts of OR 99W in McMinnville and Newberg), crossings with pedestrian refuge islands should be provided (see Figure C-3 for an example). Stops on the far-side of the crosswalk are preferred to maximize visibility of/for crossing pedestrians. Appropriate pedestrian signal treatments should be considered based on roadway travel speeds and lane configurations.

Figure C-5 Mid-Block Crossing and Refuge Island Example



Source: ODOT, Highway Design Manual, Figure 13-4. https://tinyurl.com/ya3khqfg

New Roadway Construction

Where new roadways are constructed, if it is likely that transit will be provided along that roadway at some point in the future, the design of the roadway should provide adequate right-of-way for the subsequent development of bus stop facilities and bus pullouts.

BUS STOP ACCESSIBILITY GUIDANCE

Accessibility requirements come from multiple overlapping sources that include both general guidelines and specific guidance when introducing or altering bus stops. Several national sources authoritatively

dictate the rules and standards on accessibility; however, there is little in the way of direct, clear guidance on the requirements, with many open to interpretation. Sources include:

The **ADA Accessibility Guidelines for Transportation Facilities (ADAAG)** is the primary source for federal guidance on accessibility issues, and the US Department of Transportation (DOT) has adopted ADAAG as the standard for ADA compliance.[1] ADAAG requires that "bus boarding and alighting areas" be "connected to streets, sidewalks, or pedestrian paths by an accessible route" (ADAAG 810.2.3).

The **Federal Transit Administration (FTA)** also provides accessibility standards, which are the interpretation of the ADAAG standards, more specific for transportation facilities.[2] DOT requirements only apply to facilities and systems that are subject to the DOT ADA regulations.

General minimum ADAAG requirements include:

- **Section 810.2.1: Surface.** "Bus stop boarding and alighting areas shall have a firm, stable surface."
- **Section 810.2.2: Dimensions.** "Bus stop boarding and alighting areas shall provide a clear length of 96 inches [8 feet] minimum, measured perpendicular to the curb or vehicle roadway edge, and a clear width of 60 inches [5 feet], measured parallel to the vehicle roadway."
- **Section 810.2.3: Connection.** "Bus boarding and alighting areas shall be connected to streets, sidewalks, or pedestrian paths by an accessible route complying with 402 [Accessible Routes]."
- **Section 810.2.4: Slope.** "Parallel to the roadway, the slope of a bus stop boarding and alighting area shall be the same as the roadway, to the maximum extent practicable. Perpendicular to the roadway, the slope of the bus stop boarding and alighting area shall not be steeper than 1:48 [~2%]."
- **Section 810.3: Bus Shelters.** "Bus shelters shall provide a minimum clear floor or ground space complying with 305 [Clear Floor or Ground Space] entirely within the shelter. Bus shelters shall be connected by an accessible route complying with 402 [Accessible Routes] to a boarding and alighting area complying with 810.2."
- **Section 810.4: Bus Signs.** "Bus route identification signs shall comply with 703.5.1 through 703.5.4, and 703.5.7 and 703.5.8. In addition, to the maximum extent practicable, bus route identification signs shall comply with 703.5.5." The standards include finish, contrast, and legibility standards.

Another source for accessibility guidance is the concept of Designing for Disability, also known as universal or inclusive design. Universal design guidelines intended to create environments that are most usable by all people, including people with disabilities. Universal design provides a higher level of access for people with disabilities, and many municipalities strive to meet these accommodations. Universal design guidelines include:

- Bus stop areas should be clear of all obstacles, street furniture should maintain a maximum clear width of 48 inches and clear headroom of 80 inches from the pedestrian pathway to the stop.
- The sidewalk adjacent to stops should be wide enough to accommodate expected levels of pedestrian activity and for two wheelchair users to pass each other traveling in opposite directions.
- Door clearances for front and rear bus doors should be kept clear of trees, poles, hydrants, etc.

[1] ADA Accessibility Guidelines for Transportation Facilities (ADAAG); https://tinyurl.com/zupmy25

[2] USDOT Final Rule Adopting New Accessibility Standards (2006) http://www.fta.dot.gov/12325_5936.html

Application of Accessibility Guidance

In 2015, the FTA issued Circular 4710.1 providing recipients of FTA financial assistance with guidance on implementing the ADA.[3] Along with the ADAAG, it helps clarify transit agency responsibilities in situations including:

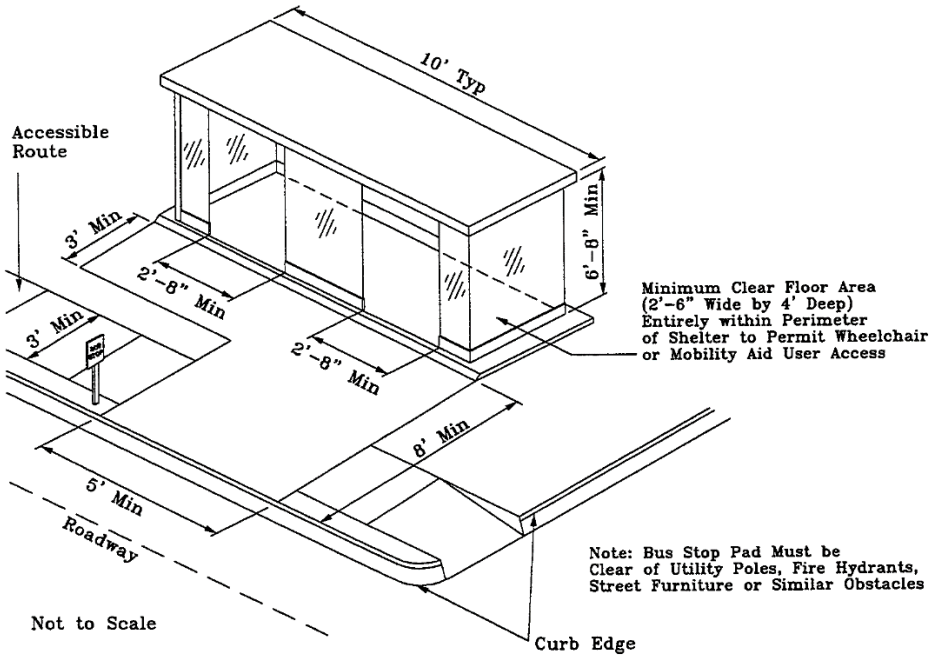
- **Adding amenities and modifying existing on-street bus stops**: Adding a sign, trash barrel, or bench to an existing stop likely does not trigger accessibility requirements, such as adding a sidewalk or path. Alterations are defined by changes to a facility that affects the usability of the facility. "Alterations include, but are not limited to, remodeling, renovation, rehabilitation, reconstruction, historic restoration, resurfacing of circulation paths or vehicular ways, changes or rearrangement of the structural parts or elements, and changes or rearrangement in the plan configuration of walls and full-height partitions. Normal maintenance, reroofing, painting or wallpapering, or changes to mechanical and electrical systems are not alterations unless they affect the usability of the building or facility." (ADAAG 106.5) The principle of Designing for Disability also suggests avoiding creating an obstruction within an existing pedestrian path when placing amenities and ensure that required minimum clear width is maintained.
- **Installing of shelters**: The ADA Circular considers that shelters are usually under a transit agency's control, therefore ADA-compliant shelters and an accessible route between the shelter and the boarding and alighting areas are required. Adding shelters likely qualifies as an alternation. If shelters are installed at existing bus stops, the boarding and alighting area itself should comply "to the maximum extent practicable" (ADAAG 209.2.3). ADAAG Section 810.3 specifies that:
  - The minimum clear floor or ground space must be entirely within the shelter to accommodate individuals using wheelchairs; Section 305 [Clear Floor or Ground Space] requires clear floor/ground space to be a minimum of 30 inches by 48 inches.
  - The bus boarding and alighting area must be connected to streets, sidewalks, or pedestrian paths by an accessible route; Section 402 [Accessible Routes] outlines specific requirements for walking surfaces, ramps, curb ramps, and slope.
  - The bus boarding and alighting areas must provide a clear length of 96 inches minimum, measured perpendicular to the curb or vehicle roadway edge, and a clear width of 60 inches minimum, measured parallel to the vehicle roadway (ADAAG 810.2.2).
- **Siting new bus stops**: The scope of the accessibility requirements for a new or relocated on-street bus stop requires that the stop comply with requirements in Section 810.2 for surface, dimensions, connection, and slope (ADAAG 810.2.1 – 810.2.4). The requirement to have an accessible boarding and alighting area is qualified as "to the maximum extent practicable" (ADAAG 209.2.3) and "to the extent the construction specifications are within their control" (ADAAG 810.2.2).
- **Connectivity**: Bus boarding and alighting areas must be connected to streets, sidewalks, or pedestrian paths by an accessible route (ADAAG 810.2.3). Existing sidewalks, whether ADA-compliant or non-compliant, that connect to bus boarding and alighting areas are not required by ADAAG to be brought into compliance unless an alteration is undertaken at the stop. However, the ADA Circular recognizes sidewalks and other pedestrian elements as "essential elements" even though they are often outside a transit agency's jurisdiction, and encourages agencies to inventory stop accessibility and "coordinate with owners of public rights-of-way (e.g., local municipalities) to help ensure connections to stops are as accessible as possible."

[3] FTA Circular 4710.1, 2015. https://tinyurl.com/z9gqo86

Bus Stop and Shelter Placement Illustration

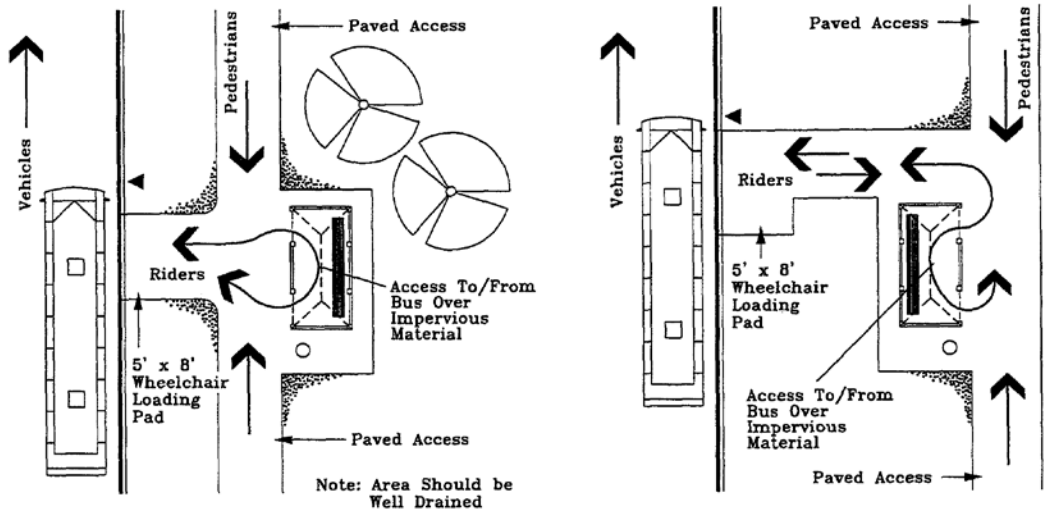
Figure C-6 illustrates the desired clearances around different bus stop elements, including a minimum loading pad of 5 feet by 8 feet to accommodate wheelchair loading and a minimum 30-inch by 48-inch clear zone within the shelter. Shelters may be placed front-facing or rear-facing, depending on conditions. Figure C-7 illustrates circulation from the shelter to the loading zone. A minimum 4-foot clear sidewalk zone is required either behind or in front of the shelter. The Oregon Bicycle and Pedestrian Design Guide recommends a 6-foot sidewalk clear zone and a continuous 8-foot wide sidewalk along the length of a bus stop. The maximum cross-slope is 2%, for at least a 4-foot wide area across driveways, curb ramps, and crosswalks.

Figure C-6 Minimum Bus Stop Pad and Shelter Dimensions



Source: TCRP Report 19, Guidelines for the Location and Design of Bus Stops, Figure 28. https://tinyurl.com/ycn9uwna

Figure C-7 Front and Rear-Facing Shelter Circulation



Source: TCRP Report 19, Guidelines for the Location and Design of Bus Stops, Figure 25. https://tinyurl.com/ycn9uwna

ADDITIONAL RESOURCES

US Access Board, ADA Standards for Transportation Facilities. https://tinyurl.com/zupmy25. E.g., Section 810 Transportation Facilities.

FTA, ADA Circular 4710.1. https://tinyurl.com/z9gqo86

National Aging and Disability Transportation Center (NADTC), Toolkit for the Assessment of Bus Stops Accessibility and Safety, https://tinyurl.com/yc8q3so6

ODOT Highway Design Manual and Bicycle Pedestrian Design Guide:

- Chapter 12. Public Transportation. https://tinyurl.com/yawlrujx. E.g., Section 12.3 Transit Stops and 12.4 Transit Accessibility and Amenities.
- Chapter 13. Pedestrian and Bicycle. https://tinyurl.com/ya3khqfg. E.g., Section 13.5 Street Crossings.
- Appendix L. Oregon Bicycle and Pedestrian Design Guide. https://tinyurl.com/y7aq9l8q. E.g., Transit Stop Connections in Chapter 4.

Oregon Transportation and Growth Management Program, Transit in Small Cities: Primer for Planning, Siting, and Designing Transit Facilities in Oregon. https://tinyurl.com/ybwlgxbg

Transit Cooperative Research Program (TCRP), Report 19, Guidelines for the Location and Design of Bus Stops. https://tinyurl.com/ycn9uwna

TriMet, Bus Stop Design Guidelines, 2010. https://tinyurl.com/ycl8sao4

APPENDIX D

Service Design Details

APPENDIX D SERVICE DESIGN DETAILS

This appendix provides service design details for service plan provided in Chapter 6 of the TDP. It is an update of information originally presented in TM #5. It is organized into the following sections, one for each city or corridor, and is intended to provide each jurisdiction with information for local plans:

- McMinnville Local Service
- Newberg Local Service
- Intercity Corridors
  - McMinnville-Newberg-Tigard
  - McMinnville-Salem
  - McMinnville-Grand Ronde
  - McMinnville-Hillsboro
- Service within/between Smaller Cities

MCMINNVILLE LOCAL SERVICE

Key Improvements

- Additional routes make service more reliable, more frequent, and cover more of the city
- Earlier and later weekday hours and Saturday service

Key Outreach Ideas/Findings

- Addressing Route 3 issues and enhancing local service are among the top priorities among survey respondents.
- Service on Riverside Drive would be desirable sooner than the long-term.
- Some concerns about eliminating flag stops.
- Most people wanted buses to start running at 5:30 a.m. or by 6:00 a.m. (roughly split) and for the last bus to leave the transit center at 8 p.m. (although approximately 25% of people wanted it to run later).

Additional community input is summarized in TDP Volume II, Section 4: TM #4, Chapter 6 and Appendix A.

Figure D-1 summarizes local service improvements in McMinnville, by time frame.

Figure D-1 Summary of Service Actions: McMinnville Local Service – Table

Project ID	Task [1]	Priority Tier [1]	Project Name [1]	Service Area(s)	Service Type	Project/Task Description [1]	Map or Other Details	Additional Annual Hours [1]	Additional Annual Operating Cost [1, 2]	New Capital Requirements
Immediate										
SI1	1	-	McMinnville Local Service Adjustments	McMinnville	Fixed-Route	Interline McMinnville local routes and adjust schedules, to help address capacity and schedule issues on Route 3: ▪ One bus serves 2 East and 3 South ▪ One bus serves 2 West and 3 North	-	-	-	-
SI1	2	-	McMinnville Local Service Adjustments	McMinnville	Fixed-Route	Stop and minor routing adjustments: ▪ Revise Route 3 South routing at Booth Bend Rd ▪ Revise Route 2 East to use Dunn Pl; new Housing Authority bus stop ▪ Various other minor stop adjustments	-	-	-	-
SI2	1	-	McMinnville bus stops closer to store front doors	McMinnville	Fixed-Route	Local buses serve stops for WinCo/Walmart near store front doors, subject to identifying suitable locations and reaching agreements with stores. (Safeway could be a later phase, contingent on Route 3 redesign)	Figure D-2	-	-	-
Near-Term										
SN1	1	1	McMinnville Local Service Capacity, Coverage, and Service Hours	McMinnville	Fixed-Route	Renumber McMinnville local routes: ▪ Renumber Route 3 South to Route 1 ▪ No change to Route 2 East - remains Route 2 ▪ No change to Route 3 North - remains Route 3 ▪ Renumber Route 2 West to Route 4	Figure 6-10 (TDP Vol. I)	-	-	-
SN1	2	2	McMinnville Local Service Capacity, Coverage, and Service Hours	McMinnville	Fixed-Route	Modify Route 1 (formerly Route 3 South) to provide bidirectional service on Ford St south of downtown. This would provide a faster connection between the Transit Center and Linfield College. Route 1 would no longer serve 2nd St or Adams St, which would still be served by Route 4 (formerly Route 2 West).	Figure D-3	-	-	-

Project ID	Task [1]	Priority Tier [1]	Project Name [1]	Service Area(s)	Service Type	Project/Task Description [1]	Map or Other Details	Additional Annual Hours [1]	Additional Annual Operating Cost [1, 2]	New Capital Requirements
SN1	3	1	McMinnville Local Service Capacity, Coverage, and Service Hours	McMinnville	Fixed-Route	Modify Route 3 to provide more service to Winco/Walmart area, two-way service on Evans and 27th St, and service on McDaniel Ln (Senior Center). Requires additional half bus.	Figure D-4	1,430	$107,000	1 large cutaway
SN1	4	2	McMinnville Local Service Capacity, Coverage, and Service Hours	McMinnville	Fixed-Route	Modify Route 4 (current 2 West) to extend along 2nd St west of Hill Rd, providing service for additional residents, and south to Booth Bend Rd to provide direct access to Roths, Bi-Mart, and Albertsons. Accomplished using the remaining half bus from the Route 3 modification.	Figure D-7	1,430	$107,000	
SN1	5	2	McMinnville Local Service Capacity, Coverage, and Service Hours	McMinnville	Fixed-Route	1 additional hour for Route 2 and 4 (start at 7:00 AM)	N/A	260	$20,000	-
SN4	1	2	Route 44 serves OR 99W in McMinnville	McMinnville -Tigard	Fixed-Route	Route 44 runs on OR 99W instead of Lafayette Ave in McMinnville, and stops at OMI (5th & Cowls) in both directions; assumes concurrent introduction of local service on Lafayette Ave in McMinnville.	See Figure 6-19 (TDP Vol. I)	-	-	-
SN6	1	2	Shopper Shuttle	McMinnville, Newberg, Small Cities	Flex Route	Implement shopper shuttle pilot projects in McMinnville, Newberg / Dundee, Yamhill / Carlton, Amity / Sheridan / Willamina, and Dayton / Lafayette (4 hours per day, 1 day per service area; 5 days per week, with up to two additional days in Yamhill/Carlton and Sheridan/Willamina to support medical trip needs such as dialysis where patients may have three appointments per week. Total of 9 days.).	N/A	1,040	$60,000 + $48,000 ($108,000 total)	1 van (+ 1 existing van)

Project ID	Task [1]	Priority Tier [1]	Project Name [1]	Service Area(s)	Service Type	Project/Task Description [1]	Map or Other Details	Additional Annual Hours [1]	Additional Annual Operating Cost [1, 2]	New Capital Requirements
Short-Term										
SS1	1	1	McMinnville Local Service East Extension	McMinnville	Fixed-Route	▪ Redesign Route 2 (East) to serve NE Cumulus St (e.g., Virginia Garcia Clinic, Fircrest Senior Living, etc.). Contingent on capital improvement to access road/gate. ▪ Coordinate with Evergreen Museum to explore possibility of a walking path from a bus stop located at the intersection of Cumulus Ave and NE Cumulus Ave (southwest of the museum).	Figure D-6 Capital project	-	-	Modifications to access roadway and gate
SS2	1	1	Early Evening Service	McMinnville	Fixed-Route	Extend McMinnville local fixed-route service hours by one hour to 7 PM (last trips leave transit center at 6:00 or 6:30 PM). Assumes 3 fixed-route buses.	N/A	780	$60,000	-
SS2	2	1	Early Evening Service	McMinnville	Demand-Response	Extend McMinnville demand-response service hours by one hour to 7 PM; assumes 2 Dial-a-Ride vehicles.	N/A	520	$30,000	-
SS4	1	2	Phase out flag stops	McMinnville/ Newberg	Fixed-Route	After stops are marked or signed, transition away from flag stops in McMinnville and Newberg. This will help service run faster and stay on schedule.	N/A	-	-	Mark or sign all bus stops
Mid-Term										
SM1	1	1	McMinnville Saturday Service	McMinnville	Fixed-Route	Add local service on Saturdays. Assumes 2 fixed-route vehicles for 10 hours, e.g., 8 AM-6PM.	N/A	1,040	$78,000	-
SM1	2	1	McMinnville Saturday Service	McMinnville	Demand-Response	Add local service on Saturdays. Assumes 1 Dial-a-Ride vehicle for 10 hours, e.g., 8 AM-6PM.	N/A	520	$30,000	-
Long-Term										
SL6	2	2	Expand Shopper Shuttle Days of Operation	McMinnville	Flex-Route	Expand shopper shuttle to a 5 day per week flex-route service. Assumes 4 hours per day.	N/A	832	$48,000	0.5 van

Project ID	Task [1]	Priority Tier [1]	Project Name [1]	Service Area(s)	Service Type	Project/Task Description [1]	Map or Other Details	Additional Annual Hours [1]	Additional Annual Operating Cost [1, 2]	New Capital Requirements
SL7	1	1	Early Morning and Later Evening Service	McMinnville	Fixed-Route	Start McMinnville local fixed-route service at 6 AM. Assumes 3 buses.	N/A	780	$60,000	-
SL7	2	1	Early Morning and Later Evening Service	McMinnville	Demand-Response	Start McMinnville demand-response service hours at 6 AM. Assumes 1 Dial-a-Ride vehicle.	N/A	260	$15,000	-
SL7	3	2	Early Morning and Later Evening Service	McMinnville	Fixed-Route	Extend McMinnville local fixed-route service hours to 9 PM (last trips leave transit center at 8:00 or 8:30 PM). Assumes 2 buses (reduced coverage or lower frequency than daytime operation).	N/A	1,040	$78,000	-
SL7	4	2	Early Morning and Later Evening Service	McMinnville	Demand-Response	Extend McMinnville demand-response service hours to 9 PM; assumes 1 Dial-a-Ride vehicle.	N/A	520	$30,000	-
SL8	1	1	McMinnville Lafayette Ave On-Demand Flex-Route Pilot	McMinnville	Flex-Route	▪ Develop a pilot flex-route serving the area east of Lafayette Ave (e.g., YCAP, McMinnville Power & Light, Dental Clinic, Pet Stop Inn, etc.), with some fixed stops and on-demand dispatch software that enables ride requests within a 2-hour window or on a subscription basis. ▪ Could be designed to serve employment areas at key shift times. ▪ Cost assumes 7 AM – 6 PM operation, but could be implemented in two phases (peak hours and midday). ▪ YCTA should seek grant funding for emerging mobility projects to provide funding for this service.	See Figure 6-19 (TDP Vol. I)	2,860	$165,000	1 van

Project ID	Task [1]	Priority Tier [1]	Project Name [1]	Service Area(s)	Service Type	Project/Task Description [1]	Map or Other Details	Additional Annual Hours [1]	Additional Annual Operating Cost [1, 2]	New Capital Requirements
SL9	1	2	New Route or Extension Serving Hill Rd / Baker Creek Rd Area	McMinnville	Fixed-Route	▪ Extend service to the Hill Rd and Baker Creek Rd area. Cost assumes a new route along Baker Creek Rd that would connect to the WinCo/Walmart/Safeway area via NE 27th St and to the transit center via Lafayette Ave. ▪ This new route would also allow Route 3 to be modified to operate a shorter route, including service on 19th St. and improving access to McMinnville High School.	Figure D-8 Figure D-5	3,900	$293,000	1 large cutaway
Long-Term (Vision)										
SV2	3	3	Expand Saturday service	McMinnville	Demand-Response	Add a second Dial-A-Ride bus in McMinnville on Saturdays	N/A	520	$30,000	
SV3	6	3	Implement Sunday Service	McMinnville	Fixed-Route	Add local service on Sundays. Assumes 2 fixed-route vehicles for 10 hours, e.g., 8 AM-6 PM.	N/A	1,040	$78,000	
SV3	7	3	Implement Sunday Service	McMinnville	Demand-Response	Add local service on Sundays. Assumes 1 Dial-a-Ride vehicle for 10 hours, e.g., 8 AM-6 PM.	N/A	520	$30,000	
SV4	1	3	Local Service Expansion	McMinnville	Fixed-Route	Add one additional bus in McMinnville to provide additional frequency and capacity, if and where needed based on service standards, e.g., Routes 2 and 4 (existing 2 East and West). Assumes 12 service hours per day, but could also be implemented during peak hours only for multiple routes.	N/A	3,120	$234,000	1 Large Cutaway

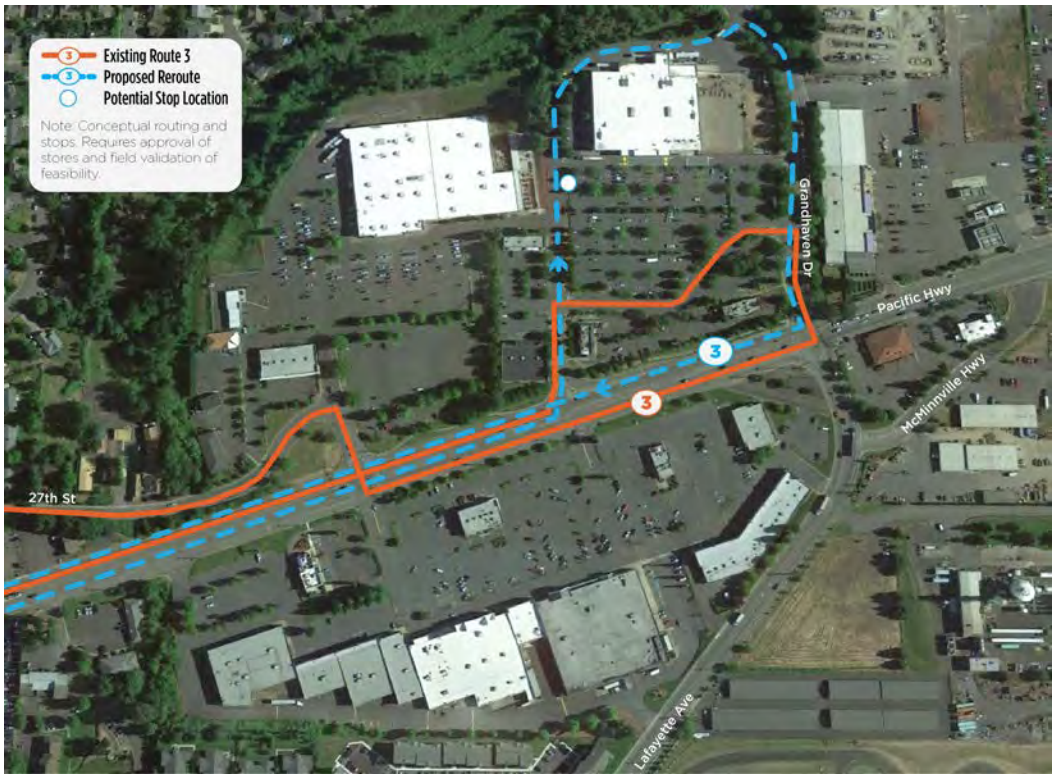
Notes: [1] Element required for STIF Plan. STIF Plan requires that projects be ranked and allows projects to be submitted at 100% and 130% of projected funding. Preliminary recommendation to be confirmed by YCTA Advisory Committee. [2] Costs in this table reflect an average cost per hour of $75 for fixed-route, $58 for Dial-a-Ride, and $56 for flex-routes, which is the assumed cost for FY 2020. The TDP financial plan assumes costs that are escalated to implementation year.

Route Maps and Details

Figure D-2 Stops Near Winco/Walmart (Immediate or Near-Term/Short-Term)

Immediate or Near-Term:

- Stop in Winco parking lot on existing Route 3
- Existing sidewalk can be used
- Contingent on obtaining store approval
- Feasibility of right-turn from OR 99W into parking lot needs to be tested, given concrete median and channelized right-turn island



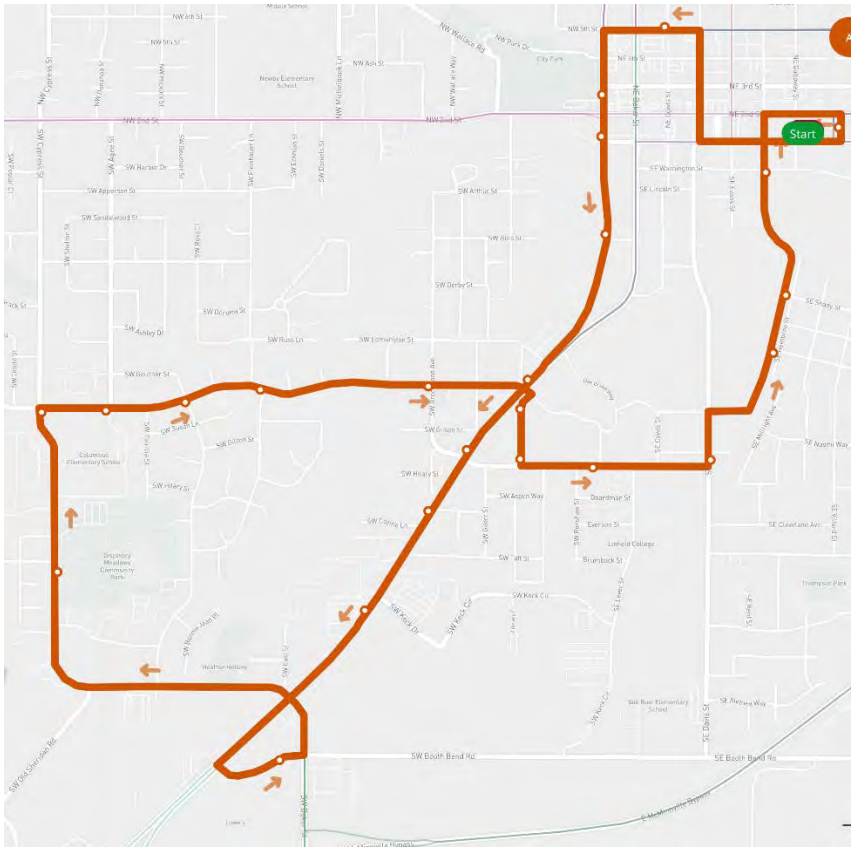
Short-Term:

- Add stop in Safeway parking lots on future Route 3
- Previous concept revised to avoid unprotected left turn onto Lafayette
- Contingent on identifying a suitable stop location, obtaining store approval, and having sufficient time in the route for the deviation

Figure D-3 Proposed Route 1 (3 South) (Near-Term)

- Route 3 South (left panel) currently runs in a “Figure 8” pattern. It duplicates service provided by Route 2 between McMinnville Transit Center and Linfield College (along SE Adams Street), in one directoon only. It serves SE Ford Street in only one direction.
- The only Immediate time frame modification to Route 3 South (included in the left panel) is to reverse the loop on SW Booth Bend Road and serve a new stop across the street from Carl’s Jr.
- In the near-term (right panel), Route 3 South would be renamed to Route 1 and be modified to provide bidirectional service along SE Ford Street between McMinnville and Linfield College. This would make the route easier to understand, provide more direct service to Linfield College, and improve service to residents along SE Ford Street. This change should be coordinated with near-term modifications to Route 4 (2 West) that would extend it to SW Booth Bend Road.

Immediate Route 3 South



Near-Term Route 1

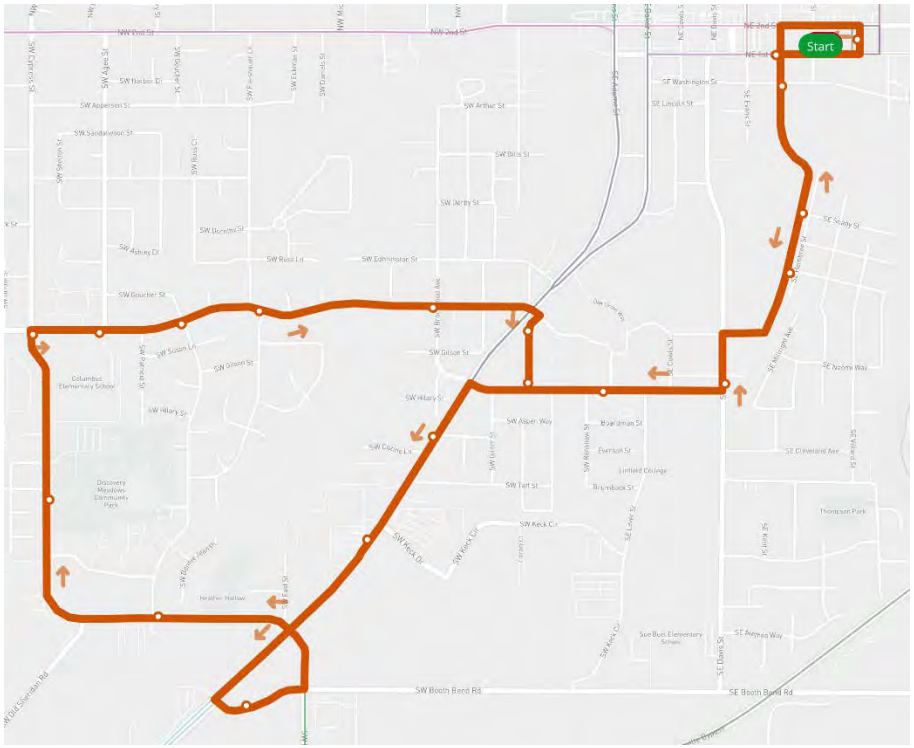
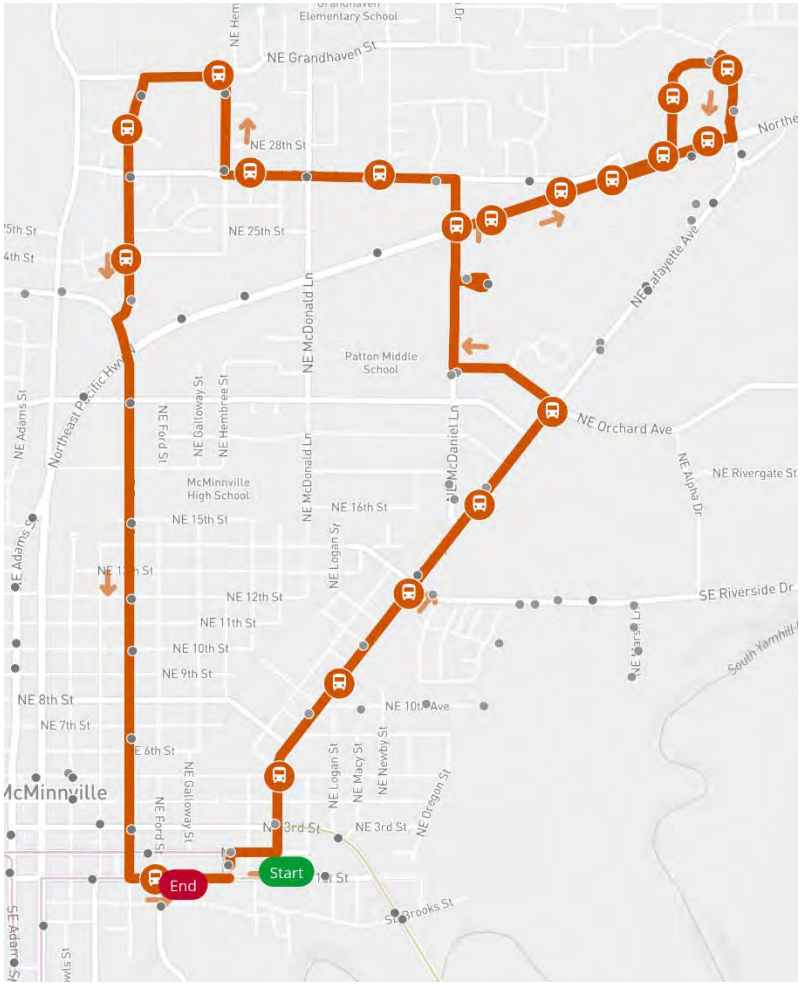


Figure D-4 Proposed Route 3 (North) (Near-Term)

- Routing on Evans assumes that Routes 33 and 44 have been moved to Lafayette Avenue; if not this routing could be modified to keep Route 3 southbound on Adams Street.
- Assumes service closer to the Winco/Walmart store entrances, as illustrated in Figure D-2.

Counter-Clockwise



Clockwise

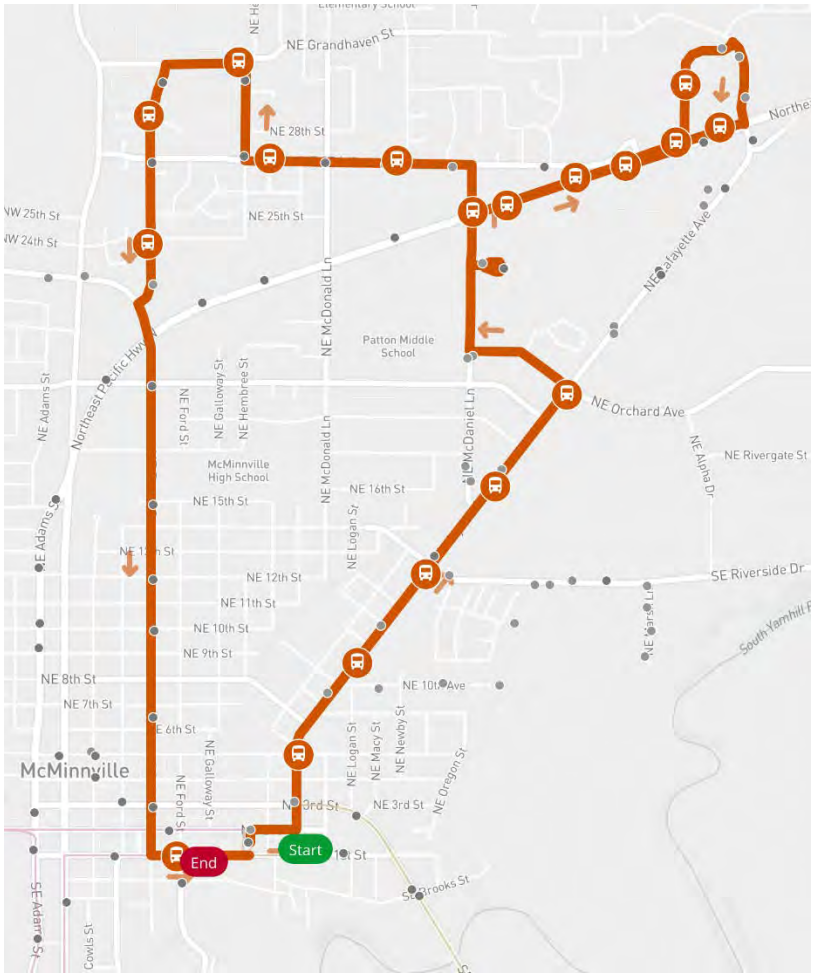
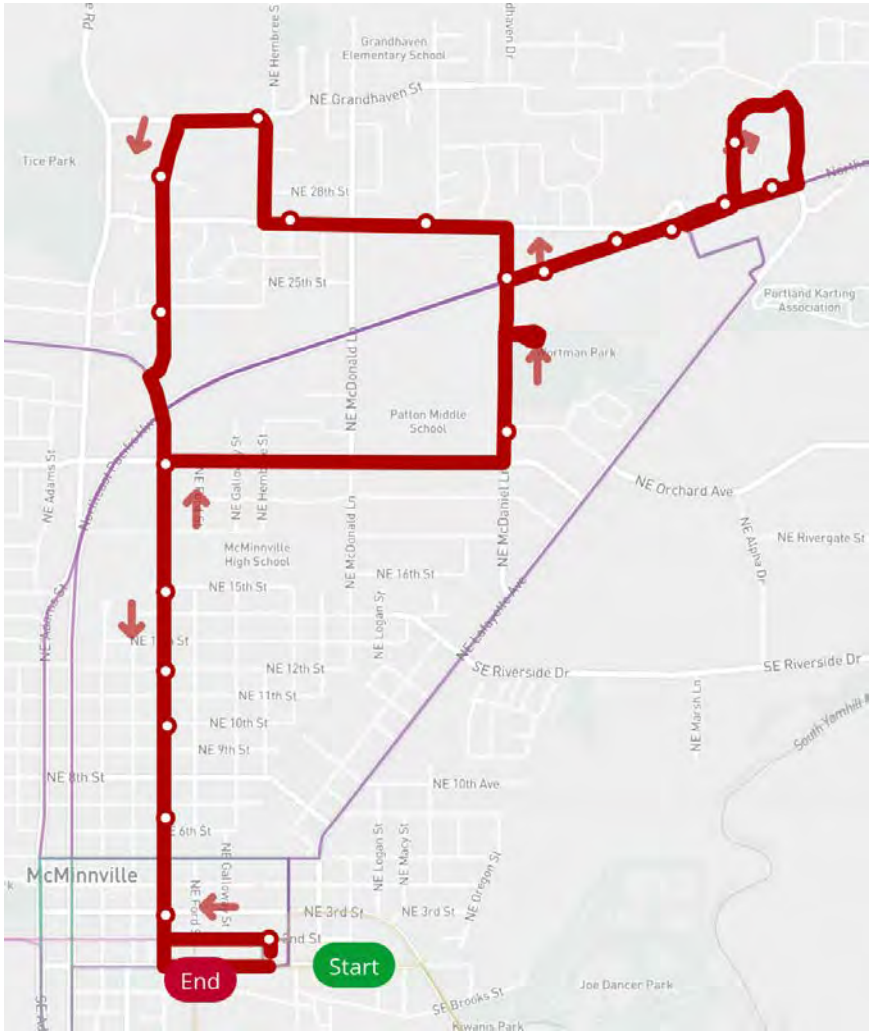


Figure D-5 Proposed Route 3 (North) (Long-Term)

- If a Lafayette Avenue/Baker Creek Road route is implemented (see Figure D-8), the Route 3 bidirectional loop could be shortened since the new route would serve Lafayette Avenue.
- Route 3 would continue to serve the Senior Center along McDaniel Lane, but could then serve NW 19th Street. This would improve service to McMinnville High School and residential areas between OR 99W and Lafayette Avenue.

Counter-Clockwise



Clockwise

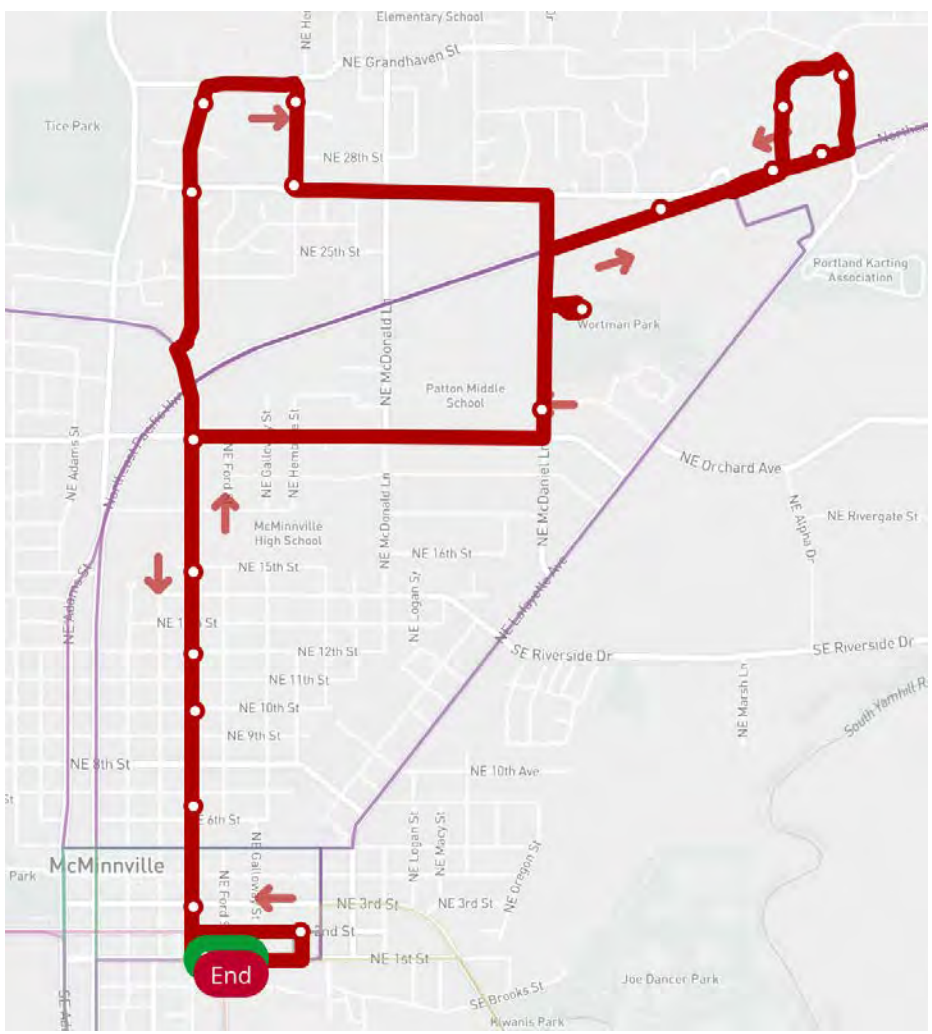
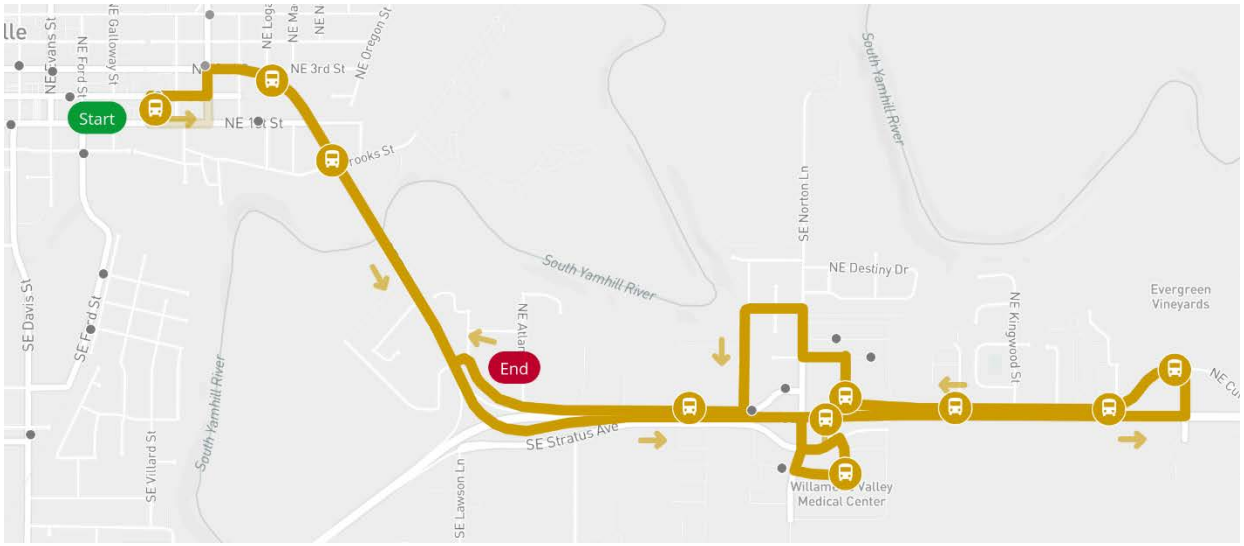


Figure D-6 Proposed Route 2 (East)

Short-Term

- Extension to NE Cumulus Ave east of Norton Lane, serving Virginia Garcia Clinic and housing
- Requires installing a controlled access gate to allow bus to access Chemeketa parking lot from NE Cumulus Ave.



Long-Term (Vision)

- Conceptual extension to Olde Stone Village and Evergreen Space Museum; would require access to museum through gate that is currently locked.

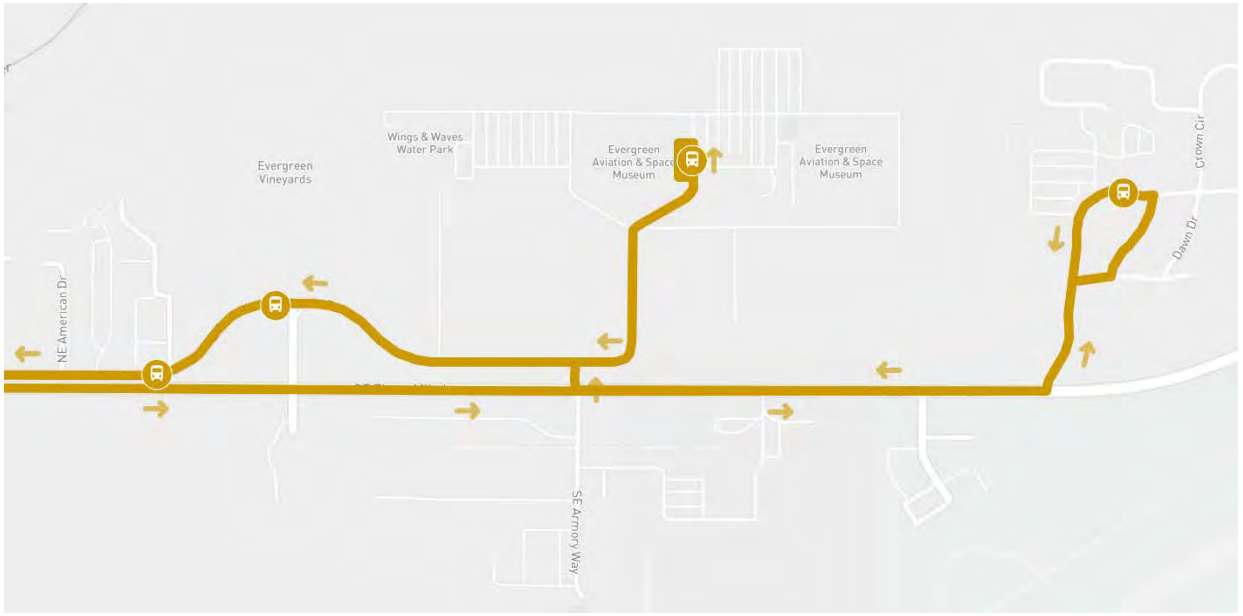
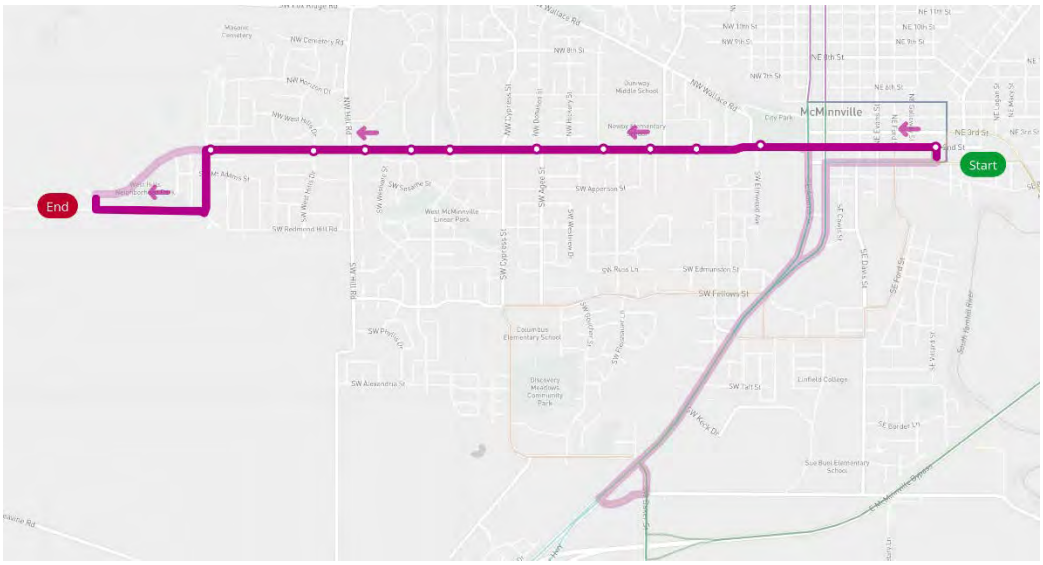


Figure D-7 Proposed Route 4 (Route 2 West)

Near-Term

- Extension of Route 4 east of Hill Road and south to the BiMart, Roths, and Albertsons area; a full vehicle will be required for this route which will be feasible when another bus is added to the system to serve Route 3

Outbound (To SW Redmond Hill Rd, SW Mallard Street, and 2nd Street)



Inbound (To Booth Bend Road and McMinnville Transit Center

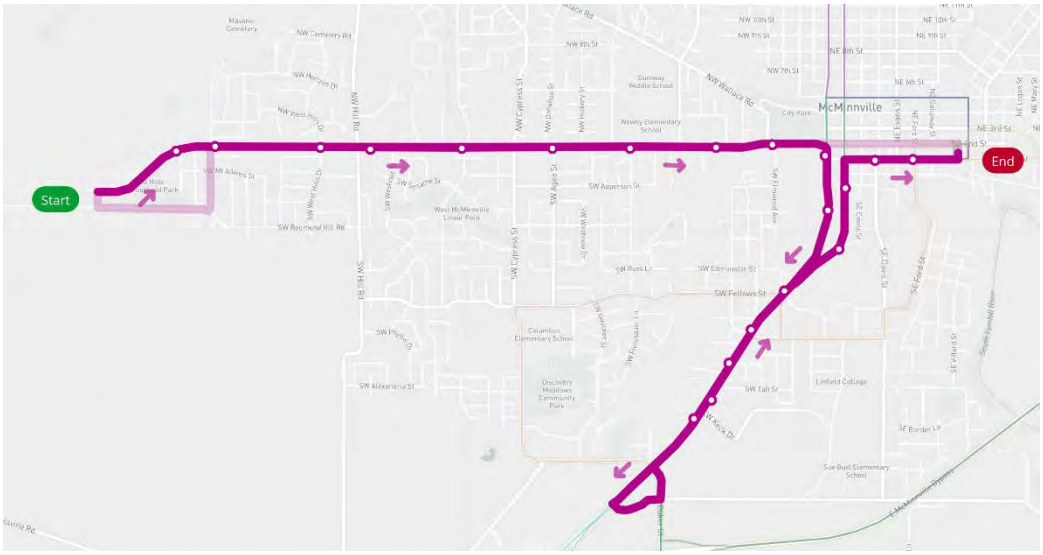
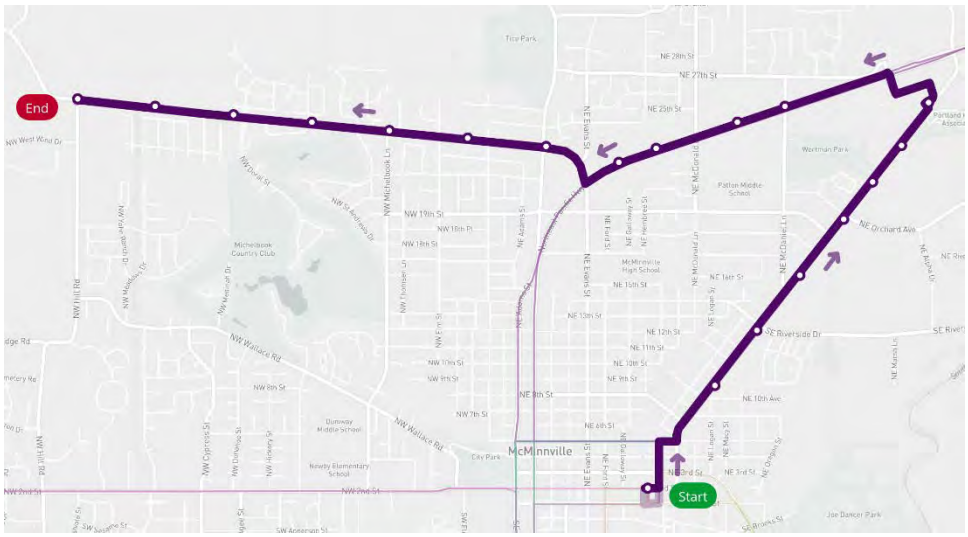


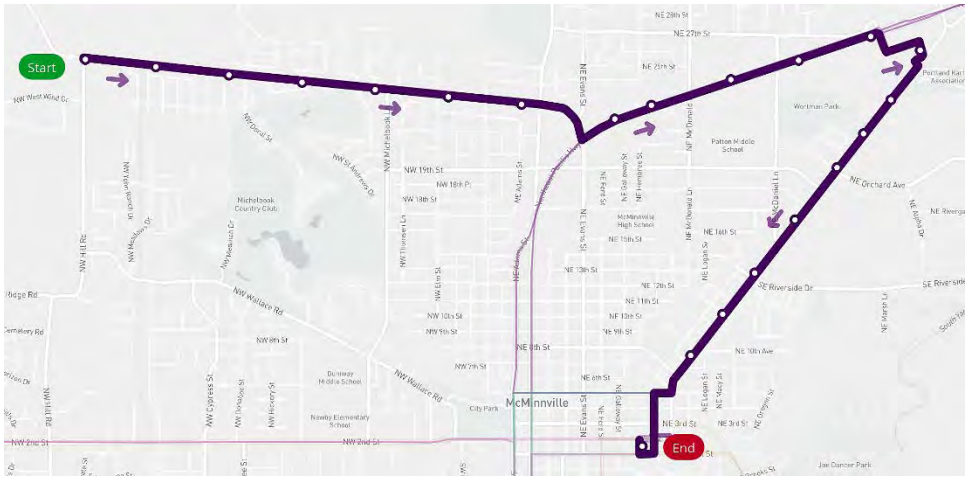
Figure D-8 Proposed Options to Serve Hill Road/Baker Creek Road Area (Long-Term)

- Long-term concept to serve the Hill Road / Baker Creek Road area, connecting to the Winco/Walmart/Safeway area and downtown McMinnville via Lafayette Avenue.
- The routing shown assumes a stop in the Safeway parking lot. Ability to also serve a stop in the Winco/Walmart parking lot depends on available time in the schedule.
- Route could complement or be an alternative to the Route 2W long-term option (Figure D-8), also shown in the background at right.
- Route 3 could be modified if this route is implemented.

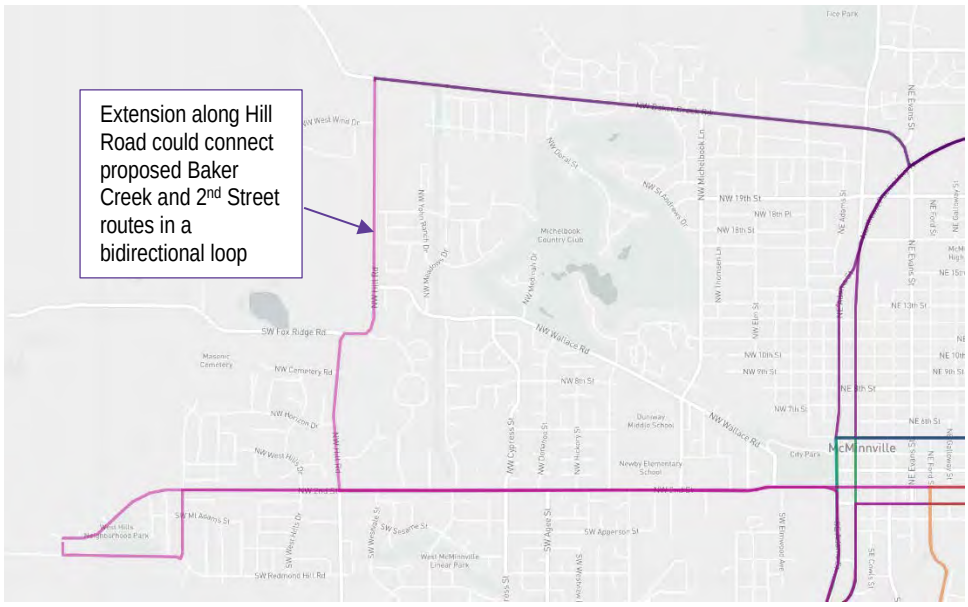
Outbound (To Baker Creek Road / Hill Road):



Inbound (To Downtown McMinnville Transit Center):



- An alternative / complementary option would be to connect this new route with Route 4 (current 2 West) along Hill Road, creating a bidirectional loop.



NEWBERG LOCAL SERVICE

Key Improvements

- Additional routes make service more reliable and cover more of the city, including northeast Newberg

Key Outreach Ideas/Findings

- Overall support, but some concerns about maintaining service for seniors with moving a dial-a-ride bus to the fixed routes.
- Some concerns about eliminating flag stops.
- Comment about serving affordable housing on Haworth (addressed in change to proposed Route 8).

Additional community input is summarized in TDP Volume II, Section 4: TM #4, Chapter 6 and Appendix A.

Figure D-9 summarizes local service improvements in Newberg, by time frame.

Figure D-9 Service Changes: Newberg Local Service

Project ID	Task [1]	Priority Tier [1]	Project Name [1]	Service Area(s)	Service Type	Project/Task Description [1]	Map or Other Details	Additional Annual Hours [1]	Additional Annual Operating Cost [1, 2]	New Capital Requirements
Immediate										
SI3	1		Newberg Local Service Adjustments	Newberg	Fixed-Route	Schedule adjustments for Routes 5 and 7	-	-	-	-
Near-Term										
SN2	1	1	Newberg Local Service Redesign	Newberg	Fixed-Route	▪ Four approximately 30-minute routes, each running every hour (2 buses; 1 bus converted from Dial-A-Ride). ▪ Routes operate counter-clockwise and generally serve each quadrant of Newberg. ▪ Shorter western routes interlined with longer eastern routes, e.g., NW-SE (5-7) and SW-NE (6-8). ▪ Renumber routes to 15, 16, 17, and 18; see Figure 6-20 (TDP Vol. I) ▪ Coordinated transfers with intercity services in downtown (Route 44). ▪ Provide a westbound stop on Hancock St for all local and intercity routes. The eastbound stop at Nap's Thriftway only serves eastbound routes. (This could transition later to a downtown transit center) ▪ Consider stops near selected store front door for local routes, subject to identifying suitable locations and reaching agreements with stores. Locations TBD, e.g., Fred Meyer and Safeway.	Figure D-10 Figure D-11 Figure D-12 Figure D-14	-	-	1 large cutaway

Project ID	Task [1]	Priority Tier [1]	Project Name [1]	Service Area(s)	Service Type	Project/Task Description [1]	Map or Other Details	Additional Annual Hours [1]	Additional Annual Operating Cost [1, 2]	New Capital Requirements
SN6	1	2	Shopper Shuttle	McMinnville, Newberg, Small Cities	Flex Route	Implement shopper shuttle pilot projects in McMinnville, Newberg / Dundee, Yamhill / Carlton, Amity / Sheridan / Willamina, and Dayton / Lafayette (4 hours per day, 1 day per service area; 5 days per week, with up to two additional days in Yamhill/Carlton and Sheridan/Willamina to support medical trip needs such as dialysis where patients may have three appointments per week. Total of 9 days.).	N/A	1,040	$60,000 + $48,000 ($108,000 total)	1 van (+ 1 existing van)
Short-Term										
SS3	1	2	Early Evening Service	Newberg	Fixed-Route	Extend Newberg local fixed-route service hours by a half-hour to 7 PM (last trips leave transit center at 6:00 or 6:30 PM). Assumes 2 fixed-route buses.	N/A	260	$20,000	-
SS3	2	2	Early Evening Service	Newberg	Demand-Response	Extend Newberg demand-response service hours by a half-hour to 7 PM; assumes 1 Dial-a-Ride vehicle.	N/A	130	$8,000	-
SS4	1	2	Phase out flag stops	McMinnville/ Newberg	Fixed-Route	After stops are marked or signed, transition away from flag stops in McMinnville and Newberg. This will help service run faster and stay on schedule.	N/A	-	-	Mark or sign all bus stops
Mid-Term										
SM2	1	3	Newberg Dial-A-Ride Capacity	Newberg	Demand-Response	Contingency project to restore Newberg Dial-a-Ride to two vehicles, assuming that fixed-route ridership meets standards and additional paratransit capacity is required based on service standards.	N/A	2,080	$121,000	-

Project ID	Task [1]	Priority Tier [1]	Project Name [1]	Service Area(s)	Service Type	Project/Task Description [1]	Map or Other Details	Additional Annual Hours [1]	Additional Annual Operating Cost [1, 2]	New Capital Requirements
Long-Term										
SL6	1	1	Expand Shopper Shuttle Days of Operation	Newberg / Dundee	Flex-Route	Expand shopper shuttle to a 5 day per week service. Assumes 4 hours per day.	N/A	832	$48,000	0.5 van
SL7	5	1	Early Morning and Later Evening Service	Newberg	Fixed-Route	Start Newberg local fixed-route service at 6 AM. Assumes 2 buses.	N/A	520	$40,000	-
SL7	6	1	Early Morning and Later Evening Service	Newberg	Demand-Response	Start Newberg demand-response service hours at 6 AM. Assumes 1 Dial-a-Ride vehicle.	N/A	260	$15,000	-
SL7	7	2	Early Morning and Later Evening Service	Newberg	Fixed-Route	Extend Newberg local fixed-route service hours to 9 PM (last trips leave transit center at 8:00 or 8:30 PM). Assumes 2 buses.	N/A	1,040	$78,000	-
SL7	8	2	Early Morning and Later Evening Service	Newberg	Demand-Response	Extend Newberg demand-response service hours to 9 PM; assumes 1 Dial-a-Ride vehicle.	N/A	520	$30,000	-
Long-Term (Vision)										
SV2	4	1	Expand Saturday service	Newberg	Fixed-Route	Add local service on Saturdays. Assumes 2 fixed-route vehicles for 10 hours, e.g., 8 AM-6PM.	N/A	1,040	$78,000	
SV2	5	1	Expand Saturday service	Newberg	Demand-Response	Add local service on Saturdays. Assumes 1 Dial-a-Ride vehicle for 10 hours, e.g., 8 AM-6PM.	N/A	520	$30,000	
SV3	8	3	Implement Sunday Service	Newberg	Fixed-Route	Add local service on Sundays. Assumes 2 fixed-route vehicles for 10 hours, e.g., 10 AM-6PM.	N/A	1,040	$78,000	

Project ID	Task [1]	Priority Tier [1]	Project Name [1]	Service Area(s)	Service Type	Project/Task Description [1]	Map or Other Details	Additional Annual Hours [1]	Additional Annual Operating Cost [1, 2]	New Capital Requirements
SV3	9	3	Implement Sunday Service	Newberg	Demand-Response	Add local service on Sundays. Assumes 1 Dial-a-Ride vehicle for 10 hours, e.g., 10 AM-6PM.	N/A	520	$30,000	
SV4	2	3	Local Service Expansion	Newberg	Fixed-Route	Add one additional bus in Newberg to provide additional frequency and capacity, if and where needed based on service standards. Assumes 12 service hours per day.	N/A	3,120	$234,000	1 Large Cutaway
SV4	3	3	Local Service Expansion	Newberg	Demand Response	Add additional Dial-a-Ride capacity in Newberg, if needed based on service standards (assumes 1 additional van and 1 additional cutaway in service, each for 8 service hours per day)	N/A	4,160	$241,000	

Notes: [1] Element required for STIF Plan. STIF Plan requires that projects be ranked and allows projects to be submitted at 100% and 130% of projected funding. Preliminary recommendation to be confirmed by YCTA Advisory Committee. [2] Costs in this table reflect an average cost per hour of $75 for fixed-route, $58 for Dial-a-Ride, and $56 for flex-routes, which is the assumed cost for FY 2020. The TDP financial plan assumes costs that are escalated to implementation year.

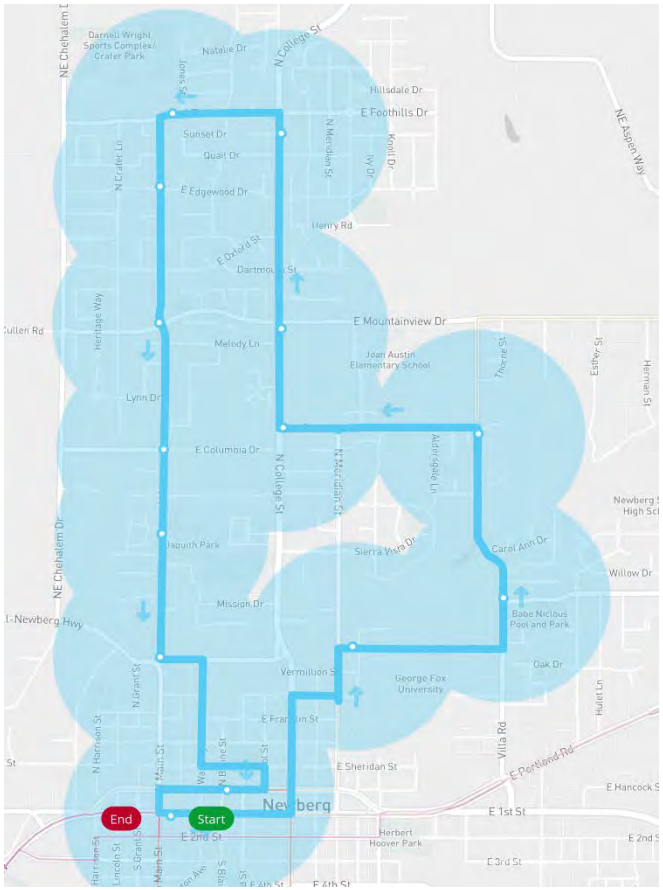
Route Maps and Details

A counter-clockwise (CCW) pattern is recommended for proposed services in Newberg for several reasons: (1) Consistency across all routes (easier for people to remember). (2) It enables bidirectional travel on streets where routes run in both directions, such as along OR 99W. Each route is described in detail below.

Northwest: Proposed Route 5

- Counter-clockwise loop, every 60 minutes
- Interlined with Route 7
- Deviations could be allowed
- Existing Route 5 would be modified to serve Fulton Street – Villa Road – Crestview Drive, providing access to the Chehalem Parks & Recreation District Aquatic and Fitness Center on Haworth Avenue. This would eliminate service on Meridian Road between Fulton and Crestview and two existing YCTA stops including Oaks Apartments. The eliminated service would be within a quarter-mile of the revised route.
- Existing Route 5 would also be modified to serve Sheridan Street and the Chehalem Cultural Center, using Illinois Street, Washington Street, and Sheridan Street. This would serve a key destination without significant impact to existing stops and reduce existing delay turning onto Main Street and approaching Hancock Street.

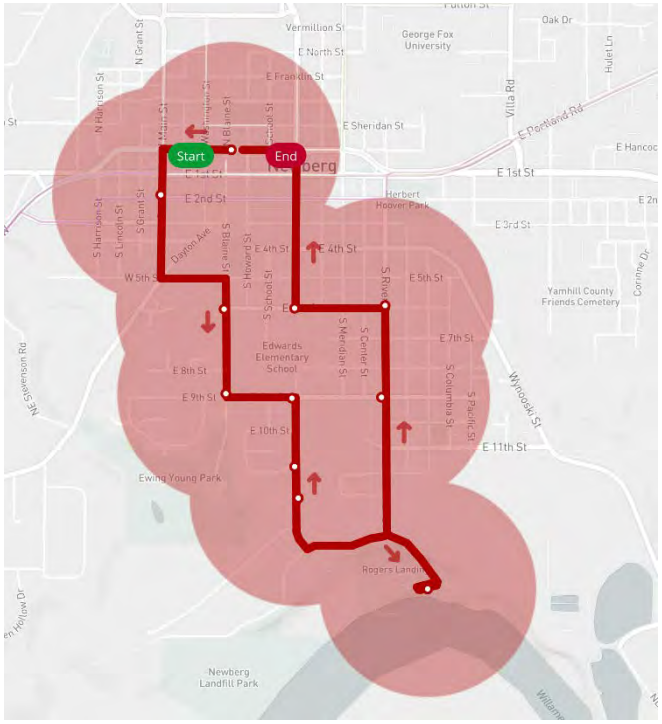
Figure D-10 Modified Route 5: Northwest Newberg



Southwest: Proposed Route 6

- Counter-clockwise loop, every 60 minutes
- Interlined with Route 8
- Deviations could be allowed
- Route 6 would be split from existing Route 5 and provide additional coverage in southwest Newberg.
- The City of Newberg proposed serving Rogers Landing Park. Based on likely demand this could be served seasonally or on weekends (assuming future Saturday or Sunday service).
- There are also some operational concerns:
  - Seasonal parking enforcement would be needed to ensure the bus is able to turn around.
  - The hill leading into the park would need to be avoided in winter weather conditions (snow/ice).

Figure D-11 Proposed Route 6: Southwest Newberg



Northeast: Proposed Route 8

- Counter-clockwise loop, every 60 minutes
- Interlined with Route 6
- Option #1 is recommended.
- South of OR 99W, the route serves Elliott Avenue (CPRD offices, FISH Emergency Services) and PCC, with a transfer to Route 7 on Brutscher near Fred Meyer (and/or Route 45x if it is re-routed to use the Bypass in the future).
- It could be possible to serve a stop in the Safeway parking lot with this route.
- North of OR 99W, the route serves multifamily housing on Haworth Avenue, Newberg Schools, Head Start, A-dec, Allison Inn, and the CPRD Aquatic and Fitness Center.

Figure D-12 Proposed Route 8: Northeast Newberg (Option #1) - Recommended

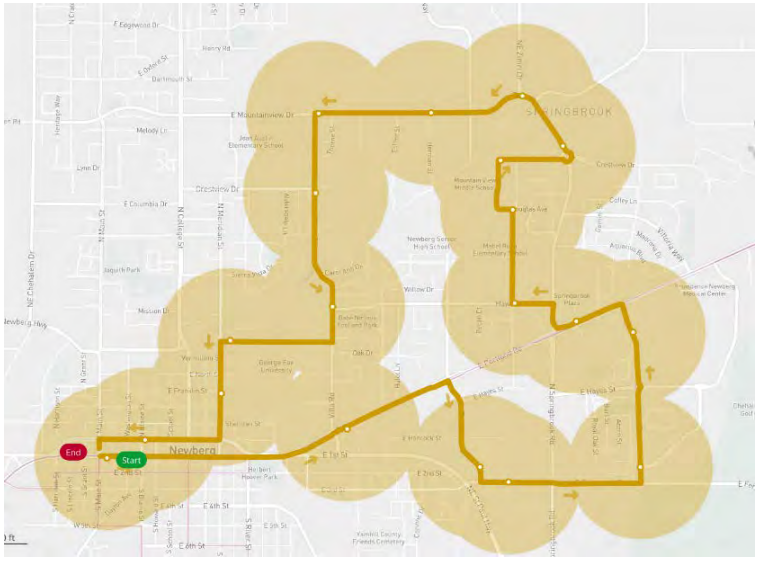
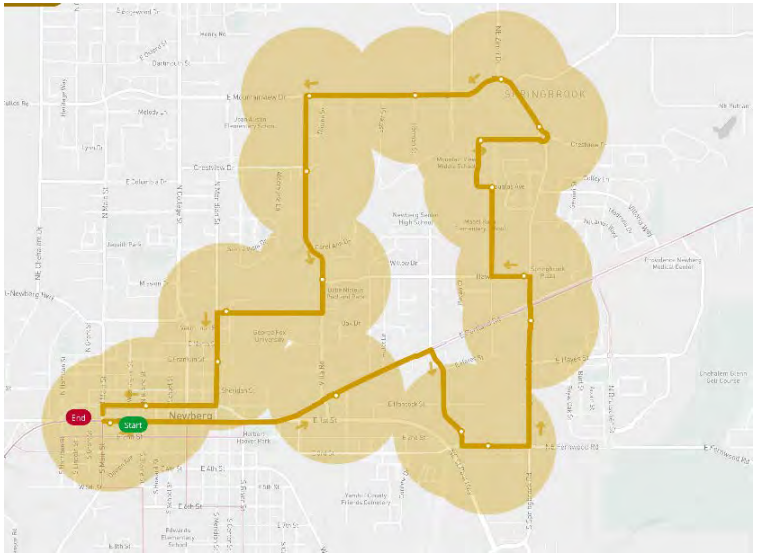


Figure D-13 Proposed Route 8: Northeast Newberg (Option #2)



Southeast: Modified Route 7

- Counter-clockwise loop, every 60 minutes
- Interlined with Route 6
- Option #1 is recommended.
- The proposed concept attempt to make Route 7 more "legible" by having both proposed Routes 7 and 8 serve portions of Southeast Newberg
- The deviation from Third Street to Second Street to provide front door service at the Colonial Village Apts could potentially be eliminated to save time.
- Crossing St. Paul Hwy on Third/Second Street does not appear viable in the present roadway configuration (if that could be addressed, it would open up some other routing options).
- On south Springbrook Road, the route serves employment, housing, and the Helping Hands Rentry Outreach Center (Note: Ridership on this portion of existing Route 7 could not be surveyed in Spring 2017 due to construction).
- The route serves PCC, Fred Meyer, and Providence Hospital. The recommended routing option (#1) could be used to provide front door service at Fred Meyer. From Springbrook Road the route turns right into the Fred Meyer parking lot (assuming a viable location can be identified), right on Brutscher Street. After stopping at PCC, the route could continue to Providence Mdedical Center using Werth Blvd. Alternatively, the existing routing could be maintained (return to Hayes Street using the roundabout, and turn right).
- Route 7 returns to downtown along OR 99W (westbound).

Figure D-14 Modified Route 7: Southeast Newberg (Option #1) - Recommended

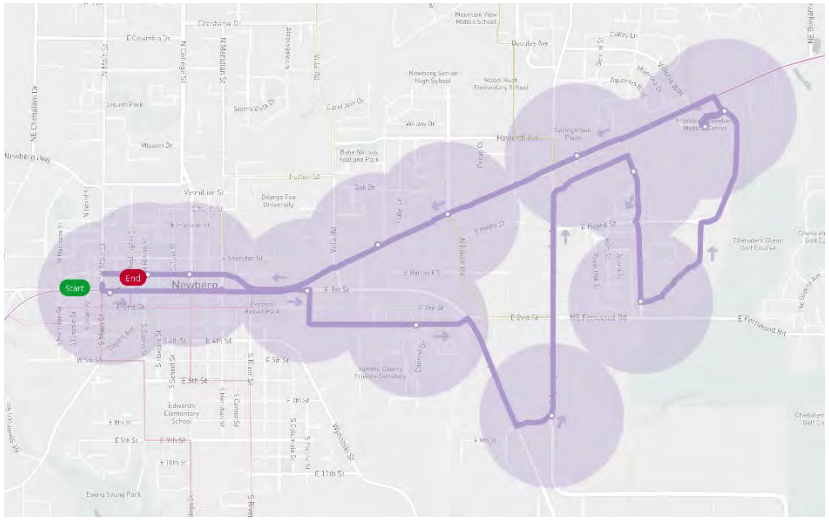
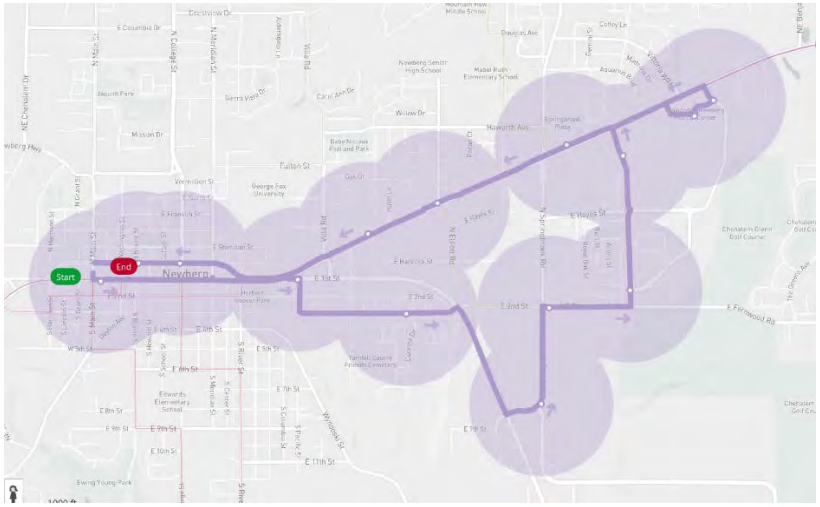


Figure D-15 Proposed Route 7: Southeast Newberg (Option #2)



MCMINNVILLE-NEWBERG-TIGARD CORRIDOR INTERCITY SERVICE: ROUTES 44/45X/46S

Key Improvements

- More frequent service between McMinnville and Newberg on Route 44, filling in existing long gaps in service
- Route 45x has additional morning and afternoon commute trips, potentially using Dundee Bypass
- One additional evening trip to/from Tigard on Route 44

Key Outreach Ideas/Findings

- Filling mid-morning and mid-afternoon service gaps is seen as a priority.
- Concerns about bypassing Dundee with Route 45x service
- Design Route 45x schedules to accommodate needs of Linfield students, arriving before 8 a.m. classes
- Improve timing to McMinnville local routes
- Need alternate service on Lafayette Avenue, if Route 44 runs on OR 99W in McMinnville
- Among weekend service options, Sunday service in this corridor is a relatively high priority

Additional community input is summarized in TDP Volume II, Section 4: TM #4, Chapter 6 and Appendix A.

Figure D-16 summarizes intercity service improvements for the OR 99W corridor, between McMinnville, Dayton, Lafayette, Dundee, Newberg, and Tigard, by time frame, including local service improvements in Dayton, Lafayette, and Dundee.

Figure D-16 Service Changes: McMinnville-Newberg-Tigard Corridor Intercity Service (Routes 44/45x) - Table

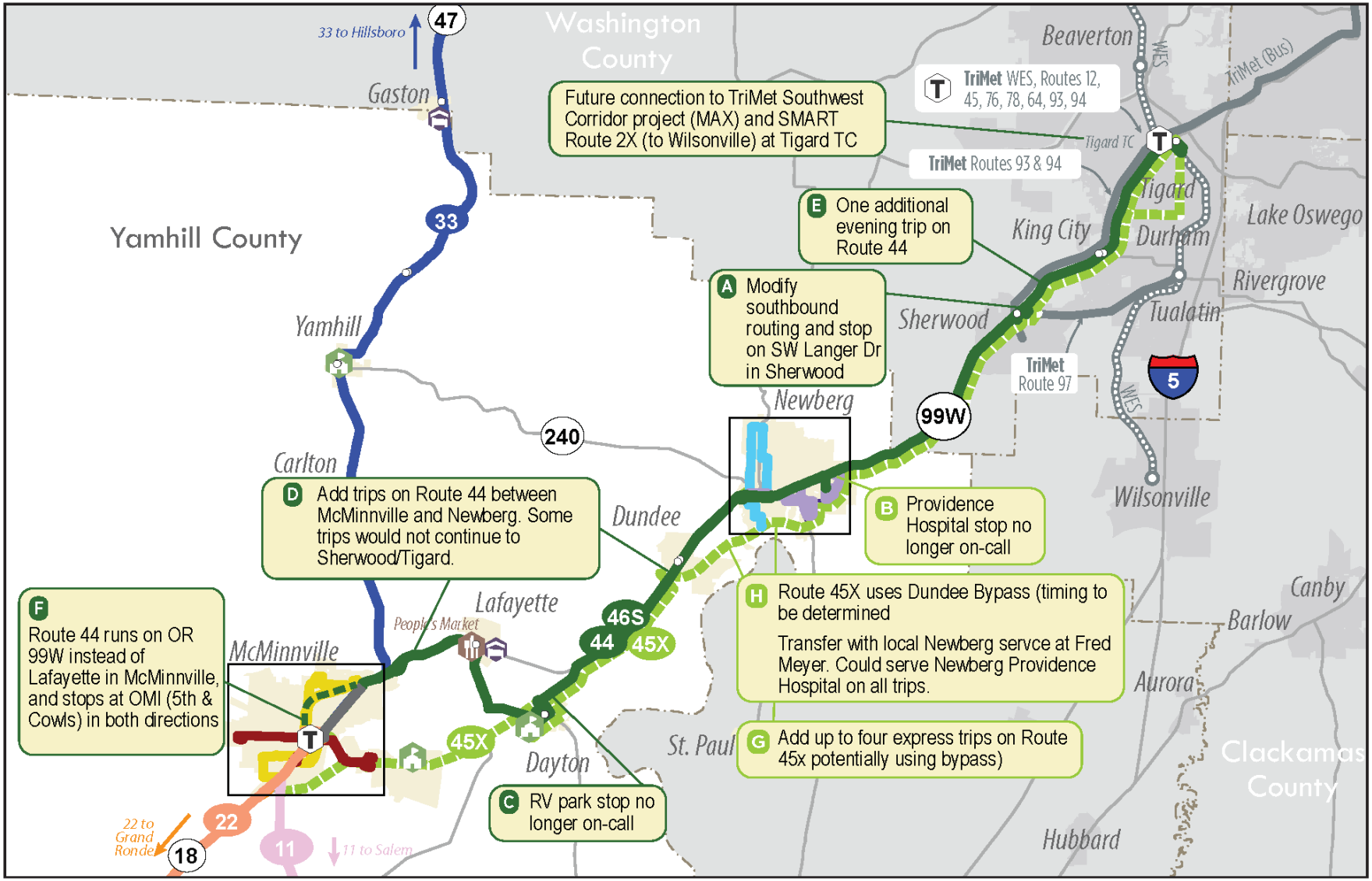
Project ID	Task [1]	Priority Tier [1]	Project Name [1]	Service Area(s)	Service Type	Project/Task Description [1]	Map or Other Details	Additional Annual Hours [1]	Additional Annual Operating Cost [1, 2]	New Capital Requirements
Immediate										
SI7	1		Tigard Intercity Schedule, Stop, and Routing Adjustments	McMinnville-Tigard	Fixed-Route	Schedule adjustments for Routes 44 and 45x	-	-	-	-
SI7	2		Tigard Intercity Schedule, Stop, and Routing Adjustments	McMinnville-Tigard	Fixed-Route	Modify southbound stop at Langer Pkwy in Sherwood to run in the opposite direction, saving several minutes of time in the southbound direction	-	-	-	Stop Improvements
SI7	3		Tigard Intercity Schedule, Stop, and Routing Adjustments	McMinnville-Tigard	Fixed-Route	Convert on-call stop at Providence Hospital to a regular stop. Stops on OR 99W. YCTA will need to coordinate pedestrian access improvements with ODOT & City of Newberg.	-	-	-	Stop Improvements
SI7	4		Tigard Intercity Schedule, Stop, and Routing Adjustments	McMinnville-Tigard	Fixed-Route	Convert on-call stop at Dayton RV Park to a regular stop. Stops on OR-18. YCTA will need to coordinate shoulder improvements with ODOT.	-	-	-	Stop Improvements
SI7	5		Tigard Intercity Schedule, Stop, and Routing Adjustments	McMinnville-Tigard	Fixed-Route	Modify Route 45x to serve Linfield College stops on OR 99W at Fellows St	-	-	-	Stop Improvements
Near-Term										
SN3	1	1	McMinnville-Newberg Connector	McMinnville-Tigard	Fixed-Route	Add trips on Route 44 to provide more frequent, consistent service between McMinnville and Newberg. Added trips would not continue to Sherwood/Tigard. Uses existing buses serving Routes 44/45x.	N/A	1,040	$78,000	-

Project ID	Task [1]	Priority Tier [1]	Project Name [1]	Service Area(s)	Service Type	Project/Task Description [1]	Map or Other Details	Additional Annual Hours [1]	Additional Annual Operating Cost [1, 2]	New Capital Requirements
SN4	1	2	Route 44 serves OR 99W in McMinnville	McMinnville-Tigard	Fixed-Route	Route 44 runs on OR 99W instead of Lafayette Ave in McMinnville, and stops at OMI (5th & Cowls) in both directions; assumes concurrent introduction of local service on Lafayette Ave in McMinnville.	See Figure 6-19 (TDP Vol. I)	-	-	-
SN6	1	2	Shopper Shuttle	McMinnville, Newberg, Small Cities	Flex Route	Implement shopper shuttle pilot projects in McMinnville, Newberg / Dundee, Yamhill / Carlton, Amity / Sheridan / Willamina, and Dayton / Lafayette (4 hours per day, 1 day per service area; 5 days per week, with up to two additional days in Yamhill/Carlton and Sheridan/Willamina to support medical trip needs such as dialysis where patients may have three appointments per week. Total of 9 days.).	N/A	1,040	$60,000 + $48,000 ($108,000 total)	1 van (+ 1 existing van)
Short-Term										
SS5	1	1	McMinnville-Newberg Connector	McMinnville-Tigard	Fixed-Route	Phase 2 of near-term project to add trips on Route 44 to provide more frequent, consistent service between McMinnville and Newberg. Added trips would not continue to Sherwood/Tigard. Uses existing buses serving Routes 44/45x.	N/A	1,040	$78,000	-
Mid-Term										
N/A										
Long-Term										
SL1	1	1	Additional intercity later evening service	McMinnville-Tigard	Fixed-Route	Add 1 additional evening trip	N/A	780	$59,000	-

Project ID	Task [1]	Priority Tier [1]	Project Name [1]	Service Area(s)	Service Type	Project/Task Description [1]	Map or Other Details	Additional Annual Hours [1]	Additional Annual Operating Cost [1, 2]	New Capital Requirements
SL3	1	1	Additional express service	McMinnville-Tigard	Fixed-Route	▪ Add up to four total express trips on Route 45x in morning and afternoon commute hours ▪ Express could potentially using bypass if traffic conditions warrant it in the future. Using bypass means express trips would not serve Dundee and downtown Newberg. There would be a timed transfer with local service in eastern Newberg (e.g., Fred Meyer). Route 44 would continue to serve Dundee and downtown Newberg. ▪ Express service provides direct access to Willamette Medical Center and other activity centers on the OR 18 Bypass, and reduces travel times between the County's largest population centers.	N/A	1,213	$91,000	-
SL5	1	1	Implement/Exp and Local Flex Routes	Dayton / Lafayette	Flex-Route	Expand shopper shuttle pilot to three days per week, 10 hours per day operation in a third geographic area (Dayton/Layafette assumed). Amity could be included in Dayton/Lafayette service area and/or Sheridan/Willamina service area.	N/A	1,352	$78,000	1 van
Long-Term (Vision)										
SV2	1	1	Expand Saturday service	McMinnville-Newberg	Fixed-Route	Add frequency on Route 44 between McMinnville and Newberg on Saturdays	N/A	416	$31,000	-
SV3	1	2	Implement Sunday Service	McMinnville-Tigard	Fixed-Route	Operate Route 44 on Sundays (McMinnville-Tigard). Assumes 4 round trips. This would be the highest priority for Sunday service on intercity routes.	N/A	624	$47,000	-
SV3	2	3	Implement Sunday Service	McMinnville-Newberg	Fixed-Route	Add frequency on Route 44 between McMinnville and Newberg on Sundays	N/A	416	$31,000	-

Notes: [1] Element required for STIF Plan. STIF Plan requires that projects be ranked and allows projects to be submitted at 100% and 130% of projected funding. Preliminary recommendation to be confirmed by YCTA Advisory Committee. [2] Costs in this table reflect an average cost per hour of $75 for fixed-route, $58 for Dial-a-Ride, and $56 for flex-routes, which is the assumed cost for FY 2020. The TDP financial plan assumes costs that are escalated to implementation year.

Figure D-17 Service Changes: McMinnville-Newberg-Tigard Corridor Intercity Service (Routes 44/45x) - Map



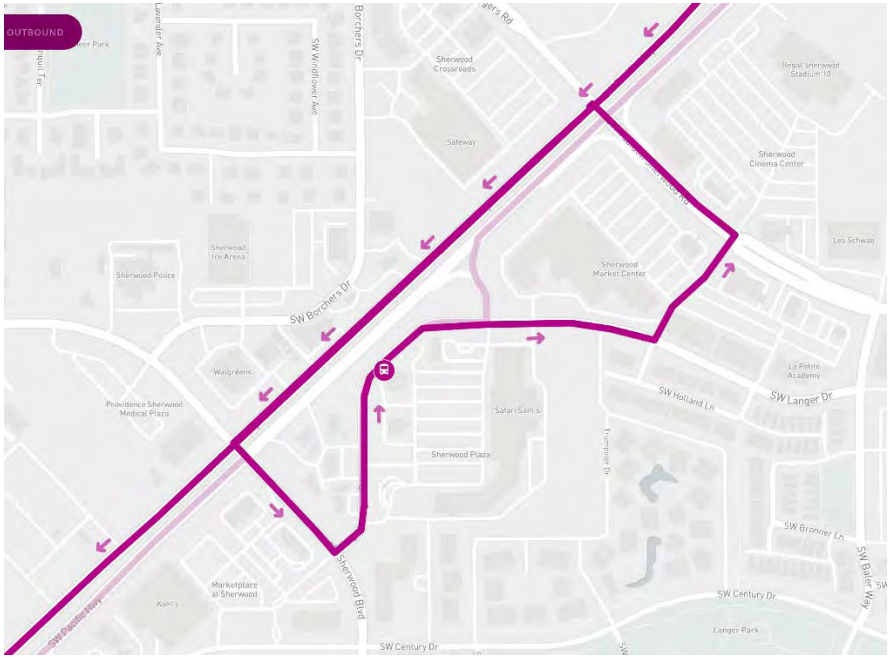
Route Maps and Details

Route 44 Southbound / Langer Drive

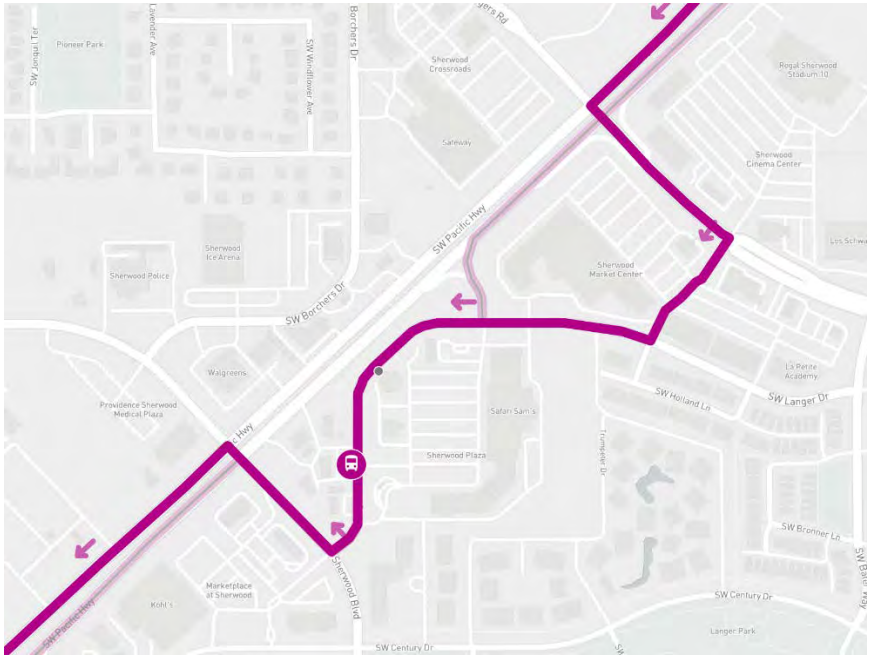
- Redesign the deviation to Sherwood Plaza (Shari's) on SW Langer Drive in Sherwood, which requires approximately three minutes northbound and five or more minutes southbound.
- This will require stopping on the opposite side of the street from the current stop. There is a TriMet bus zone, but no sidewalk. A TriMet stop located further south opposite Dutch Bros. can be used. This change would also need to be coordinated with TriMet.

Figure D-18 Existing and Proposed Route 44 Change at SW Langer Drive

Existing - Southbound



Proposed - Southbound



MCMINNVILLE-SALEM INTERCITY SERVICE: ROUTE 80X (CURRENT 11)

Key Improvements

- Extend Route 11 to Downtown Salem Transit Center
- Add trips during morning and afternoon commute hours, including early evening

Key Outreach Ideas/Findings

- Request to fill mid-morning and mid-afternoon service gaps (no departures from McMinnville between 7:30 a.m. and noon, or between noon and 4:00 p.m.)
- Comments supporting extending to downtown Salem sooner, and potentially serving Greyhound/Amtrak
- Desire for service from Dayton to Salem (suggestion to use OR 221)
- Among weekend service options, Saturday service in this corridor is a relatively high priority

Additional community input is summarized in TDP Volume II, Section 4: TM #4, Chapter 6 and Appendix A.

Figure D-19 summarizes intercity service improvements between McMinnville and Salem, by time frame, including local service improvements in Amity.

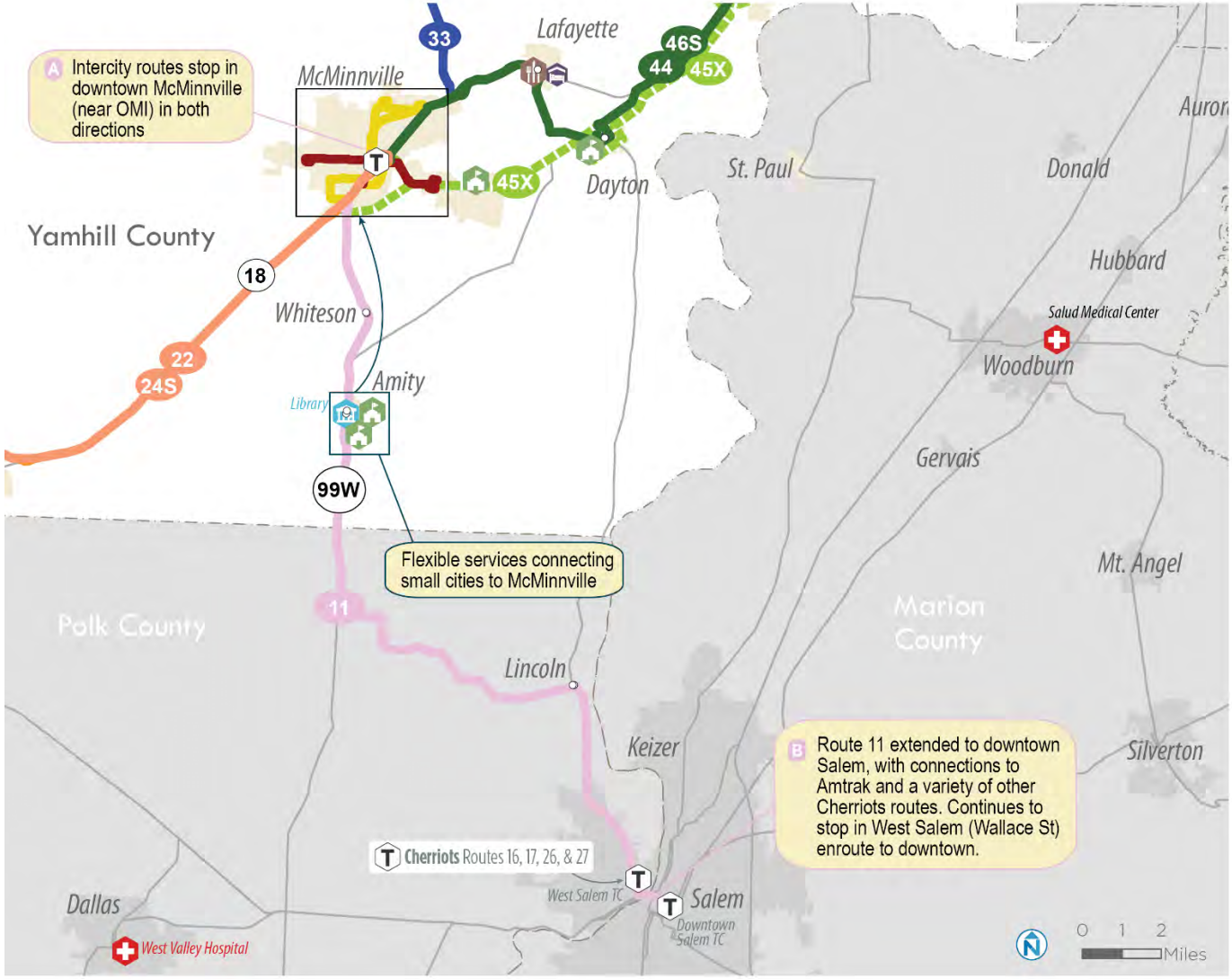
Figure D-19 Service Changes: McMinnville-Salem Corridor Intercity Service (Routes 11 / Future 80x) - Table

Project ID	Task [1]	Priority Tier [1]	Project Name [1]	Service Area(s)	Service Type	Project/Task Description [1]	Map or Other Details	Additional Annual Hours [1]	Additional Annual Operating Cost [1, 2]	New Capital Requirements
Immediate										
SI4	1		Salem Intercity Schedule, Stop, and Routing Adjustments	McMinnville-Salem	Fixed-Route	Schedule adjustments for Route 11	-	-	-	-
SI4	2		Salem Intercity Schedule, Stop, and Routing Adjustments	McMinnville-Salem	Fixed-Route	Add a Route 11 stop at OMI (5th & Cowls) in both directions	-	-	-	-
Near-Term										
SN6	1	2	Shopper Shuttle	McMinnville, Newberg, Small Cities	Flex Route	Implement shopper shuttle pilot projects in McMinnville, Newberg / Dundee, Yamhill / Carlton, Amity / Sheridan / Willamina, and Dayton / Lafayette (4 hours per day, 1 day per service area; 5 days per week, with up to two additional days in Yamhill/Carlton and Sheridan/Willamina to support medical trip needs such as dialysis where patients may have three appointments per week. Total of 9 days.).	N/A	1,040	$60,000 + $48,000 ($108,000 total)	1 van (+ 1 existing van)
Short-Term										
SS6	1	2	Extension to Downtown Salem	McMinnville-Salem	Fixed-Route	▪ Extend Route 11 to Downtown Salem Transit Center. Route 11 would still stop along Wallace Rd in West Salem. ▪ In conjunction with this change, rename Route 11 (e.g., to 80X) to avoid confusion with Cherriots Route 11.	Figure D-21 Figure D-22	758	$57,000	-
Mid-Term										
N/A										

Project ID	Task [1]	Priority Tier [1]	Project Name [1]	Service Area(s)	Service Type	Project/Task Description [1]	Map or Other Details	Additional Annual Hours [1]	Additional Annual Operating Cost [1, 2]	New Capital Requirements
Long-Term										
SL1	2	1	Additional intercity later evening service	McMinnville-Salem	Fixed-Route	Add 1 additional early evening trip	N/A	403	$30,000	-
SL2	1	1	Additional intercity morning and/or afternoon trips	McMinnville-Salem	Fixed-Route	Add 1 additional morning and 1 additional afternoon trip; no additional vehicles required; depending on YCTA's financial and capital resources, and future productivity of these routes, consider adding an additional vehicle to increase frequency during morning and afternoon peak periods (see SV1 - Long-Term Vision).	N/A	806	$60,000	-
SL4	1	2	Saturday Service Expansion	McMinnville-Salem	Fixed-Route	Add Saturday service between McMinnville and downtown Salem. Assumes 4 round trips.	N/A	322	$24,000	-
Long-Term (Vision)										
SV1	1	2	Increase peak period frequency to Salem and Hillsboro	McMinnville-Salem	Fixed-Route	Add trips on Route 11 during morning and afternoon commute hours; this would increase frequency. Requires an additional bus on the route.	N/A	806	$60,000	1 medium bus
SV3	4	2	Implement Sunday Service	McMinnville-Salem	Fixed-Route	Operate Route 11 on Sundays. Assumes 4 round trips.	N/A	322	$24,000	

Notes: [1] Element required for STIF Plan. STIF Plan requires that projects be ranked and allows projects to be submitted at 100% and 130% of projected funding. Preliminary recommendation to be confirmed by YCTA Advisory Committee. [2] Costs in this table reflect an average cost per hour of $75 for fixed-route, $58 for Dial-a-Ride, and $56 for flex-routes, which is the assumed cost for FY 2020. The TDP financial plan assumes costs that are escalated to implementation year.

Figure D-20 Service Changes: McMinnville-Salem Corridor Intercity Service (Routes 11) - Map



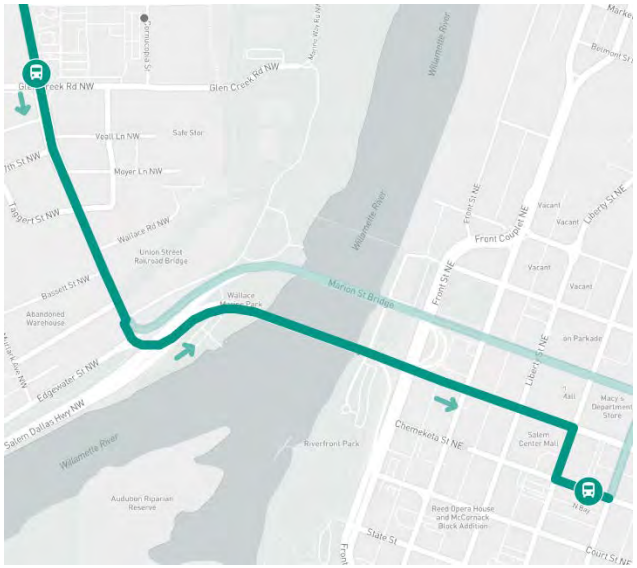
Route Maps and Details

Figure D-21 illustrates the extension of current Route 11 to downtown Salem as Route 80. The route would stop on Wallace Road near Glen Creek Transit Center, and at the Downtown Salem Transit Center. The actual stop location at the Downtown Salem Transit Center would need to be determined in coordination with Cherriots.

The route could also serve the Salem Amtrak station at certain times of day, an addition of approximately 10 minutes each way. See Figure D-22.

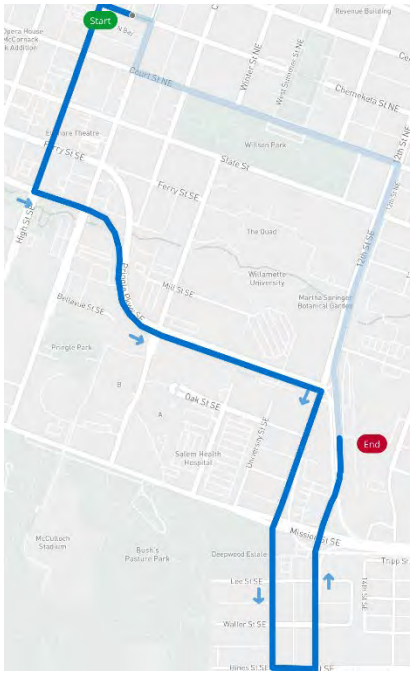
Figure D-21 Route 80x (Current Route 11) Extension to Downtown Salem

Glen Creek – Downtown Salem– Southbound



Glen Creek – Downtown Salem - Northbound

Figure D-22 Route 80x Potential Extension to Salem Amtrak Station



MCMINNVILLE-GRAND RONDE INTERCITY SERVICE: ROUTE 22/24S

Key Improvements

- Add stops serving west Sheridan and Wandering Spirit RV Park (others depend on shoulder improvements)
- Align schedule with YCTA Route 44/45x in McMinnville and Tillamook County Route 60x in Grand Ronde
- Add an additional evening trip serving Casino work shifts

Key Outreach Ideas/Findings

- Desire for stops at Dairy Queen, High School, Deer Meadow Assisted Living, and Oldsville Road, and a shelter across from TJs in Sheridan

Additional community input is summarized in TDP Volume II, Section 4: TM #4, Chapter 6 and Appendix A.

Figure D-23 summarizes intercity service improvements between McMinnville and Grand Ronde, by time frame, including local service improvements in Sheridan, Willamina, and/or Amity.

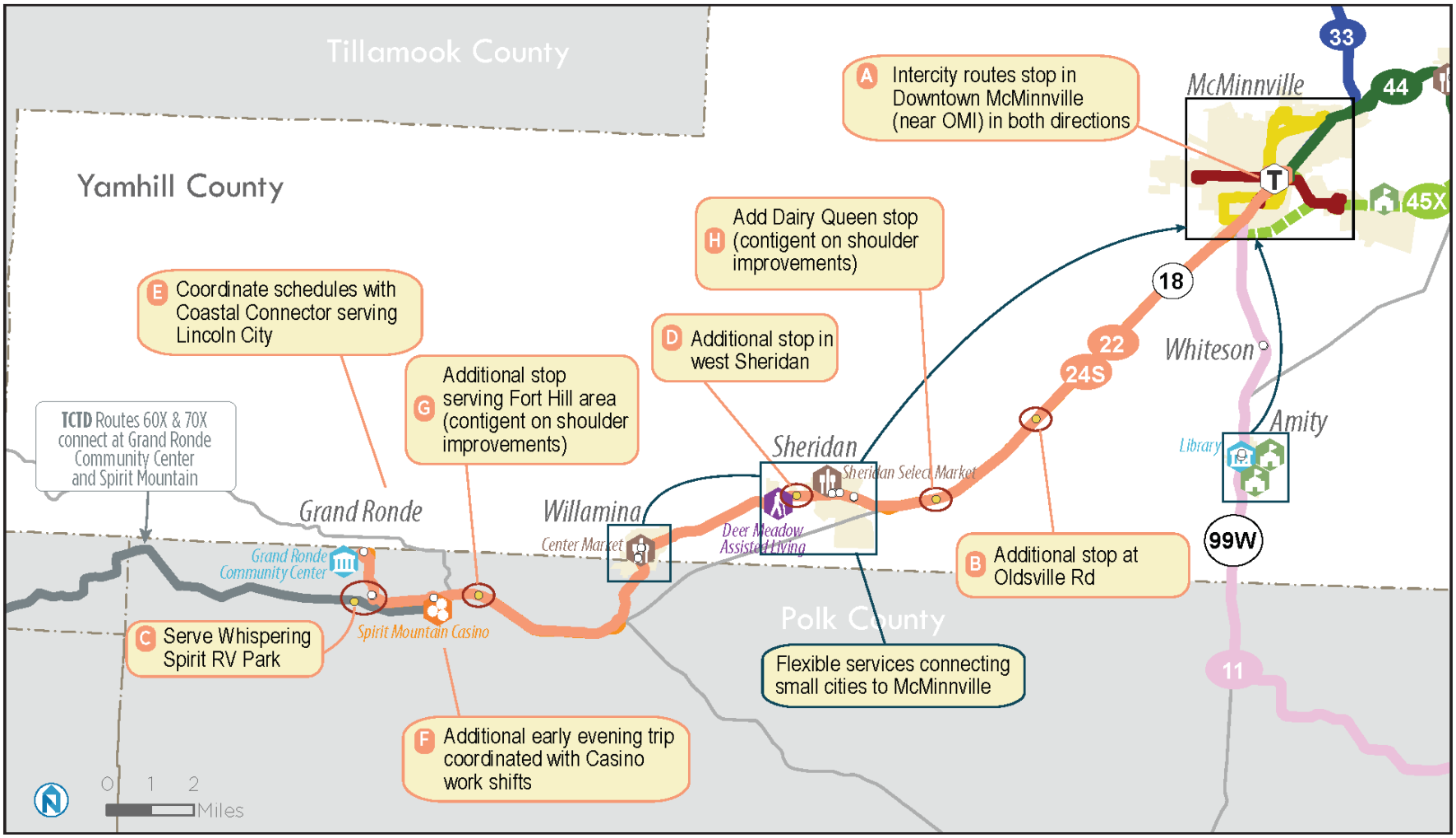
Figure D-23 Service Changes: McMinnville-Grand Ronde Corridor Intercity Service (Route 22) – Table

Project ID	Task [1]	Priority Tier [1]	Project Name [1]	Service Area(s)	Service Type	Project/Task Description [1]	Map or Other Details	Additional Annual Hours [1]	Additional Annual Operating Cost [1, 2]	New Capital Requirements
Immediate										
SI5	1		Grand Ronde Intercity Schedule, Stop, and Routing Adjustments	Figure D-21 Figure D-22.	Fixed-Route	Schedule adjustments for Route 22 including better timing with other intercity routes	-	-	-	-
SI5	2		Grand Ronde Intercity Schedule, Stop, and Routing Adjustments	Figure D-21 Figure D-22.	Fixed-Route	▪ Add a stop at OMI (5th & Cowls) in both directions ▪ Add a stop at Wandering Spirit RV Park (west of Grand Ronde Road) ▪ Add a stop at Oldsville Road	-	-	-	-
Near-Term										
SN6	1	2	Shopper Shuttle	McMinnville, Newberg, Small Cities	Flex Route	Implement shopper shuttle pilot projects in McMinnville, Newberg / Dundee, Yamhill / Carlton, Amity / Sheridan / Willamina, and Dayton / Lafayette (4 hours per day, 1 day per service area; 5 days per week, with up to two additional days in Yamhill/Carlton and Sheridan/Willamina to support medical trip needs such as dialysis where patients may have three appointments per week. Total of 9 days.).	N/A	1,040	$60,000 + $48,000 ($108,000 total)	1 van (+ 1 existing van)
Short-Term										
SS7	1	1	Additional Grand Ronde evening trip	McMinnville -Grand Ronde	Fixed-Route	Add an additional evening trip, timed to serve work shifts at the Spirit Mountain Casino and improve connections to/from TCTD 60X Coastal Connector route serving Lincoln City (at Spirit Mountain Casino or Grand Ronde Community Center). Timing should be determined in consultation with TCTD and Spirit Mountain. Improves regional coordination and job access.	N/A	503	$38,000	-

Project ID	Task [1]	Priority Tier [1]	Project Name [1]	Service Area(s)	Service Type	Project/Task Description [1]	Map or Other Details	Additional Annual Hours [1]	Additional Annual Operating Cost [1, 2]	New Capital Requirements
SS8	2	2	Implement Local Flex Route	Sheridan / Willamina	Flex-Route	Expand shopper shuttle pilot to three days per week, 8 to 10 hour per day operation. Either Yamhill/Carlton or Sheridan/Willamina/Amity are recommended for the short-term. One area could be implemented in the first year of the short-term and the second could be implemented in the second or third year based on available resources in Year 1.	N/A	1,352	$78,000	1 van
Mid-Term										
N/A										
Long-Term										
SL5	2	1	Implement/Expand Local Flex Routes	Sheridan / Willamina	Flex-Route	Expand local flex-route to operate 5 days per week in Sheridan/Willamina.	N/A	1,040	$60,000	
Long-Term (Vision)										
SV3	3	2	Implement Sunday Service	McMinnville-Grand Ronde	Fixed-Route	Operate Route 22 between McMinnville and Grand Ronde on Sundays. This would be the second highest priority for Sunday service on intercity routes.	N/A	624	$47,000	

Notes: [1] Element required for STIF Plan. STIF Plan requires that projects be ranked and allows projects to be submitted at 100% and 130% of projected funding. Preliminary recommendation to be confirmed by YCTA Advisory Committee. [2] Costs in this table reflect an average cost per hour of $75 for fixed-route, $58 for Dial-a-Ride, and $56 for flex-routes, which is the assumed cost for FY 2020. The TDP financial plan assumes costs that are escalated to implementation year.

Figure D-24 Service Changes: McMinnville-Grand Ronde Corridor Intercity Service (Route 22) - Map



Route Maps and Details

Figure D-25 Photos of Proposed Stop Locations on Route 22 that require shoulder improvements

Map ID	Time Frame	Location	Photo
G	Contingent on shoulder improvements	Fort Hill Road area. Shoulders are narrow and roadway is divided with a barrier in segments.	 Source: Google Street View
H	Contingent on shoulder improvements	Dairy Queen North shoulder is narrow.	 Source: Google Street View

MCMINNVILLE-HILLSBORO INTERCITY SERVICE: ROUTE 33

Key Improvements

- Improve facilities/signage at Hillsboro Transit Center
- Add trips during the morning and afternoon/early evening commute hours

Key Outreach Ideas/Findings

- Time Route 33 to allow connections to Salem or Hillsboro in the morning (e.g., 9 am), and to Tigard route
- Desirable to connect Yamhill/Carlton to Newberg

Additional community input is summarized in TDP Volume II, Section 4: TM #4, Chapter 6 and Appendix A.

Figure D-26 summarizes intercity service improvements between McMinnville and Hillsboro, by time frame.

Washington County has communicated a desire from the City of Gaston for additional service (e.g., SL1.3), and may be able to contribute funding support. If additional partner funding can be identified; it may be possible to implement this project sooner. Washington County and Gaston also plan to explore submitting a discretionary application for a park & ride/stop enhancement in Gaston.

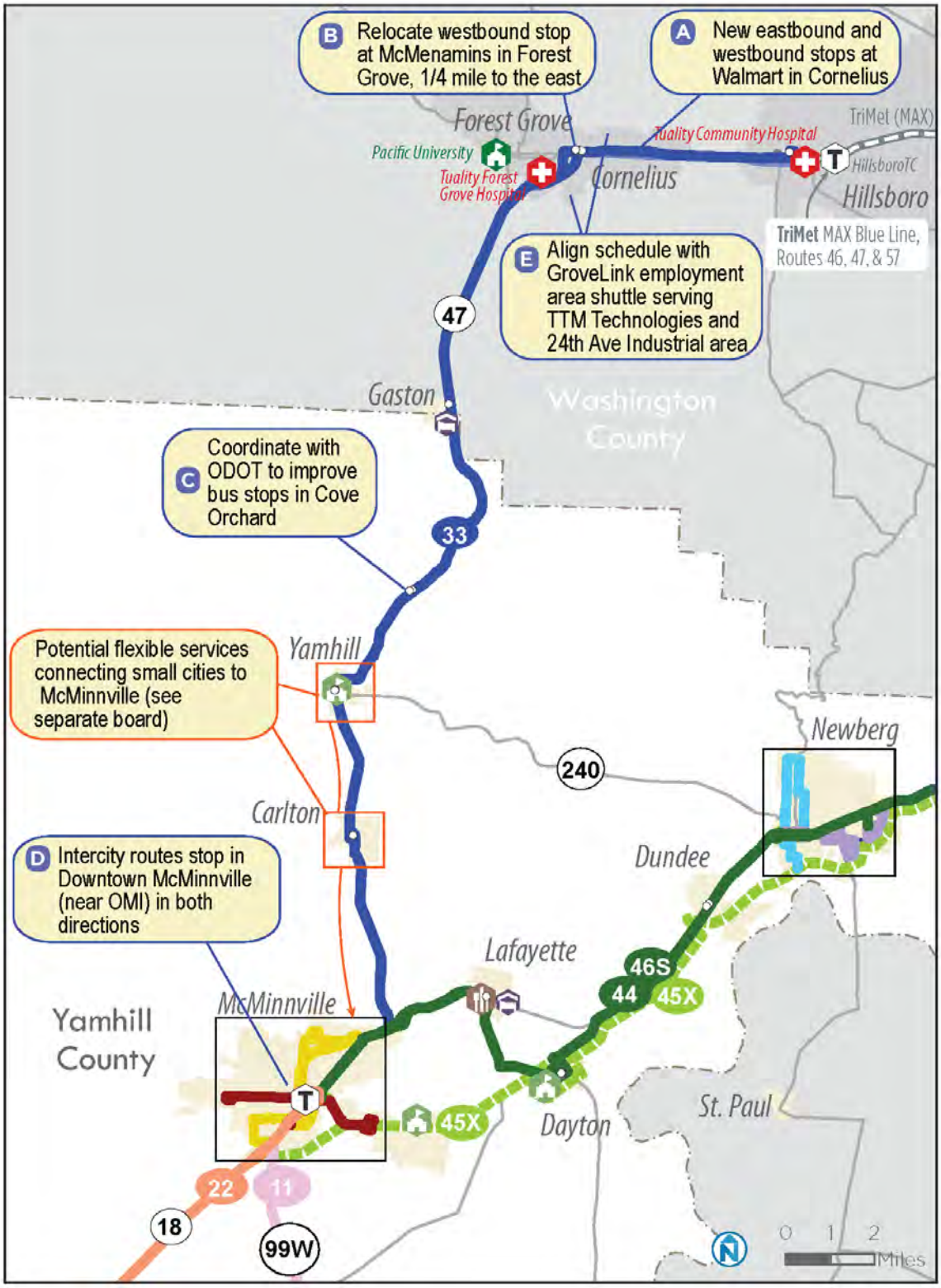
Figure D-26 Service Changes: McMinnville-Hillsboro Corridor Intercity Service (Route 33) – Table

Project ID	Task [1]	Priority Tier [1]	Project Name [1]	Service Area(s)	Service Type	Project/Task Description [1]	Map or Other Details	Additional Annual Hours [1]	Additional Annual Operating Cost [1, 2]	New Capital Requirements
Immediate										
SI6	1	-	Hillsboro Intercity Schedule, Stop, and Routing Adjustments	McMinnville-Hillsboro	Fixed-Route	▪ Schedule adjustments for Route 33, including adjusting schedules of the current 10:30 am and 12:30 pm trips from McMinnville to reduce the current 4h 30 min gap between the 6 AM and 10:30 AM trips. ▪ Add a stop at OMI (5th & Cowls) in both directions	-	-	-	-
Near-Term										
SN5	1	2	Route 33 bus stop and routing changes	McMinnville-Hillsboro	Fixed-Route	▪ Relocate westbound Route 33 stop in Forest Grove. Eliminate westbound stop at McMenamins Grand Lodge (west of Hwy 47). Add new westbound stop at the TriMet bus stop 1/4 mile east of Hwy 47. Modify westbound routing to save travel time. ▪ Add eastbound and westbound stops at Walmart (4th Ave) in Cornelius.	Figure D-28	-	-	-
SN5	2	3		McMinnville-Hillsboro	Fixed-Route	Coordinate with ODOT on shoulder and other improvements to enhance safety of the Cove Orchard stop.	N/A	-	-	-
Short-Term										
None										
Mid-Term										
None										
Long-Term										
SL1	3	1		McMinnville-Hillsboro	Fixed-Route	Add 1 additional early evening trip. This was initially a mid-term priority, but was deferred to the long-term given funding availability;	N/A	520	$39,000	-

Project ID	Task [1]	Priority Tier [1]	Project Name [1]	Service Area(s)	Service Type	Project/Task Description [1]	Map or Other Details	Additional Annual Hours [1]	Additional Annual Operating Cost [1, 2]	New Capital Requirements
						however, Washington County and Gaston are able to provide approximately $20,000 towards the cost of adding this trip, which would serve Gaston High School and students returning from after school activities. This has been included in the Near-Term STIF plan (subject to YCTA STIF Advisory Committee approval).				
SL2	2	1	Additional intercity morning and/or afternoon trips	McMinnville-Hillsboro	Fixed-Route	Add 1 additional morning trip; no additional vehicles required; depending on YCTA's financial and capital resources, and future productivity of these routes, consider adding an additional vehicle to increase frequency during morning and afternoon peak periods (see SV1 - Long-Term Vision).	N/A	520	$39,000	-
SL4	2	2	Saturday Service Expansion	McMinnville-Hillsboro	Fixed-Route	Add Saturday service between McMinnville and Yamhill/Carlton. Assumes 4 round trips. Phase 1 of Saturday service to Hillsboro.	N/A	159	$12,000	-
Long-Term (Vision)										
SV1	2	2	Increase peak period frequency to Salem and Hillsboro	McMinnville-Hillsboro	Fixed-Route	▪ Add trips on Route 33 during morning and afternoon commute hours; this would increase frequency. Requires an additional bus on the route. ▪ Improve coordination with Grovelink employment area trips.	N/A	1,040	$78,000	1 medium bus
SV2	2	3	Expand Saturday service	McMinnville-Hillsboro	Fixed-Route	Extend Route 33 to Hillsboro on Saturdays. Hours/cost in addition to Phase 1 (SL4, McMinnville-Yamhill only)	N/A	257	$19,000	-
SV3	5	3	Implement Sunday Service	McMinnville-Hillsboro	Fixed-Route	Operate Route 33 on Sundays. Assumes 4 round trips.	N/A	451	$34,000	-

Notes: [1] Element required for STIF Plan. STIF Plan requires that projects be ranked and allows projects to be submitted at 100% and 130% of projected funding. Preliminary recommendation to be confirmed by YCTA Advisory Committee. [2] Costs in this table reflect an average cost per hour of $75 for fixed-route, $58 for Dial-a-Ride, and $56 for flex-routes, which is the assumed cost for FY 2020. The TDP financial plan assumes costs that are escalated to implementation year.

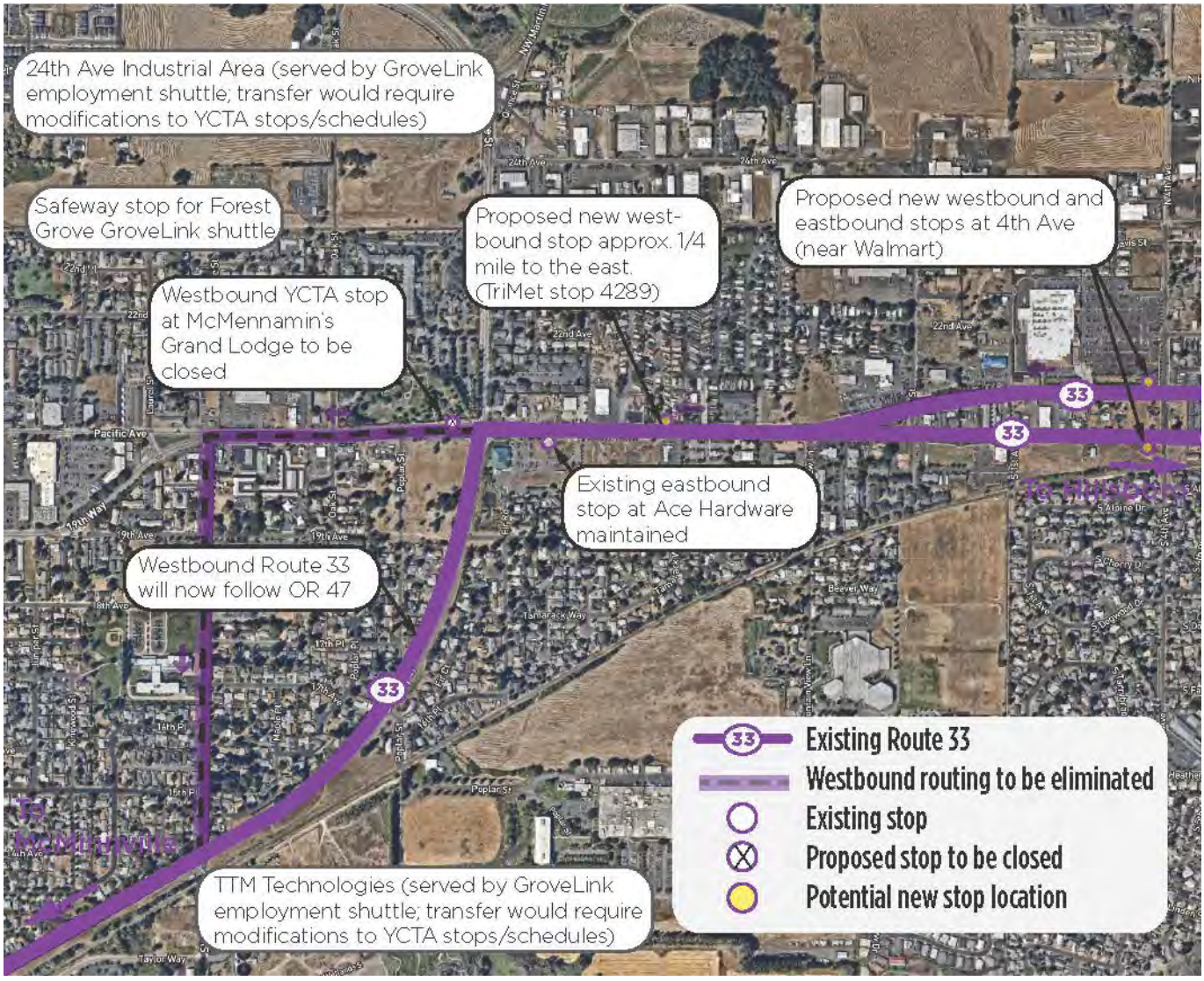
Figure D-27 Service Changes: McMinnville-Hillsboro Corridor Intercity Service (Route 33) - Map



Route Maps and Details

Route 33 Forest Grove and Cornelius Stop and Routing

Figure D-28 Proposed Changes to Route 33 in Forest Grove and Cornelius



SERVICE WITHIN/BETWEEN SMALL CITIES

Key Improvements

- Shopper shuttle pilot services and community-driven process to design services connecting small cities to intercity transit routes and/or key destinations/services in McMinnville and Newberg

Key Outreach Ideas/Findings

- Over 60% of online survey respondents preferred a Rural Flex Route model, while 27% supported a rural shopper/medical shuttle

Additional community input is summarized in TDP Volume II, Section 4: TM #4, Chapter 6 and Appendix A.

Figure D-29 summarizes service improvements aiming at increasing connectivity within/between small cities and McMinnville/Newberg, by time frame.

Several service models were proposed in TM #4 and taken out to the community for their input in March 2018 (see Figure D-30). In general, there was a preference for the Rural Flex Route model, but based on public comments, some aspects of the other service models, e.g., serving as a feeder to intercity routes, also have appeal in smaller cities. There was general support for using a pilot shopper/medical shuttle to help develop the specific design for each service, which could incorporate a community-driven process (or set of communities). This could evolve into a service that operates more frequently over time in the communities and markets where it is well-utilized.

The service would utilize small vans, which would allow them to serve destinations that are inaccessible in a large bus, such as Deer Meadows Assisted Living in Sheridan.

The service would incorporate on-demand technology to allow them to be used in a more real-time manner, as opposed to traditional demand-response service where reservations are required the previous day.

Note: A shopper/medical shuttle pilot is also included in the McMinnville and Newberg local service sections; due to its proximity Dundee is included in the cost of the Newberg service.

Figure D-30 Small City Service Model Options

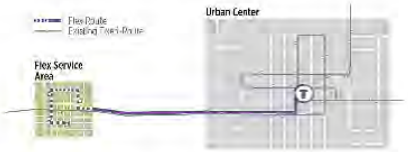
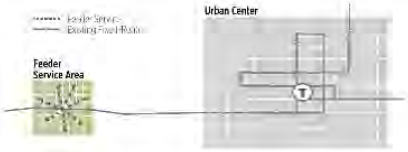
SERVICE MODEL	RURAL SHOPPER/MEDICAL SHUTTLE	RURAL FLEX ROUTE		RURAL FEEDER SERVICE	
Description	Door-to-door service in small cities, with advance reservations, to selected major shopping and medical destinations in McMinnville or Newberg	Scheduled stops in small cities (deviations and curb-to-curb service with advance reservations) directly serving McMinnville or Newberg Transit Centers and selected major shopping and medical destinations		Curb-to-curb service within small cities, with advance reservations, making timed transfers with intercity buses in each city, and offering trips between points within each city	
Image					
# Vehicles	🚌	🚌🚌	🚌🚌🚌	🚌🚌	🚌🚌🚌
Service Days/Hours	Limited days and hours of service: 1 day per week in each service area*, approx. 4 hours per day	Regular all-day service: 2-3 days per week in each service area, approx. 8-5 pm	Regular all-day service: 5 days per week in each service area, approx. 8-5 pm	Regular all-day service: 2-3 days per week in each service area, approx. 8-5 pm	Regular all-day service: 5 days per week in each service area, approx. 8-5 pm
Cost	$	$$$$ ($$ per vehicle)	$$$$$$ ($$ per vehicle)	$$$$ ($$ per vehicle)	$$$$$$ ($$ per vehicle)

Figure D-31 Service between Small Cities – Table

Project ID	Task [1]	Priority Tier [1]	Project Name [1]	Service Area(s)	Service Type	Project/Task Description [1]	Map or Other Details	Additional Annual Hours [1]	Additional Annual Operating Cost [1, 2]	New Capital Requirements
Near-Term										
SN6	1	2	Shopper Shuttle	McMinnville, Newberg, Small Cities	Flex Route	Implement shopper shuttle pilot projects in McMinnville, Newberg / Dundee, Yamhill / Carlton, Amity / Sheridan / Willamina, and Dayton / Lafayette (4 hours per day, 1 day per service area; 5 days per week, with up to two additional days in Yamhill/Carlton and Sheridan/Willamina to support medical trip needs such as dialysis where patients may have three appointments per week. Total of 9 days.).	N/A	1,040	$60,000 + $48,000 ($108,000 total)	1 van (+ 1 existing van)
Short-Term										
SS8	1	1	Implement Local Flex Route	Yamhill / Carlton	Flex-Route	Expand shopper shuttle pilot to three days per week, 8 to 10 hour per day operation. Either Yamhill/Carlton or Sheridan/Willamina/Amity are recommended for the short-term. One area could be implemented in the first year of the short-term and the second could be implemented in the second or third year based on available resources in Year 1.	N/A	1,352	$78,000	1 van
SS8	2	2	Implement Local Flex Route	Sheridan / Willamina	Flex-Route		N/A	1,352	$78,000	1 van
Mid-Term										
N/A										
Long-Term										
SL5	2	1	Implement/Exp and Local Flex Routes	Sheridan / Willamina	Flex-Route	Expand local flex-route to operate 5 days per week in Sheridan/Willamina.	N/A	1,040	$60,000	-

Notes: [1] Element required for STIF Plan. STIF Plan requires that projects be ranked and allows projects to be submitted at 100% and 130% of projected funding. Preliminary recommendation to be confirmed by YCTA Advisory Committee. [2] Costs in this table reflect an average cost per hour of $75 for fixed-route, $58 for Dial-a-Ride, and $56 for flex-routes, which is the assumed cost for FY 2020. The TDP financial plan assumes costs that are escalated to implementation year.

FY 2019-2021 STIF PLAN INFORMATION

Recommended Definition of a High-Percentage of Low-Income Households

The Statewide Transportation Investment Fund (STIF) guidance[4] and STIF Advisory Committee Bylaws template[5] define a low-income household as:

> *A household the total income of which does not exceed 200% of the poverty guidelines updated periodically in the Federal Register by the U.S. Department of Health and Human Services under the authority of 42 U.S.C. 9902(2) for the 48 Contiguous States and the District of Columbia.*

The STIF guidance provides local discretion for defining a "high-percentage" of low-income households, which is among the criteria used to evaluate STIF projects submitted for funding. The definition must be provided in section 4.3 of the STIF funding plan. The TDP recommends the following methodology for determining a high-percentage of low-income households, or population; the recommended language refers to both population and households based on data availability and to provide YCTA and the YCTA STIF Advisory Committee with more flexibility.[6]

> *A community with a high percentage of low-income households (or population) is defined as having an equal or higher low-income percentage than the county-wide percentage of low-income households (or population). Within a city comprised of multiple Census tracts (i.e., McMinnville and Newberg), an area with a high percentage of low-income households (or population) is defined as a Census tract with an equal or higher percentage of low-income households (or population) than the city-wide percentage of low-income households (or population).*

Figure 2-3 of the TDP (Chapter 2) provides demographic information for Yamhill County. Based on low-income population (see footnote below), communities with an equal or higher low-income (200% of poverty) percentage than the county-wide percentage (36%) are: McMinnville (43%), Newberg (36%), Sheridan (57%), Lafayette (41%), Dayton (39%), and Willamina (43%). Communities with a lower percentage are: Carlton (30%), Dundee (28%), Amity (28%), and Yamhill (19%). (It would be possible for the YCTA STIF Advisory Committee to use a different method or standard to make this determination.) In

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[4] ODOT, STIF Application Guidance. https://www.oregon.gov/ODOT/RPTD/RPTD%20Committee%20Meeting%20Documents/STIF-Application-Guidance.pdf

[5] ODOT, Model STIF Advisory Committee Bylaws Template. https://tinyurl.com/ydgs9w45

[6] The STIF regulations enacted by the Oregon Legislature in HB 2017 refer to low-income households. The American Community Survey (ACS) provides poverty information for households, families, and individuals; however, a breakdown of 200% of the federal poverty level (the STIF definition of low-income) is only available for families (Table S1702) and population (Table S1701). Households include all person who occupy a housing unit including a single family, one person living alone, two or more families living together, or any other group of related or unrelated persons who share living arrangements. Population data is for the population for whom poverty status is determined, which excludes institutionalized people (e.g., prisons), people in military group quarters, people in college dormitories, and unrelated individuals under 15 years old. In addition, based on the same data availability limitations, the Remix software calculates the share of the *population* within a ½-mile of transit stops. It is possible to convert from population to households based on average household size (calculated as people in occupied housing units [96,886] divided by total housing units [35,002], from 2016 ACS 5-Year Estimate, Table DP04, equal to 2.8 people per household, rounded to nearest 0.1).

addition, within McMinnville and Newberg it is possible to use Census Tract data to identify different areas in these larger cities that have a high-percentage of low-income households; the recommended comparison is to the city-wide percentage of low-income population.

FY 2019-2021 STIF Plan Summary

STIF Plans (applications) must be received by ODOT no later than November 1, 2018 for the first round of funding opportunity or May 1, 2019 for the second round of funding opportunity. The template requires that projects submitted in the STIF Plan identify which of the following STIF Criteria and Oregon Public Transportation Plan (OPTP) goals (and policies; not listed) are met. The table below lists the preliminary STIF revenue projections for YCTA in the current funding cycle, and 130% of the projected funding level (recipients are encouraged to submit a "130%" list in case revenues exceed projections, and the request can exceed 130% if desired).

Figure D-32 STIF Revenue Projections for Yamhill County

Year	TDP Time Frame	Preliminary Revenue Projection	130% of Projection
FY 2019	Near-Term	$496,000	$645,000
FY 2020	Short-Term	$1,127,000	$1,465,000
FY 2021	Short-Term	$1,275,000	$1,658,000

Figure D-33 summarizes funding requested through STIF. Actual funding is constrained by revenue received.

Figure D-33 STIF Plan Project Summary

Category	Fiscal Year		
	2019	2020	2021
100% List	$640,161	$1,100,699	$1,173,115
100% with Planning/Administration	$43,300	$26,800	$12,900
Total 100% List	**$683,461**	**$1,127,499**	**$1,186,015**
130% List	$35,000	$365,000	$425,000
130% List with Planning/Administration	$0	$0	$19,100
Total 130% List	**$35,000**	**$365,000**	**$444,100**
Overall Total	**$718,461**	**$1,492,499**	**$1,630,115**
Preliminary Revenue Projection	$496,000	$1,127,000	$1,275,000
130% of Projection	$645,000	$1,465,000	$1,658,000

YCTA needs to rate the projects based on STIF criteria established in the legislation. Figure D-34 summarizes the allocations. A minimum of 1% of funding needs to serve students in Grades 9-12 and the YCTA STIF Plan should exceed that threshold. Not all project types are allocated to STIF criteria, so the amounts are less than the total STIF plan requested funding amount.

Figure D-34 STIF Criteria and YCTA STIF Plan Draft Allocations

STIF Criteria		FY 2019	FY 2020	FY 2021	Total	% of Total
Criterion 1	Increased frequency of bus service to areas with a high percentage of Low-Income Households.	$334,750	$619,750	$603,600	$1,558,100	47%
Criterion 2	Expansion of bus routes and bus services to serve areas with a high percentage of Low-Income Households.	$148,500	$511,500	$607,000	$1,267,000	38%
Criterion 3	Fund the implementation of programs to reduce fares for public transportation in communities with a high percentage of Low-Income Households.	$0	$0	$0	$0	0%
Criterion 4	Procurement of low or no emission buses for use in areas with 200,000 or more.	$0	$0	$0	$0	0%
Criterion 5	The improvement in the frequency and reliability of service between communities inside and outside of the Qualified Entity's service area.	$26,250	$57,750	$70,700	$154,700	5%
Criterion 6	Coordination between Public Transportation Service Providers to reduce fragmentation in the provision of transportation services.	$0	$28,500	$40,700	$69,200	2%
Criterion 7	Implementation of programs to provide student transit service for students in grades 9-12.	$32,500	$111,500	$116,000	$260,000	8%
Total		$542,000	$1,329,000	$1,438,000	$3,309,000	100%

Each project also needs to be evaluated based on meeting one or more of the following Oregon Public Transportation Plan (OPTP) Goals. Draft ratings are provided, but are omitted from the draft STIF input tables below due to space limitations.

Goal 1 Mobility: Public Transportation User Experience -- People of all ages, abilities, and income levels move reliably and conveniently between destinations using an affordable, well-coordinated public transportation system. People in Oregon routinely use public transportation to meet their daily needs.

Goal 2: Accessibility and Connectivity -- Riders experience user-friendly and convenient public transportation connections to and between services and travel modes in urban, suburban, rural, regional, and interstate areas.

G**oal 3: Community Livability and Economic Vitality** -- Public transportation promotes community livability and economic vitality by efficiently and effectively moving people of all ages to and from homes, jobs, businesses, schools and colleges, and other destinations in urban, suburban, and rural areas.

Goal 4: Equity -- Public transportation provides affordable, safe, efficient, and equitable transportation to jobs, services, and key destinations, improving quality of life for all Oregonians.

Goal 5: Health -- Public transportation fosters improved health of Oregonians by promoting clean air, enhancing connections between people, enabling access to services such as health care and goods such as groceries, and by giving people opportunities to integrate physical activity into everyday life through walking and bicycling to and from public transportation.

Goal 6: Safety and Security -- Public transportation trips are safe; riders feel safe and secure during their travel. Public transportation contributes to the resilience of Oregon communities.

Goal 7: Environmental Sustainability -- Public transportation contributes to a healthy environment and climate by moving more people with efficient, low-emission vehicles, reducing greenhouse gases and other pollutants.

Goal 8: Land Use -- Public transportation is a tool that supports Oregon's state and local land use goals and policies. Agencies collaborate to ensure public transportation helps shape great Oregon communities providing efficient and effective travel options in urban, suburban, and rural areas.

Goal 9: Funding and Strategic Investment -- Strategic investment in public transportation supports the overall transportation system, the economy, and Oregonians' quality of life. Sustainable and reliable funding enables public transportation services and infrastructure to meet public needs.

Goal 10: Communication, Collaboration, and Coordination -- Public and private transportation providers and all levels of government within the state and across state boundaries work collaboratively and foster partnerships that make public transportation seamless regardless of jurisdiction.

FY 2019-2021 STIF Plan Inputs

Figure D-35 provides information for YCTA to use in completing the ODOT STIF formula funds application template.[7] The table is spread across four pages (two across); some columns are not included below due to space limitations. Figure D-36 provides additional detail for rolling stock (bus) projects. The final submission may vary from these values.

[7] ODOT, STIF Application Template. https://www.cognitoforms.com/ODOT2/STIFPlanTemplate

Figure D-35 FY 2019-2021 STIF Application Template Information, Near-Term/Short-Term Projects: Page 1/4

TDP Project ID	TDP Task	TDP Time Frame	Initial Impl. Year	Project Name	Service Area(s)	Project/Task Description	Plan Page #	STIF Plan Project & Task	100% or 130% List [2]	Committee Rank (10/18/18)	Project Rank within 100% or 130% List [2]	One-Time Planning/ Admin Cost (10%) [3]	Hold for Future STIF Plan Period	Share to Improve/ Expand Service	Service Type	STIF % of Funding	# of Years	Total Revenue Hours (STIF Plan Period)	Total Revenue Miles (STIF Plan Period)	Total Rides (STIF Plan Period) [3]	Population with Access to Transit [4]	Low-Income House-Holds Access to Transit [4]	New Shared Stops with Other Providers (#)
CN1	-	Near-Term to Short-Term	2019	Bus Local Match	System-wide	Replace end-of-life vehicles with low-floor vehicles branded for and matched to each service type; Acquire new vehicles to support SN1.3, SN 1.4, and SN 6.1 [See STIF Bus Task Detail for task-level inputs]	7-5, 7-12	1	100%	1	1	-	No	100%	N/A	100%	3	N/A	N/A	N/A	N/A	N/A	N/A
SN1	3	Near-Term	2019	McMinnville Local Service Capacity, Coverage, and Service Hours	McMinnville	Modify Route 3 to provide more service to Winco/Walmart area, two-way service on Evans and 27th St, and service on McDaniel Ln (Senior Center). Requires additional half bus.	6-28, D-9, D-10	2.1	100%	2	2.1	Yes	No	100%	Fixed-Route	100%	3	4,290	101,244	67,800	9,207	1,828	No
SN1	4	Near-Term	2019	McMinnville Local Service Capacity, Coverage, and Service Hours	McMinnville	Modify Route 4 (current 2 West) to extend along 2nd St west of Hill Rd, providing service for additional residents, and south to Booth Bend Rd to provide direct access to Roths, Bi-Mart, and Albertsons. Accomplished using the remaining half bus from the Route 3 modification.	6-28, D-12	2.2	100%	2	2.2	Yes	No	100%	Fixed-Route	100%	3	4,290	49,764	56,100	3,294	738	No
SN1	5	Near-Term	2019	McMinnville Local Service Capacity, Coverage, and Service Hours	McMinnville	Morning Service: 1 additional hour for Route 2 and 4 (start at 7:00 AM).	6-28	2.3	100%	2	2.3	-	No	100%	Fixed-Route	100%	3	780	4,524	10,200	3,294	738	No
CN2	1	Near-Term to Short-Term	2019	Bus Stop Improvements	System-wide	Sign and Mark Bus Stops; communicates where vehicles stop and the presence of transit in the community. Stop improvement program (benches, shelters, pads, and other amenities) provides comfortable, dignified places for passengers to catch the bus. Planning.	7-7, 7-12	3.1	100%	3	3	Yes	No	100%	N/A	100%	1	N/A	N/A	N/A	N/A	N/A	N/A
CN2	2	Near-Term to Short-Term	2019	Bus Stop Improvements	System-wide	Sign and Mark Bus Stops; communicates where vehicles stop and the presence of transit in the community. Stop improvement program (benches, shelters, pads, and other amenities) provides comfortable, dignified places for passengers to catch the bus. Signing/Marking.	7-7, 7-12	3.2	100%	3	3	No	No	100%	N/A	100%	3	N/A	N/A	N/A	N/A	N/A	N/A
CN2	3	Near-Term to Short-Term	2019	Bus Stop Improvements	System-wide	Sign and Mark Bus Stops; communicates where vehicles stop and the presence of transit in the community. Stop improvement program (benches, shelters, pads, and other amenities) provides comfortable, dignified places for passengers to catch the bus. Shelters and other stop improvements.	7-7, 7-12	3.3	100%	3	3	No	No	100%	N/A	100%	2	N/A	N/A	N/A	N/A	N/A	N/A
CN3	1	Near-Term to Short-Term	2019	Technology Enhancements	System-wide	Technology Enhancements (1) Mobile surveillance solution for reliable, real time tracking for 33 buses to increase efficiency and camera coverage inside & out to promote passenger safety. (2) Automated Stop Announcements.	9-11 to 9-12	4.1	100%	4	4	No	No	100%	N/A	100%	2	N/A	N/A	N/A	N/A	N/A	N/A
SN3	1	Near-Term	2019	McMinnville-Newberg Connector	McMinnville-Tigard	Phase 1 of project to add trips on Route 44 to provide more frequent, consistent service between McMinnville and Newberg. Added trips would not continue to Sherwood/Tigard. Uses existing buses serving Routes 44/45x.	6-28, D-24	5.1	100%	5	5	Yes	No	100%	Fixed-Route	100%	3	3,120	51,174	34,800	27,426	4,222	No
SN6	1	Near-Term	2019	Implement Shopper Shuttles/Local Flex Routes	McMinnville, Newberg, Small Cities	Implement shopper shuttle pilot projects in McMinnville, Newberg / Dundee, Yamhill / Carlton, Amity / Sheridan / Willamina, and Dayton / Lafayette (4 hours per day, 1 day per service area; 5 days per week, with up to two additional days in Yamhill/Carlton and Sheridan/Willamina to support medical trip needs such as dialysis where patients may have three appointments per week. Total of 9 days.)	6-29, D-45	6.1	100%	6	6	Yes	No	100%	Demand-Response	100%	3	5,616	64,099	23,400	77,716	10,388	No
SM1	1	Mid-Term	2020	McMinnville Saturday Service	McMinnville	Add local service on Saturdays. Assumes 2 fixed-route vehicles for 10 hours, e.g., 8 AM-6PM.	6-29	7.1	100%	7	7	Yes	No	100%	Fixed-Route	100%	2	2,080	18,304	30,000	12,501	2,586	No
SM1	2	Mid-Term	2020	McMinnville Saturday Service	McMinnville	Add local service on Saturdays. Assumes 1 Demand-Response vehicles for 10 hours, e.g., 8 AM-6PM.	6-29	7.2	100%	8	8	Yes	No	100%	Demand-Response	100%	2	1,040	11,970	3,200	33,185	4,835	No
CN4	4	Near-Term	2019	CCC Access Gate	McMinnville	Gate access and roadway improvements at Chemeketa Community College in McMinnville. Enables service to Virginia Garcia clinic and other housing east of Norton Lane.	7-7, 7-12	8.1	100%	9	9	Yes	No	100%	N/A	100%	1	N/A	N/A	N/A	N/A	N/A	N/A
CN5	3	Near-Term	2019	Marketing	System-wide	Support vehicle and other branding and marketing.	7-12, 9-8	9.1	100%	10	10	Yes	No	100%	N/A	100%	0	N/A	N/A	N/A	N/A	N/A	N/A
SS7	1	Short-Term	2021	Additional Grand Ronde evening trip	McMinnville-Grand Ronde	Add an additional evening trip, timed to serve work shifts at the Spirit Mountain Casino and improve connections to/from TCTD 60X Coastal Connector route serving Lincoln City (at Spirit Mountain Casino or Grand Ronde Community Center). Timing should be determined in consultation with TCTD and Spirit Mountain. Improves regional coordination and job access.	6-29	10.1	100%	11	11	Yes	No	100%	Fixed-Route	100%	1	503	7,410	4,400	11,512	2,261	No
SS2	1	Short-Term	2020	McMinnville Evening Service	McMinnville	Early Evening Service: Add 1 additional hour of service in the evening (last trip leaves at 6:00 or 6:30 pm). Assumes 3 buses (all routes).	6-29	11.1	100%	12	12.1	-	No	100%	Fixed-Route	100%	2	1,560	11,960	22,600	25,686	5,037	N/A

Figure D-35 FY 2019-2021 STIF Application Template Information, Near-Term/Short-Term Projects: Page 2/4

TDP Project ID	TDP Task	TDP Time Frame	Initial Impl. Year	Project Name	Service Area(s)	Project/Task Description	Plan Page #	STIF Plan Project & Task	100% or 130% List [2]	Committee Rank (10/18/18)	Project Rank within 100% or 130% List [2]	One-Time Planning/ Admin Cost (10%) [5]	Hold for Future STIF Plan Period	Share to Improve/ Expand Service	Service Type	STIF % of Funding		# of Years	Total Revenue Hours (STIF Plan Period)	Total Revenue Miles (STIF Plan Period)	Total Rides (STIF Plan Period) [3]	Population with Access to Transit [4]	Low-Income House-Holds Access to Transit [4]	New Shared Stops with Other Providers (#)
SS2	2	Short-Term	2020	McMinnville Evening Service	McMinnville	Early Evening Service. Add 1 additional hour of service in the evening (last trip leaves at 6:00 or 6:30 pm). Assumes 3 buses (all routes)	6-29	11.2	100%	12	12.2	-	No	100%	Demand-Response	100%		2	1,040	5,935	3,200	33,185	4,835	N/A
SS5	1	Short-Term	2020	McMinnville-Newberg Connector	McMinnville-Tigard	Phase 2 of near-term project to add trips on Route 44 to provide more frequent consistent service between McMinnville and Newberg. Added trips would not continue to Sherwood/Tigard. Uses existing buses serving Routes 44/45x.	6-29, D-24	12.1	100%	13	13	-	No	100%	Fixed-Route	100%		2	2,080	34,116	23,200	27,426	4,222	N/A
SS3	1	Short-Term	2020	Newberg Early Evening Service	Newberg	Add 1/2 hour of service in the evening (last trip leaves at 6:00 or 6:30 pm). Assumes 2 buses (all routes).	6-29	13.1	100%	14	14.1	-	No	100%	Fixed-Route	100%		2	520	2,340	3,200	19,571	2,695	N/A
SS3	2	Short-Term	2020	Newberg Early Evening Service	Newberg	Add 1/2 hour of demand-response service in the evening; this includes complementary ADA Paratransit. Assumes 1 vehicles.	6-29	13.2	100%	14	14.2	-	No	100%	Demand-Response	100%		2	260	2,968	800	22,566	2,744	N/A
SS8	1	Short-Term	2020	Implement Shopper Shuttles/Local Flex Routes	Yamhill / Carlton	Expand shopper shuttle pilot to three days per week, 8 to 10 hour per day operation. Either Yamhill/Carlton or Sheridan/Willamina/Amity are recommended for the short-term. One area could be implemented in the first year of the short-term and the second could be implemented in the second or third year based on available resources in Year 1.	6-29, D-45	14.1	100%	15	15	Yes	No	100%	Demand-Response	100%		2	1,040	59,351	12,400	3,001	271	No
SS8	2	Short-Term	2021	Implement Shopper Shuttles/Local Flex Routes	Sheridan / Willamina	Expand shopper shuttle pilot to three days per week, 8 to 10 hour per day operation. Either Yamhill/Carlton or Sheridan/Willamina/Amity are recommended for the short-term. One area could be implemented in the first year of the short-term and the second could be implemented in the second or third year based on available resources in Year 1.	6-29, D-45	15.1	100%	16	16	Yes	No	100%	Demand-Response	100%		1	1,352	20,179	6,200	9,417	1,316	No
SS6	1	Short-Term	2020	Extension to Downtown Salem	McMinnville-Salem	Extend Route 11 to Downtown Salem Transit Center. Route 11 would still stop along Wallace Rd in West Salem. In conjunction with this change, rename Route 11 (e.g., to 80x) to avoid confusion with Cherriots Route 11.	6-29, D-31	16.1	100%	17	17	Yes	No	100%	Fixed-Route	100%		2	1,517	69,403	12,800	13,784	2,782	Yes (1)
SL1	3	Long-Term	2019	Additional intercity later evening service	McMinnville-Hillsboro	Add 1 additional early evening trip. This was deferred to the long-term given funding availability; however, Washington County and Gaston are able to contribute towards the cost of adding this trip, which would serve Gaston High School and students returning from after school activities. Cost represents the total cost to YCTA (before Washington County/Gaston contributions	6-30, D-41	17.1	130%	18	1	-	No	100%	Fixed-Route	100%		3	1,560	24,860	15,600	18,751	3,602	No
CS1	1	Short-Term	2021	Capital Reserve	System-wide	Establish and contribute to a capital reserve fund (e.g., to be used for local matching funds for vehicle grants)	7-7, 7-12	19.1	130%		2	No	Yes	100%	N/A			2	N/A					
SM3	1	Mid-Term	2021	Newberg Demand-Response Capacity	Newberg	Restore Newberg Dial-a-Ride to two vehicles, assuming that fixed-route ridership meets standards and additional paratransit capacity is required based on service standards.	6-29, D-16	18.1	130%	19	3	No	No	100%	Demand-Response	100%		2	4,160	47,481	12,400	22,566	2,744	No
SL7	1	Long-Term	2021	McMinnville Early Morning Service	McMinnville	Start McMinnville local fixed-route service at 6 AM. Assumes 3 buses	6-30	20.1	130%		4	Yes	No	100%	Fixed-Route	100%		2	1,560	0	22,600	25,686	5,037	No
SL7	2	Long-Term	2021	McMinnville Early Morning Service	McMinnville	Start McMinnville demand-response service hours at 6 AM. Assumes 1 Dial-a-Ride vehicle.	6-30	20.2	130%		5	Yes	No	100%	Demand-Response	100%		2	520	5,935	1,600	33,185	4,835	No
SL7	3	Long-Term	2021	McMinnville Evening Service	McMinnville	Extend McMinnville local fixed-route service hours to 9 PM (last trips leave transit center at 8:00 or 8:30 PM). Assumes 2 buses (reduced coverage or lower frequency than daytime operation).	6-30	21.1	130%		6	Yes	No	100%	Fixed-Route	100%		2	2,080	0	28,600	18,479	3,209	No
SL7	4	Long-Term	2021	McMinnville Evening Service	McMinnville	Extend McMinnville demand-response service hours to 9 PM; assumes 1 Dial-a-Ride vehicle.	6-30	21.2	130%		7	Yes	No	100%	Demand-Response	100%		2	1,040	11,870	3,200	33,185	4,835	No

Notes
[1] Priority tier is a TDP recommendation, which should be confirmed by the YCTA advisory committee for submission in YCTA's STIF Plan (see "Rank within 100% or 130% list).
[2] The STIF Plan requires that projects be ranked and allows projects to be submitted at 100% and 130% of projected funding, in order to help prioritize depending on actual funds available. The list and ranking is a YCTA STIF Advisory Committee decision.
[3] Assumes productivity based on the ridecheck conducted in April/May 2017; ranges from 13.1 to 15.8 riders per hour on McMinnville local routes and 8.5 to 11.2 riders per hour on intercity routes. Productivity was assumed to be 3 riders per hour for Dial-A-Ride, 4 riders per hour for flex-route/shuttles, and 6 riders per hour for Newberg local routes.
[4] Transit access within 1/2 mile of fixed-route stops, or within the service area (typically city or cities) for demand-response or flex-route services.
[5] 10% allowance for administration and planning are included where needed to implement the project.

Figure D-35 FY 2019-2021 STIF Application Template Information, Near-Term/Short-Term Projects: Page 3/4

TDP Project ID	TDP Task	TDP Time Frame	Initial Impl. Year	Project Name	Service Area(s)	Project/Task Description	Plan Page #	STIF Plan Project & Task	Supports Grade 9-12 Student Transp.	# Students Served	Category	Category Description (Lookup)	Activity Type	Activity Type Description (Lookup)	Activity Detail	Activity Detail Description (Lookup)	Annual Operating or One-Time Capital Cost (Escalated to year-of-expenditure dollars)			Planning & Admin (10% one-time)[3]
																	FY 2019	FY 2020	FY 2021	
CN1	-	Near-Term to Short-Term	2019	Bus Local Match	System-wide	Replace end-of-life vehicles with low-floor vehicles branded for and matched to each service type. Acquire new vehicles to support SN1.3, SN 1.4, and SN 5.1. [See STIF Bus Task Detail for task-level inputs]	7-5, 7-12	1	N/A	-	111-00	Bus Rolling Stock	See STIF Bus Task Detail	#N/A	See STIF Bus Task Detail	#N/A	$128,451	$136,699	$110,115	$0
SN1	3	Near-Term	2019	McMinnville Local Service Capacity, Coverage, and Service Hours	McMinnville	Modify Route 3 to provide more service to Winco/Walmart area, two-way service on Evans and 27th St, and service on McDaniel Ln (Senior Center). Requires additional half bus.	6-28, D-9, D-10	2.1	Yes	2,176	300-00	Operations	30.09	Operating Assistance	30.09.01	Operating Assistance	$95,000	$107,000	$110,000	$11,000
SN1	4	Near-Term	2019	McMinnville Local Service Capacity, Coverage, and Service Hours	McMinnville	Modify Route 4 (current 2 West) to extend along 2nd St west of Hill Rd, providing service for additional residents, and south to Booth Bend Rd to provide direct access to Roths, Bi-Mart, and Albertsons. Accomplished using the remaining half bus from the Route 3 modification.	6-28, D-12	2.2	No	-	300-00	Operations	30.09	Operating Assistance	30.09.01	Operating Assistance	$95,000	$107,000	$110,000	$11,000
SN1	5	Near-Term	2019	McMinnville Local Service Capacity, Coverage, and Service Hours	McMinnville	Morning Service: 1 additional hour for Route 2 and 4 (start at 7:00 AM).	6-28	2.3	Yes	2,176	300-00	Operations	30.09	Operating Assistance	30.09.01	Operating Assistance	$17,000	$20,000	$20,000	$0
CN2	1	Near-Term to Short-Term	2019	Bus Stop Improvements	System-wide	Sign and Mark Bus Stops; communicates where vehicles stop and the presence of transit in the community. Stop improvement program (benches, shelters, pads, and other amenities) provides comfortable, dignified places for passengers to catch the bus. Planning.	7-7, 7-12	3.1	N/A	-	442-00	Planning	44.22	Planning	44.22.00	Planning	$10,000	$0	$0	$1,000
CN2	2	Near-Term to Short-Term	2019	Bus Stop Improvements	System-wide	Sign and Mark Bus Stops; communicates where vehicles stop and the presence of transit in the community. Stop improvement program (benches, shelters, pads, and other amenities) provides comfortable, dignified places for passengers to catch the bus. Signing/Marking.	7-7, 7-12	3.2	N/A	-	113-00	Bus Stations/Stops/Terminals	11.33	Construction of Bus Stations / Terminal	11.33.09	Bus Route Signing	$20,000	$10,000	$10,000	$0
CN2	3	Near-Term to Short-Term	2019	Bus Stop Improvements	System-wide	Sign and Mark Bus Stops; communicates where vehicles stop and the presence of transit in the community. Stop improvement program (benches, shelters, pads, and other amenities) provides comfortable, dignified places for passengers to catch the bus. Shelters and other stop improvements.	7-7, 7-12	3.3	N/A	-	113-00	Bus Stations/Stops/Terminals	11.33	Construction of Bus Stations / Terminal	11.33.10	Bus Passenger Shelters	$0	$25,000	$25,000	$0
CN3	1	Near-Term to Short-Term	2019	Technology Enhancements	System-wide	Technology Enhancements (1) Mobile surveillance solution for reliable, real time tracking for 33 buses to increase efficiency and camera coverage inside & out to promote passenger safety. (2) Automated Stop Announcements.	9-11 to 9-12	4.1	N/A	-	113-00	Bus Stations/Stops/Terminals	11.42	Acquisition	11.42.09	Surveillance / Security (Bus)	$100,000	$50,000	$0	$0
SN3	1	Near-Term	2019	McMinnville-Newberg Connector	McMinnville-Tigard	Phase 1 of project to add trips on Route 44 to provide more frequent, consistent service between McMinnville and Newberg. Added trips would not continue to Sherwood/Tigard. Uses existing buses serving Routes 44/45x.	6-28, D-24	5.1	Yes	330	300-00	Operations	30.09	Operating Assistance	30.09.01	Operating Assistance	$69,000	$78,000	$80,000	$8,000
SN8	1	Near-Term	2019	Implement Shopper Shuttles/Local Flex Routes	McMinnville, Newberg, Small Cities	Implement shopper shuttle pilot projects in McMinnville, Newberg / Dundee, Yamhill / Carlton, Amity / Sheridan / Willamina, and Dayton / Lafayette (4 hours per day, 1 day per service area; 5 days per week, with up to two additional days in Yamhill/Carlton and Sheridan/Willamina to support medical trip needs such as dialysis where patients may have three appointments per week. Total of 9 days.).	6-29, D-45	6.1	No	-	300-00	Operations	30.09	Operating Assistance	30.09.01	Operating Assistance	$101,000	$106,000	$108,000	$10,800
SM1	1	Mid-Term	2020	McMinnville Saturday Service	McMinnville	Add local service on Saturdays. Assumes 2 fixed-route vehicles for 10 hours, e.g., 8 AM-6PM.	6-29	7.1	No	-	300-00	Operations	30.09	Operating Assistance	30.09.01	Operating Assistance	$0	$84,000	$84,000	$8,400
SM1	2	Mid-Term	2020	McMinnville Saturday Service	McMinnville	Add local service on Saturdays. Assumes 1 Demand-Response vehicles for 10 hours, e.g., 8 AM-6PM.	6-29	7.2	No	-	300-00	Operations	30.09	Operating Assistance	30.09.01	Operating Assistance	$0	$36,000	$36,000	$3,600
CN4	4	Near-Term	2019	CCC Access Gate	McMinnville	Gate access and roadway improvements at Chemeketa Community College in McMinnville. Enables service to Virginia Garcia clinic and other housing east of Norton Lane.	7-7, 7-12	8.1	N/A	-	113-00	Bus Stations/Stops/Terminals	11.33	Construction of Bus Stations / Terminal	11.33.07	Surveillance / Security Equipment	$15,000	$0	$0	$1,500
CN5	3	Near-Term	2019	Marketing	System-wide	Support vehicle and other branding and marketing.	7-12, 9-8	9.1	N/A	-	300-00	Operations	30.09	Operating Assistance	44.26.14	Communicatons	$0	$0	$0	$0
SS7	1	Short-Term	2021	Additional Grand Ronde evening trip	McMinnville-Grand Ronde	Add an additional evening trip, timed to serve work shifts at the Spirit Mountain Casino and improve connections to/from TCTD 60X Coastal Connector route serving Lincoln City (at Spirit Mountain Casino or Grand Ronde Community Center). Timing should be determined in consultation with TCTD and Spirit Mountain. Improves regional coordination and job access.	6-29	10.1	No	-	300-00	Operations	30.09	Operating Assistance	30.09.01	Operating Assistance	$0	$0	$39,000	$3,900
SS2	1	Short-Term	2020	McMinnville Evening Service	McMinnville	Early Evening Service: Add 1 additional hour of service in the evening (last trip leaves at 6:00 or 6:30 pm). Assumes 3 buses (all routes).	6-29	11.1	Yes	2,176	300-00	Operations	30.09	Operating Assistance	30.09.01	Operating Assistance	$0	$60,000	$60,000	$0

Figure D-35 FY 2019-2021 STIF Application Template Information, Near-Term/Short-Term Projects: Page 4/4

TDP Project ID	TDP Task	TDP Time Frame	Initial Impl. Year	Project Name	Service Area(s)	Project/Task Description	Plan Page #	STIF Plan Project & Task	Supports Grade 9-12 Student Transp.	# Students Served	Category	Category Description (Lookup)	Activity Type	Activity Type Description (Lookup)	Activity Detail	Activity Detail Description (Lookup)	Annual Operating or One-Time Capital Cost (Escalated to year-of-expenditure dollars)			Planning & Admin (10% one-time)[5]
																	FY 2019	FY 2020	FY 2021	
SS2	2	Short-Term	2020	McMinnville Evening Service	McMinnville	Early Evening Service: Add 1 additional hour of service in the evening (last trip leaves at 6:00 or 6:30 pm). Assumes 3 buses (all routes).	6-29	11.2	Yes	2,176	300-00	Operations	30.09	Operating Assistance	30.09.01	Operating Assistance	$0	$30,000	$34,000	$0
SS5	1	Short-Term	2020	McMinnville-Newberg Connector	McMinnville-Tigard	Phase 2 of near-term project to add trips on Route 44 to provide more frequent, consistent service between McMinnville and Newberg. Added trips would not continue to Sherwood/Tigard. Uses existing buses serving Routes 44/45x.	6-29, D-24	12.1	Yes	330	300-00	Operations	30.09	Operating Assistance	30.09.01	Operating Assistance	$0	$78,000	$80,000	$0
SS3	1	Short-Term	2020	Newberg Early Evening Service	Newberg	Add 1/2 hour of service in the evening (last trip leaves at 6:00 or 6:30 pm). Assumes 2 buses (all routes).	6-29	13.1	Yes	1,619	300-00	Operations	30.09	Operating Assistance	30.09.01	Operating Assistance	$0	$20,000	$20,000	$0
SS3	2	Short-Term	2020	Newberg Early Evening Service	Newberg	Add 1/2 hour of demand-response service in the evening; this includes complementary ADA Paratransit. Assumes 1 vehicles.	6-29	13.2	Yes	1,619	300-00	Operations	30.09	Operating Assistance	30.09.01	Operating Assistance	$0	$8,000	$9,000	$0
SS8	1	Short-Term	2020	Implement Shopper Shuttles/Local Flex Routes	Yamhill / Carlton	Expand shopper shuttle pilot to three days per week, 8 to 10 hour per day operation. Either Yamhill/Carlton or Sheridan/Willamina/Amity are recommended for the short-term. One area could be implemented in the first year of the short-term and the second could be implemented in the second or third year based on available resources in Year 1.	6-29, D-45	14.1	No	-	300-00	Operations	30.09	Operating Assistance	30.09.01	Operating Assistance	$0	$88,000	$90,000	$9,000
SS8	2	Short-Term	2021	Implement Shopper Shuttles/Local Flex Routes	Sheridan / Willamina	Expand shopper shuttle pilot to three days per week, 8 to 10 hour per day operation. Either Yamhill/Carlton or Sheridan/Willamina/Amity are recommended for the short-term. One area could be implemented in the first year of the short-term and the second could be implemented in the second or third year based on available resources in Year 1.	6-29, D-45	15.1	No	-	300-00	Operations	30.09	Operating Assistance	30.09.01	Operating Assistance	$0	$0	$90,000	$9,000
SS6	1	Short-Term	2020	Extension to Downtown Salem	McMinnville-Salem	Extend Route 11 to Downtown Salem Transit Center. Route 11 would still stop along Wallace Rd in West Salem. In conjunction with this change, rename Route 11 (e.g., to 80x) to avoid confusion with Cherriots Route 11.	6-29, D-31	16.1	No	-	300-00	Operations	30.09	Operating Assistance	30.09.01	Operating Assistance	$0	$57,000	$58,000	$5,800
SL1	3	Long-Term	2019	Additional intercity later evening service	McMinnville-Hillsboro	Add 1 additional early evening trip. This was deferred to the long-term given funding availability; however Washington County and Gaston are able to contribute towards the cost of adding this trip, which would serve Gaston High School and students returning from after school activities. Cost represents the total cost to YCTA (before Washington County/Gaston contributions.	6-30, D-41	17.1	Yes	1,171	300-00	Operations	30.09	Operating Assistance	30.09.01	Operating Assistance	$35,000	$39,000	$40,000	$0
CS1	1	Short-Term	2021	Capital Reserve	System-wide	Establish and contribute to a capital reserve fund (e.g., to be used for local matching funds for vehicle grants)	7-7, 7-12	19.1		-	111-00	Bus Rolling Stock	N/A	#N/A	N/A	#N/A	$0	$0	$50,000	$0
SM3	1	Mid-Term	2021	Newberg Demand-Response Capacity	Newberg	Restore Newberg Dial-a-Ride to two vehicles, assuming that fixed-route ridership meets standards and additional paratransit capacity is required based on service standards.	6-29, D-16	18.1	No	-	300-00	Operations	30.09	Operating Assistance	30.09.01	Operating Assistance	$0	$144,000	$144,000	$0
SL7	1	Long-Term	2021	McMinnville Early Morning Service	McMinnville	Start McMinnville local fixed-route service at 6 AM. Assumes 3 buses	6-30	20.1	Yes	2,176	300-00	Operations	30.09	Operating Assistance	30.09.01	Operating Assistance	$0	$59,000	$60,000	$6,000
SL7	2	Long-Term	2021	McMinnville Early Morning Service	McMinnville	Start McMinnville demand-response service hours at 6 AM. Assumes 1 Dial-a-Ride vehicle.	6-30	20.2	Yes	2,176	300-00	Operations	30.09	Operating Assistance	30.09.01	Operating Assistance	$0	$15,000	$17,000	$1,700
SL7	3	Long-Term	2021	McMinnville Evening Service	McMinnville	Extend McMinnville local fixed-route service hours to 9 PM (last trips leave transit center at 8:00 or 8:30 PM). Assumes 2 buses (reduced coverage or lower frequency than daytime operation).	6-30	21.1	Yes	2,176	300-00	Operations	30.09	Operating Assistance	30.09.01	Operating Assistance	$0	$78,000	$80,000	$8,000
SL7	4	Long-Term	2021	McMinnville Evening Service	McMinnville	Extend McMinnville demand-response service hours to 9 PM; assumes 1 Dial-a-Ride vehicle.	6-30	21.2	Yes	2,176	300-00	Operations	30.09	Operating Assistance	30.09.01	Operating Assistance	$0	$30,000	$34,000	$3,400

Notes
[1] Priority tier is a TDP recommendation, which should be confirmed by the YCTA advisory committee for submission in YCTA's STIF Plan (see "Rank within 100% or 130% list).
[2] The STIF Plan requires that projects be ranked and allows projects to be submitted at 100% and 130% of projected funding, in order to help prioritize depending on actual funds available. The list and ra
[3] Assumes productivity based on the ridecheck conducted in April/May 2017: ranges from 13.1 to 15.8 riders per hour on McMinnville local routes and 8.5 to 11.2 riders per hour on intercity routes. Produ
[4] Transit access within 1/2 mile of fixed-route stops, or within the service area (typically city or cities) for demand-response or flex-route services.
[5] 10% allowance for administration and planning are included where needed to implement the project.

Figure D-36 FY 2019-2021 STIF Application Template Information, Bus Detail

STIF Plan Project & Task	Category	Category Description (Lookup)	Activity Type	Activity Type Description (Lookup)	Activity Detail	Activity Detail Description (Lookup)	Quantity	STIF Funds			Federal Funds (Secured Grants Only)			Other Funds			Total (Check)
								2019	2020	2021	2019	2020	2021	2019	2020	2021	
1.1	111-00	Bus Rolling Stock	11.12	Buy Replacements - Capital Bus	11.12.03	Bus 30 FT	5	$0	$80,928	$110,115	$0	$707,072	$960,000	$0	$0	$0	$1,858,114
1.2	111-00	Bus Rolling Stock	11.13	Buy Expansion - Capital Bus	11.12.03	Bus 30 FT	1	$0	$35,809	$0	$0	$0	$0	$0	$312,191	$0	$35,809
1.3	111-00	Bus Rolling Stock	11.12	Buy Replacements - Capital Bus	11.12.04	Bus < 30 FT	5	$68,628	$14,715	$0	$486,317	$0	$0	$0	$128,285	$0	$569,660
1.4	111-00	Bus Rolling Stock	11.12	Buy Replacements - Capital Bus	11.12.04	Bus < 30 FT	2	$17,493	$0	$0	$0	$0	$0	$152,507	$0	$0	$17,493
1.5	111-00	Bus Rolling Stock	11.13	Buy Expansion - Capital Bus	11.12.04	Bus < 30 FT	2	$17,493	$0	$0	$0	$0	$0	$152,507	$0	$0	$17,493
1.6	111-00	Bus Rolling Stock	11.12	Buy Replacements - Capital Bus	11.12.15	Vans	3	$14,547	$5,248	$0	$85,453	$0	$0	$0	$45,752	$0	$105,248
Total							18	$118,161	$136,699	$110,115	$571,770	$707,072	$960,000	$305,014	$486,228	$0	
								$364,975			$2,238,842			$791,242			
								$3,395,059									

Rolling Stock Make and Model Detail

STIF Plan Project & Task	Activity Detail	Activity Detail Description (Lookup)	Activity Type	Activity Type Description (Lookup)	TDP Bus Category	Quantity	Make	Model	Length	Seats	Total ADA	Fuel Type
1.1	11.12.03	Bus 30 FT	11.12	Buy Replacements - Capital Bus	Bus - Medium	5	El Dorado	EZ Rider II, Low-Floor	30	23	2	Diesel
1.2	11.12.03	Bus 30 FT	11.13	Buy Expansion - Capital Bus	Bus - Medium	1	El Dorado	EZ Rider II, Low-Floor	30	23	2	Diesel
1.3	11.12.04	Bus < 30 FT	11.12	Buy Replacements - Capital Bus	Cutaway - Large	5	Champion	LF, Low-Floor	21	17	2	Gas
1.4	11.12.04	Bus < 30 FT	11.12	Buy Replacements - Capital Bus	Cutaway - Small	2	Arboc	Spirit of Independence, Low-Floor	24	10	2	Gas
1.5	11.12.04	Bus < 30 FT	11.13	Buy Expansion - Capital Bus	Cutaway - Small	2	Arboc	Spirit of Independence, Low-Floor	24	10	2	Gas
1.6	11.12.15	Vans	11.12	Buy Replacements - Capital Bus	Van	3	TBD	Van, Accessible	< 20	5	2	Gas

CONCEPTUAL SCHEDULES

McMinnville Local Routes

To be added

Newberg Local Routes

To be added

Route 80x (Current Route 11): Salem

To be added

Route 22: Grand Ronde

To be added

Route 33: Hillsboro

To be added

Route 44/45x: Tigard

To be added

APPENDIX E

Public Transportation Funding Sources

APPENDIX E PUBLIC TRANSPORTATION FUNDING SOURCES

Figure E-1 summarizes potential funding options that could be used to support public transportation in Yamhill County. The information is limited to resources YCTA is eligible for either directly or with local partners and describes solicitation schedules, eligible activities, local match, and how the source applies to YCTA. Funds may be available at the local and state levels with or without formal grant solicitation processes, and YCTA can check directly with funding partners on an as-needed basis.

Figure E-1 Public Transportation Funding Options

Program Name	Description	Eligible Agencies	Eligible Activities	Applicability/Assessment/Comments
Federal Grants				
FTA 5310 Enhanced Mobility of Seniors & Individuals with Disabilities[8]	▪ Grants for public transit agencies that provide transportation services specifically for older adults and people with disabilities. ▪ ODOT allocates funds every two years by formula based on population. ▪ ODOT may offer discretionary grants through this program, currently on an irregular schedule. ▪ Local match is 20% capital (including purchased service) and 50% operating (limited eligibility).	▪ Designated STF agencies receive funds and manage local award process	▪ Capital ▪ Operations (limited) ▪ Nontraditional programs (e.g., travel training, mobility management)	▪ This is a long-time source of operating funding for YCTA through the FTA's "purchased service" rules allowing YCTA to pay third-party vendor costs at a capital match rate. ▪ Local agencies are eligible to apply for FTA 5310 funding via YCTA as the regional Special Transportation Fund (STF) agency. ▪ Though considered a stable funding source, program could be subject to changes in state highway funding. Over 80% of Oregon's §5310 program is Federal Highway funds the state moves to this FTA program.
FTA §5311 Formula Grants for Rural Areas[9]	▪ Capital, planning, and operations assistance that supports public transportation in rural communities with populations less than 50,000 ▪ Training and technical assistance through the Rural Transportation Assistance Program (RTAP) ▪ ODOT allocates funds every two years by formula based on ridership, population and miles. ▪ Local match is 20% capital and 50% operating	▪ Recipients – States – Native tribes or villages ▪ Subrecipients: – Local government authorities (including Yamhill County) – Nonprofit organizations – Public transportation operators (including YCTA)	▪ Planning ▪ Capital ▪ Operations	▪ This is a long-time source of operating funding for YCTA.

[8] Federal Transit Administration, Fact Sheet: Enhanced Mobility of Seniors and Individuals With Disabilities, Chapter 53 Section 5310, U.S. Department of Transportation, 2015. https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/funding/grants/37971/5310-enhanced-mobility-seniors-disabled-fact-sheet_0.pdf

[9] Federal Transit Administration, Fact Sheet: Formula Grants for Rural Areas, Chapter 53 Section 5311, U.S. Department of Transportation, 2015. https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/5311%20Rural%20Program%20Fact%20Sheet%20FAST.pdf

Program Name	Description	Eligible Agencies	Eligible Activities	Applicability/Assessment/Comments
FTA §5311(f) Rural Intercity Bus	▪ ODOT uses these funds for state-supported intercity transit service (i.e., POINT routes) and for a statewide discretionary grant program. Discretionary program funds are generally very limited (i.e. < $2 million) ▪ Rural intercity bus routes are those serving multiple jurisdictions with stops generally 5 miles apart or more. ▪ Local match is 20% capital and 50% operating	▪ State ▪ Nonprofit organizations ▪ Public transportation operators (i.e., YCTA) ▪ Intercity bus service companies	▪ Capital ▪ Operations ▪ Planning	▪ YCTA has not received §5311(f) funds. ▪ YCTA routes to Hillsboro, Tigard, Salem, Grand Ronde and between Newberg and McMinnville would be eligible for §5311(f) funding. ▪ This program may change as ODOT implements STIF programs. This program is not likely to be a significant or sustainable source of ongoing funding for YCTA.
FTA 5339 Buses and Bus Facilities Grants Program[10]	▪ Replace, rehabilitate, and purchase transit vehicles and related equipment ▪ Construct transit-related facilities ▪ ODOT awards funds through a statewide discretionary program every 1 to 3 years. ▪ Local match is 20% capital.	▪ Public transportation operators ▪ State and local government entities ▪ Tribes that are eligible to receive 5307 or 5311	▪ Capital	▪ YCTA has received funds through this program. ▪ Though discretionary and competitive, YCTA can expect some funding through this program to replace aging vehicles, particularly those exceeding both age and miles useful life thresholds.
USDOT TIGER Grants Program[11]	▪ Competitive grant program for capital projects that will have a significant impact on a region, metropolitan area, or the nation. ▪ Local agencies and ODOT typically propose projects independently directly to the USDOT. ▪ TIGER program is available every 2-5 years. ▪ Local match may vary.	▪ State ▪ Local government authorities (including Yamhill County) ▪ Public transportation operators ▪ Tribal governments ▪ Metropolitan planning organizations ▪ Can be multi-jurisdictional	▪ Capital	▪ Could be used for major projects such as a transit center. ▪ Chances of award to YCTA are low.

[10] Federal Transit Administration, Fact Sheet: Grants for Bus and Bus Facilities, Chapter 53 Section 5339, U.S. Department of Transportation, 2015. https://www.transit.dot.gov/sites/fta.dot.gov/files/5339%20Bus%20and%20Bus%20Facilities%20Fact%20Sheet.pdf

[11] U.S. Department of Transportation, TIGER Grants Overview, 2015. https://www.transportation.gov/sites/dot.gov/files/docs/TIGER%20Fact%20Sheet_2015.pdf

Program Name	Description	Eligible Agencies	Eligible Activities	Applicability/Assessment/Comments
USDOT TIFIA Program[12]	▪ Federal credit assistance program for surface transportation projects for: Secured loans, loan guarantees, and lines of credit. ▪ Local agencies and ODOT typically propose projects independently directly to the USDOT.	▪ States ▪ US Territories ▪ Local government authorities (including Yamhill County) ▪ Public transportation operators ▪ Private entities undertaking projects sponsored by public authorities	▪ Capital	▪ Could be used for major projects such as a transit center. ▪ YCTA may be more competitive and face fewer compliance hurdles through the Oregon Transportation Infrastructure Bank.
State				
State Transportation Investment Fund (STIF)[13]	▪ HB2017 passed in 2017 by the Oregon Legislature created a dedicated funding source for public transportation from a payroll tax of one-tenth of one percent on wages paid to employees. 90% will be distributed by formula to eligible agencies, 5% through a discretionary program, and 4% through a discretionary program for intercity transit. ODOT will use 1% for a transit technical resource center.	▪ Mass transit districts, transportation districts, counties without a mass transit district or transportation district, and federally-recognized Indian tribes in Oregon (same as STF Agencies).	▪ To improve or expand public transportation service in Oregon.	▪ This will be a significant source of public transportation funding for YCTA by January 1, 2019. YCTA will need to manage the local project solicitation and evaluation process, as with Oregon's STF and FTA 5310 programs. ▪ The program is effective as of July 1, 2018.
Oregon Special Transportation Fund (STF) - Formula[14]	▪ ODOT awards funds every two years to STF agencies by formula based on population.	▪ Designated STF agencies receive funds and manage local award process to any public or non-profit transit providers.	▪ Capital ▪ Operations ▪ Planning	▪ This is a long-time source of operating funds in Yamhill County. Funds may be used to match Federal funding programs. ▪ This is considered a stable funding source, though funds declined 10% between 2015-2017 and 2017-2019 funding cycles.

[12] Federal Highway Administration, Transportation Infrastructure Finance and Innovation Act (TIFIA), U.S. Department of Transportation, 2015. https://www.fhwa.dot.gov/fastact/factsheets/tifiafs.cfm

[13] Statewide Transportation Improvement Fund, OAR 732-040-0030. https://tinyurl.com/y928h4ay

[14] Oregon Department of Transportation, Public Transportation Funding in Oregon, 2017. http://www.oregon.gov/ODOT/RPTD/RPTD%20Document%20Library/Transit-funding-in-Oregon.pdf

Program Name	Description	Eligible Agencies	Eligible Activities	Applicability/Assessment/Comments
Oregon Special Transportation Fund (STF) - Discretionary[15]	▪ Grants for transit agencies providing service to older adults and people with disabilities. ▪ ODOT awards funds at irregular intervals based on available funding. ▪ Funding criteria target innovative capital, start up and pilot programs, though subject to change.	▪ Public and non-profit local transit providers apply through the local STF agency.	▪ Capital ▪ Operations ▪ Planning	▪ YCTA received a significant award for public information and technology activities in 2016. ▪ This is not considered a sustainable funding source, though a good resource for one-time, irregular funding needs.
State Transportation Improvement Program (STIP)[16] Enhance Program	▪ The Enhance program provides funding to projects that enhance, expand, or improve the transportation system. This has included public transportation capital needs. ▪ ODOT Area Commissions on Transportation prioritize and recommend Enhance projects. ▪ ODOT offers the Enhance program every 1-2 years as funding allows. ▪ The program is related to ODOT's maintenance (Fix-It) program, which includes ODOT-selected projects to maintain the roadway system statewide, including bicycle and pedestrian infrastructure. ▪ Local match is typically 20% but may vary.	▪ Local government authorities (including Yamhill County)	▪ Capital ▪ Sidewalk infrastructure	▪ YCTA received a significant award for 40-foot replacement buses in 2016. ▪ This program is primarily used for roadway infrastructure projects, including pedestrian infrastructure. ▪ This is not considered a sustainable funding source, though a possible resource for vehicles.
ConnectOregon	▪ Lottery-backed bonds to support multimodal transportation, including rail, marine, aviation and bicycle and pedestrian capital infrastructure. ▪ Local match is 30% and may vary.	▪ Local government authorities (including Yamhill County)	▪ Multimodal transportation projects ▪ Previously included transit centers	▪ Public transportation is not expected to be a directly eligible use after ODOT implements the STIF program. ▪ YCTA bus stop access could benefit from local bicycle and pedestrian infrastructure projects.

[15] Oregon Department of Transportation, Public Transportation Funding in Oregon, 2017. http://www.oregon.gov/ODOT/RPTD/RPTD%20Document%20Library/Transit-funding-in-Oregon.pdf

[16] Oregon Department of Transportation, About the STIP. http://www.oregon.gov/ODOT/STIP/Pages/About.aspx

Program Name	Description	Eligible Agencies	Eligible Activities	Applicability/Assessment/Comments
Planning Grant Program (from ODOT via FTA 5303, 5304, and 5305)[17]	▪ Discretionary ODOT grant program for transit plans that lead to improved public transportation systems. ▪ ODOT awards funds through irregularly-scheduled solicitations depending on available funds, or on an as-needed basis. ▪ Local match is 20%	▪ Rural, and small urban public transportation providers	▪ Planning	▪ This offers a flexible, but one-time resource to create and maintain local public transportation plans.
Oregon Transportation Infrastructure Bank (OTIB)[18]	▪ Statewide revolving loan fund "designed to promote innovative financing solutions for transportation needs." Cities as well as transit districts are eligible to borrow from the bank. ▪ There is a funding pool set-aside for public transportation projects. Rates are typically very low and more favorable to local agencies than other loan programs.	▪ Cities ▪ Counties ▪ Transit districts ▪ Port authorities ▪ Special service districts ▪ Tribal governments ▪ State agencies ▪ Private for-profit and not-for-profit entities	▪ Transit capital projects (facilities, vehicles) ▪ Active transportation access projects on highway rights-of-way	▪ This has been resource for public transportation providers to cost-effectively secure a loan for major capital purposes. ▪ A sustainable, regular local funding source is required to demonstrate the provider can support ongoing interest costs.
ODOT Transportation Growth Management (TGM) Program	▪ TGM Grants help local communities plan for streets and land use to foster more livable, economically vital, and sustainable communities and increase opportunities for transit, walking and bicycling. ▪ ODOT solicits proposals and awards funds annually. ▪ Local match is 20%.	▪ Counties ▪ Cities ▪ Public transportation providers	▪ Planning	YCTA received an award in 2016 to develop a consultant-led Transit Development Plan (TDP). Awards are needs-based (e.g., time since last planning process), and YCTA is unlikely to require or receive an award in the near future.

[17] Oregon Department of Transportation, Public Transportation Funding Options, 2017. http://www.oregon.gov/ODOT/RPTD/Pages/Funding-Opportunities.aspx#2f96a75c-e0ff-4504-aae5-ec14cee35125

[18] Oregon Department of Transportation, Financial Services: Oregon Transportation Infrastructure Bank, 2017. http://www.oregon.gov/odot/about/pages/financial-information.aspx

Program Name	Description	Eligible Agencies	Eligible Activities	Applicability/Assessment/Comments
Local				
Transit Access (Utility) Fee	▪ A transit access (utility) fee is paid by households and businesses within a service district, and is designed to support a transit service provider over time. A transit access fee could be assessed for all households within the transit service district, or a subset. Transit access fees are typically a monthly charge of between $1 to $ 5 per household.	▪ County ▪ Cities	▪ Operations ▪ Capital ▪ Administration	▪ There are approximately 34,000 households in Yamhill County as of 2015.[19] A monthly utility fee of $1 to $1.50 per household could generate between $400,000 and $600,000 in annual revenue. ▪ The City of Corvallis assesses a transit operations fee of $2.75 for single-family residential customers and $1.90 for multi-family residential units. The fee for industrial and commercial customers varies by the type of business. The fee generated $1,100,000 in fiscal year 2015-2016; approximately $400,000 replaced property tax revenue that is now used for other services (police, fire, library, etc.).[20]
Employer Payroll Tax	▪ An employer payroll tax is a progressive tax imposed directly on the employer. The tax is based on payroll for services performed within a transit district, including traveling sales representatives and employees working from home. This tax applies to covered employees and self-employed workers.	▪ Mass Transit Districts formed under Oregon Revised Statute 267.	▪ Operations ▪ Capital ▪ Administration ▪ Equity	▪ Several transit districts or providers in Oregon use a payroll tax as their primary local funding source, including TriMet, the City of Wilsonville, the City of Sandy, the South Clackamas Transportation District, the City of Canby, and Lane Transit District. ▪ YCTA is currently a Service District, and it would need to be confirmed whether it is authorized to implement a payroll tax. ▪ A payroll tax of 1/10th of a percent of annual payroll would yield about $400,000 in 2017 dollars, costing employees about $3.90 each year.

[19] U.S. Census Bureau, 2011-2015 American Community Survey 5-Year Estimates, Table S1101.

[20] City of Corvallis, https://www.corvallisoregon.gov/modules/showdocument.aspx?documentid=4248

Program Name	Description	Eligible Agencies	Eligible Activities	Applicability/Assessment/Comments
Gasoline Tax	A gas tax is a tax on the sale of gasoline for use in motor vehicles. Motorists already pay federal, state, and local taxes on motor fuel so the levy would not impose a new type of tax.	▪ State ▪ Local government authorities (including Yamhill County)	▪ Operations ▪ Capital ▪ Administration ▪ Equity	▪ Various cities and counties in Oregon have local gas taxes, ranging from $0.01 to $0.05 per gallon, including neighboring Washington and Multnomah counties.[21] Dundee is currently the only local jurisdiction in Yamhill County assessing a gas tax; Dundee's gas tax is $0.02 per gallon. ▪ Based on an average 1,226 gallons of gasoline consumed per US household per year , and approximately 34,000 households in Yamhill County as of 2015,[22, 23] a $0.01 gas tax could generate approximately $400,000 in annual revenue. ▪ However, gas tax revenues are currently on a declining trend, due to factors such as increasing vehicle fuel efficiency, and adoption of alternative vehicle fuel sources. This long-term trend is expected to continue.[24]
Property Tax	A property tax dedicated to funding public transportation is usually assessed at a rate per $1,000 of property value. Property taxes may be permanent, or temporary and need to be re-approved by voters.	▪ State ▪ Local government authorities (including Yamhill County)	▪ Operations ▪ Administration ▪ Capital ▪ Equity	▪ There are several examples of dedicated property taxes for transit in Oregon. Tillamook County has a tax of $0.20 per $1,000 in property value to fund operation of its transit system. Basin Transit (Klamath Falls) has a levy of $0.38 per $1,000 in property value. A 2001 report identified seven districts in Oregon that used property taxes to fund transit, with average annual per-capita revenues of $14.[25] ▪ With countywide assessed property values of approximately $8.3 billion,[26] a county property tax of $0.05 or $0.10 per $1,000 of property value could raise between $410,000 and $830,000 in annual revenue. ▪ Property taxes in Oregon are subject to "compression," which limits the amount of property taxes that can be collected (based on state Measures 5, 47, and 50) and can reduce the amount of revenue collected.

[21] State of Oregon, Fuels Tax Group, http://cms.oregon.gov/ODOT/CS/FTG/pages/current_ft_rates.aspx#bm3

[22] U.S. Energy Information Administration, Frequently Asked Questions: How Much Gasoline Does the United States Consume, 2017. https://www.eia.gov/tools/faqs/faq.php?id=23&t=10

[23] U.S. Census Bureau, 2011-2015 American Community Survey 5-Year Estimates, Table S1101.

[24] Oregon Department of Transportation, Oregon State Fuel Taxes, 2017. http://www.oregon.gov/ODOT/FTG/Pages/Current%20Fuel%20Tax%20Rates.aspx

[25] Goldman, Corbett, and Wachs. Local Option Transportation Taxes in the United States, Research Report UCB-ITS-RR-2001-3, March 2001. http://www.its.berkeley.edu/publications/UCB/2001/RR/UCB-ITS-RR-2001-3.pdf

[26] Yamhill County, Summary of 2016-2017 Assessment & Tax Roll. http://www.co.yamhill.or.us/sites/default/files/2016%20Assessment%20Summary.pdf

Program Name	Description	Eligible Agencies	Eligible Activities	Applicability/Assessment/Comments
Local Option Sales Tax	A tax assessed on the purchase of goods or services within the jurisdiction of a taxing authority.	▪ State ▪ Local government authorities (including Yamhill County)	▪ Operations ▪ Administration ▪ Capital ▪ Equity	Sales taxes are widely used to fund transit in other states, despite not currently being used in Oregon. A specific local option sales tax can apply to tourism, collecting revenue from outside visitors. For example, Ashland collects a 9% transient occupancy tax (hotel/motel). There is an existing state lodging and hotel tax of 1%, providing an existing collection mechanism.
Motor Vehicle Registration Fee	A tax assessed on the registration of private motor vehicles within the jurisdiction of a taxing authority.	▪ Counties ▪ Special districts	▪ Operations ▪ Administration ▪ Capital ▪ Equity	As of 2016, over 113,000 private motor vehicles are registered in Yamhill County.[27] A $2 annual registration fee would generate approximately $110,000, with the assumption that at least 50% of registrations are ineligible for the fee.
System Development Charges	Systems Development Charges (SDCs) are fees paid by land developers intended to reflect the increased capital costs incurred by a municipality or utility as a result of a development. Development charges are calculated to include the costs of impacts on adjacent areas or services, such as increased school enrollment, parks and recreation use, or transit use.	▪ Local government authorities (including Yamhill County)	▪ Capital	Cities in Yamhill County currently have transportation system development charges and other fees associated with new developments. These are not linked to public transportation.
Property Access Fee, Land Value Capture, or Benefit Assessment Districts	Property access fee, land value capture, and benefit assessment districts are mechanisms for sharing transit costs with owners of property located near a transit resource who benefit directly from the proximity to the transit resource. These mechanisms help finance transit through taxes on nearby private development, where the property value increased as a result of transit investments.	▪ Local government authorities (including Yamhill County)	▪ Operations ▪ Capital ▪ Administration	

[27] Oregon Department Of Transportation, Driver And Motor Vehicle Services Division, Oregon Motor Vehicle Registrations By County (Note 1), 2016. http://www.oregon.gov/ODOT/DMV/docs/2016_Vehicle_County_Registration.pdf

Program Name	Description	Eligible Agencies	Eligible Activities	Applicability/Assessment/Comments
Tax Increment Financing	Tax increment financing (TIF) is the primary finance tool used within urban renewal areas. TIF is generated when an urban renewal area (URA) is designated and the assessed value of all property in the area is 'frozen.' Over time, the total assessed value in the area increases above the 'frozen base' from appreciation and new development. The value in the area greater than the frozen base is called the incremental assessed value, and taxes generated on the incremental assessed value are received by the URA, rather than other taxing districts.	▪ Urban Renewal Area	▪ TIF could only be used on capital transit projects that directly benefit the URA. Projects that benefit the broader area can only receive TIF funding proportional to the benefits the URA receives.	Could be used to fund capital improvements in conjunction with an urban renewal district within a Yamhill County city, if established in the future.
Public and Private Partnership Funding Programs				
Advertising	Advertisements: Transit providers can display paid advertisements on agency properties, including the inside and outside of fleet vehicles, bus shelters, benches, and at transit stations.		▪ Operations ▪ Administration ▪ Capital	Could be a supplementary funding source for YCTA.
Employer Transit Pass Program	Employer transit pass programs are partnerships between a transit agency and private employers, and offer employers the opportunity to purchase a transit pass for all employees, often at discounted rates. The company may be able to take a tax deduction on the cost of the transit pass. The benefit to the transit agency is an increase in ridership and in revenues.		▪ Operations ▪ Administration ▪ Capital ▪ Equity	Could be a supplementary funding source for YCTA.
Transit Pass Program	Public school districts or colleges/ universities and transit agencies sometimes partner to provide students with a transit pass, as a way for students to get to school or school-affiliated activities.		▪ Operations ▪ Administration ▪ Capital ▪ Equity	A transit pass program through direct agreement with the institutions such as the Willamette Valley Medical Center, Linfield College, and George Fox University could bring opportunities for steady funding streams while offering convenience to riders.

Program Name	Description	Eligible Agencies	Eligible Activities	Applicability/Assessment/Comments
Naming Rights / Sponsorships	Historically, the selling of naming rights to people or organizations that make a donation for a capital improvement was most common for large organizations, such as universities or hospitals. Selling naming rights has become more common among smaller organizations and some transit agencies sell naming rights to vehicles, stations, or transit corridors		▪ Operations ▪ Administration ▪ Capital	Selling naming rights may provide a small amount of revenue for transit.
Public-Private Partnerships and Joint Development	A public-private partnership is a mutually beneficial agreement between public and private entities that seek to improve the value of an asset. Transit funding from public-private partnerships are most likely to be for capital projects such as a mixed use development that combined a transit station or center.		▪ Operations ▪ Administration ▪ Capital ▪ Equity	

APPENDIX F

Public Transportation Funding Sources

APPENDIX F SUPPORTING PROGRAMS DETAILS

ELECTRONIC FARE PAYMENT

Chapter 9 of the TDP includes an assessment of two representative electronic fare options that YCTA could pursue—Touchpass and HopThru. The sections below provide the assumptions behind the planning-level cost estimates for that is provided in Chapter 9 (see Fare Policies and Programs). Key inputs and assumptions include:

- Ridership, ranging from existing to higher future ridership
- Share of fares that would be provided through the e-fare system
- Average fares, based on the current YCTA fare with assumed gradual increases over time
- Share of fares paid with passes vs. one-way, cash fares (implications for transaction costs)
- Capital and startup costs spread over an assumed five-year equipment lifecycle for Touchpass (equivalent to the warranty period), with any potential integration costs spread over a 10-year period. There are no upfront costs with HopThru.

Figure F-1 Touchpass Budgetary Estimate and 10-Year Lifecycle Cost Analysis

Upfront Capital Costs

Capital Line Items	Unit Cost	Quantities and Costs by Time Frame						Notes
		Near-Term		+Short-Term		+Mid-Term		
		Qty w/Spares	Total Cost	Qty w/Spares	Total Cost	Qty w/Spares	Total Cost	
TouchPass Readers	$2,000	20	$40,000	2	$4,000		$0	For 16 buses (including spare vehicles), plus 4 spares; does not include Dial-A-Ride
Reader Installation Kits	$150	16	$2,400	2	$300		$0	Installed readers only; not required for spare units
Modem (Cradlepoint IBR1100)								Not included, assuming data capabilities through AVL system or other
Antenna (MobileMark LTM401)								Not included, assuming data capabilities through AVL system or other
Bluetooth NFC Reader	$100	10	$1,000	2	$200	2	$200	Adapter for tablet device on Dial-A-Ride and Shuttle services (provided separately). Android MDTs will be able to run the TouchPass Mobile Reader application, with the NFC Reader (assuming the MDTs don't have an NFC interface).
TouchPass Cards	$2	1,595	$3,190		$0		$0	Min = 1,000. 5-year life
Paper Tokens (10% of cash fares)	$0.02	6,380	$128		$0		$0	Min = 5,000
Reader Warranty Extension (5 years)	$600	13	$7,800	2	$1,200	2	$1,200	
Total Initial Capital Costs:			$55,000		$5,700		$1,400	
Total Initial Capital Costs (without media)			$52,000					
Contingency for Integration Costs:			$30,000					May or may not be required; further investigation would be needed
Initial Costs with Contingency			$85,000		$5,700		$1,400	

Ongoing Annual Costs

Item	Unit Cost	% of Transactions or # of Units	Existing Ridership		Future Ridership		Notes
			Low	High	Low (+25%)	High (+33%)	
# of Riders			275,000	300,000	350,000	400,000	
% Fares through Touchpass			50%	75%	50%	75%	
Touchpass Transactions			137,500	225,000	175,000	300,000	
Data Plan							Not included, assuming data capabilities through AVL system or other
Reader Loan Fee							This would be for a lease option
Transaction Fees							Touchpass budgetary lump-sum estimate of $813 / month, or $9,756 annually (for existing ridership)
Tier 1 - 0-15% of total ridership	$0.10	*15%*	$2,063	$3,375	$2,625	$4,500	
Tier 2 - 16-60% of total ridership	$0.06	*45%*	$3,713	$6,075	$4,725	$8,100	
Tier 3 - 61-100% of total ridership	$0.03	*40%*	$1,650	$2,700	$2,100	$3,600	
TouchPass Cards	$2.00	500	$1,000	$1,000	$1,000	$1,000	5 year life, but also accounts for new riders
Paper Tokens	$0.02	*10%*	$275	$450	$350	$600	Assumes 10% of fares
Total Ongoing Costs			$8,700	$13,600	$10,800	$17,800	
Cost per rider (each ride assumed to be 1 transaction)			$0.03	$0.05	$0.03	$0.04	

Lifecycle Cost

Year	0	1	2	3	4	5	6	7	8	9	10
Ridership	275,000	287,500	300,000	312,500	325,000	337,500	350,000	362,500	375,000	387,500	400,000
% Fares through Touchpass	50%	53%	55%	58%	60%	63%	65%	68%	70%	73%	75%
Touchpass Transactions	137,500	150,938	165,000	179,688	195,000	210,938	227,500	244,688	262,500	280,938	300,000
One-Way Fare	$1.25	$1.50	$1.55	$1.60	$1.65	$1.70	$1.75	$1.80	$1.85	$1.90	$1.95
Average Fare	$1.08	$1.30	$1.34	$1.38	$1.43	$1.47	$1.51	$1.56	$1.60	$1.64	$1.68
Initial cost for fare media (included in operating costs in future)	$3,318										
Annualized Capital Costs - Initial w/near-term (5 year life)	$10,400	$10,400	$10,400	$10,400	$10,400	$10,400	$10,400	$10,400	$10,400	$10,400	$10,400
Annualized Capital Costs - Short-Term (5 year life)		$1,140	$1,140	$1,140	$1,140	$1,140	$1,140	$1,140	$1,140	$1,140	$1,140
Annualized Capital Costs - Mid-Term (5 year life)						$280	$280	$280	$280	$280	$280
Annualized Capital Cost	$13,718	$11,540	$11,540	$11,540	$11,540	$11,820	$11,820	$11,820	$11,820	$11,820	$11,820
Annual Transaction Cost	$7,425	$8,151	$8,910	$9,703	$10,530	$11,391	$12,285	$13,213	$14,175	$15,171	$16,200
Annual Fare Media Cost	$1,275	$1,302	$1,330	$1,359	$1,390	$1,422	$1,455	$1,489	$1,525	$1,562	$1,600
Annualized Capital + Operating Cost (rounded)	$23,000	$21,000	$22,000	$23,000	$24,000	$25,000	$26,000	$27,000	$28,000	$29,000	$30,000
Average Operating Cost per Transaction	$0.06	$0.06	$0.06	$0.06	$0.06	$0.06	$0.06	$0.06	$0.06	$0.06	$0.06
Avg Operating + Annualized Capital Cost per Transaction	$0.17	$0.14	$0.13	$0.13	$0.12	$0.12	$0.11	$0.11	$0.11	$0.10	$0.10
Operating + Annualized Capital Cost % of 1-way fare	13%	9%	9%	8%	7%	7%	7%	6%	6%	5%	5%
Operating + Annualized Capital Cost % of avg fare	15%	11%	10%	9%	9%	8%	8%	7%	7%	6%	6%

Assuming Integration Contingency

Annualized Cost (over 10 years)	$3,000	$3,000	$3,000	$3,000	$3,000	$3,000	$3,000	$3,000	$3,000	$3,000	$3,000
Total Annualized Capital Cost	$16,718	$14,540	$14,540	$14,540	$14,540	$14,820	$14,820	$14,820	$14,820	$14,820	$14,820
Annualized Capital + Operating Cost (rounded)	$26,000	$24,000	$25,000	$26,000	$27,000	$28,000	$29,000	$30,000	$31,000	$32,000	$33,000
Avg Operating + Annualized Capital Cost per Transaction	$0.19	$0.16	$0.15	$0.14	$0.14	$0.13	$0.13	$0.12	$0.12	$0.11	$0.11
Operating + Annualized Capital Cost % of 1-way fare	15%	11%	10%	9%	8%	8%	7%	7%	6%	6%	6%
Operating + Annualized Capital Cost % of avg fare	18%	12%	11%	10%	10%	9%	8%	8%	7%	7%	7%

Source: Lifecycle cost analysis by Nelson\Nygaard. Cost inputs for budgetary estimates provided by and reviewed with Delerrok, the Touchpass vendor.

Figure F-2 HopThru Budgetary Estimate and 10-Year Lifecycle Cost Analysis

Ridership & Fare Inputs	Value
# of Rides (2016)	277,355
Fare Revenue (2016)	$300,000
Average Fare	$1.08
Fare Revenue (2018 Budget)	$314,968
% Existing Day, Monthly Passes and 10 Day Pass Books	28%

	Existing Ridership		Future Ridership	
	Low	High	Low (+25%)	High (+33%)
Assumptions				
Ridership, annual	275,000	300,000	350000	400000
% of mobile fares	40%	65%	40%	65%
% of day, monthly passes and multi-ride books	28%	75%	35%	75%
One-way fare	$1.25	$1.25	$1.75	$1.75
Average fare	$1.08	$1.08	$1.51	$1.51
Hopthru Cost Estimates				
# of Mobile Transactions	110,000	195,000	140,000	260,000
# Mobile Transactions < $2 (8% + 10 cents) - one-way fares	79,129	48,750	91,000	65,000
Transaction Costs	$15,826	$9,750	$21,840	$15,600
# Mobile Transactions >= $2 (10%) - all passes	30,871	146,250	49,000	195,000
Transaction Costs	$3,334	$15,795	$7,409	$29,484
Total Annual Transaction Costs (Rounded)	$20,000	$26,000	$30,000	$46,000
Average Cost per Transaction	$0.18	$0.13	$0.21	$0.18
% of 1-way fare	15%	11%	12%	10%
% of avg fare	17%	12%	14%	12%

Lifecycle Cost

Year	0	1	2	3	4	5	6	7	8	9	10
# of Annual Riders	275,000	287,500	300,000	312,500	325,000	337,500	350,000	362,500	375,000	387,500	400,000
% of mobile fares	40%	43%	45%	48%	50%	53%	55%	58%	60%	63%	65%
% of day, monthly passes and multi-ride books	28%	33%	37%	42%	47%	52%	56%	61%	66%	70%	75%
One-Way Fare	$1.25	$1.30	$1.35	$1.40	$1.45	$1.50	$1.55	$1.60	$1.65	$1.70	$1.75
Average Fare	$1.08	$1.12	$1.17	$1.21	$1.25	$1.30	$1.34	$1.38	$1.43	$1.47	$1.51
# of Mobile Transactions	110,000	122,188	135,000	148,438	162,500	177,188	192,500	208,438	225,000	242,188	260,000
Mobile Transaction Cost < $2 (8% + 10 cents) - one-way fares	$15,826	$16,761	$17,564	$18,206	$18,660	$18,893	$18,875	$18,573	$17,950	$16,972	$15,600
Mobile Transaction Cost >= $2 (10%) - all passes	$3,334	$4,496	$5,897	$7,567	$9,535	$11,834	$14,495	$17,554	$21,046	$25,010	$29,484
Total Transaction Costs (Rounded)	$20,000	$22,000	$24,000	$26,000	$29,000	$31,000	$34,000	$37,000	$39,000	$42,000	$46,000
Average Cost per Transaction	$0.18	$0.18	$0.18	$0.18	$0.18	$0.17	$0.18	$0.18	$0.17	$0.17	$0.18
% of 1-way fare	15%	14%	13%	13%	12%	12%	11%	11%	11%	10%	10%
% of avg fare	17%	16%	15%	14%	14%	13%	13%	13%	12%	12%	12%

Notes/Source: Monthly passes fall into >= $2 category; can purchase multiple tickets at once in single transaction. Lifecycle cost analysis by Nelson\Nygaard. Cost inputs for budgetary estimates provided by and reviewed with HopThru.

REGIONAL COORDINATION

TriMet Sign Decal Specifications for Shared Stops

Sign Decal Specification

TriMet can include YCTA on its stop poles at shared stop locations. Preferably, YCTA would provide stickers (generic or route-specific) for TriMet to include on its route sign blades. Stickers can be sent to TriMet using the contact information provided below along with a list of stops at which they should be applied. The presence of YCTA at those stops would be recorded in TriMet's database, so that YCTA can be notified if the sign needs to be replaced in the future or the stop needs to be closed.

Figure F-3 TriMet Shared Stop Decal Specifications and Coordination Details

Contact Information	Sticker Specifications	Route-Specific Example	Generic Example
Myleen Richardson TriMet – GIS 4012 SE 17th Ave Portland, OR 97202 Phone: 503-962-5733 Email: Richardson, Myleen <RichardM@trimet.org>	Size: 5.45" x 4.7" Paper: Super Engineering Grade Quantity: 2 per shared stop, plus additional reserve inventory		

TriMet Shared Stops

Figure F-4 identifies TriMet stops that YCTA serves. As noted above, YCTA can communicate these stop locations to TriMet and coordinate to have a YCTA route sticker placed on the stop pole and the stop noted as a shared stop in the TriMet bus stop database for coordination purposes.

Figure F-4 TriMet Shared Stops

Service Status	YCTA Route	YCTA Route Direction	Stop Type	YCTA Stop ID	TriMet Stop ID	Stop Description	Notes
Existing	33	Northbound (Eastbound)	Bus Stop	784336	4272	FOREST GROVE - TV Hwy & Hwy 47 (TriMet stop @ Ace Hardware)	
Existing	33	Northbound	Transit Center	784359	N/A	HILLSBORO - Central Station Transit Center (Washington St & 3rd Ave.)	Adjacent to Transit Center but not currently a shared stop; YCTA is coordinating with City of Hillsboro on pole placement
Existing	33	Southbound	Transit Center	784359	N/A	HILLSBORO - Central Station Transit Center (Washington St & 3rd Ave.)	Adjacent to Transit Center but not currently a shared stop; YCTA is coordinating with City of Hillsboro on pole placement
Existing	33	Southbound (Westbound)	Bus Stop	784366	4307	FOREST GROVE - TV Hwy & Hwy 47 (TriMet stop @ Grand Lodge)	Proposed to close in the future and replace with TriMet stop 4289
Future	33	Southbound (Westbound)	Bus Stop	TBD	4289	FOREST GROVE - WB TV Hwy between 2nd Ave & Hwy 47 (TriMet Bus Stop)	Proposed stop, replacement for Trimet stop 4307
Future	33	Northbound (Eastbound)	Bus Stop	TBD	303	CORNELIUS - EB TV Hwy & 4th Ave (Walmart) (TriMet Bus Stop)	Proposed stop
Future	33	Southbound (Westbound)	Bus Stop	TBD	35	CORNELIUS - WB TV Hwy & 4th Ave (Walmart) (TriMet Bus Stop)	Proposed stop
Existing	44 / 45x / 46s	Northbound	Bus Stop	784297	12849	SHERWOOD – Langer Dr - Shari's	
Existing	44 / 45x / 46s	Northbound	Bus Stop	784362	4316	SHERWOOD – NB Hwy 99 @ 124th	
Existing	44 / 45x / 46s	Northbound	Transit Center	784334	N/A	TIGARD - Tigard Transit Center (Ballroom Studio)	Adjacent to Transit Center but not currently a shared stop
Existing	44 / 45x / 46s	Southbound	Transit Center	784334	N/A	TIGARD - Tigard Transit Center (Ballroom Studio)	Adjacent to Transit Center but not currently a shared stop
Existing	44 / 45x / 46s	Southbound	Bus Stop	784363	4260	SHERWOOD – SB Hwy 99 @ 124th	
Existing	44 / 45x / 46s	Southbound	Bus Stop	784297	12849	SHERWOOD – Langer Dr - Sherwood Shari's	Currently same as northbound stop; proposed to move to 9189 for southbound direction
Future	44 / 45x / 46s	Southbound	Bus Stop	784297	9189	SHERWOOD – Langer Dr - Sherwood Shari's	Proposed new southbound stop (currently same as northbound stop)
Future	44 / 45x / 46s	Northbound	Bus Stop	TBD	8644	TIGARD - NB Hwy 99 & Durham Rd	
Future	44 / 45x / 46s	Southbound	Bus Stop	TBD	9792	TIGARD - SB Hwy 99 & Durham Rd	
Future	44 / 45x / 46s	Northbound	Bus Stop	TBD	4308	TIGARD - SB Hwy 99 & Fischer Rd	
Future	44 / 45x / 46s	Southbound	Bus Stop	TBD	4258	TIGARD - SB Hwy 99 & Fischer Rd	

APPENDIX G

Detailed Land Use Policy Assessment

APPENDIX G DETAILED LAND USE POLICY ASSESSMENT

This section supplements Chapter 10 in the TDP. It provides an assessment of local jurisdiction's Comprehensive Plan policies and development codes for consistency with TDP objectives and recommendations.

TRANSIT-SUPPORTIVE POLICY AND CODE LANGUAGE

Recommended Comprehensive Plan Policies

Chapter 10 of the TDP provides comprehensive plan recommendations.

Recommended Development Code Language

This section presents sample development code language that reflects the TDP objectives and the recommendations, is supported by the Comprehensive Plan policies recommended above, and is consistent with the TPR. The recommended code language includes the following topic areas:

- Coordination with transit agencies
- Access to transit
- Transit-supportive improvements
- Other transit-related development requirements (vehicle parking, bicycle parking, and urban form)

The recommended development code language is intended to be a reference for code updates in all of the jurisdictions in the YCTA service area. Source material includes the State of Oregon Transportation and Growth Management Model Development Code for Small Cities, 3rd Edition ("Model Code") as well as exemplary language from other locally adopted code and ordinances in Oregon. While all of the recommended language should be reviewed for local applicability and modified as needed, language shown [in brackets] is text that must be customized to the jurisdiction.

An evaluation of existing development code language in YCTA service area jurisdictions revealed the need for strengthened language related to transit. The evaluation is summarized in Figure G-2. While the evaluation targets the two largest cities in the YCTA service area, the following sets of model development code language are intended for consideration by all the jurisdictions in the service area, as code update opportunities arise.

Coordination with Transit Agencies

Improving coordination with transit agencies is a key part of implementing the TDP and improving transit service and facilities in Yamhill County. Therefore, it is recommended that YCTA, or transportation

facility and service providers generally, be included in the development application process when applications may affect an existing or planned facility or service.

1. Pre-Application Conference

The following language would ensure that YCTA and other transportation service providers have the opportunity to be involved in development review early in the project evaluation process.

> The [City/County Community Development/Planning Director/City Manager or designee] shall invite [City/County] staff from other departments to the pre-application conference to provide technical expertise applicable to the proposal, as necessary. Other staff from public agencies whose facilities or services may be affected by the proposal, including transportation and transit agency staff, shall also be invited to participate in the pre-application conference.

2. Application Review

Cities have discretion in involving other agencies in application review. Notification of transit service providers, or transportation facility providers more generally, is typically not explicitly required. The lack of requirements that would allow providers to participate in application review does not reflect the need for stronger coordination between agencies – particularly local jurisdictions, ODOT, and YCTA – that have been identified during the TDP process.

For applications that involve administrative review with notice (e.g., Type II procedures) and quasi-judicial review (e.g., Type III procedures), the following language is recommended:

> Referrals [requests to review and comment on the application] shall be sent to interested and affected agencies. Interested agencies include but are not limited to [City/County] departments, police department, fire district, school district, utility companies, and applicable City, County, and State agencies. Affected agencies include but are not limited to the Oregon Department of Transportation and Yamhill County Transit Area.

3. Hearing Notice

Another opportunity for involving transit and transportation agencies in the development review process occurs at the time of public hearing, including the time soon before the hearing when the staff report is being completed. It is recommended that hearing notice provisions be clearly differentiated from application notice provisions, and that they require that notice be sent to agencies such as YCTA, whose facilities or services may be affected by the proposed land use action.

> Notice of a pending quasi-judicial public hearing shall be given by the [City/County Community Development/Planning Department] in the following manner:
>
> A. At least [twenty] days prior to the scheduled hearing date, notice shall be sent by mail to:
>
> Any governmental agency or utility whose property, services, or facilities may be affected by the decision. Agencies include and are not limited to: [list of agencies appropriate to jurisdiction, e.g., counterpart County or City Planning/Community Development, ODOT, ODOT Rail, ODOT Transit, railroad, Port, school district, Yamhill County Transit Area, and other transit/transportation service providers].

Access to Transit and Transit-Supportive Improvements

A fundamental set of development requirements to support transit includes provisions that ensure that community members can easily get to transit stops and that the stops are appropriately furnished with transit-supportive facilities and features. The following recommended language addresses active transportation access to transit facilities.

Site Access

4. Access between the Site and the Street

One element of providing access to transit is establishing connections between the site and the street where there is existing or planned transit service. In particular, development plans should show how pedestrians safely and conveniently travel through the site and to facilities such as sidewalks and transit stops that are adjacent to or near the proposed development. Existing development code provisions in the two cities require connections between the building entrances and street and sidewalk for at least some forms of development.

The following recommended language should be established for all development and zones that may be served with transit.

> ***Pedestrian Access and Circulation***
>
> ***Standards.*** Developments shall conform to the following standards for pedestrian access and circulation:
>
> ***A. Continuous Walkway System.*** A pedestrian walkway system shall extend throughout the development site and connect to adjacent sidewalks, if any, and to all future phases of the development, as applicable.

5. Access to the Transit Stop and Supportive Improvements

Requiring safe and convenient connections between buildings and transit stops can also benefit transit riders. As suggested below, pedestrian access to transit can be part of a larger section of transit-specific development code provisions addressing building orientation, as well as the features and improvements that are needed as part of the transit stop itself. Requirements could be specified to be applicable only to existing or planned transit stops with higher-frequency service (e.g., headways of 30 minutes or less).

> **Transit Access and Supportive Improvements**
>
> Proposed development that includes or is adjacent to an existing or planned transit stop shall provide or plan for access to the transit stop and, where determined necessary in consultation with [applicable transit service providers], provide transit-supportive improvements consistent with adopted or approved transportation and/or transit plans. Requirements apply where the subject parcel(s) or portions thereof are within [200] feet of a transit stop. Required transit-supportive improvements may include, but are not limited to, the following:
>
> A. Intersection of mid-block traffic management improvements to allow for pedestrian crossings at transit stops.
>
> B. Reasonably direct pedestrian connections between building entrances on the site and adjacent streets with planned or existing transit stops. For the purpose of this Section, "reasonably direct" means a route that does not deviate

unnecessarily from a straight line or a route that does not involve a significant amount of out-of-direction travel for users.

C. Building placement within [20] feet of one of the following:

1. the existing or planned transit stop;
2. a pedestrian plaza adjacent to the transit stop;
3. a street with an existing or planned transit stop;
4. a street that intersects the street with an existing or planned transit stop; or
5. a pedestrian plaza at the intersection of streets where one street has an existing or planned transit stop.

D. Transit passenger landing pads that are ADA accessible and built to transit agency standards.

E. An easement or dedication for transit stop improvements and an underground utility connection if improvements are identified in an adopted or approved plan.

F. Lighting at the transit stop, to transit agency standards.

G. Other improvements for the transit stop adjacent to the site identified in an adopted or approved plan and coordinated with the transit agency.

Area Access

6. Off-Site Access to Transit Stops

Access to transit may require improvements that extend off-site, beyond the site adjacent to the stop. Off-site access is provided through a combination of:

1. A connected roadway system (with pedestrian and bicycle facilities), which is primarily addressed in the transportation system planning process; and
2. Pedestrian and bicycle access ways between roadways, which can be addressed in the development code.

The following recommended language addresses access ways.

Pedestrian and Bicycle Access Ways

The *[decision body]* in approving a land use application with conditions may require a developer to provide an access way where the creation of a street consistent with street spacing standards is infeasible and the creation of a cul-de-sac or dead-end street is unavoidable. An access way provides a connection through a block that is longer than established standards or connects the end of the street to another right-of-way or a public access easement. An access way shall be contained within a public right-of-way or public access easement, as required by the [City/County]. An access way shall be a minimum of *[10]*-feet-wide and shall provide a minimum *[6]*-foot-wide paved surface or other all-weather surface approved by the [*City/County decision body]*. Design features should be considered that allow access to emergency vehicles but that restrict access to non-emergency motorized vehicles.

Other Transit-Related Development Requirements

Other development code provisions that can implement the TDP and policies recommended in this memorandum include requirements related to vehicle parking, bicycle parking, and urban form. These provisions may appear less directly related to transit than the previous recommendations regarding coordination with transit agencies, access to transit stops, and transit stop improvements. However, they contribute to creating safe and inviting pedestrian and bicycling environments; a successful transit system relies on safe and convenient access to transit by multiple modes. Therefore, the following suggested code requirements are part of a comprehensive set of strategies to support and promote transit in the YCTA service area.

Vehicle Parking

7. Transit-Related Uses/Facilities in Parking Areas

Bus stops and designated park-and-ride areas in parking lots may informally exist in parking areas in the YCTA service area. To codify these uses and to comply with a subsection of the TPR specifically addressing these uses[28], the language below is recommended for integration into code sections regarding off-street parking.

> Parking spaces and parking areas may be used for transit-related uses such as transit stops and park-and-ride/rideshare areas, provided minimum parking space requirements can still be met.

8. Carpool/Vanpool Parking

As recommended in the TDP, ridesharing can complement transit and may be more accessible to parts of communities within the YCTA service area that are less dense and more distant from fixed route service. Accordingly, it is important to support ridesharing, and providing preferential parking is one way of supporting ridesharing through development requirements. The following recommended language targets commuting and reflects TPR language specific to this topic.[29]

> Parking areas that have designated employee parking and more than 20 automobile parking spaces shall provide at least 10% of the employee parking spaces (minimum two spaces) as preferential carpool and vanpool parking spaces. Preferential carpool and vanpool parking spaces shall be closer to the employee entrance of the building than other parking spaces, with the exception of ADA accessible parking spaces.

9. Maximum Parking Requirements

Maximum off-street parking requirements help manage parking and encourage the use of transit, typically in denser, urban areas. While these requirements are recommended in the YCTA service area, their applicability can be specified for sites adjacent to transit stops and transit routes and/or for more urban-oriented zones where transit stops may be most likely to be located (e.g., central or general commercial zones).

> ***Maximum Number of Off-Street Automobile Parking Spaces.*** The maximum number of off-street automobile parking spaces allowed per site equals the minimum number of required spaces, pursuant to Table [___], multiplied by a factor of:

[28] OAR 660-012-0045(4)(e)

[29] OAR 660-012-0045(4)(d)

A. [1.2] spaces for uses fronting a street with adjacent on-street parking spaces; or

B. [1.5] spaces, for uses fronting no street with adjacent on-street parking; or

C. A factor determined according to a parking analysis.

10. Reduced Parking Requirements

Similar to maximum parking requirements, allowing reductions in off-street parking requirements – where, for example, a site is adjacent or close to a transit stop – helps manage parking and supports the use of transit.

Modification of Off-Street Parking Requirements

The applicant may propose a parking space standard that is different than the standard in Section [___], for review and action by the [Community Development Director] through a [variance procedure], pursuant to [___]. The applicant's proposal shall consist of a written request and a parking analysis prepared by a qualified professional. The parking analysis, at a minimum, shall assess the average parking demand and available supply for existing and proposed uses on the subject site; opportunities for shared parking with other uses in the vicinity; existing public parking in the vicinity; transportation options existing or planned near the site, such as frequent transit service, carpools, or private shuttles; and other relevant factors.

The [Community Development Director/Planning Director] may reduce the off-street parking standards without a [variance procedure] for sites with one or more of the following features:

A. Site has a transit stop with existing or planned frequent transit service (30-minute headway or less) located adjacent to it, and the site's frontage is improved with a transit stop shelter, consistent with the standards of the applicable transit service provider: Allow up to a 20 percent reduction to the standard number of automobile parking spaces;

B. Site has dedicated parking spaces for carpool/vanpool vehicles: Allow up to a 10 percent reduction to the standard number of automobile parking spaces;

C. Site has dedicated parking spaces for motorcycle and/or scooter or electric carts: Allow reductions to the standard dimensions for parking spaces and the ratio of standard to compact parking spaces;

D. Site has more than the minimum number of required bicycle parking spaces: Allow up to a 10 percent reduction to the number of automobile parking spaces.

E. On-street parking spaces are adjacent to the subject site in amounts equal to the proposed reductions to the standard number of parking spaces.

11. Parking Area Landscaping

Parking area landscaping is a significant, yetoften underestimated, element in creating an attractive environment for walking, rolling, and taking transit. Requirements for landscaping around the perimeter of parking areas help to screen and soften the effect of large areas of pavement and create an inviting active transportation environment. Internal parking area landscaping breaks up large areas of pavement and, along with walkways, provides an inviting and less intimidating experience of crossing a parking area to access a sidewalk and a transit stop.

The following recommended language addresses both perimeter and internal parking area landscaping.

Parking Lot Landscaping. All of the following standards shall be met for each parking lot or each parking bay where a development contains multiple parking areas:

A. A minimum of [10] percent of the total surface area of all parking areas, as measured around the perimeter of all parking spaces and maneuvering areas, shall be landscaped. Such landscaping shall consist of canopy trees distributed throughout the parking area. A combination of deciduous and evergreen trees, shrubs, and ground cover plants is required. The trees shall be planned so that they provide [a partial / # percent] canopy cover over the parking lot within [#] years. At a minimum, one tree per [12] parking spaces on average shall be planted over and around the parking area.

B. All parking areas with more than [20] spaces shall provide landscape islands with trees that break up the parking area into rows of not more than [10-12] contiguous parking spaces. Landscape islands and planters shall have dimensions of not less than [48] square feet of area and no dimension of less than [6] feet, to ensure adequate soil, water, and space for healthy plant growth;

C. All required parking lot landscape areas not otherwise planted with trees must contain a combination of shrubs and groundcover plants so that, within [2] years of planting, not less than [50-75] percent of that area is covered with living plants; and

D. Wheel stops, curbs, bollards or other physical barriers are required along the edges of all vehicle-maneuvering areas to protect landscaping from being damaged by vehicles. Trees shall be planted not less than [2] feet from any such barrier.

E. Trees planted in tree wells within sidewalks or other paved areas shall be installed with root barriers, consistent with applicable nursery standards.

Screening Requirements. Screening is required for outdoor storage areas, unenclosed uses, and parking lots, and may be required in other situations as determined by the [City/County decision body]. Landscaping shall be provided pursuant with the standards of subsections [_ - _], below:

A. Parking Lots. The edges of parking lots shall be screened to minimize vehicle headlights shining into adjacent rights-of-way and residential yards. Parking lots abutting sidewalk or walkway shall be screened using a low-growing hedge or low garden wall to a height of between [3] feet and [4] feet.

Maintenance. All landscaping shall be maintained in good condition, or otherwise replaced by the property owner.

Bicycle Parking

12. Minimum Bicycle Parking Requirements

In addition to generally encouraging active transportation and addressing TPR provisions,[30] establishing minimum bicycle parking requirements also supports the use of transit, accommodating customers bicycling to a transit stop. To this end, it is recommended that requirements for the minimum number of bicycle parking spaces at transit stops and transit centers be established.

[30] OAR 660-012-0045(3)(a)

Bicycle Parking

Table __ Minimum Required Bicycle Parking Spaces		Long- and Short-Term Bicycle Parking
Use	Minimum Number of Spaces	As % of Minimum Required Bicycle Parking Spaces
Transit Stops	2 spaces	100% short-term [a]
Transit Centers	4 spaces or 1 per 10 vehicle spaces, whichever is greater	50% long-term [b] 50% short-term [a]

a. Short-term bicycle parking is parking intended to be used for durations less than two hours. Short-term bicycle parking shall consist of a stationary rack or other approved structure to which the bicycle can be locked securely and shall be located within 50 feet of the main building entrance or one of several main entrances, and no further from an entrance than the closest automobile parking space. Shelter or cover may be required for a specified percentage of short-term parking.

b. Long-term bicycle parking is parking intended to be used for durations over two hours. Long-term parking shall consist of a lockable enclosure, a secure room in a building on-site, monitored parking, or another form of fully sheltered and secure parking.

Urban Form

13. Maximum Building Setbacks

Buildings that are built to the front property line, or close to it, are recognized as a key urban design element in creating pedestrian-friendly, walkable environments. One mechanism for achieving building presence on the street frontage is establishing maximum front yard setbacks, requiring buildings to be located no more than a certain distance from the right-of-way. Maximum setbacks in urban commercial areas typically vary from 0 to 10 feet. A related but slightly less powerful mechanism is establishing no minimum front yard setbacks, allowing buildings to be located up to the right-of-way but also allowing them to be set further back, without a limit on that distance.

This development code concept is reinforced by questions raised during the TDP process about buildings along OR 99W being set far back, making transit stops along the highway less accessible and viable. To that end, front yard setback requirements in zones that front OR 99W in Newberg and McMinnville – the Community Commercial (C-2) and Central Business District (C-3) zones in Newberg and General Commercial (C-3) zone in McMinnville – were evaluated against the recommended language presented below. While maximum setback requirements or no minimum setback requirements are established in two of these three zones, the requirements should be further strengthened specifically for development along OR 99W.

As a note, maximum setback requirements can be refined to allow for a front yard setback, or a greater setback, when a plaza or other pedestrian amenity is provided.

Development Standards.

Setback Requirements.

1. Minimum front yard setback: none
2. Maximum front yard setback: [0-10] feet

EVALUATION OF LOCAL JURISDICTION POLICIES AND DEVELOPMENT CODE

Policy Consistency

This section supplements the Summary of Local Policy Assessment section in Chapter 10 of the TDP. It describes an assessment of existing transportation policies found in the Comprehensive Plans and Transportation System Plans (TSPs) of each jurisdiction in the YCTA service area. These policies were reviewed for consistency with the recommended policies. Findings of consistency are summarized in Figure G-1.

In general, the evaluation checked to see whether existing policies address topics covered in the recommended policies. In the larger jurisdictions where more robust transit service is expected, the evaluation sought to find each of the recommended policies represented in existing policies in some way. In smaller jurisdictions, the evaluation determined whether the four categories of recommended policies were more generally represented in existing policies. To this end, findings of “consistent,” “mostly consistent,” “partially consistent,” “minimally consistent,” and “inconsistent” were made, and are supported by brief explanations in Figure G-1.

Figure G-1 Evaluation of Policy Consistency

	Planning for Transit-Dependent Populations	Establishing the YCTA TDP as a Guidance Document	Coordinating with YCTA	Implementing Transit-Supportive Improvements
Larger Jurisdictions				
Yamhill County	CONSISTENT Existing policy addresses transit accessibility for transportation-disadvantaged groups.	PARTIALLY CONSISTENT Existing policy addresses service improvements but in a very general way and without a connection to a transit agency plan. (The Yamhill County Coordinated Human Services Public Transportation Plan is referred to in existing policy.)	PARTIALLY CONSISTENT Existing policy calls for implementing transit stops/centers and park-and-rides identified in the Coordinated Human Services Public Transportation Plan and generally for provision of basic improvements (shelters and benches).	MINIMALLY CONSISTENT An existing goal generally calls for working with transit agencies to provide transit service and improvements, but more detailed policy is not provided beyond this goal.
Newberg	CONSISTENT Existing policy commits the City to supporting a regional transit service that addresses the needs of disadvantaged residents, as well as ensuring that transit services and transportation facilities are ADA accessible.	PARTIALLY CONSISTENT Existing policy identifies a number of potential service improvements (e.g., commuter service to the Portland area) and commits to higher density development near transit corridors but does not establish that these transit-supportive actions and improvements are based on a transit plan	MINIMALLY CONSISTENT Existing policy commits the City to providing transit options for area residents, supporting the formation of a regional transit service district, and coordinating between local transit service providers and TriMet, but does not refer to land use planning and development coordination with YCTA, nor coordination of transit-related improvements or transportation demand management (TDM).	PARTIALLY CONSISTENT Existing policy establishes the City's support for planning and developing park-and-rides, enhancing commuter transit services, and instituting ridesharing and other TDM programs, but does not get down to the level of transit stop improvements. Existing policy addresses prioritization of pedestrian and bicycle improvements, but does not link them to transit corridors.

	Planning for Transit-Dependent Populations	Establishing the YCTA TDP as a Guidance Document	Coordinating with YCTA	Implementing Transit-Supportive Improvements
McMinnville	MOSTLY CONSISTENT Existing policy addresses City support for ensuring transportation services and facilities meet the needs of the transportation-disadvantaged (transit not singled out). Existing policy regarding complete streets focuses on the safety of children, seniors, and people with disabilities in all phases of transportation and development project implementation.	PARTIALLY CONSISTENT Existing policy establishes City support for transit service improvements that meet residents' needs and are consistent with City goals, policies, and plans. Existing policy commits the City to street design and development requirements consistent with the "Transit System Plan" (which may only be a reference to the City's TSP and not to transit agency-specific planning), and does not address transit-supportive density.	MOSTLY CONSISTENT Existing policy directs the City to study the feasibility of forming a transportation district in collaboration with Yamhill County. Existing policy calls for coordination with YCTA in providing multimodal access to transit stops, streets and sidewalks that can accommodate transit stops and improvements, and support for TDM programs, but does not does not refer to land use planning and development coordination.	MOSTLY CONSISTENT Existing policy expresses support for hosting an intercity/intracity transit terminal in the city. Existing policy commits the City to transit-supportive development requirements with a focus on pedestrian connectivity; requirements for transit stop improvements and other transit-supportive improvements (e.g., park-and-rides) are not called out. Ways that the City can support TDM (development requirements) are also not specified.
Dundee	MOSTLY CONSISTENT Existing policy generally addresses City support for developing a transportation system that is safe, accessible, and efficient for all users including the transportation-disadvantaged (transit not singled out).	MINIMALLY CONSISTENT Existing policy addresses service improvements but does not tie those improvements to a long-range transit plan.	INCONSISTENT Coordination of land use planning, development, TDM, transit stop improvements, and/or other transit-supportive improvements with transit service providers is not addressed. [31]	MINIMALLY CONSISTENT Existing policy establishes the goal of a safe, continuous, and direct network of streets, access ways, and other facilities (including crossings) and commits to providing bike and pedestrian facility connections to local and regional travel routes, but does not specify or prioritize connecting to transit. Improvements related to transit stops, the pedestrian environment, and TDM are not addressed.

[31] Policy proposed during the Dundee TSP update process in 2015 addressed coordination of transit stop access and improvements with transit service providers. However, the policy amendments have not been adopted.

	Planning for Transit-Dependent Populations	Establishing the YCTA TDP as a Guidance Document	Coordinating with YCTA	Implementing Transit-Supportive Improvements
Smaller Jurisdictions				
Dayton	MOSTLY CONSISTENT Existing policy commits the City to promoting transportation actions and improvements that address the needs of low-income, disabled, and senior populations (transit not specified).	MINIMALLY CONSISTENT Existing policy states that the City will support public transportation but does not refer to long-range transit planning guidance.	INCONSISTENT Existing policy states that the City will support public transportation programs but does not address coordination with transit service providers.	PARTIALLY CONSISTENT Existing policy prioritizes sidewalk maintenance and improvements on arterials, collectors, and where they improve connectivity, but does not address access to transit or other transit-supportive improvements and programs.
Lafayette	CONSISTENT Existing policy commits to a street network that is safe, accessible, and efficient for the transportation-disadvantaged, as well as a convenient, safe, and economical public transportation system for the transportation-disadvantaged.	PARTIALLY CONSISTENT Existing policy generally addresses service improvements but does not tie those improvements to a long-range transit plan. (Public transportation policy commits to implementation of the 1998 Regional Transportation Enhancement Plan.)	INCONSISTENT Coordination of land use planning, development, and/or transit-supportive improvements with transit service providers is not addressed.	PARTIALLY CONSISTENT Existing policy establishes the goal of a safe, continuous, and direct network of streets, access ways, and other facilities (including crossings) and addresses pedestrian environment improvements in the Central Business District, but does not address access to transit or other transit-supportive improvements and programs.
Yamhill	MOSTLY CONSISTENT Existing policy commits the City to promoting transportation actions and improvements that address the needs of low-income, disabled, and senior populations (transit not specified).	MINIMALLY CONSISTENT Existing policy states that the City will encourage carpooling and alternative forms of transit, but does not refer to long-range transit planning guidance.	INCONSISTENT Existing policy states that the City will encourage carpooling and alternative forms of transit, but does not address coordination with transit service providers.	MINIMALLY CONSISTENT Sidewalk improvements are prioritized for Main Street and Maple Street, but access to transit or other transit-supportive improvements and programs are not addressed.
Carlton	CONSISTENT Existing policy commits the City to providing increased access, safety, and service related to walking, biking, transit, and ridesharing particularly for the transportation-disadvantaged.	PARTIALLY CONSISTENT Existing policy expresses strong support for transit service and improvements, including coordination with other agencies, but does not tie improvements or requirements to long-range transit planning.	MOSTLY CONSISTENT Existing policy refers to coordination with other agencies regarding transit opportunities, including studying the needs for park-and-ride facilities, but does not specifically address coordination of land use planning and development.	MOSTLY CONSISTENT Existing policy addresses transit-supportive improvements including safe crossings, park-and-ride, and TDM/ridesharing programs, but not transit-related development requirements or pedestrian facility improvements that are prioritized related to transit.

	Planning for Transit-Dependent Populations	Establishing the YCTA TDP as a Guidance Document	Coordinating with YCTA	Implementing Transit-Supportive Improvements
Amity	MOSTLY CONSISTENT Existing policy commits the City to transportation improvements that address the needs of low-income, disabled, and senior populations (transit not specified).	PARTIALLY CONSISTENT Existing policy commits the City to support and promote transit and related coordination, but does not tie these efforts to a long-range transit plan.	MOSTLY CONSISTENT Existing policy refers to coordination with YCTA regarding service changes, but does not address coordination related to other transit-supportive improvements.	PARTIALLY CONSISTENT Existing policy addresses opportunities to improve the transit system very generally, but does not provide more specific guidance related to access to transit and other transit-supportive improvements and programs.
Sheridan	MOSTLY CONSISTENT Existing policy commits the City to transportation improvements that address the needs of low-income, disabled, and senior populations (transit not specified).	MINIMALLY CONSISTENT Existing policy commits the City to support and promote transit, but does not tie these efforts to a long-range transit plan.	PARTIALLY CONSISTENT Existing policy states support for transit and commits the City to coordinating transportation planning and implementation with transportation facility and service providers, but does not address land use and development coordination nor specify transit agencies.	PARTIALLY CONSISTENT Existing policy address improvements very generally for the transportation-disadvantaged, for promoting transit, and for promoting walking and biking, but does not provide more specific guidance related to access to transit and other transit-supportive improvements and programs.
Willamina	CONSISTENT Existing policy commits the City to work with Yamhill and Polk Counties to address the transit needs of the disadvantaged.	MOSTLY CONSISTENT Existing policy commits the City to make transportation planning and improvements consistent with transportation plans, although the plans are not specified as transit plans.	MOSTLY CONSISTENT Existing policy states support for transit and commits the City to coordinating transit service and meeting the needs of the disadvantaged with Yamhill and Polk Counties, but does not address land use and development coordination.	PARTIALLY CONSISTENT Existing policy addresses improvements very generally for the transportation-disadvantaged, promoting transit, and safe and intermodal pedestrian and bicycle facilities, but does not provide more specific guidance related to access to transit and other transit-supportive improvements and programs.

Development Code Consistency

This section supplements the Summary of Local Development Code Assessment section in Chapter 10 of the TDP.

Figure G-2 Evaluation of Development Code Consistency

	Newberg	McMinnville
Coordination with Transit Agencies		
1. Pre-application conference	INCONSISTENT A pre-application form is available on the City's website, but there are not code provisions regarding a pre-application conference, let alone specifying that transit agencies need to be invited to participate.	INCONSISTENT A pre-application form is available on the City's website, but there are not code provisions regarding a pre-application conference, let alone specifying that transit agencies need to be invited to participate.
2. Application review	MINIMALLY CONSISTENT The Community Development Director has discretion to require that notice be mailed to parties that the Director believes may be affected by the application, which could include transit agencies, but notice is not required. (Section 15.100.210(C))	MINIMALLY CONSISTENT Notice of a Director Review proposal must be sent to property owners and notice of a Public Hearing Review proposal must be sent to agencies that the Planning Director determines to have an interest in the proposal, neither of which requires notice to be sent to transit agencies or other transportation providers. (Section 17.72.110 and Section 17.72.120)
3. Hearing notice	(Notice of the hearing is not addressed separately from notice of the proposal. See #2 above.)	(Notice of the hearing is not addressed separately from notice of the proposal. See #2 above.)
Access to Transit and Supportive Improvements		
Site Access		
4. Access between the site and the street	CONSISTENT On-site walkways are required to connect from the building entrance(s) to the street and may be required to connect to adjoining development. (Section 15.440.140)	MOSTLY CONSISTENT Pedestrian walkways are required to connect between building entrances and the street/sidewalk for large format commercial development; there are no requirements related to connecting to adjoining development. (Section 17.56.050(C)(2)) Buildings are required to have a zero setback and primary entrances are required to open onto the public right-of-way in downtown. (Section 17.59.050) A similar level of connection is not required for development that is not downtown or is not large format commercial.

	Newberg	McMinnville
5. Access to transit stop and supportive improvements	CONSISTENT Existing code includes access requirements (addressed in #4 above) and requirements for transit stop improvements including reasonably direct access, a landing pad, an easement, and lighting, consistent with the TSP or an adopted transit plan. (Section 15.505.030(V))	INCONSISTENT Other than basic requirements regarding access (addressed in #4 above), code provisions do not address transit-specific access or improvements.
Area Access		
6. Access to transit stops from beyond the site	MINIMALLY CONSISTENT Existing requirements establish maximum block lengths of 800-1,200' in residential and institutional zones, with allowances for longer blocks where there is a mid-block public walkway, but code does not require or encourage this type of access way for long blocks or other situations where a street connection is not practical. (Section 15.505.030(O))	CONSISTENT Land division standards limit block length to 400' and perimeter to 1,600'. "Pedestrian ways" (access ways) are allowed to be provided in the cases of long blocks, dead-end streets, and other sub-standard situations. (Section 17.53.103)
Other Transit-Supportive Requirements		
Vehicle Parking		
7. Transit-related uses/facilities in parking areas	CONSISTENT Transit-related uses permitted in parking areas. (Section 15.440.060(J))	INCONSISENT Parking spaces are permitted to be used only for car parking; transit-related uses are not addressed. (Section 17.06.040)
8. Preferential parking for employee ridesharing	CONSISTENT Preferential carpool/ vanpool parking is established in existing code. (Section 15.440.010(D))	INCONSISTENT Existing code does not address carpool/vanpool parking.
9. Maximum parking requirements	MOSTLY CONSISTENT Off-street parking is not required in the Central Business District and 50 percent parking requirement reductions are permitted for non-residential uses in the Riverfront District and for commercial uses within 200 feet of a public parking lot. (Sections 15.440.010(B) and (C) and Section 15.440.050(C))	MOSTLY CONSISTENT Off-street parking is not required and 50 percent parking requirement reductions are allowed in designated parts of downtown. (Sections 17.60.060 and 17.60.100)

	Newberg	McMinnville
10. Reduced parking requirements	PARTIALLY CONSISTENT See #9 above for parking requirement reductions. Residential development is permitted to credit on-street parking when 10 spaces or more are required, and reductions are allowed for affordable housing sites with pedestrian connections or routes to a transit stop. (Section 15.440.030)	PARTIALLY CONSISTENT See #9 above for parking requirement reductions. A reduction of one vehicle parking space for each 15 required vehicle spaces is permitted for five bicycle parking spaces provided (all zones). (Section 17.60.140(A)(3))
11. Parking area landscaping	MOSTLY CONSISTENT Parking areas with 10 or more spaces must provide at least 25 square feet of landscaping per parking space. Perimeter landscaping and landscaped islands are required. (Section 15.420.010(B)(3))	PARTIALLY CONSISTENT Perimeter landscaping around surface parking lots is required in downtown. Otherwise, reduced or no landscaping is required in downtown. Five to seven percent of parking lot gross area is required to be landscaped (all zones), and islands are required to break up parking areas. (Section 17.59.060 and Section 17.57.070)
Bicycle Parking		
12. Minimum requirements for transit stops and centers	MOSTLY CONSISTENT Existing code requires bicycle parking based on required vehicle parking for transit transfer stations and park-and-ride lots. (Section 15.440.100) Bicycle parking for transit centers that do not require vehicle parking and bicycle parking for standard transit stops are not addressed.	INCONSISTENT Existing code only requires bicycle parking in commercial and office/residential zones and is based on the amount of required vehicle parking. (Section 17.60.140) The Planning Director is authorized to determine parking requirements for uses not listed. (Section 17.60.090) However, it is not clear whether these provisions apply to bicycle parking (they are grouped with other vehicle parking requirements), and without bicycle parking requirements explicitly established for transit stops and transit centers, bicycle parking is not guaranteed to be provided for these uses.
Urban Form		
13. Maximum setbacks	PARTIALLY CONSISTENT Existing front yard setback requirements for the C-2 zone and C-3 zone – the zones that predominantly front OR 99W – require at least a 10-foot setback in the C-2 zone and no minimum setback plus a 20-foot maximum setback in the C-3 zone. (Section 15.410.020) Removing minimum setback requirements in the C-2 zone where adjacent to OR 99W and a maximum setback of 0-10 feet (with allowances for pedestrian amenities) in both zones where adjacent to OR 99W are not addressed.	MOSTLY CONSISTENT Existing front yard setback provisions do not require front yards in the C-3 zone, which is the predominant zoning fronting OR 99W. (Section 17.33.030) Except when providing pedestrian amenities, buildings are required to have no setback in downtown. (Section 17.59.050) Maximum setbacks in the C-3 zone outside of downtown and adjacent to OR 99W are not addressed.