

**UNITED STATES OF AMERICA
U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
WASHINGTON, DC 20590**

**GRANT AGREEMENT UNDER THE
TRANSPORTATION, HOUSING AND URBAN DEVELOPMENT, AND
RELATED AGENCIES APPROPRIATIONS ACT, 2010 (DIVISION A OF
THE CONSOLIDATED APPROPRIATIONS ACT, 2010 (PUB. L. 111- 117,
DEC. 16, 2009)), FOR THE NATIONAL INFRASTRUCTURE
INVESTMENTS DISCRETIONARY GRANT PROGRAM (TIGER II
DISCRETIONARY GRANTS)**

NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION

FHWA TIGER II Grant No. C-02

MEMORIAL BRIDGE REPLACEMENT

This agreement (the "Agreement" or "Grant Agreement") reflects the selection of the New Hampshire Department of Transportation, on behalf of the State of New Hampshire, ("Grantee" or "Recipient") as a Recipient of a grant awarded under the provisions of the Transportation, Housing and Urban Development, and Related Agencies Appropriations Act, 2010 (Division A of the Consolidated Appropriations Act, 2010 (Pub. L. 111-117, Dec. 16, 2009)), regarding National Infrastructure Investments (the "Act"). The grant program under the Act is referred to as "TIGER II Discretionary Grants."

SECTION 1. TERMS AND CONDITIONS OF THE GRANT

- 1.1 This Agreement is entered into between United States Department of Transportation ("DOT" or the "Government") and the Grantee. This Agreement will be administered by the Federal Highway Administration (also referred to herein as "FHWA" or the "Government").
- 1.2 This Grant is made to the Grantee for the project as described in the Grantee's Technical Application (the "Project"), titled *Memorial Bridge Replacement Project Portsmouth, NH – Kittery, ME* and the negotiated provisions on the Project's material terms and conditions, including the Project's scope, assurance/confirmation that all required funding has been obtained and committed, and the timeline for completion of the Project.
- 1.3 The Government, having reviewed and considered the Grantee's Technical Application and finding it acceptable, pursuant to the Act awards a TIGER II Discretionary Grant in

the amount of Twenty Million Dollars (\$20,000,000), for the entire period of performance (referred to as the "Grant"). This Grant is the total not-to-exceed amount of funding that is being provided by the Government under this Grant Agreement. The Grantee hereby certifies that not less than Eighteen Million Dollars (\$18,000,000) in state or local funds are committed to fund the Project in order to satisfy the Act's requirement that at least twenty percent (20%) of the Project's costs are funded through non-Federal sources and/or turnpike toll credits. The Government's liability to make payments to the Grantee under this Grant Agreement is limited to those funds obligated by the Government under this Agreement as indicated herein and by any subsequent amendments agreed to in writing by all parties.

1.4 The Grantee agrees to abide by and comply with all terms and conditions of this Agreement and to abide by, and comply with, all requirements as specified in the Exhibits and Attachments, identified in paragraphs 1.5 and 1.6, which are considered as integral parts of this Agreement. Each Exhibit and Attachment identified below is deemed to be incorporated by reference into this Agreement as if fully set out herein.

1.5 This Agreement shall also include the following Exhibits as integral parts hereof, located at (http://www.ops.fhwa.dot.gov/freight/infrastructure/tigerii/ga_exhbt_tmp/index.htm):

- Exhibit A Legislative Authority
- Exhibit B General Terms and Conditions
- Exhibit C Applicable Federal Laws and Regulations
- Exhibit D Grant Assurances
- Exhibit E Responsibility and Authority of the Grantee
- Exhibit F Reimbursement of Project Costs
- Exhibit G Grant Requirements and Contract Clauses
- Exhibit H Quarterly Progress Reports: Format and Content

1.6 This Grant Agreement shall also include the following Attachments as integral parts hereof:

- Attachment A Statement of Work
- Attachment B Project Schedule
- Attachment C Project Budget
- Attachment D Performance Measurement Table

1.7 In the case of any inconsistency or conflict between the specific provisions of this Grant Agreement, the Exhibits, and the Attachments, such inconsistency or conflict shall be resolved as follows: First, by giving preference to the specific provisions and terms of this Grant Agreement; second, by giving preference to the provisions and terms of the Exhibits; and, finally by giving preference to the provisions and terms of the Attachments.

SECTION 2. GRANTEE AND PROJECT INFORMATION

Grantee, in accordance with the requirements of the TIGER II Discretionary Grant Program, provides the following information:

2.1 Project's Statement of Work Summary (for further information see Attachment A): This project replaces the Memorial Bridge, a 1923 historic lift bridge, that carries US Route 1 over the Piscataqua River between Portsmouth, NH and Kittery, Maine by replacing the superstructure and abutments for the main river span structures and rehabilitation of the existing two piers. The Project will result in a new bridge four feet wider than the existing structure to accommodate 11-foot travel lanes, five-foot shoulders and maintain flanking sidewalks. The replacement structure over the main river segment is anticipated to be a similar truss design as it exists today. The Project will replace the Scott Avenue Bridge, owned by the City of Portsmouth, which is the southern approach to the Memorial Bridge. The Project also replaces the Kittery Approach 10-spans, by replacing with a 4-span superstructure that is owned by the State of Maine and is the northern approach to the Memorial Bridge.

2.2 Project's Schedule Summary (for further information see Attachment B):

Planned or Actual Contract Award Date: December 2011

Planned or Actual Construction Start Date: April 2012

Planned Project Completion Date: November 2013

2.3 Project's Budget Summary (for further information see Attachment C): TIGER II Grant Funds and Additional Sources of Project Funds:

TIGER II Discretionary Grant Amount:	\$20,000,000	22.2%
Other Federal Funds from State of New Hampshire:	\$26,000,000	28.9%
Other Federal Funds from State of Maine	\$26,000,000	28.9%
State Funds (NH - Betterment):	\$2,500,000	2.8%
State Funds (NH- Turnpike Toll Credits)	\$5,600,000	6.2%
State Funds (ME)	\$9,000,000	10.0%
Local Funds (City of Portsmouth):	\$900,000	1.0%
Other Funds (if any):	\$00.00	0%
Total Project Cost:	\$90,000,000	100%

2.4 If there are any cost savings or if the contract award is under the engineer's estimate, 23 C.F.R. 630.106(f) shall not apply to any match for the TIGER II Discretionary Grant amount.

2.5 Project's State and Local Planning Requirements: Inclusion in the New Hampshire Statewide Transportation Improvement Program (STIP) was approved by the New

Hampshire FHWA Division 01/18/11. Administrative Modifications to include the project into FY 2011 STIP were processed on 03/01/11 and 03/24/11. Inclusion in the Maine STIP was approved by the Maine FHWA Division on 03/15/11.

2.6 Project's Environmental Approvals and Processes:

Environmental Documentation Type, Titles and Date: Categorical Exclusion dated March 16, 2011

Environmental Decision Type and Date: Categorical Exclusion FHWA Approval dated March 17, 2011.

Name of Agency and Office Approving each Environmental Decision Document: FHWA (New Hampshire Division)

2.7 Grantee's and any Sub-Grantee's Dun and Bradstreet Information:

Dun and Bradstreet Data Universal Numbering System (DUNS) No. of the Grantee:

New Hampshire # 808591697

Maine # 809045966 (for informational purposes).

Name of any First-Tier Sub-Grantees or Sub-Recipients (if applicable – to be reported if/when identified. If not applicable please note is N/A): N/A

DUNS No. of First-Tier Sub-Grantee or Sub-Recipient (if applicable – to be reported if/when identified): N/A

2.8 Grantee's Designation of Official Contact(s) (to whom all communications from Government will be addressed):

New Hampshire DOT

William A. Cass, PE
Director of Project Development
7 Hazen Drive, PO Box 483
Concord, NH 03302-0483
(603) 271-1486
wcass@dot.state.nh.us

Maine DOT

Kenneth Sweeney, PE
Chief Engineer
16 State House Station
Augusta, ME 04333-0016
(201) 624-3011
Ken.Sweeney@maine.gov

SECTION 3. REPORTING REQUIREMENTS

Subject to the Paperwork Reduction Act, and consistent with the purposes of the TIGER II Discretionary Grant Program, Grantee agrees to collect data necessary to measure performance

of the Project and to ensure accountability and transparency in Government spending. Grantee further agrees to submit periodic reports to the Government that contain data necessary to measure performance of the Project and to ensure accountability and transparency in Government spending.

- 3.1 **Project Outcomes and Performance Measurement Reports:** Grantee shall collect the data necessary to track and report on each of the performance measures identified in the Performance Measurement Table in Attachment D and report results of the data for each measure to the Government periodically, according the reporting schedule identified in Attachment D. Furthermore, Grantee agrees to provide an initial Pre-project Report and a final Project Outcomes Report to the Government.
 - 3.1.1 The Pre-project Report shall consist of current baseline data for each of the performance measures specified in the Performance Measurement Table in Attachment D. The Pre-project Report shall include a detailed description of data sources, assumptions, variability, and the estimated level of precision for each measure. Grantee will submit the report to the Government by April 2012. Grantee shall represent that the data in the Pre-project Report is current as of January 2012.
 - 3.1.2 Grantee shall submit interim Project Performance Measurement Reports to the Government for each of the performance measures specified in the Performance Measurement Table in Attachment D following Project completion. Grantee shall submit reports at each of the intervals identified for the duration of the time period specified in the Performance Measurement Table in Attachment D. Grantee shall represent that the data in each of the interim Project Performance Reports is current as of the final date of the reporting interval.
 - 3.1.3 The Project Outcomes Report shall consist of a narrative discussion detailing Project successes and/or the influence of external factors on Project expectations. Grantee will submit the Project Outcomes Report to the Government by March 31 2017, which includes an *ex post* examination of project effectiveness in relation to the Pre-project Report baselines. Grantee will represent that the data in the Project Outcomes Report is current as of December 31, 2016.
 - 3.1.4 Grantee shall submit each report via email to each of the Government contacts identified in paragraph 3.5 of this Agreement and, additionally, to outcomes@dot.gov. The email shall reference and identify in the email subject line the TIGER Grant Number and provide the number of the Performance Measures report submitted, e.g., Re: [Modal] Tiger Grant No. 52 - Performance Measure Report No. 1 or 2 or 3, etc.
- 3.2 **Project Progress and Monitoring Reports:** Consistent with the purposes of the TIGER II Discretionary Grant Program, to ensure accountability and transparency in Government spending, the Grantee shall submit quarterly progress reports and the Federal Financial Report (SF-425) to the contacts designated by the Government in section 3.5, as set forth in Exhibit H, Quarterly Progress Reports: Format and Content, to the Government on a quarterly basis, beginning on the 20th of the first month of the calendar year quarter

following the execution of the Agreement, and on the 20th of the first month of each calendar year quarter thereafter until completion of the Project. The initial report shall include a detailed description, and, where appropriate, drawings, of the items funded.

- 3.2.1 The Grantee shall submit all required reports and documents to the Government electronically, referencing the Grant number, the contacts designated by the Government in section 3.5.
- 3.3 **Annual Budget Review and Program Plan:** The Grantee shall submit an Annual Budget Review and Program Plan consisting of the Portsmouth-Kittery Project Financial Plan to the Government via e-mail 60 days prior to the end of each Agreement year. The Annual Budget Review and Program Plan shall provide a detailed schedule of activities, estimate of specific performance objectives, include forecasted expenditures, and schedule of milestones for the upcoming Agreement year. If there are no proposed deviations from the Approved Detailed Project Budget, attached hereto as Attachment C, the Annual Budget Review shall contain a statement stating such. The Grantee will meet with the Government to discuss the Annual Budget Review and Program Plan. If there is an actual or projected project cost increase, the annual submittal should include a written plan for providing additional sources of funding to cover the project budget shortfall or supporting documentation of committed funds to cover the cost increase. To the extent the annual budget update deviates from the approved project budget by more than 10 percent, then work proposed under the Annual Budget Review and Program Plan shall not commence until written approval from the Government is received.
- 3.4 **Closeout Process:** Closeout occurs when all required project work and all administrative procedures described in Title 23 (or 49 C.F.R. Part 18 or Part 19, as applicable) are completed, and the Government notifies the Grantee and forwards the final Federal assistance payment, or when the Government acknowledges Grantee's remittance of the proper refund. Within 90 days of the Project completion date or termination by the Government, the Grantee agrees to submit a final Federal Financial Report (SF-425), a certification or summary of project expenses, and third-party audit reports.
- 3.5 All notices or information required by this Agreement should be addressed and sent to all the Government contacts as follows:

FHWA - New Hampshire
Cindy Vigue
Assistant Division Administrator
19 Chenell Drive, Suite 1
Concord, NH 03301
(603) 228-3057
Cindy.Vigue@dot.gov

FHWA - Maine
Cheryl Martin
Assistant Division Administrator
Edmund S. Muskie Federal Bldg.
40 Western Avenue, Rm 614
Augusta, ME 04330
(207) 622-8350
Cheryl.Martin@dot.gov

and

Ed Strocko
TIGER Discretionary Program Modal Coordinator
Federal Highway Administration
1200 New Jersey Ave. SE, E84-440
Washington DC 20590
(202) 366- 2997
Ed.Strocko@dot.gov

and

Robert Mariner
United States Department of Transportation
Office of the Secretary
1200 New Jersey Avenue, SE, W84-244
Washington, DC 20590
(202) 366-8914
Robert.Mariner@dot.gov

SECTION 4. SPECIAL GRANT REQUIREMENTS

- 4.1 The Grantee the State of New Hampshire and the State of Maine have entered into a binding agreement entitled *Memorandum of Agreement Between the States of New Hampshire and Maine Regarding the Three Bridges Between Portsmouth, NH and Kittery, ME*. The terms and conditions of this agreement are incorporated by reference into this Grant Agreement.
- 4.2 The Grantee agrees to advance the project on timely basis by completion and issuance of a final Request for Proposals as approved by the Government, but by no later than September 1, 2011.
- 4.3 The Government's execution of this Grant Agreement does not in any way constitute pre-approval or waiver of any of the requirements imposed upon Grantee under the applicable Federal rules, regulations and laws regarding Federal-aid highway projects or design-build projects undertaken in accordance with Title 23 of the U.S. Code and Title 23 of the Code of Federal Regulations. The Grantee must comply with all applicable Federal requirements before any reimbursement on the project may occur.

SECTION 5. TERMINATION, EXPIRATION, AND MODIFICATION

- 5.1 Subject to terms set forth in this Agreement, the Government reserves, in its sole discretion, the right to terminate this Agreement and all of its obligations associated with this Agreement, unless otherwise agreed to in a signed writing between the Grantee and the Government, if any of the following occurs:

- 5.1.1 The Grantee fails to obtain or provide any non-TIGER II Discretionary Grant contribution or alternatives approved by the Government as provided in this Agreement and in accordance with the Project Schedule (Attachment B);
- 5.1.2 The Grantee fails to begin construction before September 30, 2012;
- 5.1.3 The Grantee fails to begin expenditure of Grant funds by September 30, 2012;
- 5.1.4 The Grantee fails to meet the conditions and obligations specified under this Agreement including, but not limited to, a material failure to comply with the Project Schedule (Attachment B) even if it is beyond the reasonable control of the Grantee; or
- 5.1.5 The Government, in its sole discretion, determines that termination of the Agreement is in the public interest.
- 5.2 Funds made available under this Agreement shall be obligated by Grantee on or before September 30, 2012. Funds made available under this Agreement, once obligated, are available for liquidation and adjustment through September 30, 2017, the "Grant Termination Date." Unless otherwise agreed to by the parties, this Agreement shall terminate on the Grant Termination Date.
- 5.3 Either party (the Government or the Grantee) may seek to amend or modify this Agreement prior to the Grant Termination Date by written notice (formal letter) to the other party and in accordance with 49 C.F.R. Parts 18.43 and 18.44. The Grant Agreement may be amended or modified only on the mutual written agreement by both parties.

SECTION 6. AWARD AND EXECUTION OF GRANT AGREEMENT


There are three (3) identical counterparts of this Agreement in hard copy; each counterpart is to be fully signed in writing by the parties and each counterpart is deemed to be an original writing having identical legal effect. Upon final execution of this Agreement by the Grantee, the effective date shall be the date the Government awarded funding under this Agreement as set forth below. When signed and dated by the authorized official of the Government, this instrument will constitute an Award under the Act.

EXECUTION BY THE GOVERNMENT

By signature below, the Government acknowledges that it accepts and will be bound by this Agreement.

Executed this 30th day of March, 2011.

Federal Highway Administration

A handwritten signature in black ink, appearing to read "Patrick A. Bauer", written over a horizontal line.

Patrick A. Bauer

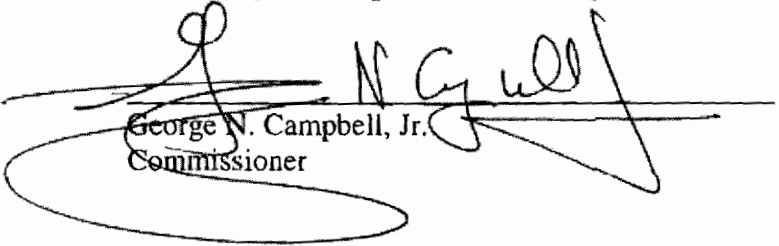
Acting Division Administrator - FHWA

EXECUTION BY THE GRANTEE/RECIPIENT

By signature below, the Grantee/Recipient acknowledges that it accepts and will be bound by this Agreement.

Executed this 30th day of March, 2011.

New Hampshire Department of Transportation


George N. Campbell, Jr.
Commissioner

ATTACHMENT A STATEMENT OF WORK

The Memorial Bridge Replacement Project includes the following primary elements:

- 1) Replacement of the Fixed spans, Movable span, Towers; and abutments,
- 2) Increase the overall cross-section of the Memorial Bridge by four feet by providing for a 11-4 typical and a clear 6-foot sidewalk on each side as a minimum,
- 3) Maintain or improve the current navigational clearances in both the closed and open position,
- 4) Rehabilitation of the piers and existing fender system with the possibility of a new dolphin fendering system, as may be required,
- 5) Replacement of the Scott Avenue Bridge including piers, abutment and superstructure,
- 6) Replacement of the Kittery Approach Structure including piers, abutments and superstructure,
- 7) Relocation of Utilities and services for the structure, and
- 8) Civil, Highway and drainage improvements.

The Towers, two adjacent fixed spans, and movable span for the Memorial Bridge are to be replaced with new structure and having similar visual representation (i.e.: truss design). A major goal of the new structure will be design details to reduce corrosion. The new fixed spans and movable span will likely consist of a similar truss design, which is visually similar to the existing span or any alternative design that meets the project's objectives while meeting the Secretary of Interior Standards for Rehabilitation of Historic Buildings. The Memorial Bridge lift span will be designed to be able to remotely operate other bridges or be remotely operated from another bridge or location. Strengthening and rehabilitation of the existing piers may be required based upon the new superstructure loads.

The Scott Avenue Bridge five-span bridge is to be replaced and with a two span modern design structure with drainage and utility improvements to the local city streets. This work will include a detour of traffic, demolition of the existing structure and construction of the new two-span structure. The work shall be coordinated to co-inside with required closures for the movable span to minimize impacts to the traveling public. A backup power generator with automatic transfer switch and bridge operator parking shall be located under the new Scott Avenue Bridge within the existing right of way.

The Kittery Approach Structure consist of ten short spans and is to be replaced with a low maintenance structure consisting of no more than four spans eliminating several existing piers. This work shall include detour of traffic, demolition of the existing structure and construction of the new structure. The work shall be coordinated to co-inside with required closures for the movable span to minimize impacts to the traveling public.

ATTACHMENT B PROJECT SCHEDULE

Design – Build Procurement (w/ATC) and Construction Schedule

Design – Build Procurement

November 17, 2010	Design – Build (D-B) Public Hearing
December 20, 2010	The Governor and Executive Council Granted Authorization for D-B Procurement
February 8, 2011	Request for Qualifications (RFQ) issued
March 17, 2011	NEPA Approval of Project by FHWA
March 18, 2011	Statement of Qualifications submissions to NHDOT
April 7-8, 2011	Selection of Shortlist Teams
April 11, 2011	Issue draft Request for Proposals (RFP), previously approved by FHWA, for Industry Review to Short-Listed D-B teams for comments
April 24-30, 2011	Meeting with D-B Team(s) for industry review of draft RFP
June 7, 2011	Issuance of final Request for Proposals (RFP) to Shortlisted D-B teams
June 27, 2011	Deadline for requesting Alternative Technical Concept (ATC) to NHDOT (20 days after Issuance of RFP)
July 6-15, 2011	ATC Meetings with NHDOT/Maine DOT & D-B teams
July 28, 2011	Final Decision on D-B Team's ATC Options
October 21, 2011	Design-Build Teams Submission of Final Technical Proposal
November 10, 2011	Design-Build Teams Submission of Final Price Proposal
November 15, 2011	NHDOT Final Selection of Design-Build Team
December 2011 Nov. 2011	G&C Award of Contract for D-B

Design-Build Design/Construction Anticipated

December 2011	Initiate final design of accepted technical proposal
August 2012	Fabrication Plans Accepted
August 2012-March 2013	Main Span Structures Fabricated Off-Site (18 months)
April 201 ³ 2	D-B Team takes over Operation of Memorial Lift Structure

May 2012	Bridge Closed – Transit Begins for Pedestrians and Bicyclists
May-July 2012	Demolition of existing bridge
July – December 2012	Substructure and Pier reconstruction
December 2012 – June 2013	Approach Superstructure Construction (Scott Ave. and Kittery Approach)
May-June 2013	Float in Fixed Span Superstructures
July 2013	Float in Lift span Superstructures
August 2013	Adjust mechanical and electrical for Lift Operation
September – October 2013	Final Project Cleanup and testing completed
October 2013	Project Construction Completed

ATTACHMENT C PROJECT BUDGET

The TIGER II funds will be used on major bridge construction items. TIGER II funds will be prioritized and expended before other program funding. Therefore, the TIGER II funds are anticipated to contribute to initial construction expenses, including design builder engineering and design costs, steel procurement and fabrication, procurement of electrical and mechanical components, and demolition of the existing structure.

ENGINEERING		
State PE		\$200,000
Consultant support		\$1,600,000
other/commitments		\$698,000
		\$2,498,000
ROW	incidentals	\$2,000
CONSTRUCTION		
Abutments		\$1,000,000
Piers		\$100,000
Demolition		\$9,300,000
Truss Span		\$13,100,000
Lift Span		\$7,700,000
Towers		\$14,000,000
Fender Improvements		\$500,000
Mechanical/Electric		\$19,500,000
Kittery Approach spans		\$4,000,000
Scott Avenue Bridge		\$4,000,000
Mobilization		\$7,300,000
Subtotal		\$80,500,000
Shuttle during Closure		\$1,000,000
State design build review and mangement		\$2,000,000
Construction Engineering		\$3,000,000
Construction Inspection (consultant)		\$1,000,000
subtotal		\$7,000,000
Construction Total		\$87,500,000
Project Total		\$90,000,000

ATTACHMENT D PERFORMANCE MEASUREMENT TABLE

Study Area: Memorial Bridge connecting US Route 1 over the Piscataqua River between Portsmouth, New Hampshire and Kittery, Maine.

Table 1: Performance Measurement Table

Average daily traffic (ADT)	ADT is defined as the total volume of vehicle traffic crossing the bridge per day..	Quarterly	<p>Pre-Project (Baseline) Measurement: Before project commencement</p> <p>Performance Measurement: 3 years after the project opens for operation under normal conditions</p>
Average Daily Truck Traffic (ADTT)	ADT is defined as the total volume of truck traffic crossing the bridge per day.	Quarterly	<p>Pre-Project (Baseline) Measurement: Currently prohibited</p> <p>Performance Measurement: 3 years after the project opens for operation under normal conditions</p>
Average Daily Pedestrian and Bicyclist Traffic	Average daily bicycle and pedestrian counts uses National Bicycle & Pedestrian Documentation Project (NBPDP) methodology by conducting hourly counts on the bridge. Counts will be collected quarterly on days specified by the NBPDP.	Quarterly	<p>Pre-Project (Baseline) Measurement: Before project commencement</p> <p>Performance Measurement: 3 years after the project opens for operation under normal conditions</p>

<p>Federal Sufficiency Bridge Rating</p>	<p>Federal Sufficiency Bridge Rating is a bridge rating based upon structural and functional condition.</p>	<p>Annually</p>	<p>Pre-Project (Baseline) Measurement: Before project commencement</p> <p>Performance Measurement: 3 years after the project opens for operation under normal conditions</p>
<p>Operational Delays for Opening and Closing of Structure</p>	<p>Operational delay to traffic crossing the bridge can be measured based upon closure for lifts</p>	<p>Quarterly</p>	<p>Pre-Project (Baseline) Measurement: Before project commencement</p> <p>Performance Measurement: 3 years after the project opens for operation under normal conditions</p>