



NEVADA BRIDGE PROGRAM

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Inventory/Inspection

AASHTO SUBCOMMITTEE ON MAINTENANCE
BRIDGE TECHNICAL WORKING GROUP
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NEVADA: WE'RE #1!!!

	# Bridges	# Deficient	%
NV	1919	35	1.8
UT	3019	95	3.1
AZ	8056	246	3.1
OR	8037	417	5.2
CA	25318	2009	7.9
ID	4369	385	8.8

Reference: American Road & Transportation Builders Association (ARTBA)
2016 Annual Bridge Report (NBI Data 2015)
Published in Better Roads Magazine

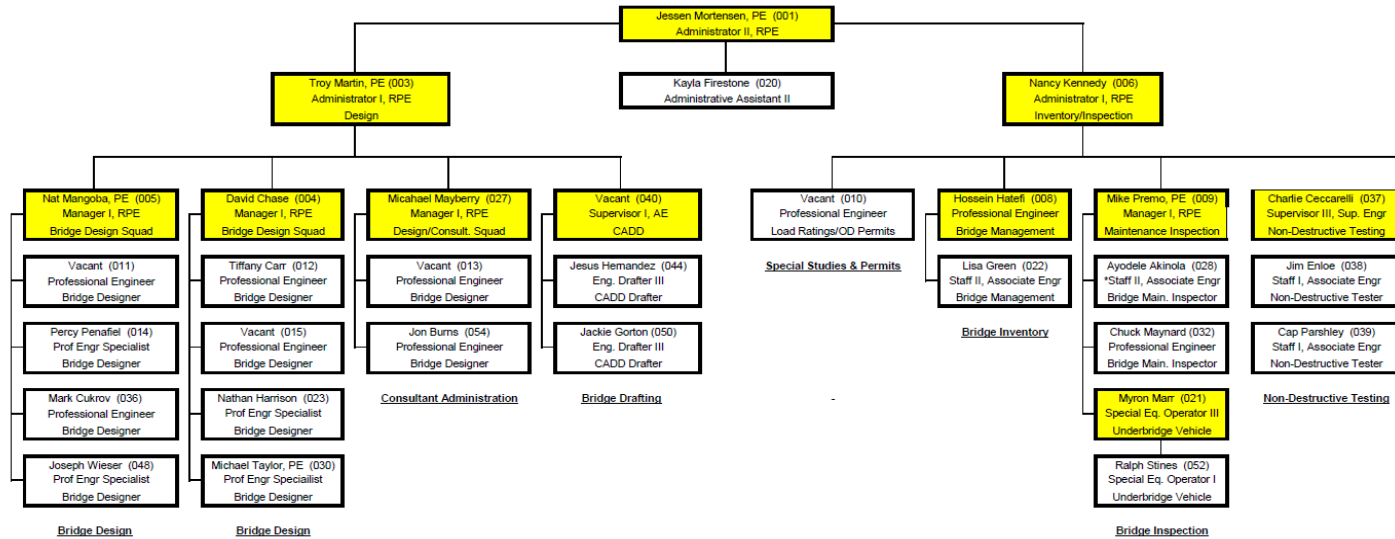


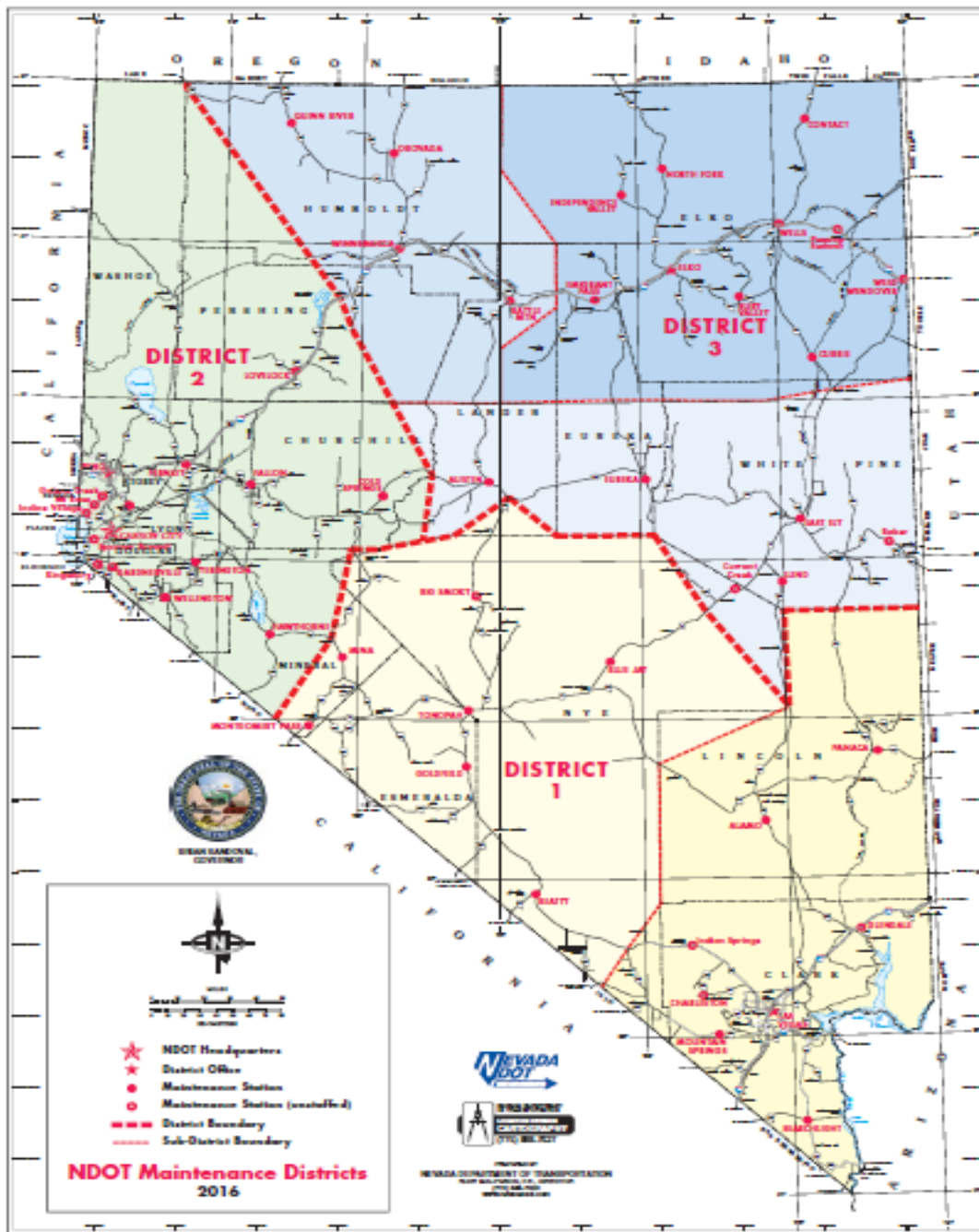
Outline

- NDOT Organizational Structure
- Bridge Data
- Current Bridge Management Practice
- Current Bridge Preservation Practice
- Bridge Inspection
- Future Planning



ORGANIZATIONAL CHART







NEVADA BRIDGE FUNDING

Fiscal Year 2013

Rehabilitation \$9,025,658
Replacement \$384,384
Seismic Retrofit \$6,440,418
Inspection Program \$1,000,000

Fiscal Year 2014

Rehabilitation \$0
Replacement \$4,493,890
Seismic Retrofit \$0
Inspection Program \$1,000,000



DISTRICT MAINTENANCE BRIDGE FUNDING

Fiscal Year 2013

Preventative Maintenance \$354,154

Corrective Maintenance \$7,568,596

Fiscal Year 2014

Preventative Maintenance \$439,263

Corrective Maintenance \$3,846,964



Bridge Management

NDOT does not have a formal bridge Management system

NDOT is in procurement for an Enterprise Management System that will include a Bridge Management System (BMS)

Inspection Group uses InspectTech Version 5.7 but in the process of upgrading to Version 7.4

Maintenance Needs are Communicated to the Districts and local agencies through InspectTech



District Forces and Bridge Maintenance

- District personnel assist the Bridge inspection group by providing traffic control and by acting as Assistant Inspectors
- Minor maintenance activities (drain/joint cleaning, spall repairs, joint repairs) are usually performed by District forces. Priorities for Bridge Maintenance are set by the District Engineers
- Major maintenance work (over lays, joint replacement, deck repairs) are typically contracted out by District forces with input from Bridge Design.
- Seismic retrofits and scour mitigation are generally contracted out by either District Forces or Bridge Design



BRIDGE PRESERVATION PRACTICE

NDOT does not have a formal bridge preservation program nor any policies in place

Administration is just beginning to realize that must change and will be asking for additional personnel in the next legislative session.

We are taking first steps by becoming involved with the Western Bridge Preservation Partnership!



Bridge Inventory and Inspection Group

NDOT is able to complete the federally required inspections with two in house team Leaders and Two Consultant Team Leaders

The group maintains the bridge data base in InspectTech

The NDT Group performs inspections during construction and performs minor fatigue crack repairs on steel structures

The group also performs load ratings as well as provides reviews and analysis for over dimensional permits



Bridge Inventory and Inspection Group (cont.)

NDOT began Element Level inspections on all bridges in 2011

We are in the process of getting all Team Leaders certified to do tunnel inspections

The inspection group is anticipating picking up approximately 60 pedestrian bridge inspections in the Las Vegas area this year



Challenges for the NDOT Bridge Program

Retirements in the Inspection Group

Limited Funding and Resources with an increasing bridge inventory (possibly an additional 50+ bridges in addition to the 60 pedestrian bridges to be added in the next two years)

Aging Inventory without an active bridge preservation program. Real possibility of losing our #1 ranking



Future Planning

- Begin to use a bridge management system including deterioration modeling for planning future bridge rehabilitation and replacement projects
- Work with all three Districts to accept bridge maintenance work being prioritized and budgeted on a statewide basis.
- Establish policy for cyclical and routine maintenance work statewide



Future Planning (cont.)

- Establish an Emergency Response Plan for the Bridge Inspection and Design Group
- Establish Design policies that promote longevity in new Bridge Designs



THANK YOU!



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