



PUBLIC INFORMATION MEETING

THURSDAY, MARCH 11, 2010 AT 6:30 PM

AT

Worcester Technical High School
One Skyline Drive
Worcester, MA 01605

**FOR THE PROPOSED
BRIDGE REPLACEMENT OF THE
KENNETH F. BURNS MEMORIAL BRIDGE
ROUTE 9 OVER LAKE QUINSIGAMOND
PROJECT 604729**

**BETWEEN THE TOWN OF
SHREWSBURY AND CITY OF WORCESTER**

COMMONWEALTH OF MASSACHUSETTS
MASSACHUSETTS DEPARTMENT OF TRANSPORTATION
HIGHWAY DIVISION

LUISA PAIEWONSKY
DIVISION ADMINISTRATOR

FRANK A. TRAMONTOZZI, P.E.
CHIEF ENGINEER

PRESENTERS

Joseph Pavao, Project Manager,
Accelerated Bridge Program, MassDOT Highway Division
Mario Russo, Right of Way Bureau,
MassDOT Highway Division

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1 providing a transcript of tonight's meeting.

2 Let me start off I'm going to ask Art Frost
3 to read the public notice which was advertised in the
4 *Shrewsbury Chronicle* and the *Telegram Gazette* on February
5 25 and March 4.

6 ARTHUR FROST: "The Commonwealth of
7 Massachusetts, Massachusetts Department of Transportation
8 Highway Division; no longer MassHighway. This is a Public
9 Information Meeting for the Shrewsbury Worcester Route 9
10 Bridge over Lake Quinsigamond. Proposed, it's the Kenneth
11 F. Burns Memorial Bridge Replacement Project. Project No.
12 604729.

13 The purpose of this meeting is to provide
14 the public with the opportunity to become fully acquainted
15 with the proposed bridge replacement alternatives of Bridge
16 No. S-14-001 and Route 9 over Lake Quinsigamond.

17 Following the presentation, MassDOT staff
18 will lead the discussion to answer questions and gather
19 public comments on the alternatives. The proposed bridge
20 structure will have three travel lanes in each direction
21 when it's completed, left and right turning lanes at each
22 approach, bicycle accommodating shoulders, and sidewalks in
23 each direction.

24 A secure right of way is needed for this

1 as many of the comments and concerns that you have tonight
2 to the extent possible for the project.

3 The funding for this project is currently
4 budgeted at \$137 million. Of that, Federal Highway
5 Administration will participate at 80 percent with MassDOT
6 picking up the remaining 20 percent. The design and
7 construction for this project is being done under the
8 Accelerated Bridge Program. The Accelerated Bridge Program
9 was signed into law in the spring of 2008 by Governor
10 Patrick for approximately \$3 billion was allocated to
11 repair and replace structurally deficient bridges
12 throughout the Commonwealth.

13 The Route 9 over Lake Quinsigamond Bridge is
14 one of the signature projects under the Accelerated Bridge
15 Program. As I mentioned, the program started in the spring
16 of 2008. It's an eight year program, which means this
17 project must be designed and constructed by 2016.

18 One of the ways we're going to try to
19 accomplish that is through the design-build procurement
20 process. This project is design-build. Basically, what
21 that means is the design team, which you see here tonight,
22 will design the project to 25 percent level. Upon
23 completion of that design, MassDOT will advertise the
24 project and put it out as a design build project. Your

1 contractor and a different designer will team up to finish
2 the design for the project.

3 There are several advantages to that, one is
4 cost and schedule, but most importantly what that will do
5 is allow the contractor to come up with innovative
6 construction techniques to try to build this bridge even
7 quicker.

8 I'd like to just introduce now Mario Russo.
9 He's with MassDOT right-of-way. He's going to go over the
10 right-of-way procedures.

11 MARIO RUSSO: Good evening ladies and
12 gentlemen. Again, my name is Mario Russo. And my phone
13 number is 508-929-3862 if you have any ongoing concerns
14 you'd like to speak to me about. I represent the Right of
15 Way Bureau MassDOT. The Right-of-way Bureau is responsible
16 for acquiring all necessary rights in private and public
17 for the design, construction, and implementation of this
18 project.

19 Affected property owners will be contacted
20 by someone in the Right of Way Bureau and the procedures
21 used will comply with State and Federal regulations in the
22 acquisition process.

23 Affected property owners rights are
24 protected under Massachusetts General Laws primarily

1 Chapter 79. The project is receiving Federal funds and
2 property owners' rights are further defined under Title III
3 of the Real Property Act of 1970, as amended.

4 I will be here during the whole meeting,
5 which if you have any specific concerns. Thank you.

6 JOSEPH PAVAO: Thank you, Mario.

7 Before we start the presentation, I'm going
8 to be turning it over to Gary to do a PowerPoint
9 presentation. I would ask that all of you just hold your
10 comments and questions until the end of the presentation.
11 We'll be here as long as we need to, to answer all your
12 questions. So, with that said, I will turn it over to
13 Gary.

14 GARY BUA: Thank you. So, tonight this is
15 an outline of what I'm going to go over. I'll do a little
16 bit about the projects history, not necessarily the history
17 of the bridge, but the history of what has gotten us to
18 this point. I'll talk a little bit about the project
19 scope, touch upon the environmental process, talk about
20 what some of the projects parameters and goals, and what
21 were trying to do as part of this bridge replacement
22 project, go through the roadway alignment alternatives, and
23 what we've looked at as far as construction sequencing and
24 traffic management, and then go over the bridge

1 alternatives.

2 The consulting team working on this project,
3 TranSystems is the lead designer on this, responsible for
4 project management and highway engineering, bridge
5 engineering. We do have Fred Gottemiller with Bridge Scape
6 and he's the bridge Architect and helping us with bridge
7 aesthetics, Howard/Stein-Hudson with Traffic Engineering
8 and Public Information, and then GZA, Geo-Environmental for
9 geo-technical hazardous. And, Green, also supporting bits
10 of field surveys.

11 Project history, we really started getting
12 involved with this project back in 2008. We've done
13 several routine bridge inspections, and also a special
14 member inspection in the fall of 2008. We also went
15 through and got some additional information with respect to
16 material testing and testing the concrete. Really, with
17 the idea of, you know, could this bridge be saved and
18 should it be rehabilitated. And, so, in line with that, we
19 also looked at traffic evaluation. Because, as you know,
20 there's two lanes that cross the bridge now, and it's a
21 narrow structure. So, we also wanted to see if it met the
22 function of as far as traffic and pedestrians and such.

23 We combined all that into what we call a
24 "Preliminary Structures Report," and completed that in

1 winter of 2009. And we actually presented everything at an
2 initial public meeting back in March 2009. So, there
3 actually, just about a year ago, we went over the results
4 of that finding. But, I did want to just go through some
5 of that information just so you have an idea, again, how we
6 got to where we are.

7 A quick summary of the bridge inspection and
8 what we found, the deck or the road structure that directly
9 supports the vehicular traffic is in serious condition.
10 The bridge superstructure is in poor condition, a sub-
11 structure, which is the foundation material. The bridge
12 superstructures will be arched and the beams that carry
13 that deck is also poor condition. In several areas we
14 actually recommended temporary supports.

15 I'll quickly go over a couple of some of the
16 information here. You can see there's a full crack in one
17 of the spandle columns. It actually occurs in a couple
18 different areas. We actually recommended that that be
19 temporarily supported immediately. This column supports
20 the floor beam and the bridge deck is right above here.
21 The arches are also in poor condition. There's several
22 areas where there's large swales, and reinforcement is
23 showing and has deteriorated. And, also -- not only
24 affects the safety of the people going in underneath.

1 The strength structure, again, the
2 foundations are also in poor condition. The concrete has
3 spalled and is deteriorating in several areas. This area
4 in here is actually soft. When you hit it with a hammer
5 it'll break apart. So, once we looked at the condition of
6 -- we also -- we knew, let's really understand what the
7 condition of the existing concrete is, what the material
8 makeup is, again, just keeping it very simple.

9 The compressive strength or the strength of
10 the concrete is actually good condition. A chloride
11 testing, which measures the amount of salt in different
12 depths, which is important when you're evaluating the
13 quality of concrete, is not good. There is quite a bit of
14 chloride, high-levels of chloride in several areas. And
15 then petrographic analysis, which is where we actually take
16 the concrete and we slice it and look under a microscope,
17 or a testing facility does, looks at in detail. And they
18 came back with the concrete is in poor quality, as low air
19 entrainment, it reflects the durability of the concrete.

20 And then also they described it as soft and
21 porous, which is never good when you're referring to
22 concrete. So, the structure, we found out, is basically in
23 poor condition. And, again, we also want to look at the
24 function of the existing bridge. So, we did a traffic

1 analysis. And we looked not only at the current traffic,
2 but we also looked at future year traffic, and did a
3 conceptional or preliminary analysis. And what we found
4 out was that we were going to require additional lanes
5 between the intersection.

6 Right now you have two lanes in each
7 direction, in the future year volumes, especially with all
8 the developments going on, and the development of UMass,
9 and such, that a third lane is needed in the future. In
10 addition, there's some turning lanes, turning movements,
11 especially at the intersection of Lake here that are going
12 to require lengthening and adding of lanes. As you know,
13 many of you know there's no left hand turn lane. It's
14 actually permanent permitted for Route 9 traveling
15 westbound. So, we evaluated all that information as well.

16 So, we kind of looked at all together, and
17 really again, just trying to talk over this quickly, the
18 structures in poor condition. The traffic operations
19 require upgrade. And in order to rehabilitate it, because
20 we are going to add lanes and because we needed shoulders
21 for safety, and we know that the sidewalks aren't wide
22 enough, and all of those different things was going to
23 require significant widening of the existing structure.
24 Also, because of the condition, a large portion of that

1 structure would have to be replaced. And another component
2 is, again, that concrete is in bad condition.

3 So, if we did rehabilitate it, we weren't
4 going to rehabilitate it and be done with it for 75 years,
5 especially on where that concrete was old. We were going
6 to be back there multiple number of times in repairs. And
7 we know that every time people go out there and make
8 repairs, it's always a burden on the public and a cost to
9 the Commonwealth. So, we recommended replacement in that
10 report.

11 So since that time and MassDOT has asked us
12 to go through and now take this project to the next step.
13 And what we're doing now is we're evaluating replacement
14 alternatives, both roadway alternates and the bridge. And
15 that's why we're here going over tonight, is the roadway
16 alternatives and the bridge types that we have developed at
17 this point. We're also going to prepare Federal, State
18 environmental documentation, and all the permits. We're
19 going to go through preliminary design, and then go through
20 again, the design-build procurement process shortly after.

21 From a scheduled standpoint, we want to
22 complete the conceptual design here in the spring of 2010,
23 come up with a preferred alternative, so that we can begin
24 preliminary design here in the summer, and finished it up

1 here by the winter of 2011; the same with the environmental
2 permits. So, that again, we can have the design-build
3 procurement for this bridge ready for the spring of 2011.

4 We are going to be going through a full
5 environmental process of -- we have to go through both the
6 State MEPA process, the Federal MEPA process, which is the
7 environmental process documents that are required for a
8 project of this size. We are looking at filing an E & F
9 here in the spring of 2010, and want to finish the MEPA
10 documents in the fall of 2010. Right now, we are going for
11 a categorical exclusion, and environmental assessing may be
12 necessary. And, of course, we also need to prepare all the
13 necessary permits over this period before the design-build
14 procurement is complete, or is ready to go out.

15 One thing I do want to talk about is, again,
16 we did meet back here, or not here, but in Shrewsbury in
17 March of 2009, and since that time, we've also talked to a
18 number of stakeholders. And these are some of the things,
19 some of the comments and observations that we have been
20 listening to, and are going to or have been trying to
21 incorporate into our design.

22 We understand that recreational use of this
23 lake and underneath this bridge and around this area is
24 important to the communities. And we've heard loud and

1 clear that improving some vertical clearance underneath
2 this bridge is something that everybody's interested in.
3 We also know that pedestrian accommodations is important,
4 not only for the people that around live around, but also
5 when there's an event in Regatta's. And, so, providing
6 wider sidewalks and safer sidewalks is important.

7 We also heard from the businesses, the
8 construction duration should be minimized to reduce impacts
9 of the traveling public and the local businesses. And I
10 think that's why this is a perfect candidate for this
11 project to be part of the Accelerated Bridge Program.
12 Public safety issues should be addressed. We talked with
13 the police in Shrewsbury and in Worcester, and so, we heard
14 some of their concerns. And we're, again, trying to
15 incorporate those in our alternatives.

16 Aesthetic appeal, again, the existing bridge
17 is certainly aesthetically pleasing. We know that the
18 bridge, the new bridge also needs to be aesthetically
19 pleasing. Water quality was brought up as an issue. We've
20 done some, actually, testing of sediments. And, we also
21 plan on including storm water and all of those different
22 elements, and making improvements to water quality for the
23 design phase.

24 And then we also heard about light pollution

1 as a concern. You know, I also heard just even this
2 morning, today, this afternoon, about people interested in
3 seeing it being lit up at night. But, you know, we would
4 also, we would look at that. We could look at that. We're
5 also going to consider what that does to light pollution in
6 the area as well.

7 Project parameters and goals really kind of
8 came from those two things that I just kind of talked
9 about, the traffic, and then what we've been hearing from
10 you. Vehicular traffic, we want to be able to provide for
11 the future traffic volumes. We want to provide wider
12 sidewalks for pedestrians, also, safer sidewalks, bicycle,
13 and traffic. We want to provide wider shoulders for
14 bicycle accommodation on Lake. You have a bicycle lane, I
15 know that that would also be a positive addition to the
16 project, and recreational traffic, improve vertical
17 clearance for recreational use, and also the horizontal
18 clearance. And we're going to see that each of the
19 alternatives and look to address that.

20 Again, minimize impacts to the abutters and
21 businesses, make sure that we minimize the environmental
22 impacts, and also consider utilities. I guess this one
23 statement to me, if you provide and be greatly consistent
24 with the sight context; it improves the overall appeal and

1 function of the project site. And there's one other
2 project goal that I'm going to refer to here, and it's
3 again, based being on this Accelerated Bridge Program, was
4 to really try to minimize the impact to the traveling
5 public. Our goal was to try to get it down, so that the
6 traveling public felt the -- was affected for about one
7 year. And, so, that was the goal, that's not the overall
8 construction duration. So that was the goal. So, just as
9 you're listening to the presentation, you can see that
10 that's where the Commonwealth was headed.

11 Quick on the traffic analysis results, I did
12 kind of touch upon this. Again, we looked at a full build
13 analysis for 2028. That's the year the traffic volumes
14 will be evaluated. Highlights are, we are going to need
15 three lanes in each direction for the future bridge, based
16 on the capacity and based on the traffic volumes. And, we
17 also are going to require additional turning lanes at the
18 intersection with Lake. And, again, another highlight is
19 two lanes of traffic will be maintained at all times during
20 construction.

21 This is a cross-section of the existing
22 bridge. The existing bridge, about 70 feet wide, you know,
23 it's very narrow. And as you're driving over that, you
24 have two lanes in each direction with a concrete median and

1 then a 5 foot 6 wide sidewalk on each side. You know we
2 heard from the police that this is an issue with having no
3 shoulders during emergencies. There's also, again, not
4 enough capacity.

5 So, the new bridge will, at a minimum, be
6 wider by at least 40 feet. This way we can provide three
7 lanes of traffic. You can see we took a look at either 11
8 foot or 12 foot lanes, added shoulders, both on the inside
9 and outside, 4 foot minimum 8 foot preferred on the outside
10 shoulders, wider sidewalks. I should say 8 to 12 foot
11 sidewalks on the -- this would be on the north side and
12 then an 8 foot wide sidewalk on the south side. I'll also
13 point out that we are considering adding and are proposing
14 currently, adding traffic barrier along the sidewalk to
15 separate the sidewalk from the roadway, and again, provide
16 that little level of safety.

17 So, what I want to do is kind of walk you
18 through some of the roadway alignments that we have
19 considered, and I'm going to just kind of walk you through
20 the process. That cross-section that I just showed you is
21 110 foot wide, I would call that -- again, you're minimum
22 width cross-section for your future cross-section. And
23 what this -- this concept 1A did was try to build up to,
24 build that cross-section in two stages, okay. Again, and I

1 say two stages I mean two phases of construction, build it,
2 demo, and then complete your construction.

3 So, what we're talking about doing for this
4 alternative was to provide the construction zone,
5 basically, will be completely off-line except for that
6 south sidewalk, which would be demo'd as part of that. The
7 new structure would be constructed in that location, and
8 would be constructed wide enough so that you can provide
9 four lanes of traffic over the newly constructed portion of
10 the bridge, while you demo'd the remaining -- the existing
11 bridge in one phase, and then you complete the construction
12 by constructing your second phase of construction.

13 Now, when you look at this alignment you can
14 see that, basically, what we did again was we built enough
15 bridge so that we can construct four lanes of traffic on
16 the south side of the bridge all at once, so that we can
17 move all of that traffic on there. What you can see that I
18 did is that I shifted this south side of the bridge, so
19 that now the roadway alignment, basically, kinks to the
20 south. And, so, this is the, again, your minimum cross-
21 section constructed, so that you can do it in two phases.
22 This is not necessarily a desirable final alignment. So,
23 we wanted to see if we can improve upon it.

24 So, again, your existing conditions -- and I

1 do want to point out on the existing conditions is the
2 intersection of Lake with the intersection of Quinsigamond.
3 You can see that the existing intersections and actually
4 Route 9 on both sides is significantly wider than that
5 existing bridge. So, when I talk about we're widening the
6 structure that wide, we're not widening it anymore than
7 what the roadway actually is on both sides. We're actually
8 just tying that bridge into each of the intersections.

9 So, with 1B we said well lets see if we can
10 do it in two phases and shift the alignment. Really, the
11 only way we could do that -- we looked at actually two
12 different things, and I'm not going to walk you through it
13 because the other alternative was not feasible, was we
14 looked at three phase construction. And three phase
15 construction to us did not appear feasible after this type
16 of structure. You, basically, would be constructing in a
17 narrow zone between two -- between live traffic on both
18 sides. And to a structure of this size and a site of the
19 constraint did not appear feasible.

20 So, this was a -- we constructed a temporary
21 bridge, obviously, the temporary impacts for this are very
22 large. Also, the cost is also very large of building, a
23 four lane temporary bridge, and of course the impact.
24 You're adding, sencely, another years of ongoing

1 construction, at least, for construction of this sort of
2 structure, and then we would finish it. So, you can see we
3 addressed the alignment alternative, again, we have this
4 minimal, this minimized cross-section, but we did it at the
5 cost of building a large temporary bridge with large --
6 with significant traffic temporary impacts.

7 So, again, we stepped back. What we liked
8 in alternative 1A was the fact that we we're doing it
9 without a temporary bridge, and we like it, was two phases
10 of construction, and so, we generated alternative two,
11 which is very similar where we, basically, constructed
12 enough of the existing, or the proposed structures, so that
13 we could carry four lanes in each direction, and two lanes
14 east and two lanes west, and then allow for the entire
15 demolition of the existing bridge in one phase with the
16 exception of the sidewalk.

17 But, instead of putting it back in the
18 location that we did in 1A, we, basically, put it back in
19 the location that made the most sense with respect to the
20 alignment with Sigmund and with the intersection with Lake.
21 And, what that did was it, basically, provided for an open
22 median in the middle, and that had benefits. So we,
23 basically, we now have an alignment that was constructed in
24 two phases, but we also have a structure, and structure

1 with a good alignment.

2 And, I think some ancillary benefits, too,
3 where an open median will provide additional light
4 underneath for recreational users. Also, from above it will
5 not feel as wide. It won't feel as dominating as those
6 other structures that I just walked through. And, I think
7 it's going to -- it will help to deal with overall
8 aesthetic appeal.

9 We also look at a third alignment
10 alternative. This actually, this alternative or this
11 alignment was generated based on constructing a through
12 type structure. When I say a through type structure, that
13 means a structure that is actually where the structural
14 components come up through the deck and they help carry the
15 bridge. And I know many of you are out there looking.
16 That was for this structure over here, where you have a
17 through type, through type arch coming up through the deck.
18 So this was a specific alternative to that.

19 Now, for this, we did need to put a two lane
20 temporary bridge to the north, which then allowed us to
21 demo part of the existing bridge while we maintained two
22 lanes of traffic on the existing bridge. We would then
23 construct half the bridge, and shift traffic four lanes
24 onto that new section of bridge and then complete

1 construction. And, again, this is for that through arch
2 alternative. And you could see we did something there with
3 the alignment as well. Again, more from an aesthetic
4 appeal.

5 So, just a quick summary, alignment 1A did
6 not require a temporary bridge. We did it in two phases.
7 1B did require a temporary bridge, three phases. Alignment
8 two did not. It was done in two phases. And three also
9 did require a temporary bridge in three phases. Alignment
10 1A, again, which is this alignment over here, provided for
11 a poor alignment. 1B, with that temporary bridge that was
12 required, the temporary impacts and the cost to us didn't
13 make sense.

14 Especially since the impacts -- actually, I
15 want to point that out the actual impacts to each of these
16 surrounding properties is similar for each of these
17 alignments. There's a little bit more taking on some of
18 the alternative than the others. But, as far as the level
19 of impact to each of the properties, they're very similar.
20 Alignment two provided the benefit of 1A with an improved
21 alignment. And I think, also, with the open median
22 provides an improvement for the overall aesthetics, and
23 then for the recreational users below. And alignment three
24 is necessary for the through type structures.

1 So, I'm going to summarize, we actually
2 would be recommending alignment two for any of the deck
3 type alternatives. So, for any of the structures that the
4 beams are underneath the deck, or their supported from
5 underneath, it would be recommending alignment two. And
6 for that through arch alternative alignment three would be
7 necessary. And that's basically what you're going to see
8 here as we go through the bridge types.

9 Okay, bridge concepts, we are looking at
10 three different types of structures at this point. This
11 is, again, I think consistent with what we have been
12 presenting in the original public information meeting. And
13 also, as we have talked with some of the stakeholders
14 through the past year, hunched girders or arched girders
15 are one alternative, a steel deck arch is a second
16 alternative, and then a through arch alternative is
17 another. This is a haunched girder alternative example.
18 This bridge here is, both of these actually, this one, both
19 of these are concrete haunched girders. Again, when I say
20 haunched I mean arched. These are individual girders.
21 They are supported on piers and abutments, again, providing
22 that arch shaped.

23 One thing I did want to point out is, on
24 this bridge over here and I think this, again, this is

1 consistent with what we presented before. We are looking
2 to incorporate these bump outs or overlooks in the new
3 bridge. We think there's not only an aesthetic, but
4 functional use for us, as far as having pedestrians and
5 people who want to view the lake, and some of the
6 recreational uses and races that are going on to provide
7 that additional space. Actually this here -- it also
8 provides an opportunity for us to add architectural and
9 aesthetic elements to the bridge.

10 The existing bridge profile, the high point,
11 basically, of the bridge, in the highest clearance point
12 occurs at the main span, which is currently is a 125 feet,
13 low point occurs right here over the -- and you have about
14 an 18 foot vertical clearance over the water at beam high-
15 water.

16 Now, the first haunched girder alternative
17 that I'm going to show you is the three-span alternative,
18 basically, providing two piers in the water, main spans
19 over 300 feet long. Again, high points is going to appear
20 here under the main span, the low points are actually going
21 to occur off the bridge on both sides. And, even though
22 this is a deep structure here, we still were able to, by
23 raising the profile, provide about a 19 foot under
24 clearance, which is an improvement about by 1 foot from the

1 existing structure.

2 This here is an animation of what this
3 alternative might look like. Again you can see we're going
4 to three lanes in each direction. I'm showing the open
5 median here. I'm also, quick going to point out the bridge
6 rail here that separates the pedestrians from the travel
7 way. You can see these bump outs are occurring at each
8 pier. So, we actually have two bump outs or four, two on
9 each side, got about a 300, over 300 foot main-span, and
10 overall, from an Accelerated Bridge Technique, were
11 thinking about using precast elements within the Piers.

12 I don't know if you could see this in this
13 particular -- but, we're looking at maybe making these look
14 like a block type pier. But, also, make them precast, so
15 that they could be assembled quicker. As many of you maybe
16 saw, or didn't see, we are looking at separating the island
17 from the proposed bridge, and allowing water to basically
18 flow around the island. With that, I'm going to actually
19 have Fred talk a little bit about some of the architectural
20 components.

21 FRED GOTTEMILLER: Thanks, Gary. We wanted
22 to talk a little bit about the visual aspects of these
23 different designs and describe what they are. And since so
24 much of the use of this lake is at water level by boaters

1 or by shoreline users, we're going to start by
2 concentrating on the views, as you would see them from the
3 shore water line.

4 One of the things that you'll notice with
5 this girder, these three-span girders, because it is so
6 deep, it pretty much blocks your view of anything beyond
7 it. You really can't see much of the lake beyond the
8 bridge, or much of the shore line beyond the bridge,
9 because it's 18 feet deep here, and 19 feet from the water
10 to the top.

11 Basically, the girder is about as big as the
12 space on the new bridge. So, one of the effects of that is
13 it's going to look very massive and sort of -- here's the
14 kayaker, going to compare that to the size of the girder.
15 You can see how massive it looks and the other effect of it
16 is it might make the space under the bridge seem quite
17 dark, because you don't have a whole lot of light from the
18 sun or the sky. So, those are some of the impacts or the
19 effects of the three-span girder. We did start to look at
20 how you might -- structure overlooks.

21 This is a more contemporary version, you
22 might say the kind of supports that you saw in that earlier
23 example, and those are details that we can work out once
24 one of these alternatives is picked. We'll get into more

1 detail with architectural options for those kind of
2 features.

3 GARY BUA: Thank you. So, just to kind to
4 summarize, three-span haunched girder alternative, very
5 deep structure, very heavy visually. It is going to be
6 challenging to construct and deliver and install these
7 beams. You're talking about, you know, beams that are over
8 350 feet long, although, they will be spliced. So, it will
9 help reduce the difficulty, but it's still going to be very
10 difficult to construct, deliver, and install these beams at
11 this location.

12 Also, the cost is relatively high. There's
13 a lot of steel on this alternative. Those are big beams; a
14 lot of steel. And, also, with this structure it really
15 only improved the vertical clearance by 1 foot, which
16 didn't meet our goal of -- and I know I've talked to some
17 of you before this, by trying to exceed over 21 feet to at
18 least be able to pass the 21 foot O'Day sailboats that use
19 the lake frequently.

20 Again, the existing profile, so we took a
21 step back with the three-span alternative. And, as we
22 showed you again in that first public information meeting,
23 we also looked at a five-span girder alternative, both for
24 concrete and for steel. We're talking about spliced girder

1 technology for both the concrete and the steel. We're
2 talking about a 230 foot main span.

3 So, again, significantly longer, your spans
4 and your existing bridge are 125 foot. I believe they go
5 from 90, 75, and this last one is a 60 foot. So, it's
6 still significantly longer. The highpoint will, again,
7 occur over the main span both points, again, off the
8 bridge, again, which would be beneficial for several
9 reasons. And then provide 22 foot under clearance under
10 beam high water.

11 Again, another visualization here to kind of
12 give you a feel for, you know, what is going on. Again,
13 you could see it's a little bit shorter. Its 230, which
14 is, you know, it's certainly shorter. But, now we have
15 four peers in the water. It's very similar. Obviously
16 above, we're still -- we'll obviously have two more look
17 outs or bump outs because we have two more piers. We're
18 still providing the open median.

19 Same applies with respect to looking at
20 precast alternatives, even evaluating precast on the deck.
21 But, it also does allow us to go much thinner. Again,
22 we'll provide about a 6.5 foot structured deck at the
23 middle of the span. But, we did want to keep it relatively
24 deep over the piers so that we could still have the arched

1 feel with this alternative.

2 FRED GOTTEMILLER: Well, you could see if
3 you go back to his question, what kind of a view you have
4 through the bridge. And you could see more of the lake
5 through this bridge. And you can see more of the scenery
6 behind it because it's so much thinner. The depth at the
7 piers is about 12.5 feet. The depth at mid-span is about
8 22 feet. So, the effect of that is that the space under
9 the bridge is now twice as much as the thickness of the
10 girder, so it's going to seem much thinner and more open.

11 One of the things though that happens with
12 girder bridges is that they do tend to soak up the light
13 underneath. There's light reflected from the water, but it
14 kind of gets trapped in the spaces between these girders.
15 Each of these girders is like a wall extending down from
16 the deck, and the spaces between them tend to soak up any
17 reflections from below. So from the perspective of a
18 boater, underneath the bridge, it seems dark above you.
19 And, so, that's always going to be a little bit of a
20 problem for recreational users.

21 There is the gap between the two bridges on
22 this alternative, which will give us a strip of light down
23 the middle. But, still each half will seem dark from
24 below. Again, we show some structure from the overlooks,

1 one of the things about the three deck structure is that
2 there really aren't many features above the deck that you
3 can see.

4 So, all the finer things we're talking to
5 you about now have been features that you can appreciate
6 from the river, from the lakeshore, or from the boats.
7 But, they're not things you could really appreciate, as you
8 approached the bridge, coming down Route 9 or from those
9 views up at street level.

10 So, you know, these are things that we would
11 be thinking about, like maybe ornamental light fixtures on
12 the overlooks, or you could consider a gateway feature at
13 the abutments that's some kind of a pile on, or something
14 to let you know that you're about to enter the bridge.
15 And, those features could be related to Shrewsbury or
16 Worcester depending on what the, you know, interest of the
17 community are.

18 We are also very positive of the lighting
19 issue. There are lighting fixtures available that,
20 basically, protect all their light downward, so you don't
21 get the kind of spread of light through the sky, which is
22 the source of light reflects many some people worry about.
23 So, those are things we would consider in the design of the
24 light.

1 GARY BUA: So, again just to summarize here,
2 the five-span haunched girder has a much shallower
3 structure. The arch shaped is accentuated because of -- it
4 will be able to be much thinner at the center of the span.
5 It will be easier to construct, spans are shorter. They're
6 also lighter because -- because they're shorter. It'll
7 make it easier to install and deliver the beams. This is,
8 actually, a relatively cost-effective design. We will be
9 able to include the vertical clearance approximately 4
10 feet, or just over 22 feet of vertical clearance over beam
11 high water.

12 The third, or the second -- the next type of
13 structure that we considered was the steal deck arch. And,
14 actually part of that inspiration was this bridge back in
15 1916. When they were doing the alternative analysis, one
16 of the alternatives was a steal deck arch, and they,
17 obviously, went with the concrete alternative for this
18 particular one. But, we thought, you know, that this
19 structure may have some merit for this location at this
20 time.

21 These are a couple of, again, deck arch
22 alternatives, I wanted to just point out, that you can
23 provide. What these do is they do provided a moral good
24 feel. Again, your existing bridge, the span arrangement

1 for this particular alternative is very similar, or we kept
2 a very similar to the five-span haunched girder. Again,
3 with a main span of about 230 feet, again, your high point
4 occurring over your main span. And, because this is
5 actually a little bit more efficient structure, it's going
6 to be a little bit more complex. A little bit more
7 efficient. We can provide a 23 foot clearance underneath
8 the bridge.

9 Again, another animation to kind of give you
10 a sense of what this bridge might feel like, again, 230
11 feet. These pier locations are based on -- right now, we
12 have them so that each arch is support on its own pier
13 location. A couple reasons for that are some of the
14 foundations that we were considering -- I do want to point
15 out that we did try to keep about 8 feet of difference
16 between the beam high water and the bearings to try to
17 prohibit or minimize the amount of people that might be
18 able to climb on the bridge.

19 Again, very similar to the other structures
20 in respects to the overall -- the overall structure, and
21 with respect to the opening, and the provisions for bump
22 outs. I'll let Fred talk a little bit more about
23 aesthetics here.

24 FRED GOTTEMILLER: Comparing this to the

1 earlier girder design, you can see that you can see pretty
2 much what there is to see through this bridge, because
3 you're looking through the web of the structures. So, it's
4 much more transparent bridge. The other thing that happens
5 is because the bottom of the deck is pretty much flat and
6 exposed in all directions. The light that reflects off the
7 water, that reflects all over the place inside and below
8 the bridge. And, you might have notice in the 3-D view how
9 easy it was to see the old structure, even the top of it,
10 because of that reflected lights. So, this is a much more
11 pleasant area to be on -- be in under the bridge.

12 Next, the other thing, of course we have the
13 overlooks here as I said earlier, and one of the things
14 that I think it would be worth considering, particularly
15 for this bridge, is some lighting of the bridge itself.
16 That's where you have this bridge that's transparent
17 structure.

18 GARY BUA: Let's see. I think I missed it.
19 I'll summarize anyway. So, this, again, this structure is
20 also relatively cost-effective. It is a little bit more
21 expensive than the five-span haunch girder alternative. It
22 does provide a more transparent structure, as Fred had
23 determined or had explained. And it also will provide
24 opportunities for accelerated construction.

1 Again, precast, we could look at precast
2 elements for these pylons, and also these elements are all
3 going to be a lot lighter than some of those heavier beam
4 elements. And, even though there's more elements than I
5 thinking of, as an erector set, we have a lot of light
6 pieces that you could be able to erect relatively quickly
7 and easily.

8 Again, we provide about 23 feet of under
9 clearance for this particular alternative. And, it does
10 provide for a more traditional feel. And, again, something
11 that's probably, actually, more similar to what the
12 existent structure looks like, but more -- much more open.

13 The final type of structure is a through
14 arch alternative. Again, these are some examples of a
15 through arch alternative. When I say, again, through arch,
16 that means that the structure, the actual structure
17 elements come through the deck and then you, basically,
18 hang your bridge from those arches. Again, the existing
19 alignment main span here is about 350 feet for this
20 particular arrangement. And, because we are now supporting
21 the bridge, it's not actually supported longitudinally by
22 longitudinal beams; it's supported above the bridge by
23 these arches. This structure can actually get even
24 thinner, so it can provide a clearance of over 20, or about

1 -- or just over 24 feet of vertical clearance.

2 And, again, when I compare these elevations,
3 we're comparing them based on one profile, which we feel
4 was the optimal profile, as far as pedestrians, the slopes
5 for pedestrians to be able to use the height of your eye
6 crossing, so you don't feel like your climbing up such a
7 large hill visually, and those sorts of things. So, we
8 held one profile, so we can compare -- compare the depths
9 and the different clearances to the same criteria.

10 Again, another animation here of this
11 through arch alternative, we got about a 350 foot span;
12 it's going to open it up quite a bit. We have three
13 structural members, again, that will complicate the actual
14 construction. It does -- will require a temporary bridge,
15 because the position of this arch and location, basically,
16 this needs to be positioned in a location where the
17 existing structure is. So, we are going to have to
18 partially demolish the structure before we place that
19 center arch. And, of course, because it's supported by two
20 of them, we need both of them constructed. We can't
21 construct one at a time, but we have to at least construct
22 two.

23 Right now we are from the approaches still
24 having -- we still have a deck type arch alternative, but

1 there are other alternatives that we could evaluate.
2 Actually, I'm going to show you real quickly, we are
3 showing splayed arches here, which, again, it was there for
4 a visual and an aesthetic appearance. We have talked
5 internally with MassDOT. This, you know, again, these are
6 all concepts. We could look at making those vertical,
7 these through arches, to simplify the construction.

8 We've also talked about potentially
9 modifying the approach spans to something of, maybe, even
10 more economical in nature than these deck arches, so, that
11 we could try and keep the cost if this is something that
12 the DOT and the community was interested in.

13 FRED GOTTEMILLER: Before we looked at, you
14 could see right away that this is the most transparent
15 because of all the structures involved. You could see
16 right through everything beyond the bridge below. The
17 other thing that, because this underside was relatively
18 simple, it would be very reflective, so that space under
19 the bridge would be very open and light fill.

20 The big difference though between this
21 alternative and the others is that you have something above
22 the deck that you can see from a distance. You'll be able
23 to see these arches from a mile east on Route 9 as you
24 approach the bridge, or from a mile west as you approach

1 the bridge. So, these will really become a landmark to let
2 people know that they're about to cross the lake, that this
3 is the place where the crossing is. It will become symbols
4 of both Worcester and Shrewsbury and so on.

5 These features, we thought we should look at
6 maybe bringing some kind of features at the piers. There's
7 a dozen different ways to do that. This is just one way.
8 Should the decision be made to continue to pursue this
9 alternative, then we would look at other options for these
10 features, and for things like color. There's a dozen of
11 different colors we might consider, and dozen different
12 options for the railings and so on. All those things will
13 be architectural details that we'll pursue once the
14 decision is made about which alternative to pursue.

15 GARY BUA: So, again, initial thoughts,
16 about 350 main span. This is actually similar span or a
17 little bit longer than the three-span steel, but instead
18 you're providing certainly a lot more vertical clearance
19 under there, and again a more open structure, again,
20 providing visual interest from above and below. This is,
21 obviously, one of the more complex structures out of the
22 alternatives that we've looked at, as far as
23 constructability. So, it will have a longer construction
24 duration.

1 And, in fact, because this is the only
2 alternative based on, again, those alignments that we
3 talked about down here, it will require a temporary bridge.
4 It will have a relatively long construction duration. And,
5 we'll construct a temporary bridge, move two lanes of
6 traffic over there, then there's partial demolition of the
7 existing bridge. And this is a high cost alternative so
8 far.

9 I'm going to quickly summarize here, there's
10 probably a lot of information on here, then again, this
11 presentation will actually be posted on the website in the
12 near future. The three-span haunched girder alternative,
13 its high construction cost, about two plus years of
14 construction duration, and 19 foot vertical clearance.

15 I'm just going to compare these three
16 components first, a five-span hunch girder, again, this
17 alternative down here. A moderate construction cost,
18 again, this is with less steel. It was, actually, reduced
19 the cost for this particular -- again, about two plus years
20 of construction duration, 22 feet of clearance, steel deck
21 arch. Again, is similar in scale, maybe be a little bit
22 more expensive than the haunched girder alternative, or I
23 should say more expensive by -- but still in the same
24 range, two years plus of construction, 23 feet; and then

1 the through arch, at the highest cost, could take up to
2 four years to construct that alternative because of the
3 construction of the temporary bridge, and then the partial
4 demolition, and then some of the complexity, but does
5 provide 24 feet of vertical clearance.

6 Again, the three-span girder, difficult
7 construction, visually less appealing and it is expensive.
8 Probably would not recommend that alternative; five-span
9 haunched girder, does meet all the project goals, is
10 visually appealing, will provide the vertical clearance,
11 and is within the project budget; steel deck arch, again,
12 meets the project goals it is -- one of the benefits about
13 this alternative, again, it is a little bit more -- it's
14 more transparent. It, also is, again, a little bit more
15 traditional, but it certainly does add some design in
16 construction complexity.

17 The through arch is, again, the only
18 alternative that does have visual presence above and below
19 the deck. These other three alternatives, we could do
20 similar to the existing bridge. We can do -- we can make
21 them architecturally interesting from below. We can add
22 railings and lighting, and then some, you know, other
23 elements from above, but they wouldn't have the presence of
24 that through arch.

1 So, that's really it. Again, maybe I'll
2 have -- I'm going to have Nate just talk about this here,
3 just as far as what people should do, as far as getting
4 more information. Nate's our Public Information Guru.

5 NATHANIEL CABRAL-CURTIS: So, you all have
6 some comment forms tonight that have just regular comment
7 forms, as well as there's one attached to the back of the
8 packet, those are addressed to Frank Tramontozzi, Chief
9 Engineer. You can -- their address -- their all set. All
10 you have to do is fill them up and put a stamp on, and send
11 your comments written that way.

12 You can also contact Stephanie Boundy who is
13 the Public Records Coordinator for the whole Accelerator
14 Bridge Program. This is her contact information right
15 here. That contact information is also shown on this
16 project website right here, which I would encourage
17 everyone to go to. It's all -- it's got -- it'll have this
18 presentation on there in case you want to review it later.
19 So, we are looking to hear from you. Please send us your
20 thoughts and comments, and we'll, as Gary said, try respond
21 quickly as best possible.

22 UNKNOWN SPEAKER: Is there a link on the
23 MassDOT website?

24 NATHANIEL CABRAL-CURTIS: I believe there

1 should be, yes. You should be able to navigate there
2 through the -- you go to the Mass website, you can go to
3 the Accelerator Bridge Section and then you be able to find
4 a link to that project website. www.mass.gov/mass. --

5 JOSEPH PAVAO: Thank you, Nate. Thank you,
6 Gary. Thank you, Fred for your presentation. As I
7 mentioned earlier, tonight is your opportunity to provide
8 comments, ask questions on the presentation that you'd seen
9 and some of the bridge types we are proposing tonight.
10 Before we open it up to questions and answers, I'd like to
11 ask if there's any elected officials here tonight who would
12 like to speak first

13 HARRIET CHANDLER: I don't want to speak
14 first, but I just want to ask a question.

15 JOSEPH PAVAO: Sure, go right ahead.

16 HARRIET CHANDLER: The question I have is
17 this - I'm Harriet -- I'm the State Senator for this side
18 of the bridge. This is the main connection between middle
19 school and the hospital in Worcester and a very busy
20 business section in Shrewsbury. Well, I was fascinated by
21 the through arch alternative. Four years is a very long
22 time, how much will this help traffic?

23 JOSEPH PAVAO: The intent is to maintain two
24 lanes of traffic in each direction, just like we have

1 today. With all of the alternatives, we're going to try to
2 maintain two lanes of traffic in each direction. As far as
3 the duration for construction, it depends on the
4 alternative that we chose. The through arch, as Gary
5 mentioned earlier, is probably the most difficult to build
6 and the most time consuming because of the temporary
7 structure. We have not chosen an alternative yet, we're
8 still evaluating them.

9 It's also going to depend on what the
10 contractor can come up with in terms of doing something
11 innovative. That's one of the reasons we're going with the
12 design-build procurement is it will allow the design-build
13 team, which will consist of a contractor and a designer to
14 take the 25 percent, complete the design, and start
15 construction simultaneously. So, we can actually have
16 construction ongoing while the design is completed. And
17 that will also allow the contractor that has experience in
18 these types of projects to come up with something
19 innovative that will hopefully speed up construction. But,
20 again that's going to depend on the bridge type.

21 HARRIET CHANDLER: The through arch, is that
22 like Zakim Bridge in Boston?

23 JOSEPH PAVAO: NO.

24 HARRIET CHANDLER: No?

1 JOSEPH PAVAO: No. I would say it's
2 similar, in that it has cables and structures to come
3 through the deck to support it, but, that Zakim is a cable
4 bridge and this is an arch bridge, so it is different.

5 KATE TOOMEY: Worcester City Council, Kate
6 Toomey. And, actually I live on this side on the city; the
7 other side of Route 20. And, this is actually, you know,
8 daily life for me and I think there's some people from Lake
9 Avenue over here, etc. So, it's so critical to make sure
10 that we get to this point.

11 We can have the extra lanes, because we've
12 got this multi, you know, million-dollar project that's
13 going to on at UMass. We have the emergency vehicles that
14 you have to get by. One of the things that I'm -- I love
15 this, I think it's great -- one of the things that I'm
16 concerned about is architecturally, the Town of Shrewsbury
17 has spent a great deal of money on their roadwork, or the
18 State has in Shrewsbury -- certain type of, well, very
19 similar to that, which on Shrewsbury Street, which is going
20 to end up tying up into Belmont Street.

21 If there's something that can connect that
22 architecturally to those, it's preferable. I think in
23 terms of design and elements and all that. What I really
24 like about all of these is that you integrated the

1 pedestrian, which is an absolutely critical element for
2 people living on both sides to be able to cross. And I
3 think that's a great plus. Is there going to be any
4 element for a bike path on that? Not a path, but a bike
5 lane. I should say.

6 JOSEPH PAVAO: There'll be 8 foot shoulders.

7 GARY BUA: Yes, with any of those deck type
8 alternatives, and actually, with all of these alternatives,
9 we have an 8 foot wide shoulder on the outsides. So, that
10 would be more than enough for bicycle accommodations.

11 KATE TOOMEY: An 8 foot wide shoulder and
12 then the sidewalk?

13 GARY BUA: Yes, so, you would have three 12
14 foot lanes, an 8 foot shoulder, a railing, and then a wide
15 sidewalk.

16 KATE TOOMEY: That separated railing is
17 great. That's wonderful. So, great job on that
18 presentation.

19 JOSEPH PAVAO: Thank you. Any other elected
20 officials that would like to speak? I guess we're going to
21 open it up to general questions. If you could just state
22 your name for the record when you ask a question that'd be
23 great.

24 MICHAEL PAIKA: My names Michael Paika. I

1 live at 17A -- Court in Shrewsbury. I'm a member of Lake
2 Quinsigamond Commission. I guess I got a couple questions,
3 number one does the MassDOT have a particular design of the
4 ones proposed here tonight that they're leaning towards? I
5 mean just myself, visually, I like the arch one, and that
6 it just visually opens up more under the lake, under the
7 bridge itself. It's got the highest beam high-water. It's
8 for recreation use. Also, visually, I like the fact that
9 there's a lot of light that comes through. You could see
10 up and down lake. But, again I'm curious as to what you
11 folks have a particular design you're leaning towards.

12 I just want to make a comment, if you
13 weren't going to connect the new bridge to the island,
14 where by there were some path that allowed for Regatta
15 Point State Park to include the islands, as part of the
16 project, to keep it separate, in my mind to allow the water
17 flowage around it is a great alternative. The island,
18 unfortunately, has become a no mans land in the terms of
19 homeless invading people. So, the islands just sort of
20 turned to the wild, in terms of you can't really access it
21 with your boat.

22 I have been to a number of spring clean ups
23 to take a lot of trash out, and it's brought to, currently,
24 the island as people cross the bridge down the steps there,

1 it's gross trash, old mattresses, liquor bottles, there are
2 all kinds of things. Don't forget that the islands start
3 to become separate; a lot of that trash simply won't be
4 there so much anymore, because it's not going to be that
5 successful.

6 Again, in my mind, it might be one of the
7 two, maybe there's a road that connects Regatta Point to
8 the island so it literally becomes connected with Regatta
9 Point and it's publicly accessible, useable, and if it's
10 that accessible, it may not be -- or an alternative is to
11 either keep the island separate and let the water flow
12 around it. That's not such a bad alternative in my mind.
13 And, again, better for flowage uses, better to let the
14 island be a little more separate. And that'd be something
15 that, unfortunately, won't get as much use as it does now.
16 Again, I guess that's a comment, but back to my first
17 question, does MassDOT have a particular preference in
18 terms of the design?

19 JOSEPH PAVAO: At this time, no. The
20 designer, Gary, is working on a type study. It's
21 evaluating all the structures right now. We received the
22 preliminary version of that. It hasn't been officially
23 submitted yet. So, we are starting to look at some of the
24 bridge types. We're looking at it in terms of cost, right

1 of way impacts, environmental impacts, traffic impacts,
2 constructability, what kind of bridge -- type of structure
3 lends itself to Accelerated Bridge techniques. So, we're
4 starting to look at that that, internally, as far as making
5 a decision. We won't be making a decision until such time
6 that Gary completes his full in-depth evaluation and makes
7 a recommendation to the State.

8 MICHAEL PAIKA: I would like to make one
9 final comment.

10 JOSEPH PAVAO: Sure.

11 MICHAEL PAIKA: Thanks so much for your
12 time. By the time this is done, this is going to be a
13 hundred years from the time of completion of the last
14 bridge. It just seems to me that relative to all the money
15 that's been spent on the Worcester side, in terms of UMass,
16 the bioresearch property, a quarter -- a billion dollars
17 has been spent on a new psychiatric hospital, than to have
18 something that would make a statement like build an arched
19 bridge, which, again, will also give best vision from the
20 water level up and down the lake, would be the most
21 exciting thing I think on my part, as residential abutter,
22 and some those who lived for many years in the lake area.
23 So, thank you so much. I appreciate it.

24 JOSEPH PAVAO: Thank you. Yes, sir.

1 PATRICK DIGGINS: I'm Patrick Diggins. I'm
2 from the Quinsigmund Road Association. I was just
3 wondering if they're going to be accommodations for boat
4 traffic during each segment of construction, as well.

5 JOSEPH PAVAO: Yes, we are planning to make
6 sure that they -- that the contractors are aware that they
7 need to provide recreation -- at least some sort of path
8 for recreational use through there. So we'd be talking to
9 you as far as --

10 PATRICK DIGGINS: -- for minimum width, I'm
11 sort of concerned --

12 JOSEPH PAVAO: Yeah, I'd be interested in
13 talking to you about -- you can see in our plans now that
14 we are now starting to at least show that we are thinking
15 about those elements. And recreational openings would be
16 required throughout construction. There might be times
17 when they need to -- to block it for period of times to do
18 some construction operations. Without, would be affecting
19 the coordinator.

20 PATRICK DIGGINS: Thank you.

21 JOSEPH PAVAO: In the back?

22 BARRY SHORE: My name is Barry Shore -- I'm
23 curious to know, to the best of your knowledge, to what
24 extent will retailing be clobbered by the construction of

1 this bridge? Particularly, in the area which is extremely
2 important in Shrewsbury from White City right down to the
3 center of new Kelly, Mass on Route 9? Secondly, am I right
4 or wrong ensuing that the type of a bridge you put up, to
5 the best of your knowledge, your material you use to give
6 back on retailing, except of course the situation involving
7 what design -- is --

8 JOSEPH PAVAO: To answer your first
9 question, this is a major project, which we all know
10 MassDOT will strive to maintain retail. We certainly don't
11 want to create any more impacts then we need to on any of
12 the businesses or the uses of the bridge. As we mentioned
13 earlier, we are going to maintain two lanes of traffic in
14 each direction at all times. We're going to maintained
15 access points to all businesses at all times. So, yes, we
16 will minimize to the extent possible any impacts that we
17 can on the local businesses and the users of the bridge.

18 Regarding the different bridge types, there
19 will be different durations of construction depending on
20 which bridge type we ultimately choose. The through truss
21 bridge will take longer. It's more complicated
22 construction. There's temporary bridges involved in that,
23 so, yeah that will take longer. And, it will have a longer
24 impact due to the duration. Like I said, we haven't made a

1 decision yet, but, those are things that we are considering
2 when we make a final selection; impacts to businesses,
3 construction duration, traffic impacts, all of those are
4 going to be considered.

5 GARY BUA: The other thing to is the long-
6 term. One thing we were considering, in respect to retail,
7 the businesses, and abutters of the area, was future
8 traffic. Right now, we know there's congestion and there's
9 traffic and there's safety issues in there, in the projects
10 sight; the bridge area. The new bridge, again, will be
11 more welcoming. It will be safer. It's going to provide
12 for better traffic flow. It's going to provide better
13 pedestrian access. So, I think once this construction is
14 done, I think it will be an improvement.

15 And, I also point out that the bridge is in
16 really -- it's in poor shape. You know, we've already had
17 temporary supports under several locations. It's inspected
18 frequently, to make sure that it's safe, and it is safe,
19 but, it is in bad shape. If nothings done and done in a
20 relatively quick fashion, the condition will just get
21 worse, and then that will be even worse for the retail
22 businesses and the abutters. It would actually be, you
23 know, obviously, would be catastrophic to the abutters --

24 JO HART: Jo Hart; Worcester. I have a

1 couple of technical questions, sort of -- on the first one,
2 which I think is most gorgeous, but, what is the problem in
3 having higher arches? Is it simply money?

4 GARY BUA: You mean clearance underneath?

5 JO HART: No, higher arches, which of course
6 would give you clearance underneath.

7 GARY BUA: I'm not sure which alternative
8 you're talking about?

9 JO HART: The first one.

10 GARY BUA: Which one?

11 JO HART: The first one.

12 GARY BUA: The first one; this?

13 JO HART: The three arch.

14 GARY BUA: This one here or --

15 UNKNOWN SPEAKER: The girder three-span?

16 JO HART: Yeah.

17 UNKNOWN SPEAKER: The very first one you
18 see.

19 GARY BUA: Oh, okay. The reason why that
20 alternative -- it is more expensive. I think it's going to
21 be more difficult to construct. Again, the span is long.
22 The beams are very large. So, constructability is going to
23 be a challenge. And, also it's very deep, because as the
24 span gets longer, the structure gets deeper. And, as that

1 structure gets deeper, you reduce your vertical clearance.
2 Now, what you're saying is could you just raised the bridge
3 so you get the vertical clearance?

4 JO HART: No. I'm saying why don't you have
5 a higher arch?

6 GARY BUA: Oh, that is the narrowest arch
7 you can have for that span for that type of girder. You
8 need -- this needs to be -- this bridge over here, at mid-
9 span, it needs to be about 11 feet deep in order to carry
10 the loads.

11 JO HART: Well, I guess I don't quite
12 understand, because arches normally are stronger than no
13 arches.

14 GARY BUA: Well, this is this is a girder
15 bridge. It's shaped like an arch. It's called a "Haunched
16 Girder" and what that does is, not to try to get to
17 technical about it, but as you open a pier, you want your
18 structure depth to be deeper, because there's higher
19 moments or higher loads that occur over those piers. So,
20 as your pier, you want your girder to be deep. And, then,
21 from an efficiency standpoint, as you move to mid-span, you
22 don't need that. It's almost counter-intuitive to a normal
23 simple span. This is called a "Continuous Girder." But,
24 basically, that allows us to create that arched shape.

1 But, still from a structural standpoint you
2 need to be about 11 feet, you need to be about 18 feet deep
3 over the pier, and about 11 feet deep over the center span
4 for that three-span haunched girder. Again, it's actually
5 a curved beam.

6 JO HART: Okay, one more question. Why was
7 there no three-span steel deck?

8 GARY BUA: The steel deck, because of the
9 height with a haunch girder, we can -- this is a more of a
10 true arch. These again are haunched or arched beams. This
11 is more of a true arch. And, so, as you, I think I going
12 to get Fred involved with this here, but as your arch ratio
13 -- to make it longer you would need it to be taller, okay.
14 Because arches have to follow a certain ratio before they
15 start acting like arches.

16 JO HART: What would be wrong with that;
17 again, unless it's money.

18 GARY BUA: It will collapse.

19 JO HART: I'm sorry; I thought you said it
20 needed to be higher?

21 GARY BUA: Oh, yeah, we can't we already
22 raised it as high as it can go. We're already raising the
23 profile 6 feet. We don't want to raise the profile too
24 much. I know Mr. Shore wouldn't like that too much,

1 because we'd be impacting the adjacent properties, and we
2 certainly don't want to impact the restaurants and
3 businesses. So, we have a certain amount that we can raise
4 that profile without impacting the adjacent abutters and
5 still maintain the required clearance, or the required
6 speed -- design speed.

7 So, that -- this particular -- that deck
8 arch, it's already pretty flat, you know, with a five-span,
9 we already have an arch ratio, you know, it's a pretty flat
10 ratio already. We already have to do, I think I mentioned
11 it in my presentation; we have to do some technical things
12 as far as making sure that, you know, we address those
13 things. There's a little bit of complexity involved with
14 that, because of the shape of the arch. We certainly
15 couldn't make those spans longer without going higher. We
16 can't go higher without impacting properties for that
17 particular alternative. So, that's why if you want to go
18 longer, you need to go through the deck and basically
19 that's when you get into that through arch alternative.

20 JO HART: Thank you.

21 KATE TOOMEY: I have a question. It's about
22 maintenance.

23 JOSEPH PAVAO: Sure.

24 KATE TOOMEY: It's great to build it, how's

1 the maintenance after? With this steel deck arch, you
2 would have to paint?

3 GARY BUA: Yes.

4 KATE TOOMEY: And, so, what's the best
5 alternative for maintenance -- low maintenance?

6 GARY BUA: Yeah, we -- we are considering
7 that as part of our analysis life cycle cost. At least
8 from a courtesy level, we'll certainly have a courtesy
9 level, will be evaluated. We're not going to do an in-
10 depth life cycle, but we are going to be evaluating those
11 components that will add to a -- that will impact lifecycle
12 cost, which of course, for that steel deck arch is painted.
13 If we get painted, it would be weathering steel. It would
14 probably be not as appealing.

15 So, yeah, that is something we need to
16 consider, this lifecycle cost. All of these are, you know,
17 actually, all of these can be steel. We actually talked a
18 little bit about -- we did look at concrete alternatives
19 for this, but what happens is the span starts to get pretty
20 long. Well, span is long for the concrete. And, again,
21 from a delivery constructability, we were worried about
22 being able to deliver those types of arches; the concrete
23 arch for that span.

24 KATE TOOMEY: In your original presentation

1 from the previous meetings you had a design; one of the
2 designs was architecturally closer to the existing bridge.
3 I think, and I'm just curious, there's one -- there is one
4 I had seen on line somewhere. You've got a picture of it,
5 I think, at the beginning of your presentation. That's the
6 one that had at each end; they had kind of like a
7 gathering.

8 GARY BUA: Oh, that's actually -- that's
9 actually the haunched girder.

10 KATE TOOMEY: The haunched girder.

11 GARY BUA: Yeah.

12 KATE TOOMEY: Ok.

13 GARY BUA: Yeah, you're talking from --
14 yeah, that's interesting. Again, what that is, that's a
15 concrete hunched girder.

16 KATE TOOMEY: Yeah.

17 GARY BUA: And, again, what was done there
18 was probably -- I should let Fred talk about it, it's his
19 bridge --

20 KATE TOOMEY: That picture, right there on
21 the left. That one; yes.

22 GARY BUA: Again, that is -- is similar to
23 these alternatives here. What -- again, this just added
24 more architectural elements. These were designed a little

1 bit more traditional, a little bit ornate. So, the
2 difference what you're seeing between these arches, or this
3 bridge, and our bridge here is, I think, the maximum span
4 here was about 170 feet. Is that right?

5 FRED GOTTEMILLER: 165 feet.

6 GARY BUA: About 165 feet.

7 KATE TOOMEY: What's the span right now at
8 the existing bridge?

9 GARY BUA: -- existing bridge about 125.
10 Yeah, so, we would either have to go with a seven-span
11 bridge with a shorter span, because what we have here is
12 about, again, these spans are longer, so as they get longer
13 they get deeper. And, I'm sure, again, what they did was
14 they incorporated, because it had additional, they can
15 incorporate a little more depth to accentuate those arches.
16 But, those sorts of things can be incorporated into this
17 whole thing.

18 KATE TOOMEY: Right, some of it's just
19 frosting.

20 GARY BUA: Right.

21 JO HART: Is that an existing bridge?

22 GARY BUA: That is an existing bridge.

23 JO HART: Where is it?

24 GARY BUA: It's in Hamilton, Ohio.

1 JO HART: Oh, it's very good looking.

2 MICHAEL PAIKA: The potential lifespan of a
3 through arch bridge would be?

4 JOSEPH PAVAO: These are all seventy-five
5 years.

6 GARY BUA: We design them all for seventy-
7 five years.

8 MICHAEL PAIKA: Is there a projectable life
9 span of the bridge, which is obviously, is approaching --
10 its nine years old now --

11 GARY BUA: Again, that's a pretty massive
12 construction, as far as if you think about how much
13 material is there, and you know how big, so. And, you
14 know, of course there was major rehabilitations done in the
15 1940's and 1980's, and so about every forty years --

16 MICHAEL PAIKA: I'd like -- want to make
17 another comment. I was pleased to hear that you mitigate
18 run off of -- frankly, the renovation of the 1980's. It
19 was disappointing. I saw the straight plastic pipes coming
20 off the bridge right down to the lake. That was
21 disappointing to see at that time. If you mitigate run off
22 to side and have some retention to our ponds and filtered
23 water that would be good, in terms of inevitable salt and
24 sand that you're going to throw on the surface, and the bad

1 weather guards; even if I was disappointed back then, I'd
2 like to hope that the new construction, particular to --
3 Thank you.

4 GARY BUA: Thank you.

5 MATT HOGAN: Matt Hogan, I live on the lake
6 in Shrewsbury. It seems that one of the significant
7 impacts of the through arch is the ability to make a
8 statement. Which, architecturally, you refer to it in
9 terms of people arriving knowing that this is the lake,
10 across lake, etc. And, I recognize that some people would
11 think that's very attractive, and other people will think
12 it's not. But, if there were a desire to make a statement
13 with the bridge, but, also a desire not to have a four year
14 contract over temporary bridges, is there a possibility of
15 taking a steel deck, and adding these through arch
16 appearances that were ornamental, but not structured?

17 FRED GOTTEMILLER: Well, of course it's
18 possible to do that. There's a tendency, I think, what I
19 would call a decoration is a solution. But you add serious
20 maintenance problems, and serious cost problems, and end up
21 with a structure that just looks like, you know --

22 MATT HOGAN: But, think about what if you
23 went with a design -- just a thought.

24 JOSEPH PAVAO: Thank you; anyone else?

1 TIMOTHY WOODCOME: Tim Woodcome from Regatta
2 Point. We had two concerns. And one of them was actually
3 addressed very well, was the hike. So, frankly, for us a
4 foot here or there, the more the better. It takes a good
5 sailor and a steady wind to get through 110 feet, but the
6 new bridge would be that amount; the goal of the project.
7 Secondly, we were wondering if there's any concern that we
8 should have, as to the staging area or construction area
9 that would affect our operations. We run out of the DCR
10 Park at Regatta Point, which is on the north side on the
11 project. It seemed like most of the construction zone was
12 in the south side. But, would there be any staging or
13 other impacts?

14 JOSEPH PAVAO: At this stage in the project,
15 what MassDOT will do is we'll take a look at the area and
16 identify some potential staging areas. Ultimately, we'll
17 leave it up to the contractor to find areas where they will
18 do the staging depending on what type of construction they
19 want to do, if they want to work off the lake, or if they
20 want to truck beams in. Again it's going to depend on the
21 type of structure. We won't go out and designate areas for
22 staging. We may take areas that can be used for staging,
23 but it will ultimately be up to the contractor to find
24 those areas.

1 TIMOTHY WOODCOME: So how do we stay in tune
2 with that?

3 JOSEPH PAVAO: Through the design process.
4 This isn't going to end tonight. We're going to go through
5 a twenty-five percent then it gets advertised. We'll have
6 a design build contractor. We will continue with the
7 public process. They will have to submit to us at the very
8 beginning the schedule, how they're going to proceed with
9 construction, where their staging locations are going to
10 be. So, we're going to know all of that ahead of time.
11 That's all going to be approved and we'll be back out to
12 present that information.

13 TIMOTHY WOODCOME: One more question,
14 please, on design build when you let the first twenty-five
15 percent out, the basic design will have been selected, is
16 that correct?

17 JOSEPH PAVAO: Correct. We will give them
18 the parameters that they have to work with --

19 TIMOTHY WOODCOME: But one of these options
20 will be selected?

21 JOSEPH PAVAO: -- ascetically, correct.
22 There maybe some options on material concrete or steel, but
23 we're going to set the parameters in terms of the number of
24 spans and what the overall project will look like; anyone

1 else?

2 WILL VARRELL: Question?

3 JOSEPH PAVAO: Yes, sir.

4 WILL VARRELL: I'm Will Varrell of Parson's
5 Transportation Group. This bridge is, obviously, in
6 terrible condition, I notice here. And, it's also a
7 difficult part of the traffic management scheme. Whose
8 responsibility will be to make sure the bridge can handle
9 those loads? Will it be part of the twenty-five percent or
10 will that be on the design build team?

11 JOSEPH PAVAO: I would say it would be on
12 both. If the bridge has on going maintenance, it's going
13 to be inspected as needed. It's been inspected every six
14 months, I believe, it's being inspected. That will
15 continue if it warrants inspections. That will continue
16 right through the end of construction, so. There will be -
17 - MassDOT will be responsible for doing the inspections.
18 The contractor, when they're out there, will have to
19 continue with that.

20 WILL VARRELL: -- span rehabilitation of the
21 existing structure just to handle those temporary loads?

22 JOSEPH PAVAO: Not unless it's warranted;
23 no.

24 GARY BUA: Again, we say temporary loads,

1 it's really where they are is there's two arches per
2 barrel, basically. And we wouldn't have it so that you
3 would take away that. You would still keep two arches per
4 barrel.

5 WILL VARRELL: But, you are squeezing more
6 traffic on there.

7 JOSEPH PAVAO: We're not squeezing more
8 traffic on there.

9 GARY BUA: You're talking about during
10 construction, carrying heavy loads and beams onto the
11 bridge during construction?

12 WILL VARRELL: No; talking -- I thought --

13 GARY BUA: There's four lanes existing, and
14 we would provide four lanes on the existing during
15 construction. And there were some alternatives. We looked
16 at partial demolition, but, we demo'd two lanes, and again
17 two of the arches, and take away one barrel, and then you
18 keep two lanes on the second barrel.

19 WILL VARRELL: Okay.

20 GARY BUA: So, no, we would not be adding
21 more traffic than what a normal -- in the current
22 alternatives, unless the design builder does it.

23 JOSEPH PAVAO: Anyone else?

24 UNKNOWN SPEAKER: -- in this design are you

1 taking into consideration utilities?

2 GARY BUA: Yes, we are incorporating into
3 the -- we've actually have been talking with the District
4 Utility Engineer. He's been talking with you and other
5 utilities, and we are going to continue that. And, we do
6 have some sequencing solution that we'd -- to talk with
7 utilities

8 UNKNOWN SPEAKER: Thank you.

9 JOSEPH PAVAO: Yes, sir.

10 UNKNOWN SPEAKER: -- I just want to make a
11 recommendation that I know you've been working on the
12 twenty-five percent plans, is it possible to get those
13 plans in advance? Because, in the past, we get calls from
14 your contractor, maybe a design build that they want to put
15 a receipt, and we haven't looked at the plans at all, so,
16 because this is under a different program. So, I think if
17 we were able to get those plans in advance, we can start
18 looking at it. So, that -- because, you know, you have a
19 two year duration. So --

20 JOSEPH PAVAO: Absolutely, that's our
21 intent. We have a District Utility Engineer that's going
22 to work specifically on that. So, we will be coming out to
23 all the utility companies ahead of time, co-ordinate all
24 the work, all the staging way before design build gets

1 awarded.

2 UNKNOWN SPEAKER: Okay.

3 JOSEPH PAVAO: Yes, ma'am.

4 LYNDI DVERDEN: Lyndi Dverden; is there any
5 environmental issues that would affect construction phase,
6 like a fish spawning, time period, or now, putting a barge
7 in the water a certain time?

8 GARY BUA: No. We are going to be going
9 through -- we haven't gotten our permits from MEPA or NEPA
10 yet. So, I can't dependably say that. Based on
11 preliminary discussions and our coordination with Histories
12 of Wild Life there are none of those components. Bill you
13 wanted to --

14 BILL: All I know is that this has already
15 been coordinated already with National Heritage. And they
16 -- there's a lot of different species and fish in the lake,
17 but there aren't any restrictions.

18 JOSEPH PAVAO: Thank you.

19 JO HART: Jo Hart, again. I thought I would
20 wait until everybody spoke. Just, again, I know I'm the
21 only public transportation person in the room, as I usually
22 am. But, this goes against what everybody else is trying
23 to do, which is to limit cars not add cars. And, so,
24 you're not considering public transportation at all; no

1 people in Worcester, you know, without cars can go
2 anywhere. We can't go to, you know, beyond, what is it --
3 Plaza. So, all the retail ships are, of course beyond us.
4 Again, it's a civil rights issue. And, so, you're adding
5 cars, which, of course, from an environmental stand point,
6 a smart drug stand point, from every stand point, it's the
7 wrong way to go about it. I've been asking for years for
8 light rail on Route 9 --

9 JOSEPH PAVAO: This is a bridge project.

10 JO HART: It's a bridge project, and if
11 Route 9 had light rail it would be involved in your bridge
12 project.

13 JOSEPH PAVAO: If there was light rail
14 existing, then we would have to address this on this
15 project. Right now we're addressing the users of the
16 bridge, which include the users under the bridge. We're
17 going to accommodate vehicles, pedestrians, bicyclists, and
18 the people that use the lake.

19 GARY BUA: Again, we're not adding traffic;
20 basically, all we're doing is connecting. We're connecting
21 two points. You have --

22 JO HART: No; you're adding a lane. You're
23 adding a lane in each direction.

24 GARY BUA: We're adding lanes to connect the

1 two intersections --

2 JO HART: No; I understand that.

3 GARY BUA: -- not for adding traffic, but
4 for --

5 JOSEPH PAVAO: We have to design the bridge
6 to accommodate future traffic.

7 JO HART: Well, yes, which should be public
8 transportation. That's the point I'm making. That's why
9 I'm bringing it now.

10 JOSEPH PAVAO: We're going to design the
11 bridge for future traffic, which we're required to do. In
12 this case, it requires an additional lane in each
13 direction. We're going to widen the shoulders for safety,
14 emergency access, and to accommodate bicycles. And we're
15 also going to be widening sidewalks on both sides of the
16 bridge.

17 JO HART: No; I hear everything you said.

18 JOSEPH PAVAO: So we're accommodating and
19 improving the accommodations for all of the users of the
20 bridge. There is no light rail on this bridge today.

21 JO HART: No; I know, I know, I know, I've
22 been asking for this for years. All I mean is that at some
23 point, you know, there has to be public transportation.
24 And, so, I'm bringing this up because I think you should

1 consider that right now.

2 JOSEPH PAVAO: Unfortunately, that's not
3 part of the scope of this project.

4 GARY BUA: Again, this bridge is in poor
5 shape. You can't wait for the approval of the light rail
6 system to go down Route 9. That would take way too long.
7 And, so, this needs to be addressed quickly. And, again,
8 we're not adding lanes to add traffic.

9 JO HART: Anytime you add lanes, you add
10 traffic.

11 GARY BUA: No; we're adding lanes to connect
12 to these points.

13 JO HART: I know, but you add traffic --

14 JOSEPH PAVAO: Thank you for your comment;
15 anyone else? That's it? No; one more.

16 BARRY SHORE: I heard you people talk and
17 this lady talk about the business of bicycles. I've own
18 White City for a long time. I've seen very, very few
19 bicycles on Route 9. As a matter of fact, I asked the
20 manager whether it'd pay to have a bicycle rack outside
21 there, and she said there are very few bicyclists here.
22 So, I just thought I'd bring this forth.

23 JOSEPH PAVAO: Thank you; anyone else?

24 I think that concludes tonight's meeting. I

1 want to thank everybody for coming tonight. If you haven't
2 signed in, I would ask that you sign in on the way out.
3 And, I thank you again for coming.

4 (Whereupon, the proceedings were concluded
5 on March 11, 2010 at 8:11 p.m.)

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C E R T I F I C A T E

I, Karen Damiano, do hereby certify that the foregoing record is a true and accurate transcription of the proceedings in the above-captioned matter to the best of my skill and ability.

Karen Damiano

**** ALL NAMES NOT PROVIDED WERE SPELLED PHONETICALLT TO THE BEST OF MY ABILITY**

BURNS 9 BRIDGE

REPLACEMENT PROJECT



The Massachusetts Department of Transportation's Highway Division

Invites you to a

Public Information Meeting

for the

Kenneth F. Burns Memorial Bridge Replacement Project Route 9 over Lake Quinsigamond

Thursday, March 11, 2010

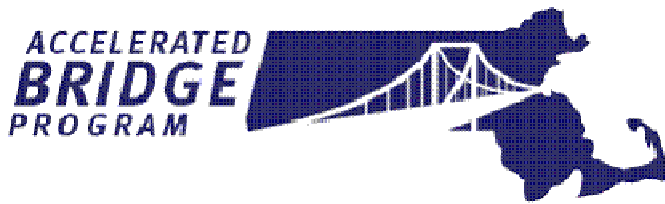
6:30 – 8:30 PM

Worcester Technical High School
1 Skyline Drive, Worcester MA

The purpose of this meeting is to present the Kenneth F. Burns Memorial Bridge Replacement project and the different bridge types being evaluated as part of the design process. The evaluation is being performed as part of the environmental process including Environmental Assessment (EA) in accordance with the National Environmental Policy Act (NEPA) and Environmental Notification Form (ENF) in accordance with the Massachusetts Environmental Policy Act (MEPA). The project team will also summarize comments received to date and how they are being incorporated into the project. Following the presentation, MassDOT staff will lead a discussion to answer questions and gather public comment on the alternatives. Comments received will be carefully considered as the alternatives evaluation moves forward.

The replacement of the Kenneth F. Burns Memorial Bridge, which carries Route 9 over Lake Quinsigamond between Worcester and Shrewsbury, is being conducted under the Commonwealth's Accelerated Bridge Program (ABP). This is one of the most significant projects being undertaken by MassDOT under the ABP and when completed, will create a replacement bridge on a similar alignment as the current span.

If you have questions or would like more information about the project or would like to be added to the project email or US Mail distribution lists, please contact Stephanie Boundy, Public Outreach Coordinator for MassDOT's Accelerated Bridge Program, by phone at 617-973-8049 or by email at Stephanie.Boundy@state.ma.us. The Worcester Technical High School is accessible.



PUBLIC INFORMATIONAL MEETING

THURSDAY MARCH 11, 2010

AT

WORCESTER TECHNICAL HIGH SCHOOL

**One Skyline Drive
Worcester, MA 01605**

6:30 P.M.

FOR THE PROPOSED

**BRIDGE REPLACEMENT OF THE KENNETH F. BURNS MEMORIAL BRIDGE
ROUTE 9 OVER LAKE QUINSIGAMOND
PROJECT 604729**

BETWEEN THE TOWN OF SHREWSBURY AND CITY OF WORCESTER

**COMMONWEALTH OF MASSACHUSETTS
MASSACHUSETTS DEPARTMENT OF TRANSPORTATION**

**LUISA PAIEWONSKY
HIGHWAY DIVISION ADMINISTRATOR**

**FRANK A. TRAMONTOZZI, P.E.
CHIEF ENGINEER**

**COMMONWEALTH OF MASSACHUSETTS
MASSACHUSETTS DEPARTMENT OF TRANSPORTATION-HIGHWAY DIVISION**

NOTICE OF PUBLIC INFORMATION MEETING

**Shrewsbury-Worcester: Route 9 over Lake Quinsigamond - Proposed Kenneth F. Burns Memorial
Bridge Replacement**

Project File No. 604729

A Public Information Meeting will be held by MassDOT-Highway Division to discuss the Proposed Kenneth F. Burns Memorial Bridge Replacement Project in Shrewsbury, and Worcester MA.

WHERE: Worcester Technical High School – Conference Center
One Skyline Drive
Worcester, MA 01605

WHEN: Thursday, March 11, 2010 @ 6:30 PM

PURPOSE: The purpose of this meeting is to provide the public with the opportunity to become fully acquainted with the proposed bridge replacement alternatives of Bridge No. S-14-001=W-44-018, Route 9 over Lake Quinsigamond. Following the presentation, MassDOT staff will lead a discussion to answer questions and gather public comment on the alternatives. All views and comments received at the meeting will be carefully reviewed and considered to the maximum extent possible.

PROPOSAL: The project involves the replacement of the Kenneth F. Burns Memorial Bridge, Route 9 over Lake Quinsigamond. The proposed bridge structure will have three travel lanes in each direction, left and right turning lanes at each approach, bicycle accommodating shoulders and sidewalks in each direction. The proposed work will include the preparation of an Environmental Assessment (EA) in accordance with the National Environmental Policy Act (NEPA) and Environmental Notification Form (ENF) that complies with the Massachusetts Environmental Policy Act (MEPA) and its associated regulations (301 CMR 11.00).

A secure right-of-way is necessary for this project. Acquisitions in fee and permanent or temporary easements may be required. The Commonwealth of Massachusetts is responsible for acquiring all needed rights in private or public lands. MassDOT's policy concerning land acquisitions will be discussed at this meeting.

Written views received by MassDOT subsequent to the date of this notice and up to five (5) days prior to the date of the meeting shall be displayed for public inspection and copying at the time and date listed above. Plans will be on display one-half hour before the meeting begins, with an engineer in attendance to answer questions regarding this project. A project handout will be made available on the MassDOT website listed below.

The community has declared that this facility is accessible to all in compliance with the ADA / Title II. However, persons in need of ADA / Title II accommodations should contact Angela Rudikoff by phone at (617) 973-7005 or email to angela.rudikoff@state.ma.us. Requests must be made at least 10 days prior to the date of the public meeting.

In case of inclement weather, meeting cancellation announcements will be posted on the internet at <http://www.massdot.state.ma.us/Highway/>

LUISA PAIEWONSKY
HIGHWAY DIVISION ADMINISTRATOR

FRANK A. TRAMONTOZZI, P.E.
CHIEF ENGINEER

Boston, Massachusetts



DEVAL L. PATRICK
GOVERNOR
TIMOTHY P. MURRAY
LT. GOVERNOR
JEFFREY B. MULLAN
SECRETARY & CEO
LUSA PAIEWONSKY
DIVISION ADMINISTRATOR



Dear Concerned Citizen:

The Massachusetts Department of Transportation (MassDOT) is committed to building and maintaining a transportation infrastructure that is both safe and efficient for all who use our roadways, bridges, bicycle facilities and pedestrian paths, while maintaining the integrity of the environment.

As part of the design process for this project, we are conducting this public hearing to explain the proposed improvements, listen to your comments and answer any questions you may have. At the conclusion of the hearing, MassDOT will review all of your comments and, where feasible, incorporate them into the design of the project.

We recognize that road and bridge construction can create inconveniences for the public. MassDOT places a great deal of emphasis on minimizing the temporary disruptive effects of construction.

MassDOT encourages input from local communities and values your opinions. Please be assured that we will undertake no project without addressing the concerns of the community.

Sincerely,

Luisa Paiewonsky
Highway Division Administrator

www.mass.gov/massdot

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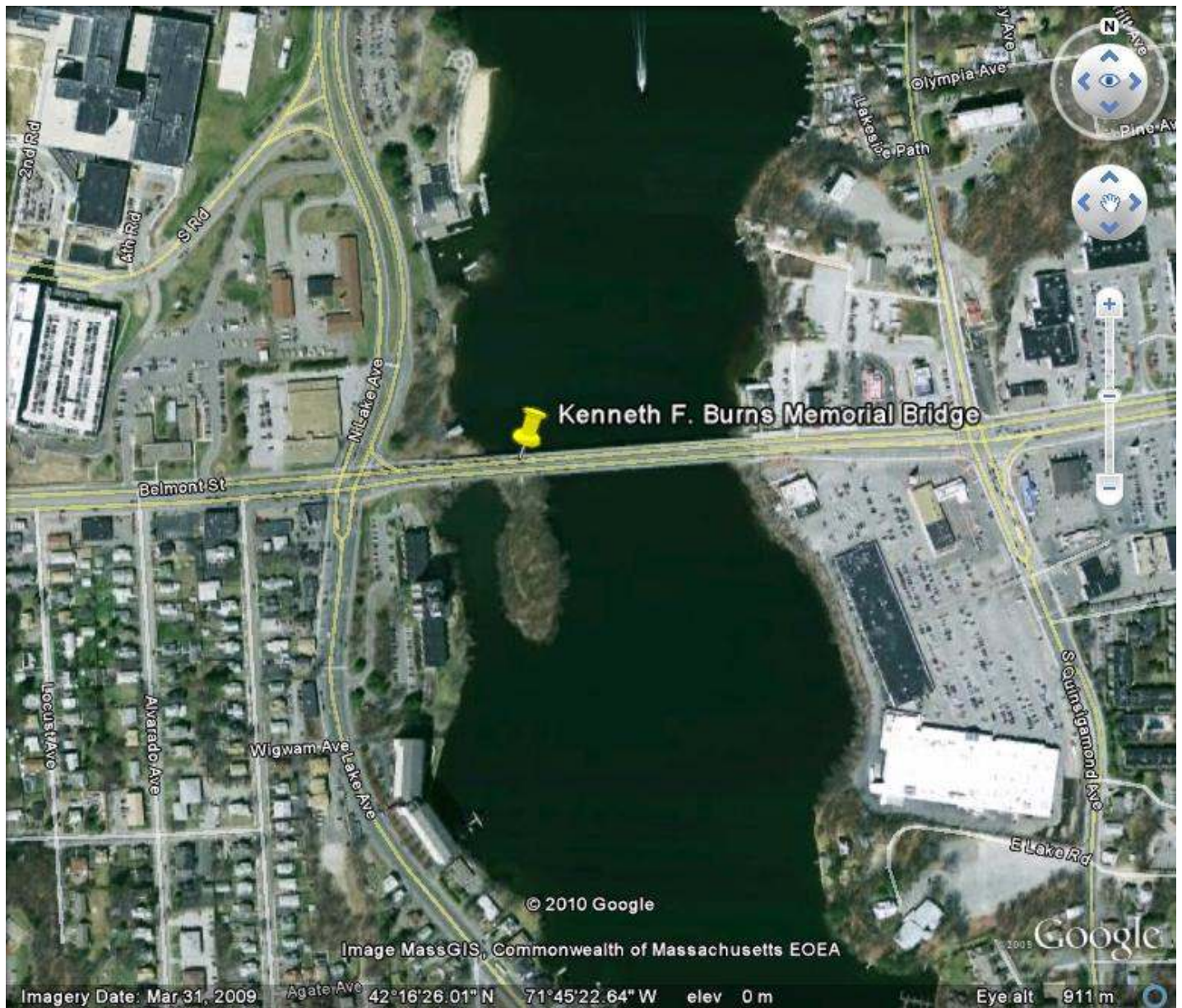


Figure 1:

**Site Locus Plan
Bridge No. S-14-001=W-44-018
Shrewsbury/Worcester, Massachusetts**

Project Location

MassDOT proposes to replace the current Kenneth F. Burns Memorial Bridge that carries Route 9 over Lake Quinsigamond between Worcester and Shrewsbury, Massachusetts.

Purpose

The purpose of the project is to replace the structurally deficient and functionally obsolete bridge. The project involves replacement of the existing structure with a new bridge that will meet current design standards of increased capacity for traffic with improved bicycle and pedestrian accommodations in the same location.

Existing Conditions

The current Kenneth F. Burns Memorial Bridge, the fifth crossing of Lake Quinsigamond, constructed in 1916, is a reinforced concrete deck arch-type bridge consisting of five arch spans. The Bridge links Worcester and Shrewsbury via State Route 9, which carries more than 47,000 vehicles per day. This portion of Lake Quinsigamond is navigable to recreational vessels including power and sail boats and crew shells. Significant crew activity, including major regattas takes place adjacent to this location on the lake.

Inspection and evaluation of the existing structural integrity of the bridge has been performed and has determined that the existing bridge is in poor condition. In several areas the existing deteriorated condition has required emergency repair and support of structural members. Material testing of the concrete bridge has been performed as well in order to evaluate the potential of re-using the bridge. The results of this material testing indicate that the existing concrete is in poor condition and would require continuous maintenance and repair if re-used. The current bridge has been repaired and rehabilitated several times throughout the past ninety-four years. MassDOT has determined that the bridge has deteriorated beyond the point of repair and must be replaced.

Scope of Work

MassDOT has selected a consultant team led by TranSystems to provide a bridge type study and sketch plans that will lead to a twenty-five percent design-build procurement package for the Kenneth F. Burns Memorial Bridge Replacement Project. The existing bridge will be replaced with a new widened structure. Bridge types under consideration include a steel or concrete haunched (arched) girder bridge, a deck arch bridge or a through arch bridge. The proposed lane configuration will provide three travel lanes in both directions with exclusive left and right-turn lanes on the westbound approach into Worcester. The eastbound approach into Shrewsbury will match the current configuration. Bicycle accommodating shoulders and sidewalks will be provided in both directions. The design seeks to create a new bridge that will accommodate all users while minimizing impacts to the intersections or the homes and business on either side of the bridge adjacent to the state highway layout line in Worcester and Shrewsbury. The proposed roadway profile will be raised in order to provide improved vertical under-clearance for recreational users.

Environmental Review

MassDOT is committed to the performance of a full environmental review process for this project in compliance with all applicable federal and state regulations. This will include preparation of the required documentation in accordance with the National Environmental Policy Act (NEPA) and the Massachusetts Environmental Policy Act (MEPA). As part of this review process, a comprehensive public participation program is being implemented. This outreach program will keep the public updated on the project's status, seek public input, support the regulatory process, and offer coordinated meetings for elected and municipal officials.

Schedule

The design and construction of the bridge will be managed and overseen by MassDOT. The twenty-five percent design-build procurement package is scheduled to be complete by early 2011. Design-Build Procurement/Construction will begin shortly thereafter and is anticipated to be completed by 2015 (including final design). The project contractor will be required to maintain two lanes of traffic in each direction during peak hours and pedestrian traffic over the bridge during construction.

If you have any questions, comments or concerns, please feel free to contact Stephanie Boundy, Public Outreach Coordinator for MassDOT's Accelerated Bridge Program, by phone at 617-973-8049 or by email at Stephanie.Boundy@state.ma.us.

BURNS 9 BRIDGE

REPLACEMENT PROJECT



OVERVIEW

The Kenneth F. Burns Bridge: The Kenneth F. Burns Bridge is a concrete deck arch span bridge comprised of a total of seven arches. The bridge carries Massachusetts Route 9, known in the project area as Belmont Street or Turnpike Road, over Lake Quinsigamond, between the City of Worcester and the Town of Shrewsbury.

Role: Route 9, and the Burns Bridge, both play a major role in the local and regional transportation network. According to traffic counts obtained in July, 2008, a total of 47,700 cars travel over the Burns Bridge each weekday.

Project History: Originally constructed in 1916, the Burns Bridge was the fifth crossing of Lake Quinsigamond to be built. The current bridge has been repaired and rehabilitated several times throughout its lifespan. Analysis undertaken by MassDOT Highway Division in 2008 showed that the current bridge has deteriorated beyond repair and must be replaced. MassDOT will work with the community build a replacement bridge that meets their needs.

Project Goal: To select a bridge type that will provide for a speedy, cost-effective, and aesthetically pleasing replacement for the Burns Bridge so that Route 9 can continue to carry local and regional traffic safely and effectively.

Project Cost: Approximately \$137 Million. 80% of the funding will be provided by the Federal Highway Administration with the remaining 20% coming from MassDOT Division of Highways.

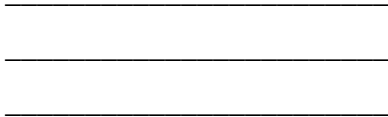
Project Timeline: The project is currently in the pre-25% design phase. Construction is expected to begin in 2011.

An Accelerated Bridge: The Accelerated Bridge Program commits \$3 Billion over the next eight years to repair or replace structurally deficient bridges in Massachusetts. The Burns Bridge will be replaced under this program using a "design/build" approach that will minimize disruption associated with project and help to contain costs.

Keeping Traffic Flowing: Given the major role played by Route 9, MassDOT Highway Division will ensure that traffic continues to flow during construction. At this time, the project's design team is analyzing different ways to accomplish this goal ranging from lane shifts on the existing structure to creation of a full temporary bridge. Some disruption to traffic flow is inevitable during this necessary replacement however the Highway Division will work to keep it to a minimum throughout construction.

Public Involvement: The bridge plays a major role in the day-to-day lives of local residents and area commuters. A number of properties closely abut the Burns Bridge. Lake Quinsigamond is heavily used by recreational and sport boaters. MassDOT Highway Division is committed to the meaningful involvement of all stakeholders. Later this year, the Highway Division will launch a website that will allow users to sign up for email alerts regarding the project, read about the progress of work, and submit comments to the project team. Should you wish to be placed on future informational mailing lists, please feel free to contact [Stephanie Boundy](mailto:Stephanie.Boundy@state.ma.us) by telephone (617) 973-8049 or by e-mail at stephanie.boundy@state.ma.us.

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Please Place
Appropriate
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Frank A. Tramontozzi, P.E.
Chief Engineer
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10 Park Plaza
Boston, MA 02116-3973

RE: Public Information Meeting
Kenneth F. Burns Memorial Bridge
Shrewsbury-Worcester, MA
Project File no. 604729

