

MAP-21 Q&A and Roundtable Discussion

**2013 WBPP Meeting
San Diego
May 10, 2013**

Bridge Preservation

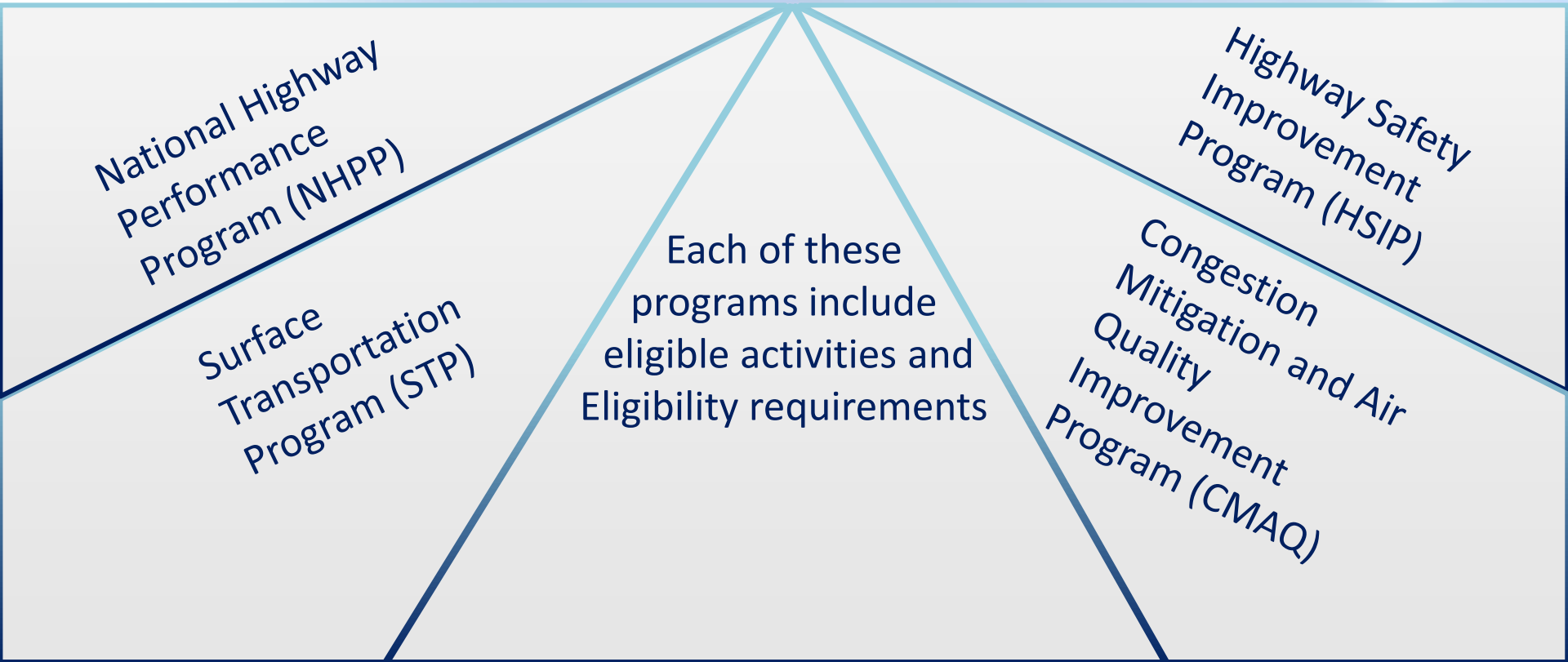
Innovation

Teamwork

Question: How will we justify proposed bridge projects under MAP-21?



Answer: There are four main programs that provide funding for bridge projects.



National Highway Performance Program- 23 USC 119

- Funds an enhanced National Highway System,
- Combines NHS, IM and Bridge Programs from past legislation
- Requires a risk-based asset management plan
- States set targets for conditions and performance



National Highway Performance Program- 23 USC 119



- Eligible Facility = Any facility on the NHS
- Eligible Project = Supports the national performance goals and meets at least one listed purpose
- NHS performance targets set by state as part of an asset management plan
 - Law sets standard for NHS bridges -- no more than 10% of deck area may be structurally deficient
 - Risk and performance based
 - In line with national goals, specified in law (23 USC 150)

National Highway Performance Program- 23 USC 119

Eligible Activities Include:



- Construction, Replacement, Rehabilitation, Preservation, Inspection, Evaluation, Inspector Training
- Protection – scour countermeasures, seismic retrofits, impact protection, security, extreme events
- Costs associated with obtaining, updating, and licensing software and equipment required for asset management
- Inspection and evaluation of other infrastructure assets (Signs, walls, drainage structures)

Surface Transportation Program- 23 USC 133



- Eligible Facility = Any facility including bridges and tunnels on public roads of all functional classifications
- Eligible Activities Include:
 - Construction of new bridge or tunnel on a Federal-aid Highway, replacement, rehabilitation, preservation, protection, application of de-icing chemicals, inspection, evaluation, inspector training

Question: What if a State Doesn't have an approved Asset Management Plan?



Answer: If no approved asset management plan in place, Federal share for NHPP will be limited to 65%

Question : Does MAP-21 require agreements between State agencies and FHWA for the use of federal funds for preventive maintenance on highway bridges?



Answer : MAP-21 doesn't require agreements; however, preventive maintenance activities are eligible for federal-aid funding provided that the activities are cost effective means of extending the useful life of a Federal-aid highway per 23 USC 116 (e).

Programmatic agreements between a state agencies and FHWA are encouraged for efficiency purposes. Lack of such agreements would require project approval on a case by case basis.

Question: How do we set our performance measures or set targets for bridge preservation projects?



- Considerations for setting targets for Bridge Preservation:
 - Engage your superordinate, subordinates, customers & stakeholders, seek and consider their input in the process
 - Use measures for BP that is based on Element condition or NBI component condition
 - Evaluate current condition of the bridge inventory
 - Relate condition to preservation actions
 - Review/analyze historical condition and funding trends
 - Determine funding level and resources required to achieve desired goals

Question: With an epoxy overlay or healer/sealer the bridge condition is not improved but the deterioration of the deck is slowed which extends the life of the bridge. How would a state be able to show progress in achieving its targets with bridge preservation projects?



Answer: I think it depends on what the state set as their preservation targets. If the state has targets that are based on extending the life of their bridges, this activity directly supports progress towards their targets. If their preservation targets are based on improving conditions, this activity would not support progress.

Select targets and measures carefully so that they reflect the States goals.

Measures for Bridge Preservation Continued...

If the State's goal is to extend the life of their bridges through preservation....the following approach may be useful in setting targets for Bridge Preservation:

- Determine and track the condition of bridges
- Based on the bridge conditions, classify bridge work candidates under three categories:



Preventive Maintenance, Rehabilitation, and Replacement

- As an example, you can use the criteria shown in the table below

Bridge Condition	Work Candidate
Good	Preventive Maintenance
Fair	Preventive Maintenance or Rehabilitation
Poor	Rehabilitation or Replacement

Measures for Bridge Preservation Continued...

- Based on the initial results and other factors set the appropriate target for each category
- Going forward, compare the baseline conditions vs. future conditions to show whether the system is improving or deteriorating for each of these categories
- You can also look at historical condition trends to assess program performance
- Determine the number of bridges worked on vs. the change in condition for the three categories. This will show whether each category is gaining or losing ground
- Adjust your targets as deemed appropriate



NBI General Condition Ratings (GCRs)

Code	Description		Commonly Employed Feasible Actions
9	Excellent Condition	GOOD	Preventive Maintenance
8	Very Good Condition		
7	Good Condition		
6	Satisfactory Condition	FAIR	Preventive Maintenance/ Repairs/ Rehabilitation
5	Fair Condition		
4	Poor Condition	POOR	Rehabilitation or Replacement
3	Serious Condition		
2	Critical Condition		
1	Immediate Failure Condition		

Element Condition State (CS)

Condition State	Description	Commonly Employed Feasible Actions
1	Varies depending on element – Good	Preventive Maintenance
2	Varies depending on element – Fair	Preventive Maintenance or Repairs
3	Varies depending on element – Poor	Rehabilitation
4	Varies depending on element - Severe	Rehabilitation or Replacement



**Roundtable
Discussion**

Question: What tools or mechanisms do you or your bridge program leadership use to communicate the benefits of bridge preservation?



Question: What type of activities does your agency's Bridge Preservation program include?



Question: Describe the typical process used in your agency to identify, conduct, and implement the results of BP related research.



Question: a) What are the top challenges that are impacting your agency's Bridge Preservation program?



b) What are the steps being taken or your recommendations to mitigate these challenges?

Question: a) What are the top challenges that are impacting the implementation of Bridge Preservation products or innovative technologies?



b) What are the steps being taken or your recommendations to mitigate these challenges?

Question for next year

WHAT'S THE VISION FOR YOUR BRIDGE PRESERVATION PROGRAM?

