



# Multnomah County Transportation Division Needs Assessment Advisory Team

June 21, 2024

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- **Margi Bradway**,  
Director of Community Services
- **Jon Henrichsen**,  
Transportation Division Director
- **Taylor Steenblock**,  
Strategic Initiatives Manager
- **Britta Schinske**,  
Finance Director
- **Jessica Berry**,  
Transportation Deputy Director
- **Chet Hagen**,  
Asset Management & Continuous Improvement Program Manager
  
- **Kelsi Pothier**
- **Hal Gard**
- **Kurt Playstead**

## Project Purpose:

*Consider and frame the Transportation Division's 10-year future funding needs, service levels, and structure.*

## Tasks

- Today: Refined Future State Options

## Today's Objectives

- Review five options

# Five Investment Scenarios

Scenario:	Status Quo	Needs Met	Rural Roads	Bridges	Safety, Equity and Accessibility
	Revenue and expenditures remain at FY2024, levels. Capital projects are completed at current spending levels.	Revenue matches County needs. All projects identified are completed. Staffing matches needs and maintenance shifts to a proactive approach.	Pavement and adjacent assets on rural roads are brought to a state of good repair. Other assets and service levels remain at status quo.	Willamette River Bridges and small bridges are brought to a state of good repair including seismic enhancements and life safety. Other assets and service levels remain at status quo.	The Urban East area and downtown bridges are the safety focus; accessibility includes the active transportation network. Service Levels and Asset Stewardship in the Urban East area exceed network average.
Service Levels:					
Asset Stewardship:					
Total 10-year Investment:	\$879M	\$1,480M	\$987M	\$1,047M	\$1,289M
Total 10-year Funding Gap:	\$63M	\$647M	\$204M	\$214M	\$455M

Legend

- Achieved
- Progress
- Remote

Legend

- VERY GOOD
- GOOD
- FAIR
- POOR



# Status Quo

Expenditures remain consistent with FY24 dollars. No additional revenue sources are added, existing revenue remains flat. Staffing remains constant, skill sets match current organizational structure. Service levels decrease, and condition of assets deteriorate.

### 10-year needs:

State/County Revenue: \$727M  
 Estimated Grant Revenue : \$ 90M  
 Estimated Revenue: \$816M

Estimated Revenue \$816M  
 Estimated Expenses: \$879M

**Gap: \$ 63M**

### Minimal investment in:

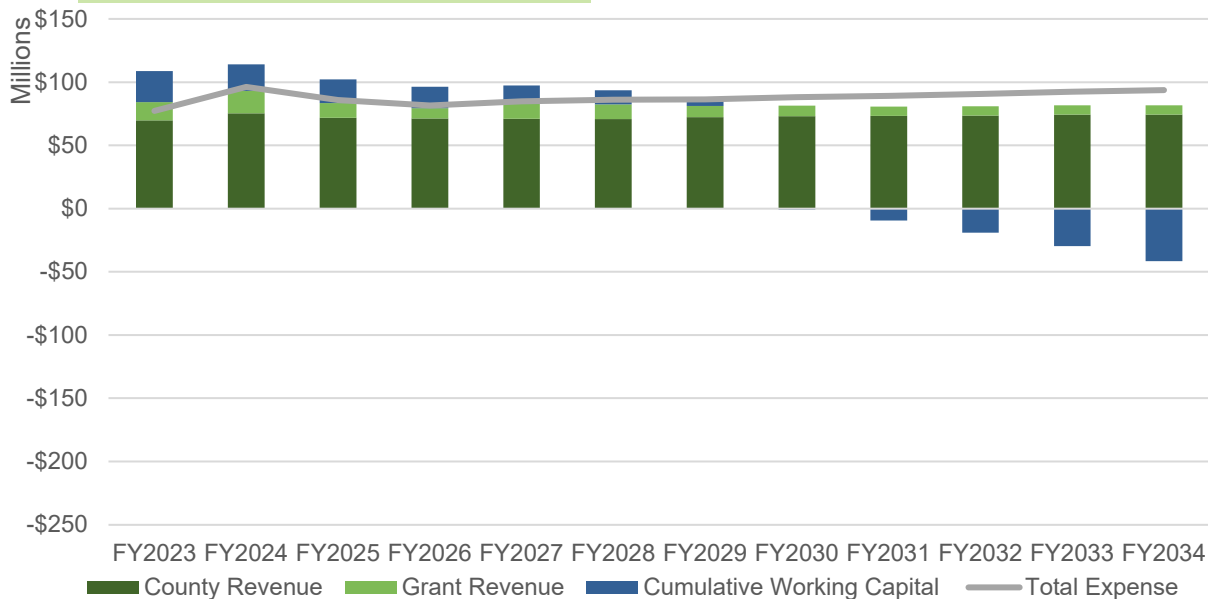
- Climate
- Resilience
- Community Health and Safety
- Stormwater

## Service Levels

	Current FY24	Projected FY34
Sidewalk AT Network Complete	Remote	Remote
ADA Compliant Curb Ramps	Remote	Remote
ADA Compliant Sidewalks	Progress	Progress
Urban Ride Quality	Progress	Remote
Rural Ride Quality	Achieved	Remote
Stair and Sidewalk Cleaning	Progress	Progress
Removing Graffiti	Achieved	Progress
Cleaning Debris and Removal	Progress	Progress
Emergency Response on Roads & Bridges	Progress	Progress
WRB Opened Promptly and Fully	Progress	Progress

Ride Quality drops significantly, other service levels decrease.

## Revenue and Expenditures



## Asset Stewardship

	Current FY24	Projected FY34
Willamette River Bridges	FAIR	GOOD
Roads	FAIR	POOR
Small Bridges	FAIR	GOOD
Traffic Signs	POOR	POOR
Catch Basins	VERY GOOD	GOOD
Culverts	FAIR	POOR

Condition data not available for Roads Right of Way and Stormwater

Assets cannot be maintained to desired condition.

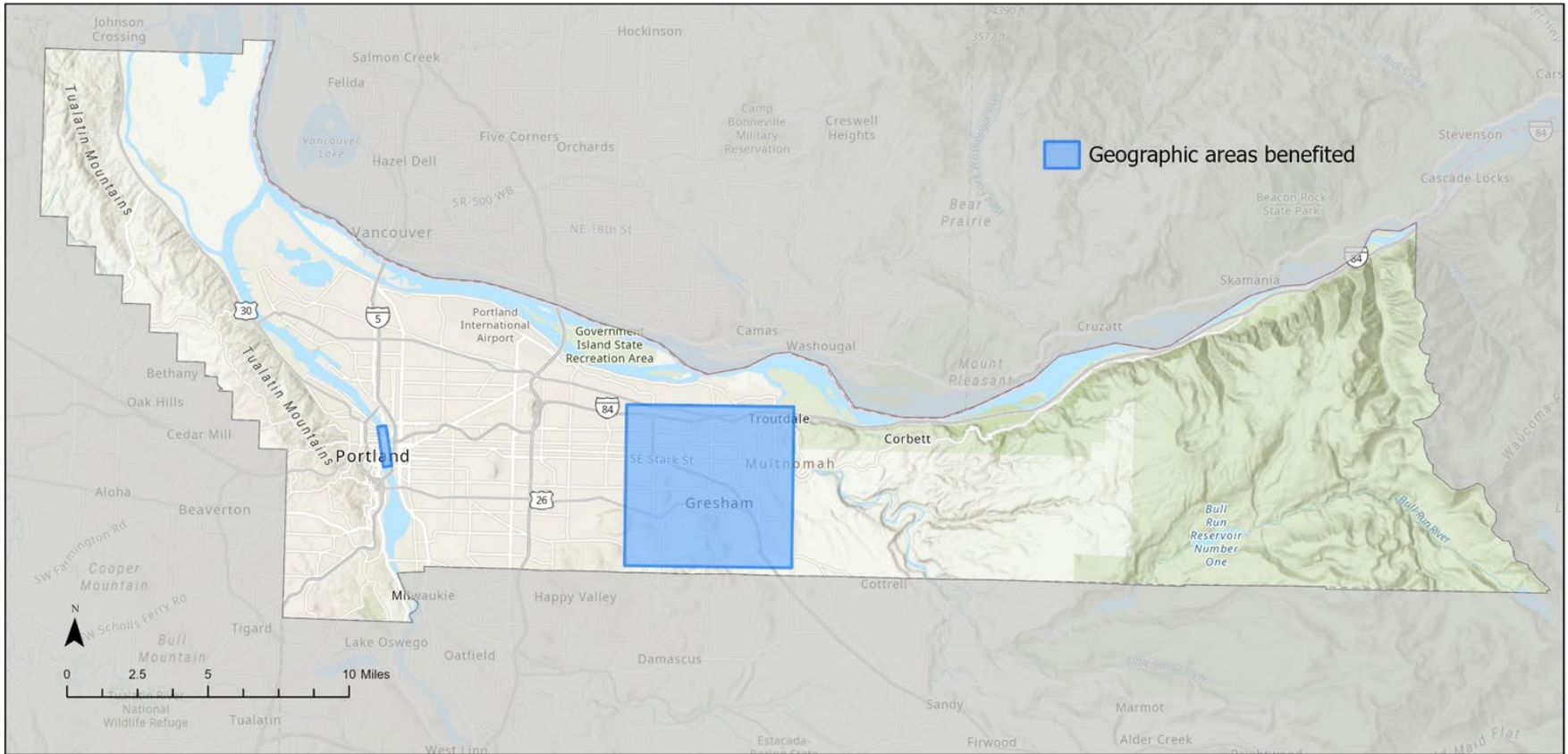
Asset condition will deteriorate, with the exception with Willamette River Bridges and Small Bridges, due to projects underway.



# Status Quo



**Revenue and expenditures are consistent with FY2024.**





# Needs Met

Significant capital investment is made to bring assets to a condition where they can be maintained by County Staff. Funding sources are in place to support County goals. A Quick Build Program is established with 4 new staff. Staffing needs and competencies are evaluated to meet the County needs to sustain Service Levels and Asset Stewardship, including 5 staff for the small bridge program.

**10-year needs:**  
 State/County Revenue: \$727M  
 Estimated Grant Revenue: \$107M  
 Estimated Revenue: \$834M

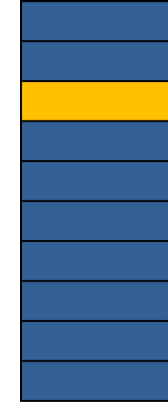
Estimated Revenue \$ 834M  
 Estimated Expenses: \$1,480M  
**Gap: \$ 647M**

Minimal investment in:  
 • Stormwater

## Service Levels

	Current FY24
Sidewalk AT Network Complete	Remote
ADA Compliant Curb Ramps	Remote
ADA Compliant Sidewalks	Progress
Urban Ride Quality	Progress
Rural Ride Quality	Achieved
Stair and Sidewalk Cleaning	Progress
Removing Graffiti	Achieved
Cleaning Debris and Removal	Progress
Emergency Response on Roads & Bridges	Progress
WRB Opened Promptly and Fully	Progress

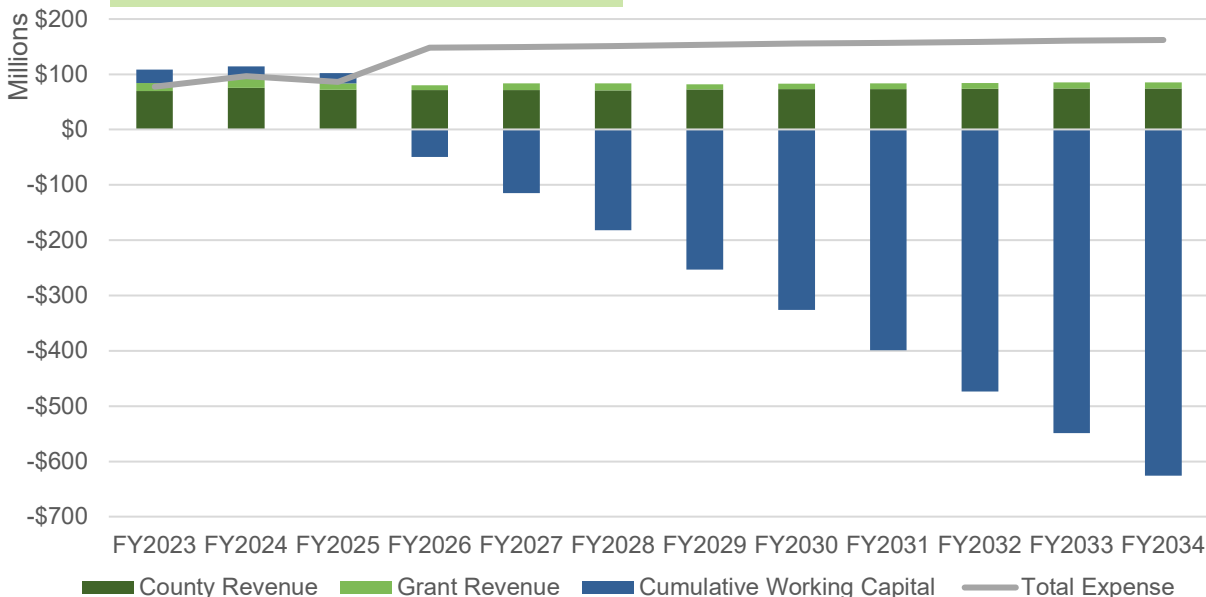
Projected FY34



Legend
Achieved
Progress
Remote

Staff are proactively working to achieve service levels and are available to respond to issues raised by residents. Capital investment addresses ride quality, AT Network, and ADA compliance.

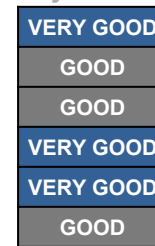
## Revenue and Expenditures



## Asset Stewardship

	Current FY24
Willamette River Bridges	FAIR
Roads	FAIR
Small Bridges	FAIR
Traffic Signs	POOR
Catch Basins	VERY GOOD
Culverts	FAIR

Projected FY34



Legend
85 - 100
70 - 85
50 - 70
20 - 50
0 - 20

Condition data not available for Roads Right of Way and Stormwater

Assets are in a state of good repair. O&M focus has shifted to preventive maintenance. There are limited number of emergency failures.

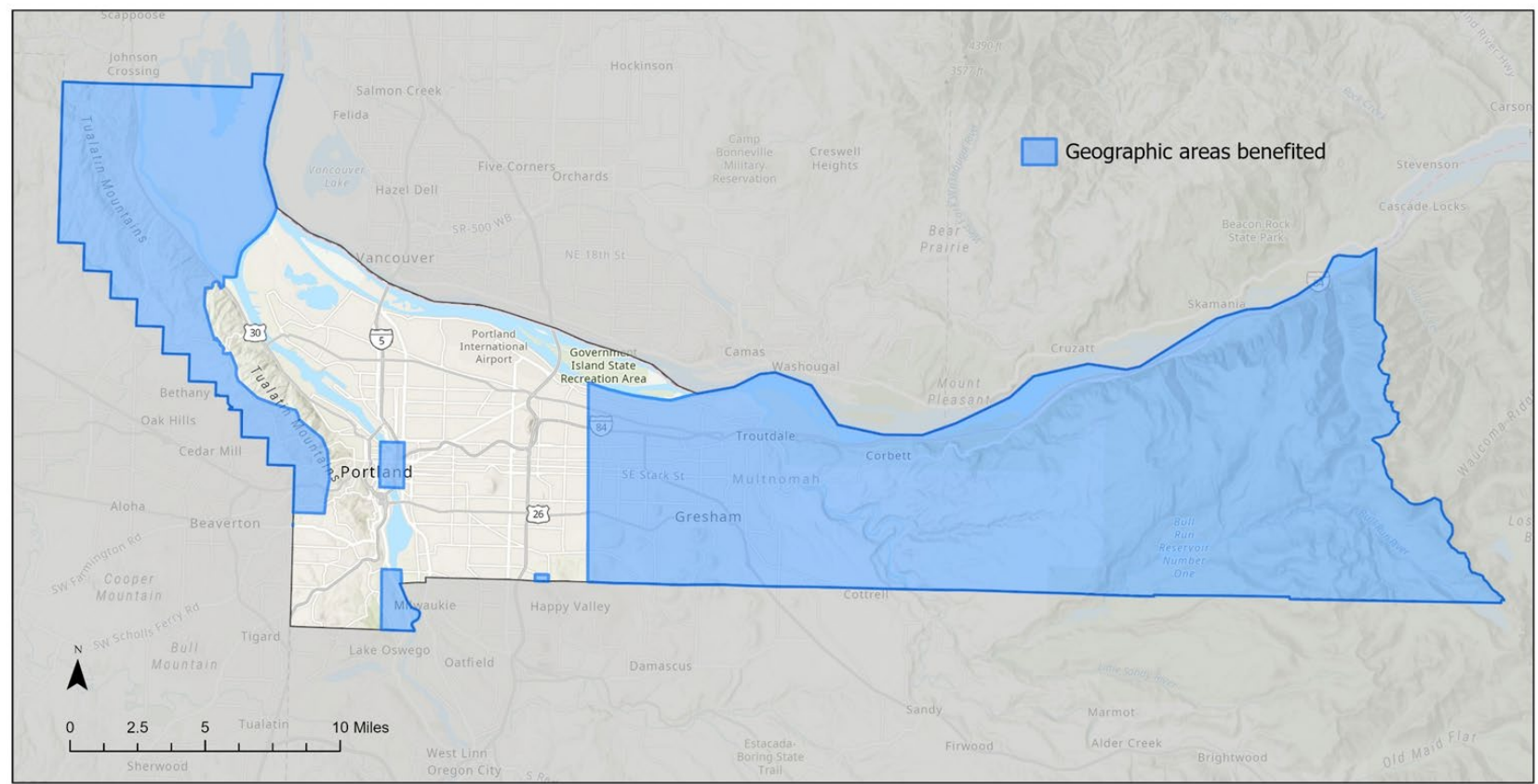
Asset lifecycle needs drive funding requirements.



# Needs Met



**Revenue matches County needs. Identified projects are completed.**





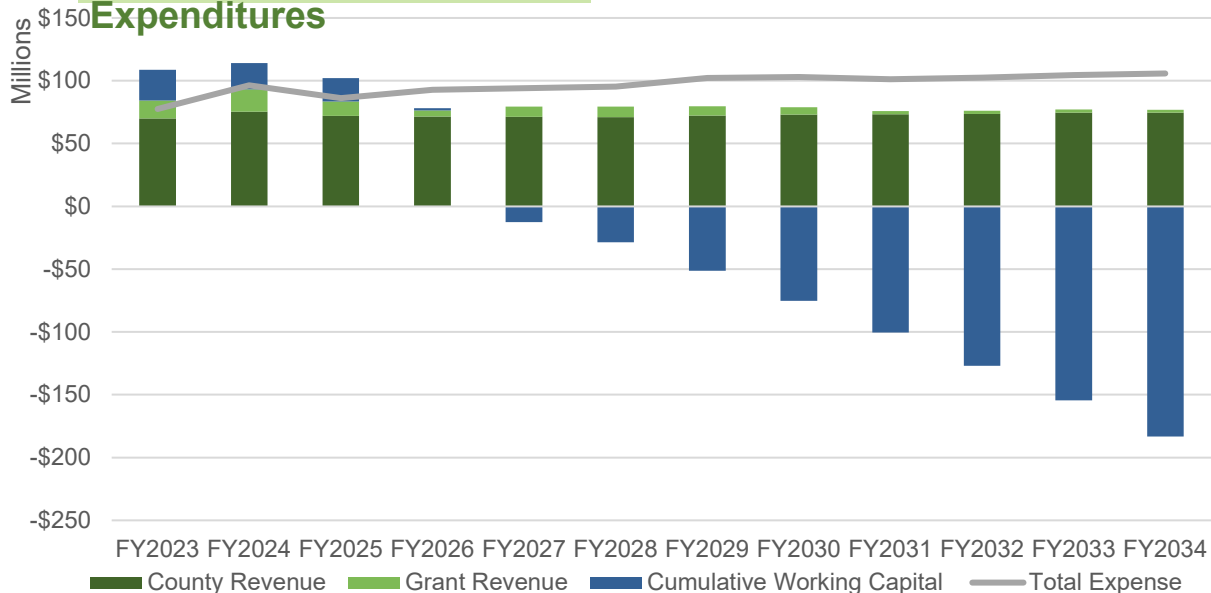
# Rural Roads

Investments focus on rural roads and adjacent assets to bring rural ride quality to a level that meets County goals. Rural ride quality can be maintained by County staff. Other assets have minimal investments made in them. Staffing remains similar to FY24 levels, competencies are evaluated as attrition happens and adjusted to meet the County needs.

10-year needs:  
 State/County Revenue: \$727M  
 Estimated Grant Revenue: \$56M  
 Estimated Revenue: \$783M  
 Estimated Revenue Minimal investment in: \$783M  
 Estimated Expenses: \$987M  
**Gap: \$204M**

- Climate
- Stormwater
- Urban Roads

## Revenue and Expenditures



## Service Levels

	Current FY24
Sidewalk AT Network Complete	Remote
ADA Compliant Curb Ramps	Remote
ADA Compliant Sidewalks	Progress
Urban Ride Quality	Progress
Rural Ride Quality	Achieved
Stair and Sidewalk Cleaning	Progress
Removing Graffiti	Achieved
Cleaning Debris and Removal	Progress
Emergency Response on Roads & Bridges	Progress
WRB Opened Promptly and Fully	Progress

Projected FY34

Sidewalk AT Network Complete	Remote
ADA Compliant Curb Ramps	Remote
ADA Compliant Sidewalks	Progress
Urban Ride Quality	Remote
Rural Ride Quality	Achieved
Stair and Sidewalk Cleaning	Progress
Removing Graffiti	Achieved
Cleaning Debris and Removal	Progress
Emergency Response on Roads & Bridges	Progress
WRB Opened Promptly and Fully	Progress

Legend
Achieved
Progress
Remote

Ride Quality for rural roads is at a level the County accepts. Urban ride quality decreases due to minimal investments.

## Asset Stewardship

	Current FY24
Willamette River Bridges	FAIR
Roads	FAIR
Small Bridges	FAIR
Traffic Signs	POOR
Catch Basins	VERY GOOD
Culverts	FAIR

Projected FY34

Willamette River Bridges	GOOD
Roads	FAIR
Small Bridges	GOOD
Traffic Signs	FAIR
Catch Basins	GOOD
Culverts	GOOD

Legend
85 - 100
70 - 85
50 - 70
20 - 50
0 - 20

Condition data not available for Roads Right of Way and Stormwater

Rural roads are in a condition that can be maintained by County Staff. Road adjacent assets, culverts and traffic signs are renewed as rural roads are renewed.

Bridge projects that have funding are completed, including Burnside and Stark Street.

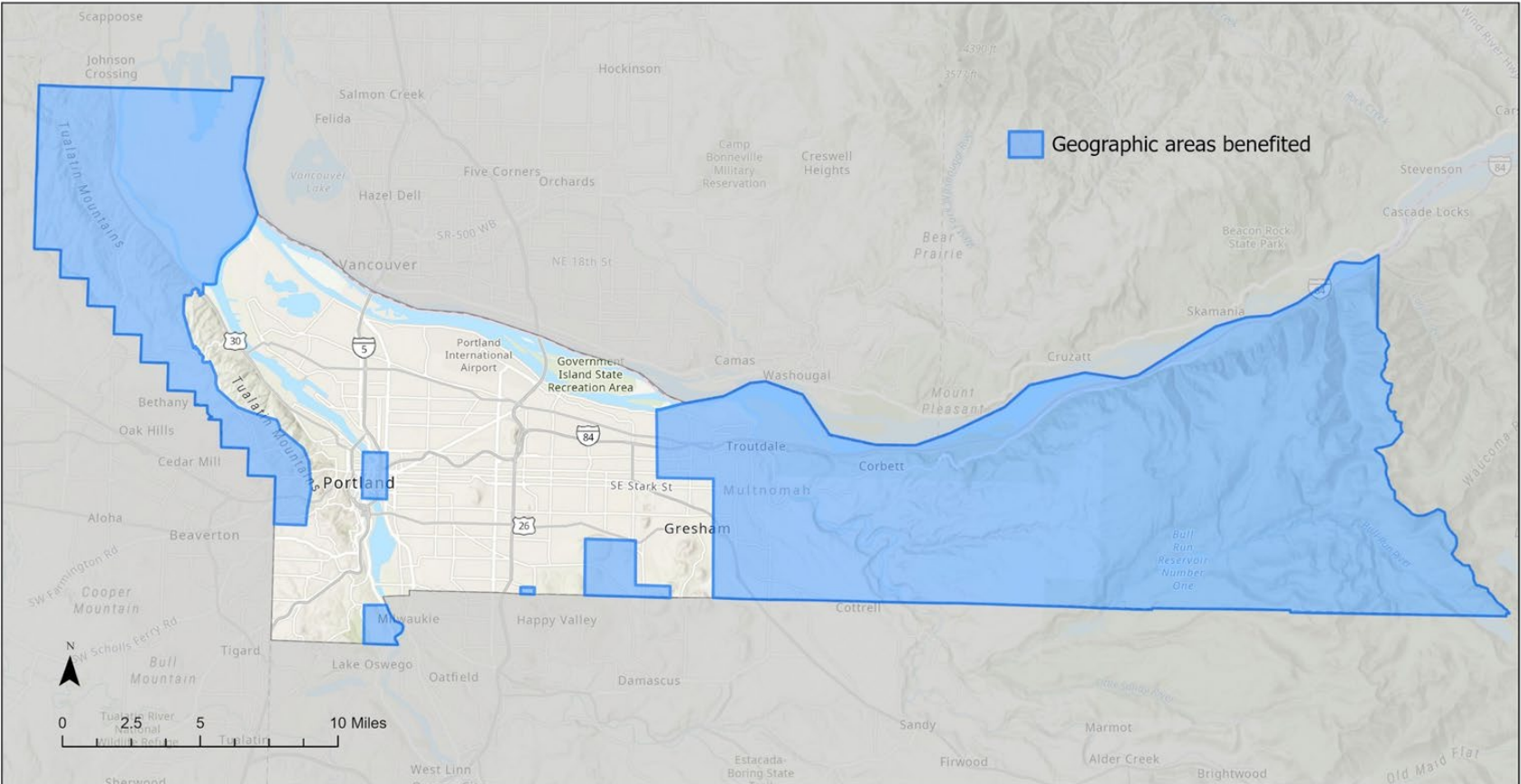




# Rural Roads



**Investment is made in Rural Roads**





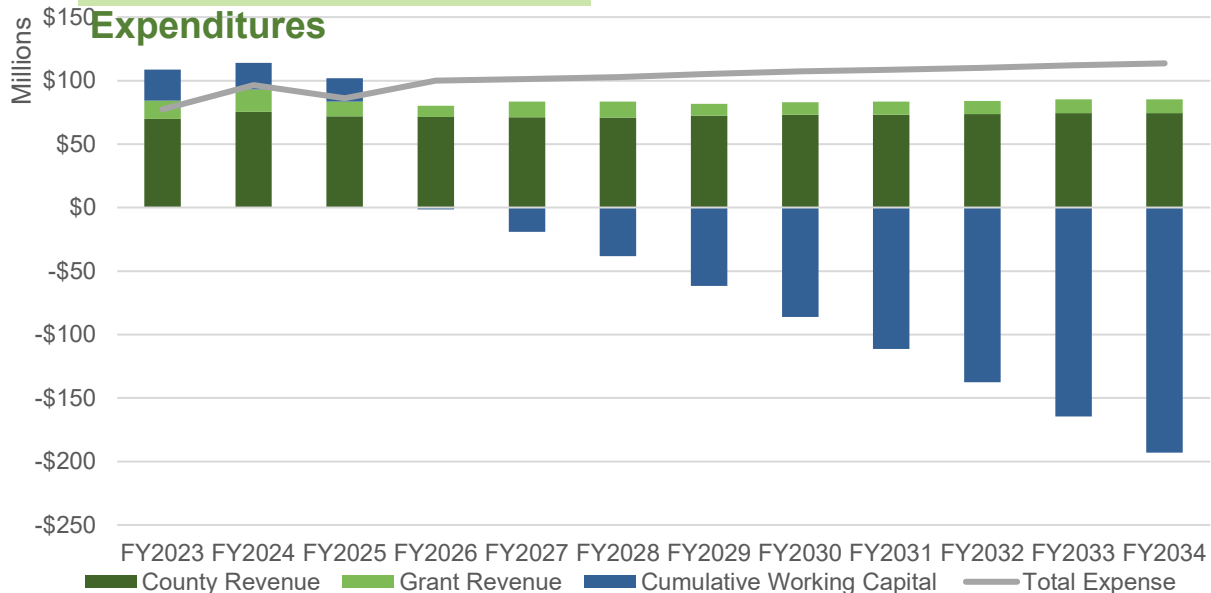
# Bridges

Capital investment focuses on Willamette River Bridges and small bridges. Willamette River Bridges have been rehabilitated and seismic enhancements completed. All bridges are in a condition where they can be maintained by County staff. Staffing needs and competencies are evaluated, 5 staff are added to support the small bridges program.

**10-year needs:**  
 State/County Revenue: \$727M  
 Estimated Grant Revenue : \$107M  
 Estimated Revenue: \$834M  
 Minimal investment in: \$1,017M  
 Estimated Expenses: \$800M  
 Gap: \$214M



## Revenue and Expenditures



## Service Levels

	Current FY24	Projected FY34
Sidewalk AT Network Complete	Remote	Remote
ADA Compliant Curb Ramps	Remote	Remote
ADA Compliant Sidewalks	Progress	Progress
Urban Ride Quality	Progress	Remote
Rural Ride Quality	Achieved	Remote
Stair and Sidewalk Cleaning	Progress	Progress
Removing Graffiti	Achieved	Progress
Cleaning Debris and Removal	Progress	Progress
Emergency Response on Roads & Bridges	Progress	Progress
WRB Opened Promptly and Fully	Progress	Achieved

Investment focus supports Willamette River Bridges and small bridges.

## Asset Stewardship

	Current FY24	Projected FY34
Willamette River Bridges	FAIR	VERY GOOD
Roads	FAIR	POOR
Small Bridges	FAIR	VERY GOOD
Traffic Signs	POOR	POOR
Catch Basins	VERY GOOD	GOOD
Culverts	FAIR	POOR

Condition data not available for Roads Right of Way and Stormwater

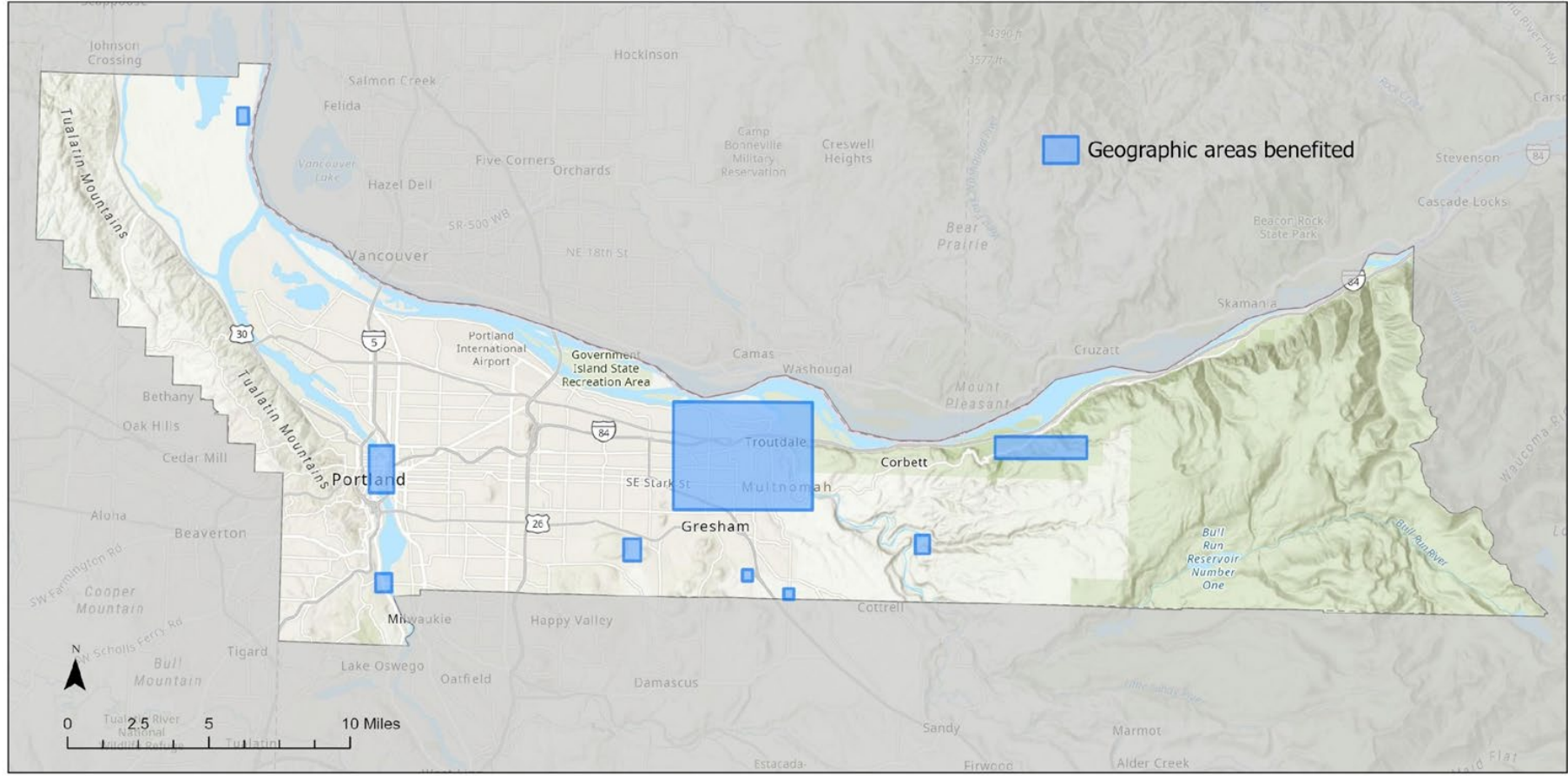
Willamette River Bridges and small bridges are in a state of good repair and can be maintained by County Staff.



# Bridges



**Investment is made in Willamette River and small bridges**





# Safety, Equity and Accessibility

This scenario encompasses the Urban East area, downtown bridges, ball banking project and active transportation network. Capital expenditures are focused on these specific areas. A Quick Build Program is established with 4 new staff. Service levels and asset condition in these areas is higher than the network average. Other areas of the county are like Status Quo.

10-year needs:  
 State/County Revenue: \$727M  
 Estimated Grant Revenue: \$107M  
 Estimated Revenue: \$834M  
 Estimated Revenue: \$834M  
 Estimated Expenses: \$1,289M  
**Gap: \$455M**

Minimal investment in:

- Climate
- Stormwater
- Rural Roads

## Service Levels

	Current FY24
Sidewalk AT Network Complete	Remote
ADA Compliant Curb Ramps	Remote
ADA Compliant Sidewalks	Progress
Urban Ride Quality	Progress
Rural Ride Quality	Achieved
Stair and Sidewalk Cleaning	Progress
Removing Graffiti	Achieved
Cleaning Debris and Removal	Progress
Emergency Response on Roads & Bridges	Progress
WRB Opened Promptly and Fully	Progress

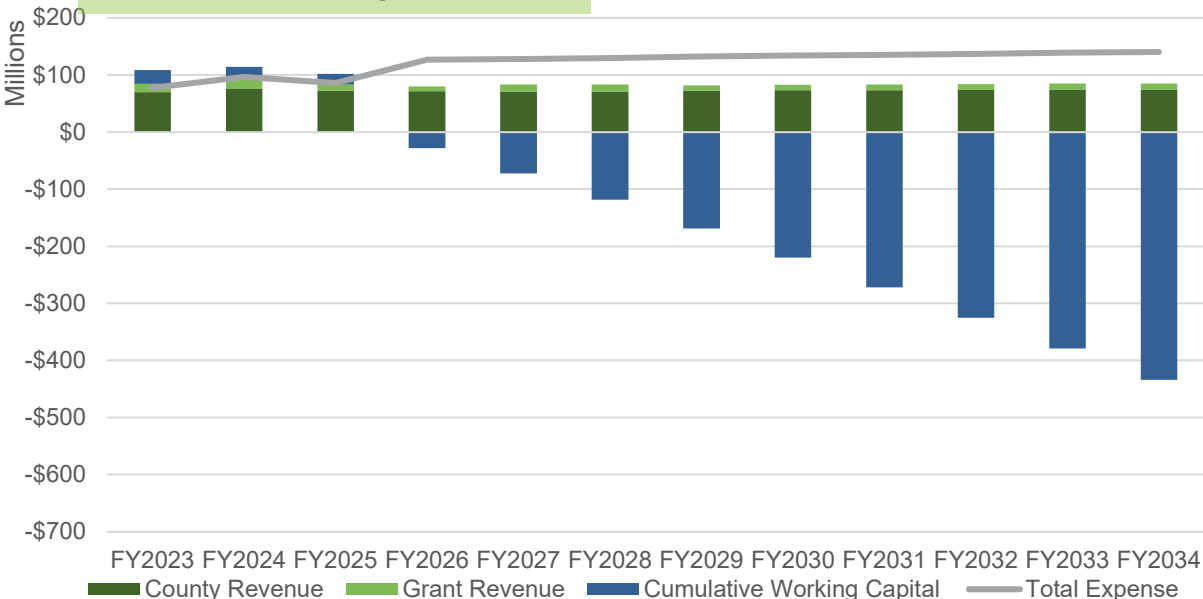
Projected FY34

Sidewalk AT Network Complete	Achieved
ADA Compliant Curb Ramps	Achieved
ADA Compliant Sidewalks	Progress
Urban Ride Quality	Achieved
Rural Ride Quality	Remote
Stair and Sidewalk Cleaning	Progress
Removing Graffiti	Progress
Cleaning Debris and Removal	Progress
Emergency Response on Roads & Bridges	Progress
WRB Opened Promptly and Fully	Progress

Legend
Achieved
Progress
Remote

Urban ride quality increases, while rural ride quality drops. The AT network increases, ADA Curb Ramps are replaced, other service levels remain constant.

## Revenue and Expenditures



## Asset Stewardship

	Current FY24
Willamette River Bridges	FAIR
Roads	FAIR
Small Bridges	FAIR
Traffic Signs	POOR
Catch Basins	VERY GOOD
Culverts	FAIR

Projected FY34

Willamette River Bridges	VERY GOOD
Roads	POOR
Small Bridges	GOOD
Traffic Signs	GOOD
Catch Basins	GOOD
Culverts	FAIR

Condition data not available for Roads Right of Way and Stormwater  
 Asset condition shown is for the network, Safety focused areas are in better condition

Assets in the Urban East and downtown bridges are in good and very good condition. Traffic signs are significantly better due the ball banking project. Network wide, roads have declined to a poor condition.

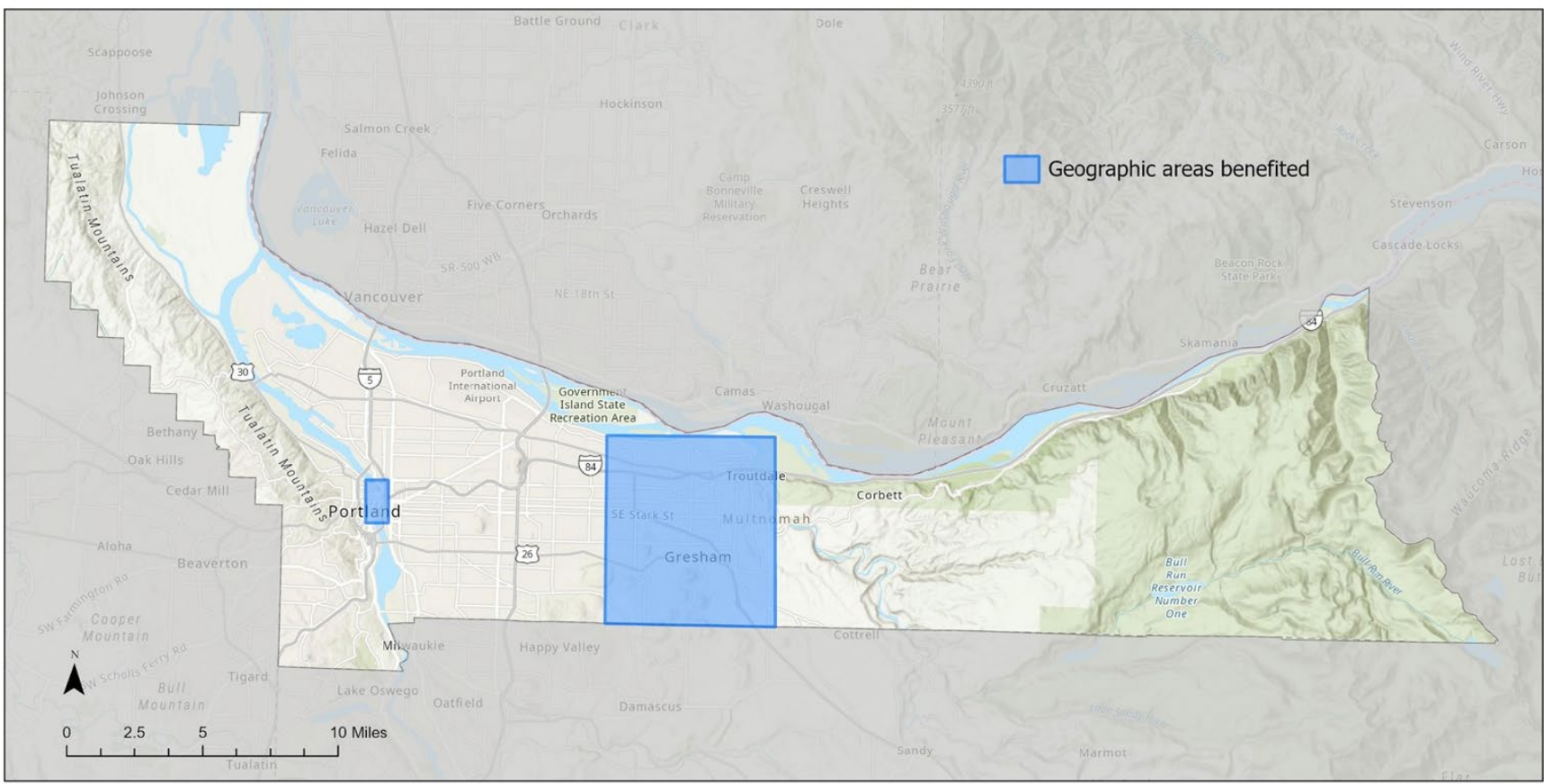
Legend
85 - 100
70 - 85
50 - 70
20 - 50
0 - 20



# Safety, Equity and Accessibility



**Investments are made in Urban East, accessibility and AT Network**



## Service Levels

Defined:	Service Levels are those activities the County measures to quantify how they are performing in specific areas.
Inputs/References:	Draft Community Charter, Cartegraph OMS Work Orders, Asset Management Plans
Assumptions:	<p>Status Quo</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> ADA Compliant Curb Ramps are installed (50/year)</li> <li><input type="checkbox"/> Asset Condition affects Urban and Rural Ride Quality</li> <li><input type="checkbox"/> Other measures are performed at the same level as today</li> </ul> <p>Needs Met</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Capital Investments are made to bring assets to an acceptable level where the County can maintain them at that level</li> <li><input type="checkbox"/> ADA Compliant Curb Ramps are installed (50/year)</li> <li><input type="checkbox"/> Staff has the qualifications and competencies to carry out all work</li> <li><input type="checkbox"/> County has the right mix and number of staff</li> <li><input type="checkbox"/> Quick Build Program is established with 4 staff</li> </ul> <p>Rural Roads</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Capital Investments are made to bring Rural Ride Quality to the desired level</li> <li><input type="checkbox"/> ADA Compliant Curb Ramps are installed (50/year)</li> <li><input type="checkbox"/> Staff has the qualifications and competencies to carry out all work</li> <li><input type="checkbox"/> County has the right mix and number of staff</li> </ul> <p>Bridges</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Capital Investments are made to bring Willamette River Bridges to the desired level</li> <li><input type="checkbox"/> Capital Investments are made to bring small bridges to the desired level</li> <li><input type="checkbox"/> ADA Compliant Curb Ramps are installed (50/year)</li> <li><input type="checkbox"/> Staff has the qualifications and competencies to carry out all work</li> <li><input type="checkbox"/> County has the right mix and number of staff</li> </ul> <p>Safety, Equity and Accessibility</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Capital Investments are made and projects where accessibility is part of the project are completed</li> <li><input type="checkbox"/> Equity is geographic equity (Urban East)</li> <li><input type="checkbox"/> Ball Banking Project is completed</li> <li><input type="checkbox"/> ADA Compliant Curb Ramps are installed (50/year)</li> <li><input type="checkbox"/> Roads in the Urban East are invested in</li> <li><input type="checkbox"/> Other assets are maintained at the same level as Status Quo</li> <li><input type="checkbox"/> Quick Build Program is established with 4 staff</li> </ul>
Probabilities/ Uncertainties:	<ul style="list-style-type: none"> <li>? County has the ability to develop staff with competencies desired</li> <li>? Projects are completed as desired</li> </ul>

## Asset Stewardship

Defined:	Asset Condition is the average condition of the network of the assets.
Inputs/References:	GIS, Cartegraph OMS, Pavement Model, Asset Management Plans
Assumptions:	<p>Status Quo</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Capital Spend remains at FY24 level</li> <li><input type="checkbox"/> Maintenance is performed at the same level as today</li> </ul> <p>Needs Met</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Capital Investments are made to bring all assets to the desired condition</li> <li><input type="checkbox"/> When investment is made, assets are in very good condition</li> <li><input type="checkbox"/> All Traffic Signs in Fair, Poor and Very Poor condition are replaced and project for ball banking signs (~2000 signs is completed)</li> <li><input type="checkbox"/> 50% of culverts are replaced</li> <li><input type="checkbox"/> Small bridges have 5 additional dedicated staff</li> </ul> <p>Rural Roads</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Capital Investments are made to bring rural pavement to the desired condition</li> <li><input type="checkbox"/> When investment is made, assets are in very good condition</li> <li><input type="checkbox"/> All Traffic Signs in Fair, Poor and Very Poor condition are replaced</li> <li><input type="checkbox"/> 50% of culverts are replaced</li> </ul> <p>Bridges</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Capital Investments are made to bring Willamette River Bridges to the desired level</li> <li><input type="checkbox"/> Capital Investments are made to bring small bridges to the desired level</li> <li><input type="checkbox"/> When investment is made, assets are in very good condition</li> <li><input type="checkbox"/> Small bridges have 5 additional dedicated staff</li> </ul> <p>Safety, Equity and Accessibility</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Capital Investments are made to bring pavement to the desired condition in Urban East area</li> <li><input type="checkbox"/> Projects where accessibility is part of the project are completed</li> <li><input type="checkbox"/> 35% of Traffic Signs are replaced and the ball banking project is completed</li> <li><input type="checkbox"/> 8% of culverts are replaced</li> <li><input type="checkbox"/> Other assets are maintained at the same level as Status Quo</li> </ul>
Probabilities/ Uncertainties:	<ul style="list-style-type: none"> <li>? Assets may not be in very good condition after investment is made</li> <li>? Assets assumed to be replaced may not be in condition assumed (ex. Very Poor)</li> <li>? Asset condition may not follow assumed deterioration</li> </ul>

# Assumptions



## Revenue and Expenditures

Defined:	Revenues and Expenditures are the cash flows in and out of the County, forecasted into the future.
Inputs/References:	Multnomah County 5-Year Plans, 2023-2045 CIP, Provided ODOT SHF Forecast, Consultations with Multnomah County
Assumptions:	<p>General</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> All forecasts based on Multnomah County 5-Year Plans, extended out to 2034. Variation with plans comes from different inflation inputs, and Scenario spending.</li> <li><input type="checkbox"/> Revenues see no growth or inflation. State Highway Fund revenue based on ODOT forecast.</li> <li><input type="checkbox"/> Forecasted project spending up to 2034 based on Multnomah County 2023-2045 CIP, with projects being allocated under different relevant scenarios.</li> <li><input type="checkbox"/> Assumed grant match of 89% of costs for bridges projects, and 75% for road projects. Consistent with historic levels.</li> <li><input type="checkbox"/> Based on consultation with Multnomah County, the maximum annual total grant revenue is limited to \$8 million, subjected to annual inflation. 65% is assumed for bridges and 35% for roads.</li> <li><input type="checkbox"/> Labor Costs have 3% inflation post 2028. Personnel numbers stay flat post 2028</li> <li><input type="checkbox"/> General costs inflated by 3%, with some capital and indirect costs having a higher rate applied.</li> <li><input type="checkbox"/> Forecasted capital costs assumed to have 20% cost overrun, not covered by grants.</li> <li><input type="checkbox"/> Working capital begins at \$17.5m 2023 level and depends directly on the cumulative gap between revenues and expenses.</li> <li><input type="checkbox"/> We assume project revenue is equal to grant revenue.</li> <li><input type="checkbox"/> Initial ADA Project cost of \$3.7m in FY25 for all scenarios.</li> <li><input type="checkbox"/> Alternative scenarios from status quo have start year of 2026.</li> </ul> <p>Status Quo</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Current committed projects serve as baseline capital spending level, which is continued to 2034.</li> <li><input type="checkbox"/> No O&amp;M costs purely uplifted by inflation.</li> </ul> <p>Need Met</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> All projects within CIP included.</li> <li><input type="checkbox"/> Additional 20% O&amp;M cost uplift on top of inflation.</li> <li><input type="checkbox"/> Additional \$500k cost for Quick Build Program, along with 4 FTEs. 5 Additional FTEs for Small Bridges Staffing.</li> </ul> <p>Rural Roads</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Specific subset of road projects in CIP included.</li> <li><input type="checkbox"/> Additional 10% O&amp;M cost uplift on top of inflation, to allow for expanded operations.</li> <li><input type="checkbox"/> No grant funds for rural roads projects. Thus, grant revenue assumed as 14% of capital cost, based on the mix of rural to urban road projects in the scenario CIP.</li> </ul> <p>Bridges</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Specific subset of road projects in CIP included, with some additional bridge projects</li> <li><input type="checkbox"/> Additional 15% O&amp;M cost uplift on top of inflation, to allow for expanded operations.</li> <li><input type="checkbox"/> 5 Additional FTEs for Small Bridges Staffing</li> </ul> <p>Safety and Accessibility</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Near all CIP projects included, with some omissions.</li> <li><input type="checkbox"/> Additional 15% O&amp;M cost uplift on top of inflation, to allow for expanded operations.</li> <li><input type="checkbox"/> Additional \$500k cost for Quick Build Program, along with 4 FTEs.</li> </ul>
Probabilities/ Uncertainties:	<ul style="list-style-type: none"> <li>? Inflation rates may differ from forecast</li> <li>? Project costs could likely differ from CIP quote</li> </ul>

Finalize  
Presentation

Provide  
Background  
Information

Additional  
Support as  
Needed



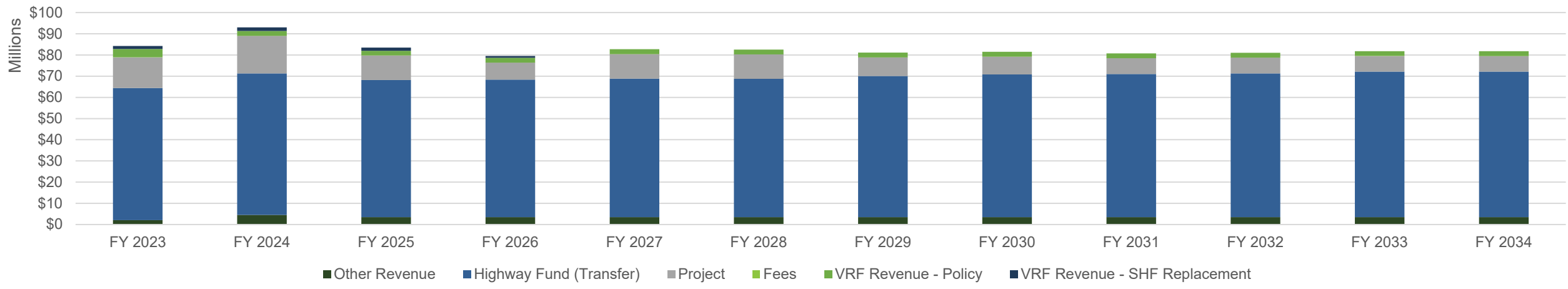
**JACOBS<sup>®</sup>**  
**THANK**  
**YOU**



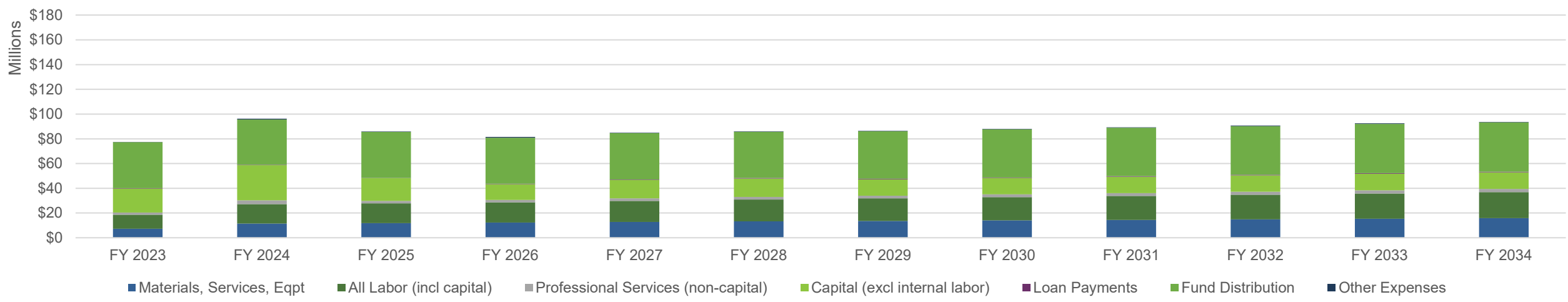


# Status Quo

### Total Revenue by Source



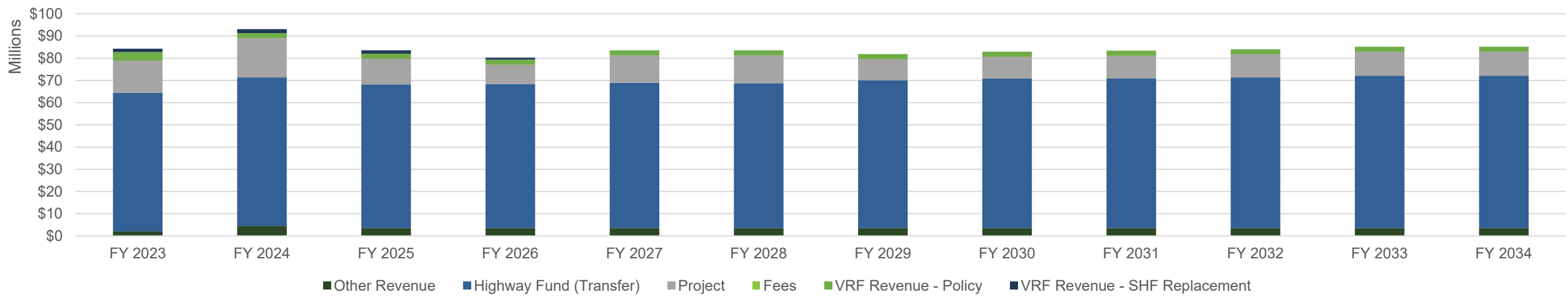
### Total Cost by Category



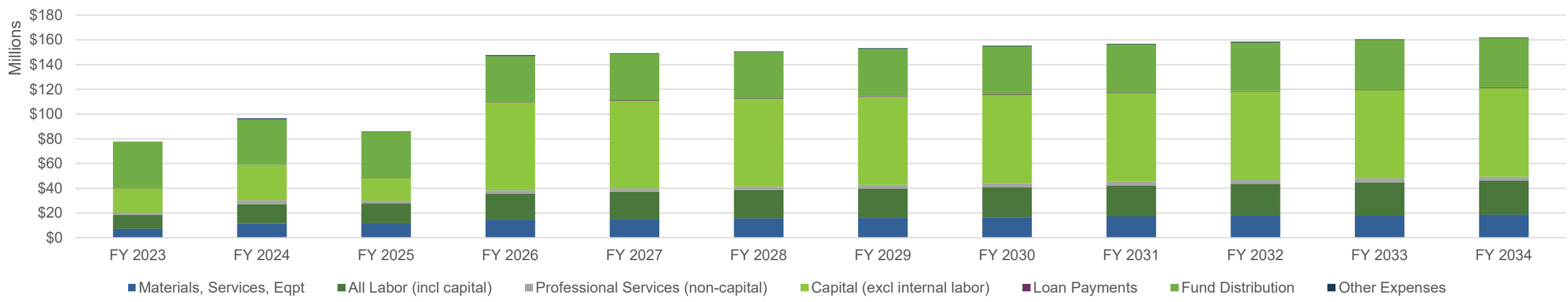


# Needs Met

### Total Revenue by Source



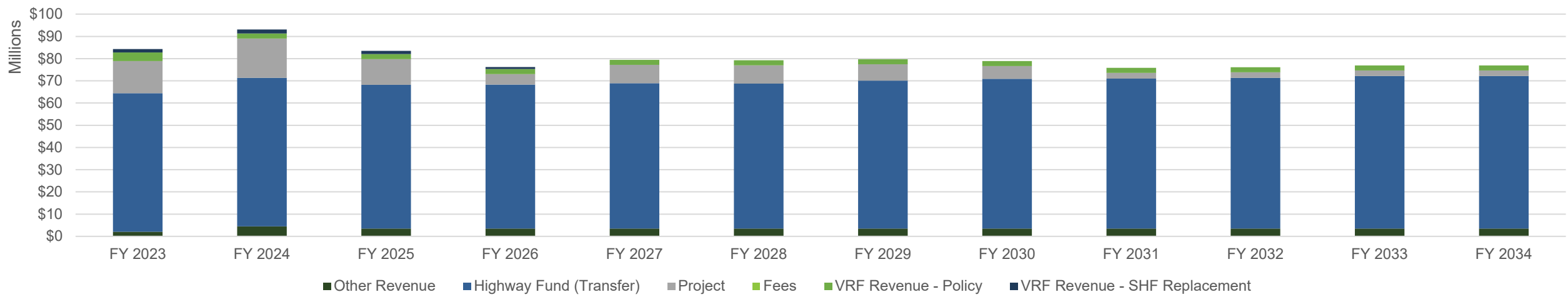
### Total Cost by Category



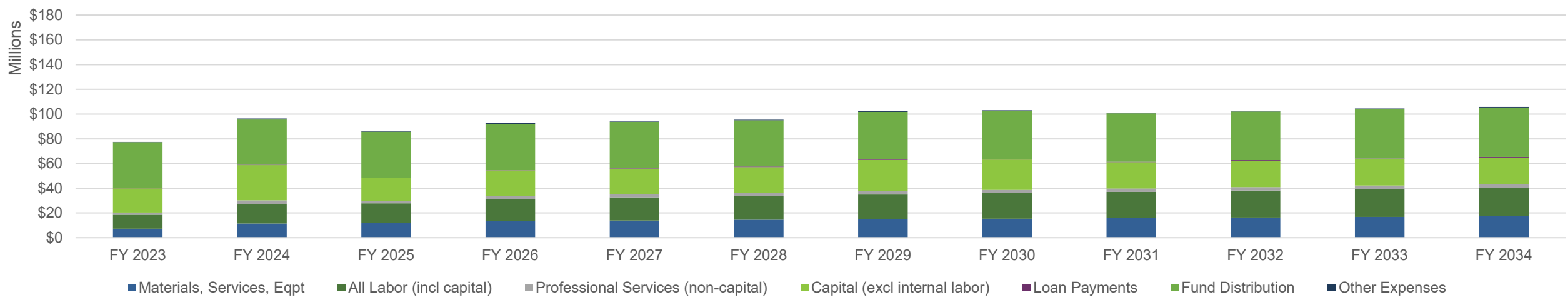


# Rural Roads

### Total Revenue by Source



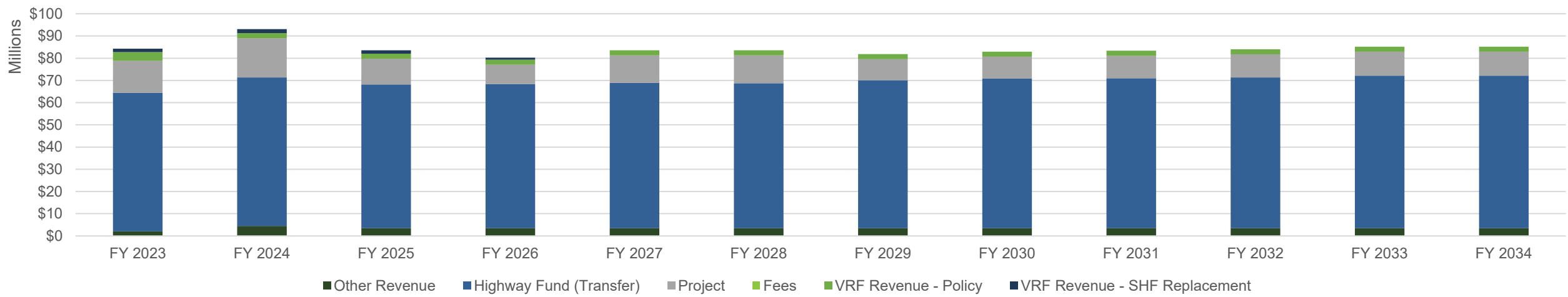
### Total Cost by Category



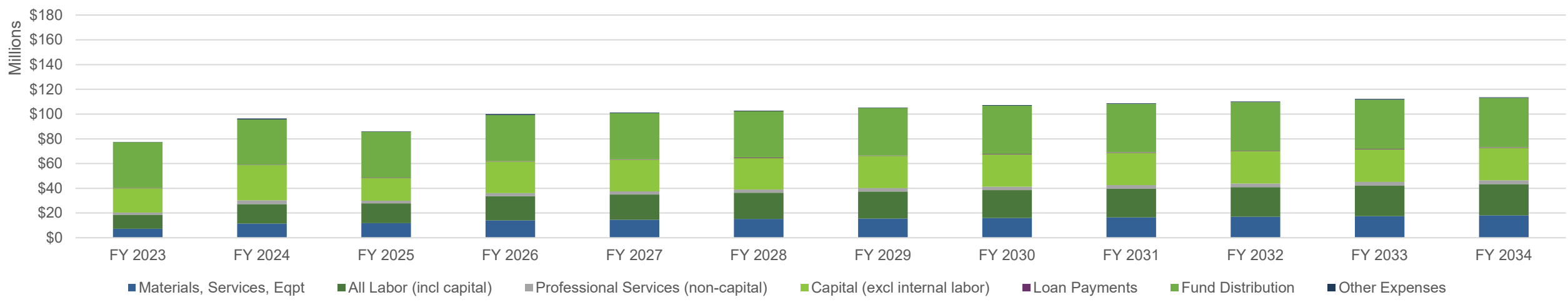


# Bridges

### Total Revenue by Source



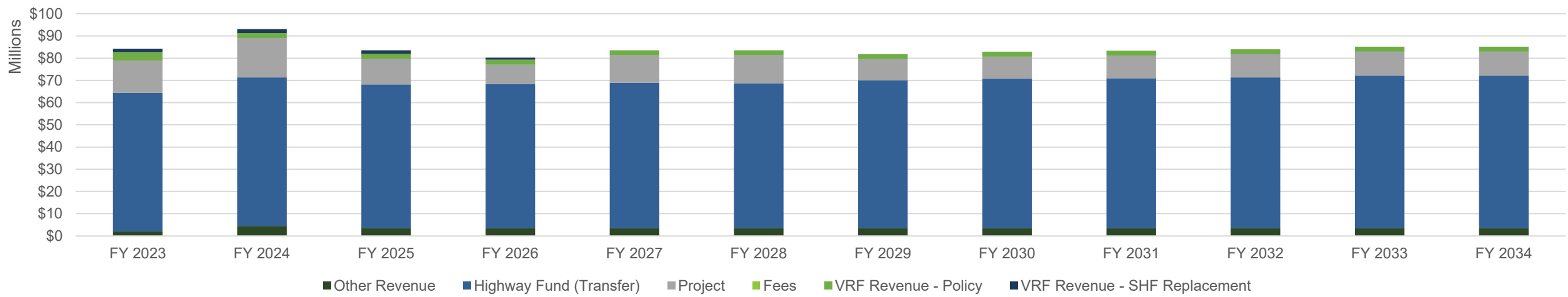
### Total Cost by Category





# Safety, Equity and Accessibility

Total Revenue by Source



Total Cost by Category

