

Senate Bill 1 – Fix Bridge Requirement



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Senate Bill 1 Language

Senate Bill 1 included a requirement to “fix an additional 500 bridges” over a 10 year period (2017-2027)

This provision required Caltrans to define:

- which activities constitute a “fix”
- Pre-SB1 “fix” level to measure the “additional” bridges



Measuring and Tracking Fixes

- Definition developed in 2017 to allow the Department to begin capturing and reporting bridge fixes.
- Annual update to the Commission on all the performance metrics including bridges “fixed”.
- In October 2018, the Department reported that an additional 86 bridges were fixed in the 2017/18 fiscal year.
- 2018/19 fiscal year numbers will be reported at the October 2019 Commission Meeting.



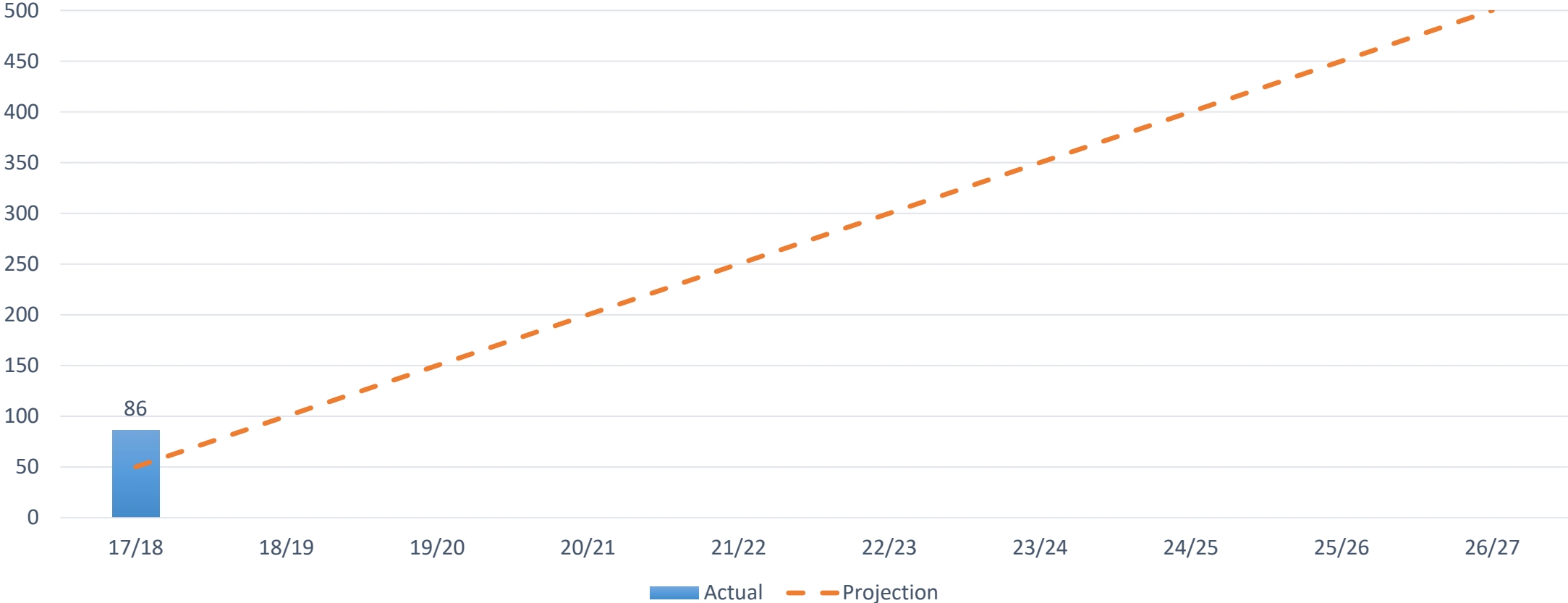
Definition of “Fix Bridge”

- Caltrans definition of “fix” for SB1 reporting:
 1. Any project that improves the condition of the bridge from a lesser condition to a better condition
 2. Any project that provides seismic safety.
 3. Any project that addresses scour vulnerability
 4. Any project that replaces a bridge rail that does not meet current federal crash test standards
 5. Any bridge whose vertical clearance is increased to current Highway Design standards or whose load capacity is increased for permit vehicles shall be counted as a fixed bridge.



Measuring Progress Toward 500 Bridges

SB 1 Fix Bridge Cumulative Counts



Pre- SB1 Baseline

- A baseline was needed to track the “additional” fixes for SB1 reporting purposes.
- “Fixes” in excess of 126 each year are counted for SB1 reporting

Bridge Fix Category	Count of bridges “fixed” by fiscal year of delivery					Totals
	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	
Bridge Health	156	81	101	53	102	493
Bridge Seismic Restoration	8	8	7	18	9	50
Bridge Scour Mitigation	5	0	3	2	4	14
Bridge Rail Safety Upgrades	6	10	17	14	14	61
Bridge Goods Movement Upgrade	0	8	3	1	2	14
	Five Year Average Baseline					126 bridges /year



Relationship to Asset Management Targets

- CTC Adopted Asset Management Targets

Deck Area (Sq. Ft.)	Good Cond	Fair Cond	Poor Cond
251 million	83.5%	15%	1.5%

Average area ~ 19,000 sq. ft.

2019 State Highway System Management Plan

Currently we have ~ 3.3% of the deck area classified as Poor (8.3 million sq. ft.)

Ignoring ongoing deterioration for illustrative purposes...

To achieve the asset management Poor target, we need to reduce Poor area by 1.8% (3.3%-1.5%)
 $1.8\% \times 251 \text{ million sq. ft.} = 4.5 \text{ million sq. ft. of work required}$
(@ 19,000 sq. ft per bridge) ~ 237 bridges

