MassDOT Municipal Small Bridge Program



MMA Workshop-Bridges and Culverts: Repair, Replace, Reconstruct



Chief Engineer, MassDOT Highway Division-Patricia Leavenworth P.E.

Presentation Outline



- Program Overview
- Program Details
- Review & Approval Process





 Update From October 31st, 2016 Eligible Applications

Eligible Bridges "BRI's"



- 10' 20' span length
- Bridge must be on a public way



 Not eligible for federal aid

- 1,300 Municipally Owned BRIs in Massachusetts
 - MassDOT received 50 applications in October 2016

Funding



Non-federal aid state funds

\$50 million over five years



- Approved projects will be funded through reimbursement agreements
- The maximum amount of reimbursement, including design and construction costs is \$500,000 per year, per municipality

Municipality's Responsibility



- Administering the project through the design and construction phases:
- Including procurement of a prequalified designer and bidding and oversight of the construction contract by a prequalified contractor
- Obtaining and certifying the they've obtained all required environmental permits and acquired all required right-of-way
- Coordination with all affected utility companies

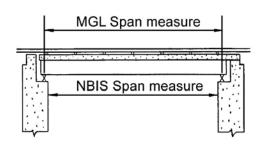
Program Description – Key Points

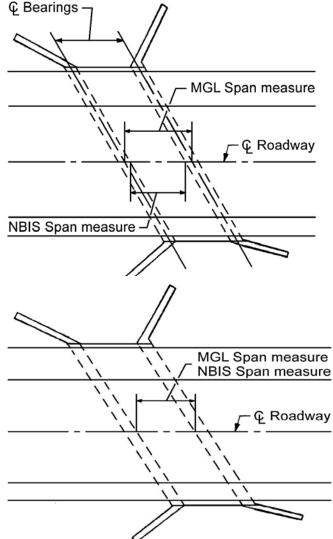


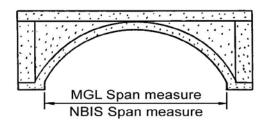
- Applications accepted 3 times per year –
 Oct. 31st, Feb. 28th & June 30th
- Emergency applications can be submitted anytime
- Maximum reimbursement is \$500,000 per municipality per year
- Project can be for replacements or for preservations
- Multiple bridges can be combined in one application (\$500k maximum for entire application)

Definitions & Method of Measuring Length of Span



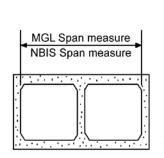


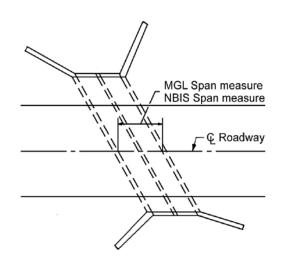


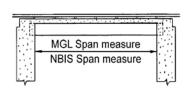


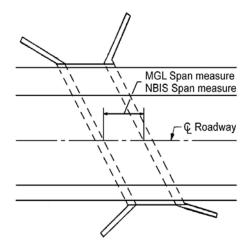
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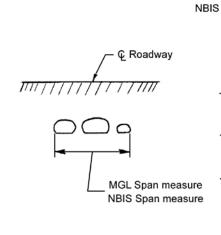


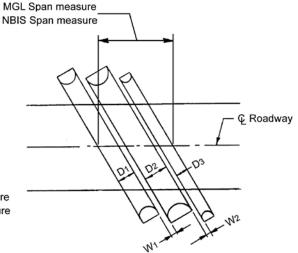






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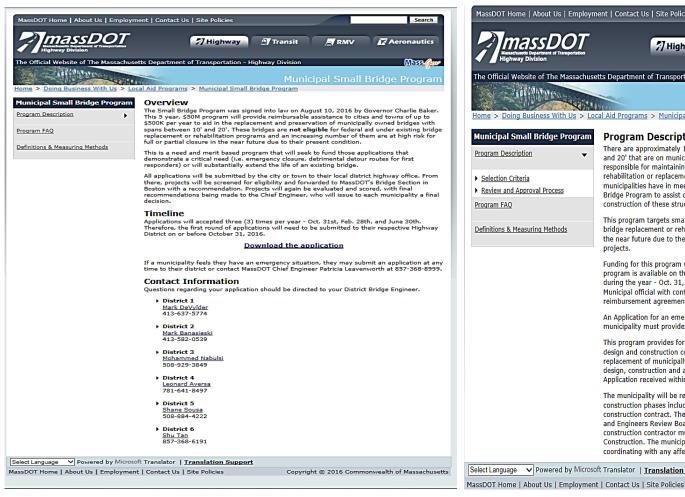


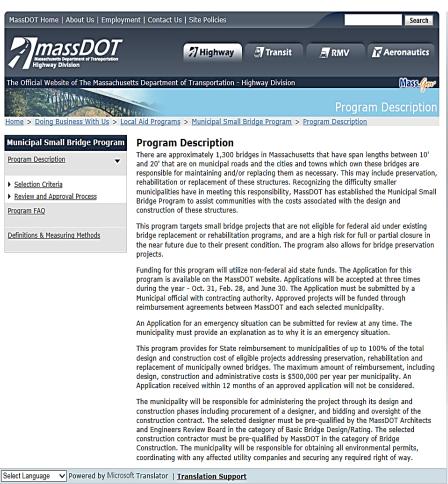


Program Website



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http://www.massdot.state.ma.us/highway/DoingBusinessWithUs/LocalAidPrograms/MunicipalSmallBridgeProgram.aspx

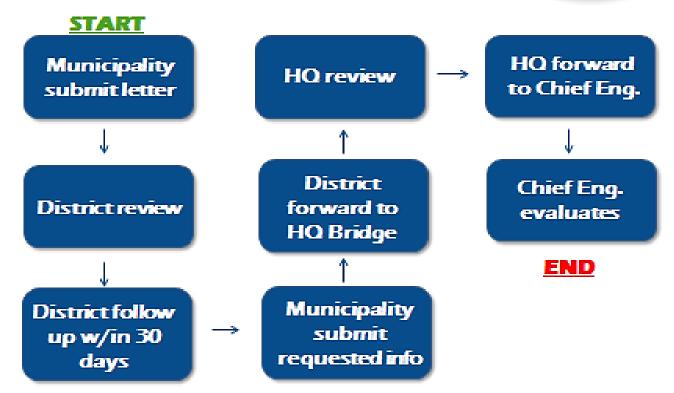
Review and Approval Process



Application Process

Applications accepted on a rolling basis





Reimbursement Process



Reimbursement Process



START

MassDOT enters into agreement

Municipality appropriates funds

Municipality submits plans, specs, estimates Municipality certifies all ROW permits

Municipality certifies all envir. permits

> MassDOT performs structural adequacy review

MassDOT
performs an
inspection on
completed
project

MassDOT reimburses the municipality

<u>END</u>

What Makes a Great Application?



- 100% completely filled out
- 10' 20' bridge span length, on a public way
- Part B → Confirmation of Applicability: These questions will be scored as "PASS / FAIL". If the answer to any of these questions is "No", the application will be rejected
- Not eligible for federal aid and demonstration for financial need
- Supporting documents e.g. inspection field reports, detour routes, pavement condition, photos, permits needed, engineering consultant evaluations, etc.

Example of an Application



	Part B: Applicability	
1.	Is the span of the bridge greater than 10 feet and less than or equal to 20 feet? Comments: Both bridges meet length criteria	Yes <mark>⊠</mark> No □
2.	Is the bridge on a public way? Comment: Both bridges on public way	Yes 🛛 No 🗆
3.	Is the bridge on the State Bridge Inventory? Comment: Both bridges on State Bridge Inventory	Yes 🖾 No 🗆
4.	Are all municipally-owned bridges in the City/Town with reduced weight-ca properly posted as previously directed by MassDOT? Comment:	rrying capacity Yes ⊠ No □
5.	Can the 25% design be submitted within 6 months of the application approva	ıl? Ye <mark>: ⊠</mark> No □

Example of an Application



2. Description of Demonstrated Public Need

 a. What is the length (in miles) of a suitable detour around
--

The distance of a detour from bridge to bridge, for the lower Road Bridge around Hill Road, or from the upper Road Bridge around Road Bridge around Road is 8.6 miles, or 22 minutes.

b. Please describe the emergency services carried by the bridge. Consider how often the roadway is used as a fire, police, and/or EMT route.

The Highway Superintendent's greatest concern for the detour is the ability of the Town's Fire Engines to get to isolated homes. Efforts to address perrenial drainage issues on the detour caused by inclimate weather and mud season continue.

c. Please describe how the bridge serves the local economy (commercial and industrial). Consider the following: agricultural, tourist/recreational sites, commercial district, major employer, other economic generators, etc.

The bridges serve small agricultural farms, second home owners, and residents needing to get to and from work. The Road bridges lead to the Legate Hill precipices, with viewsheds, often taken by tourists during Fall leaf-peeping.

d. Please describe the essential services carried by the bridge. Consider the following: heating oil, propane gas, trash/recycling, septic tank service, school busses, mail, other delivery services, etc. and if a viable detour for these services currently exists.

Heating oil, propane gas, school buses, mail, septic, and delivery services travel these routes. The Town continues to try to ensure the detour around Hill Road is a viable option; however inclimate weather and mud season may prove otherwise.

Example of an Application





Municipal Small Bridge Program Application

a. Please provide the current annual Chapter 90 apportionment for your municipality and balance of uncommitted funds. Please explain why the limited funds of the Municipal Small Bridge Program are needed to advance the project.

Annual apport. = \$181,645; \$307,383 committed for FY17 repairs; \$154,728.68 towards FY18 repairs totalling \$281,850, see attached Pavement Management Program. \$3.2M budget, 78% raised through real estate taxes, \$402k is allocated for Highway.

b. What other sources of funds does the municipality have to repair its bridges? Please explain why these are insufficient or inappropriate for this project.

The Town approved its first article at Town Meeting this year for Highway capital improvements, \$40k, reduced to \$20k, to be used for bridge. It simultaneously voted down \$350k in equipment requests. There are 36 municipally owned bridges here.

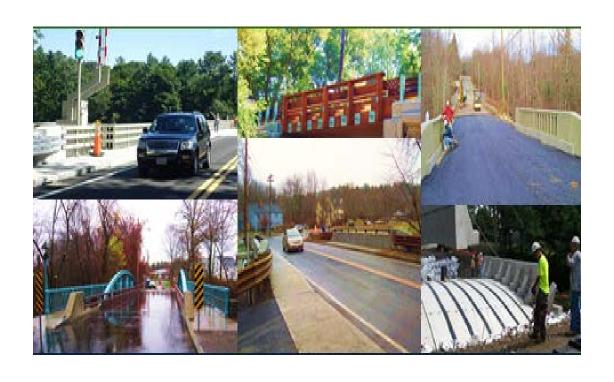
October 31st, 2016 Eligible Applications By District



District	Applications for	Applications for	Total
	Preservation	Replacement	
1	6	7	13
2	0	7	7
3	9	6	15
4	1	5	6
5	2	6	8
6	0	1	1
Total	18	32	50

MassDOT Municipal Small Bridge Program





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