Massachusetts Highway Department – District 3
Project Need Form (PNF)

This form is intended to provide preliminary information about the proposed project. It is not expected that all information that is asked for is available or known but applicants are encouraged to complete the form as fully as possible.

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Municipality/Organization: Town of Acton

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Date: March 29, 2006
Email: rbartl@acton-ma.gov

Project Reference No. (to be filled out by MassHighway): 604532

PART I – LOCATION IDENTIFICATION AND DESCRIPTION OF NEED

Municipality: Town of Acton (primarily; also Carlisle and Westford)

Route and/or Street(s): Bruce Freeman Rail Trail: x-ing 2A/119 & 27 (Acton); 225 (Westford)

Bridge ID Number (if applicable): n/a

Who owns the roadway/facility? EOT

Estimated project limits by mile marker and station from MassHighway’s roadway database or other distinguishing landmarks such as cross street(s). Include a locus map (see attached) of the project and photos illustrating project need (see feasibility study report at http://doc.acton-ma.gov/dsweb/Get/Document-11645/BFRT+2004+Feasibility+Study.pdf):

Start: Acton /Concord line – STA 671+50±
End: Route 225 Westford – STA 931+65±
Total Mileage: 4.93 miles

Please provide a brief description of the project need:

Bruce Freeman Rail Trail identified in regional bikeway plan. This segment continues southward from the Lowell to Westford section of the Bruce Freeman Trail currently under design and construction. High local demand.
Bruce Freeman Rail Trail

Estimated Construction Cost: $5+ million (plus cost of bridge over Rt. 2A, if chosen)

Does the project have Federal Funding? [ ] Yes [x] No

If yes, legislation/program: CMAQ; TIP 2008 Amount: $3,520,000

Is the project authorized in a state transportation bond bill? [ ] Yes [x] No

If yes, bill/program: CMAQ; TIP 2008 Amount: $ 880,000

Note: Project is scheduled in 2006 TIP with CMAQ funding for design and construction in FFY 2008; current allocation is $4,400,000 for design and construction.

PART II – PROJECT BACKGROUND

In what type of area is the project located? Project limits may include more than one type of area. For a definition of areas, please refer to Chapter 3 of the Guidebook.

[x] Rural Natural [ ] Suburban High Density

[ ] Rural Village [ ] Suburban Village/Town Center

[x] Rural Developed [ ] Urban Residential or CBD

[ ] Suburban Low Density

How does the roadway/facility function in the community? n/a

[ ] High-speed, primary corridor with limited access

[ ] Moderate speed, major corridor between towns/regions

[ ] Low to moderate speed corridor between towns/regions

[ ] Moderate speed, major street connecting residential areas to a town center or major connector

[ ] Low to moderate speed street connecting residential areas with other streets

[ ] Primarily or exclusively a residential street

What is the federal functional classification of the road? n/a

[ ] Interstate [ ] Rural Principal Arterial

[ ] Urban Principal Arterial [ ] Rural Minor Arterial

[ ] Urban Minor Arterial [ ] Rural Major Collector

[ ] Urban Collector [ ] Rural Minor Collector

Is the proposed project on the National Highway System? [ ] Yes [x] No

Does the project have any Intelligent Transportation System Components? [ ] Yes [x] No

If yes, describe:

Is the project a footprint road project? [ ] Yes [x] No

Is the project a footprint bridge project? [ ] Yes [x] No

-- A copy of the PNF should be sent to local MPO staff --
Provide whatever information is available to characterize the current, general use of the facility (attach traffic counts).

<table>
<thead>
<tr>
<th>CHARACTERISTIC</th>
<th>USE/DATA</th>
<th>DATA SOURCE</th>
<th>NOT AVAILABLE/Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Lanes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lane Width</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shoulder Width</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Sidewalk Availability/Width</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bicycle Facility Availability/Width</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Existing Right of Way</td>
<td>yes</td>
<td>EOT</td>
<td></td>
</tr>
<tr>
<td>Current Average Annual Daily Traffic (AADT)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Current Peak Hour Vehicular Volume</td>
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<td></td>
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<tr>
<td>Current Peak Hour Bicycle Traffic</td>
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<tr>
<td>Current Peak Hour Pedestrian Traffic</td>
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<tr>
<td>Percent Truck Traffic</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Current Transit Operations/Facilities</td>
<td>West Concord</td>
<td>(future connection)</td>
<td></td>
</tr>
<tr>
<td>Traffic Control (signal, flash, signs, etc.)</td>
<td>old R.R. crossing signs</td>
<td></td>
<td></td>
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<tr>
<td>Roadway Lighting</td>
<td></td>
<td></td>
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<tr>
<td>Pavement Condition and Markings</td>
<td>no pavement</td>
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<td></td>
</tr>
<tr>
<td>Posted Speed Limit</td>
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<td></td>
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<tr>
<td>85th Percentile Speed</td>
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</tbody>
</table>

PART III – TRANSPORTATION NEEDS ASSESSMENT

Choose a project type – Roadway, Sidewalk or Multiuse Path; Bridge or Other. Answer the questions that apply to the proposed project. Depending on the nature of the project, not all questions need to be answered. For all projects, answer For All Projects.

Roadway, Sidewalk, Multiuse Path

- Preventive Maintenance
- Rehabilitation/Resurfacing
- Reconstruction
- Widening
- New Facility
- Intersection, Roundabout or Traffic Signal Improvements
- New Interchange or Interchange Reconfiguration
- Safety
Bruce Freeman Rail Trail

What is the condition of the facility, e.g. extent of cracking, deterioration, rideability/walkability, surface condition, structural adequacy, etc.? Include a pavement management system (PMS) condition rating from a MassHighway approved PMS, as appropriate, and attach photo documentation with this submittal showing typical facility surface or site conditions.

n/a

What year was the last repair made to the facility (at minimum a preventative maintenance treatment)?

n/a

What repair was made to the facility? (Use repair typed above and describe)

n/a

What is the crash history or other safety concerns of the facility? (For safety projects, consult MassHighway’s Traffic Division for more detailed analysis requirements).

n/a

Are there mobility issues for motorists, bicyclists or pedestrians? (As an alternate to this question, attach Transportation Evaluation Criteria Form.)

See MPO Transportation Evaluation Criteria (TEC) Form DM0235 for Acton/Maynard, but note incorrect mileage in line 9.

Are there congestion issues? Provide level of service analysis results if necessary. (As an alternate to this question, attach Transportation Evaluation Criteria Form.)

See attached TEC form.

What other conditions exist that warrant this project? (As an alternate to this question, attach Transportation Evaluation Criteria Form.)

See attached TEC form.
Evaluate the impact of the project on the following resources/environmental conditions. If major impact”, “minor impact”, or “will improve” are selected, describe below. (As an alternate to this question, attach Transportation Evaluation Criteria Form.)

<table>
<thead>
<tr>
<th>RESOURCE/ CONDITION</th>
<th>MAJOR IMPACT</th>
<th>MINOR IMPACT</th>
<th>NO IMPACT</th>
<th>WILL IMPROVE</th>
<th>UNKNOWN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultural Resources</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>☑</td>
</tr>
<tr>
<td>Wetlands</td>
<td></td>
<td>☑</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Hazardous Materials</td>
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<td>☑</td>
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<tr>
<td>Air Quality</td>
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<td>☑</td>
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<tr>
<td>Noise</td>
<td></td>
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<tr>
<td>Other</td>
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</tbody>
</table>

Existing ROW bounded by wetlands. ConCom filing for work within buffer required.

NHESP estimated habitat of rare wildlife north of Route 2A crossing. Project is expected to shift motor vehicle trips to bicycle use.

**Bridge**

- Maintenance
- ☑ Rehabilitation
- ☐ Replacement
- ☐ New or Widening

What is the bridge rating and date of inspection?

Several brook crossings. Adaptation of rail trestles to bikeway use.

- ☐ Structurally Deficient?
- ☐ Functionally Obsolete?
- ☑ Posted?
- ☑ Unknown?

What is the condition of the bridge elements?

Decent to good based on visual inspection.

What is the condition of other infrastructure elements?

Railroad bed with ties and rails still in place.
What is the schedule of preventative maintenance?

n/a

If a new bridge or a bridge that does not meet current eligibility requirements, describe why the project is proposed.

A new bridge may need to be considered for a safe crossing of Route 2A/119.

Other

☐ New or Expanded TDM/Park and Ride Lot
☐ New or Expanded Traffic Management System
☐ Traffic Calming, Streetscape, Lighting, or Transit Improvements
☐ Intelligent Transportation Systems
☒ Other

Describe the conditions that warrant the project.

Increasing demand for safer off-street bicycle commuting routes.

For All Projects

Describe Right of Way Issues

☒ Probably adequate
☐ Probably will require takings
☐ Probably will require easements and/or rights of entry
☐ Unknown

Describe known project area concerns or constraints.

Route 2A/119 crossing. Encroachment area in North Acton needs resolution.

Describe the project’s effect on multimodal accommodation.

Although not included in this project, a future extension through Concord will link this bike trail to the Fitchburg Commuter line at the West Concord Station.
PART IV – PUBLIC PROCESS

Please describe the public process associated with the project to date.

☐ None to Date

Feasibility study with public meetings. R.O.W. clean-up days. Acton Town Meeting
appropriations from CPA funds. There is a Friends of the Bruce Freeman Rail Trail, Inc.

What is the expected level of community interest in the project?

☒ High ☐ Medium ☐ Low ☐ Unknown

Describe issues of concern raised by the public during the public process to date.

What to do with old ties? What to do with contaminated railroad bed materials?

Accommodate horse-back riding. Safety of Route 2A/119 crossing very important.
Locus Map

--- Figure 2: Local Transportation Infrastructure ---