

The background of the slide is a photograph of a winding asphalt road that curves into the distance. The scene is captured at sunset or sunrise, with a warm, orange and yellow glow on the horizon and scattered clouds. The road has white lane markings, and the overall atmosphere is serene and forward-looking.

Navajo Nation Division of Transportation Moving Roads Forward

**2017 National Tribal
Transportation Conference
September 23, 2017**

Presented by:

**Karen Bedonie Benally, Department Manager
NDOT Planning Department**

**Jim Townsend, AICP, Principal, Planning Manager
Wilson & Company**

Background

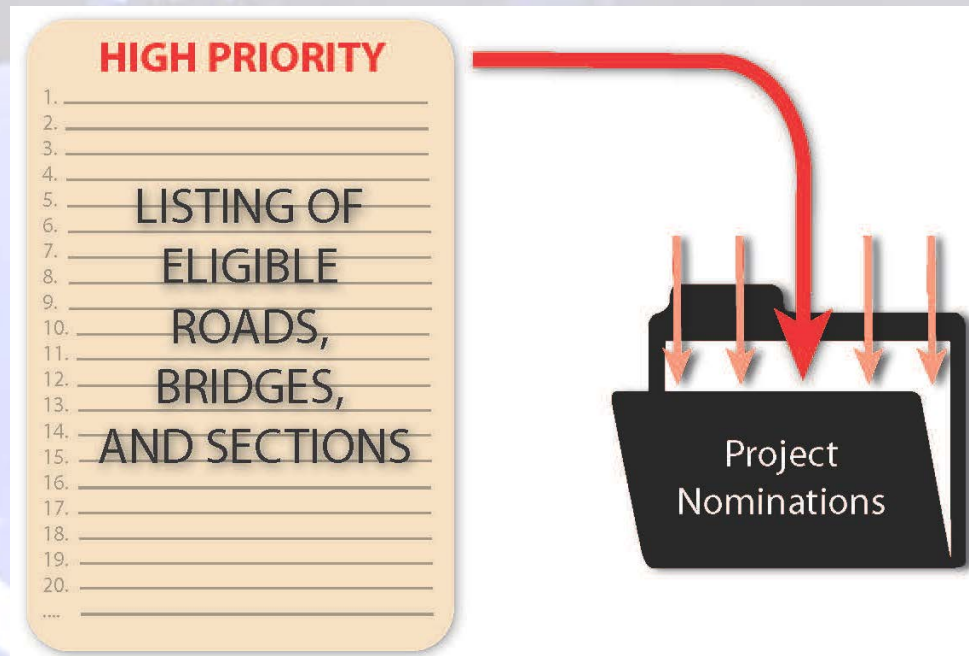
- **2009 LRTP – Project listing oriented.**
 - 38-year TIP
 - All politically driven.
- **2016 LRTP – Needs-based/performance oriented with goals, objectives and strategies.**
 - No projects... - there's a TIP process for that.
 - Significant reduction in politics.

L RTP Strategy – 7 Goals

- Goal 1: Take Care of the System**
- Goal 2: Create Connections**
- Goal 3: Provide Options**
- Goal 4: Promote Economic Development**
- Goal 5: Enhance Safety**
- Goal 6: Maximize Transportation Investment Effectiveness**
- Goal 7: Enhance Existing & Create New Partnerships**

2016 LRTP

- **Priorities based upon data; Data Driven**
- **Future projects are consistent with the LRTP goals (Take Care of the System); Performance Based.**



Objective: All Weather Roads...

- **Manage Risk**
- **Manage Resources**
- **Manage Expectations**
- **Manage to Today's Conditions**

**NDOT's responsibility:
Manage the Transportation System**

Surface Maintenance

- **Bridges**
 - Sufficiency Ratings
- **Pavement – Pavement Condition Index**
 - Crack seal
 - Chip Seal
 - Reconstruct
- **Gravel – Visual Inspection**
 - Blade/Sealants
- **Dirt – Visual Inspection**
 - Blade/Sealants/Grade & Drain

Highest Priority Projects

			AGENCY					
			Northern	Western	Eastern	Chinle	Ft. Defiance	Totals
DIRT ROADS	AADT 250+ (Miles)		76.7	159.8	67.5	109.3	119	532.3
	AADT 250+ and Regional Route (Miles)		29	37	29.3	54.5	40.3	190.1
PAVED ROADS	PCI 0-54 (Miles)	<1000 AADT	66.3	36.1	97.2	97.3	90.7	387.6
		1000-2999 AADT	59.9	53.3	38	104	108.6	363.8
		3000+ AADT	0	6.3	2.8	19.9	28.8	57.8
	PCI 55-69 (Miles)		72.4	34.3	42	36	17.4	202.1
	PCI 70+ (Miles)		93.3	109.6	13.5	17.7	44.3	278.4
# of BRIDGES	Sufficiency Rating = 0-20		3	0	0	0	8	11
	Sufficiency Rating = 20-40		0	1	0	1	4	6
	Sufficiency Rating = 40-50		0	0	0	0	1	1
# OF WASHOUT S	Washout		39	8	4	11	39	101
	Washout on Regional Route		5	16	1	2	44	68
	Washout on High Priority Regional Route		4	0	0	5	13	22

Highest Priority for immediate design/clearances/programming.

Regional Route Priorities



Chapter House Access

School Access

Traffic Count

Connections
(Hwy/Paved Road)

- **5 Packages**
- **20-Miles +/- Per Year**
- **10-Year Program**
 - **Grade/Drain**
 - **Gravel**
 - **Chip Seal**

Washout Priorities

1

High Priority
Regional Route
(ADT/Reg Rte)

2

Regional Route

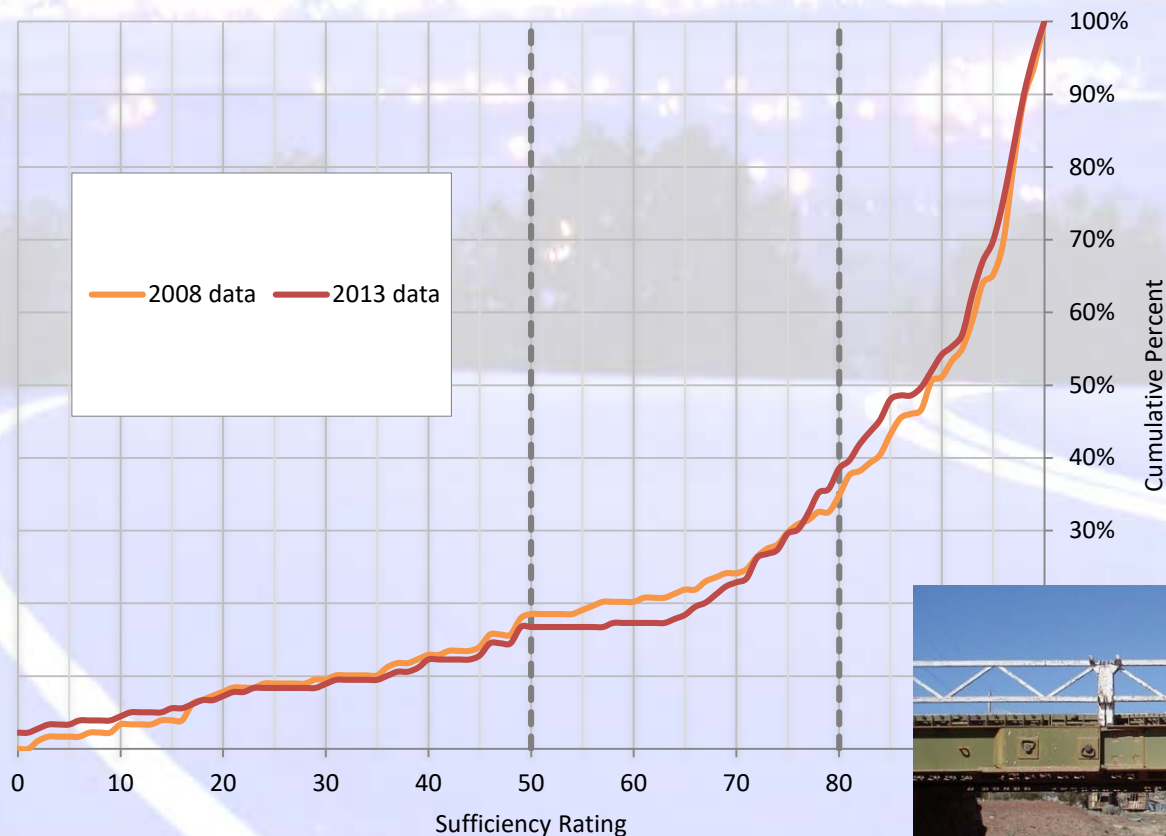
3

Others

- **Hydrology Evaluations**
- **Scoping Studies**
- **Environmental**
- **Grade/Drain**

Bridges

No Significant Changes in 5 years



- **17% are failing.**
- **20% need maintenance**



Bridge Priorities

Phase 1 Evaluation

1

Is It Needed?

2

Fracture
Critical/Closed?

3

Important to
Community?

Phase 2 Evaluation

Project Ready?
(Plans/Env/ROW)

Traffic Use/Detour

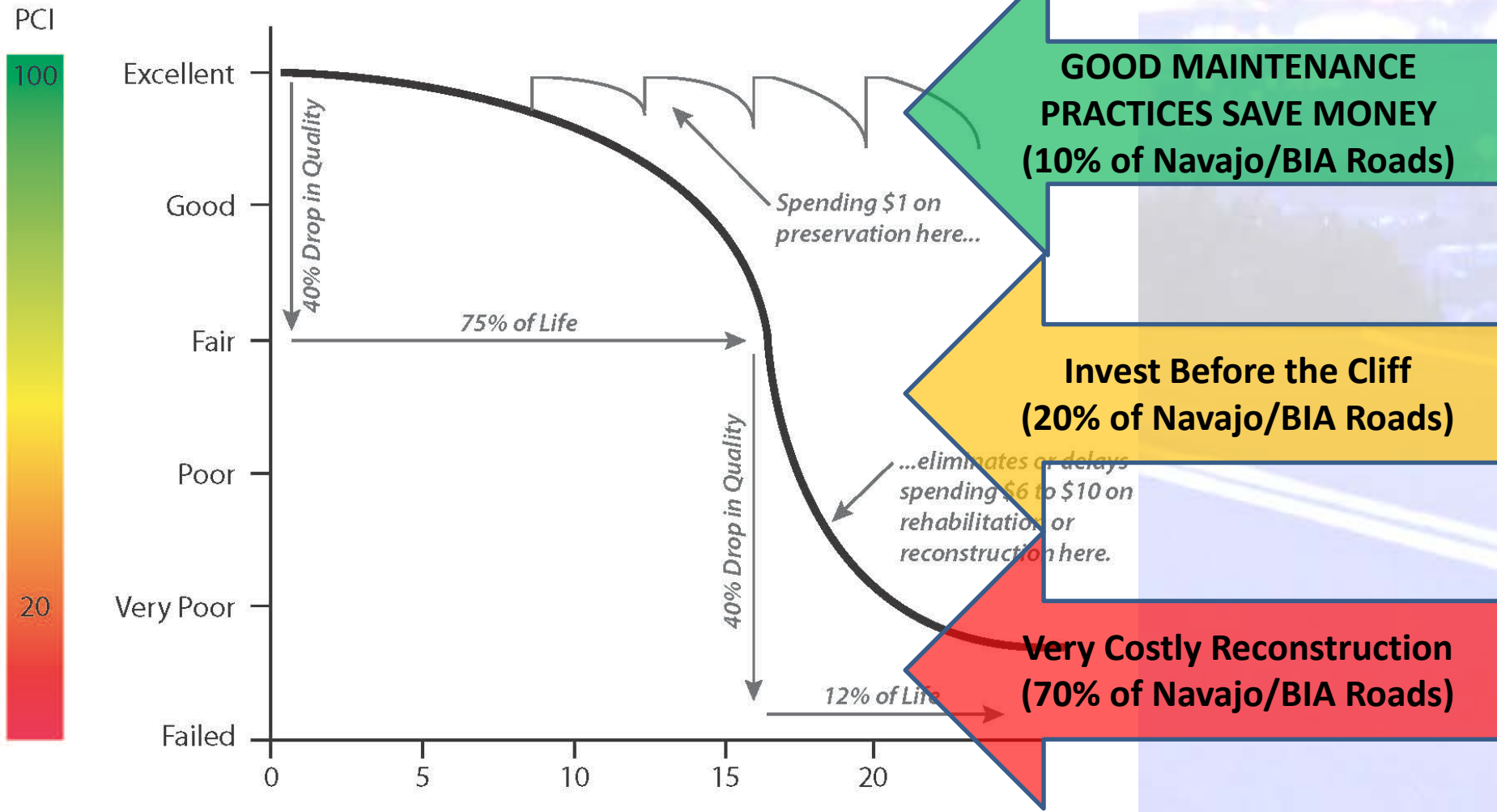
Functional Classification

Surface Type

Bus Route

Paved Surface Conditions

Pavement Option Curve
(PCI = Pavement Condition Index)



Paved Surface Conditions



Paved Surface Conditions

Targeted Crack Repairs

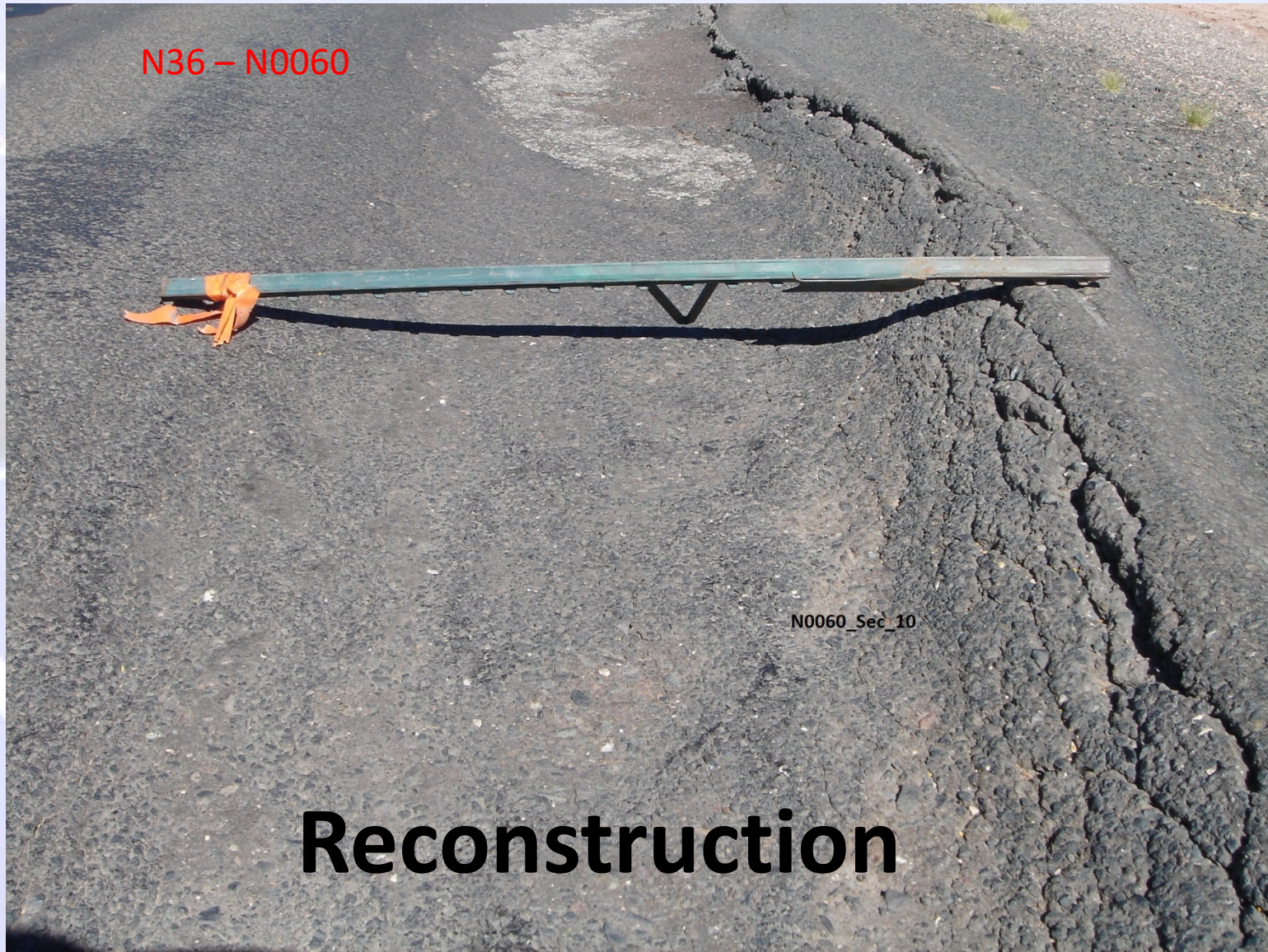


Paved Surface Conditions



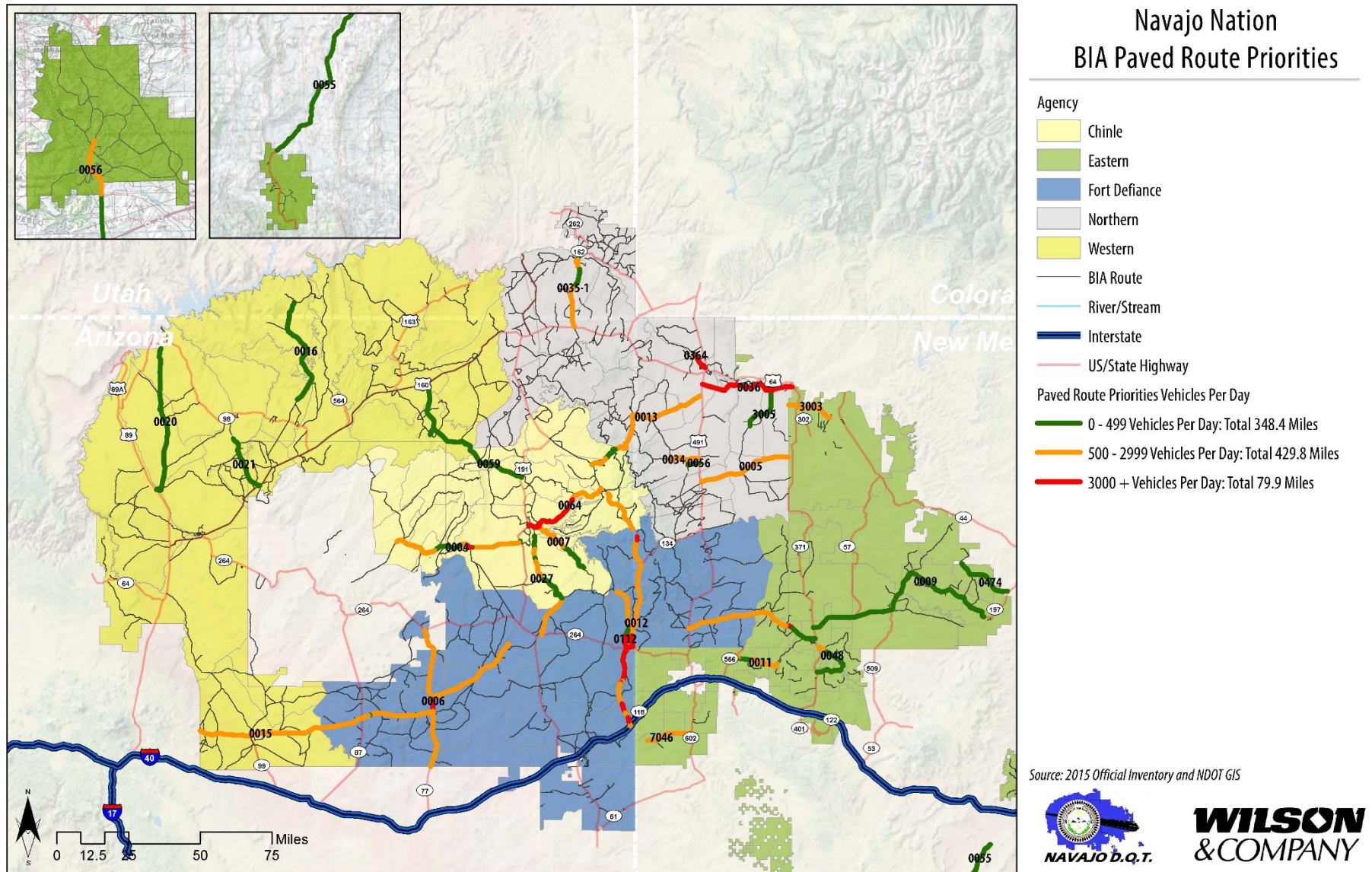
**Pothole Repair and Targeted
Reconstruction**

Paved Surface Conditions

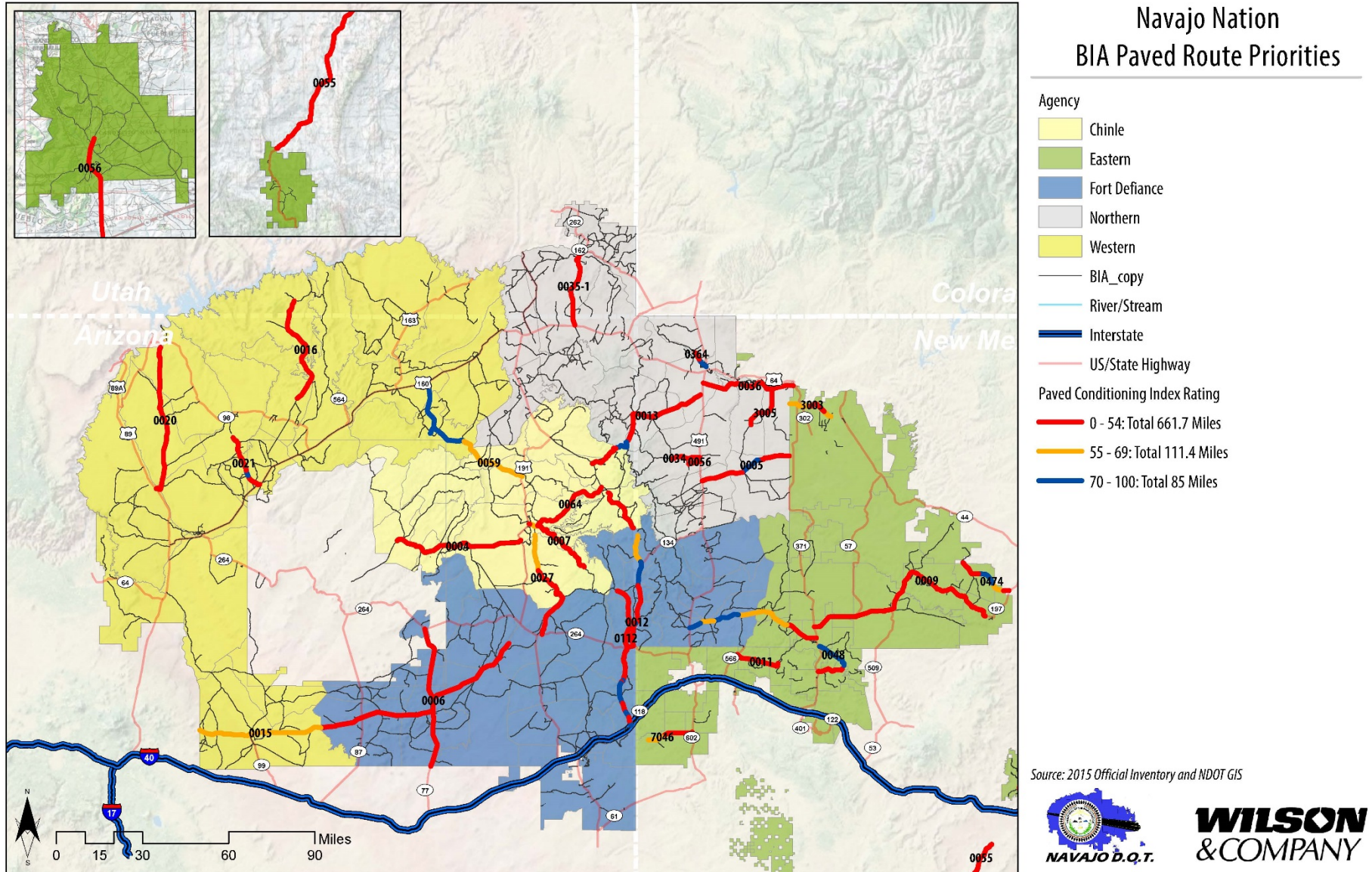


Reconstruction

BIA ID'd Highest Priority Projects



Highest Priority Projects



Pavement Priorities

1

PCI \geq 55

- ***Preserve Good Pavements***

2

PCI $<$ 55

- ***Fix and Overlay Pavements***

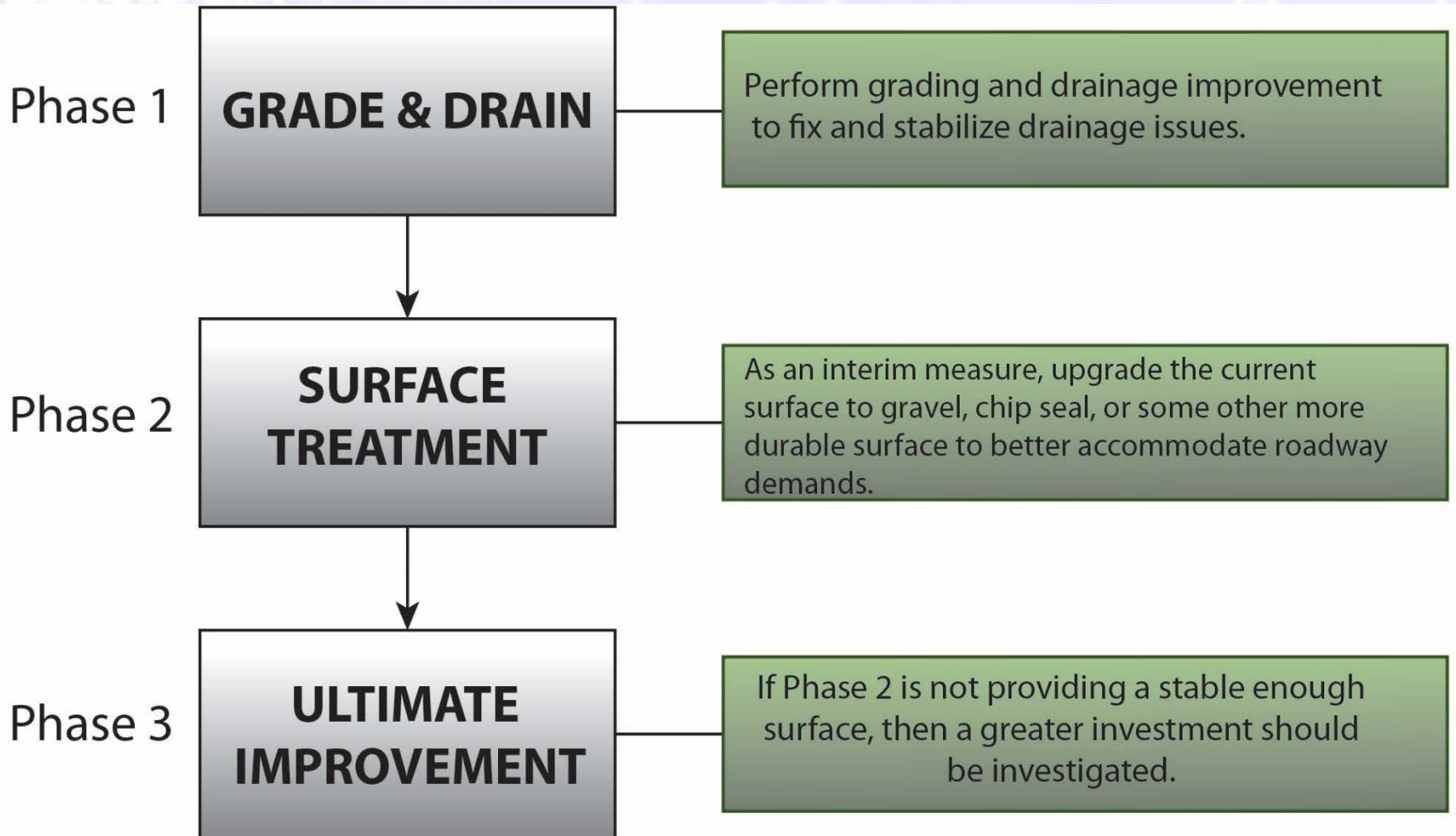
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Full
Reconstruction

- ***Rebuild Pavements***

Take Care of the System

Addressing Needs Systematically



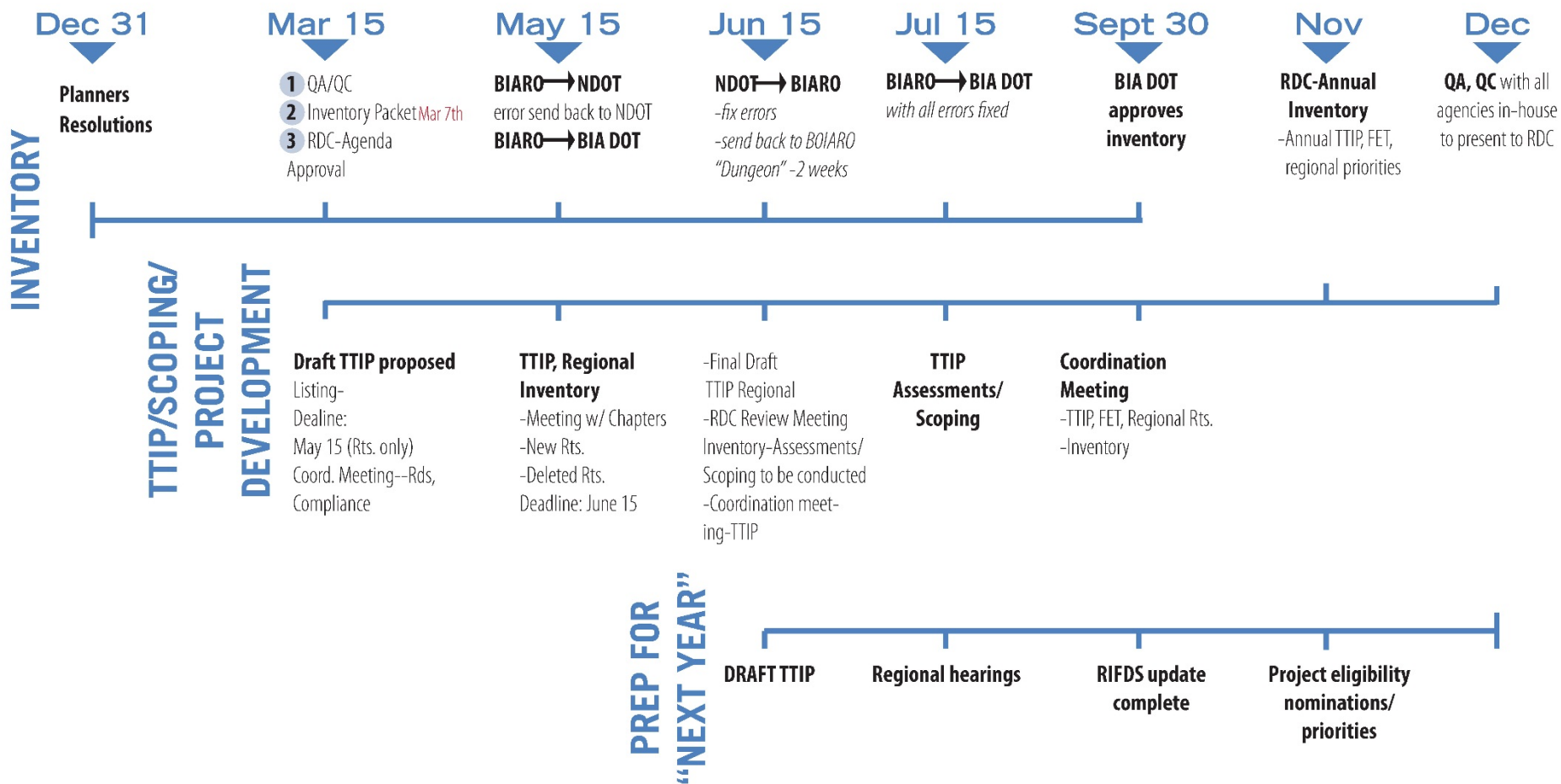
Performance-Based Programming

- **Roads – 75%-85% (approx. \$30M) – construction**
- **Bridges – 5% – 10% (approx. \$3.5M) – construction**
- **Safety – 1% - 3% (approx. \$600K) – maintenance**
- **Pedestrian/Bicycle/Transit – 1% - 2% (approx. \$400K)**
- **Airports – 1% - 2% (approx. \$400K) – maintenance**
- **Data driven process to address critical needs first**
- **Maximize funding partners for success**
- **Maintain fiscally constrained TTIP**

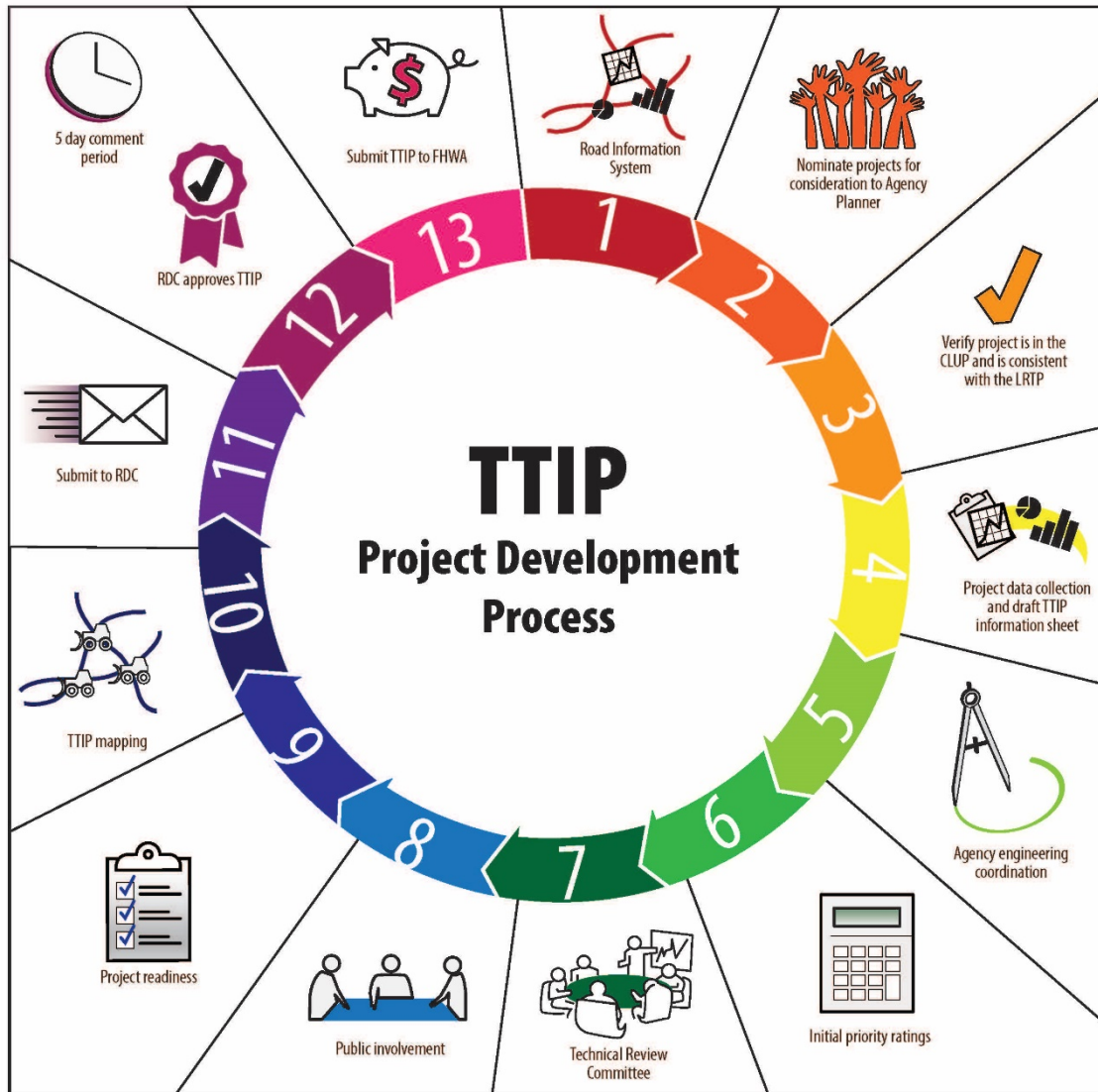
Program Approval Process

- **Project Scoping**
 - **Committee Review & Recommendations**
- **Resources and Development Committee (RDC) Review Workshop**
 - **Updates/Priorities**
 - **Draft Listing**
 - **Funds Distribution**
- **RDC Final Draft**
- **FHWA Review**
- **RDC Approval**

Timeline Comparison



Program Development Process



RIFDS Update - September



Project Eligibility - September/October



Nominations/ Priorities - November



Scoping - November-May



Finalize Draft TTIP - June



Approval - July

LRTP Discussion

QUESTIONS?

THANK YOU!