



# Tulare County Bridge Improvement Program

Presented by the  
Tulare County Resource Management Agency  
Bridge Team  
November 19, 2019



# Presentation Outline

1. Current Program Overview
  - HBP Program and Changes
  - County Bridge Improvement Program
2. Currently Programmed Projects
3. New Candidate Bridge Projects (Over 20-ft)
4. BPMP Update
5. Measure R Funded Under 20-ft BPMP
6. Program Cost Summary
7. Recently Completed Projects
8. Tulare County Bridge Program Summary
9. Comments, Questions and Discussion



# Current Program Overview

3

## Highway Bridge Program (HBP) and Changes

- Caltrans Serves as Delegated Authority
  - Perform biennial inspections of all County bridges (over 20-ft)
  - Inspect, assess and rate County bridge inventory
  - Health assessment via sufficiency rating and status
  - Structurally Deficient (SD) vs. Functionally Obsolescent (FO)





# Current Program Overview

4

## Highway Bridge Program (HBP) and Changes

- Old Programming Procedures
  - 300 million allocated annually to Local Agency bridges
  - First come, first served
  - SD and FO eligible
  - Caltrans overcommitted funds, resulting in backlog of projects
  
- New Programming Procedures
  - 300 million allocated annually to Local Agency bridges (no change)
  - Agencies submit applications for new bridges
  - Must qualify as candidate for Project Prioritization List
  - Project Prioritization List published every two years, ranking bridges Statewide using prioritization criteria
  - Ranking on Prioritization List dictates project funding



# Current Program Overview

5

## Highway Bridge Program (HBP) and Changes

- Results from 2018 Project Prioritization List
  - In 2016, County submitted 22 new bridge applications
  - 16 of 22 applications deemed eligible
  - Only 2 of 16 eligible projects received fund allocation
    - M109 White River Bridge Project
    - Avenue 152 Tule River Bridge Project
  
- 2020 Project Prioritization List (PPL)
  - Applications due November 30<sup>th</sup>
  - County will re-submit 14 projects not selected from 2018 PPL
  - 5 additional project applications to be submitted
    - Increase chances of funding selection
    - Future project funding will be limited



# Current Program Overview

## Bridge Improvement Program

- 9 Completed Bridges
- 28 Bridges Currently in Program
  - 14 Bridges in Design (Received Funds)
  - 14 Candidate Bridge Projects (2018 PPL – Awaiting Funds)

### SINCE 2012

- M319 Kaweah River
- Ave 416 Kings River
- Rd 56 Packwood Creek
- D39 Traver Canal
- M220 Rancheria Creek
- Rd 148 Outside Creek
- Rd 182 Deep Creek
- Rd 224 Deer Creek
- D129 Sand Creek





# Current Program Overview

7

## Bridge Improvement Program

- Active Construction Projects (Supplemental Projects)
  - Avenue 416 Kings River Bridge Riparian Re-vegetation and Restoration Project (**plant establishment complete**)
  - M319 Kings River Bridge Riparian Re-vegetation and Restoration Project (**plant establishment complete**)
  - D39 over Traver Canal Bridge Riparian Re-vegetation and Restoration Project (**planting completed in January 2019**)
- RFP out earlier this year for Consulting services
  - Mountain Road 109 (M109) over White River Bridge





# Currently Programmed Projects

Funded Projects - In Design		Total Cost	Match	Start Construction
1.	M348 S. Fork Kaweah River*	\$3,398,000	None	Winter 2020
2.	Ave 364 Cottonwood Creek**	\$3,450,000	None	Fall 2020
3.	Ave 392 Sand Creek**	\$3,115,000	None	Fall 2020
4.	Ave 424 Traver Canal**	\$3,104,000	None	Fall 2020
5.	Road 204 Wutchumna Ditch**	\$1,700,000	None	Winter 2020
6.	D112 Bates Slough	\$1,620,000	\$186k	Fall 2021
7.	D112 N. Branch Tule River	\$3,015,000	None	Fall 2021
8.	Ave 376 Traver Canal	\$1,700,000	None	Fall 2022
9.	Ave 428 Sand Creek	\$3,025,000	None	Fall 2022
10.	Ave 108 Lakeland Canal	\$2,920,000	None	Fall 2022
11.	M375A Mineral King	\$10,580,000	None	Fall 2022
12.	Ave 174 Friant-Kern Canal	\$3,450,000	None	Fall 2023
13.	M109 White River	\$3,705,000	\$425k	Fall 2024
14.	Ave 152 Tule River	\$15,990,000	\$1.84m	Fall 2025
<b>TOTAL</b>		<b>\$57,374,000</b>	<b>\$2,446,000 (4.3%)</b>	

\* Project Ready for Construction

\*\* Project Design Nearly Complete





# New Candidate Bridge Projects

2020 Prioritization List Applicants	Flag	Total Cost	Local Match	ADT
1. Road 16 over Homeland Canal (A)	SD	\$1,516,000	None	175
2. Road 16 over Homeland Canal (B)	SD	\$1,305,000	None	175
3. Ave 120 over Friant-Kern	SD	\$1,777,000	None	50
4. Ave 32 over Friant-Kern	SD	\$1,777,000	None	150
5. D238 over Deer Creek	FO	\$6,065,000	None	3,700
6. Road 204 over Friant-Kern	FO	\$2,488,000	\$285,000	8,800
7. Ave 196 over Friant-Kern	FO	\$2,227,000	\$255,000	2,650
8. Springville Ave over Porter Slough	FO	\$2,440,000	\$280,000	3,650
9. Road D112 over Elk Bayou	FO	\$1,780,000	None	1,200
10. Road D112 over N. Branch Tule	FO	\$2,400,000	None	1,100
11. Road 138 over Alta Canal	FO	\$948,000	None	100
12. M220 over Bear Creek	FO	\$629,000	None	220
13. D152 over Murray Creek	FO	\$835,000	None	95
14. Ave 436 over Friant-Kern	FO	\$2,912,000	None	50
15. M276 Kramer Creek	SD	\$1,422,000	None	100
16. Ave 432 Friant-Kern Canal	SD	\$4,208,000	None	200
17. Ave 268 Friant-Kern Canal	SD	\$3,321,000	None	510
18. Ave 394 Friant-Kern Canal	SD	\$2,044,000	None	40
19. Ave 404 Cottonwood Creek	SD	\$1,832,000	None	45

Note: These 19 projects do not have fund allocation

**TOTAL \$41,100,000 \$820,000 (1.99%)**



# BPMP Update

## Bridge Preventive Maintenance Program (BPMP)

(Bridges over 20-Feet, Federally Funded)

	Total Cost	Local Match
■ Group 1 - Methacrylate Treatments	\$1,224,000	\$140,000
■ Group 2 - Joint Seal Replacements	\$1,239,000	\$142,000
■ Group 3 - Miscellaneous Deck Work	\$1,683,000	\$193,000
■ Group 4 - Paint & Spall Repairs	\$3,312,000	\$380,000
■ Group 5 - Scour & Slope Protection	<u>\$4,567,000</u>	<u>\$524,000</u>
<b>Total</b>	<b>\$12,025,000</b>	<b>\$1,379,000 (11.47%)</b>

- Out of 358 total bridges, 91 eligible for preventive work
- Design funds for Groups 1 & 5 are pending
- Assuming Group 1 funds issued by January 2020, work anticipated to start Spring of 2021
- One group completed each year (total of 5 years to complete BPMP)



# Measure R Projects

11

## Bridge Preventive Maintenance Program (BPMP)

(Bridges under 20-Feet, Measure R Funded)

- \$250,000 allocated by Measure R to Develop and Implement Plan
- 1<sup>st</sup> step - Collecting data and inspecting County's inventory
  - Pipe Crossings (over 3-ft in diameter)
  - Concrete Box Culverts
  - Timber bridges





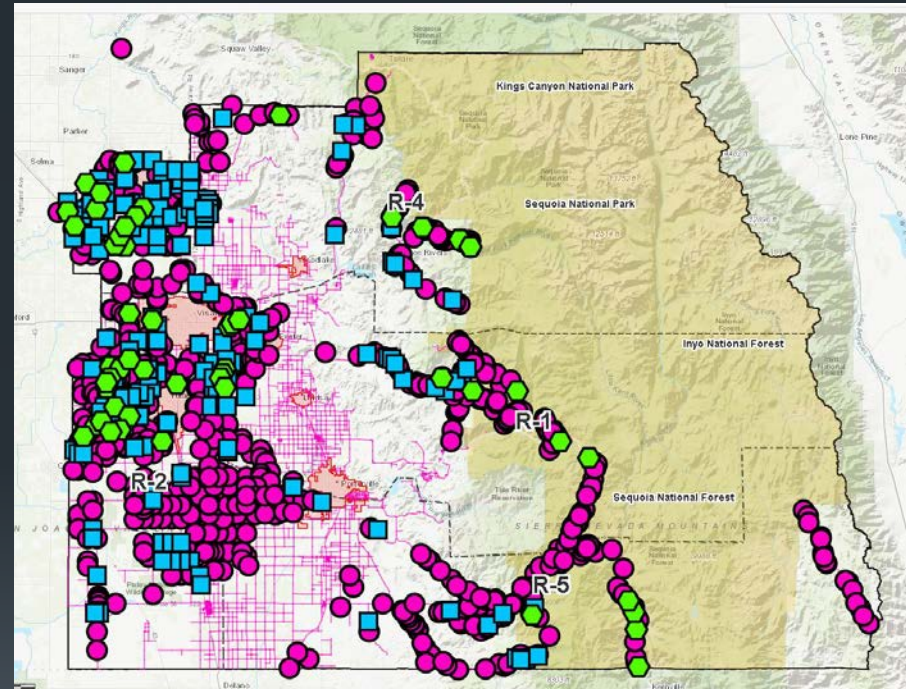
# Measure R Projects

12

## Bridge Preventive Maintenance Program (BPMP)

(Bridges under 20-Feet, Measure R Funded)

- 75% of maintained roads inspected
- Data collection complete by 2020
- Work orders
  - Prioritize all work items
  - Preventive vs. Routine Maintenance
- Objectives
  - Establish inventory of all structures under 20-feet
  - Develop procedures to implement routine inspections
  - Identify maintenance work items and associated costs
  - Evaluate structural condition and develop rehabilitation/replacement priority list

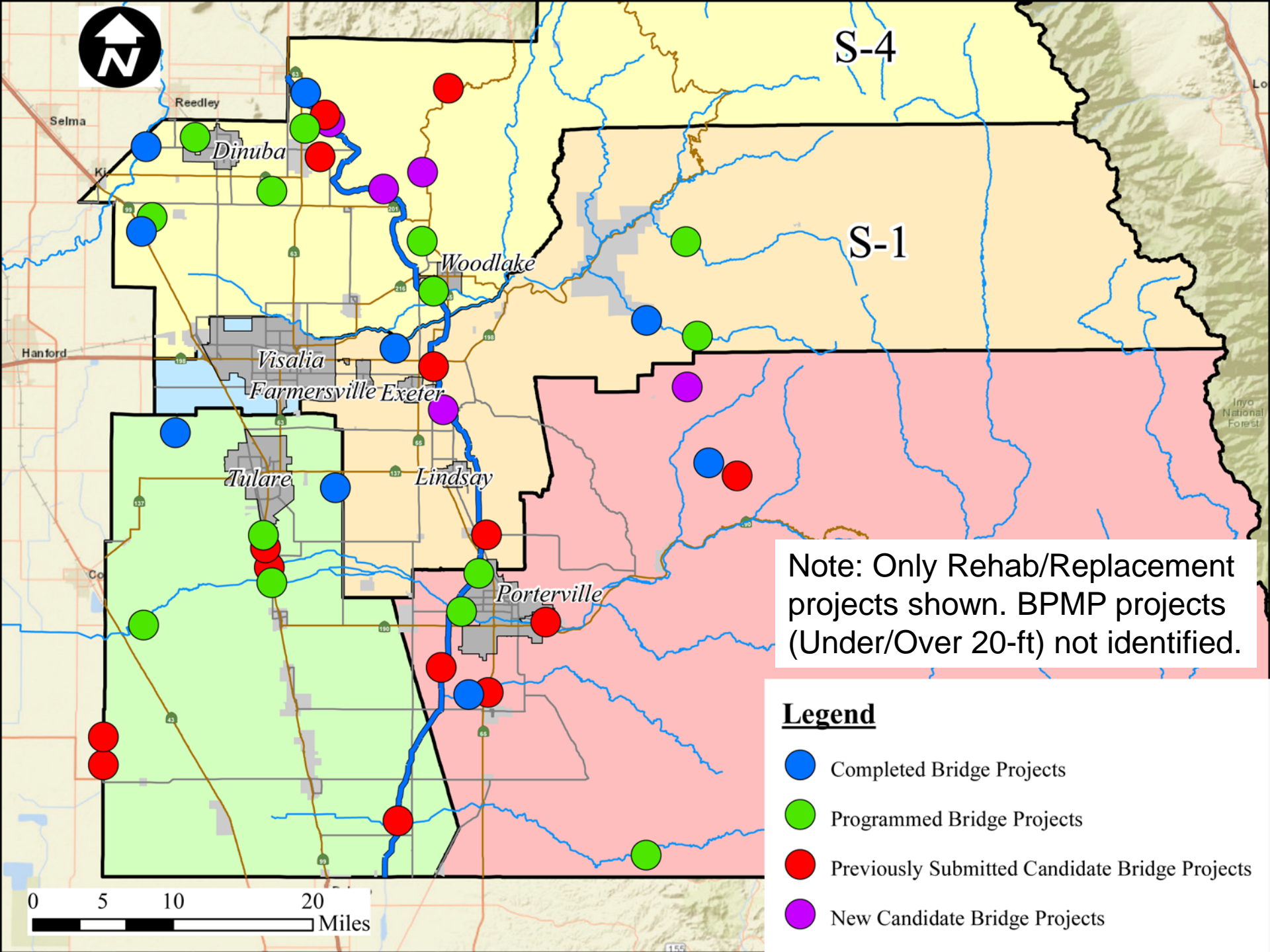




# Program Cost Summary

## Cost Summary of Projects

	Total Project Cost	Local/Measure R Cost
1. 14 Programmed HBP Bridges	\$57,374,000	\$2,446,000 (4.3%)
2. 19 HBP Candidate Projects	\$41,100,000	\$820,000 (2.0%)
3. HBP BPMP (Over 20-ft)	\$12,025,000	\$1,379,000 (11.47%)
4. (Under 20-ft) Develop BPMP	\$250,000	\$250,000 (100%)



S-4

S-1

Note: Only Rehab/Replacement projects shown. BPMP projects (Under/Over 20-ft) not identified.

**Legend**

- Completed Bridge Projects
- Programmed Bridge Projects
- Previously Submitted Candidate Bridge Projects
- New Candidate Bridge Projects

0 5 10 20 Miles



# Recently Completed Projects



D129 over Sand Creek Bridge Project - Before



# Recently Completed Projects



D129 over Sand Creek Bridge Project - After





# Recently Completed Projects



Bear Creek Road over Rancheria Creek - Before



# Recently Completed Projects



Bear Creek Road over Rancheria Creek - After



# Recently Completed Projects



Bear Creek Road over Rancheria Creek - After



# Bridge Program Summary

20

## Requests

- Approve five (5) new bridge applications for 2020 Prioritization List

## Goals & Expectations

- 14 bridges currently in design advance to construction (within next 6 years)
- 19 additional projects started (within next 10 years)
- BPMP (over 20-ft) design finalized and sizeable portion of group work constructed (within next 5 years)
- Complete maintenance inventory for locally funded bridges (under 20-ft)
  - Initiate procedures for routine inspection and maintenance (ongoing)
  - Establish list of potential rehab/replacement projects (within next year)
- Continue coordination with FWA on subsidence issue (over next 3-5 years)



# Questions?