

Connecting Highway

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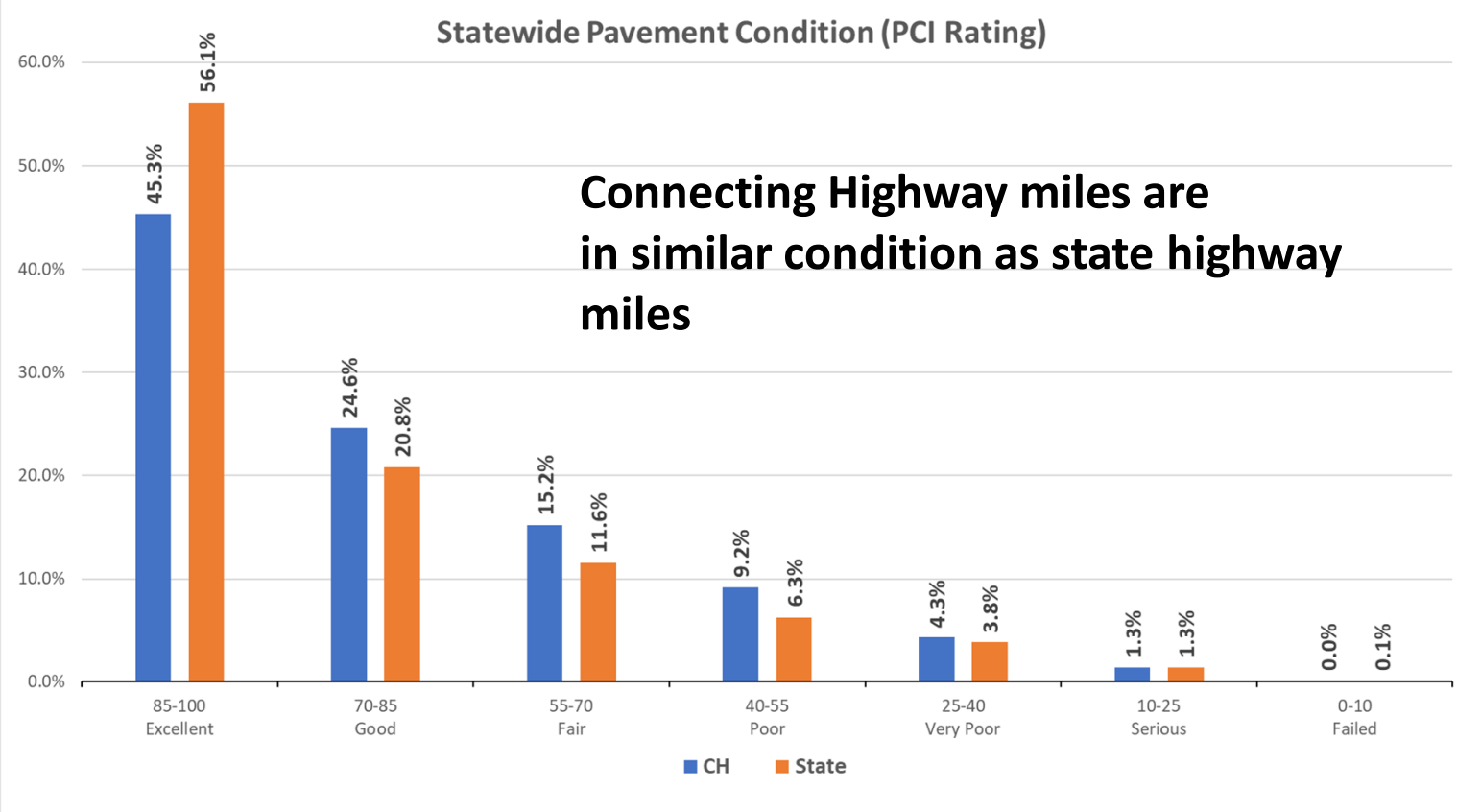


Definition of Connecting Highway

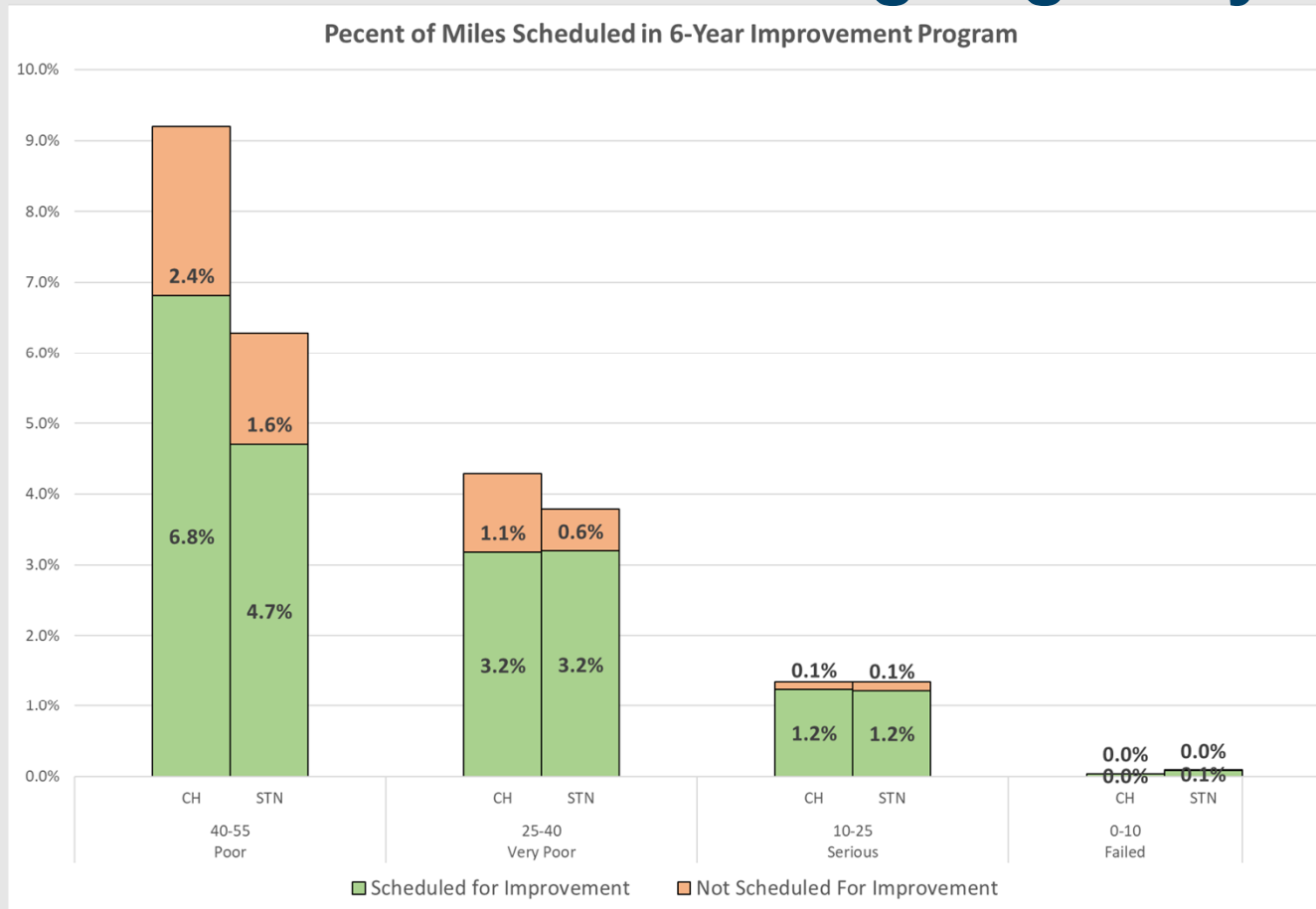
- Connecting Highways are defined pursuant to Wisconsin State Statute 86.32
 - They are part of the mapped State Trunk Highway (STH) System, yet, by statutory directive (Wis. Stat. 84.02 (11)), they are logged separately as Connecting Highways (CH).
 - Local unit of government is responsible for providing maintenance. Connecting highway aids are provided to aid maintenance costs.
 - 1,126 Connecting Highway Lane Miles of 14,483 Statewide lane miles



Condition of the Connecting Highway Network



Condition of the Connecting Highway Network



WisDOT Programming Theme Logic

- Starting with the most recent pavement survey data, pavement distresses are forecasted for the next 10 years
 - Forecasts based on historical data
 - Closely following deterioration trends

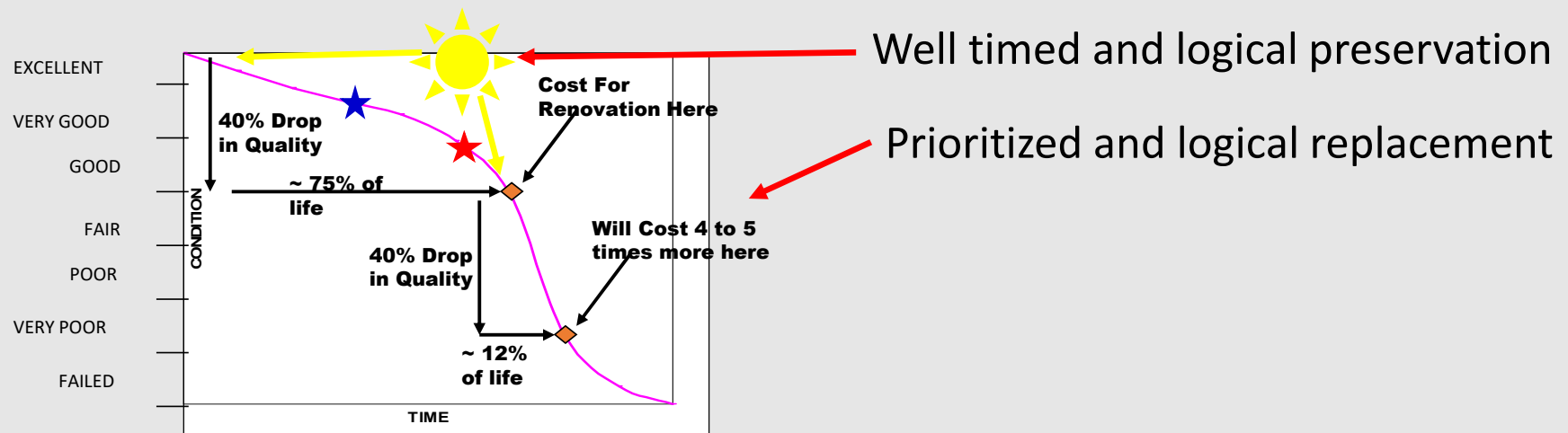


PIF SEG ID ↑ ▼	PAVE TYPE ↑ ▼	HWY ↑ ▼	PAVE YEAR ↑ ▼	YEAR ↑ ▼	PCI ↑ ▼	PCC SM PAT... ↑ ▼
42790	8-PCC,JPCP DWL	013N	1994	2023	93	1
42790	8-PCC,JPCP DWL	013N	1994	2024	92	1.60
42790	8-PCC,JPCP DWL	013N	1994	2025	91	2.20
42790	8-PCC,JPCP DWL	013N	1994	2026	88	2.80
42790	8-PCC,JPCP DWL	013N	1994	2027	87	3.50
42790	8-PCC,JPCP DWL	013N	1994	2028	86	4.20
42790	8-PCC,JPCP DWL	013N	1994	2029	85	5



Our Project Programming Theme Has A Pavement Preservation Emphasis...

Typical Pavement Condition Life Cycle



WisDOT Programming Theme Logic

- In each year, all forecasted distresses are evaluated to determine a minimum level of improvement
 - This level of improvement is further evaluated to determine whether it is expected to provide at least a 4-year service life extension (This is a Federal Funding criteria / **NOT** an improvement timeline!)

AM Segments (1)	Project Info	Improvement Needs (1)	Segment Distress	Pavement Distress	Pavement History					
▼	≡	↓	118	🚫	CASCADE SELECTION					
ADG YR IRI ↑ ▼	[YEAR1] CNCP ↑ ▼	[YEAR2] CNCP ↑ ▼	[YEAR3] CNCP ↑ ▼	[YEAR4] CNCP ↑ ▼	[YEAR5] CNCP ↑ ▼	[YEAR6] CNCP ↑ ▼	[YEAR7] CNCP ↑ ▼	[YEAR8] CNCP ↑ ▼	[YEAR9] CNCP ↑ ▼	[YEAR10] CNCP ↑ ▼
261	RSRF20	RSRF20	RSRF20	RSRF20	RSRF20	PVRPLA	PVRPLA	PVRPLA	PVRPLA	PVRPLA

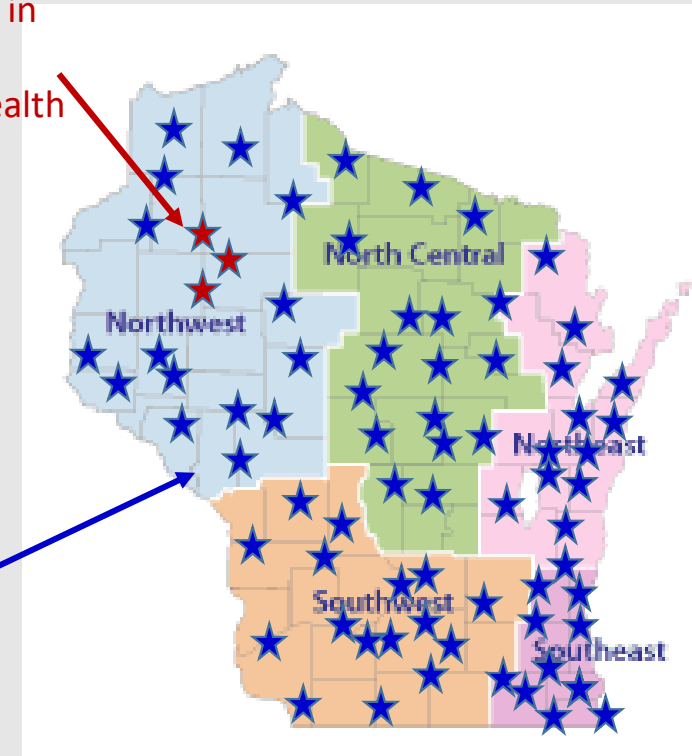


Our Project Programming Theme

- Is a STRATEGIC mix of Best Value and Low-Cost Approaches
- With it we have 230 more miles in good condition
- With it we have 678 less miles in very poor condition
- With it we have 44% less miles in a backlogged funding status

Looking at projects in isolation doesn't optimize system health

Scoping and prioritization must be system-wide



What to expect with WisDOT Improvement Projects

Performance-Based Practical Design

- Fix what is broken
- Focuses items on projects to those that address a specific purpose and need
- Uses data to drive the decision-making process
- **Safety, Bridges, Pavements, Operations, Bicycle and Pedestrians** are all considered



What to expect with WisDOT Improvement Projects

- Safety Evaluated on ALL project types and possible as stand-alone projects (HSIP and SHR)
- Operational screening can be conducted on ALL projects to assure that any performance-based operations issues are addressed.
- Bicycle and Pedestrian can be conducted on ALL projects to assure that any critical connectivity issues are addressed.
- Guidelines for cost sharing or up-scoping projects will be applied.
 - Local Utility concerns
 - Local request additional items



State Funding Connecting Highway Projects

- Proposed Policy

- State Funds all Capital Improvements

- Programming theme treats CH same as all other state highways of like classification

- Maintenance definition changed

- Change to include well-timed preservation jobs that will be state funded
- Eliminate the existing restriction on overlay depth, and joint repair on concrete
 - NOTE: If an overlay or joint repair was the right treatment, previous rules defined it as maintenance
- Will result in a 30% increase in CH pavement improvement mileage funded by the programming theme



How should this occur?

- During the life of the project normal deterioration will occur.
 - Safety can be addressed as stand alone as things arise
- The municipality will maintain any areas and expend normal maintenance amounts to keep conditions serviceable.
- Normal deterioration will overtake normal maintenance at a certain point during this time
- When the distresses and deterioration reach this point, WisDOT will model a funded project



Illustrative Example Concrete Pavement with Maintenance

Responsibility	Work Type
Municipality Maintenance	Crack and joint repair concrete (any early failure area)
WisDOT Project	Joint and slab repair (minimum 4-year Service Life Extension (SLE))
Municipality Maintenance	Crack and joint repair concrete (any early failure areas)
WisDOT Project	Joint and slab repair (minimum 4-year SLE level)
Municipality Maintenance	Crack and joint repair concrete (any early failure areas)
WisDOT Project	2 ½ " Asphalt overlay if drainage allows (Resurface), if drainage doesn't allow Joint and slab repair if cost effective
Municipality Maintenance	If asphalt – Crack sealing If concrete – Crack/joint repair/patching concrete (any early failure areas)
WisDOT Project	Pavement Replacement



What is necessary to cooperatively achieve good project lives?

- Good maintenance and deterioration expectations
 - Start with outlining maintenance expectations in SMMA
 - SMMA – State Municipal Maintenance Agreement – typically delivered at the same time as the State Municipal Financial Agreement (cost share document)
 - Communicating with municipality about deterioration expectations
- Good communication about condition changes and about municipality needs
 - Communicate with each pavement condition update and deterioration modeling improvement
 - Roadway conditions measured annually
 - Programming theme changes recommendations as pavement conditions change



Questions?

