

# Supplemental Preparation Guidelines for SHOPP Pavement Program Project Initiation Report

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## OVERVIEW

The report should be prepared using the guidance provided in the Interim SHOPP PIR Guidance along with the State Highway Operation and Protection Program (SHOPP) program specific information found here. Consult with the district program advisor and the Headquarters SHOPP program manager to determine how to handle individual project aspects.

This guidance is for completing the project initiation report and not for developing the project. While there is obvious overlap between the information needed in the report and project development requirements, the purpose of the report is to provide enough information for management to approve programming subsequent phases of the project.

Properly determining the report documentation level is intended to maintain simplicity in the documentation process and to properly define the scope, cost and schedule of the project being initiated. This decision should be based on the necessity to describe the project's specific issues and identify the risks associated with excluded information.

Regardless of which SHOPP program the project is being developed for, the goal is to begin at the lowest level (Level 1) of detail needed in each section and only provide additional detail when warranted by the project's unique characteristics.

This supplemental guidance applies to the following SHOPP Pavement Programs:

Roadway Rehabilitation 3R (program code 20.XX.201.120)

Minor Pavement Rehabilitation (formerly Pavement Preservation/CAPM, program code 20.XX.201.121)

Major Pavement Rehabilitation 2R (program code 20.XX.201.122)

The SHOPP program manager has determined that all projects are subject to varying documentation level and shall include discussion for some of the outline topics from Interim SHOPP PIR Guidance as designated within this document. Differentiation of the documentation level also matters for determining the attachments. Guidance to supplement each topic from Interim SHOPP PIR Guidance is as follows.

# MAIN BODY OF REPORT

## 1. Introduction, Work Description and Summary Table

In the project description, state the SHOPP and Rehabilitation Effectiveness values in the planned RTL delivery year for the pavement work limits. For recommended project alternatives with multiple pavement strategies according to individual lanes, segments, or pavement types; state the effectiveness accordingly for those locations and strategies.

Some effectiveness values are available from the [Pavement Condition Report](#), but other specific values may need to be calculated according to project-specific conditions.

<b>Funding Source</b>	SHOPP Pavement (20.XX.201.120, 20.XX.201.121, or 20.XX.201.122)
<b>Funding Year</b>	RTL Year
<b>SHOPP Project Output</b>	For the Pavement Performance Objective, the <i>Lane Miles</i> of pavement work should match the Total Lane Miles listed in the Pavement Condition Report.

Use Interim SHOPP PIR Guidance instructions for the rest of this section.

## 2. Purpose and Need

The purpose of the project is to rehabilitate the facility to current standards. Typical purpose statement could include:

- Restore the facility to a state of good repair so that the roadway will be in a condition that requires minimal maintenance.
- Preserve, repair, and extend the life of the existing pavement and improve ride quality.

Typical need statements could include:

- Description of pavement condition (include triggered distress types and extents), repair strategy, and replace/upgrade other highway appurtenances and facilities that are worn out or functionally obsolete. (20.XX.201.120, 20.XX.201.122)
- Description of pavement condition (include triggered distress types and extents) and repair strategy. (20.XX.201.121)

Use Interim SHOPP PIR Guidance instructions for the rest of this section.

### **3. Recommendation**

Use Interim SHOPP PIR Guidance instructions for this section.

### **4. Risk Summary**

Use Interim SHOPP PIR Guidance instructions for this section.

### **5. Background**

Describe the historical performance of previous pavement strategies. Discuss relevant project histories (strategy, age/life, completion dates, existing pavement condition, etc.) using data from the [Pave-M Highway H-chart](#) or as-built plans from the [Document Retrieval System](#). Discuss any other relevant factors such as freight movement characteristics, traffic volume, etc. Explain why each recommended strategy is preferred for an individual pavement segment or lane.

Use Interim SHOPP PIR Guidance instructions for the rest of this section.

### **6. Asset Management**

Use Interim SHOPP PIR Guidance instructions for this section.

### **7. Corridor and System Coordination**

Document that the anticipated performance life of the recommended strategy is consistent with the corridor needs (freight movement, traffic volumes, etc.) and any future planned or upcoming (programmed) projects.

Use Interim SHOPP PIR Guidance instructions for the rest of this section.

### **8. Existing Facility Condition**

The SHOPP program manager has determined that the strikethrough items do not need to be discussed in the report. Include the topics designated by the SHOPP program manager and provide information as appropriate.

Copy and paste the following into the report template; delete strikethrough topics and delete italicized text.

#### **Pavement or Roadway Rehabilitation**

#### **Corridor Geometric Information and Condition**

Right-of-way

*Include the width and whether or not there is controlled access.*

Fences

*Include the location, height and type.*

Noise barriers

*Include the location, height and type.*

Earth retaining systems

*Include the location, height and type.*

Utilities

*Include the location and type.*

Landscape

*Include the location and type.*

Landscape irrigation facilities

*Include the location and type.*

Hydraulic facilities

*Include the location and type.*

Traffic management systems

*Include the location and type.*

Traffic signals

*Include the location and type.*

Lights

*Include the location and type.*

Signs

*Include the location and type.*

Median Barrier

*Include the location and type.*

Traffic volumes

*Include the information discussed in [Highway Design Manual \(HDM\) Topic 104 – Design Designation](#). Include bicycle, pedestrian, and transit volumes.*

Traffic collisions

*Include the latest 3-year collision data for the length of the facility and any concentrated locations as needed, including bicycle and pedestrian collisions, fatalities, and injury*

Collision Rates:

The three-year period from ###/###/##### to ###/###/#####:

County-Route (post mile range)	Number of Accidents			Actual Rate (Acc/Million Vehicle Miles)			Average Rate (Acc/Million Vehicle Miles)		
	F <sup>1</sup>	F+I <sup>2</sup>	Total <sup>3</sup>	F <sup>1</sup>	F+I <sup>2</sup>	Total <sup>3</sup>	F <sup>1</sup>	F+I <sup>2</sup>	Total <sup>3</sup>

Notes:

1. Fatal accidents
2. Fatal accidents plus injury accidents
3. All reported accidents

Railroad facilities

*Include any relevant information.*

Other – Sight distances

*Include any relevant information.*

Other – Cross slopes

*Include any relevant information.*

Other – Vertical clearances

*Include any relevant information.*

Roadway Geometric Information and Condition

Traveled Way, Shoulders, and Median Geometric Information

*Include the following:*

	Facility Location	Minimum Curve Radius	Through Traffic Lanes			Paved Shoulder Width		Median Width	Shoulder is a Bicycle Lane	Other Bicycle Lane Width (3)	Bicycle Route	Facilities Adjacent to the Roadbed (4)
	Post Mile Range	Radius (ft)	Number of Lanes	Lane Width (ft)	Type (Flexible, Rigid, or Composite)	Left (ft)	Right(ft)	(ft)	(Y/N)-Width (ft)	Width (ft)	(Y/N)	Code-Width (ft)
Existing	1											
Proposed	2											
Minimum RRR Standards												

Notes:

1. Enter existing post mile limits (expand as needed for varied geometrics.)
2. Enter proposed post mile limits (expand as needed for varied geometrics.)
3. "Other Bicycle Lane Width" is the width of a bicycle lane that is not within the shoulder and is part of the traveled way.
4. Codes for row "Facilities Adjacent to the Roadbed":
  - B – Bicycle path
  - P – Pedestrian walkway
  - B/P – shared bicycle and pedestrian path
  - L – Landscaped area between the curb and sidewalk

Mainline Pavement Condition

Copy and paste the following into the report template; delete strikethrough topics and delete italicized text.

Mainline Pavement Condition (for Current and Delivery Years)

- General Information (*where applicable, match information shown in the SHOPP Tool*):  
 Roadway Classification: (*indicate Class 1, 2, or 3. For multiple classifications, include postmile limits.*)

Item or Milestone	Year
Current Automated Pavement Condition Survey (APCS)	
Ten-Year Plan (TYP)	
PIR Completed and signed (Current)	
Planned Delivery (RTL) ( <i>Use second half of fiscal year</i> )	

- Distress Types and Extents: (*Include the following data, typically available from the [Pavement Condition Report](#) yearly detail tabs as a weighted average, or estimate from visual observation if necessary for pavement strategy scoping.*)

Concrete Pavement Distress: (*State location, include detail as necessary: District-County-Route-PM-Direction-Lane, etc.*)

Type	Extent	
	Current APCS Yr (actual)	RTL Yr (predicted)
3rd Stage Cracking (%)	<i>PCR: weighted average</i>	<i>PCR: weighted average</i>
Faulting (% , elements > 0.15 inch)	<i>PCR: weighted average</i>	<i>PCR: weighted average</i>
International Roughness Index (IRI, inches/mile)	<i>PCR: weighted average</i>	<i>PCR: weighted average</i>
Corner Breaks* (%)	<i>Estimate average extent</i>	Not applicable
Joint Spalls* (%)	<i>Estimate average extent</i>	Not applicable
Other* (1 <sup>st</sup> stage cracking, pumping, etc.) (1 <sup>st</sup> stage cracking, pumping, etc.)	<i>Estimate average extent</i>	Not applicable
* Include minor distresses only if necessary, such as to supplement low effectiveness or cracking values. May be available from observation or APCS raw data (refer to the <a href="#">APCS Manual</a> for definitions or check with HQ Pavement Program Advisor, District Maintenance Engineer, or District Materials Engineer).		

Flexible Pavement Distress: (State location, include detail as necessary: District-County-Route-PM-Direction-Lane, etc.)

Type	Extent	
	Current APCS Yr (actual)	RTL Yr (predicted)
Alligator B Cracking (%)	<i>PCR: weighted average</i>	<i>PCR: weighted average</i>
Rutting (inches)	<i>PCR: weighted average</i>	<i>PCR: weighted average</i>
International Roughness Index (IRI, inches/mile)	<i>PCR: average IRI</i>	<i>PCR: average IRI</i>
Patching* (%)	<i>Estimate average extent</i>	Not applicable
Nonstructural Cracking*(Longitudinal, Transverse, or Block)	<i>Estimate average extent</i>	Not applicable
Other* (raveling, bleeding, pumping etc.)	<i>Estimate average extent</i>	Not applicable
* Delete these rows unless including minor distresses (if necessary, such as to supplement low effectiveness or cracking values). May be available from observation or APCS raw data (refer to the <a href="#">APCS Manual</a> for definitions or check with HQ Pavement Program Advisor, District Maintenance Engineer, or District Materials Engineer).		

Pavement Performance Measures

Both MAP-21 condition and Caltrans Performance Measures (Red, Orange, Blue, Yellow, Green)

lane-miles from the PCR must be documented.

Year	Pavement Type	Caltrans Performance Measures (lane-miles)					MAP-21 Condition (lane-miles)			Total Lane Miles	Effectiveness (%)	
		Green	Yellow	Blue	Orange	Red	Good	Fair	Poor		SHOPP Effectiveness ((Red + Orange) / Total Lane Miles) %	Rehab Effectiveness (Red/Total Lane Miles) %
Current APCS (year)	Flexible											
Current APCS (year)	Rigid											
RTL Delivery (year)	Flexible											
RTL Delivery (year)	Rigid											

If available, discuss Materials Report, Geotechnical Report, Pavement Structure Recommendations, or Deflection Study Report results.

Median, Shoulder, and Ramp Pavement Condition

Discuss existing pavement condition in general terms based on observation. Include any relevant distresses (type, severity, extent). Note if existing distress will not be addressed by the recommended alternative.

Structure Geometric Information and Condition

Include the following:

Structures	Width Between Curbs			Vertical Clearance			Work Identified in Project EA Report	Replace Bridge Approach Rail	Replace Bridge Approach Slab	
	Exist (ft)	RRR Std (ft)	Prop (ft)	Exist (ft)	RRR Std (ft)	Prop (ft)			(Y/N)	Number

Use Interim SHOPP PIR Guidance instructions for the rest of this section.

**9. Alternatives**

Requirements for pavement projects are described in either:



- *Design Information Bulletin 79-03* – Design Guidance and Standards for Roadway Rehabilitation Projects
- *Design Information Bulletin 81-01* – Capital Preventive Maintenance Guidelines.
- *Life-Cycle Cost Analysis* – LCCA Procedures Manual

The SHOPP program manager has determined that some of the topics need to be discussed in the report. Include the topics designated by the SHOPP program manager and provide information as appropriate.

The topics listed for the specific SHOPP program may not apply to some projects. When this occurs, include the topic and state that the project does not involve the topic or that the project has no effect on the topic. The list of topics includes:

LEVEL			TOPIC
Minor Rehab	Major Rehab	Roadway Rehab	
			· California Highway Patrol (CHP) enforcement activities
		1,2,3	· Earth retaining systems
	2,3	2,3	· Erosion control
		3	· Highway planting and irrigation
		1,2,3	· High-occupancy vehicle lanes
			· Interim features
			· Noise barriers
			· Operational improvement features
1,2,3	1,2,3	1,2,3	· Proposed engineering features
			· Ramp metering
			· Reversible Lanes
			· Roadside design and management
	1,2,3	1,2,3	· Traffic analysis
	1,2,3	1,2,3	· Other topics as needed (LCCA & Asset Management)

Use Interim SHOPP PIR Guidance instructions for the rest of this section.

## 10. Complete Streets

Use Interim SHOPP PIR Guidance instructions for this section.

## 11. Climate Change Considerations

Use Interim SHOPP PIR Guidance instructions for this section.

## **12. Environmental Compliance**

Use Interim SHOPP PIR Guidance instructions for this section.

## **13. Right-of-Way**

Use Interim SHOPP PIR Guidance instructions for this section.

## **14. Stormwater**

The SHOPP program manager has determined that this topic does not need to be discussed in the report for projects addressing minor pavement rehabilitation (formerly pavement preservation/ CAPM). Include the following in the report:

Discussion for this topic is not required by the guidelines.

For all other Pavement PIDs, use Interim SHOPP PIR Guidance instructions.

## **15. Transportation Management Plan**

The SHOPP program manager has determined that this topic does not need to be discussed in the report for projects addressing minor pavement rehabilitation (formerly pavement preservation/ CAPM). Include the following in the report:

Discussion for this topic is not required by the guidelines.

For all other Pavement PIDs, use Interim SHOPP PIR Guidance instructions for this section.

## **16. Broadband and Advance Technologies**

Use Interim SHOPP PIR Guidance instructions for this section.

## **17. Additional Considerations**

The SHOPP program manager has determined that some of the topics need to be discussed in the report. Include the topics designated by the SHOPP program manager and provide information as appropriate.

The topics listed for the specific SHOPP program may not apply to some projects. When this occurs, include the topic and state that the project does not involve the topic or that the project has no effect on the topic. The list of topics includes:

LEVEL			TOPIC
Minor Rehab	Major Rehab	Roadway Rehab	
			· Accommodation of oversize loads
			· Airports or emergency related helipads
			· Air quality conformity
	1,2,3	1,2,3	· Constructability issues
	1,2,3	1,2,3	· Construction staging
			· Environmental-justice (Title VI considerations)
			· Floodplain issues
			· Graffiti control
			· Maintenance and Cooperative Agreements
			· Maintenance and Worker Safety
	1,2,3	1,2,3	· Material and/or disposal site
	1,2,3	1,2,3	· Material disposal, staging and borrow sites
	1,2,3	1,2,3	· Recycled materials
			· Noise abatement decision report
			· Report on feasibility of providing access to navigable rivers
	1,2,3	1,2,3	· Resource conservation
			· Route adoptions, freeway agreements, relinquishments and modification of access control
			· Salvaging and recycling of hardware and other non-renewable resources
			· See level rise
			· Tribal Employment Rights Ordinance (TERO)
	1,2,3	1,2,3	· Value analysis
	1,2,3	1,2,3	· Other topics as needed

Use Interim SHOPP PIR Guidance instructions for the rest of this section.

**18. Estimate, Funding and Programming**

Use Interim SHOPP PIR Guidance instructions for this section.

**19. Delivery Schedule**

Use Interim SHOPP PIR Guidance instructions for this section.

**20. External Agency Coordination**

Use Interim SHOPP PIR Guidance instructions for this section.

## **21. Project Reviews**

The SHOPP program manager has determined that this topic does not need to be discussed in the report for projects addressing minor pavement rehabilitation (formerly Pavement Preservation). Include the following in the report:

Discussion for this topic is not required by the guidelines.

For all other Pavement PIDs, use Interim SHOPP PIR Guidance instructions.

## **22. Project Personnel**

Use Interim SHOPP PIR Guidance instructions for this section.

## **23. Attachments (Number of Pages)**

Attach Preliminary Pavement Structure Recommendations, Materials Report, and Geotechnical Study Report if available.

Attached Pavement Condition Report, which includes:

- Pavement Condition Summary Report
- Pavement Condition Detailed Report for Current (PIR) Year
- Pavement Condition Detailed Report for planned delivery (RTL) year

Only attach the Project EA Report and/or Structure PIR Cost estimate if the project includes structures and as needed for the scope of work.

Only attach the Preliminary Geotechnical Report as needed for the scope of work.

Only attach the ADA Transition Plan Items as needed.

Only attach the Culvert Inspection Report (Priority Rating Sheet) if there are culverts within the project limits.

Use Interim SHOPP PIR Guidance instructions for the rest of this section.