

AASHTO SUBCOMMITTEE ON BRIDGES & STRUCTURES
ANNUAL STATE BRIDGE ENGINEERS' SURVEY (2015)
47 States Responded

MANAGEMENT

Bridge Preservation

- 1) Will your state adopt the national MAP-21 bridge performance measures published in the recent Notice of Proposed Rulemaking?
8 (17.2%) Yes, use the national MAP-21 bridge performance measures only
35 (74.47%) Yes, use both the national MAP-21 bridge performance measures and state measures.
4 (8.51%) No, will continue to use state measures to monitor bridge performance

- 2) Does your state believe the recently published MAP-21 bridge performance measures will impact the selection of bridge projects for preservation or replacement in your state?
22 (47.83%) Yes
24 (52.17%) No

- 3) Does your state use or would it consider using service life design requirements for major, signature bridges to achieve a projected 100 year or more functional service life?
40 (88.89%) Yes
5 (11.11%) No

- 4) Would your state consider using service life design requirements for normal, non-signature bridges?
36 (78.26%) Yes
10 (21.74%) No

- 5) Does your state agree that AASHTO should provide guidance on how to achieve a uniform service life for various elements of a bridge?
38 (82.61%) Yes
8 (17.39%) No

- 6) Does your state believe service life design guidance should consider the functional life (projected traffic growth, number of lanes, ability to widen, growth planning in urban areas)?
38 (82.61%) Yes
8 (17.39%) No

- 7) Does your state agree that service life design guidance for bridges should be based on comparison of alternatives using a standardized life cycle cost analysis method?
27 (61.36%) Yes; method should be established by AASHTO HSCOBS
9 (20.45%) Yes; method should be established by others
8 (18.18%) No
- 8) Is your state using AASHTO BrM for deterioration modeling?
5 (10.87%) Currently
15 (32.61%) Planned pending release
13 (28.26%) Not planned.
13 (28.26%) Following release and several years of data collection
- 9) Does your state have performance goals that address structures that are defined as “Good”, “Fair” and “Poor”?
25 (54.35%) Yes
21 (45.65%) No
- 10) Does your state have performance goals relating to the condition of deck joints?
6 (12.77%) Yes
41 (87.23%) No

Accelerated Bridge Construction

- 11) What are the specific criteria in your state to decide if a bridge replacement project will use ABC techniques? Check all that apply.
44 (93.62%) Construction Time
35 (74.47%) Environmental Constraints
43 (91.49%) User Costs and Delays (this would include ADT & detour length)
40 (85.11%) Site Conditions
25 (53.19%) Risk Management
15 (31.91%) Other

Design-Build

- 12) What challenges are your state facing with the interpretation of the AASHTO LRFD Design and Construction Specifications with the design-build delivery method?
- 16 (34.04%)** Construction Specifications do not apply
 - 6 (12.77%)** Construction Specifications requirements are not easily enforceable for Design-Build projects and thus need to be revised
 - 9 (19.15%)** Construction Specifications are enforceable and OK as is
 - 10 (21.28%)** Design Specifications requirements are not easily enforceable for Design-Build projects and thus need to be revised
 - 18 (38.30%)** Design Specifications are enforceable and OK as is
 - 3 (6.38%)** Need completely new Special Provisions
 - 10 (21.28%)** Do not use Design-Build
- 13) Who has the delegated authority to make delegated decisions or approvals on design-build projects?
- 5 (10.64%)** Design Office Chief
 - 7 (14.89%)** State Bridge Engineer
 - 2 (4.26%)** State Highway Engineer
 - 17 (36.17%)** Project-Level Manager
 - 6 (12.77%)** District/Regional Manager
 - 10 (21.28%)** Do not use Design-Build
- 14) Does your state require archiving of bridge design calculations and specification for design-build projects?
- 28 (59.57%)** Yes
 - 0** Yes, for major structures only
 - 0** Yes, but it depends on the bridge type
 - 6 (12.77%)** No
 - 3 (6.38%)** Other
 - 10 (21.28%)** Do not use Design-Build

Project Management

- 15) For a typical single span bridge, how many bridge design plan sheets are included in the construction contract?
- 24 (52.17%)** < 20
 - 13 (28.26%)** 21 - 30
 - 6 (13.04%)** 31 - 40
 - 3 (6.52%)** 41 - 50
 - 0** Over 50
- 16) For a typical single span bridge, how many man-hours are used to prepare the final bridge plans and final bridge design computations?
- 4 (8.07%)** < 200
 - 9 (19.57%)** 201 – 300
 - 3 (6.52%)** 301 – 400
 - 6 (13.04%)** 401 – 500
 - 24 (52.17%)** Over 500
- 17) Has your State experienced delays in getting Right of Entry (ROE) Permits, Railroad Protective Liability Insurance or Flagmen for Bridge Inspection or Design activities?
- 37 (78.72%)** Yes
 - 10 (21.28%)** No
- 18) If you answered “yes” to the above questions, how many days does it take to obtain a ROE on average?
- 12 (33.33%)** Less than 30
 - 4 (11.11%)** 31 – 40
 - 4 (11.11%)** 41 – 50
 - 4 (11.11%)** 51 – 60
 - 12 (33.33%)** Over 60

DESIGN

General

- 19) For designing new/replacement locally owned bridges (counties and/or cities) not on the National Highway System, or State Highway system, does your state allow:
- 2 (4.35%)** Standard Specifications (LFD)
 - 44 (95.65%)** LRFD Design Specifications

- 20) If you answered “LRFD Design Specifications” to above question. what is the lowest load allowed to design new/replacement bridges:
- 1 (2.17%)** Lower than HL93 loads
 - 42 (91.39%)** HL93 loads
 - 3 (6.52%)** Higher than HL93 loads
- 21) For locally owned bridges (counties and/or cities) on LOW VOLUME roads and not on the National Highway System, or State Highway system, what is the lowest load allowed to design new/replacement bridges in your state:
- 2 (4.35%)** Different and lower loads than HL93
 - 4 (8.70%)** HL93 without multiple presence factors
 - 38 (82.61%)** HL93 with multiple presence factors
 - 2 (4.25%)** Different and higher loads than HL93
- 22) How long does your state require that design calculations and specifications for sign bridges and other miscellaneous structures be kept?
- 11 (23.91%)** No requirement
 - 2 (4.35%)** Until the construction contract is closed out.
 - 1 (2.17%)** Until all claims have been settled
 - 7 (15.22%)** 5-10 years
 - 25 (54.35%)** Indefinitely

Loads

- 23) Does your state have a bridge design live load to facilitate the issuance of overweight special hauling permits?
- 19 (40.43%)** Yes
 - 28 (59.57%)** No
- 24) If you answered “yes” to the above question, please provide the gross weight of the largest vehicle.
- 2 (11.11%)** 100k – 149k
 - 2 (11.11%)** 150k – 199k
 - 5 (27.78%)** 200k -249k
 - 2 (11.11%)** 250k – 299k
 - 7 (38.89%)** 300k+
- 25) Does your State permit Agricultural vehicles (Implements of Husbandry) to operate legally in excess of the Federal Bridge Formula Limits?
- 24 (51.06%)** Yes
 - 23 (48.89%)** No

- 26) If you answered “yes” to the above question, what is the maximum legal Axle and GVW limits?

Husbandry Axles:

11 (47.83%) 20-30k

2 (8.07%) 30-50k

0 50-70

10 (43.48%) Other

Husbandry GVW

9 (39.13%) 90-150T

1 (4.35%) 150-200T

0 200-300T

13 (56.52%) Other

Seismic Design

- 27) What specifications does your state use for the seismic design of bridges?

18 (38.30%) AASHTO LRFD Bridge Design Specifications

14 (29.79%) AASHTO Guide Specifications for LRFD Seismic Bridge Design

2 (4.26%) State specific or other standard

13 (27.66%) Do not design for seismic loading

- 28) Should the force-based provisions specified in the AASHTO LRFD Bridge Design Specifications be:

0 Deleted

14 (31.11%) Replaced with the displacement-based specifications of the AASHTO Guide Specifications for LRFD Seismic Bridge Design

19 (42.22) No change

12 (26.67%) Do not design for seismic loading

- 29) Does your state require seismic design for temporary bridges?

5 (10.64%) Always

0 When the bridge exceeds a specified length

6 (12.77%) When the bridge is expected to be in service more than a specified time

0 When ADTT exceeds a specified value

0 When the PGA exceeds a specified value

15 (31.91%) Never

3 (6.38%) Other

18 (38.30%) Do not design for seismic loading

Concrete

- 30) What is the maximum concrete compressive strength (ksi) your State uses with your Standard Precast Prestressed Concrete Beams?
- 7 (15.56%)** 7
 - 2 (4.44%)** 7.5
 - 10 (2.22%)** 8
 - 5 (11.11%)** 8.5
 - 4 (8.89%)** 9.5
 - 13 (28.89%)** > 10
 - 4 (8.89%)** no limit
- 31) Does your state use welded wire fabric as shear reinforcement in Prestressed Concrete Girders?
- 21 (44.68%)** Yes
 - 26 (55.32%)** No
- 32) Does your state use Ultra High Performance Concrete (UHPC) for any other applications than the connection of Precast Deck Elements (PBES)?
- 5 (10.87%)** Yes
 - 41 (89.13%)** No
- 33) If you answered “yes” to the above question, what other applications are being used?
- 1 (16.67%)** Girders
 - 2 (33.33%)** Bent Caps / Piers / Abutments
 - 0** Cast-in-place Decks
 - 3 (50%)** Other
- 34) Does your state allow deck girders (Deck Bulb Tee) on mainline bridges?
- 9 (19.57%)** Yes, without restriction
 - 0** Yes, except in certain seismic zones
 - 0** Yes, except in major interchanges
 - 4 (8.70%)** Yes, except when a specified ADTT limit is exceeded
 - 0** Yes, except when the bridge length exceeds a specified limit
 - 21 (45.65%)**No
 - 12 (26.09%)** Other

Abutments

- 35) Does your state allow bridge abutments supported on geosynthetic and MSE walls?
- 32 (69.09%)** Yes
 - 15 (31.91%)** No

- 36) If you answered “yes” to the above question, please identify any special requirements or limitations:
- 4 (13.79%)** Only for certain bridge lengths
 - 4 (14.39%)** Only for certain bridge types
 - 0** Only in non-seismic zones
 - 3 (10.34%)** Only for certain abutment heights
 - 18 (72.07%)** Other

Earth Retaining Systems

- 37) Has your state used “soil nail walls”?
- 40(85.11%)** Yes
 - 7 (14.89%)** No
- 38) If “yes”, what design methodology is used in your state? [Note: the AASHTO LRFD Specifications currently don’t address soil nail design]
- 2 (5%)** Don’t use soil nail walls
 - 15 (37.5%)** Allowable Stress Design (ASD)
 - 18 (45%)** Load and Resistance Factor Design (LRFD) loads; FHWA Manual
 - 5 (12.5%)** Other Design Method
- 39) What collision loads does your state design retaining walls supporting the traffic rails, and moment slabs for?
- 1 (21.7%)** TL-2
 - 7 (15.22%)** TL-3
 - 26 (56.52%)** TL-4
 - 2 (4.35%)** TL-5
 - 10 (21.74%)** Other
- 40) When do you require P.E. stamp for proprietary earth retaining systems? (Check all that apply)
- 44 (93.62%)** Shop plans
 - 45 (95.74%)** Calculations
 - 0** Never
- 41) Who is responsible for the proprietary earth retaining system design?
- 34 (72.34%)** The vendor
 - 13 (27.66%)** The engineer stamping the project plans.

- 42) Does your state have any experience requiring a warranty on proprietary earth retaining systems?
2 (4.35%) Yes
44 (95.65%) No
- 43) Does your State maintain a list(s) of pre-approved proprietary earth retaining systems?
35 (74.47%) Yes; updates to the list are done as needed
0 Yes; updates to the list are done annually
3 (6.38%) No, but we had a list in the past.
9 (19.15%) No; we have never had a list.
- 44) If you answered “yes” to the above question, how are the systems qualified? (Check all that apply)
17 (47.22%) We require an independent evaluation such as a HITEC report.
21 (58.33%) A package of plans, details, specs, calculations and test records—must be submitted and approved prior to project delivery.
3 (8.33%) A package of information for conceptual approval only—must be submitted and approved prior to project delivery.
6 (16.67%) The first time a system is used, a package of plans, details, specs, calculations, and test records—must be submitted during construction and approved to be added to the list.
1 (2.78%) The first time a system is used, conceptual information must be submitted. Upon successful completion of the first project, the product/vendor is added to the pre-approved list.
2 (5.56%) Other
- 45) If you answered “no” to the above question, which best describes your business practice pertaining to proprietary earth retaining systems (check all that apply):
10 (76.92%) We require and review calculations, details, and specifications for every project.
1 (7.69%) We review proprietary systems the first time they’re submitted, and deem those on future projects acceptable, or, perform a less rigorous review.
3 (23.08%) Rely on the P.E. stamped shop plans and specs. Calculations, test records, etc. aren’t needed.
6 (46.15%) A generic system is shown on the plans and in the Specs.
4 (30.77%) We provide a choice of three vendors
0 A construction change order is required to use the system chosen by the Contractor.
0 A value-engineering change is required to use the system chosen by the Contractor.
1 (7.69%) Other

- 46) Does your state design cast-in-place retaining walls and moment slabs for TL-5 barrier loads?
11 (23.92%) Yes
35 (76.09%) No
- 47) If you answered “yes” to the above question, please identify any special requirements or limitations:
0 Designed with a reduced height for load application
1 (30%) Only when wall height is below a specified limit
4 (80%) Other

Barriers and Railings

- 48) What policies are your state following in order to address AASHTO Roadside Design Guide, 4th Edition recommendations regarding Zone of Intrusion (ZOI)(Figures 5-27 thru 5-31) for traffic barriers subject to vehicular impact (e.g. single-unit truck rollover) in the median of urban areas? (check all that apply)
20 (48.78%) Following a State policy that meets the offsets shown in the Roadside Design Guide
6 (14.63%) Following a State policy that deviates from the offsets shown in the Roadside Design Guide
16 (39.02%) Other
- 49) How much horizontal clearance is being provided for obstructions (on or off a bridge) such as light poles, overhead and cantilever sign trusses?
8 (17.78%) 0 to <2-ft
3 (6.67%) 2 to <4-ft
6 (13.33%) 4 ft. or greater
28 (62.22%) Varies depending on the obstruction, barrier height, and posted speed limit
- 50) How much horizontal clearance is being provided for structural bridge components such as cables, arches, and truss members?
3 (7.14%) 0 - 2 ft
2 (4.76%) 2 - 4 ft
5 (11.9%) 4 ft. or greater
32 (76.19%) Varies depending on the obstruction, barrier height, and posted speed limit

- 51) What types of crash tested median railings are being used to minimize rollover into the ZOI?
10 (20.22%) Solid concrete, standard height (up to and including 36" height)
23 (51.11%) Solid concrete, extended height (greater than 36" height)
1 (2.22%) Flexible, State detail
0 Proprietary system
11 (24.44%) Don't consider ZOI when determining railing type
0 Other
- 52) Does your state use LRFD yield line analysis for design of traffic barrier on retaining walls?
20 (44.44%) Yes
25 (45.56%) No
- 53) If you answered "yes" to the above question, please identify any special requirements or limitations:
0 Only when wall height is within specified limits
2 (13.33%) Critical length of yield line is modified
5 (33.33%) Length of distributed impact force is modified
0 Effective height of railing wall is modified
8 (53.33%) Other
- 54) What is the traffic barrier TL loading requirement for temporary bridges in your state?
0 TL-1
5 (11.11%) TL-2
22 (48.89%) TL-3
8 (17.78%) TL-4
0 TL-5
0 TL-6
10 (22.22%) Other

Sound Walls (Noise Walls)

- 55) Does your state have a height limit for sound walls on bridges?
12 (26.69%) Yes
34 (73.91%) No
- 56) If you answered "yes" to the above question, is the sound wall
8 (57.14%) On top the barrier?
6 (42.86%) Behind the barrier?

Pedestrian Bridges

- 57) Does your state design Pedestrian Bridges using the *AASHTO Guide Specifications for Design of Pedestrian Bridges*?
45 (95.74%) Yes
2 (4.26%) No
- 58) If you answered “no” to the above question, does your state use the *International Building Code (IBC)* for the design of pedestrian bridges?
0 Yes
2 (100%) No
- 59) Does your state identify steel pedestrian bridge girders as Fracture Critical Bridge/Members?
20 (43.38%) Yes
26 (56.52%) No

CONSTRUCTION

- 60) Does your state use the AASHTO LRFD Construction Specifications
15 (31.91%) Yes
32 (68.09%) No
- 61) If you answered “yes” to the above question, please describe your experience:
0 Excellent
1 (6.67%) Very Good
13 (86.67%) Good
1 (6.67%) Not Good
0 Bad
- 62) Does your state have a standard specification for Ultra High Performance Concrete?
4 (8.51%) Yes
43 (91.49%) No
- 63) Does your state have a standard specification for use of self-consolidating concrete in caissons (drilled shafts)?
15 (32.61%) Yes
31 (67.39%) No
- 64) Does your state have a standard specification for use of self-consolidating concrete in field applications such as pier caps or pier columns?
15 (31.91%) Yes
32 (68.09%) No

- 65) Does your state use Lithium Curing Compound in place of traditional wet curing methods on bridge decks?
5 (10.87%) Yes
41 (89.13%) No
- 66) If you answered “yes” to the above question, has your state found any cracking issues caused by shrinkage?
4 (80%) Yes
1 (20%) No
- 67) If you answered “yes” to the above question, will your state continue to use Lithium Curing Compound on future projects?
4 (100%) Yes
0 No
- 68) As a follow-up to a question from the survey last year regarding mass concrete, at what minimum thickness is instrumentation required to capture the temperature differential in a mass concrete pour?
18 (52.94%) 5 ft
9 (26.47%) 6 ft
3 (8.82%) 7 ft
0 8 ft
4 (11.76%) 9 ft
- 69) Has your state used steel fiber reinforcement in bridge overlays/slabs?
11 (23.40%) Yes
36 (76.6%) No
- 70) If you answered “yes” to above question, how long have the steel fiber bars been in service?
1 (9.09%) 1 year
2 (18.18%) 2-5 years
8 (73.73) Over 5 years
- 71) If you answered “yes” to question 69, what benefits have you seen? Check all that apply
9 (100%) Less Cracking
3 (33%) Longer Life
0 Lower cost compared to traditional rebar or wire fabric reinforcement

- 72) What is the maximum cement content (lbs./cu. yd.) that your state permits in achieving the maximum concrete compressive strength for Precast Prestressed Concrete Beams?
- 6 (13.04%)** 700
 - 3 (6.52%)** 750
 - 3 (6.52%)** 800
 - 1 (2.17%)** 850
 - 1 (2.17%)** 900
 - 32 (69.57%)** No Limit
- 73) Does your state have any restriction on using adhesive (epoxy) anchors?
- 37 (78.72%)** Yes
 - 10 (21.28%)** No
- 74) If you answered “yes” to above question, is your state considering relaxing restrictions based on new NCHRP report?
- 6 (17.14%)** Yes
 - 29 (82.86%)** No
- 75) If your state uses high strength concrete mixes ($f'_c > 8$ ksi) for structural precast concrete elements, what testing, material, QC/QA or submittals are required?
- 0** Based on AASHTO LRFD Bridge Construction Specifications
 - 25 (53.19%)** Based on our Standard Specifications
 - 9 (19.15%)** Based on Special Provisions
 - 1 (2.13%)** List of approved manufacturers
 - 12 (25.53%)** Do not use concrete mix with $f'_c > 8$ ksi
- 76) If your state specifies high performance concrete mixes for long term performance with criteria other than compressive strength, does your state use durability-based criteria?
- 27 (62.79%)** Yes
 - 16 (37.24%)** No

MAINTENANCE

Monitoring

- 77) Is your state planning to implement a structural health monitoring program such that data from long term instrumentation of various bridge types and bridge sizes will be captured?
- 9 (19.57%)** Yes
 - 37 (80.43%)** No
- 78) Does your state use over height detectors/warning devices in advance of bridges?
- 14 (30.43%)** Yes
 - 32 (69.57%)** No

- 79) If you answered “yes” to above question, what is their success rate?
2 (16.67%) 100 %
4 (33.33%) 80-90%
1 (8.33%) 70-80%
0 60-70%
0 50-60%
5 (41.67%) Less than 50%
- 80) If you answered “yes” to above question, what is the typical cost for installation and maintenance at each location?
1 (8.33%) Less than \$5,000
1 (8.33%) \$5000 – \$10,000
2 (16.67%) \$10,000 – \$20,000
8 (66.67%) Over \$20,000
- 81) Is your state following published guidance on Scour Plans of Action?
46 (100%) Yes
0 No
- 82) If you answered “yes” to above question, what type of monitoring is done during events and what follow up actions are you using?
3 (6.52%) Monitoring with equipment
14 (30.43%) Inspection based on USGS or other river gage data
8 (17.39%) Water depth marks on abutments
21 (45.65%) Other

Other

- 83) Do you use a higher than normal vertical clearance for identified freight routes?
5 (10.87%) Yes
41 (89.13%) No

Overlays

- 84) What demolition method does your state use to remove the unsound deck concrete prior to the application of a Latex Concrete Overlay?
23 (48.89%) Hydro-demolition
2 (4.26%) Conventional Scarifying
2 (4.26%) Other
20 (42.55%) Do not use latex overlay

- 85) When performing preservation activities of latex or epoxy overlays on existing latex or epoxy overlays, what preparation activities are performed?
2 (4.35%) None (place on top of existing overlay);
26 (56.52%) Scarify or hydro-demo entire existing overlay;
2 (4.35%) Scarify or hydro-demo specific areas
16 (34.78%) Do not use latex overlay

Inspection

- 86) Does your State use a Risk Based inspection schedule for Federal NBI structures?
13 (27.66%) Yes
34 (72.34%) No
- 87) If you answered “yes” to above question, can your state share its criteria?
12 (92.86%) Yes
1 (7.14%) No
- 88) Does your State have an ancillary structure inspection program that is not required by NBIS?
35 (74.47%) Yes
12 (25.53%) No
- 89) If you answered “yes” to above question, what structure types and inspection frequencies does your state use? Select all that apply

Ancillary Structures inspected

- 26 (74.29%)** < 20 foot bridges
6 (17.14%) Conventional (rigid) retaining walls
7 (20%) Proprietary (flexible) retaining systems
26 (74.29%) Signs and luminaires
20 (57.14%) Buried Culverts
6 (17.14%) Other

Inspection frequency for ancillaries:

- 1 (2.86%)** Annual
3 (8.57%) Bi-annual
17 (48.57%) Every 3-8 yrs
14 (40%) Varies

- 90) For underwater inspection, what is your state’s practice for the use of high resolution underwater scanning sonar?
18 (39.13%) Not used
24 (52.17%) Used with underwater drive inspection
4 (8.7%) Used in lieu of underwater dive inspection

- 91) What is the minimum water depth at which your state invokes underwater diving methods?
29 (65.19%) 4 feet
7 (15.91%) 5 feet
8 (18.18%) 6 feet
- 92) Have you identified in-service weld or base metal cracking in high mast illumination poles?
22 (48.89%) Yes
23 (51.11%) No
- 93) If you answered “yes” to the above question, what action does your state take?
2 (10%) Repairing
5 (25%) Retrofitting
10 (50%) Replacing with new pole
3 (15%) Monitoring the cracks
- 94) For those transportation departments who delegate NBIS inspection responsibility to local agencies, what measures have been implemented to reduce the number of late inspections and improve the level of compliance with FHWA NBIP Metrics 6 through 10?
0 Provide disincentives in the local agency project selection process
1 (4%) Assume responsibility through revised state legislation
7 (28%) Restrict state and federal funding until compliance is achieved
7 (28%) Implement an automated system for data collection and compliance
10 (40%) Other

Loading Rating and Posting

- 95) Does your state include the AASHTO Manual for Bridge Evaluation “Lane-Type Legal Load Model” (as shown in Appendix D6A) in the load rating of long span bridges?
25 (53.19%) Yes
22 (46.81%) No
- 96) If you answered “yes” to above question and this legal load model governed the rating, which of the following would your state use to serve as the method of restriction?
10 (41.67%) Post a Load Limit Sign in Tons Gross
2 (8.33%) Post a Load Limit Sign in Tons Axle
12 (50%) Post a Load Limit Sign in Tons for Single and Combination Vehicles
0 Post a Load Limit Sign with required spacing between trucks

- 97) What is your predominant method of load rating existing bridges?
12 (25.53%) LRFR
0 LRFD Assigned
34 (72.23%) LFR
1 (2.13%) LFD assigned
- 98) When does your state require load rating for temporary bridges?
15 (32.61%) Always
1 (2.17%) When the bridge exceeds a specified length
6 (13.04%) When the bridge is expected to be in service more than a specified time
0 When ADTT exceeds a specified value
16 (34.78%) Never
8 (17.39%) Other

PLEASE COMPLETE THE SURVEY USING THE LINK PROVIDED. QUESTIONS MAY BE DIRECTED TO:

[Lian Duan@dot.ca.gov](mailto:Lian_Duan@dot.ca.gov)
Cc [Susan Hida@dot.ca.gov](mailto:Susan_Hida@dot.ca.gov)

By FRIDAY, March 20, 2015

Caltrans will compile the results and make available in time for the 2015 Annual SCOBS Meeting in Saratoga Springs, New York.

Thanks in advance for your participation!