

# CET 2040 Transit Master Plan

Local TAC Meeting #2 – Sisters

January 29<sup>th</sup>, 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

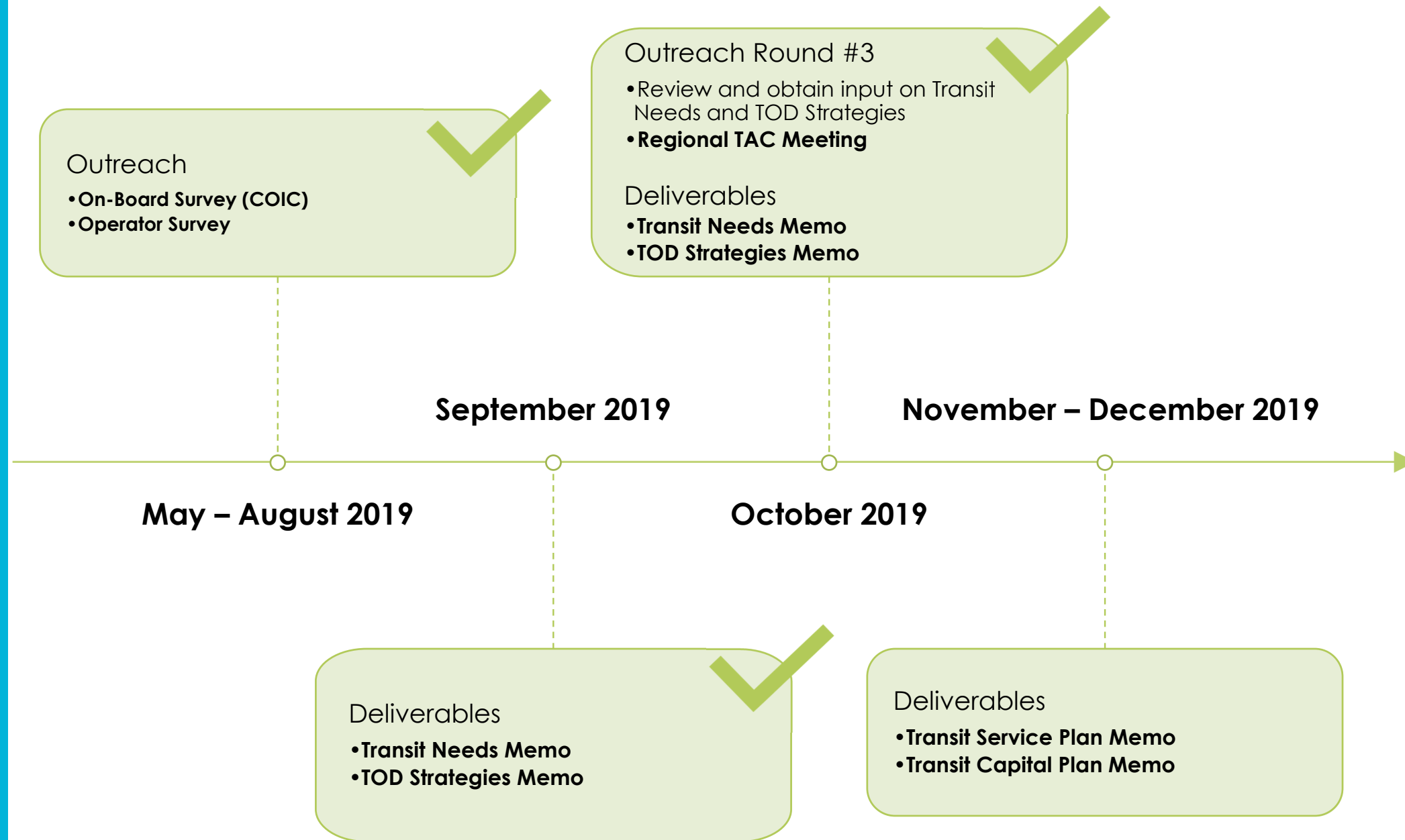
## Desired Outcomes

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

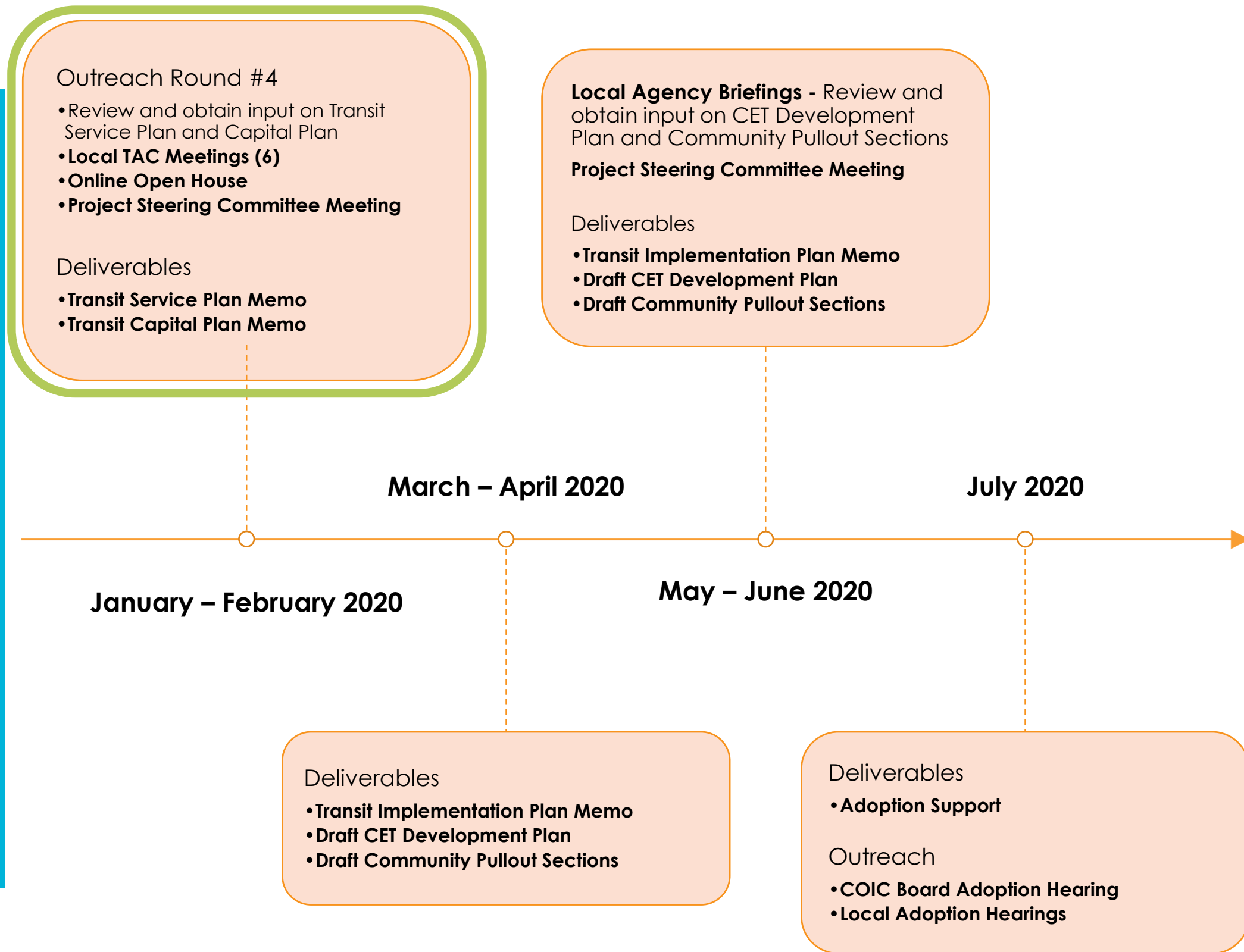
# Project Status and Schedule

(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
- 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

Funding Source	Sub-System or Qualified Entity	Sample Fiscal Year			
		2019-2020	2024-2025	2029-2030	2039-2040
<b>Total Existing Revenue</b>	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
<b>STIF</b>	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
<b>TOTAL</b>		<b>\$9,425,740</b>	<b>\$11,185,109</b>	<b>\$12,571,468</b>	<b>\$16,141,111</b>

# Memo 6: Plan Phases & Funding Assumptions

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
<b>A</b>	Existing Revenue Sources (excluding STIF)	Includes both sub-systems	\$5,831,740	\$6,129,217	\$6,441,869	\$7,115,831
<b>B</b>	Existing Revenue Sources (including STIF)	N/A	\$9,425,740	\$11,185,109	\$12,571,468	\$16,141,111
<b>C1</b>	Existing + STIF + 0.02% Property Tax	Within counties	-	\$18,832,255	\$22,331,381	\$32,038,980
<b>C2</b>		Within incorporated areas	-	\$15,427,578	\$17,986,054	\$24,960,900
<b>D</b>	Existing + STIF + Employer-Based Payroll Tax	N/A	-	\$16,241,000	\$18,701,068	\$25,166,391
<b>D1</b>	Existing + STIF + Property Tax + Payroll Tax	0.02% Property Tax within Counties	-	\$23,888,147	\$28,460,980	\$41,064,260
<b>D2</b>		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 <sup>1</sup>	Near-Term <sup>2</sup>	Short-Term <sup>2</sup>	Mid-Term <sup>2</sup>	Long-Term <sup>2</sup>
	2019-2020	2020-2021	2024-2025	2029-2030	2039-2040
<b>Bend Dial-A-Ride</b>	\$74.15	\$81	\$101	\$132	\$220
<b>Bend Fixed-Route</b>	\$75.18	\$82	\$102	\$133	\$223
<b>Rural Dial-A-Ride</b>	\$87.14	\$94	\$116	\$151	\$251
<b>Rural Community Connector</b>	\$95.34	\$103	\$128	\$166	\$277
<b>Rural Route 20</b>	\$79.26	\$86	\$107	\$139	\$231
<b>Peer Median<sup>3</sup></b>	\$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

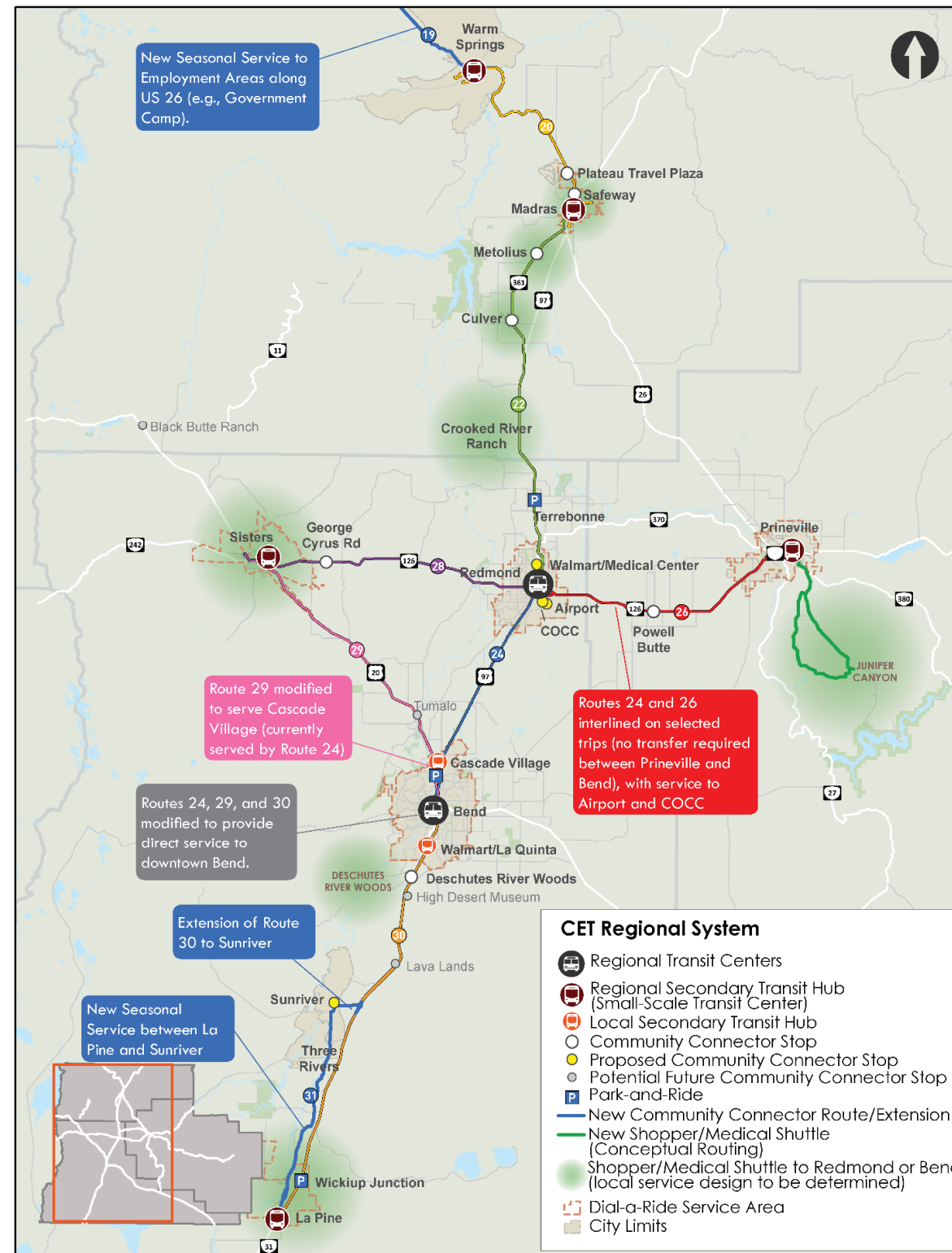


Figure 3, Page 14

## Modifications to Existing Services

### Route 28: Sisters-Redmond

- Improve local stop branding and amenities within Sisters (see Capital Plan)
- Add additional local circulation (see Sisters local service section below), 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

# Memo 6: Community Connector Service

## Modifications to Existing Services

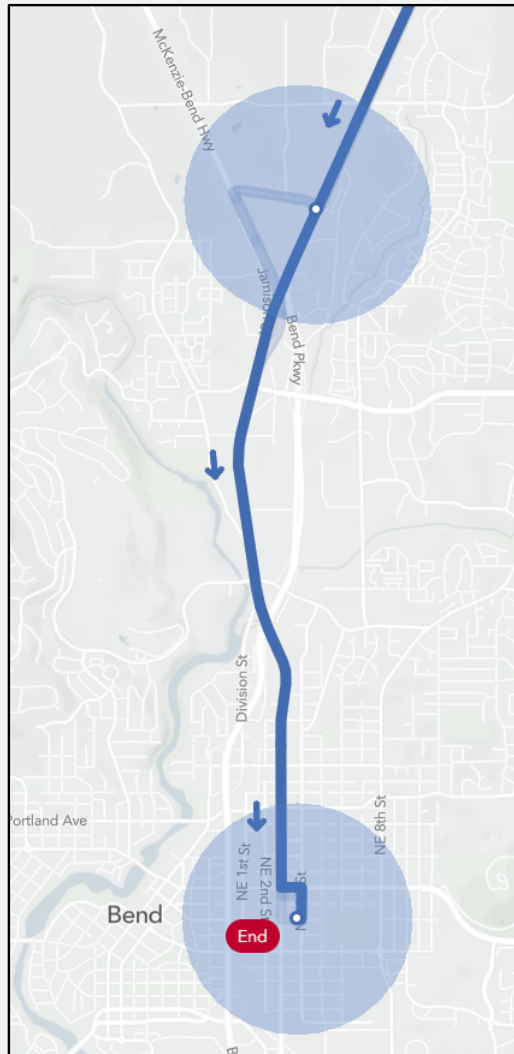
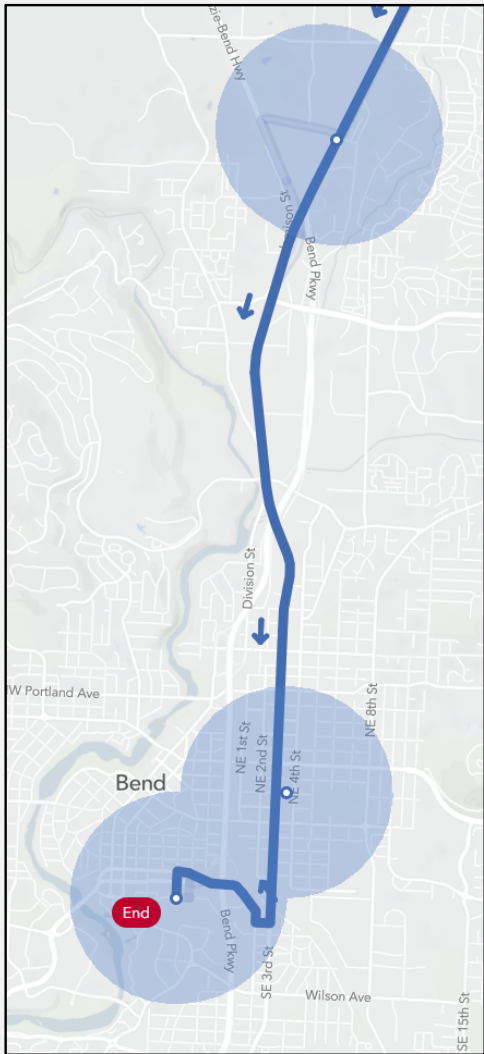

### Route 29: Sisters-Bend

- Improve local stop branding and amenities within Sisters
- Contingent on roadway improvements, stop at Tumalo between Sisters and Bend
- Provide a stop at Cascade Village in Bend
- Modify routing in Bend to provide more direct service (see image in next slide):
  - Currently, Route 29 stops at Hawthorne Station.
  - In the near- to short-term, Route 29 could be modified to continue to downtown while maintaining a stop on the eastside near Hawthorne Station.
  - Longer-term, Route 29 could circulate through downtown enroute to a south downtown mobility hub
- Add additional local circulation (see Sisters local service section below), 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
- 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 <sup>rd</sup> & Hawthorne South Downtown Hub	Cascade Village North Downtown Hub South Downtown Hub <i>no stop on eastside</i>
Map			

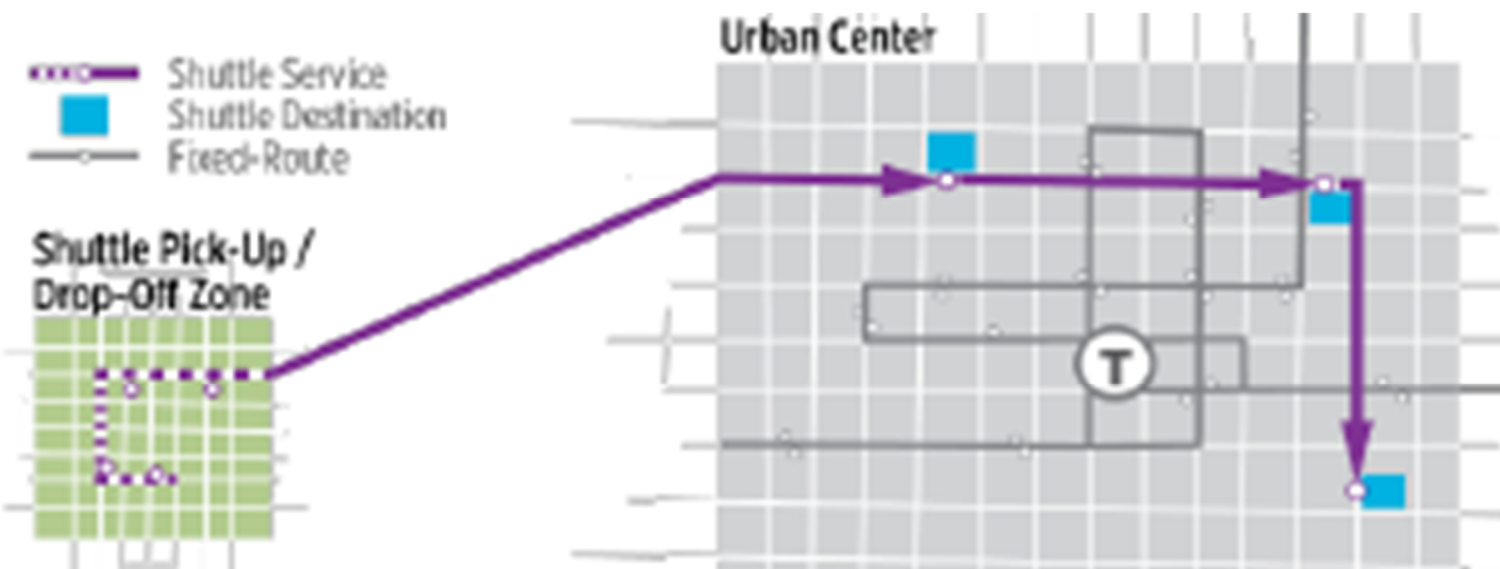
Memo 6:  
Community  
Connector  
Service

Figure 4, Page 16

## 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



# Service Enhancements

## Sisters

- Maintain existing Dial-A-Ride, which operates only two hours per day, one day per week (baseline), but is planned to expand to two days per week.
- Introduce a flex-route which would be operated by the Route 28 and/or 29 Community Connector vehicles. Figure 26 illustrates existing Dial-A-Ride travel patterns, which could be used as the basis for the route design.
- Replace the existing Dial-A-Ride with a late morning/midday shopper medical shuttle to Bend operating 2-3 days per week (as part of Route 29); this could alternatively go to Redmond, depending on community input. Service could expand to 5 days per week based on demand; see Community Connector section.

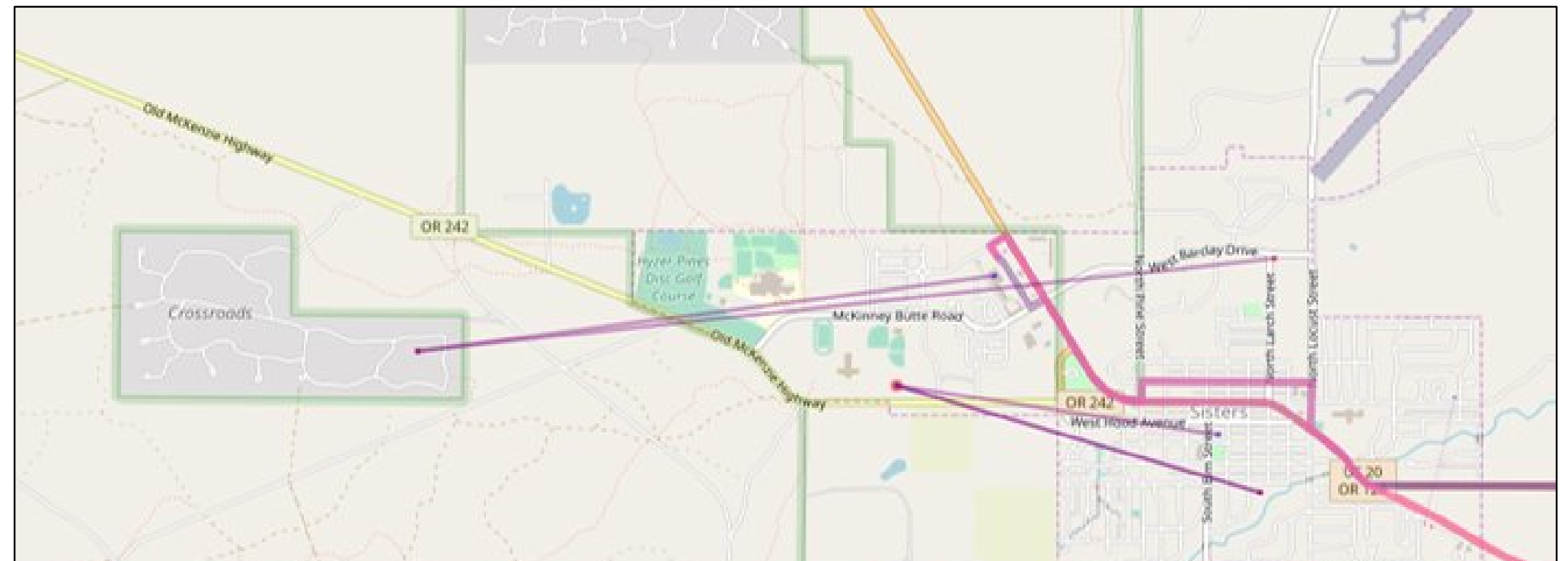


Figure 26, Page 50

# Memo 6: Local Service in Smaller Communities

## 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
<b>Route 28 Sisters – Redmond</b>	<ul style="list-style-type: none"> <li>Maintain existing service (3 trips)</li> <li>Add flex route in Sisters</li> </ul>	<ul style="list-style-type: none"> <li>3 weekday trips with local flex route</li> </ul>	<ul style="list-style-type: none"> <li>3 weekday trips with local flex route</li> </ul>	<ul style="list-style-type: none"> <li>3 weekday trips with local flex route</li> </ul>
<b>Route 29 Sisters - Bend</b>	<ul style="list-style-type: none"> <li>Maintain existing weekday service (3 trips)</li> <li>Add flex route in Sisters</li> <li>Add Saturday service (3 trips)</li> <li>Add midday shopper/ medical shuttle trip (2 days)</li> </ul>	<ul style="list-style-type: none"> <li>3 weekday and 3 Saturday trips with local flex route</li> <li>Midday shopper/ medical shuttle (2 days)</li> </ul>	<ul style="list-style-type: none"> <li>3 weekday and 3 Saturday trips with local flex route</li> <li>Expand midday shopper/ medical shuttle to 3 days per week</li> </ul>	<ul style="list-style-type: none"> <li>3 weekday and 3 Saturday trips with local flex route</li> <li>Midday shopper/ medical shuttle (3 days)</li> <li>Add Sunday service (3 trips)</li> </ul>
<b>Route 30 La Pine – Bend</b>	<ul style="list-style-type: none"> <li>Maintain existing weekday service (4 trips)</li> <li>Add flex route in La Pine</li> <li>Add Saturday service (3 trips)</li> <li>Add midday shopper/ medical shuttle trip (3 days)</li> </ul>	<ul style="list-style-type: none"> <li>4 weekday and 3 Saturday trips with local flex route</li> <li>Midday shopper/ medical shuttle (3 days)</li> </ul>	<ul style="list-style-type: none"> <li>4 weekday and 3 Saturday trips with local flex route</li> <li>Midday shopper/ medical shuttle (3 days)</li> </ul>	<ul style="list-style-type: none"> <li>4 weekday and 3 Saturday trips with local flex route</li> <li>Midday shopper/ medical shuttle (3 days)</li> <li>Add Sunday service (3 trips)</li> </ul>

# Memo 6: Summary of Community Connector and Local Service

Table 18, Page 60-61



# 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
<b>Sisters</b>	Dial-A-Ride <ul style="list-style-type: none"> <li>Tuesday only 9-10 am, 1-2 pm)</li> <li>Add 2nd day of service</li> </ul>	Dial-A-Ride <ul style="list-style-type: none"> <li>2 days, limited hours</li> </ul> Route 29/30 flex-route Saturday limited circulation as part of Route 29 flex-route  Expand service boundaries to meet rural need	Dial-A-Ride <ul style="list-style-type: none"> <li>2 days, limited hours</li> </ul> Route 29/30 flex-route Saturday limited circulation as part of Route 29 flex-route	Dial-A-Ride <ul style="list-style-type: none"> <li>2 days, limited hours</li> </ul> Route 29/30 flex-route Saturday and Sunday limited circulation as part of Route 29 flex-route

# 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
  - CET should only implement short-term enhancements that are sustainable given existing funding trends
  - Input from local TAC meeting and outreach will be used to align short-term enhancements with funding
- 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	
<b>By Service Type</b>						
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%
<b>Community Connector</b>						
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

Table 16, Page 58

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

Table 16, Page 58

# 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
<b>By Service Type</b>			
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
<b>Community Connector</b>			
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
<b>Bend Local Service</b>			
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
<b>Non-Bend Local Service</b>			
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

Table 17, Page 59

# 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
<b>By Community or Connection</b>	<b>26</b>	<b>36</b>	<b>51</b>	<b>55</b>	<b>10</b>	<b>15</b>	<b>4</b>
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 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
<b>Base Average Annual Cost</b>		\$197K
<b>Inflated Average Annual Cost</b>		\$252K
<b>Base Annual Average Cash Match (15%)</b>		\$30K
<b>Inflated Annual Average Cash Match (15%)</b>		\$38K

Memo 7:  
Transit  
Facilities

Table 7, Page 9

## Memo 7: Transit Facilities

### Transit Stops

- Transit stop investments should also incorporate the following amenities where appropriate:
  - Real-time arrival displays on shelters
  - Improved maps
  - Improved signage
  - Visitor kiosks
  - Crossing and safety improvements
- Low stress active transportation networks are critical to providing access to public transportation services.
  - Improving walking and biking routes along and cross roadways around bus stops makes it safer and more comfortable to access transit.
  - CET should coordinate with local partners to prioritize and improve the pedestrian and bicycle access on these routes.



# Memo 7: Transit Facilities

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



# 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
<b>Coordination</b>							
Coordination with Transit Provider	<i>Recommended</i>						
Transit Stop Improvements							
<b>Uses</b>							
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							
<b>Development Standards</b>							
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>						
<b>Access</b>							
Block Length	<i>Recommended</i>	<i>Optional</i>					
Accessways Through Long Blocks							
<b>Parking</b>							
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 10<sup>th</sup>, 2020)
- **Online Open House**  
(January 29<sup>th</sup> – February 17<sup>th</sup>, 2020)
- **Steering Committee**  
(March 11<sup>th</sup>, 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