TAB 60

2019 State Highway System Management Plan (SHSMP)

Director's Office of Asset Management

What is the SHSMP?

The SHSMP is Caltrans' plan, integrating the maintenance, rehabilitation, and operation of the State Highway System (SHS).

- **State Requirements:**

  Streets and Highway Code 164.6 (AB515) requires the publication of the SHSMP every two years.

- **Federal Requirements:**

  It implements key federal asset management requirements and is the basis for the SHS portion of the Transportation Asset Management Plan (TAMP).
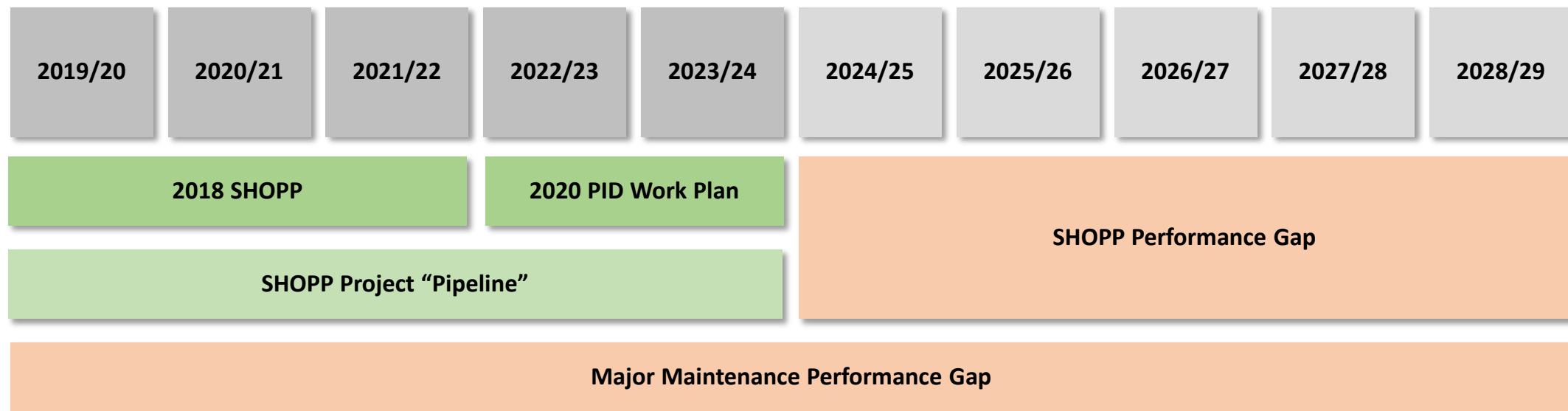
- **Departmental Requirements:**

  It aligns the Highway Maintenance (HM) program and the State Highway Operation and Protection Program (SHOPP) with the Caltrans Strategic Management Plan.

The 2019 SHSMP Spans 10 Years

- Fiscal years 2019/20 through 2028/29.
- First 5-yrs represents the SHOPP project pipeline.
- Last 5-yrs constitutes the SHOPP performance gap.
- The major maintenance performance gap spans all 10-yrs.

2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29

2018 SHOPP	2020 PID Work Plan	SHOPP Performance Gap

SHOPP Project "Pipeline"	

Major Maintenance Performance Gap

Needs Assessment Approach

STEP 1 – Asset Inventory

- Establish an asset inventory or deficiency level.

STEP 2 – Baseline and Projected Condition

- Establish the baseline and projected future condition of each objective.
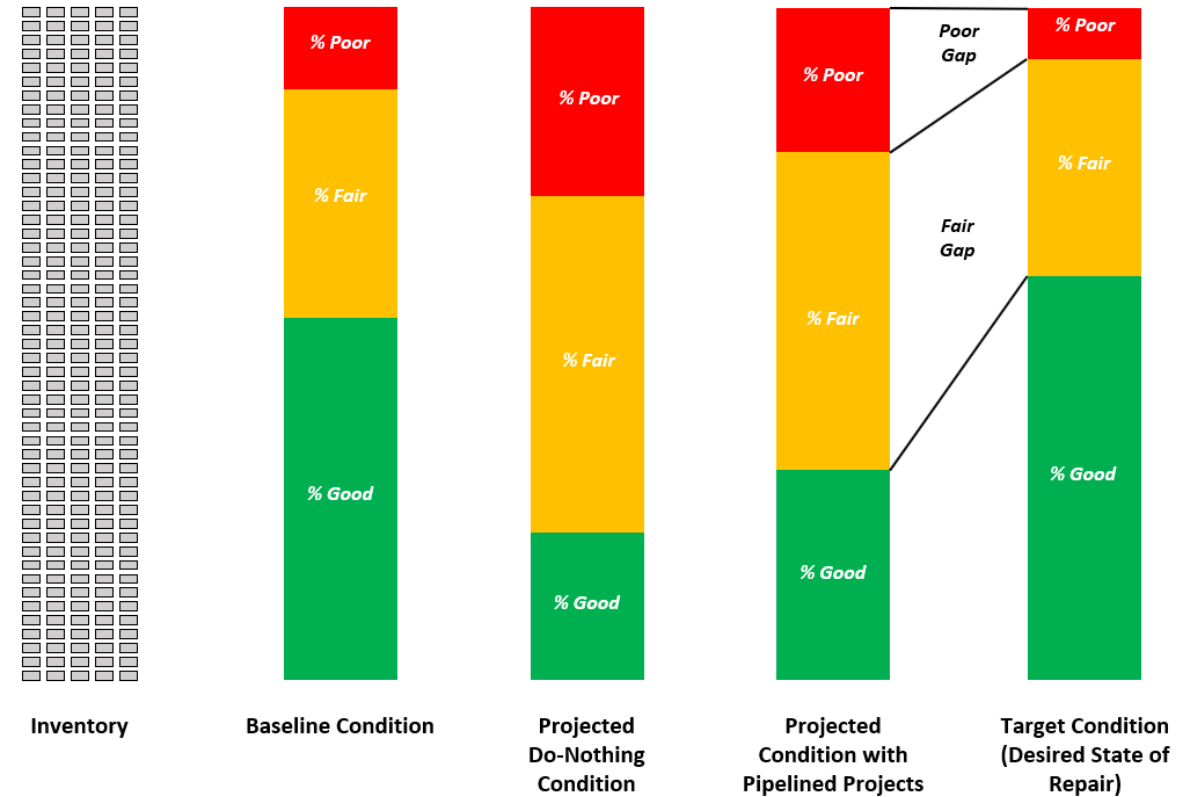
STEP 3 – Target Condition

- Establish targets to achieve desired state of repair.

STEP 4 – Performance Gaps

- Perform a gap analysis between the projected and the performance targets.

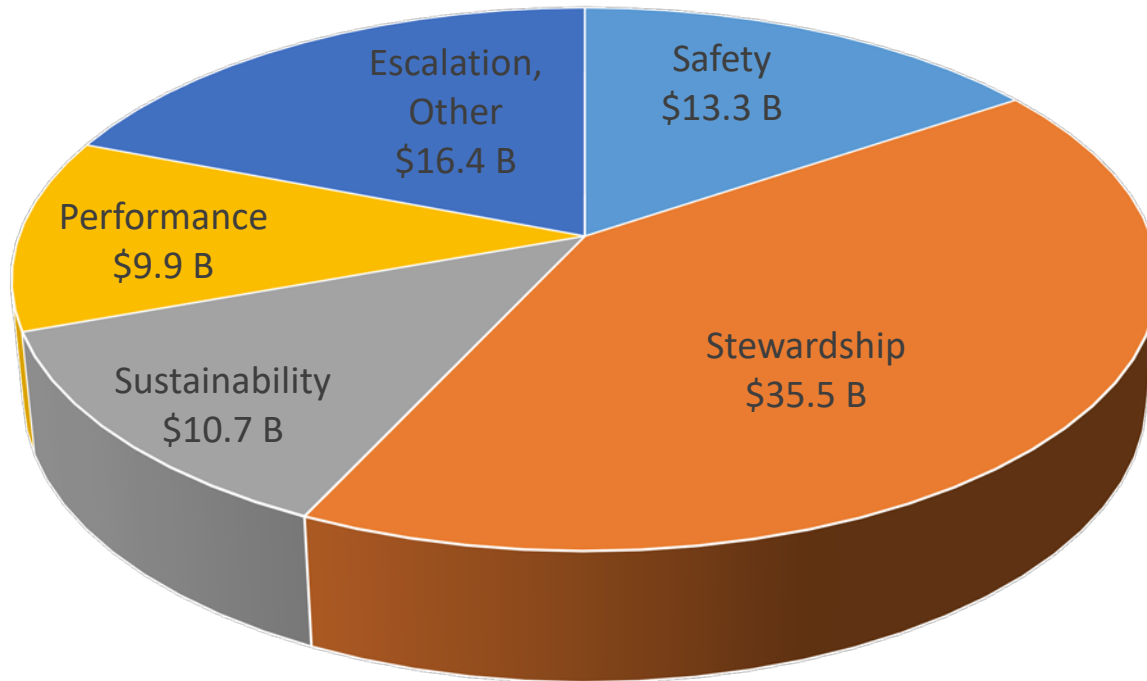**STEP 5 – Cost to Close Performance Gaps**

- Estimate the cost to close the performance gaps.
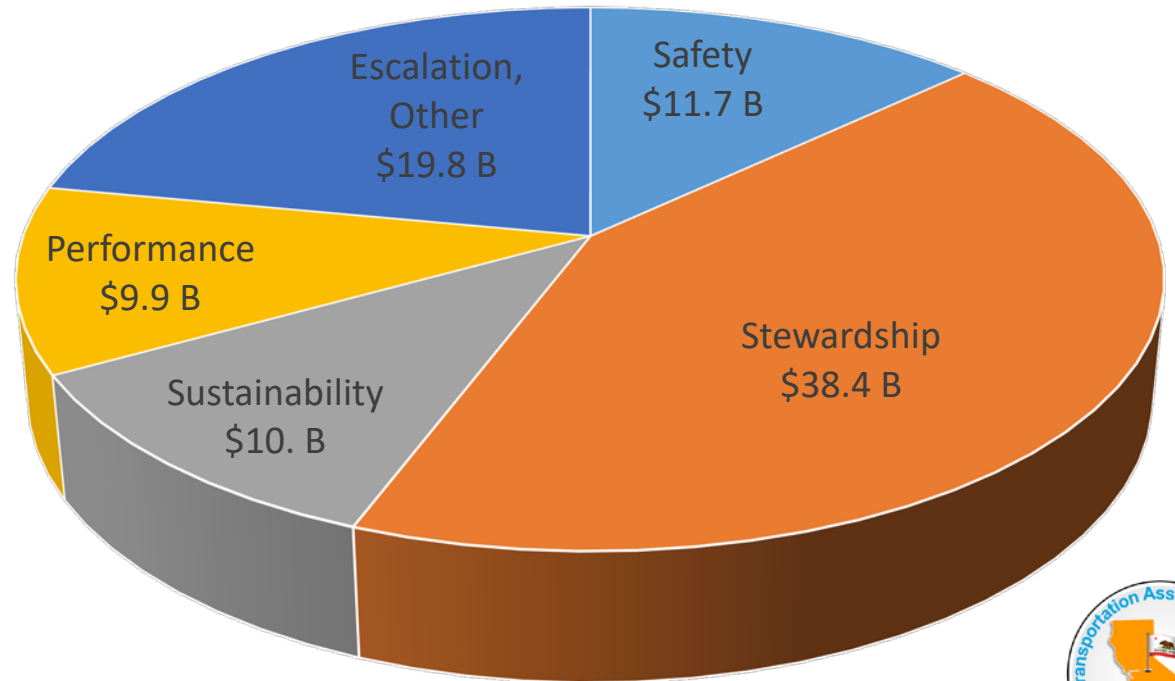
DRAFT SHOPP Needs Assessment
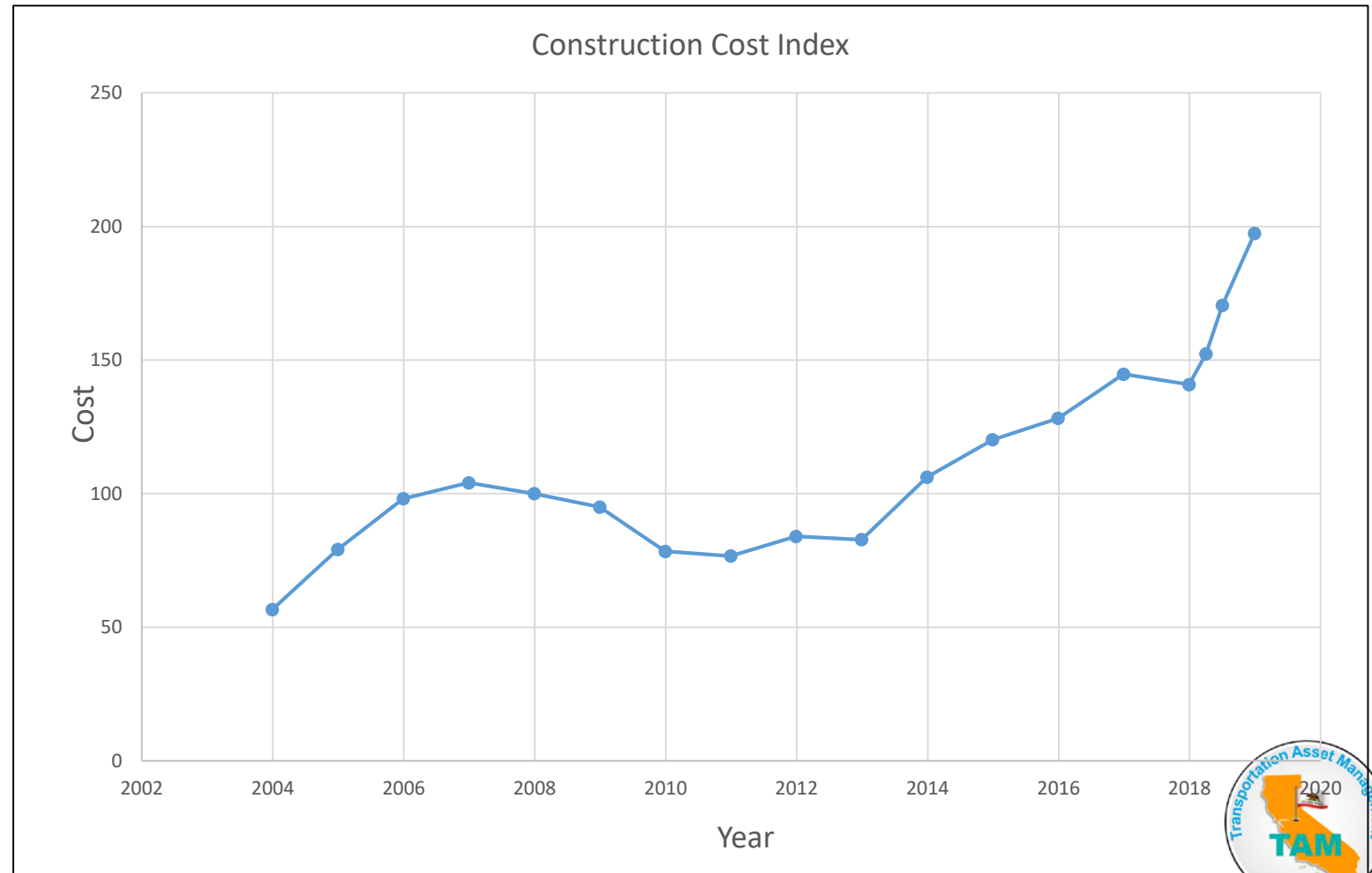
2017 SHOPP Needs Assessment

Total: $86 B

DRAFT 2019 SHOPP Needs Assessment

Total: $90 B

2017 SHOPP Needs Assessment pie chart:
- Safety $13.3 B
- Stewardship $35.5 B
- Sustainability $10.7 B
- Performance $9.9 B
- Escalation, Other $16.4 B

DRAFT 2019 SHOPP Needs Assessment pie chart:
- Safety $11.7 B
- Stewardship $38.4 B
- Sustainability $10. B
- Performance $9.9 B
- Escalation, Other $19.8 B

Construction Costs Impact Needs Assessment

- Cost escalation accounts for 75% of the needs growth from 2017 to 2019

Construction Cost Index
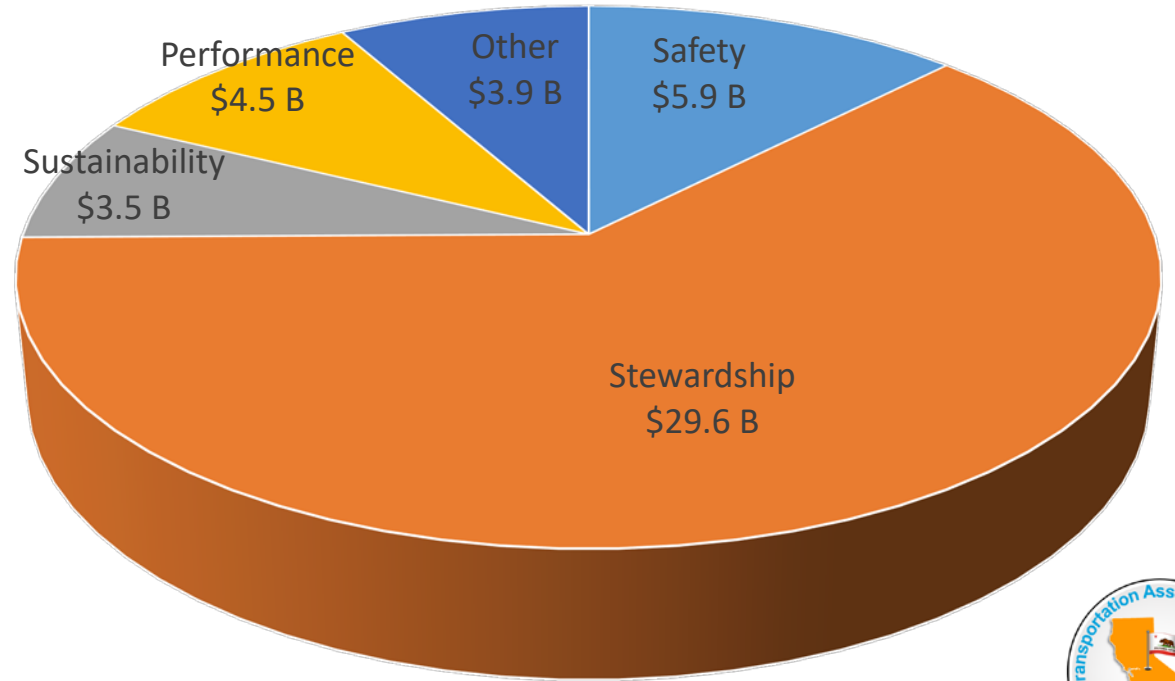
DRAFT SHOPP Investment Plan

2017 SHOPP Investment Plan

Total: $44.6 B

- Sustainability $2.9 B
- Performance $2.8 B
- Other $3.3 B
- Safety $5.5 B
- Stewardship $30.2 B
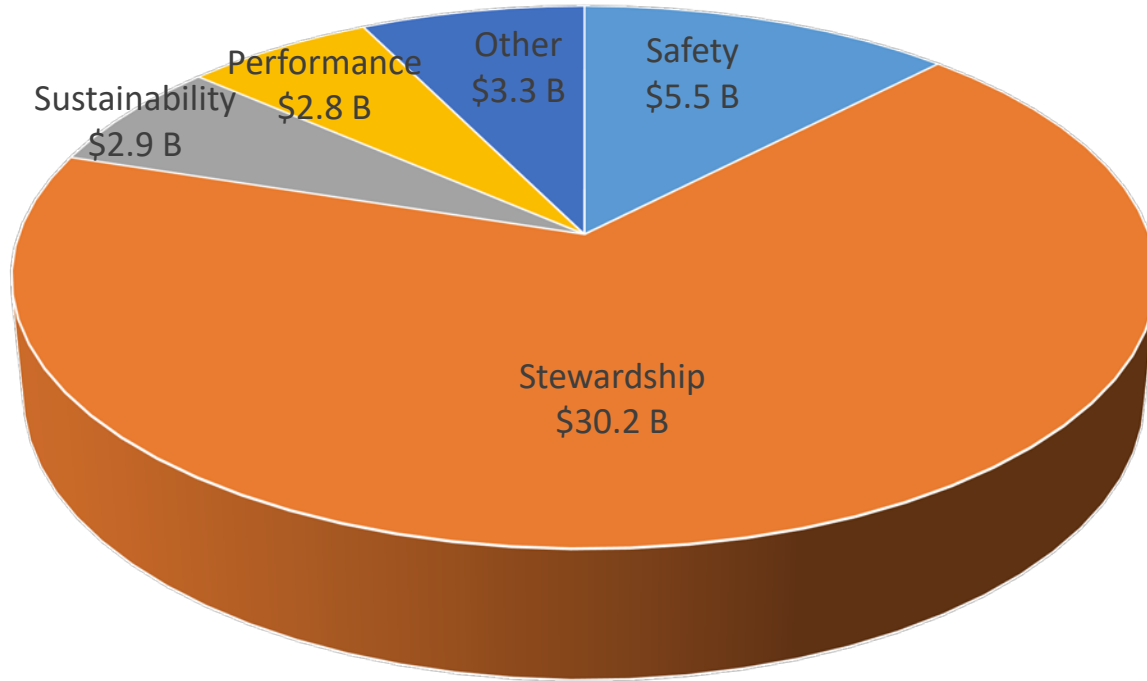
DRAFT 2019 SHOPP Investment Plan

Total: $47.4 B

- Sustainability $3.5 B
- Performance $4.5 B
- Other $3.9 B
- Safety $5.9 B
- Stewardship $29.6 B

Projects are Progressing

2017 Investement Plan

$12.8 B
34%

$24.8 B
66%

■ Pipeline ■ Non-Pipelined

2019 Investement Plan

$14.4 B
39%

$22.2 B
61%

■ Pipeline ■ Non-Pipelined
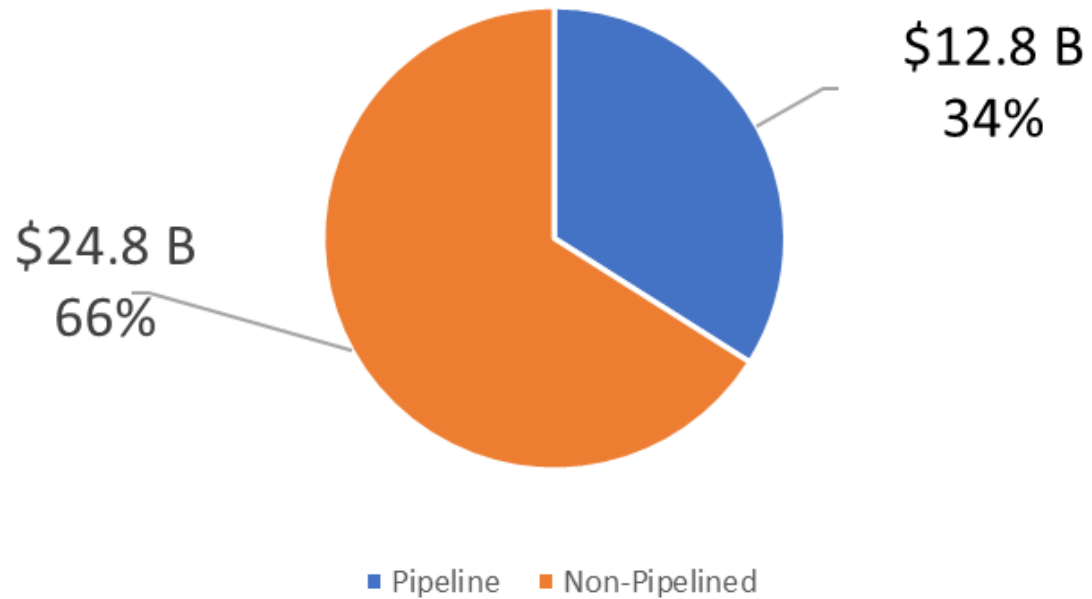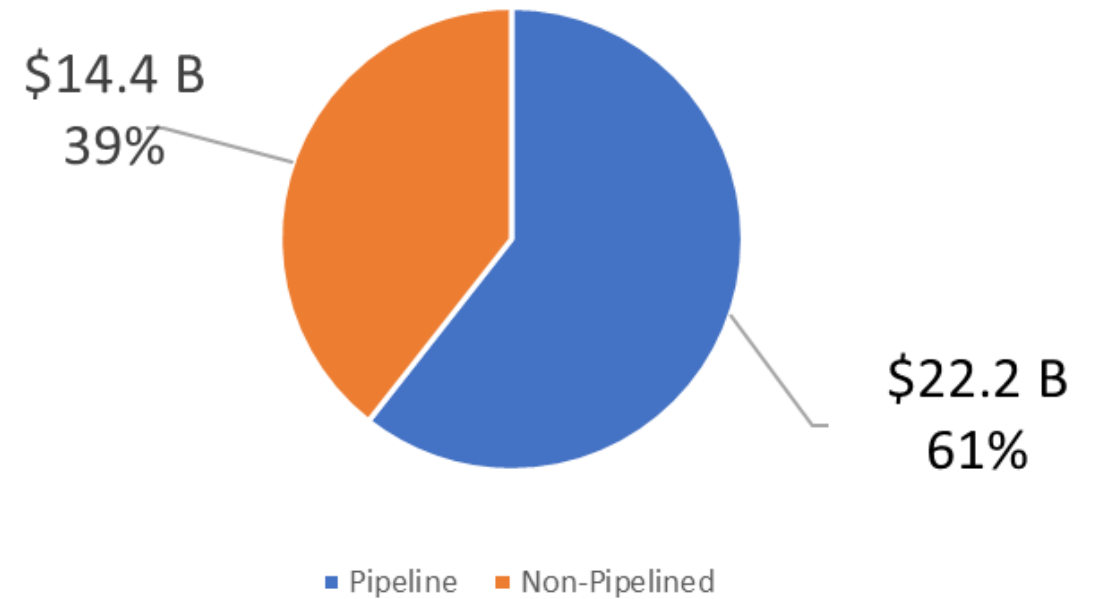
Progress Toward Goals

SB1 Goals

Asset Class	SB1 Target	Status
Pavement	98% Good or Fair condition	On Track
Bridges	Fix 500 Bridges	On Track
Culverts	90% Good or Fair condition	On Track
TMS Elements	90% Good condition	On Track

Asset Management Plan Goals

Asset Class	TAMP Good Targets	TAMP Fair Targets	TAMP Poor Targets
Pavement Class 1	60% Good	39% Fair condition	1% Poor condition
Pavement Class 2	55% Good	43% Fair condition	2% Poor condition
Pavement Class 3	45% Good	53% Fair condition	2% Poor condition
Bridges	83.5% Good	15% Fair area	1.5% Poor area
Culverts	80% Good	10% fair	10% Poor
TMS Elements	90% Good	NA	10% Poor

SHSMP Timeline

| SHSMP Kickoff April 2018 | → | Draft SHSMP January 2019 | → | Draft SHSMP CTC Presentation January 2019 | → | Draft SHSMP to CTC Feb 2019 | → | CTC Comments March 2019 | → | Final SHSMP May 2019 |