

CET 2040 Transit Master Plan

Local TAC Meeting #2 – Redmond

January 29th, 2020

Meeting Purpose and Desired Outcomes

Meeting Purpose

Welcome the TAC members
Update TAC on project status and schedule
Review draft service plan and capital plan (short-term, mid-term, and long-term)

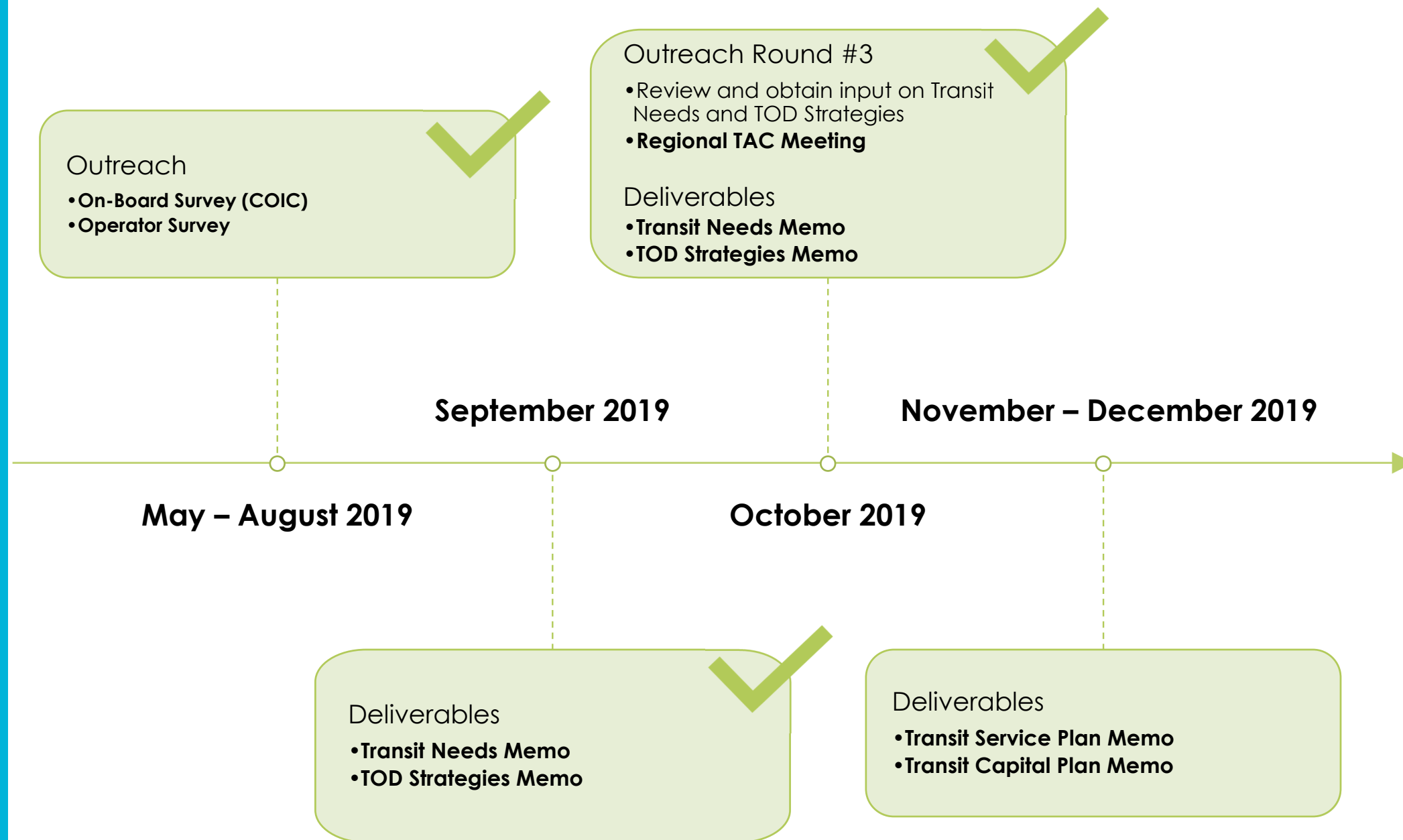
- Memo 6 – Service Plan
- Memo 7 – Capital Plan

Desired Outcomes

Feedback from TAC on service enhancements proposed for Warm Springs and Community Connector in the short-term, mid-term, and long-term
Project team understands TAC member priorities

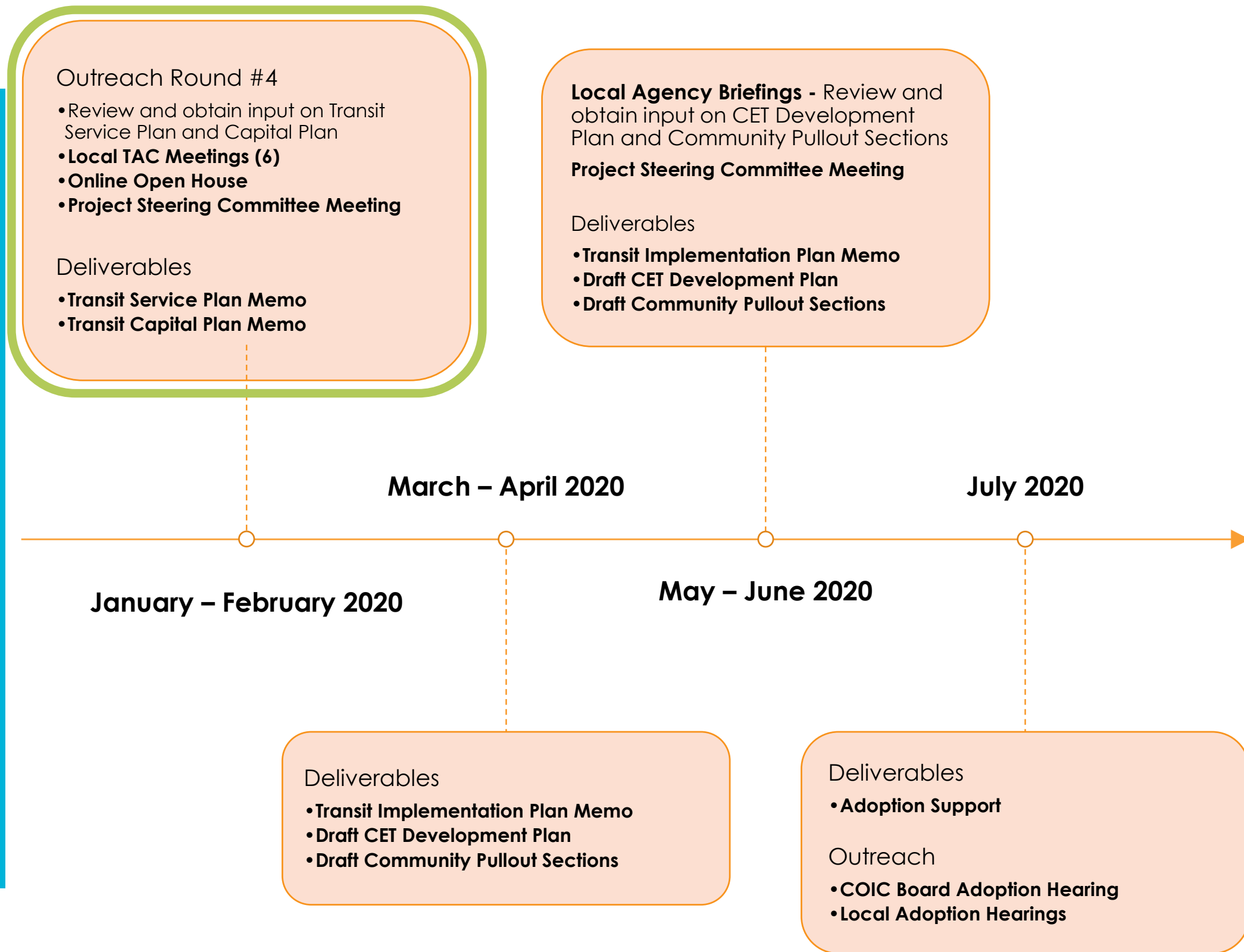
Project Status and Schedule

(Month 7-14)



Project Status and Schedule

(Month 15-18+)



Memos 6 & 7



Memo 6 – Transit Service Plan

- Plan Phases & Funding Assumptions
- Service Types
- Community Connector Service
- Redmond Local Service
- Local Service in Smaller Communities
- Recreational Services
- Summary of Community Connector/Local Service



Memo 7 – Transit Capital Plan

- Transit Vehicles
- Transit Facilities
- Transit Technology
- Transit Asset Management



Memo 6: Plan Phases & Funding Assumptions

1

**Funding Level
Assumptions**

2

**Existing Funding
Source Assumptions**

3

**Future Funding
Scenarios**

4

Cost Assumptions

Funding Level Assumptions

Memo 6: Plan Phases & Funding Assumptions

- CET's fiscal year 2019-20 projected revenue budget = \$9.4 million (includes \$3.6 million from STIF)
- May be able to increase to \$16 million annually over 20 years
- Planned phasing and funding levels:
 - Existing: 0-1 years (FY 2019, includes initial implementation of STIF)
 - Near-Term: 1-2 years (FY 2020-21, includes STIF)
 - Short-Term: 3-5 years (FY 2022-23 and FY 2023-24, includes STIF)
 - Mid-Term: 6-10 years (Potential sources in addition to STIF)
 - Long-Term: 11-20 years (unconstrained financially)

Existing Funding Source Assumptions

- Revenue sources: federal, service contracts, state, local, fares, one-time revenues, and advertising/other
- Fluctuate year by year
- 1.0% growth rate assumed on non-STIF, 0% on state and local funds, and 2-5% increases in fare and contract revenues for future years
- STIF projections have been provided by ODOT through FY 2023
 - Stable for Warm Springs and vary for counties with 4% growth rate assumed after 2021

Memo 6: Plan Phases & Funding Assumptions

Funding Source	Sub-System or Qualified Entity	Sample Fiscal Year			
		2019-2020	2024-2025	2029-2030	2039-2040
Total Existing Revenue	Bend System	\$3,544,090	\$3,724,874	\$3,914,880	\$4,324,463
	Rural System	\$2,287,650	\$2,404,343	\$2,526,989	\$2,791,368
STIF	Confederated Tribes of the Warm Springs	\$100,000	\$100,000	\$100,000	\$100,000
	Crook County	\$223,000	\$313,664	\$381,620	\$564,891
	Deschutes County	\$3,049,000	\$4,327,482	\$5,265,043	\$7,793,550
	Jefferson County	\$222,000	\$314,746	\$382,936	\$566,839
TOTAL		\$9,425,740	\$11,185,109	\$12,571,468	\$16,141,111

Table 1, Page 4



CET Future Funding Scenarios

- Seven future funding scenarios
- All use existing funding source projections as a base

ID	Funding Scenario	Variation	Fiscal Year			
			2019-2020	2024-2025	2029-2030	2039-2040
A	Existing Revenue Sources (excluding STIF)	Includes both sub-systems	\$5,831,740	\$6,129,217	\$6,441,869	\$7,115,831
B	Existing Revenue Sources (including STIF)	N/A	\$9,425,740	\$11,185,109	\$12,571,468	\$16,141,111
C1	Existing + STIF + 0.02% Property Tax	Within counties	-	\$18,832,255	\$22,331,381	\$32,038,980
C2		Within incorporated areas	-	\$15,427,578	\$17,986,054	\$24,960,900
D	Existing + STIF + Employer-Based Payroll Tax	N/A	-	\$16,241,000	\$18,701,068	\$25,166,391
D1	Existing + STIF + Property Tax + Payroll Tax	0.02% Property Tax within Counties	-	\$23,888,147	\$28,460,980	\$41,064,260
D2		0.02% Property Tax within Incorporated Areas	-	\$20,483,469	\$24,115,653	\$33,986,180

Memo 6: Plan Phases & Funding Assumptions

Table 3, Page 6

Cost Assumptions

- Used in estimating service operating costs based on projections from CET’s fiscal department
- “Existing” timeframe reflects CET’s current costs for FY 2020 (2019-21), predating new service launched from 2019-21 STIF Plan)
- Assume 5% annual increase

Sub-System	Existing ¹	Near-Term ²	Short-Term ²	Mid-Term ²	Long-Term ²
	2019-2020	2020-2021	2024-2025	2029-2030	2039-2040
Bend Dial-A-Ride	\$74.15	\$81	\$101	\$132	\$220
Bend Fixed-Route	\$75.18	\$82	\$102	\$133	\$223
Rural Dial-A-Ride	\$87.14	\$94	\$116	\$151	\$251
Rural Community Connector	\$95.34	\$103	\$128	\$166	\$277
Rural Route 20	\$79.26	\$86	\$107	\$139	\$231
Peer Median³	\$91	\$101	\$123	\$156	\$256

Notes: 1. Existing costs for 2019. 2. An additional approximately \$2 per revenue hour was added to the 2019 Existing cost to account for vacant positions. This cost was subsequently increased by 5% annually. 3. A peer median cost of \$85.40 for peer agencies in FY 2017 was identified in Memo #1, and similarly escalated by the 4% annually. 2. Costs for subsequent time frames reflect assumed 3% annual cost increases.

Table 3, Page 6

Memo 6: Plan Phases & Funding Assumptions



Memo 6: Plan Phases & Funding Assumptions

Recommendations

- Existing funding sources (including STIF) provide a base to continue funding existing transit services and enhance future transit services (some existing funding resources are declining/not increasing to keep up with inflation)
- Recommendations included in the memo will require additional funding
- Starting in the mid-term timeframe, additional funding resources are assumed based on C2 funding scenario for illustrative purposes (0.02% property tax within incorporated areas only)
- Estimates can change quickly – CET should continually monitor funding environment and update future revenue forecast

Memo 6: Community Connector Service

1

**Overall Service
Needs**

2

**Summary of Service
Enhancements**

3

**Modifications to
Existing Services**

4

New Services

Memo 6: Community Connector Service

Summary of Service Enhancements

- Add **Saturday** service for the Community Connector system
- Enhance Community Connector service (**additional trips**) in the highest demand markets
- Modify Community Connector routes to provide **more direct** service
- Develop **enhanced regional transit stops and stations**, including mobility hubs
- Add **Shopping/Medical Shuttle** service (midday in select markets)
- Add service to selected **new markets**

Summary of Service Enhancements

Memo 6: Community Connector Service

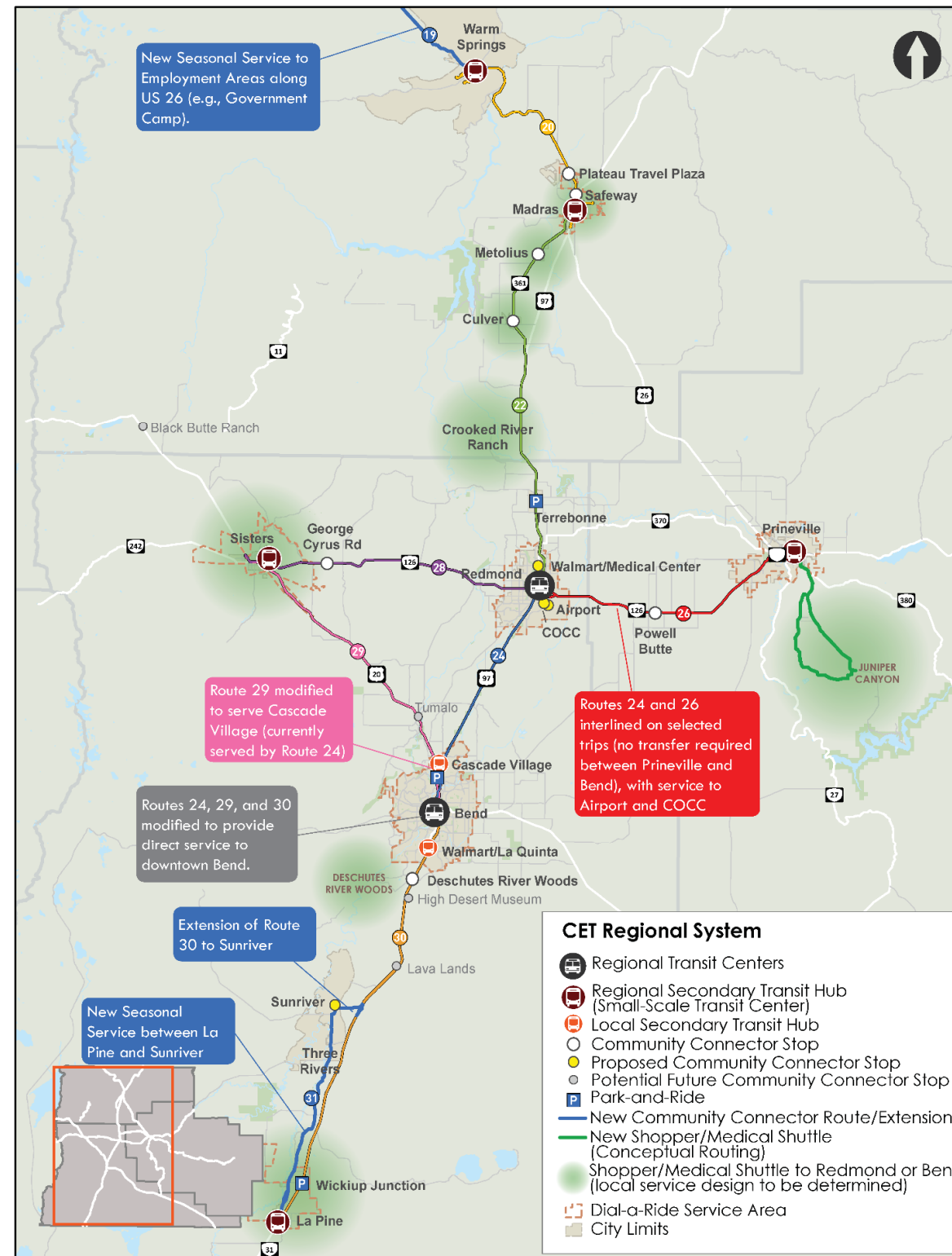


Figure 3, Page 14

Modifications to Existing Services

Memo 6: Community Connector Service

Route 22: Madras-Redmond

- Add a stop in the vicinity of St. Charles Medical Center/Walmart in Redmond
- Add more frequent peak period trips and an evening trip
- Add midday service in the form of a shopping/medical shuttle trip, including Crooked River Ranch (see separate slide below)
- Add additional local circulation in Madras to be provided by local Dial-A-Ride and/or the Community Connector vehicle
- Add Saturday service

Memo 6: Community Connector Service

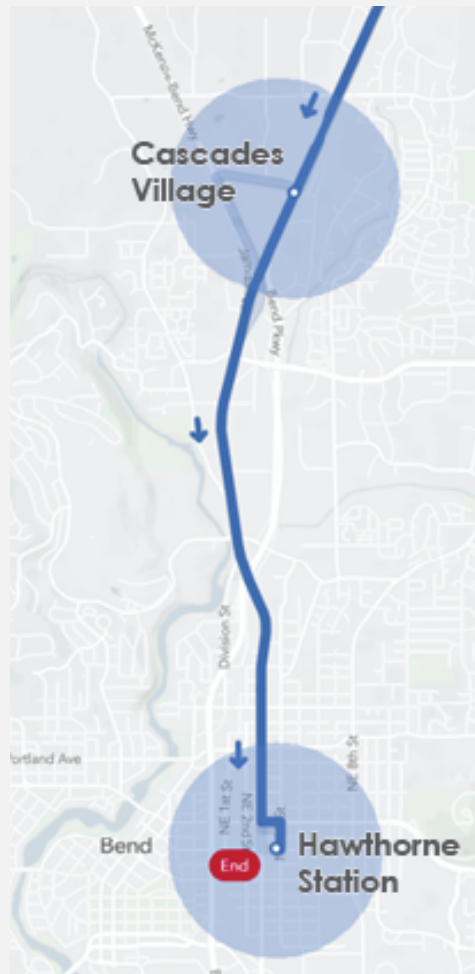


Modifications to Existing Services

Route 24: Redmond-Bend

- Modify routing in Bend to provide more direct service (see next slide)
 - Currently, Route 24 stops at Cascade Village and Hawthorne Station
 - In the near- to short-term, Route 24 could be modified to continue to downtown while maintaining a stop on the eastside near Hawthorne Station
 - Longer-term, Route 24 could circulate through downtown enroute to a south downtown mobility hub
 - Both serve more residents and provide increased access to higher job densities than today but increases travel time to each trip.
- Add more frequent service all day and an additional evening trip
- Improve connections with local service in Redmond in coordination with potential transition to flex/fixed-route service (depending on outcome of planned local transit study)
- Add Saturday service

Modifications to Existing Services

Route 24: Redmond-Bend (also applies to Route 29)

	Baseline	Near/Short-Term Transition	Longer-Term
Local Routing & Stops	Cascade Village Hawthorne Station	Cascade Village 3 rd & Hawthorne South Downtown Hub	Cascade Village North Downtown Hub South Downtown Hub <i>no stop on eastside</i>
Map			

Memo 6: Community Connector Service

Figure 4, Page 16

Modifications to Existing Services

Route 26: Prineville-Redmond

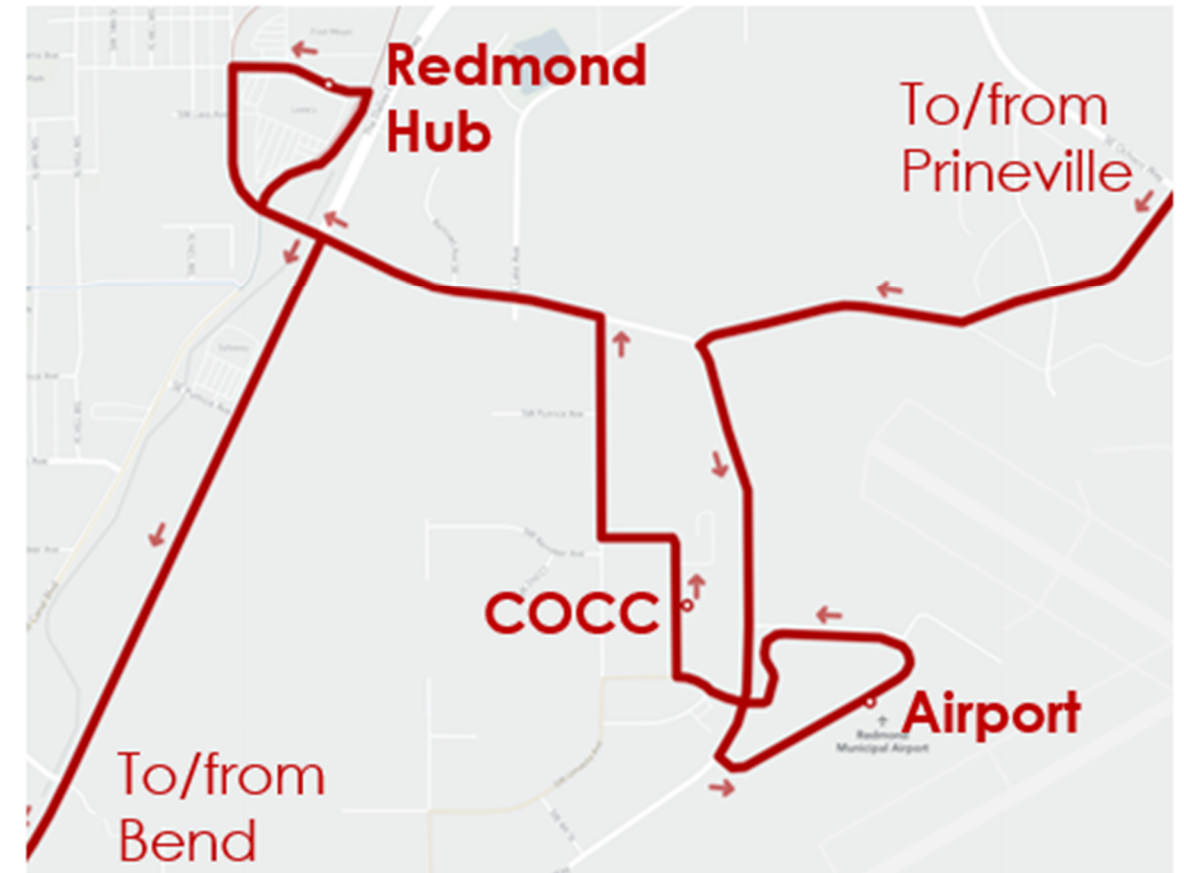
- Redesign to serve Redmond Airport and COCC. Possible routing is shown in Figure on next slide
 - Would add roughly 10 minutes of additional cycle time (5 minutes in each direction)
- Interline with Route 24, at least for selected peak period trips, to provide a one-seat ride to Bend
- Add more frequent peak period trips and an evening trip.
- Add midday service in the form of a shopping/medical shuttle trip
- Add additional local circulation in Prineville to be provided by local Dial-A-Ride and/or a Community Connector vehicle
- Add Saturday service

Memo 6: Community Connector Service

New Services

Redmond Airport Service (including Route 26 and through-routing to Bend)

- Modify Route 26 to provide Airport connections between the Redmond Hub and the Airport, including a stop at Redmond COCC (which would provide a one-seat connection from Bend through Route 24-26 interlining)
- Route 24 supplemented by local route connection between the Redmond Hub and Redmond Airport serving early morning departures and afternoon arrivals (could be an extension of a Community Connector route or part of regular deviated fixed-route or fixed-route service in Redmond)



Memo 6: Community Connector Service

Figure 8, Page 21

Modifications to Existing Services

Route 28: Sisters-Redmond

- Improve local stop branding and amenities within Sisters (see Capital Plan)
- Add additional local circulation in Sisters, to be provided by the Community Connector vehicle. This would increase access to the service since local Dial-A-Ride currently only operates one day per week for limited hours
- Determine if smaller communities along route, such as Eagle Crest, need service

Memo 6: Community Connector Service

New Shopper/Medical Shuttle Services

- Demand-response with reservations, serves key destinations
- Could be implemented as midday service on existing routes:
 - Sisters – Bend
 - **Madras – Redmond (including Culver and Metolius)**
 - **Prineville – Redmond (could include Juniper Canyon)**
 - La Pine – Bend (could include a stop in Sunriver)
- The following shuttles could provide service in new markets:
 - **Crooked River Ranch**
 - Juniper Canyon
 - Deschutes River Woods
 - Warm Springs; Simnasho and other outlying communities

Memo 6: Community Connector Service



Local Service Needs

Memo 6: Redmond Local Service

Transit Service Need	Time Frame
Fixed-route and ADA Paratransit service in Redmond, including increasing service south of Evergreen	Short
Add routes that serve Ridgeview High School, new growth in the south and west, Canal/Odem Medo to the south (high percentage of low-income populations), and Walmart/other retail services (realigning proposed SE route)	Mid or Long
Service needs to southern industrial land	Monitor
Service needs to NE with UGB expansions	Long

Table 11, Page 45

Memo 6: Redmond Local Service

Service Enhancement Options

- **Dial-A-Ride** service (existing) maximizes coverage, but requires advance reservations and, given the city's size, it is at capacity for a purely demand-responsive service model.
- **Deviated fixed-routes** maintain a high level of coverage by allowing deviations along a route, enable trips without advance reservations, and increase system capacity, but can be challenging to schedule depending on the number of deviations allowed, and deviations can increase travel times.
- **Fixed-routes** can enable more frequent and direct service at regularly scheduled times, but reduce coverage.
- **A hybrid of fixed- and deviated-route service**, e.g., north-south and east-west spine served by higher-frequency core fixed-routes that are fed by connecting deviated routes, could balance tradeoffs between a purely fixed-route or deviated-route system depending on the land use context.

Memo 6: Redmond Local Service

Service Enhancements

- **Existing/Near-Term:** Maintain Dial-A-Ride; introduce a local circulator/flex route.
- **Short-Term:** Introduce a system of four deviated fixed-routes (or alternative option, e.g., as proposed in the 2008 Transit Master Plan), which is assumed to redirect partial Redmond Dial-A-Ride service hours while maintaining some level of general demand-response service. ADA Paratransit is not required/provided. Provide evening service (a microtransit pilot is assumed, but could also be Dial-A-Ride).
- **Mid-Term:** Introduce a five-route system including ADA Paratransit, which is assumed to redirect all/some Redmond Dial-A-Ride service hours.
- **Longer-Term:** Potential route modifications to address longer-term needs identified; could also be introduced in an earlier time frame as warranted by land use.

Preliminary assumptions pending local transit study

Service Enhancements

Summary of Redmond Conceptual Service Alternative and Preliminary Phasing

Plan Phase	Existing	Near-Term	Short-Term	Mid-Term	Long-Term
Funding Level:	Existing	STIF FY19-21	STIF FY22-23, FY23-24	STIF+Additional Sources	STIF+Additional Sources
Service Type / # of Routes	Dial-A-Ride (average 3 vehicles all-day)	Dial-A-Ride (weekday only) Add Local Circulator flex-route (weekdays and Saturday)	4 Deviated Routes Circulator flex-route Maintain 1 Dial-A-Ride vehicle	4 Fixed-Routes Local circulator ADA Paratransit	5 Fixed-Routes Local circulator ADA Paratransit
Service Days / Hours	6 am – 6 pm weekdays	6 am – 6 pm weekdays Circulator runs on Saturdays			
# People	28,500 (2017 citywide estimate)	Local Circulator: 9,500 (w/in 1/2 mile)	Deviated Routes / Circulator: 19,000 (w/in 1/2 mile)	Fixed Routes / Circulator: 12,400 (w/in 1/4 mile)	Fixed Routes / Circulator: 12,900 (w/in 1/4 mile)
# Jobs	12,700 (2017 citywide estimate)	Local Circulator: 2,900 (w/in 1/2 mile)	Deviated Routes / Circulator: 4,200 (w/in 1/2 mile)	Fixed Routes / Circulator: 3,000 (w/in 1/4 mile)	Fixed Routes / Circulator: 3,000 (w/in 1/4 mile)

Memo 6: Redmond Local Service

Table 12, Page 47

Preliminary assumptions pending local transit study

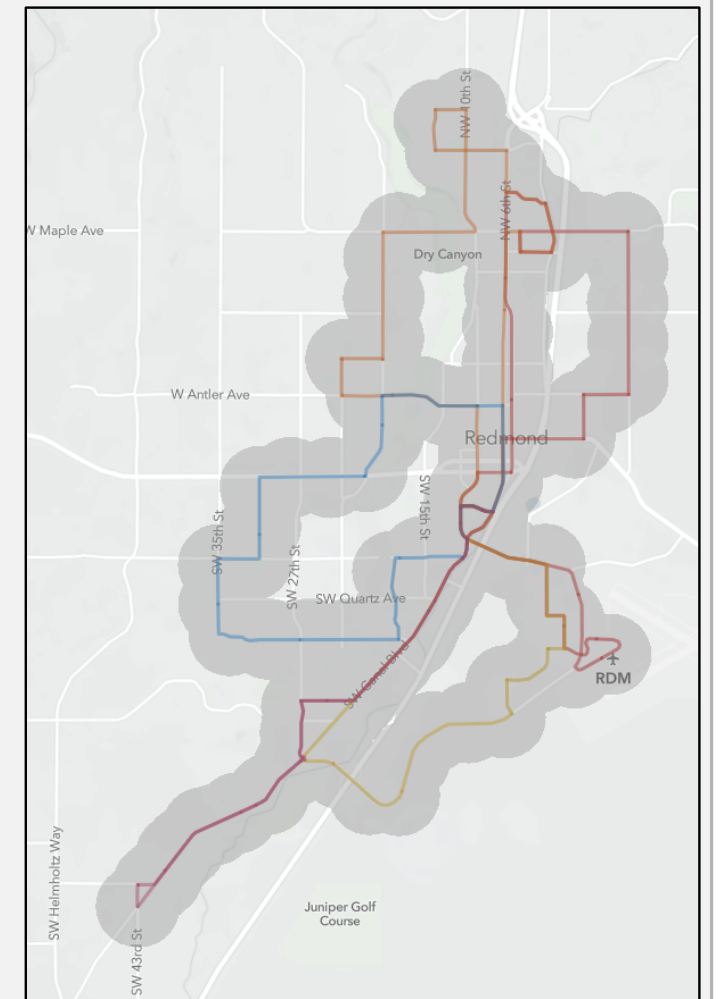
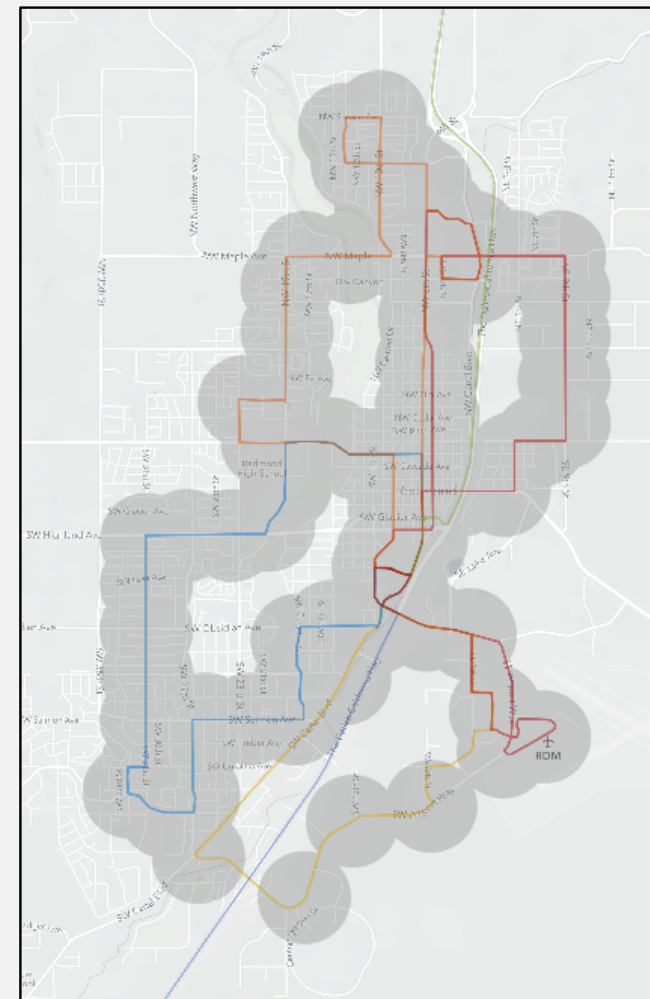
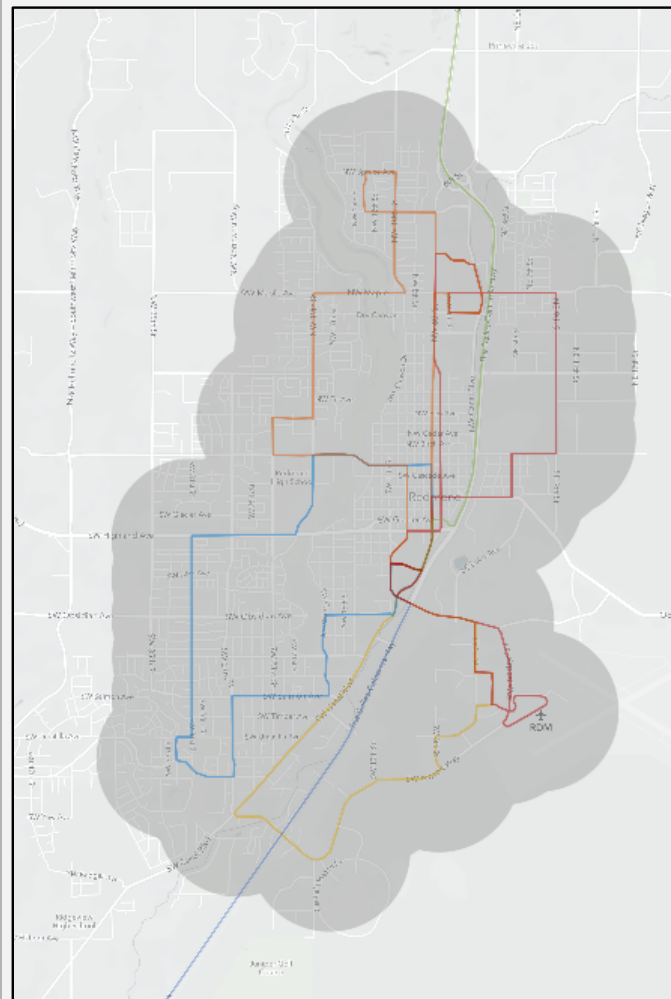
Service Enhancements

Comparison of Redmond Conceptual Transit Access

**1/2 Mile Access to Conceptual
4-Route Deviated System**

**1/4 Mile Access to Conceptual
4-Route Fixed-Route System**

**1/4 Mile Access to Conceptual
5-Route Fixed-Route System**



Memo 6:
Redmond
Local Service

Figure 24, Page 47

Recreational Services

CET will continue to expand its recreational services based on opportunities, vehicle capacity, and partner support. The “Ride Play” services need to be funded in full by fares, local agencies, other public or private entity, or special grants such as the Federal Lands Access Program (FLAP) grants. “Ride Play” services should not be funded by state or federal grants that CET could use for its Bend, Community Connector, or Dial-A-Ride services; however, some of the locations listed below could be served by Community Connector routes and use a combination of funding types.

The locations identified as potential needs and opportunities to seek out or evaluate partnerships include:

- Sunriver (year-round)
- Black Butte Ranch (year-round)
- High Desert Museum (year-round to/from Bend and/or Sunriver)
- Lava Lands Visitor Center (seasonal to/from Bend and/or Sunriver)
- Smith Rock (summer)
- Mt. Bachelor Summer Service
- Popular Central Oregon sno-parks (winter)

Memo 6: Recreational Services

Memo 6: Summary of Community Connector and Local Service

1

**Community
Connector**

2

Local Service

3

Finance Summary

4

**Fleet and Facility
Requirements**

Community Connector

Community Connector Service Plan Summary

Plan Phase	Existing/Near-Term	Short-Term	Mid-Term	Long-Term
Funding Level:	Existing + STIF FY19-21	STIF FY22-23, FY23-24	STIF+Additional Sources	STIF+Additional Sources
Route 20 Warm Springs - Madras	<ul style="list-style-type: none"> Maintain existing weekday service (6 daily trips) 	<ul style="list-style-type: none"> Add 1 additional trip, likely evening (7 daily trips) Add Saturday service (3 trips) Shopper/medical shuttle (1 day per week) 	<ul style="list-style-type: none"> Add 1 additional trip (evening and/or morning) 6 weekday and 3 Saturday trips Shopper/medical shuttle (2 days per week) 	<ul style="list-style-type: none"> 8 weekday and 3 Saturday trips Add Sunday service (3 trips) Shopper/medical shuttle (2 days per week)
Route "19" Warm Springs Employment Service	<ul style="list-style-type: none"> New Seasonal Service, Wed-Sun, 3 trips per day, 4 months per year 	<ul style="list-style-type: none"> Maintain seasonal service 	<ul style="list-style-type: none"> Maintain seasonal service 	<ul style="list-style-type: none"> 7 days per week, 3 daily trips
Route 22 Madras -Redmond	<ul style="list-style-type: none"> Add 1 peak trip (6.5 total) Add midday shopper/medical shuttle trip (5 days) Add 3 Saturday trips 	<ul style="list-style-type: none"> Add 1 peak trip 7 weekday, 3 Saturday trips Midday shopper/medical shuttle (5 days) 	<ul style="list-style-type: none"> Add 1 evening trip (8 weekday, 3 Saturday trips) Midday shopper/medical shuttle (5 days) 	<ul style="list-style-type: none"> 8 weekday, 3 Saturday trips Midday shopper/medical shuttle (5 days) Add Sunday service (3 trips)

Memo 6: Summary of Community Connector and Local Service

Community Connector

Community Connector Service Plan Summary

Plan Phase	Existing/Near-Term	Short-Term	Mid-Term	Long-Term
Funding Level:	Existing + STIF FY19-21	STIF FY22-23, FY23-24	STIF+Additional Sources	STIF+Additional Sources
Route 24 Redmond-Bend	<ul style="list-style-type: none"> Add 1 midday trip (10 total) Add 5 Saturday trips 	<ul style="list-style-type: none"> Add 1 midday trip (11 weekday, 5 Saturday trips) 	<ul style="list-style-type: none"> Add 1 midday and evening trip (13 weekday, 5 Saturday trips) 	<ul style="list-style-type: none"> 13 weekday, 5 Saturday trips Add Sunday service (5 trips)
Route "25" Crooked River Ranch - Redmond	<ul style="list-style-type: none"> New midday shopper/medical shuttle (1 day) 	<ul style="list-style-type: none"> Midday shopper/medical shuttle (1 day) 	<ul style="list-style-type: none"> Expand shopper/medical shuttle to 2 days per week 	<ul style="list-style-type: none"> Midday shopper/medical shuttle (2 days)
Route 26 Prineville-Redmond	<ul style="list-style-type: none"> Add 1 peak weekday trips, interline service with Route 24, serving Redmond Airport and COCC (7 total) Add midday shopper/medical shuttle trip (5 days) Add 3 Saturday trips 	<ul style="list-style-type: none"> Add 1 peak weekday trip (7 weekday, 3 Saturday trips) Midday shopper/medical shuttle (5 days) 	<ul style="list-style-type: none"> Add 1 evening trip (8 weekday, 3 Saturday trips) Midday shopper/medical shuttle (5 days) 	<ul style="list-style-type: none"> 8 weekday, 3 Saturday trips Midday shopper/medical shuttle (5 days) Add Sunday service (3 trips)

Memo 6: Summary of Community Connector and Local Service

Community Connector

Community Connector Service Plan Summary

Plan Phase	Existing/Near-Term	Short-Term	Mid-Term	Long-Term
Funding Level:	Existing + STIF FY19-21	STIF FY22-23, FY23-24	STIF+Additional Sources	STIF+Additional Sources
Route 28 Sisters – Redmond	<ul style="list-style-type: none"> Maintain existing service (3 trips) Add flex route in Sisters 	<ul style="list-style-type: none"> 3 weekday trips with local flex route 	<ul style="list-style-type: none"> 3 weekday trips with local flex route 	<ul style="list-style-type: none"> 3 weekday trips with local flex route
Route 29 Sisters - Bend	<ul style="list-style-type: none"> Maintain existing weekday service (3 trips) Add flex route in Sisters Add Saturday service (3 trips) Add midday shopper/ medical shuttle trip (2 days) 	<ul style="list-style-type: none"> 3 weekday and 3 Saturday trips with local flex route Midday shopper/ medical shuttle (2 days) 	<ul style="list-style-type: none"> 3 weekday and 3 Saturday trips with local flex route Expand midday shopper/ medical shuttle to 3 days per week 	<ul style="list-style-type: none"> 3 weekday and 3 Saturday trips with local flex route Midday shopper/ medical shuttle (3 days) Add Sunday service (3 trips)
Route 30 La Pine – Bend	<ul style="list-style-type: none"> Maintain existing weekday service (4 trips) Add flex route in La Pine Add Saturday service (3 trips) Add midday shopper/ medical shuttle trip (3 days) 	<ul style="list-style-type: none"> 4 weekday and 3 Saturday trips with local flex route Midday shopper/ medical shuttle (3 days) 	<ul style="list-style-type: none"> 4 weekday and 3 Saturday trips with local flex route Midday shopper/ medical shuttle (3 days) 	<ul style="list-style-type: none"> 4 weekday and 3 Saturday trips with local flex route Midday shopper/ medical shuttle (3 days) Add Sunday service (3 trips)

Memo 6: Summary of Community Connector and Local Service

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Local Service

Local Service Plan Summary

Plan Phase	Existing/Near-Term	Short-Term	Mid-Term	Long-Term
Funding Level:	Existing+ STIF FY19-21	STIF FY22-23, FY23-24	STIF+Additional Sources	STIF+Additional Sources
Redmond	Dial-A-Ride <ul style="list-style-type: none"> 6:30 am – 6:00 pm Add deviated circulator route Add limited Saturday service (e.g. circulator route)	Possible conversion to deviated Fixed-Route service <ul style="list-style-type: none"> Weekday 6:30 am – 6:00 pm Saturday circulator route 	Fixed-Route, ADA, Limited Dial-A-Ride (or hybrid of fixed-route and deviated-routes) <ul style="list-style-type: none"> Weekday 6:30 am – 6:00 pm Saturday 7:00 am – 6:00 pm Evening Microtransit 	Fixed-Route, ADA, Limited Dial-A-Ride (or hybrid of fixed-route and deviated-routes) <ul style="list-style-type: none"> Weekday 6:30 am – 6:00 pm Saturday 7:00 am – 6:00 pm Sunday 8:00 am – 6:00 pm Evening Microtransit

Note: Preliminary assumptions for Redmond service; to be determined based on local transit study.

Memo 6: Summary of Community Connector and Local Service

Memo 6: Summary of Community Connector and Local Service

Finance Summary / Recommendations

- Existing CET funding, even including STIF, doesn't cover all short-term enhancements
- Many funding sources are stable or declining, while costs will increase over time
 - Input from local TAC meeting and outreach will be used to align short-term enhancements with funding
 - CET should only implement short-term enhancements that are sustainable given existing funding trends
- There is insufficient funding (existing+STIF) to implement all mid-term enhancements
 - CET would need to identify additional funding sources
- Long-term enhancements include various potential options and are not fiscally constrained

Note: Existing and Near-Term include funds available through STIF funding in the FY 2019-21 timeframe that will be used for services that CET has not yet started operating.

Finance Summary

Costs and Funding by Service Type and Area

Phase Name	Existing / Near-Term	Near-Term	Short-Term	Mid-Term	Long-Term	% Change (Exist. to Mid-Term)
Plan Years	2019-2020	2020-2021	2022-2025	2026-2030	2031-2040	
Representative Year	2019-2020	2020-2021	2024-2025	2029-2030	2039-2040	
Total Service Cost	\$6,432,000	\$8,695,000	\$11,028,000	\$22,480,000	\$44,171,000	
Existing + STIF Funding	\$6,456,000	\$9,890,000	\$11,000,000	\$12,500,000	\$16,000,000	
By Service Type						
Community Connector	\$1,338,000	\$2,351,000	\$3,089,000	\$4,802,000	\$9,336,000	259%
Fixed-Route	\$2,290,000	\$3,298,000	\$4,164,000	\$11,702,000	\$22,207,000	411%
Dial-A-Ride (All Communities)	\$2,804,000	\$3,046,000	\$3,775,000	\$5,976,000	\$12,628,000	113%
Community Connector						
Warm Springs - Madras: CC	\$229,000	\$273,000	\$392,000	\$575,000	\$1,023,000	151%
Madras - Redmond: CC	\$233,000	\$422,000	\$525,000	\$837,000	\$1,471,000	259%
Redmond - Bend: CC	\$342,000	\$493,000	\$664,000	\$928,000	\$1,659,000	171%
Prineville - Redmond: CC	\$164,000	\$416,000	\$517,000	\$810,000	\$1,415,000	394%
Sisters - Redmond: CC	\$91,000	\$125,000	\$155,000	\$201,000	\$335,000	121%
Sisters - Bend: CC	\$106,000	\$165,000	\$246,000	\$344,000	\$637,000	225%
La Pine - Bend: CC	\$174,000	\$285,000	\$357,000	\$460,000	\$861,000	164%
Warm Springs / Employment Areas: CC	\$0	\$79,000	\$99,000	\$367,000	\$859,000	-
La Pine - Sunriver: CC	\$0	\$75,000	\$93,000	\$121,000	\$809,000	-
Crooked River Ranch - Redmond: CC	\$0	\$16,000	\$20,000	\$53,000	\$89,000	-
Deschutes River Woods - Bend: CC	\$0	\$0	\$0	\$53,000	\$89,000	-

Memo 6: Summary of Community Connector and Local Service

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Finance Summary

Costs and Funding by Service Type and Area

Memo 6: Summary of Community Connector and Local Service

Phase Name	Existing / Near-Term	Near-Term	Short-Term	Mid-Term	Long-Term	% Change (Exist. to Mid-Term)
Plan Years	2019-2020	2020-2021	2022-2025	2026-2030	2031-2040	
Representative Year	2019-2020	2020-2021	2024-2025	2029-2030	2039-2040	
Total Service Cost	\$6,432,000	\$8,695,000	\$11,028,000	\$22,480,000	\$44,171,000	
Existing + STIF Funding	\$6,456,000	\$9,890,000	\$11,000,000	\$12,500,000	\$16,000,000	
Bend Local Service						
Bend: Fixed-Route	\$2,290,000	\$2,901,000	\$3,795,000	\$9,629,000	\$17,390,000	320%
Bend: Dial-A-Ride (Including microtransit)	\$1,141,000	\$1,226,000	\$1,528,000	\$3,445,000	\$5,929,000	202%
Non-Bend Local Service						
Redmond: Fixed-Route and/or Dial-A-Ride	\$912,000	\$1,381,000	\$1,583,000	\$3,260,000	\$7,128,000	257%
La Pine: Dial-A-Ride and/or Flex-Route	\$272,000	\$293,000	\$362,000	\$471,000	\$1,566,000	73%
Sisters: Dial-A-Ride and/or Flex-Route	\$14,000	\$30,000	\$37,000	\$48,000	\$80,000	243%
Madras: Dial-A-Ride and/or Flex-Route	\$227,000	\$257,000	\$317,000	\$412,000	\$1,370,000	81%
Prineville: Dial-A-Ride and/or Flex-Route	\$238,000	\$257,000	\$317,000	\$412,000	\$1,370,000	73%
Costs By Day of Week						
Weekday	\$6,018,000	\$7,724,000	\$9,938,000	\$20,001,000	\$37,028,000	232%
Saturday	\$318,000	\$788,000	\$862,000	\$1,943,000	\$3,238,000	511%
Sunday	\$95,000	\$104,000	\$129,000	\$169,000	\$3,047,000	78%

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Finance Summary

Costs and Funding by Qualified Entity, Existing Through Short-Term

Memo 6: Summary of Community Connector and Local Service

	Deschutes County		
Phase Name	Existing	Short-Term	Mid-Term
Plan Years	2019-2020	2022-2025	2026-2030
Representative Year	2019-2020	2024-2025	2029-2030
Service Cost	\$5,484,000	\$9,171,000	\$19,548,000
STIF Funding Only	N/A	\$4,411,000	\$5,630,000
By Service Type			
Community Connector	\$855,000	\$1,865,000	\$2,694,000
Fixed-Route	\$2,290,000	\$4,164,000	\$11,702,000
Dial-A-Ride (All)	\$2,339,000	\$3,142,000	\$5,152,000
Community Connector			
Warm Springs - Madras	\$0	\$0	\$0
Madras - Redmond	\$77,000	\$162,000	\$262,000
Redmond - Bend	\$342,000	\$664,000	\$928,000
Prineville - Redmond	\$66,000	\$167,000	\$272,000
Sisters - Redmond	\$91,000	\$155,000	\$201,000
Sisters - Bend	\$106,000	\$246,000	\$344,000
La Pine - Bend	\$174,000	\$357,000	\$460,000
Warm Springs / Employment Areas	\$0	\$0	\$0
La Pine - Sunriver	\$0	\$93,000	\$121,000
Crooked River Ranch - Redmond	\$0	\$20,000	\$53,000
Deschutes River Woods - Bend	\$0	\$0	\$53,000
Bend Local Service			
Bend: Fixed-Route	\$2,290,000	\$3,795,000	\$9,629,000
Bend: Dial-A-Ride	\$1,141,000	\$1,528,000	\$3,445,000
Non-Bend Local Service			
Redmond: Fixed-Route / DAR	\$912,000	\$1,583,000	\$3,260,000
La Pine: DAR / Flex-Route	\$272,000	\$362,000	\$471,000
Sisters: DAR / Flex-Route	\$14,000	\$37,000	\$48,000
Madras: DAR / Flex-Route	\$0	\$0	\$0
Prineville: DAR / Flex-Route	\$0	\$0	\$0

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Fleet and Facility Requirements

Fleet Requirements

Vehicles Required	Total Buses by Time Period				Incremental Buses by Time Period (vs. previous time period)		
	Existing	Short-Term	Mid-Term	Long-Term	Short-Term	Mid-Term	Long-Term
By Service Type	26	36	51	55	10	15	4
Community Connector	7	13	13	13	6	0	0
Fixed-Route	9	13	23	24	4	10	1
Dial-A-Ride	10	10	15	18	0	5	3
Bend and Redmond	16	20	35	36	4	15	1
Bend Fixed-Route	9	12	19	19	3	7	0
Bend DAR	4	4	8	8	0	5	0
Redmond Fixed-Route	0	1	4	5	1	3	1
Redmond Dial-A-Ride	4	4	4	4	0	1	0
By Vehicle Class	26	36	51	55	10	15	4
Large	1	2	2	2	1	0	0
Medium	15	22	32	33	7	10	1
Small	10	12	11	14	2	-1	3
Van	0	0	6	6	0	6	0

Memo 6:
Summary of
Community
Connector
and Local
Service

Table 21, Page 65

Preliminary assumptions pending local transit study


Fleet and Facility Requirements

Fleet Requirements

Vehicles Required	Total Buses by Time Period				Incremental Buses by Time Period (vs. previous time period)		
	Existing	Short-Term	Mid-Term	Long-Term	Short-Term	Mid-Term	Long-Term
By Community or Connection	26	36	51	55	10	15	4
Bend	13	16	27	27	3	12	0
Redmond	4	5	8	9	1	4	1
Redmond - Bend	1	2	2	2	1	0	0
La Pine	1	1	1	2	0	0	1
La Pine - Bend	1	1	1	1	0	0	0
La Pine - Sunriver	0	1	1	1	1	0	0
Sisters	0	0	0	0	0	0	0
Sisters - Redmond	1	1	1	1	0	0	0
Sisters - Bend	1	1	1	1	0	0	0
Madras	1	1	1	2	0	0	1
Madras - Redmond	1	2	2	2	1	0	0
Prineville	1	1	1	2	0	0	1
Prineville - Redmond	1	2	2	2	1	0	0
Warm Springs (incl in WS - Madras)	0	0	0	0	0	0	0
Warm Springs - Madras	1	1	1	1	0	0	0
Warm Springs / Employment Areas	0	1	1	1	1	0	0
Crooked River Ranch - Redmond	0	1	1	1	1	0	0

Memo 6:
Summary of
Community
Connector
and Local
Service

Table 21, Page 65



Memo 6: Summary of Community Connector and Local Service

- Do you have comments on the summary of recommended Community Connector and local services?
- 

Memo 7: Transit Vehicles

- When replacing existing and purchasing new vehicles, CET should consider the following amenities:
 - Low-floor vehicles for routes with high levels of wheelchair boardings and improved wheelchair equipment
 - Alternative fuel propulsion (energy efficient buses)
 - Enhanced communication equipment (e.g. bus radios)
 - Wifi equipped
 - Real-time arrival displays on buses

Memo 7: Transit Facilities

1

Transit Stops

2

**Transit Centers &
Mobility Hubs**

3

Park and Rides

4

**Maintenance
Centers**

Transit Stops

2040 TMP Transit Stops Cost Estimate

Service	Existing Transit Stops (\$1K/stop)	New Transit Stops (\$15K/stop)
Bend Fixed-Route	253	98
Community Connector	31	26
Redmond Fixed-Route	-	100
Madras Flex-Route	-	10
Prineville Flex-Route	-	10
Base Average Annual Cost		\$197K
Inflated Average Annual Cost		\$252K
Base Annual Average Cash Match (15%)		\$30K
Inflated Annual Average Cash Match (15%)		\$38K

Memo 7:
Transit
Facilities

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Memo 7: Transit Facilities

Type	Example Locations	Context (Transit and Land Use)	Mobility Services	Technology Features
Transit Center (Large-Scale)	<ul style="list-style-type: none"> ▶ Bend Hawthorne Station (or future replacement on eastside or South Downtown); ▶ Redmond Transit Center 	<ul style="list-style-type: none"> ▶ Central transit hub with multiple local and Community Connector routes 	<ul style="list-style-type: none"> ▶ Context-sensitive park-and-ride ▶ Drop-off area ▶ Car sharing ▶ Micromobility ▶ Short-term and long-term/secure bike parking 	<ul style="list-style-type: none"> ▶ Real-time information ▶ Off-board fare payment
Secondary Transit Hub (Bend)	<ul style="list-style-type: none"> ▶ Cascade Village (North) ▶ Walmart (South) ▶ OSU (West) ▶ St. Charles (East) ▶ Hawthorne Station (if Transit Center is relocated) ▶ South Downtown/Old Mill (vicinity of Colorado-/Arizona) ▶ North Downtown (vicinity of Newport & Wall/Bond) 	<ul style="list-style-type: none"> ▶ Major activity center with 2+ connecting routes ▶ Potential Community Connector stop 	<ul style="list-style-type: none"> ▶ Context-sensitive park-and-ride ▶ Drop-off area ▶ Car sharing ▶ Micromobility ▶ Short-term and long-term/secure bike parking 	<ul style="list-style-type: none"> ▶ Real-time information ▶ Off-board fare payment
Secondary Hub / Small-Scale Transit Center (Regional)	<ul style="list-style-type: none"> ▶ Sisters (northwest of downtown) ▶ Madras ▶ Metolius ▶ Culver ▶ Warm Springs ▶ Prineville (near Thriftway or Rays) 			
Major Activity Center	<ul style="list-style-type: none"> ▶ North Downtown Bend (vicinity of Newport/Hawthorne) ▶ COCC ▶ Forum Shopping Center ▶ Major employment areas 	<ul style="list-style-type: none"> ▶ High ridership stop 	<ul style="list-style-type: none"> ▶ Micromobility 	<ul style="list-style-type: none"> ▶ Real-time information ▶ Off-board fare payment
Local Neighborhood	<ul style="list-style-type: none"> ▶ Local route terminus ▶ Neighborhood stop (fixed-route or deviated route) 	<ul style="list-style-type: none"> ▶ Low-to-medium density residential land uses ▶ Can be employed with micromobility where urban form limits transit access 	<ul style="list-style-type: none"> ▶ Drop-off area ▶ Micromobility 	<ul style="list-style-type: none"> ▶ Real-time information
Local stops	<ul style="list-style-type: none"> ▶ Typical stop 		<ul style="list-style-type: none"> ▶ Bike parking 	
Park-and-ride lots (major or minor)	<ul style="list-style-type: none"> ▶ ODOT P&R ▶ Mt. Bachelor 	<ul style="list-style-type: none"> ▶ City edge for unstructured parking ▶ Structured parking opportunities in central city, dense mixed use development areas 	<ul style="list-style-type: none"> ▶ Micromobility ▶ Bike parking ▶ Drop off area 	<ul style="list-style-type: none"> ▶ Real-time information



Memo 7: Transit Facilities

- Do you have comments on the recommended transit facilities?
- 

Strategies for Transit- Supportive Land Use

Developing effective strategies for implementation of transit-supportive land use involves the following steps:

- 1. Propose potential strategies (Memo 5). ✓*
- 2. Assess these strategies through Project Management Team (PMT), TAC, and Steering Committee review. ✓*
- 3. As needed following team and committee review, consult existing jurisdictions' development codes to assess the need for potential strategies. **(NEXT STEP)***
- 4. Refine the strategies into draft and then final adoption-ready code language as part of the 2040 CET TMP draft and final documents.*

Next Step: Angelo Planning Group will work with local agencies to turn recommended strategies into “adoption ready” implementation language to be included in the 2040 CET TMP and to be considered for adoption by each jurisdiction following adoption of the TMP.

Memo 5 - Proposed Transit- Supportive Strategies

TOD Strategy	Redmond	Prineville	Madras	Warm Springs	Sisters	La Pine	Crook, Deschutes, & Jefferson Counties
Coordination							
Coordination with Transit Provider	<i>Recommended</i>						
Transit Stop Improvements							
Uses							
Accessory Dwelling Units	<i>Optional</i>						
Mixed Use							
Major Trip Generator Uses							
Limit Auto-Oriented Uses	<i>Recommended</i>	<i>Optional</i>					
Limit Drive-Throughs							
Development Standards							
Residential Density	<i>Optional</i>						
Min. FAR or Lot Coverage							
Max. Front Yard Setbacks	<i>Recommended</i>	<i>Recommended</i>	<i>Recommended [no min setback]</i>	<i>Optional</i>			
Pedestrian Space in Front Setback		<i>[max. setback or no min. setback]</i>	<i>Optional</i>				
Pedestrian Orientation (Basic)		<i>Recommended</i>					
Pedestrian Orientation (Enhanced)	<i>Recommended</i>	<i>Optional</i>					
Add. Height for Housing	<i>Optional</i>						
Access							
Block Length	<i>Recommended</i>	<i>Optional</i>					
Accessways Through Long Blocks							
Parking							
No Vehicle Parking/Circulation in Front Setback	<i>Recommended</i>			<i>Optional</i>			
Parking Maximums	<i>Optional</i>						
Parking Reductions for Transit	<i>Recommended</i>		<i>Optional</i>				
Landscaping in Parking Lots				<i>Recommended</i>		<i>Optional</i>	
Preferential Parking for Ridesharing				<i>Recommended</i>			
Bicycle Parking							
Transit-Related Uses in Parking Lots	<i>Recommended</i>						

Next Steps

Meetings

- **Local TAC Meetings**
(January – February 10th, 2020)
- **Online Open House**
(January 29th – February 17th, 2020)
- **Steering Committee**
(March 11th, 2020)

Next Memos

- Implementation Plan
- Draft Transit Development Plan
- Local Agency Briefings – Summer 2020
- Final Steering Committee Meeting – Summer 2020
- COIC Board and Local Adoption – Fall 2020

Adjourn