



Resource Management Agency COUNTY OF TULARE AGENDA ITEM

KUYLER CROCKER District One

PETE VANDER POEL District Two

> AMY SHUKLIAN District Three

> EDDIE VALERO District Four

DENNIS TOWNSEND District Five

AGENDA DATE: November 19, 2019

Public Hearing Required Scheduled Public Hearing w/Clerk Published Notice Required Advertised Published Notice Meet & Confer Required Electronic file(s) has been sent Budget Transfer (Aud 308) attached Personnel Resolution attached Agreements are attached and signature tab(s)/flag(s)	Yes	□ N/A ⊠		
CONTACT PERSON: Celeste Perez PHONE: (559) 624-7010				

SUBJECT:

Presentation of the Bridge Improvement Program and Programming

Request for New Bridge Projects

REQUEST(S):

That the Board of Supervisors:

- 1. Receive a presentation on the Tulare County Bridge Improvement Program; and
- 2. Approve submittal of programming applications for five new bridge projects.

SUMMARY:

Tulare County is responsible for the maintenance of 358 bridges (measuring 20-ft and longer) on County roads. The average age of the County's bridges is approximately 65 and many structures are nearing the end of their service life. Tulare County has implemented a Bridge Improvement Program (Program) with the goal of addressing the County's aging bridge inventory. The Program is intended to repair or replace existing bridges considered "Structurally Deficient" and implement preventive maintenance needed to extend the service life of the County's bridges. Significant progress has been made in the past year and staff would like to update the Board on current activities. Following is a summary of the Program:

The Program is predominately funded by the Federal Highway Administration's (FHWA) Highway Bridge Program (HBP). The HBP is a nationwide program that provides funding for our nation's bridges that are in need of rehabilitation, repair or replacement. Supplemental funding for the Program (local match required for onsystem bridge projects) is provided by Measure R transportation funding.

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Typically, federally funded projects require a local match as a condition for receipt of federal funds. However, in 2010, the California Department of Transportation (Caltrans) received approval from FHWA for the use of approximately \$5.7 billion of "toll credits" to be applied to federally funded bridge projects in lieu of local match requirements. The intent of the "toll credits" program is to accelerate the delivery of "off-system" bridge projects; projects typically neglected by the HBP. "Off-system" bridges are defined as those that carry streets and roads that are functionally classified as urban/rural local streets and roads.

Prior to 2016, applications for new HBP projects were accepted on a first come, first served basis. Local Agencies could request bridge rehabilitation/replacement funds if a bridge was categorized as either Structurally Deficient (SD) or Functionally Obsolete (FO) and had a qualifying Sufficiency Rating (SR – an overall bridge "health" indicator established by Caltrans bridge inspectors). Although this system worked for several years, Caltrans annual funding commitments soon outweighed the annual funding allocation (approximately \$300 million distributed annually by Caltrans to Local Agencies throughout the state), creating a backlog of projects and limiting the amount of future project funding available for much needed bridge projects.

In 2016, Caltrans amended the HBP application process, allowing Local Agencies to submit new project funding applications, if determined to be eligible, to be included on the Project Prioritization List (PPL). The PPL compiled by Caltrans and published every two years, ranks eligible local agency projects across the state according to the following prioritization criteria (from highest to lowest) while also considering project detour length and Average Daily Traffic (ADT):

- 1. Seismic retrofit and critical scour countermeasure projects
- 2. Presence of major structural deficiencies resulting in bridge closure or posting
- 3. Less critical scour countermeasure projects
- 4. Eligible replacement projects (SD and SR less than 50)
- 5. Eligible rehabilitation projects (SD and SR less than 80)
- 6. Bridge Preventive Maintenance Plan (BPMP) projects
- 7. Bridges categorized as Functionally Obsolete with application dated prior to October 1, 2016
- 8. Low water crossings with application dated prior to October 1, 2016.

Once all new eligible candidate projects are prioritized, a funding cutoff line is determined for both on and off system projects. Projects above the cutoff line are accepted into the HBP database and receive funding obligation. Projects that do not make the cutoff, do not receive funding however a local agency may re-submit the project for inclusion on the next available PPL (two year waiting period).

In August 2016, Tulare County submitted applications for 22 new bridge projects to be included in the 2018 PPL. 16 of the 22 applications were determined to be eligible for inclusion on the 2018 PPL however only 2 projects (M109 White River Bridge and Avenue 152 Tule River Bridge) were accepted into the HBP database for funding

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eligibility.

In anticipation of the 2020 PPL, the County intends to re-submit applications for the 14 eligible projects remaining from the 2018 PPL. Based on the data compiled from the County's latest bridge inventory, 5 additional bridges also qualify for the 2020 PPL. The table below describes the 5 additional bridges which qualify for replacement due to their low sufficiency rating (less than 50) and Structurally Deficient (SD) status:

Bridge ID	Bridge Name	Bridge	On or Off	Year	Sufficiency	Status
		Material	System	Built	Rating	
46C0313	M 276 Kramer Creek	Concrete	Off	1932	30.8	SD
46C0225	Ave 432 Friant-Kern Canal	Concrete	Off	1949	41.9	SD
46C0242	Ave 268 Friant-Kern Canal	Concrete	Off	1949	46.7	SD
46C0229	Ave 394 Friant-Kern Canal	Concrete	Off	1949	47	SD
46C0118	Ave 404 Cottonwood Creek	Timber	Off	1936	48.8	SD

Staff requests that these 5 additional projects be approved for application submission. If approved, adding these 5 bridges would result in 19 potential bridge rehabilitation/replacement projects that would be submitted for consideration in the 2020 PPL. The estimated cost to address all 19 bridges is approximately \$41,100,000, of which HBP funds would cover \$40,373,000 and Measure-R funds would cover the remaining \$727,000.

Part of the County's Program also includes bridge preventive maintenance for bridges over 20-ft. The purpose of bridge preventive maintenance is to extend the service life of bridges that are considered to be in generally good condition, by implementing preventive maintenance measures such as protective deck treatments, joint seal repairs or scour mitigation repair, before costly or major bridge rehabilitation or repair is required. Of the County's 358 bridges over 20-ft, approximately 91 are eligible for preventive maintenance. These 91 bridges have been split into 5 different groups of BPMP projects as described below:

- Group 1 Methacrylate Treatments (Concrete Deck Sealant)
- Group 2 Joint Seal Replacements
- Group 3 Miscellaneous Deck Work
- Group 4 Paint & Spall Repairs
- Group 5 Scour Mitigation (Placement and Repair Slope Protection)

In 2016, the County also submitted 2018 PPL applications for BPMP Groups 1 & 5. Both projects were accepted by Caltrans and are expected to receive fund allocation by Spring of 2020. The remaining BPMP Groups (2, 3 & 4) will be included in the applications for the 2020 PPL (fund allocation not anticipated until Fall of 2021). The estimated cost to address various items of work for these 91 bridges is approximately \$12,025,000, of which HBP funds would cover \$10,646,000 (88.53%) and Measure-R funds would cover the remaining \$1,379,000 (11.47%).

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Resource Management Agency is also developing a Bridge Preventive Maintenance Program (BPMP) for bridges under 20-ft in length. Bridges and culverts with a total length less than 20-ft do not qualify for federal funding, therefore Tulare County is responsible for 100% of the cost to manage and maintain these structures (including the cost to rehabilitate or replace the structures). Through prior Board action, \$250,000 in Measure R funds needed to develop the County's under 20-ft BPMP was approved. This includes a full inventory of bridges under 20-ft, an assessment of the maintenance needs, and a prioritization of these projects.

The County currently has fourteen (14) active bridge projects that are in various phases of design, four (4) active bridge revegetation and habitat restoration projects, and one (1) project in construction that is nearly complete (M220 Bear Creek Bridge Project). In the last 2 years, the County has also completed two (2) other HBP projects (D129 over Sand Creek Bridge and D39 over Traver Canal Bridge).

FISCAL IMPACT/FINANCING:

There is No Net County Cost to the General Fund.

Funding for the Tulare County Bridge Improvement Program will come from FHWA's Highway Bridge Program and Measure R.

As the Bridge Improvement Program progresses, staff will work with the Tulare County Transportation Authority to program Measure R Bridge Program funds of approximately \$727,000 in local match funding for candidate "on-system" HBP bridges and \$1,379,000 in local match funding for the HBP Bridge Preventive Maintenance Program. In total, staff proposes that Measure R will provide \$2,106,000 to leverage approximately \$41,100,000 in potential bridge work throughout the County.

LINKAGE TO THE COUNTY OF TULARE STRATEGIC BUSINESS PLAN:

This project will enhance the safety and security of the public by improving the transportation infrastructure for both the general population in the region and the motorists using this facility.

ADMINISTRATIVE SIGN-OFF:

Reed Schenke, P.E.

Director

cc: County Administrative Office

Attachment(s) Attachment A – Bridge Improvement Program Map

BEFORE THE BOARD OF SUPERVISORS COUNTY OF TULARE, STATE OF CALIFORNIA

IN THE MATTER OF PRESENTATION THE BRIDGE IMPROVEMENT PROG AND PROGRAMMING REQUEST FO NEW BRIDGE PROJECTS	RAM)
UPON MOTION OF SUPERVISO	OR, SECONDED BY
SUPERVISOR	_, THE FOLLOWING WAS ADOPTED BY THE
BOARD OF SUPERVISORS, AT AN OF	FICIAL MEETING HELD <u>NOVEMBER 19, 2019</u> ,
BY THE FOLLOWING VOTE:	
AYES: NOES: ABSTAIN: ABSENT:	
ATTEST:	JASON T. BRITT COUNTY ADMINISTRATIVE OFFICER/ CLERK, BOARD OF SUPERVISORS
BY:	
	Deputy Clerk
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- 1. Received a presentation on the Tulare County Bridge Improvement Program; and
- 2. Approved submittal of programming applications for five new bridge projects.

Attachment A

Bridge Improvement Program Map

