

TEHAMA COUNTY PUBLIC WORKS

2022/23 GASB REPORT

Tehama County Public Works
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Tehama County Public Works Fiscal Year 2022/2023 Infrastructure Assets Reported Using the Modified Approach

Bridges

The County of Tehama maintains the Bridge system utilizing Microsoft Excel as a Bridge Database using the modified approach. The County combines several factors to establish a scale from 0 to 100 giving a rating to each structure in the inventory. A scale has been established with scaling from poor to excellent and are rated as follows:

Excellent-----90-100
 Good-----80-89
 Fair -----50-79
 Poor -----0-49

It is the County's recommendation to maintain at least 75% of bridge structures at fair or better condition. The County categorizes bridges into structure types and maintains a database. Categories are based on nomenclature, materials, and sub types. The following table illustrates current structural conditions:

	Total	Exc.	%	Good	%	Fair	%	Poor	%
Concrete Bridges*	148	36	24.3%	28	18.9%	67	45.3%	17	11.5%
Box Girder	17	10	58.8%	4	23.5%	2	11.8%	1	5.9%
Tee Beam	15	1	6.7%	4	26.7%	6	40.0%	4	26.7%
Pony Truss	18	0	0.0%	0	0.0%	8	38.9%	10	61.1%
Thru Truss	2	0	0.0%	0	0.0%	1	50.0%	1	50.0%
Wood	2	0	0.0%	0	0.0%	2	100%	0	0.0%
Grid Deck	37	0	0.0%	2	2.7%	34	94.6%	1	2.7%
Steel Deck w/ St Girder	58	2	3.4%	8	13.8%	39	67.2%	9	15.6%
Conc Deck w/ St Girder	33	0	0.0%	4	12.1%	22	66.7%	7	21.2%
Wood Deck w/ St Girder	1	0	0.0%	0	0.0%	0	0.0%	1	100%
Concrete Box Culverts	159	21	12.6%	70	46.7%	68	42%	0	0.0%
Precast Con Boxes	20	0	0.0%	2	10.0%	18	90%	0	0.0%
Pipes (3 Ft & Larger)	144	7	4.9%	35	24.3%	102	70.8%	0	0.0%
Bailey Bridges	0	0	0%	0	0.0%	0	0.0%	0	0.0%
Multiplate	1	1	100%	0	0.0%	0	0.0%	0	0.0%
Shipyard Trailers	4	0	0.0%	0	0.0%	0	0.0%	4	100%
Concrete Slabs	30	0	0.0%	0	0.0%	30	100%	0	0.0%
TOTAL	689	78	11.1%	157	23.5%	399	57.5%	55	7.9%

Notes:

1. 293 bridges are 20' or longer, placing them on the Federal Bridge Inventory and subject to Caltrans' inspections on a two- or four-year cycle. *8C0378 Sac River overflow on Jelly's Ferry Rd added to NBIS, increased total number inspected by Caltrans from 292 to 293.
2. 83 bridges are less than 20' long, inspected by DPW staff.
3. 313 bridges are actually concrete box culverts, pipes 3' or greater in diameter or concrete slabs.
4. *8C0310 Flournoy Bridge moved from Fair to Poor due to collapse.

Roads

The County of Tehama manages the maintained road network using the Streetsaver Pavement Management Software using ASTM D6433 “Standard Practice for Roads and Parking Lots Pavement Condition Index Surveys.” The Software establishes a Pavement Condition Index (PCI) on a scale from zero to one hundred (0-100) for each road segment maintained by the Department of Public Works. ASTM D6433 considers a PCI less than 55 to be in poor quality and meets the requirements for reconstruction. A scale has been established with roads falling in categories from Good to Poor and is rated as follows:

Good -----	70 to 100
Fair -----	55 to 69
Poor -----	0 to 54

A distinction is made between paved roads and unpaved (Gravel/Unsurfaced) roads. Paved roads are inspected for Pavement Condition Index (PCI) and Unpaved (gravel/unsurfaced) roads are given an Overall Condition Index (OCI).

It is the County's recommendation to maintain at least 50% of its maintained road system at a fair or better rating; assessments are made on a three-year rotation. Other inspections are performed on an ongoing basis.

As of June 30, 2023, the condition of the County's paved maintained road system was rated overall at 50% fair or better for Arterial and Collector roads, and 40% fair or better for Local roads, for a total of 43% fair or better for all paved roads. The County's 260 miles of unpaved roads are maintained in fair condition. The County had a consultant drive and inspect the County's paved maintained road system in 2022. The consultant drove 806* of the County's 828 miles of paved road. The data from the road inspections are shown in the tables below:

Paved Roads	Arterial & Collectors		Local		Combined Totals	
	Number of Miles	Percent	Number of Miles	Percent	Number of Miles	Percent
Good	87	30%	118	23%	205	25%
Fair	54	20%	90	17%	144	18%
Poor	142	50%	315	60%	457	57%
Total	283	100%	523	100%	806*	100%

Unpaved Gravel/Unsurfaced Roads	Arterial & Collectors		Local		Combined Totals	
	Number of Miles	Percent	Number of Miles	Percent	Number of Miles	Percent
Good	0	0	0	0	0	0%
Fair	31	100	229	100	260	100%
Poor	0	0	0	0	0	0%
Total	31	100.00	229	100	260	100%

*The County chose not to include the additional 22 miles of paved road in the tables above as they were not inspected by our consultant and would not be an accurate representation of the data.

It is the County's recommendation to maintain 260 miles of unpaved (gravel/unsurfaced) roads at a minimum of fair condition and maintain records of 0.96 miles of unconstructed right of way. The current total recorded number of maintained miles by the department is 1088 miles (828 miles paved, 260.00 miles gravel).

The majority of roads in poor condition (within the PCI 0-54 rating) are in the Local Road category and can be attributed to acquisition by the County of roads with inadequate or no structural section. All of these roads are in rural settings, with relatively minimal traffic. Increasing the PCI ratings for these roads would require large expenditures over many years.

Signs

The County of Tehama manages a traffic sign database using the Streetsaver sign management program. The State and Federal Manual of Uniform Traffic Control Devices, (MUTCD) has established Minimum Retroreflectivity levels. The County has standardized the inspection method, using a Retroreflectometer, giving County personnel the ability to assign definitive, objective, pass or fail ratings.

Signs are typically replaced throughout the year as part of The Public Works Department’s routine maintenance, No mass sign replacement program has occurred this year.

Currently, Public Works staff has a functional geo-referenced database, integrating Google maps, which allows staff to easily locate, and view sign locations, as well as their pass or fail status, from any computer or handheld mobile device.

Additionally, the County maintains a significant number of center line and edge line miles which further include various pavement markings and object markers. These assets are visually inspected during routine operations and are maintained or replaced as needed to maintain appropriate visibility.

	No. St Name Signs	No. Traffic Signs	Total	Percent Pass/Fail
Pass	3457	4179	7636	94.1
Fail	0	475	475	5.9
Total	3457	4654	8111	100