

Recommended Transportation Asset Management Target Changes

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Condition Targets Background

- *Senate Bill 486 places the authority to establish asset management condition targets with the California Transportation Commission.*
- *The Commission adopted the current targets based on 2016 data.*
- *The adopted asset management targets predate Senate Bill 1*
- *Nearly 5 years have passed since the initial targets were set and our asset management maturity is providing better target insight.*
- *Current targets overstate the needs*



Recommended FAIR Targets

Table 1 – Recommended Asset Management Targets for Bridges

	Good Condition	Fair Condition	Poor Condition
Existing Targets	83.5%	15%	1.5%
Recommended Revised Targets	48.5%	50%	1.5%

Table 2 – Recommended Asset Management Targets for Drainage Systems

	Good Condition	Fair Condition	Poor Condition
Existing Targets	80%	10%	10%
Recommended Revised Targets	70%	20%	10%



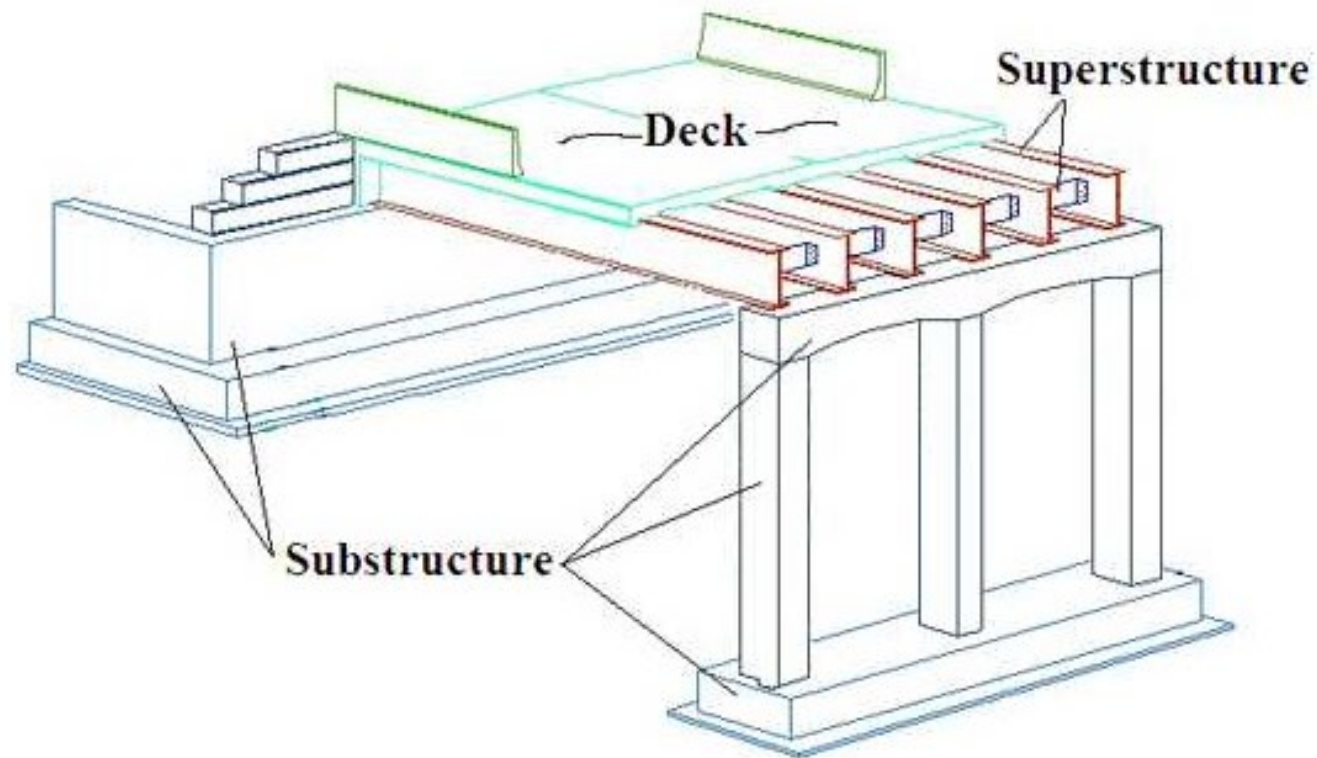
Bridge Background

- All public bridges >20 feet require inspections to be performed in accordance with federal regulations
- Bridges are typically inspected once every 2 years
- FHWA mandates standards to ensure consistency across the U.S.
- Federal inspection and compliance changes implemented in 2016
- Annual FHWA compliance audit of the Caltrans bridge inspection program



Typical Bridge Components

Federal Regulations dictate that the overall bridge condition rating is the lowest of the 3 component ratings



Graphic credit: Michigan DOT



Why Make A Change?

- Bridge targets were set while the federal rule was still in the rule making process.
- Current FAIR target is overstating the need and is not supported by work recommendations.
 - Half of all FAIR condition bridges have no work recommendations
- Bridges spend the majority of their life in FAIR Condition.
 - New bridges transition to FAIR condition within 12 years of construction
 - 15% of new bridges are entering the inventory in FAIR condition
- FAIR condition is safe and a cost effective condition to maintain!



Condition History Over Time

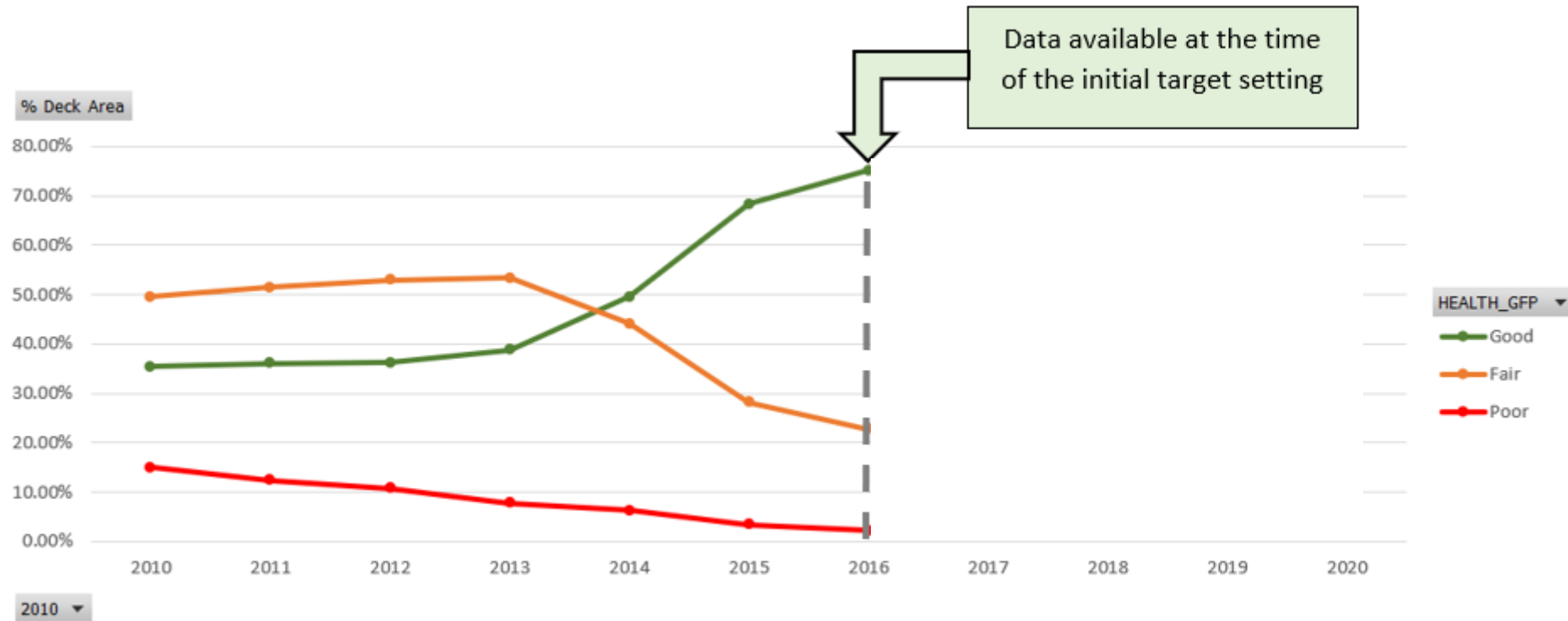


CHART 1- Bridge Deck Area Good, Fair and Poor Percentages Over Time



Condition History Over Time

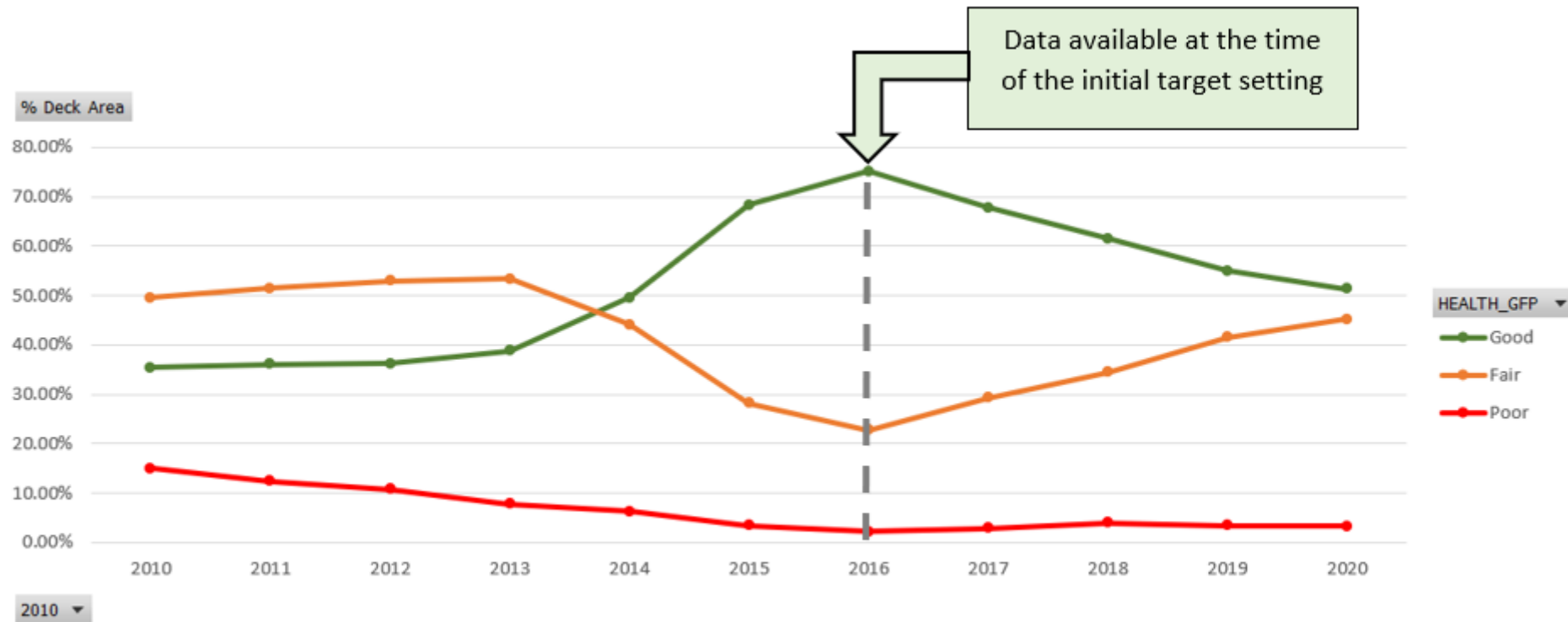


CHART 1- Bridge Deck Area Good, Fair and Poor Percentages Over Time



Case Example – Poor Bridge Deck Fix



Before - POOR Condition Deck



After – GOOD Condition Deck



Overall Condition Limited by Substructure



Case Example – New Construction FAIR



Close up of new bridge deck



Close up of new bridge column

Case Example – FAIR Columns, No Feasible Work

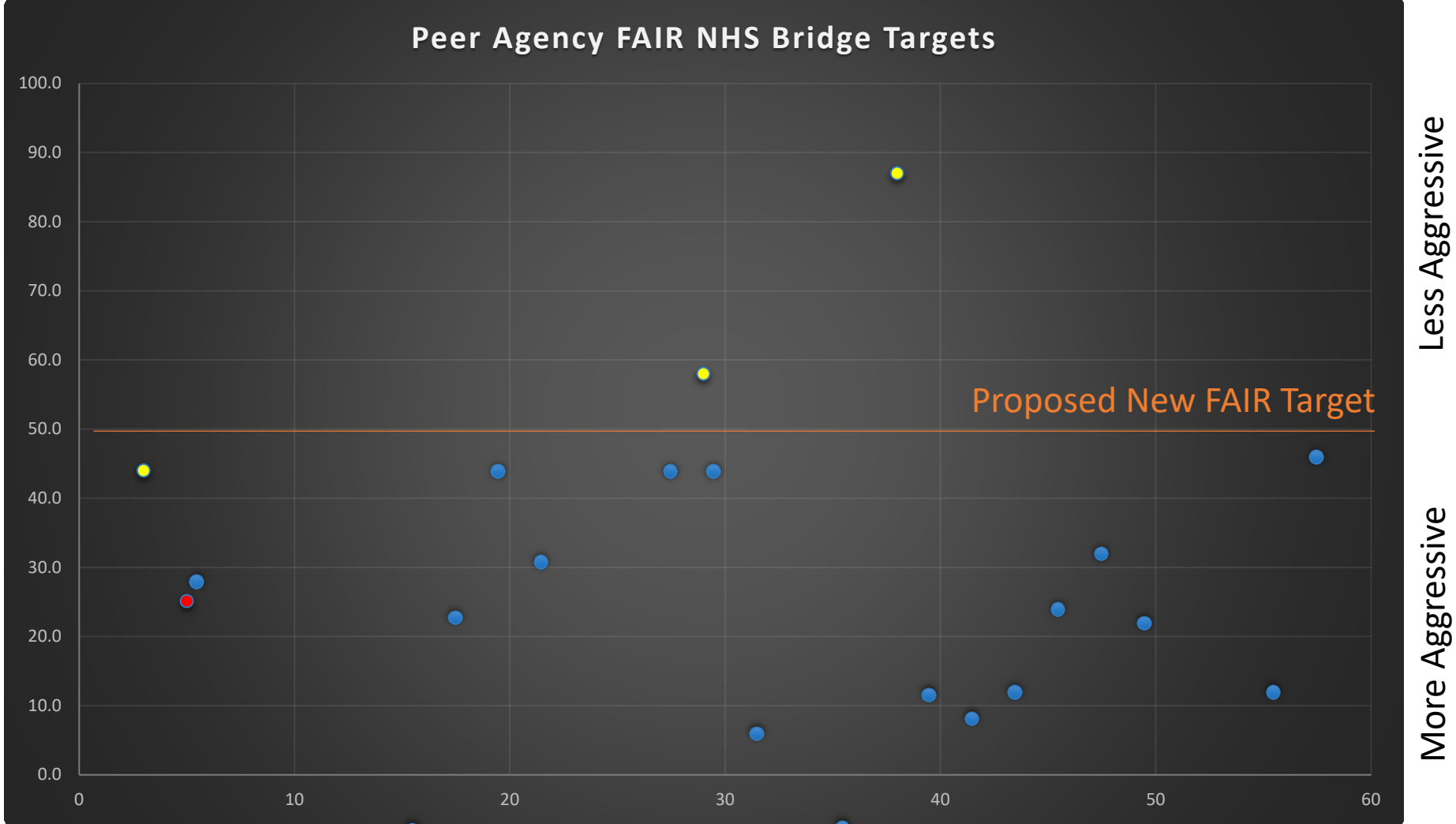


Bridge column with cosmetic abrasion



Bridge column with cosmetic abrasion

Peer Agency NHS FAIR condition Bridge Targets

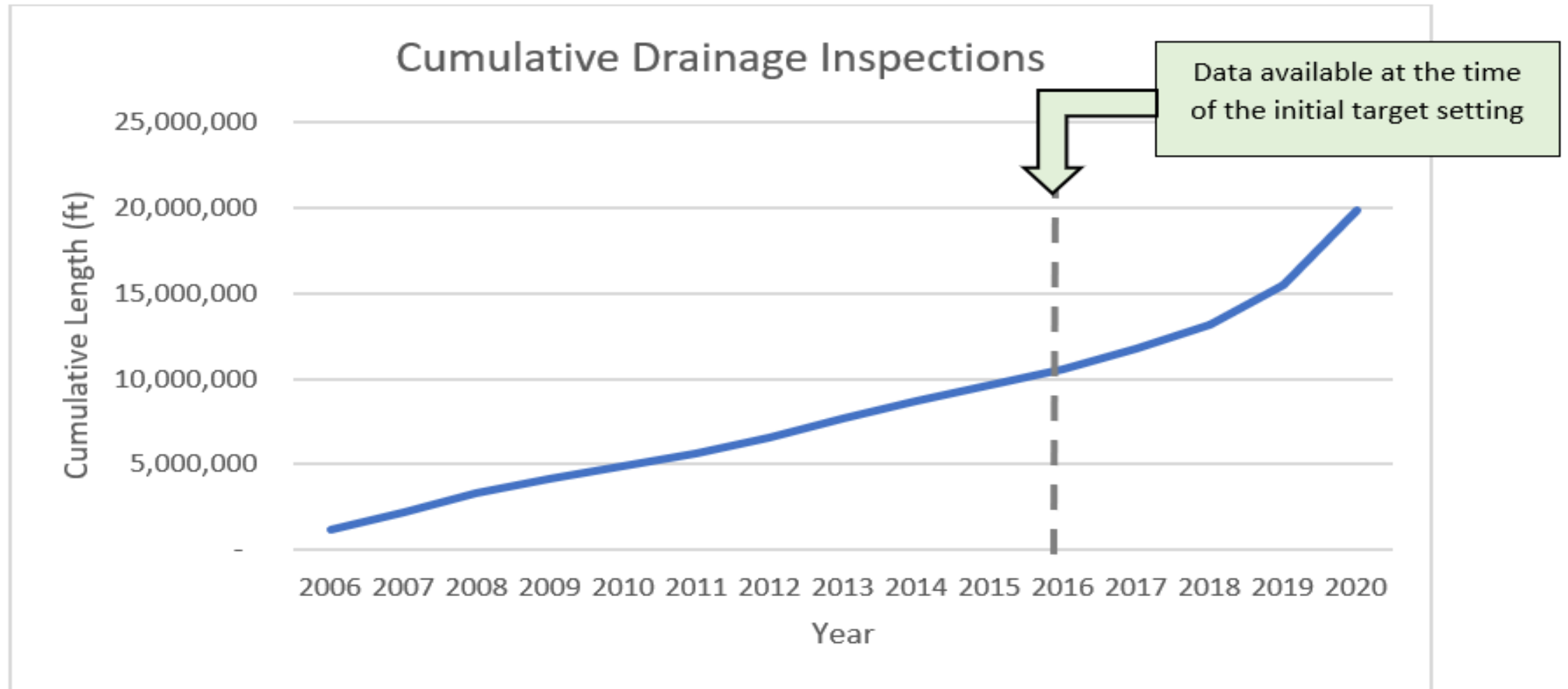


Drainage System Background

- Initial targets were set with less than 50% of the inventory condition known
- A more complete inventory and better known condition is driving the recommended FAIR condition change
- FAIR condition treatments are less viable than originally anticipated due to cost and need for larger capacities leading to replacements
- Better to put the money to POOR culvert replacements
- Reinspection of early culvert inventory is expected to result in a growth in FAIR condition



Draining System Inventory Growth



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What is the Impact of Changing the Target?

- No compromise in asset safety
- No change to SB1 performance metrics
- Changing the targets will align the needs with viable work
- More accurate long-term reporting of expected outcomes
- No change to SHOPP Investment Plan

