



C19: Expediting Project Delivery

MaPIT

MassDOT's GIS-driven Project Initiation & Screening Tool

Joint Meeting of the AASHTO SCOE and SCOD - 7/17/17

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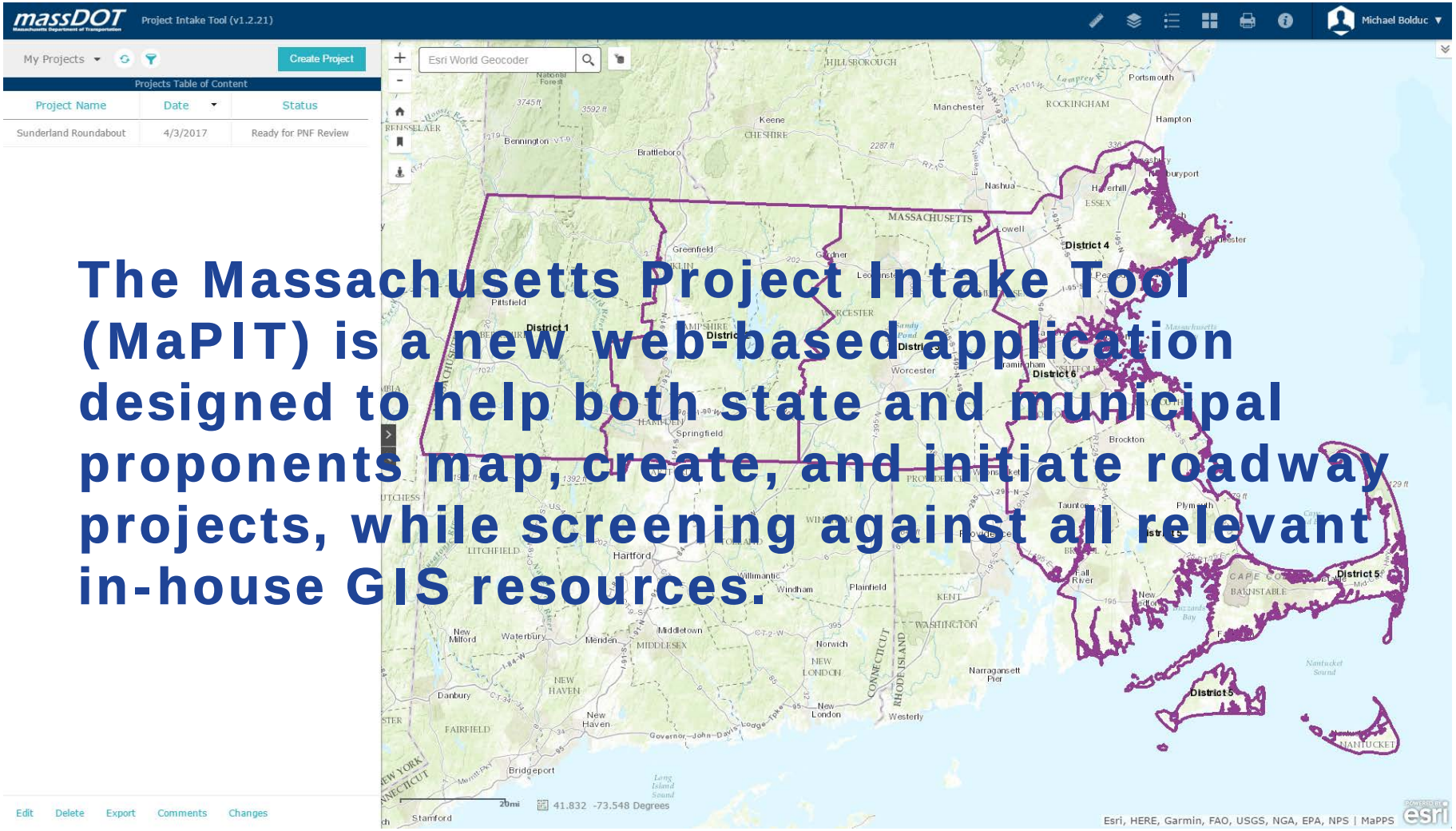
MassDOT

U.S. Department of Transportation
Federal Highway Administration

SHRP2 SOLUTIONS
TOOLS FOR THE ROAD AHEAD

American Association of State Highway and Transportation Officials
AASHTO

What is it?



The Massachusetts Project Intake Tool (MaPIT) is a new web-based application designed to help both state and municipal proponents map, create, and initiate roadway projects, while screening against all relevant in-house GIS resources.

What is it?

A joint MassDOT / ESRI collaboration

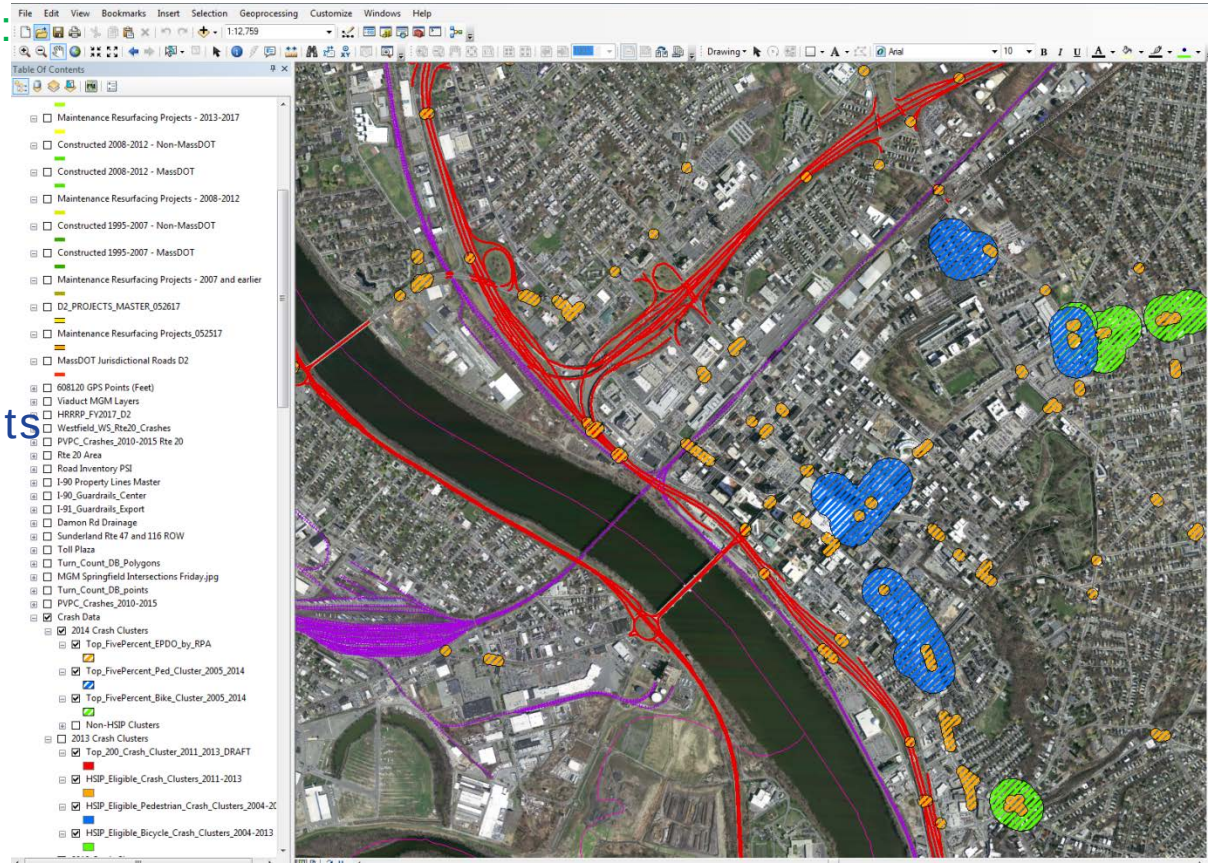
Funded by the Strategic Highway Research Program (SHRP2) to facilitate Expediting Project Delivery (C19)

Background

The MassDOT GIS Services group hosts GIS resources for in-house ArcGIS users, and develops and maintains a large repository of GIS layers

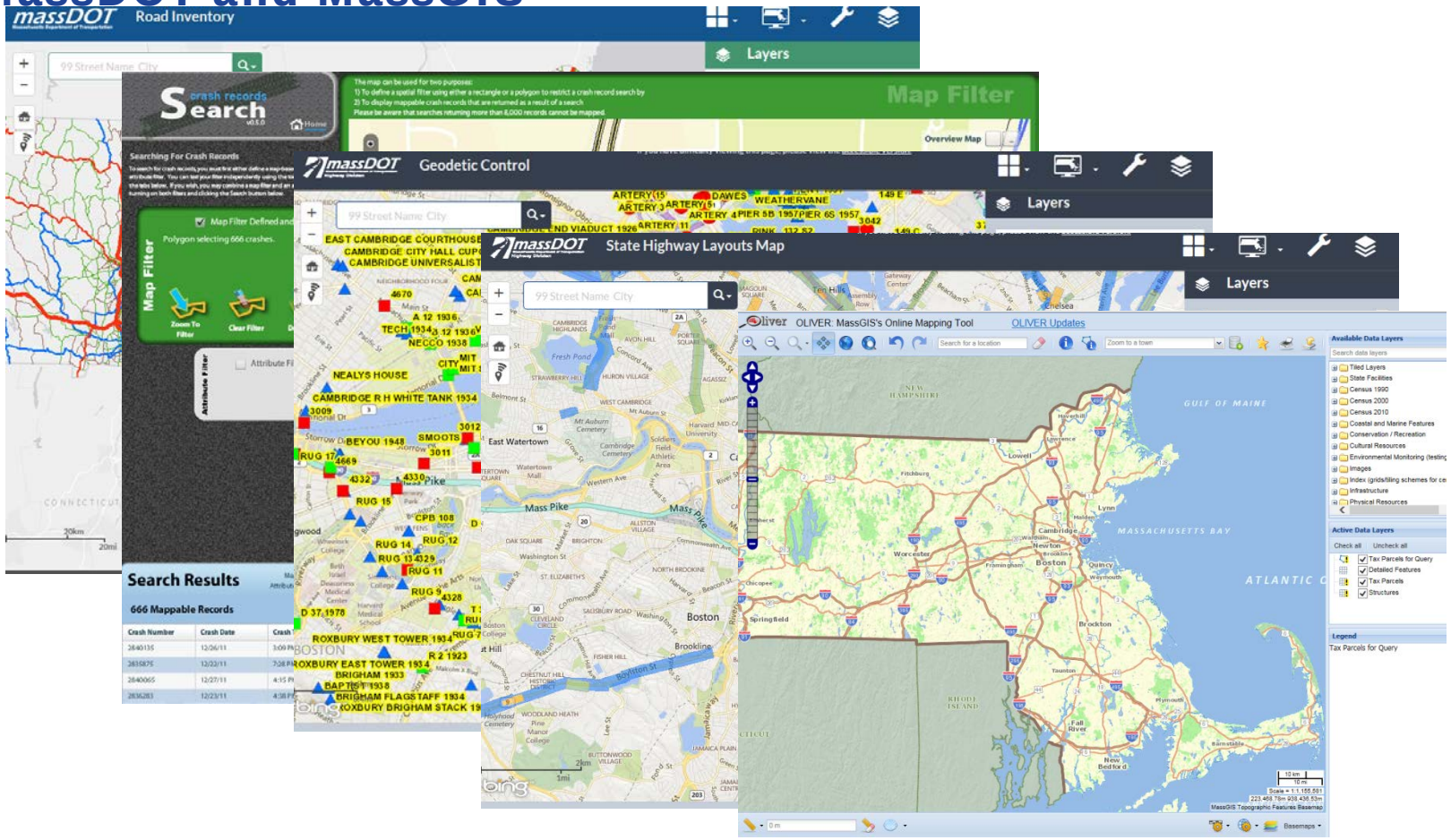
GIS data provided includes:

- Road Inventory Layer
  - Flagship roadway layer with dozens of attributes including roadway classification, ownership, federal aid eligibility, traffic volumes, pavement conditions, lanes, shoulder widths, etc.
- Rail Inventory
- Bridge Database
- Highway Facilities/Assets
- Crash Data
- Transit
- Survey and Layouts
- EJ and Title VI
- Environmental Layers
- and many more



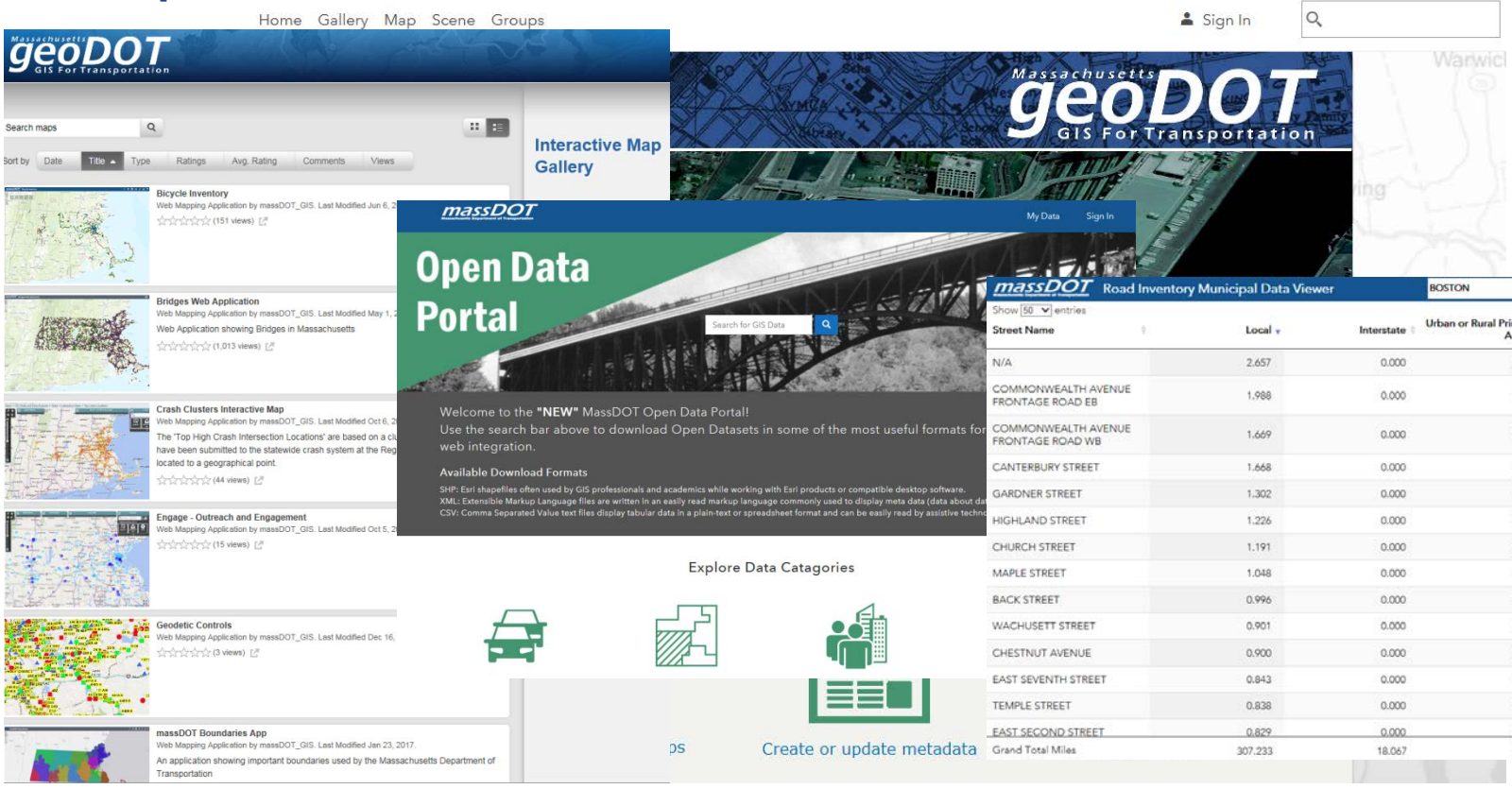
Background

Currently, data is provided to the public via web-based interactive maps or downloaded via applications provided by MassDOT and MassGIS



Background

MassDOT has also recently released *geoDOT*, a web-based GIS platform that gives MassDOT and the public the ability to view, create and share GIS data in a collaborative environment, and in multiple formats



Background

Environmental Layers

- MassDOT maintains dozens of Environmental Layers
- Large data sets are limited to ArcGIS applications to view; no quick way to visually assess a project's environmental sensitivity or permitting requirements without ArcGIS
- No web-based interactive map existed to view environmental layers

Concept

- **Conceived by a MassDOT environmental analyst as a screening tool to help identify projects that overlap environmental GIS layers and indicate areas of sensitivity or significance**
- **Could help identify environmental permitting requirements early in a project's development**
- **Would double as a web-based interactive map for viewing MassDOT environmental layers without using ArcGIS**
- **Could be funded under SHRP2 C19 as a tool to "Expedite Planning and Environmental Review of Highway Projects"**

Funding

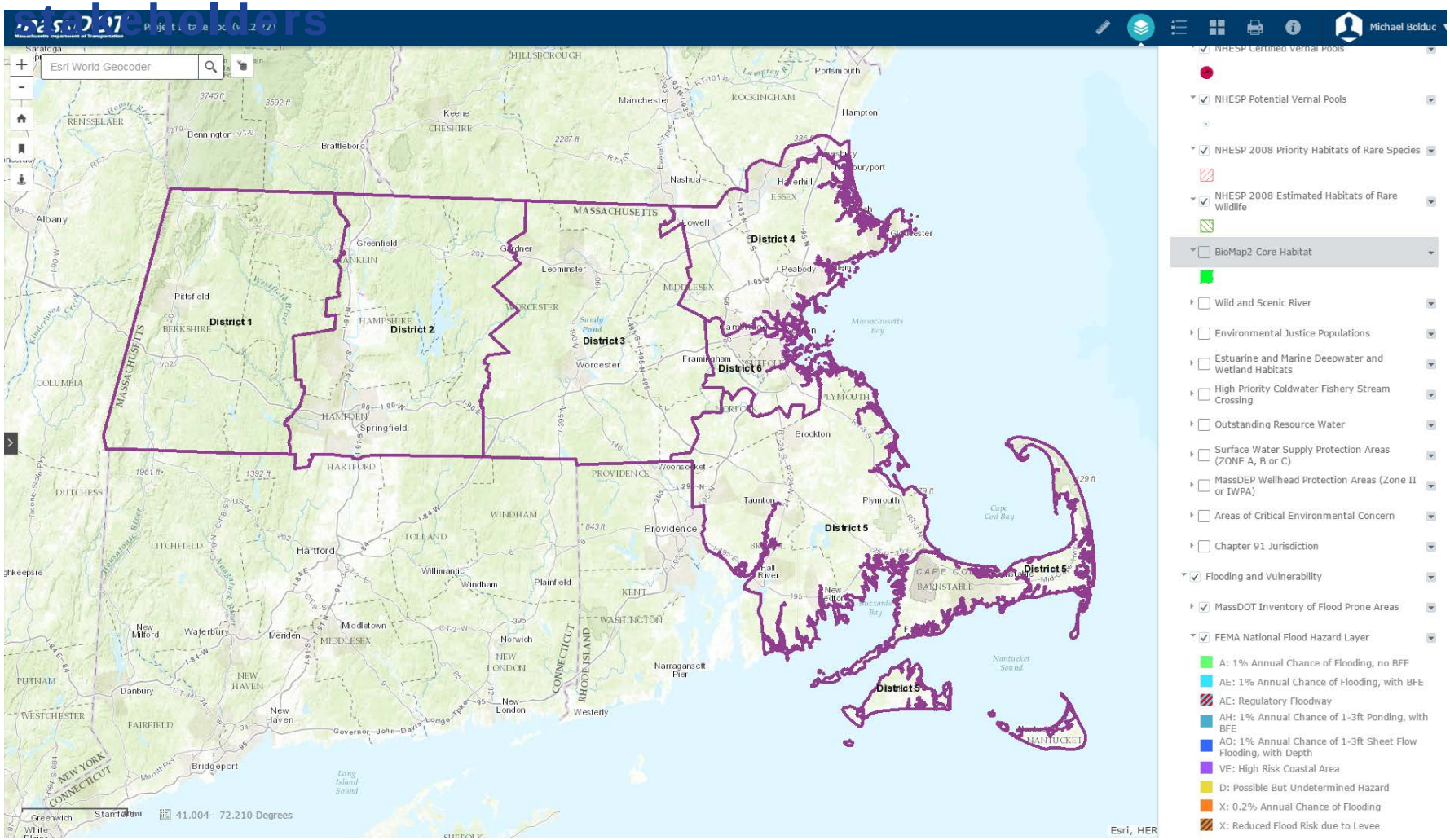
SHRP2 C19 Strategies

Strategy	Stage of Project Planning or Delivery				
	Early Planning	Corridor Planning	NEPA	Design/ROW/ Permitting	Construction
1. Change-control practices			●	●	●
2. Consolidated decision council		○	●	●	
3. Context-sensitive design and solutions	○	○	●	●	○
4. Coordinated and responsive agency involvement	○	●	●	●	●
5. Dispute-resolution process		○	●	●	○
6. DOT-funded resource agency liaisons		○	●	●	
7. Early commitment of construction funding	●	●	●		
8. Expedited internal review and decision-making	●	●	●	●	
9. Facilitation to align expectations up front	○	●	●	●	
10. Highly responsive public engagement	●	●	●	●	○
11. Incentive payments to expedite relocations		●	●	●	
12. Media relations manager		●	●	●	○
13. Performance standards	○	●	●	●	
14. Planning and environmental linkages	●	●	●		
15. Planning-level environmental screening criteria	●	●	●		
16. Programmatic agreement for Section 106		●	●	●	
17. Programmatic or batched permitting		●	●	●	
18. Real-time collaborative interagency reviews	○	○	●	○	
19. Regional environmental analysis framework	○	●	●	●	
20. Risk management	●	●	●	●	●
21. Strategic oversight and readiness assessment	○	●	●	●	
22. Team co-location		○	●	●	
23. Tiered NEPA process	○	●	●		
24. Up-front environmental commitments		●	●	●	

- **Expedited internal review and decision making (strategy 8)**
- **Planning and environmental linkages (strategy 14)**
- **Planning-level environmental screening criteria (strategy 15)**
- **Regional environmental analysis framework (strategy 19)**

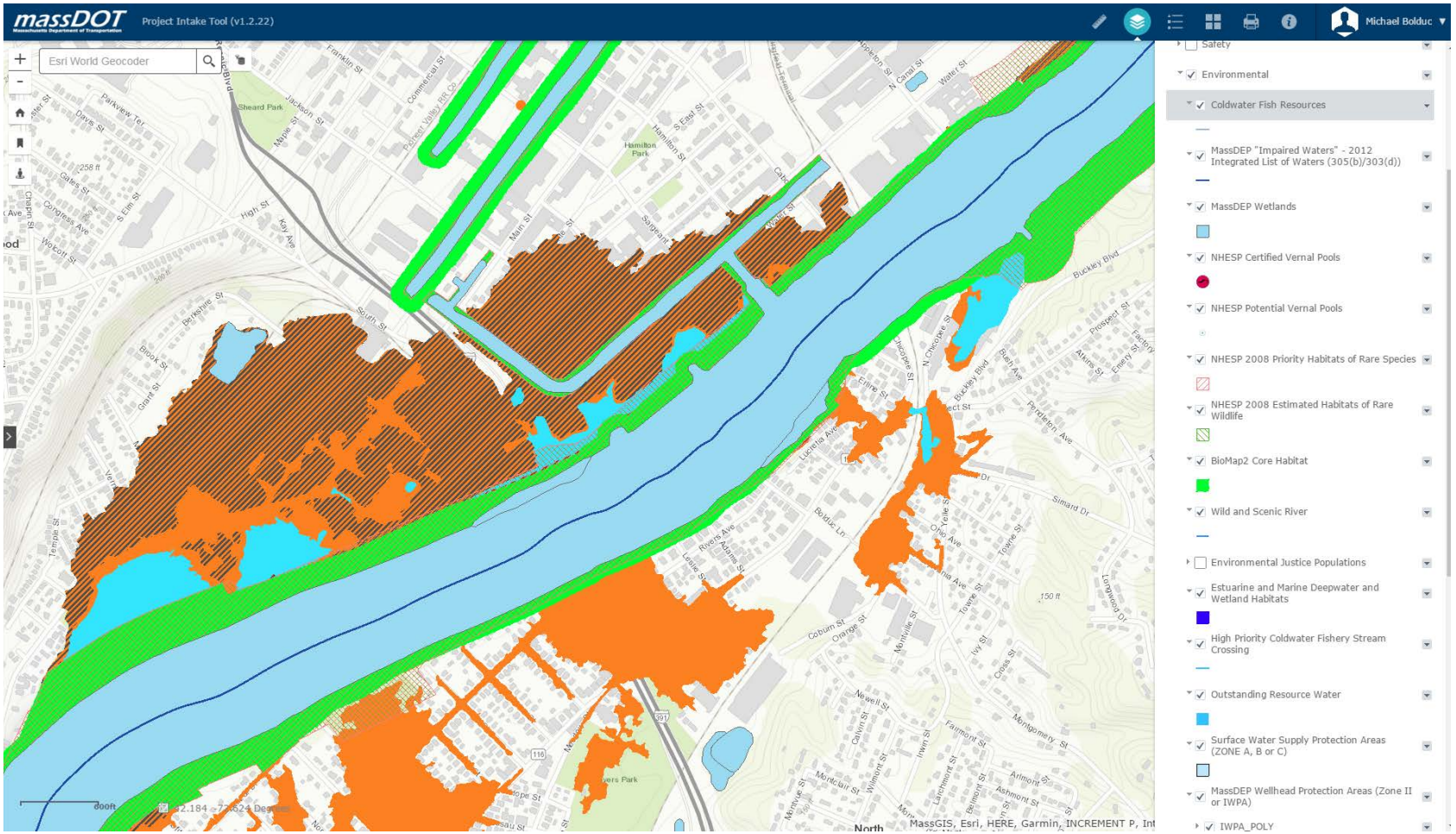
Creation

MassDOT Planning and ESRI, with input from multiple stakeholders



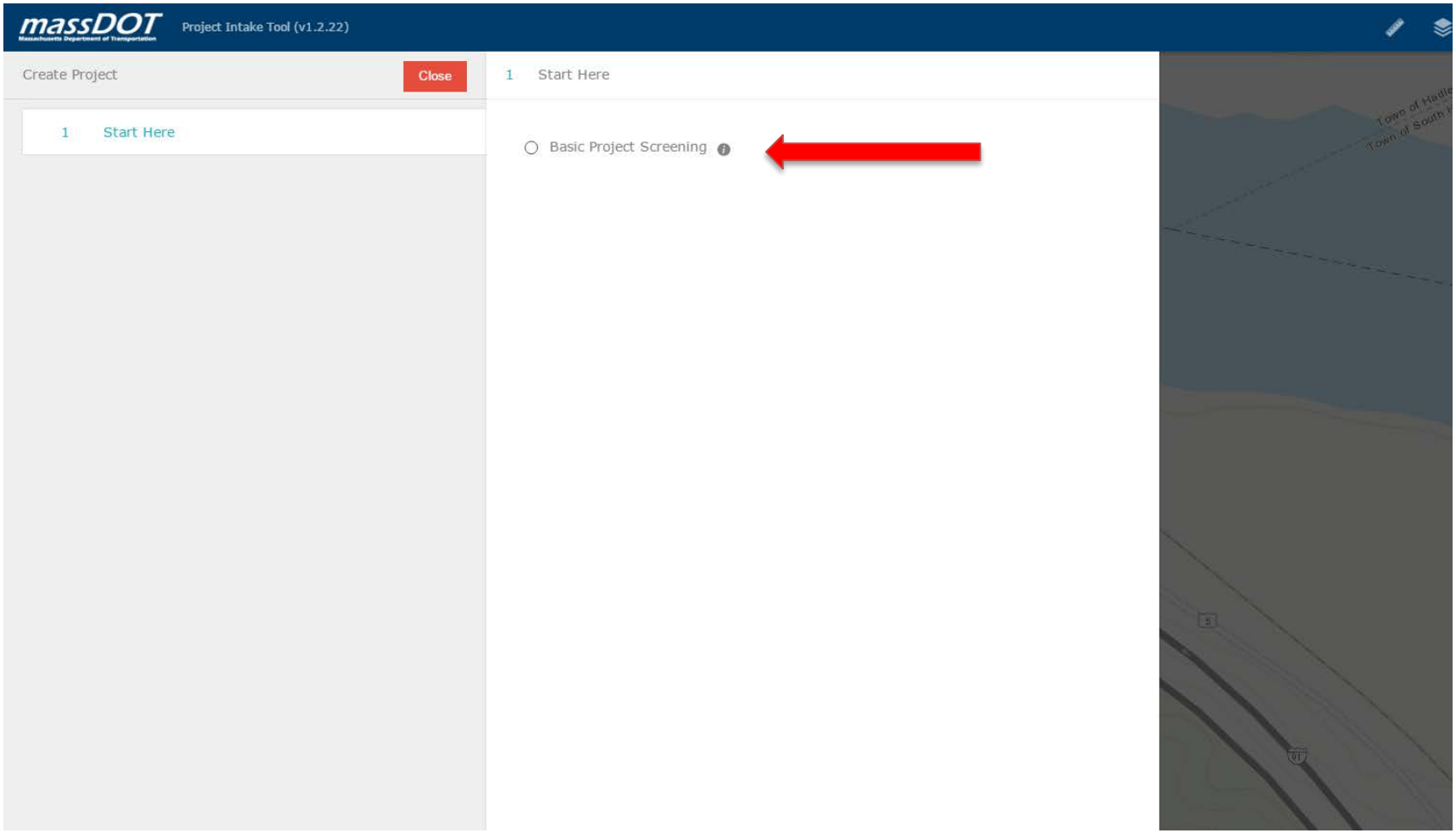
Creation

- Use as an environmental GIS viewer



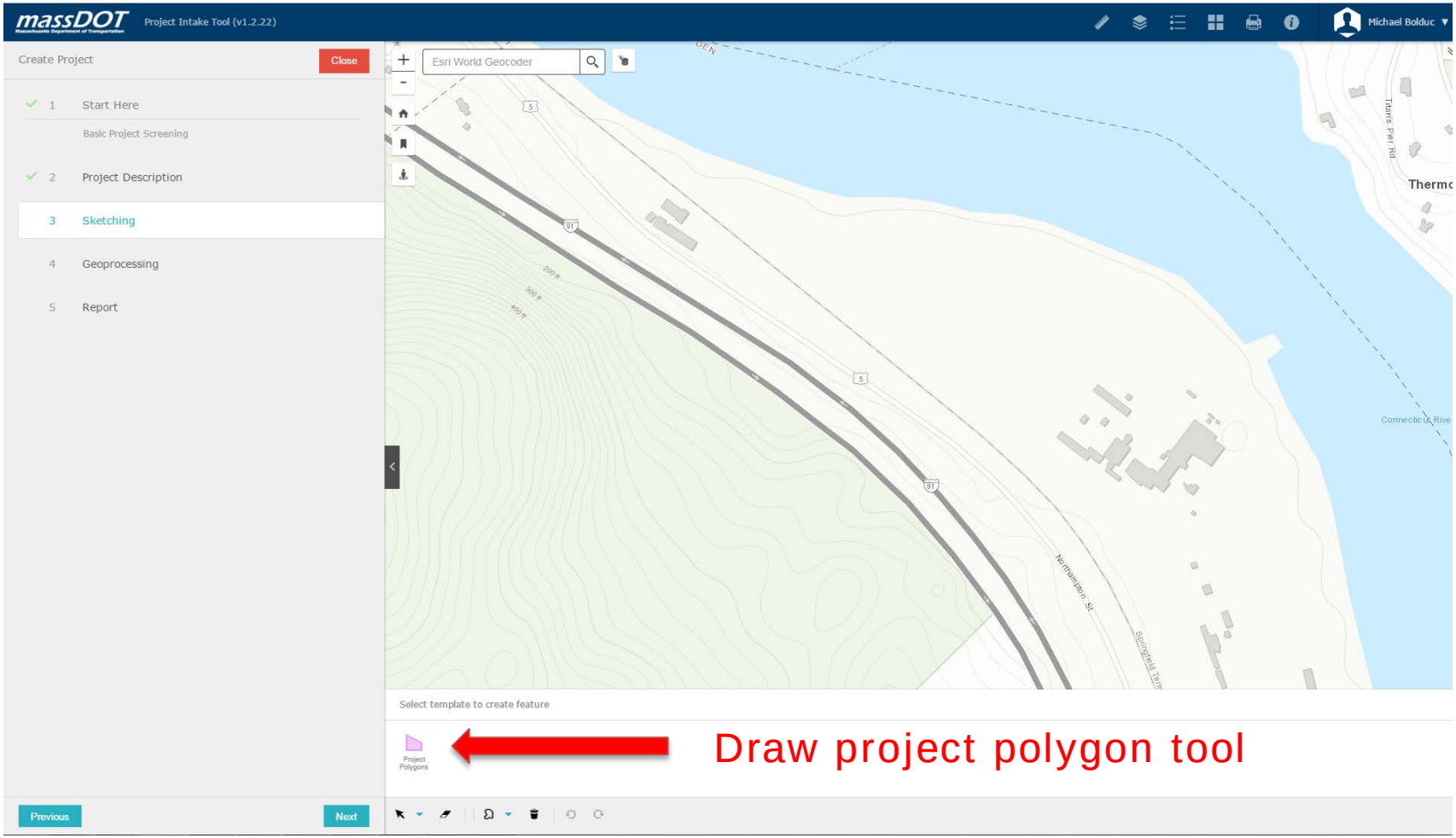
Creation

- Use as an environmental screening tool



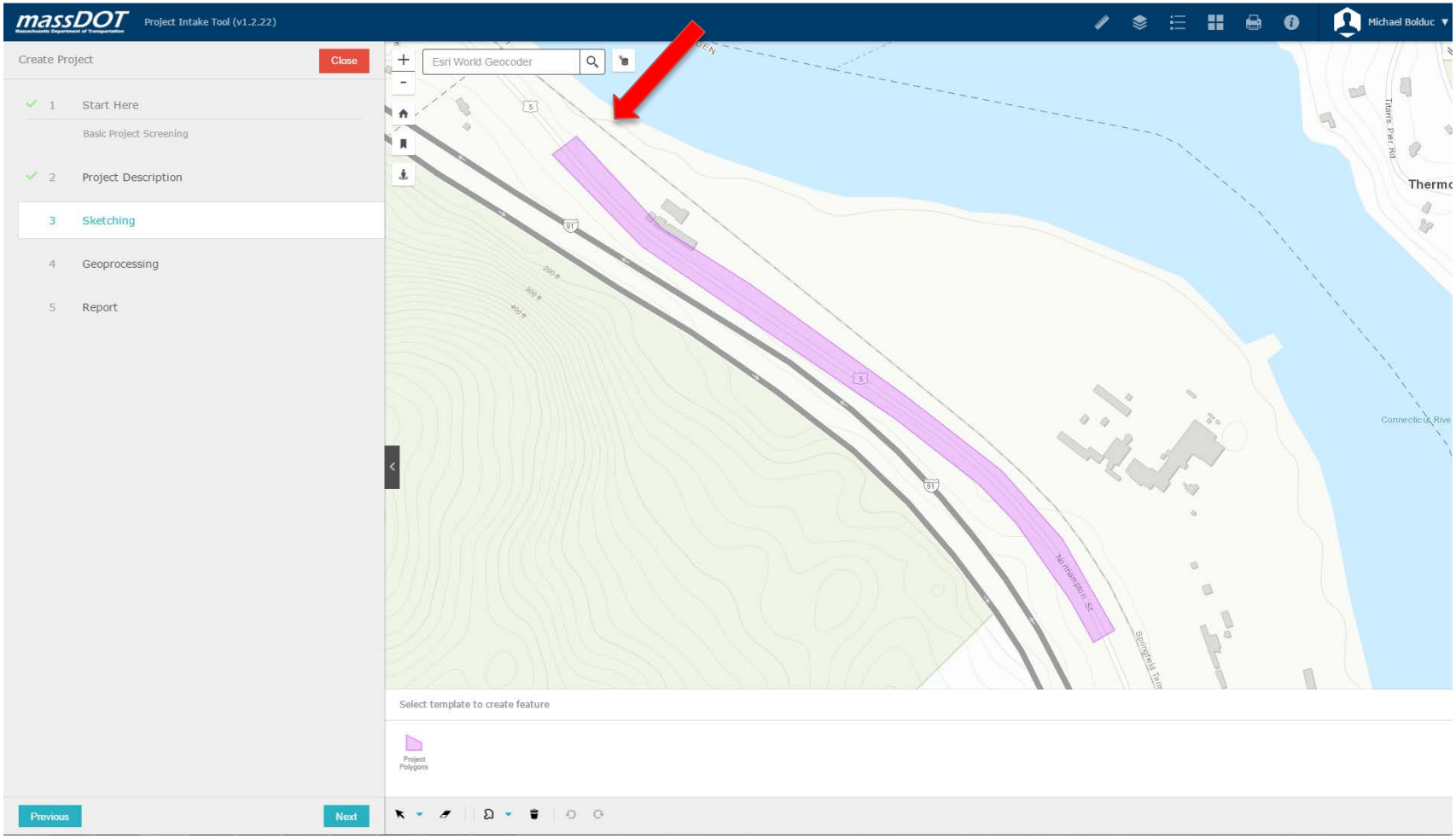
Creation

- Select project area



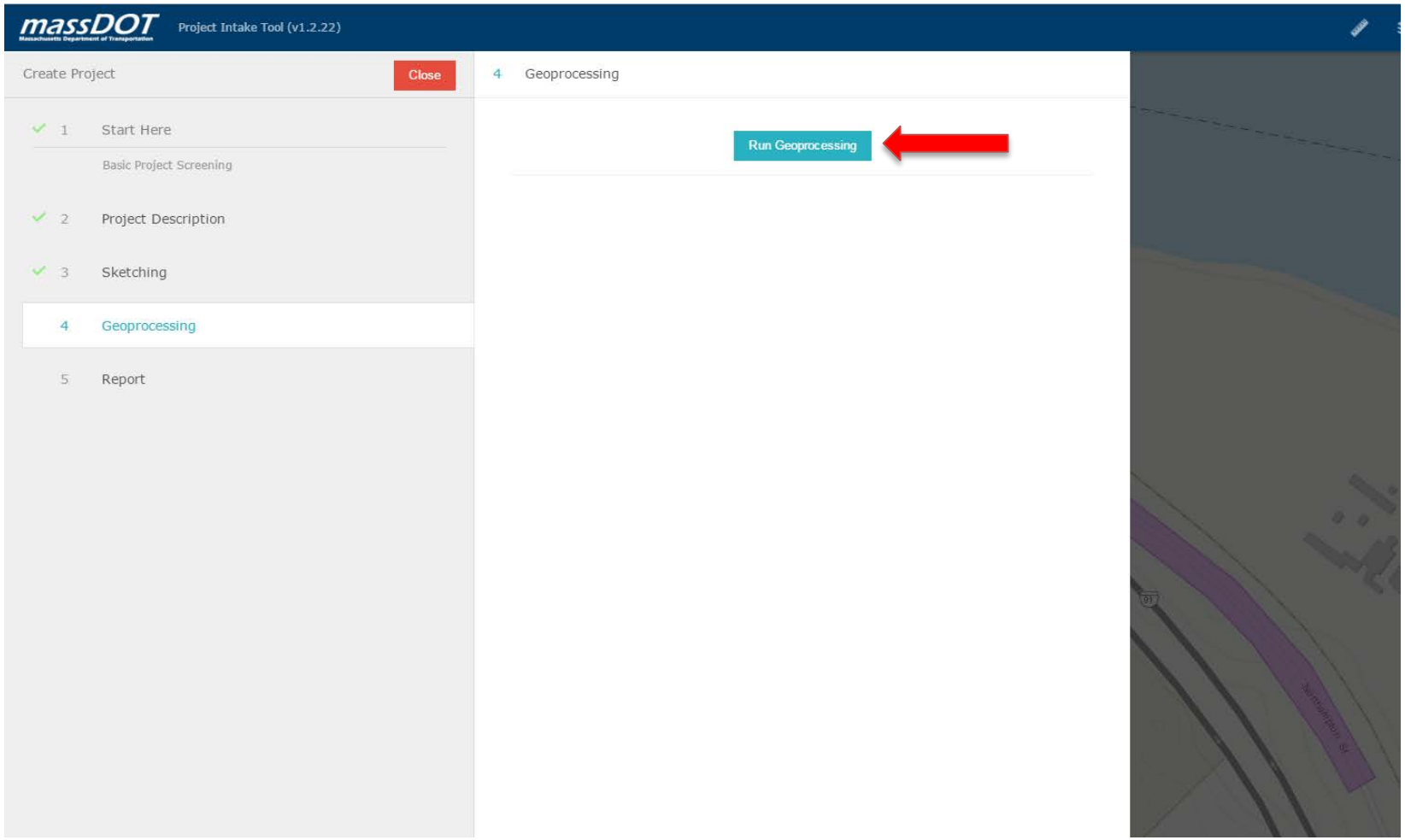
Creation

- Select project area



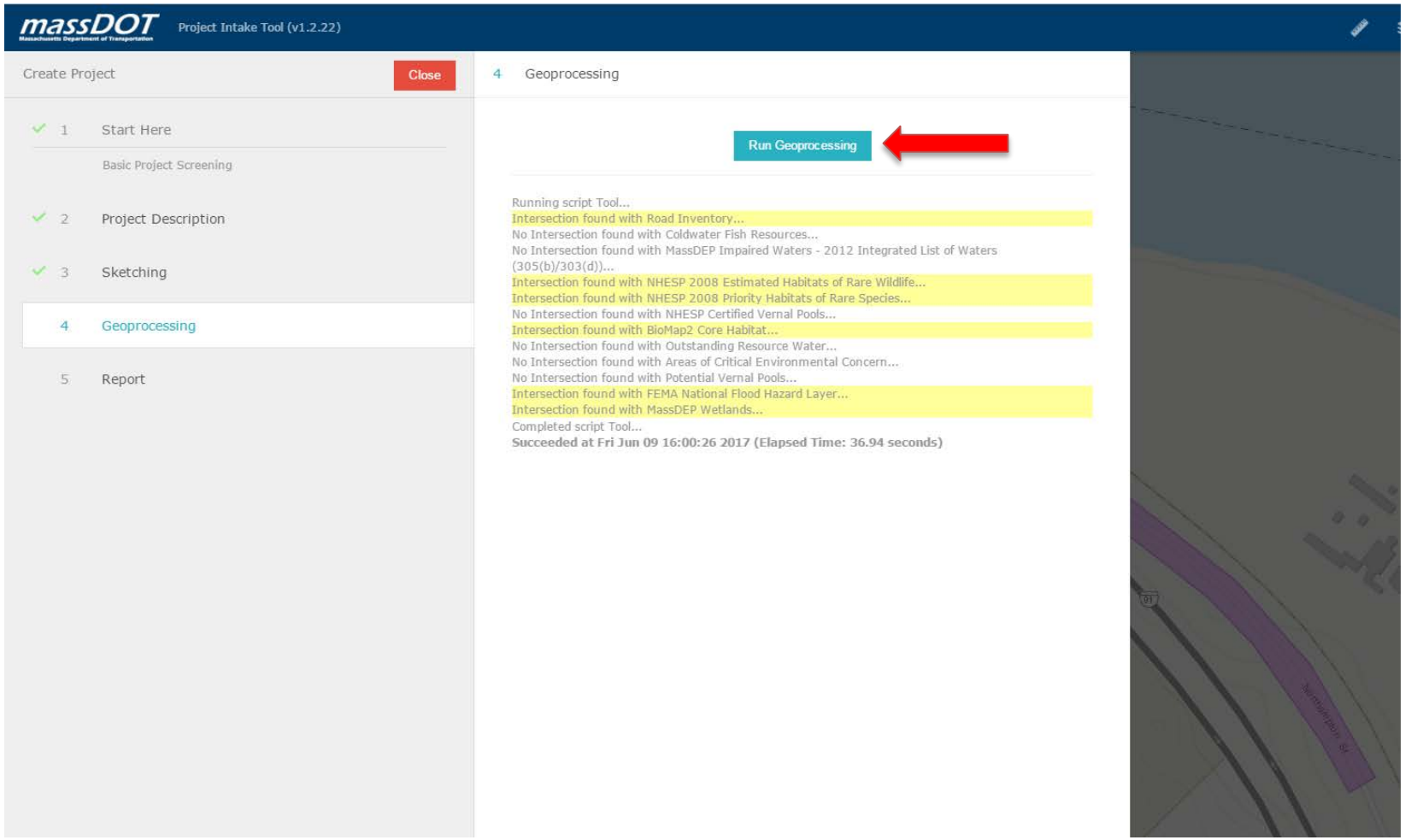
Creation

- Run Geoprocessing



Creation

- Geoprocessing results indicate intersected environmental layers



Expansion

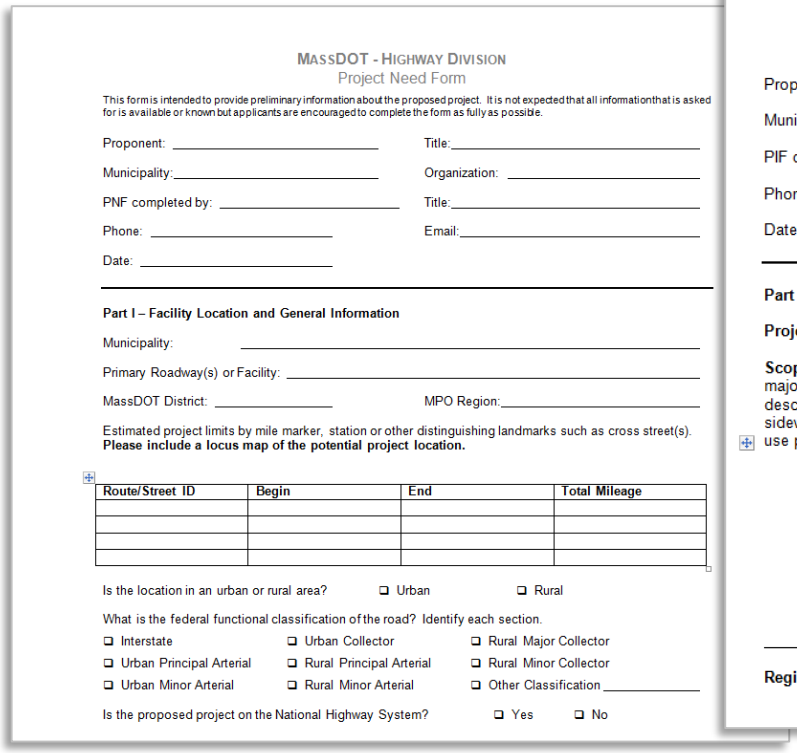
Additional Screening Layers?

- Many other GIS layers are consulted during Project Development
- Tool could screen against all GIS layers, not just environmental
- Could help state and municipal proponents initiate new projects
- Could also help with in-house project scoring

Project Development

Process

- State highway projects are initiated internally by department in charge: bridge, traffic, maintenance, pavement management, etc.
- For municipalities and other proponents seeking federal funding, two forms are required to create a project, the Project Need Form (PNF) and the Project Initiation Form (PIF)



MASSDOT - HIGHWAY DIVISION
Project Need Form

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

Proponent: _____ Title: _____

Municipality: _____ Organization: _____

PNF completed by: _____ Title: _____

Phone: _____ Email: _____

Date: _____

Part I – Facility Location and General Information

Municipality: _____

Primary Roadway(s) or Facility: _____

MassDOT District: _____ MPO Region: _____

Estimated project limits by mile marker, station or other distinguishing landmarks such as cross street(s). **Please include a locus map of the potential project location.**

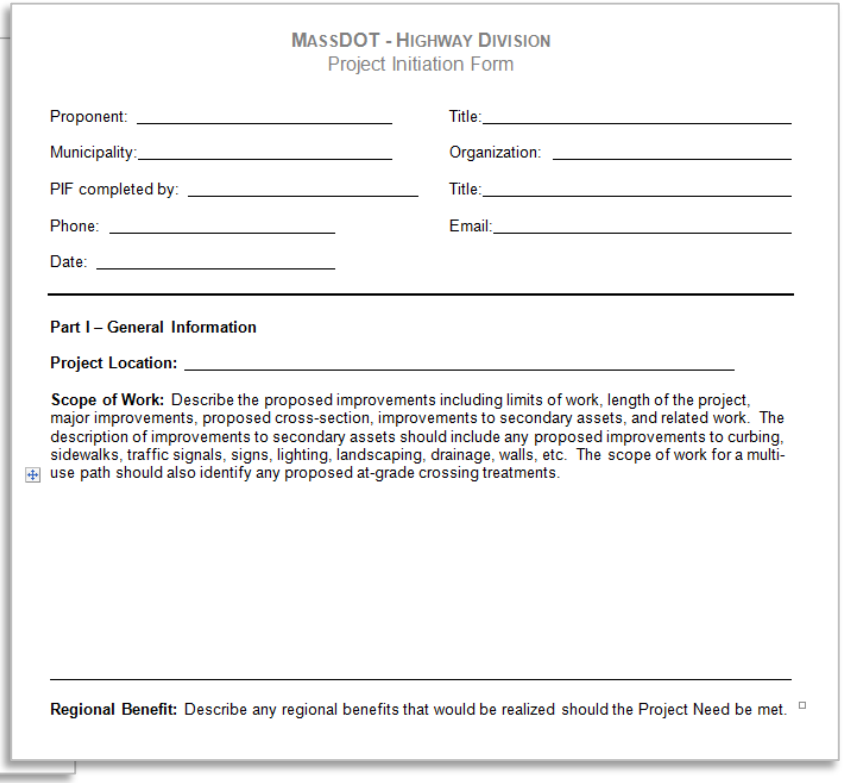
Route/Street ID	Begin	End	Total Mileage

Is the location in an urban or rural area? ❑ Urban ❑ Rural

What is the federal functional classification of the road? Identify each section.

❑ Interstate ❑ Urban Collector ❑ Rural Major Collector
❑ Urban Principal Arterial ❑ Rural Principal Arterial ❑ Rural Minor Collector
❑ Urban Minor Arterial ❑ Rural Minor Arterial ❑ Other Classification _____

Is the proposed project on the National Highway System? ❑ Yes ❑ No



MASSDOT - HIGHWAY DIVISION
Project Initiation Form

Proponent: _____ Title: _____

Municipality: _____ Organization: _____

PIF completed by: _____ Title: _____

Phone: _____ Email: _____

Date: _____

Part I – General Information

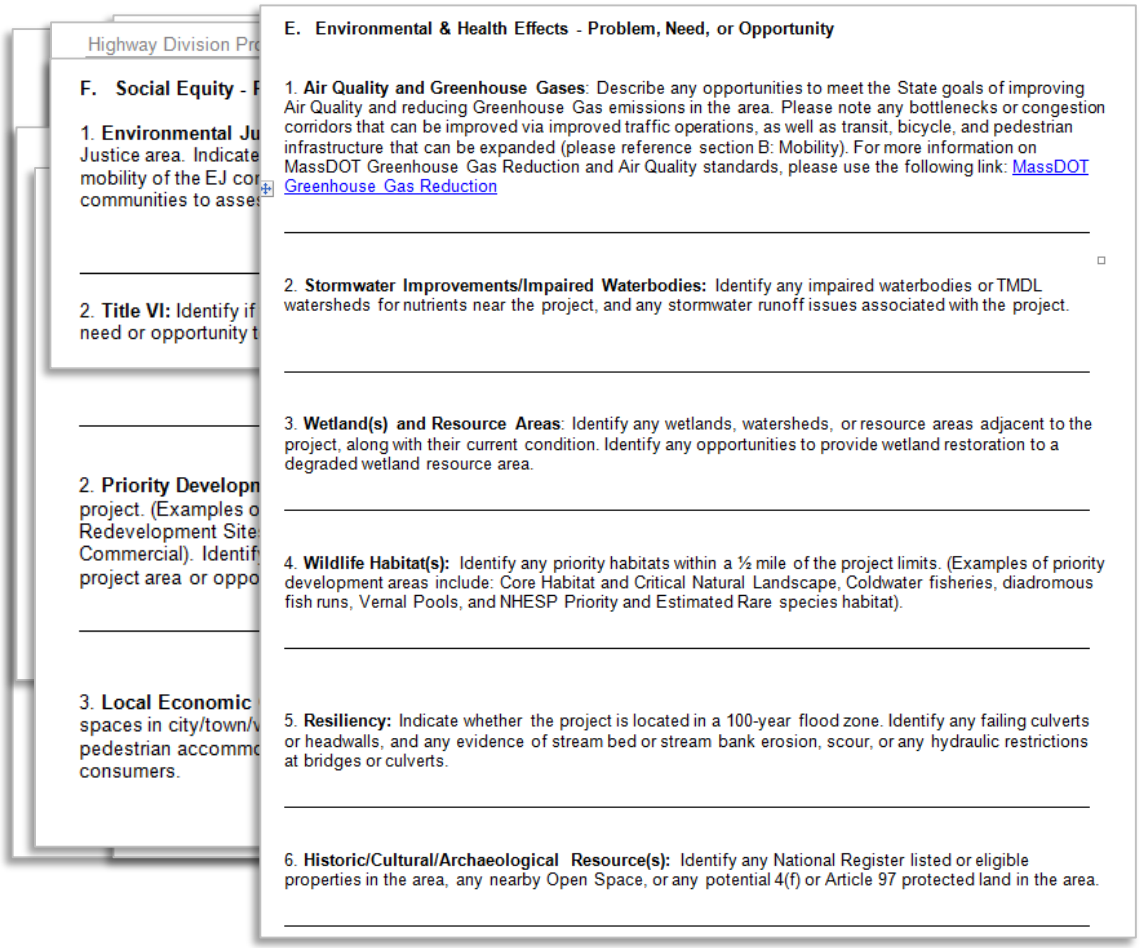
Project Location: _____

Scope of Work: Describe the proposed improvements including limits of work, length of the project, major improvements, proposed cross-section, improvements to secondary assets, and related work. The description of improvements to secondary assets should include any proposed improvements to curbing, sidewalks, traffic signals, signs, lighting, landscaping, drainage, walls, etc. The scope of work for a multi-use path should also identify any proposed at-grade crossing treatments.

Regional Benefit: Describe any regional benefits that would be realized should the Project Need be met.

Project Need Form

- PNF asks proponent to outline the problems, needs, and opportunities of a potential project site
- Asks for site-specific information often requiring consultation of various GIS layers and spatial data sets



Highway Division Pr

F. Social Equity - F

1. Environmental Ju
Justice area. Indicate
mobility of the EJ cor
communities to asse

2. Title VI: Identify if
need or opportunity t

2. Priority Developn
project. (Examples o
Redevelopment Site
Commercial). Identif
project area or oppo

3. Local Economic
spaces in city/town/v
pedestrian accommo
consumers.

E. Environmental & Health Effects - Problem, Need, or Opportunity

1. **Air Quality and Greenhouse Gases**: Describe any opportunities to meet the State goals of improving Air Quality and reducing Greenhouse Gas emissions in the area. Please note any bottlenecks or congestion corridors that can be improved via improved traffic operations, as well as transit, bicycle, and pedestrian infrastructure that can be expanded (please reference section B: Mobility). For more information on MassDOT Greenhouse Gas Reduction and Air Quality standards, please use the following link: MassDOT Greenhouse Gas Reduction

2. **Stormwater Improvements/Impaired Waterbodies:** Identify any impaired waterbodies or TMDL watersheds for nutrients near the project, and any stormwater runoff issues associated with the project.

3. **Wetland(s) and Resource Areas**: Identify any wetlands, watersheds, or resource areas adjacent to the project, along with their current condition. Identify any opportunities to provide wetland restoration to a degraded wetland resource area.

4. **Wildlife Habitat(s):** Identify any priority habitats within a ½ mile of the project limits. (Examples of priority development areas include: Core Habitat and Critical Natural Landscape, Coldwater fisheries, diadromous fish runs, Vernal Pools, and NHESP Priority and Estimated Rare species habitat).

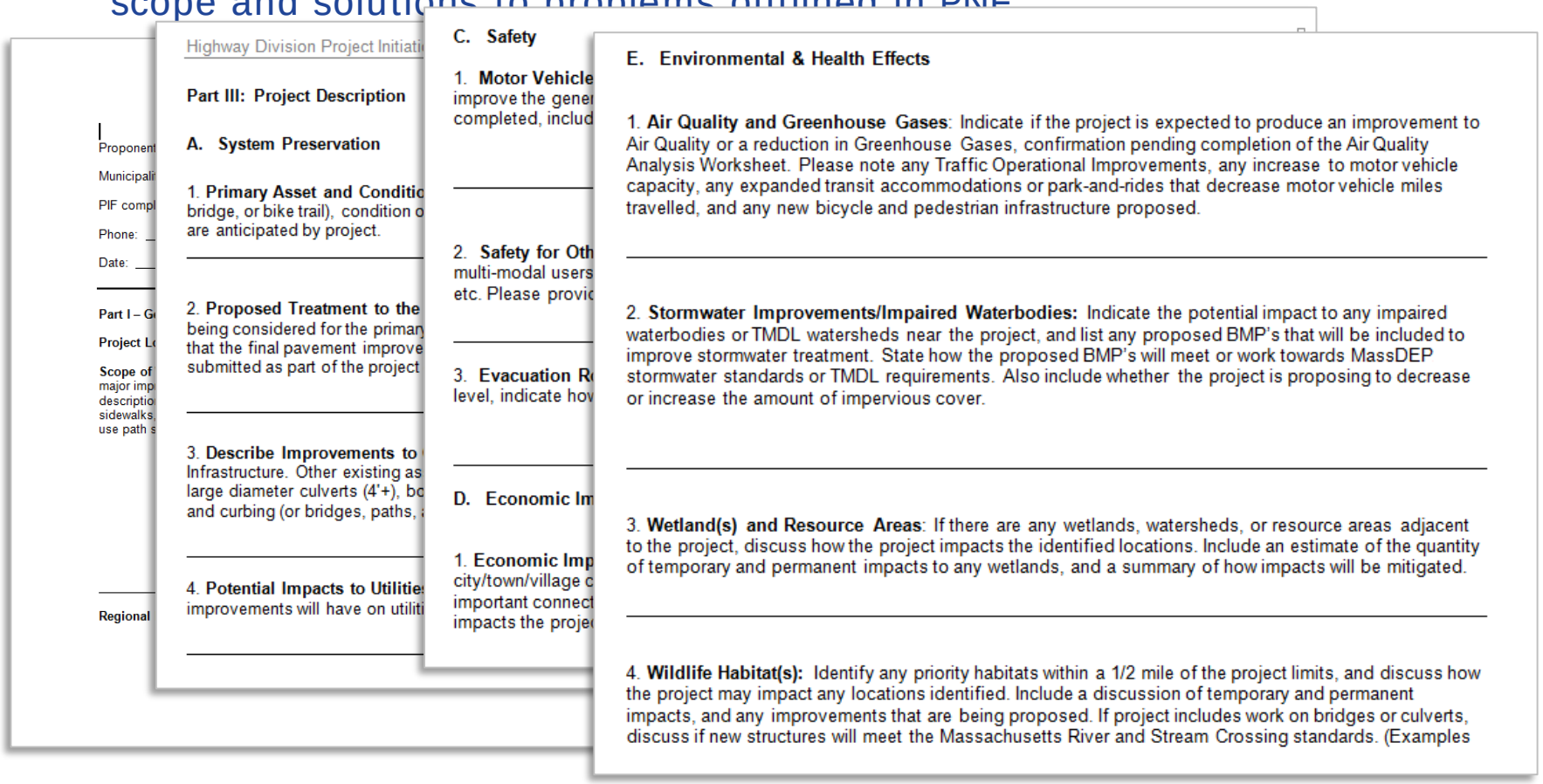
5. **Resiliency:** Indicate whether the project is located in a 100-year flood zone. Identify any failing culverts or headwalls, and any evidence of stream bed or stream bank erosion, scour, or any hydraulic restrictions at bridges or culverts.

6. **Historic/Cultural/Archaeological Resource(s):** Identify any National Register listed or eligible properties in the area, any nearby Open Space, or any potential 4(f) or Article 97 protected land in the area.

- Existing Facility Information
- Condition of assets
- Mobility & Bike/Ped
- Safety
- Economic
- Social Equity
- Environmental

Project Initiation Form

- Proponent meets with MassDOT District personnel, discuss best course of action
- Proponent fills out PIF, often with designer, describing proposed project scope and solutions to problems outlined in PNF



Proponent

Municipali

PIF compl

Phone:

Date:

Part I – Gr

Project L

Scope of
major imp
descriptio
sidewalks,
use path s

Regional

Highway Division Project Initiati

Part III: Project Description

A. System Preservation

1. **Primary Asset and Conditio**
bridge, or bike trail), condition o
are anticipated by project.

2. **Proposed Treatment to the**
being considered for the primary
that the final pavement improve
submitted as part of the project

3. **Describe Improvements to**
Infrastructure. Other existing as
large diameter culverts (4'+), bo
and curbing (or bridges, paths,

4. **Potential Impacts to Utilities**
improvements will have on utiliti

C. Safety

1. **Motor Vehicle**
improve the gener
completed, includ

2. **Safety for Oth**
multi-modal users
etc. Please provic

3. **Evacuation R**
level, indicate hov

D. Economic Im

1. **Economic Imp**
city/town/village c
important connect
impacts the proje

E. Environmental & Health Effects

1. **Air Quality and Greenhouse Gases**: Indicate if the project is expected to produce an improvement to Air Quality or a reduction in Greenhouse Gases, confirmation pending completion of the Air Quality Analysis Worksheet. Please note any Traffic Operational Improvements, any increase to motor vehicle capacity, any expanded transit accommodations or park-and-rides that decrease motor vehicle miles travelled, and any new bicycle and pedestrian infrastructure proposed.

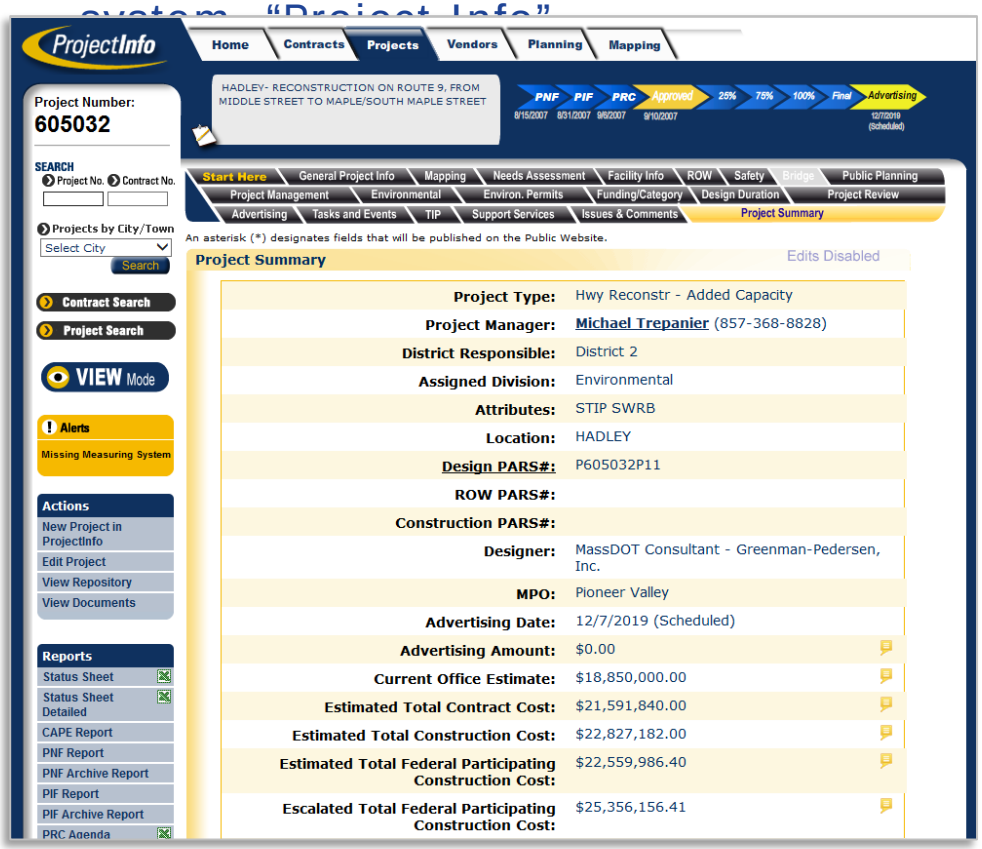
2. **Stormwater Improvements/Impaired Waterbodies:** Indicate the potential impact to any impaired waterbodies or TMDL watersheds near the project, and list any proposed BMP's that will be included to improve stormwater treatment. State how the proposed BMP's will meet or work towards MassDEP stormwater standards or TMDL requirements. Also include whether the project is proposing to decrease or increase the amount of impervious cover.

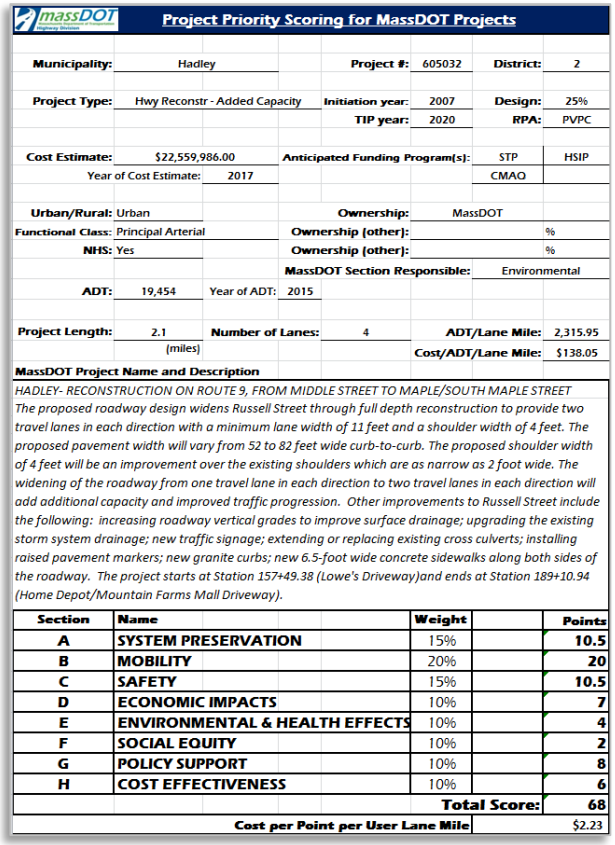
3. **Wetland(s) and Resource Areas**: If there are any wetlands, watersheds, or resource areas adjacent to the project, discuss how the project impacts the identified locations. Include an estimate of the quantity of temporary and permanent impacts to any wetlands, and a summary of how impacts will be mitigated.

4. **Wildlife Habitat(s):** Identify any priority habitats within a 1/2 mile of the project limits, and discuss how the project may impact any locations identified. Include a discussion of temporary and permanent impacts, and any improvements that are being proposed. If project includes work on bridges or culverts, discuss if new structures will meet the Massachusetts River and Stream Crossing standards. (Examples

Project Creation & Scoring

- Project is officially created by MassDOT District personnel and all information in the forms are entered into MassDOT's project database system, "ProjectInfo"





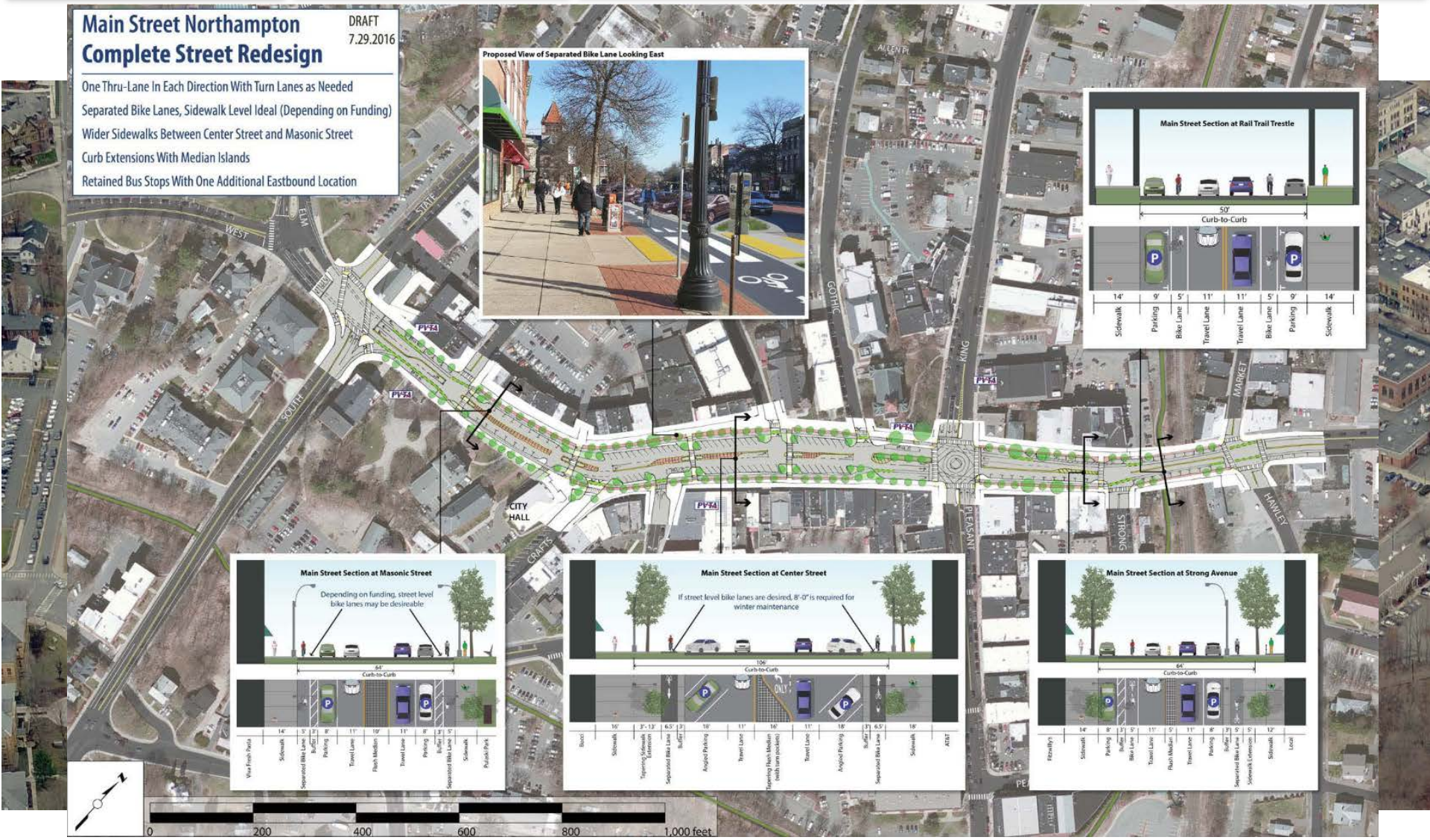
- Projects are scored internally by MassDOT to prioritize for project approval
- The scoring system directly references info in PNF/PIF and other GIS

MaPIT Concept Finalized

MaPIT achieves multiple tasks at once:

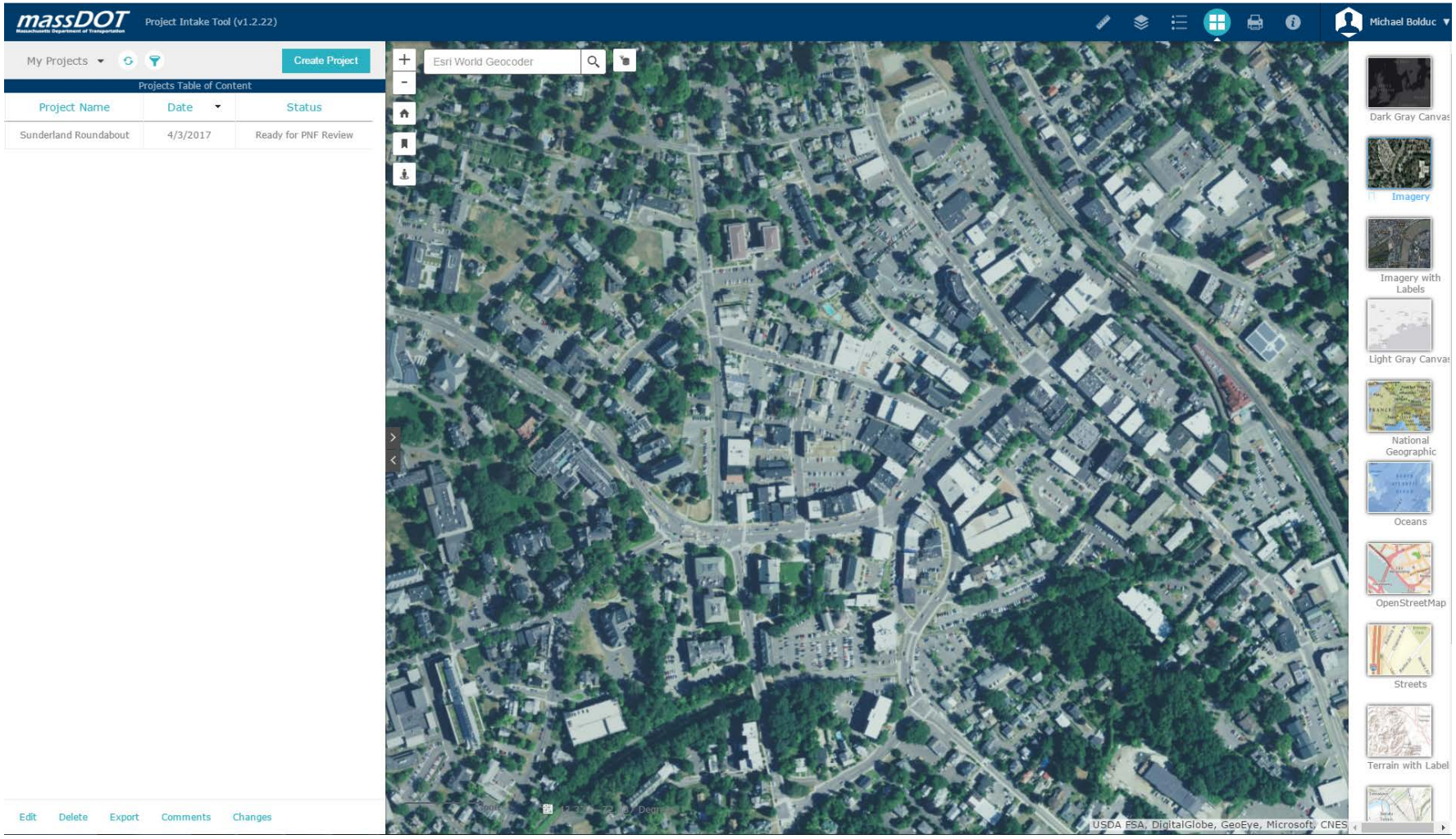
- The Project Intake Tool will be the primary interface for all project creation
- Screen potential projects against all relevant GIS layers
- Allows proponent to fill out PNF & PIF while referencing geoprocessing data
- Easy communication between proponent and MassDOT Districts with e-mail notifications during each step; completely paperless
- Once project receives District approval, project is officially created, a project number is assigned, and all relevant data from the PNF/PIF is automatically pushed into Project Info
- Project is mapped spatially, and added to the Project GIS Layer to keep

MaPIT – Project Creation



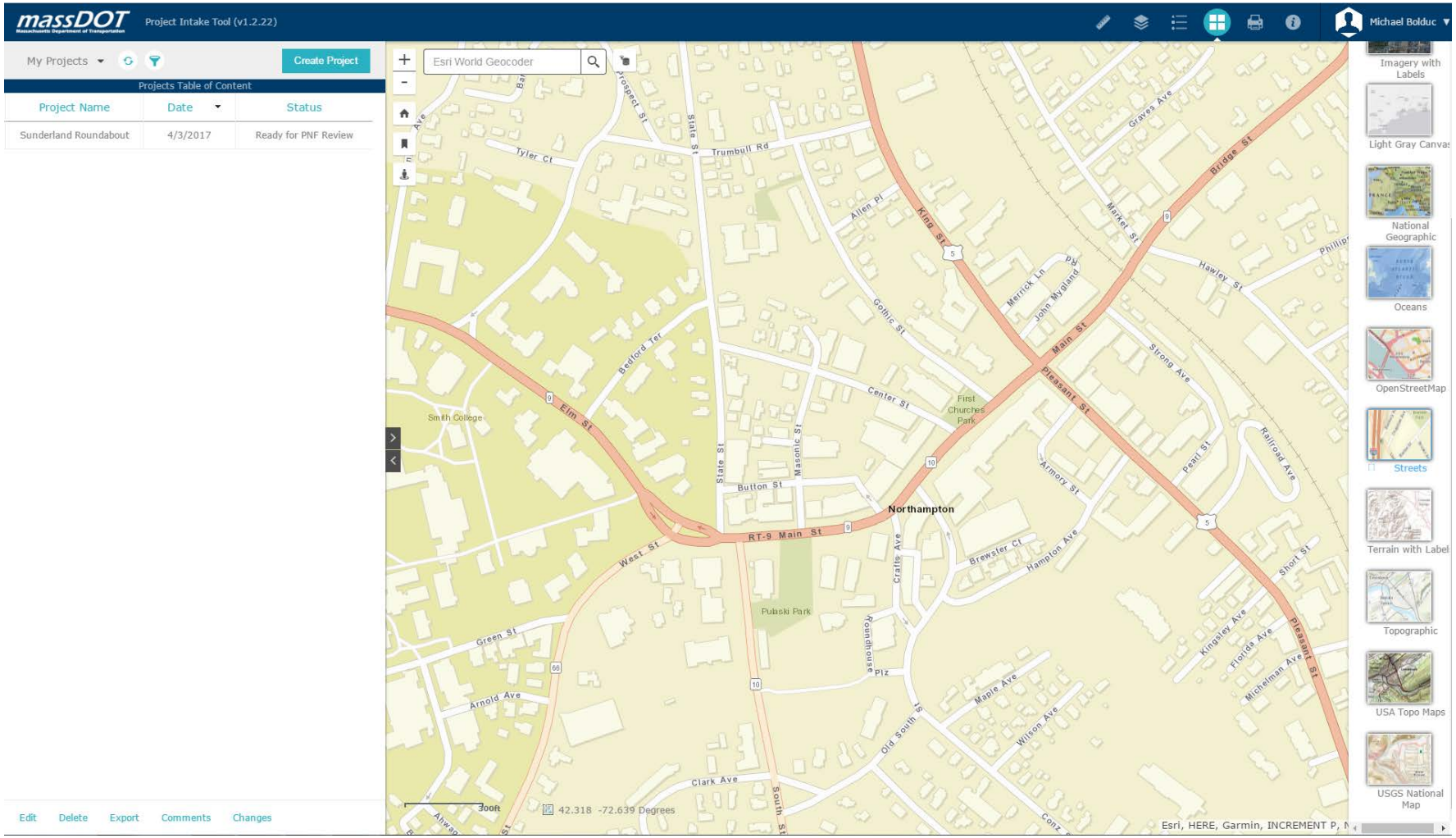
MaPIT – Project Creation

Multiple Views – Aerial Imagery



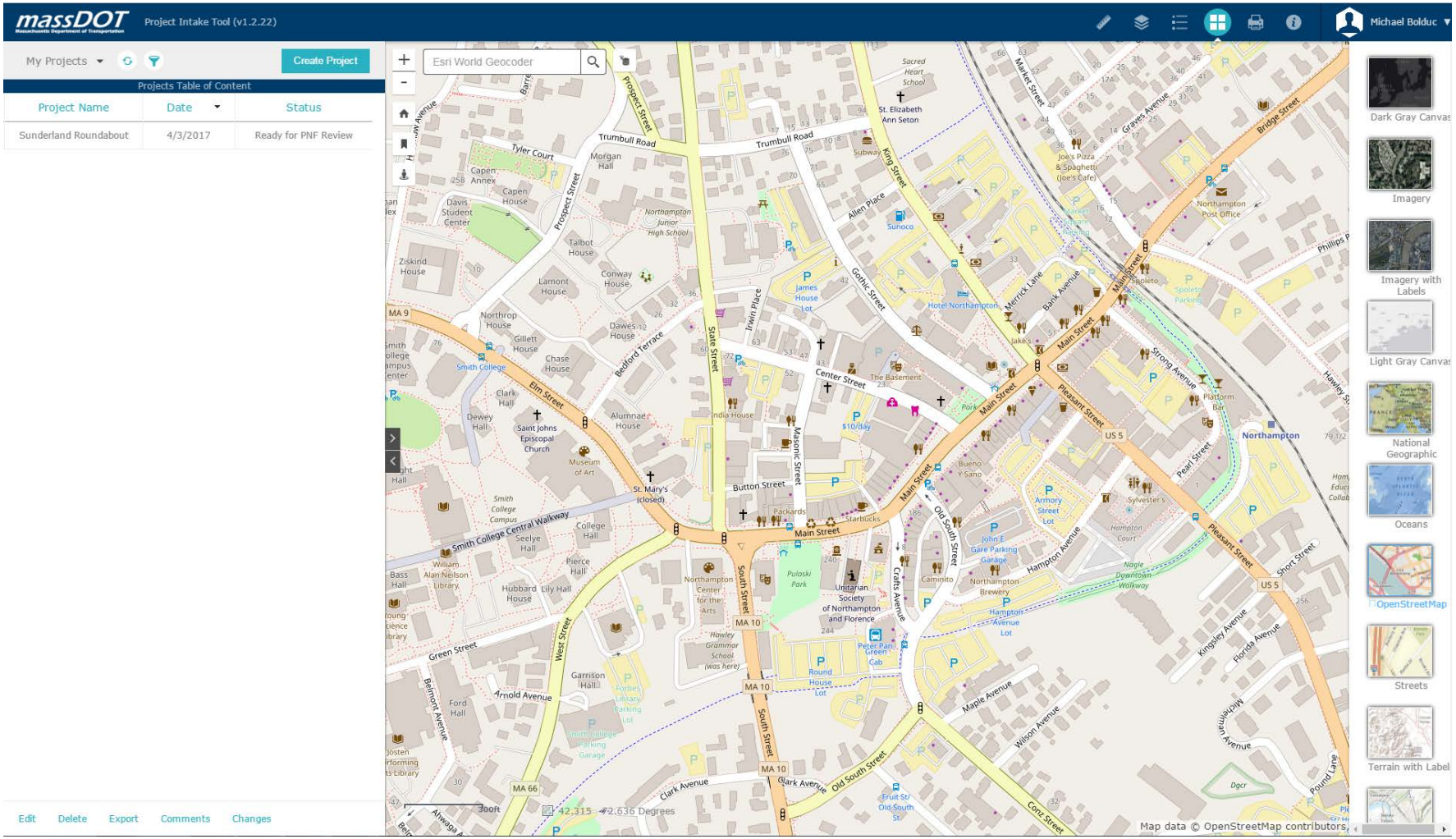
MaPIT – Project Creation

Multiple Views – Street Map



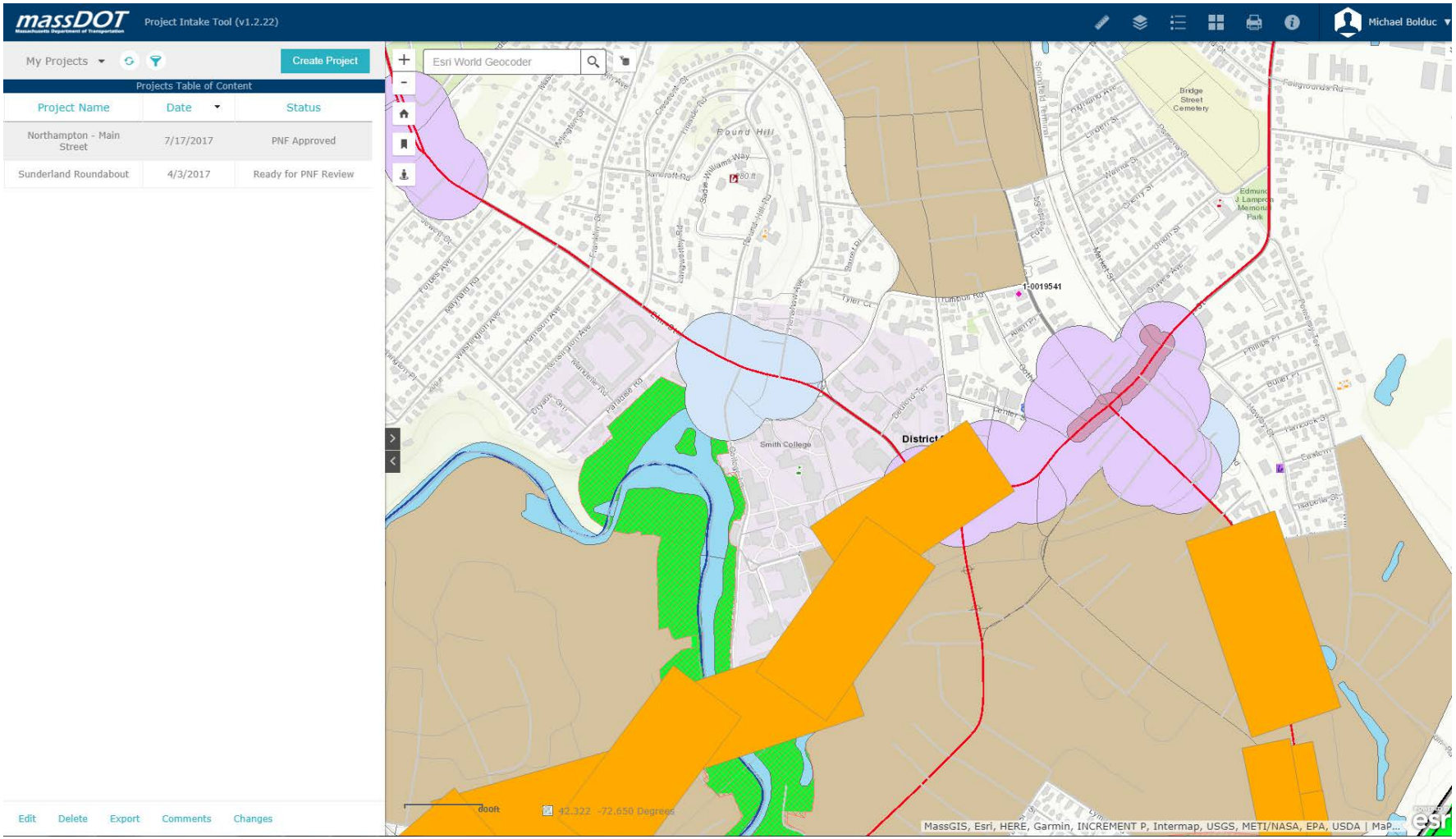
MaPIT – Project Creation

Multiple Views – Open Map



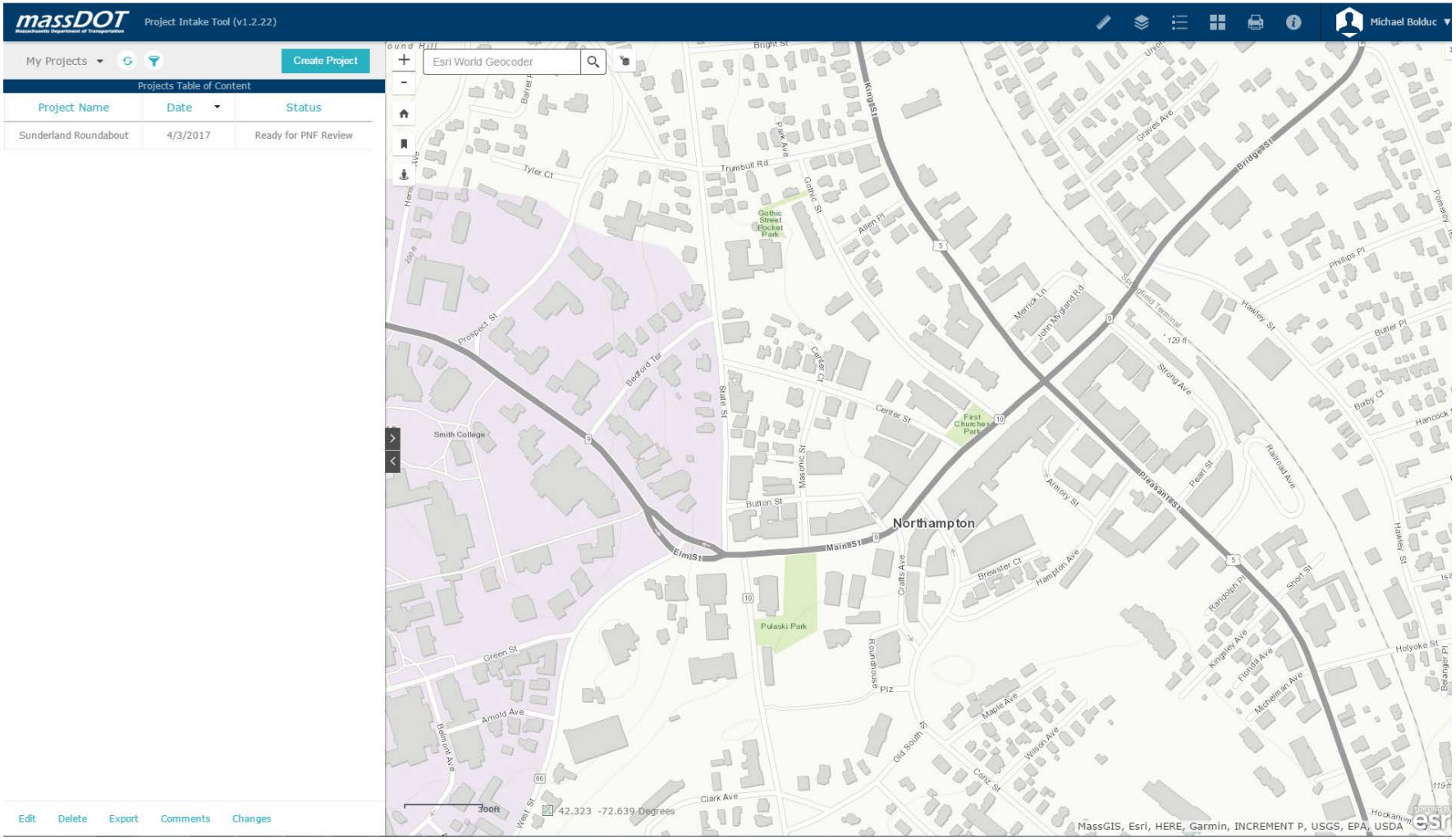
MaPIT – Project Creation

All layers turned on…



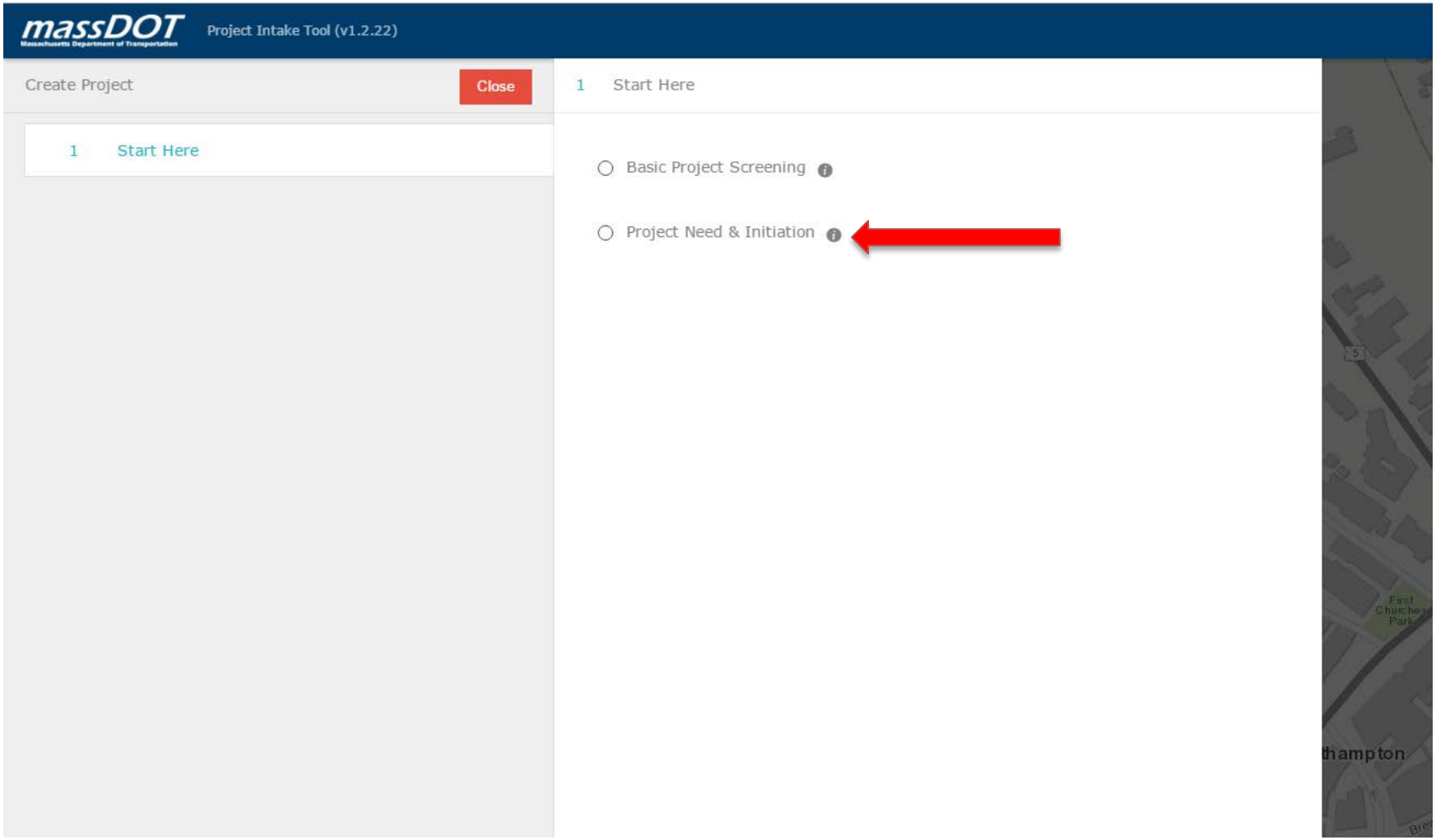
MaPIT – Project Creation

Clean Map



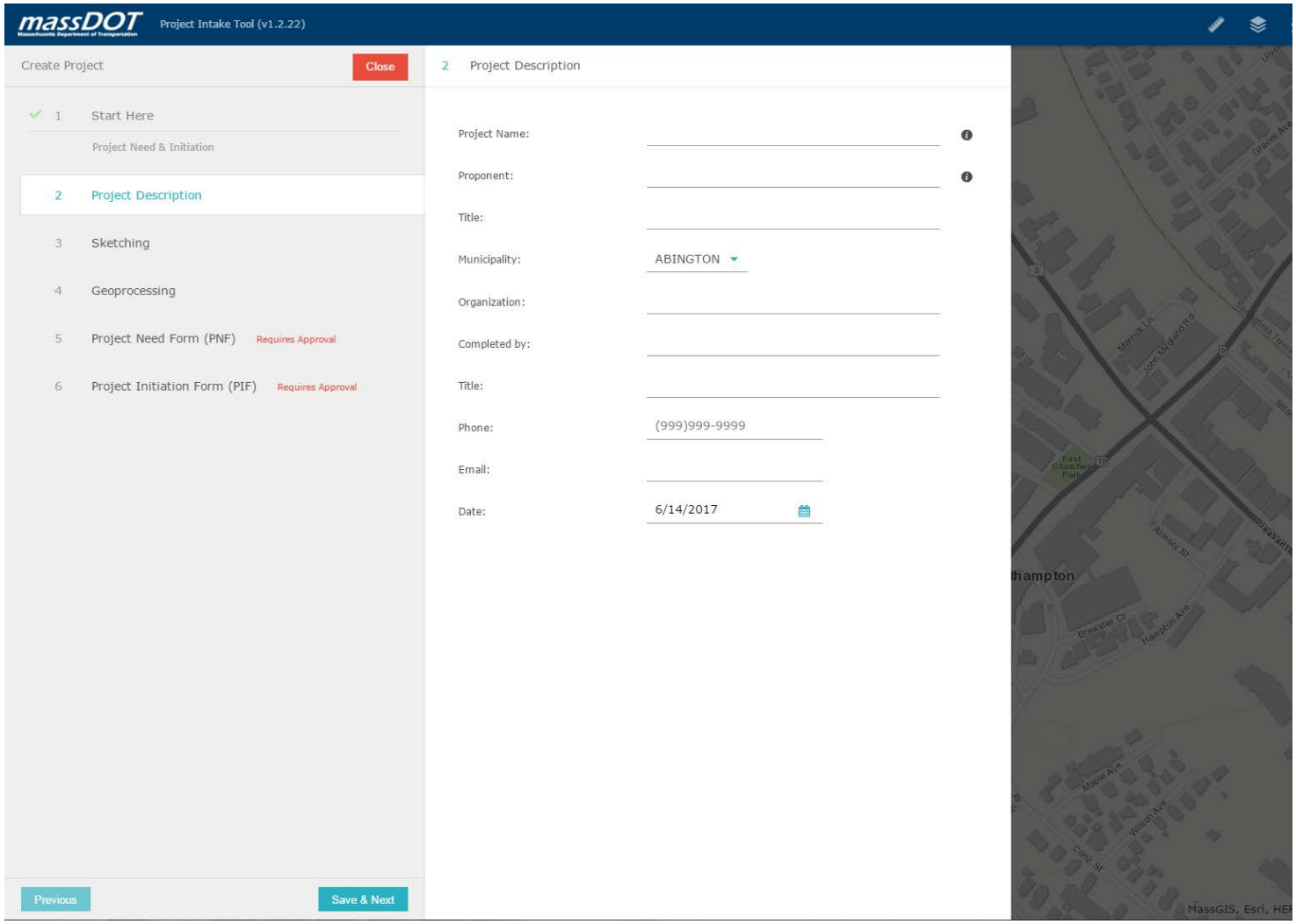
MaPIT – Project Creation

Project Need & Initiation



MaPIT – Project Creation

Project Description



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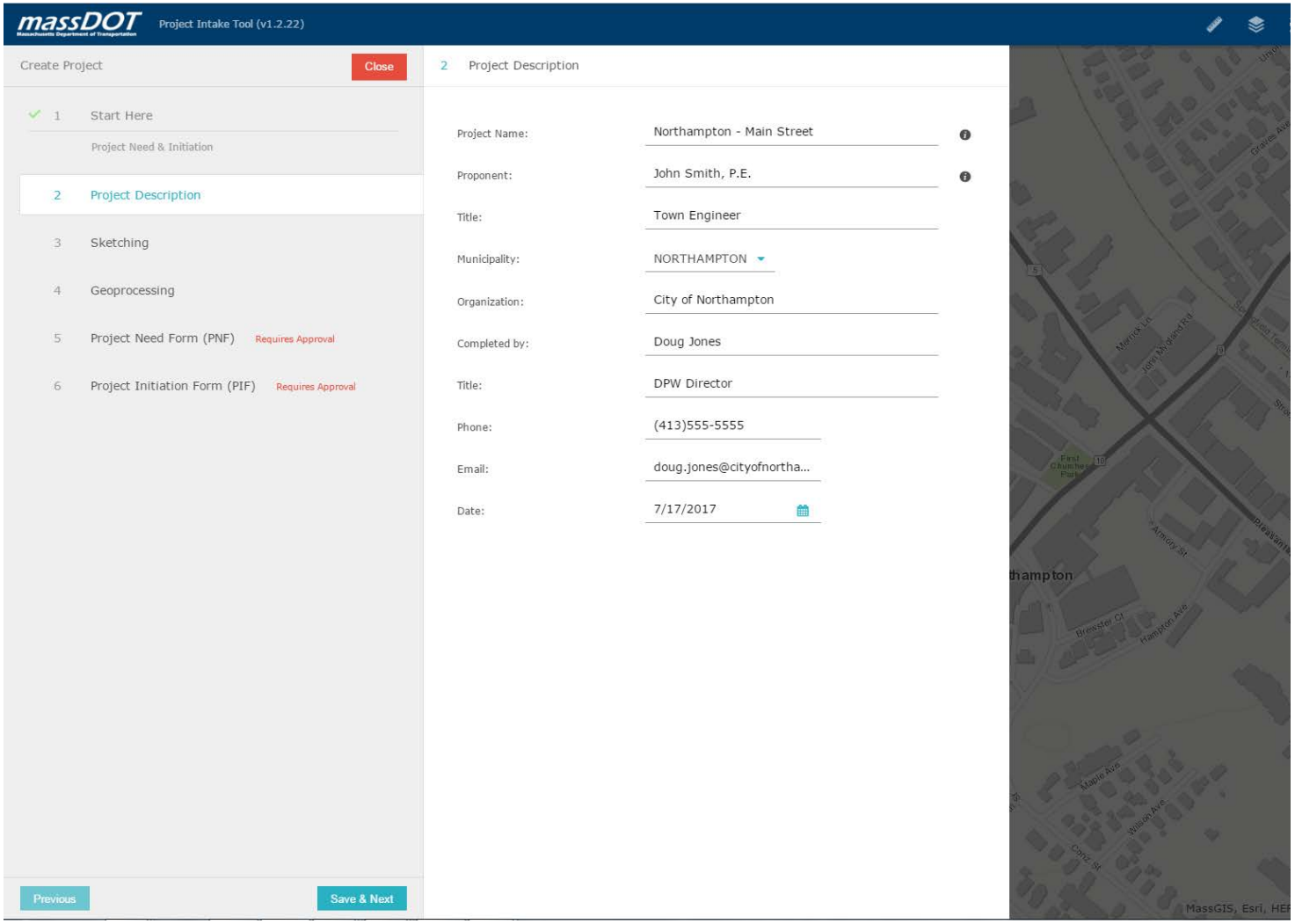
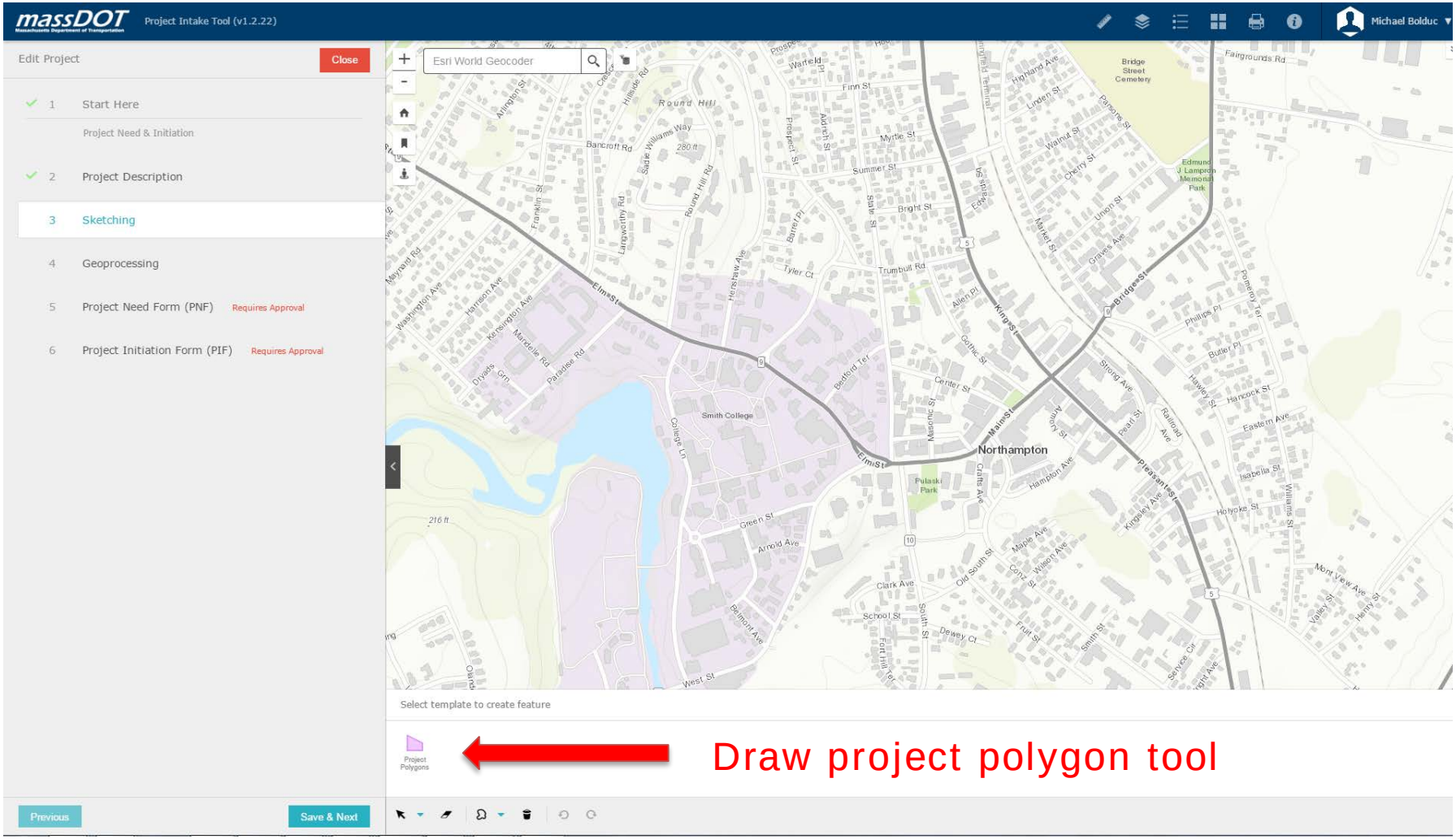


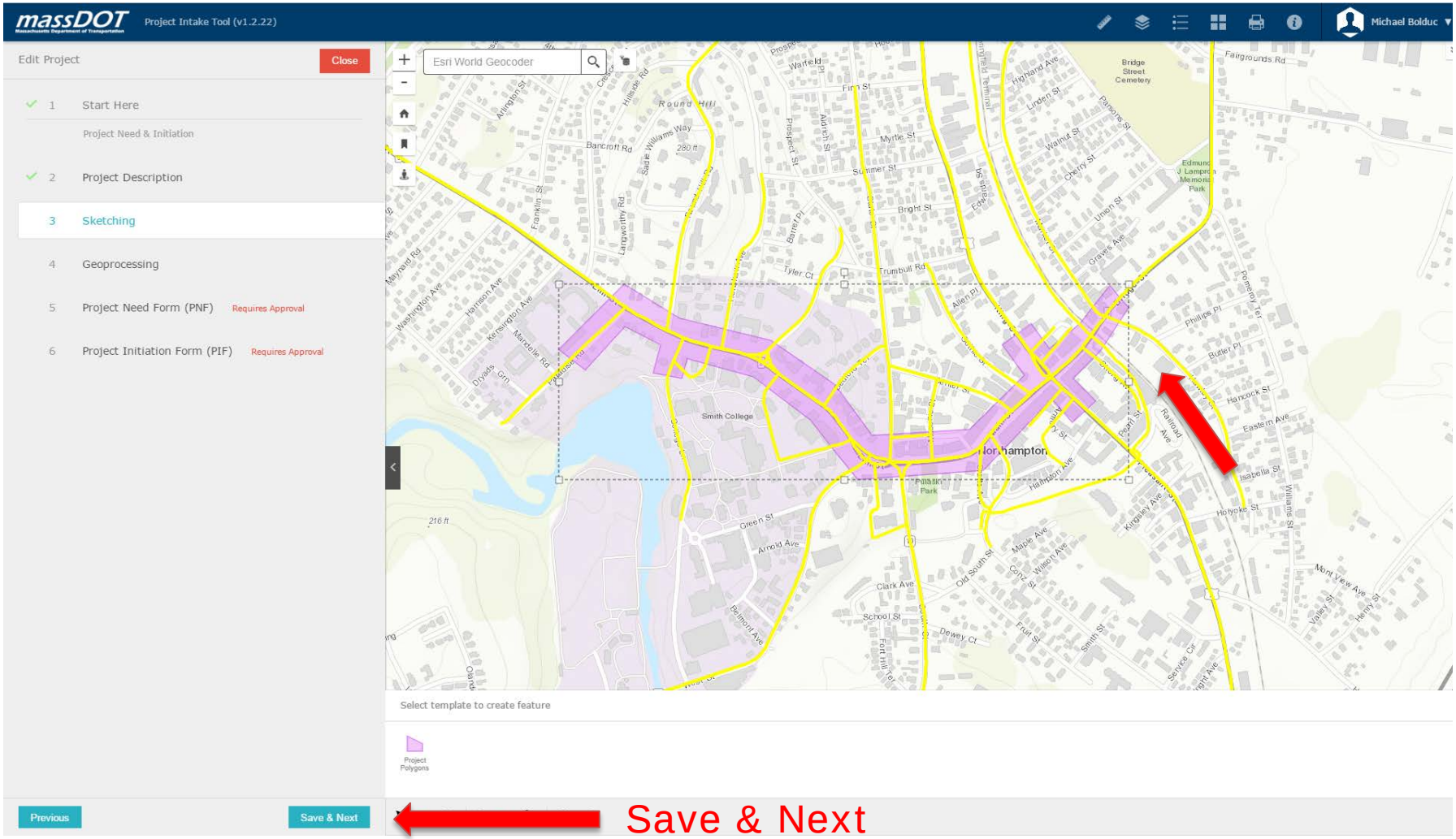
MaPIT – Project Creation

Sketching



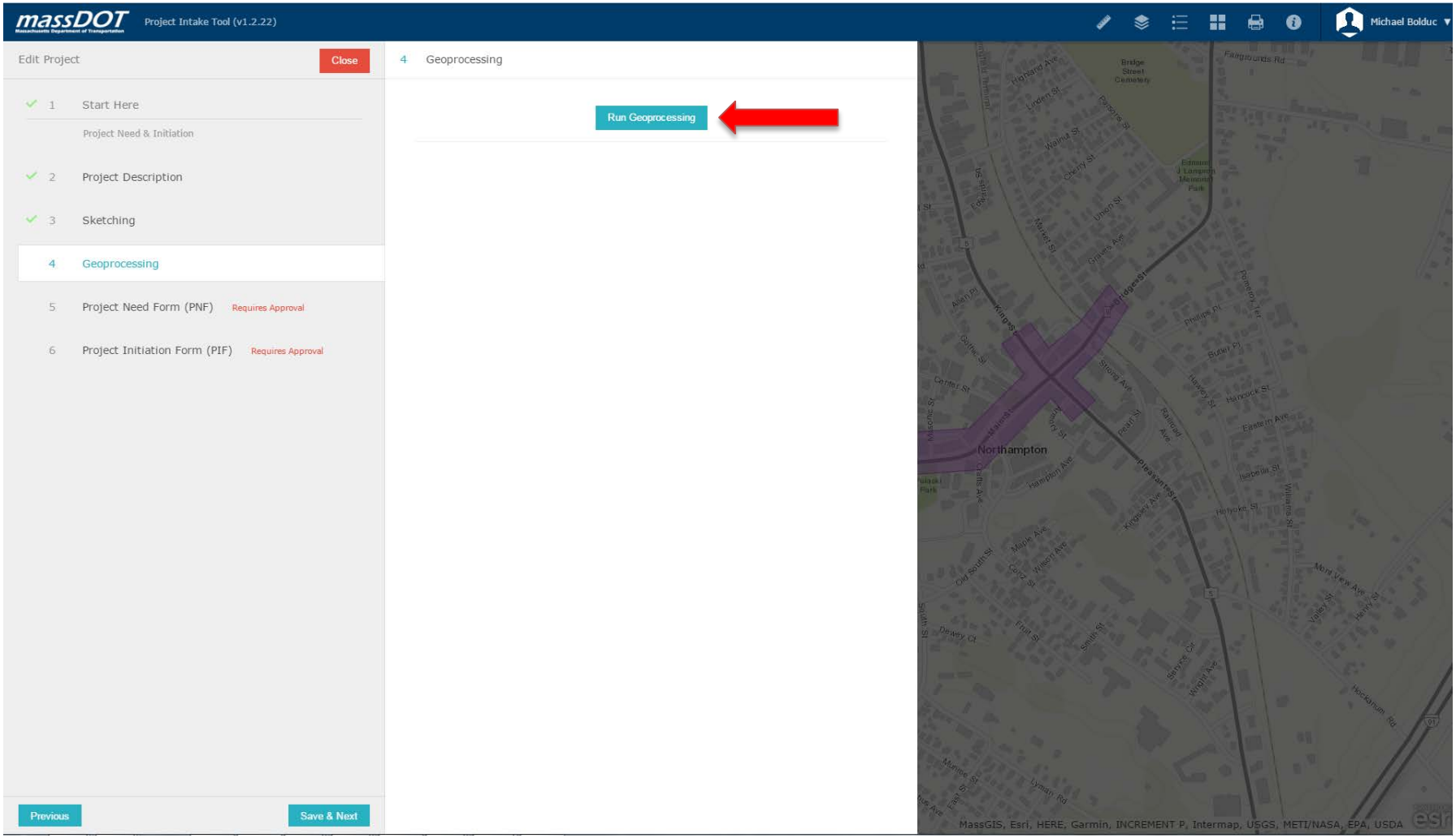
MaPIT – Project Creation

Choose Limits



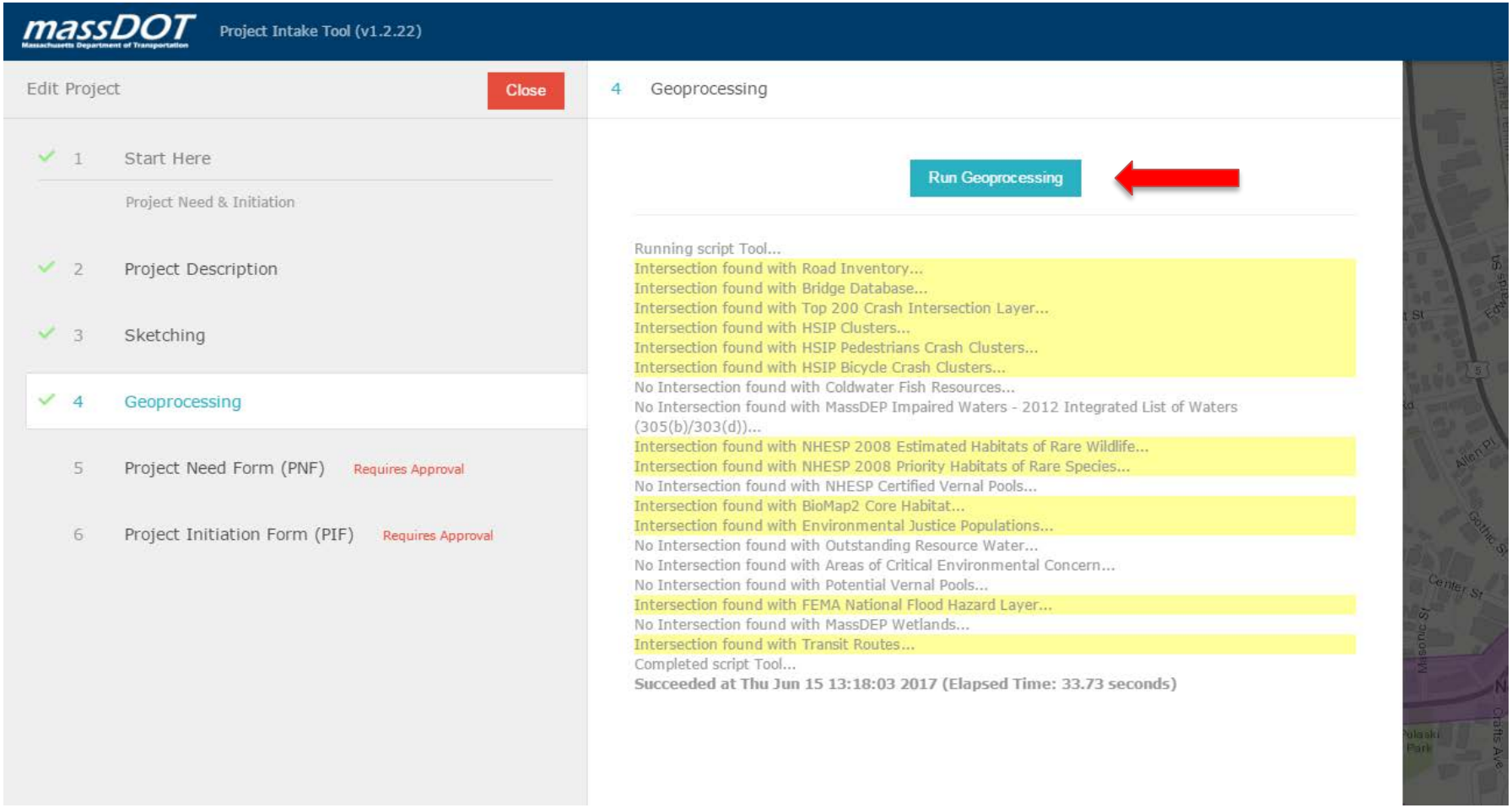
MaPIT – Project Creation

Run Geoprocessing



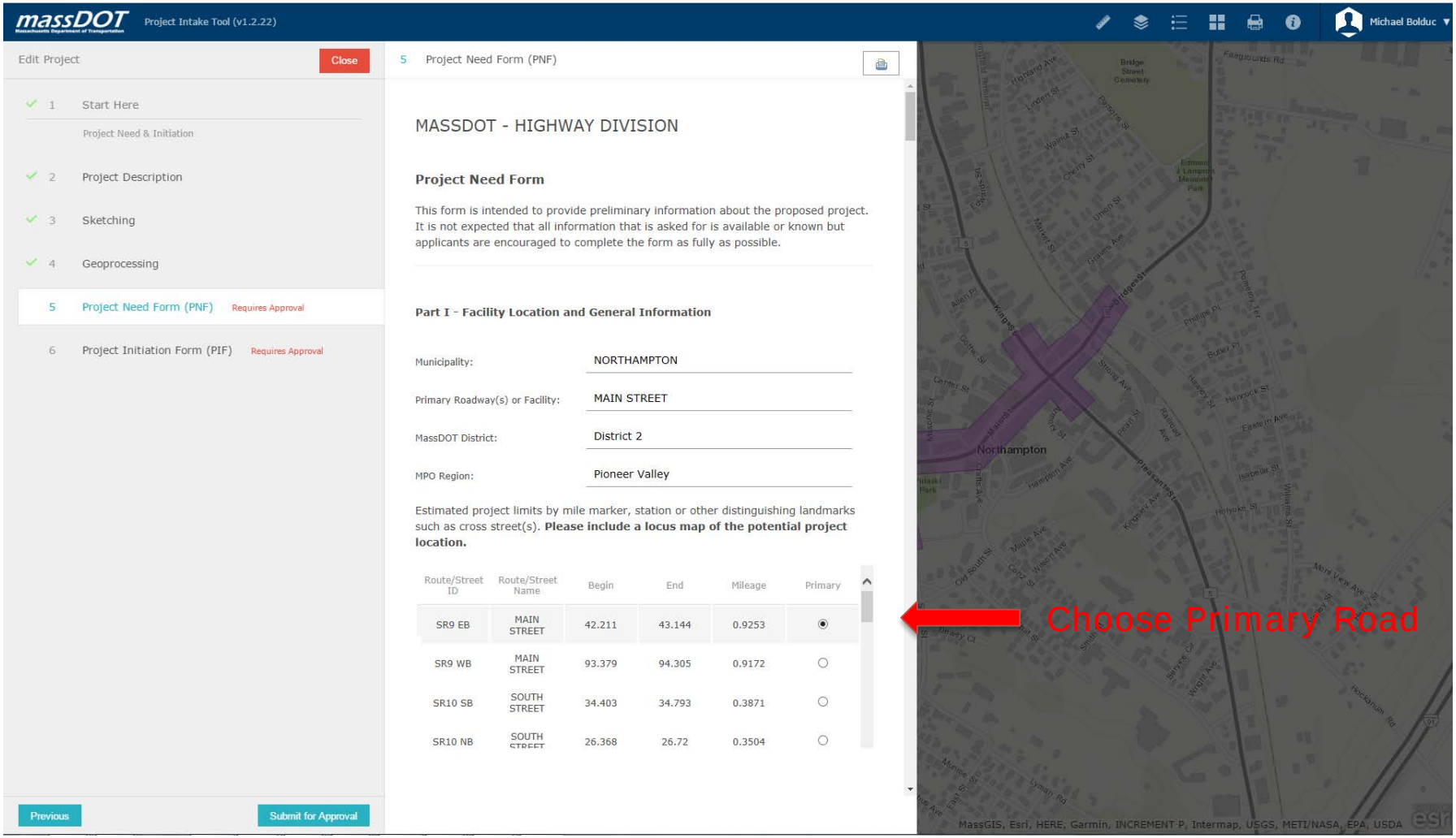
MaPIT – Project Creation

Run Geoprocessing



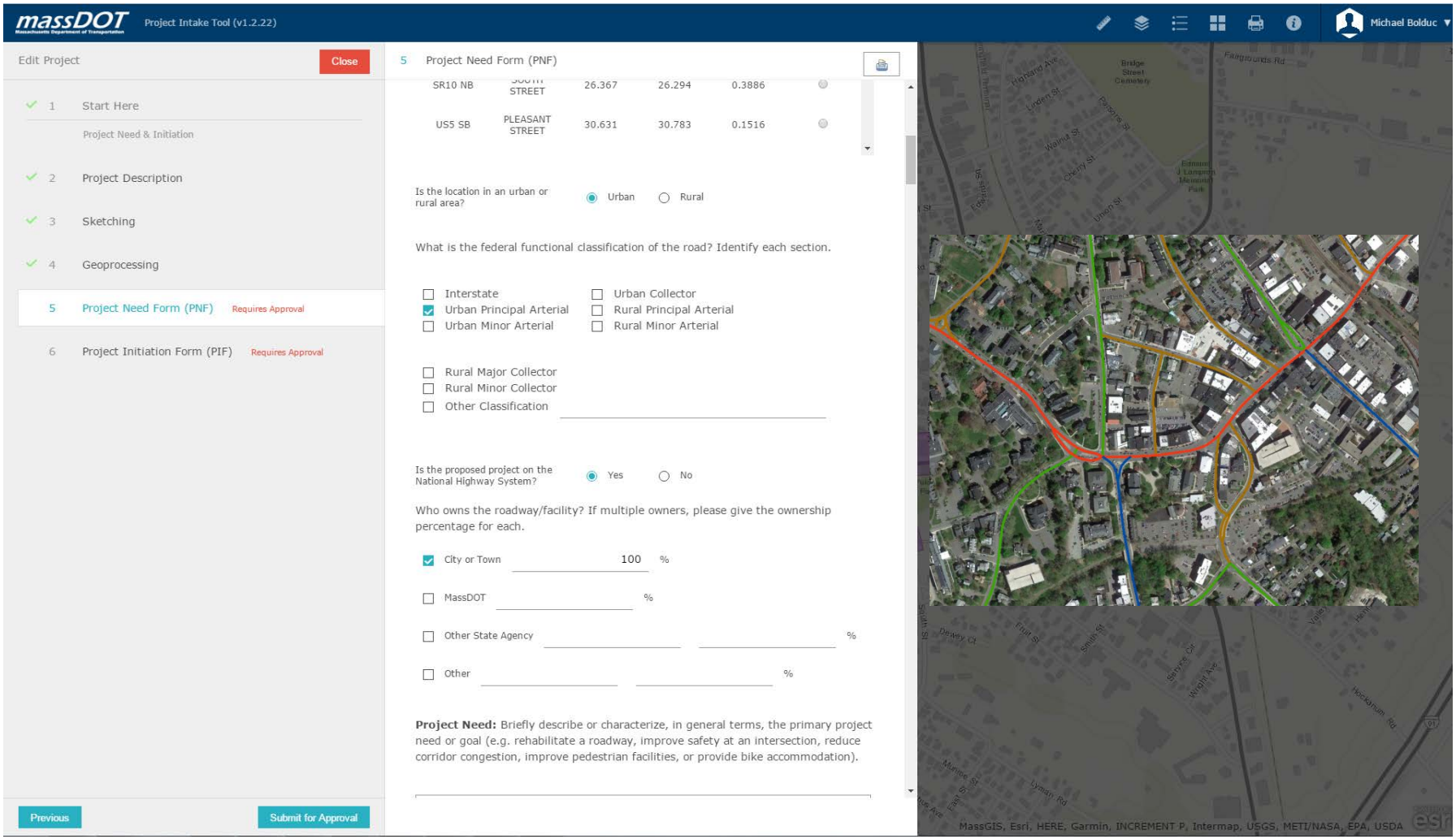
MaPIT – Project Creation

Project Need Form



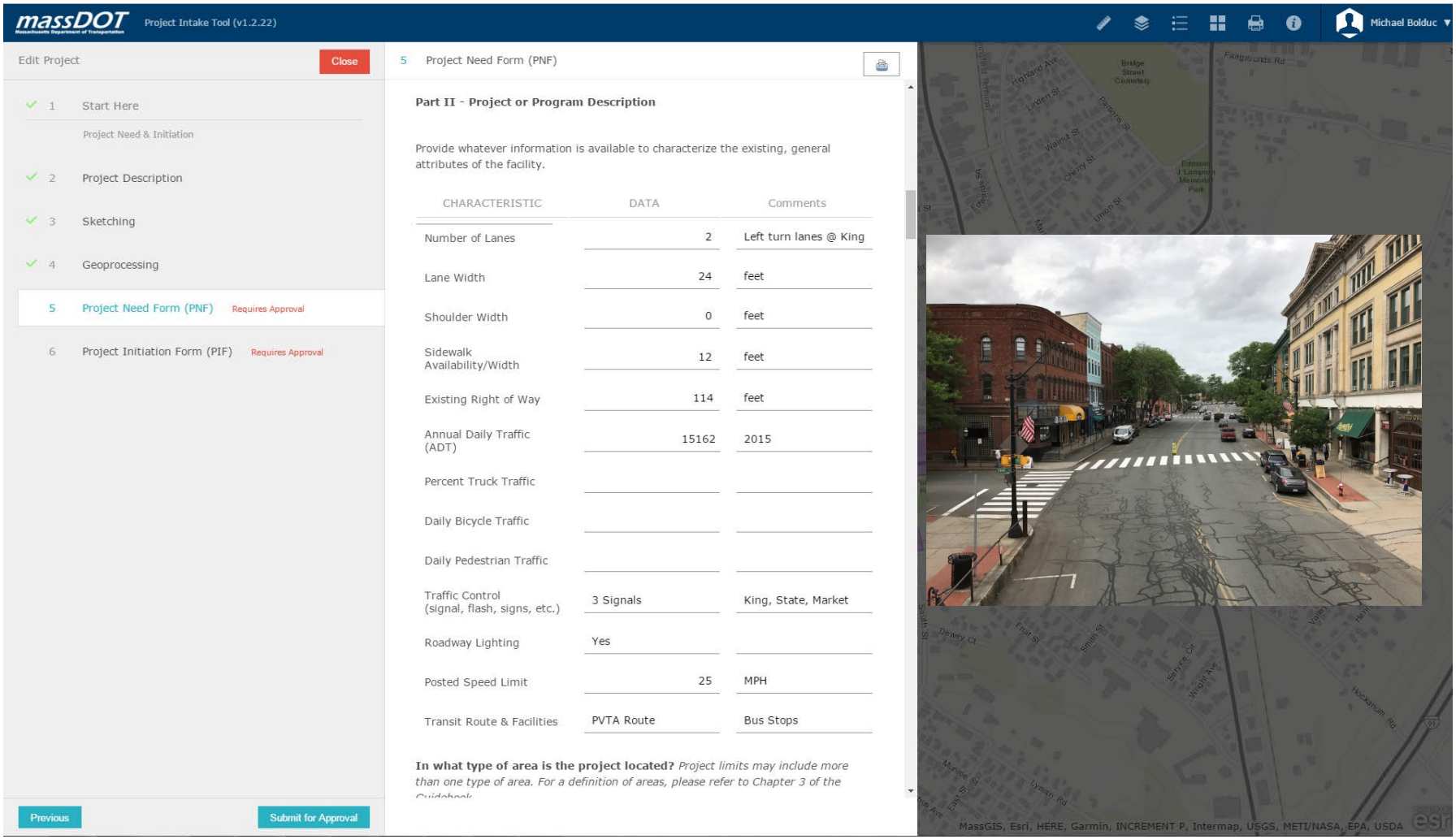
MaPIT – Project Creation

PNF – Roadway Information



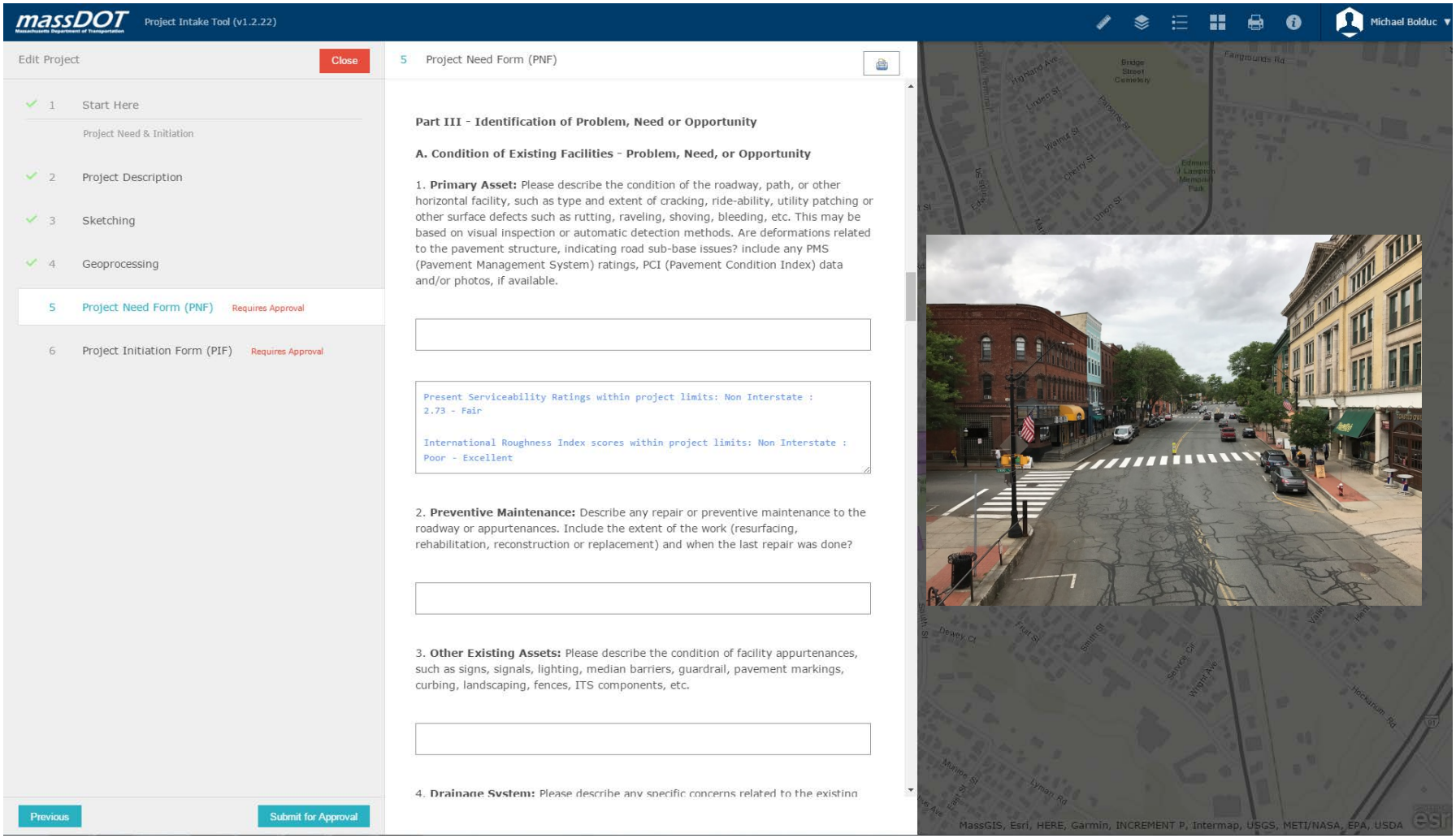
MaPIT – Project Creation

PNF – Facility Information



MaPIT – Project Creation

PNF – Roadway Condition



MaPIT – Project Creation

PNF - Bridges

massDOT Project Intake Tool (v1.2.22) — Michael Bolduc

Edit Project — Close

1 Start Here
Project Need & Initiation
2 Project Description
3 Sketching
4 Geoprocessing
5 Project Need Form (PNF) Requires Approval
6 Project Initiation Form (PIF) Requires Approval

Previous — Submit for Approval

5 Project Need Form (PNF)

5. **Bridges:** If the project/program includes a bridge or bridges, please describe the condition, such as bridge ratings, dates of inspection, weight restrictions, closings, structural adequacy, functional obsolescence, condition of other bridge elements, etc. Identify the bridge location and ID number (if known).

BDEPT = N19015.

ITEM 58 Bridge Deck Rating = 7.

ITEM 59 Bridge Superstructure Rating = 6.

ITEM 60 Bridge Substructure Rating = 6.

6. **Existing Utilities:** Identify and locate any underground utilities (water, sewer, gas, other) and overhead utilities (electric phone, cable). Identify any larger utility appurtenances, above ground or underground, such as cabinets or vaults. Identify any active or inactive railroad crossings.

B. Mobility - Problem, Need, or Opportunity

1. **Motor Vehicle Mobility and Congestion:** Please describe any existing or prospective highway congestion issues or bottlenecks. Identify the nature and extent of congestion, including when it occurs and whether there is queuing. Include any traffic analysis, including LOS (Level of Service) data or travel times, if available. Please describe any need or opportunity for greater connectivity or improved access along the corridor or to particular points along the facility. Identify any missing connection or constraint in access that could be improved for greater motor vehicle mobility.

MaPIT – Project Creation

PNF - Transit

massDOT Project Intake Tool (v1.2.22)

Michael Bolduc

Edit Project | Close

1 Start Here
Project Need & Initiation
2 Project Description
3 Sketching
4 Geoprocessing
5 Project Need Form (PNF) Requires Approval
6 Project Initiation Form (PIF) Requires Approval

Previous | Submit for Approval

5 Project Need Form (PNF)

including the limits and width of any existing facility. In addition, please characterize existing bike traffic, and condition of any bike racks or other associated appurtenances. Identify if project location is included in any local, regional or state bicycle routes.

4. **Transit Mobility and Accommodations:** Please describe the existing transit accommodations (bus stops, bump outs, shelters, transit signal prioritization), include known bus routes and providers. In addition, please characterize existing transit usage, and other known obstructions.

Project intersects with PVTA Transit Routes

There was no intersection with MBTA Transit Routes

5. **Connectivity:** Please describe any need or opportunity for greater connectivity or improved access along the corridor or to particular points along the facility. Identify any missing connection or constraint in access that could be improved for greater bicycle or pedestrian mobility.

C. Safety - Problem, Need, or Opportunity

1. **Motor Vehicle Safety:** Please describe any safety concerns on the facility. Please note the presence of any MassDOT crash clusters, regionally identified high-crash locations, or any other documented need for improvements. Provide any crash history within the project limits, including number and severity of crashes, type of crashes and whether there have been any fatalities. Include the calculated crash rate, if available. If the project location contains any MassDOT identified crash clusters, a Road Safety Audit will need to be conducted prior to making a 25% submission.

MaPIT – Project Creation

PNF - Safety

massDOT Project Intake Tool (v1.2.22) — Michael Bolduc

Edit Project — Close

1 Start Here
Project Need & Initiation
2 Project Description
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5 Project Need Form (PNF) Requires Approval
6 Project Initiation Form (PIF) Requires Approval

5 Project Need Form (PNF)

C. Safety - Problem, Need, or Opportunity

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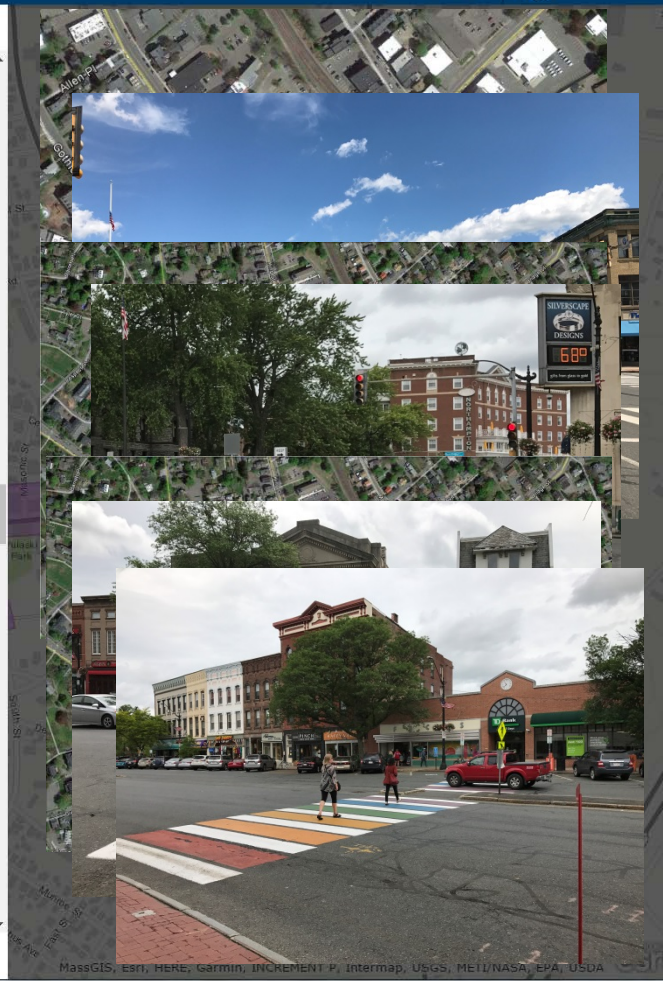
This location has been identified as a Top 200 high crash location. A road safety audit must be performed prior to the 25% submission, as noted in the 25% Design Submission Guidelines, Section IC5. (http://www.massdot.state.ma.us/Portals/8/docs/traffic/FunctionalDesignReportGuidelines.pdf)

This location has been identified as an Highway Safety Improvement Program (HSIP) eligible location. A road safety audit must be performed prior to the 25% submission, as noted in the 25% Design Submission Guidelines, Section IC5. (http://www.massdot.state.ma.us/Portals/8/docs/traffic/FunctionalDesignReportGuidelines.pdf)

2. **Safety for Other Users:** Please describe adjacent significant activity centers (schools, senior centers, places of assembly, industrial operations, or parks) and describe any safety issues for other users such as pedestrians, bicyclists, persons with disabilities, transit riders, trucks, school children, etc. Please note the presence of any MassDOT bike or pedestrian clusters, or any other documented need for improvements. If the project location contains any MassDOT identified crash clusters, a Road Safety Audit will need to be conducted prior to making a 25% submission.

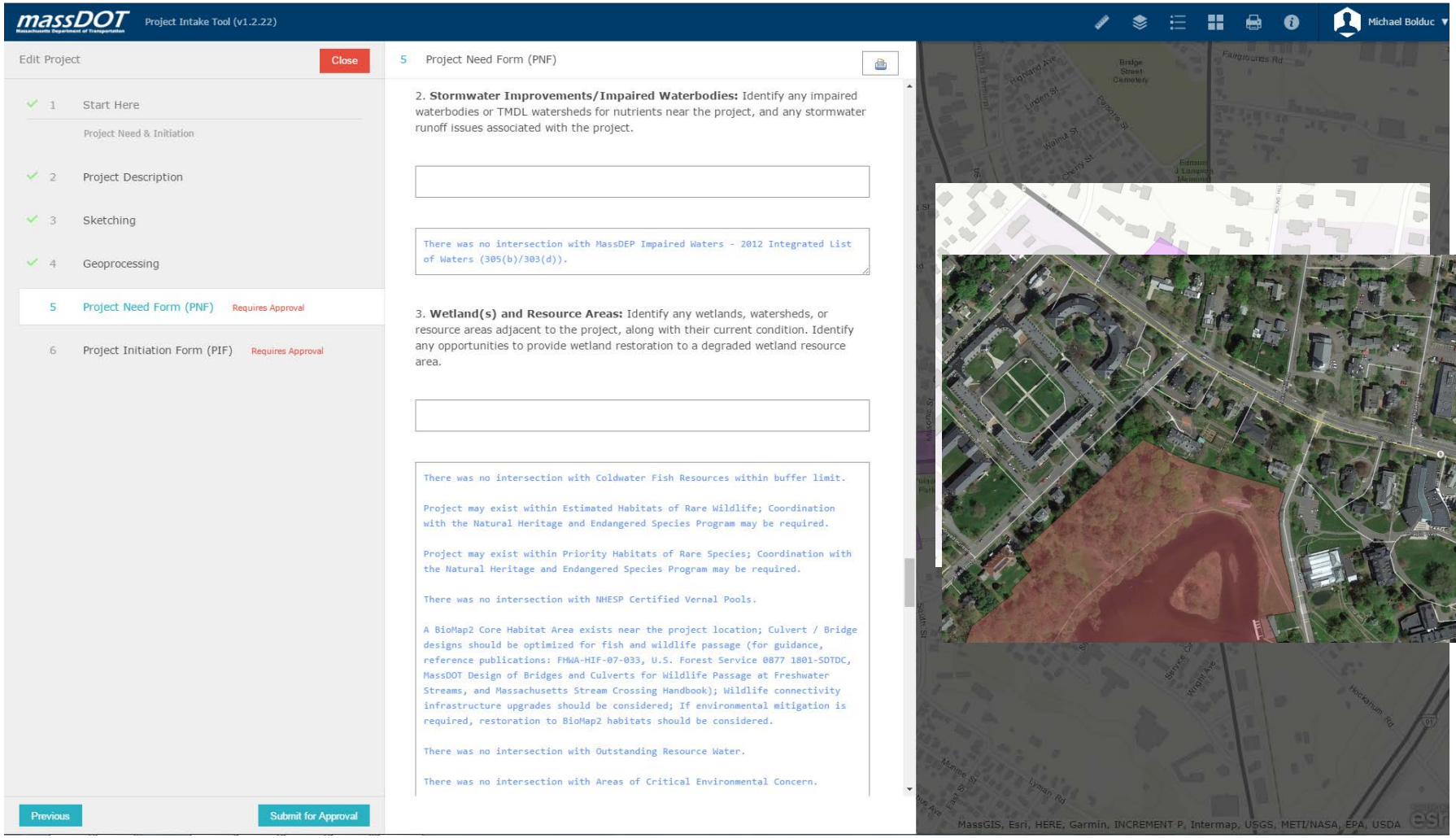
This location has been identified as an Highway Safety Improvement Program (HSIP) eligible location. A road safety audit must be performed prior to the

Previous — Submit for Approval



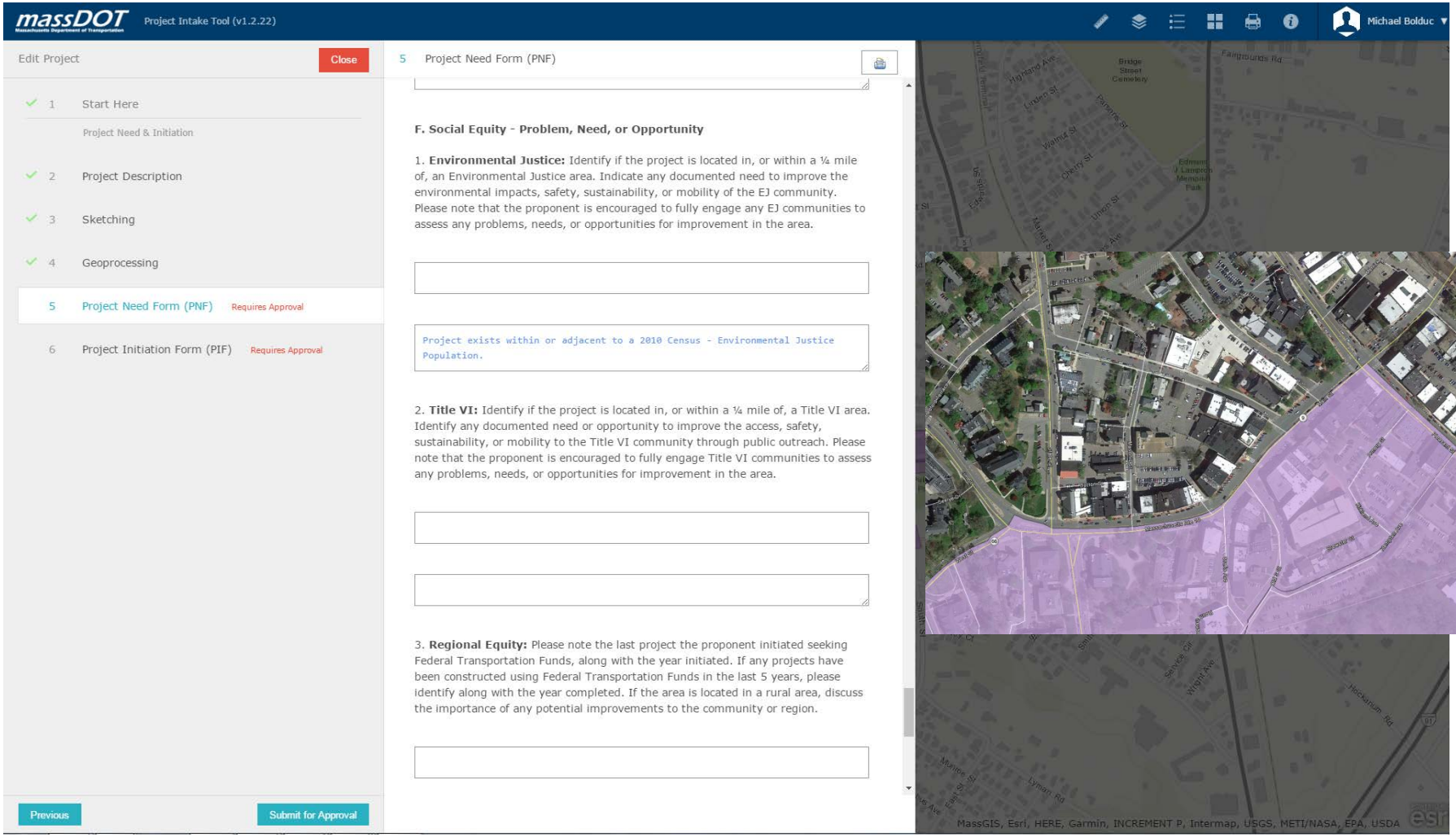
MaPIT – Project Creation

PNF – Environmental



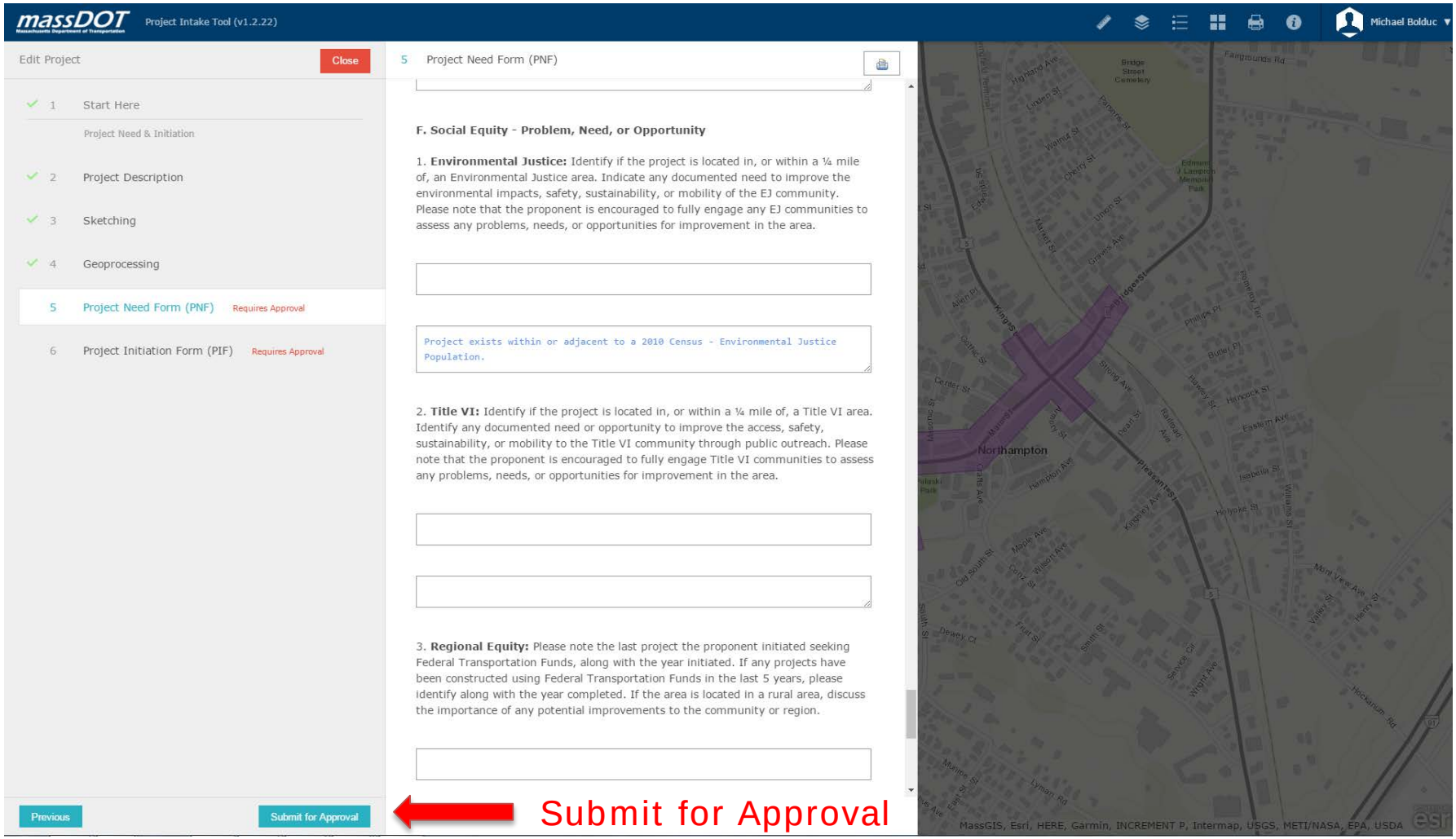
MaPIT – Project Creation

PNF - Social Equity



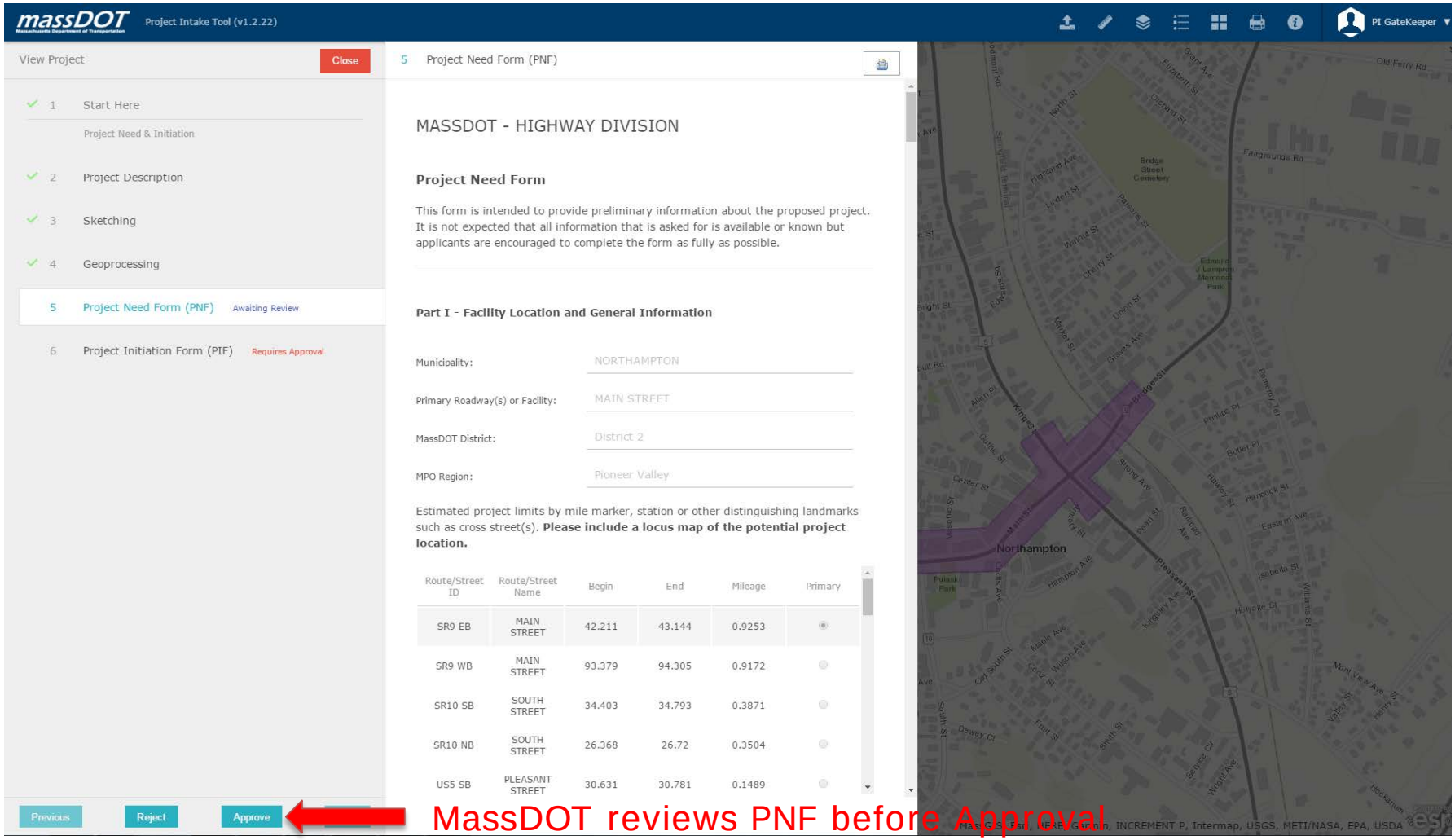
MaPIT – Project Creation

PNF - Submit for MassDOT District approval



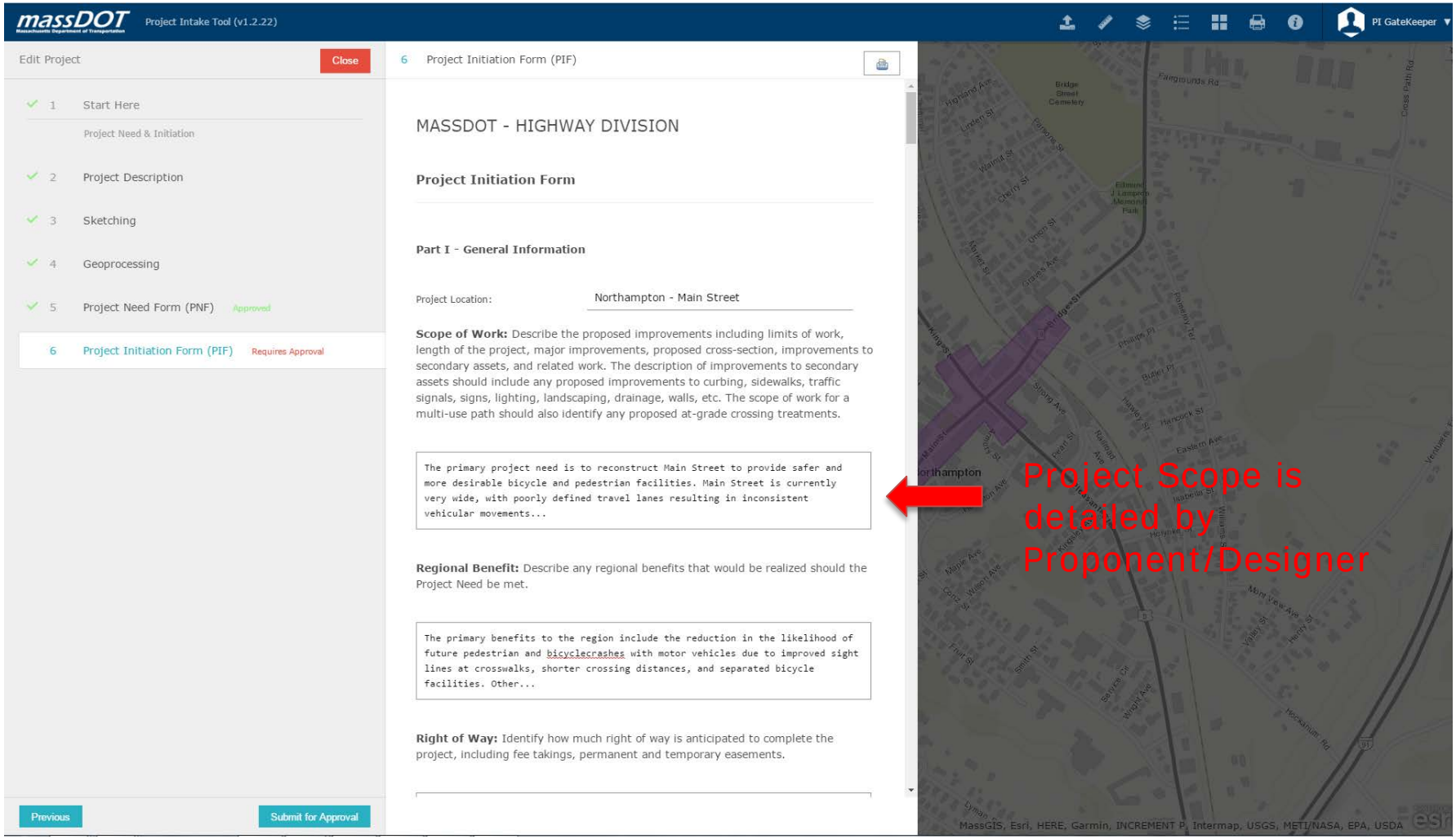
MaPIT – Project Creation

District “Gatekeepers” receive e-mail notification of submitted PNF



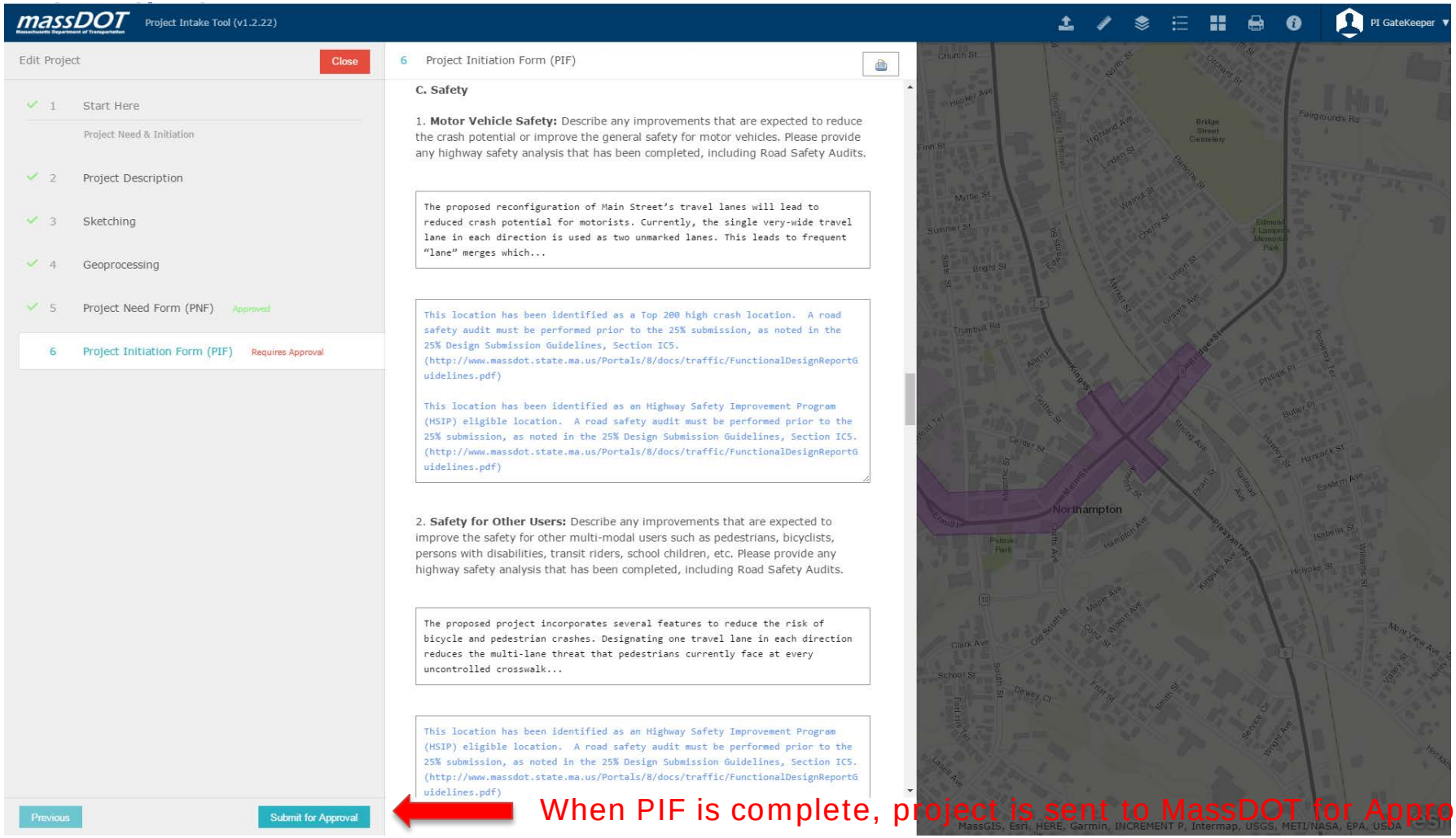
MaPIT – Project Creation

Approved PNF gives proponent access to PIF



MaPIT – Project Creation

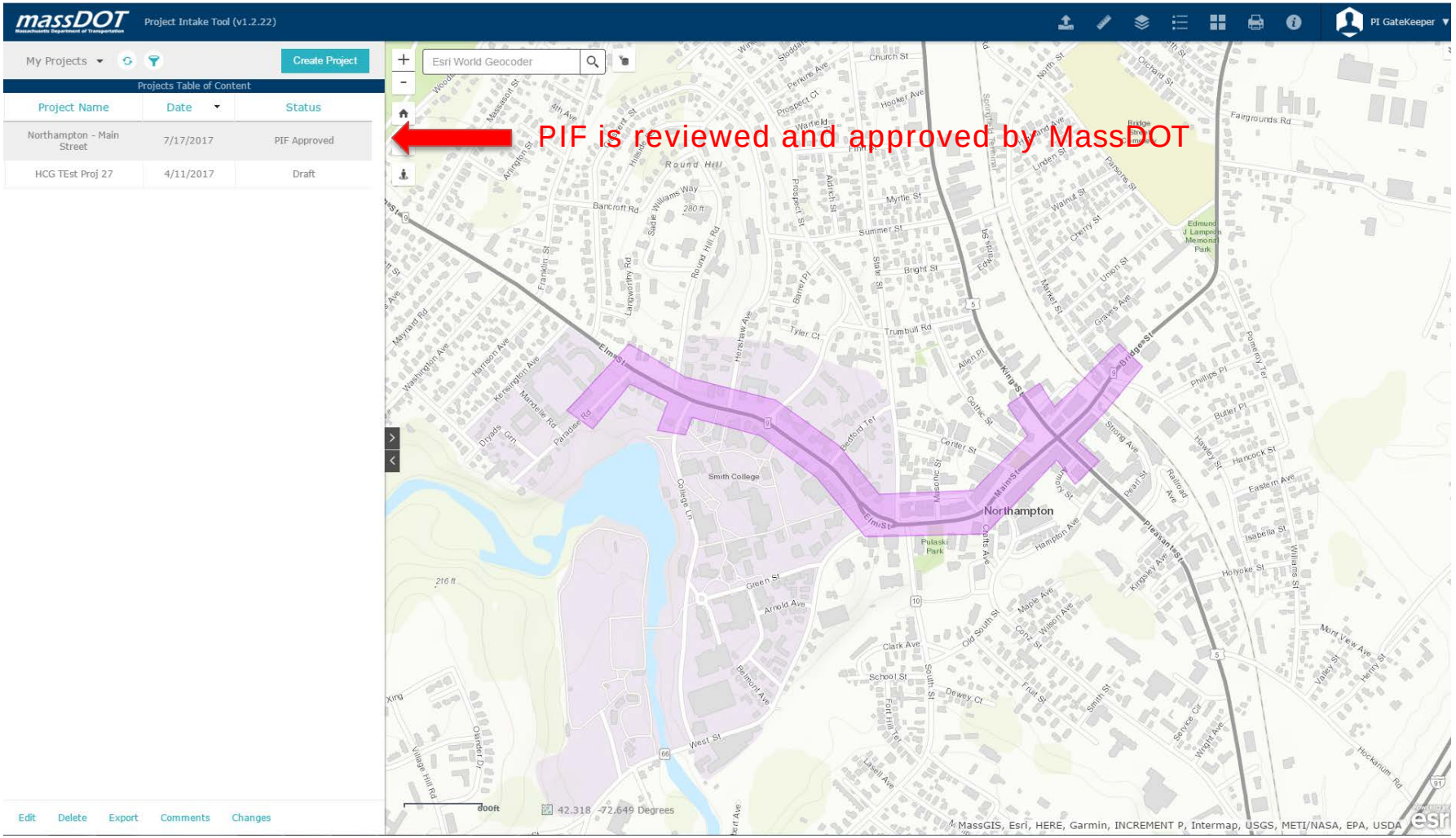
PIF – Previous information is carried over & project scope is



When PIF is complete, project is sent to MassDOT for Approval

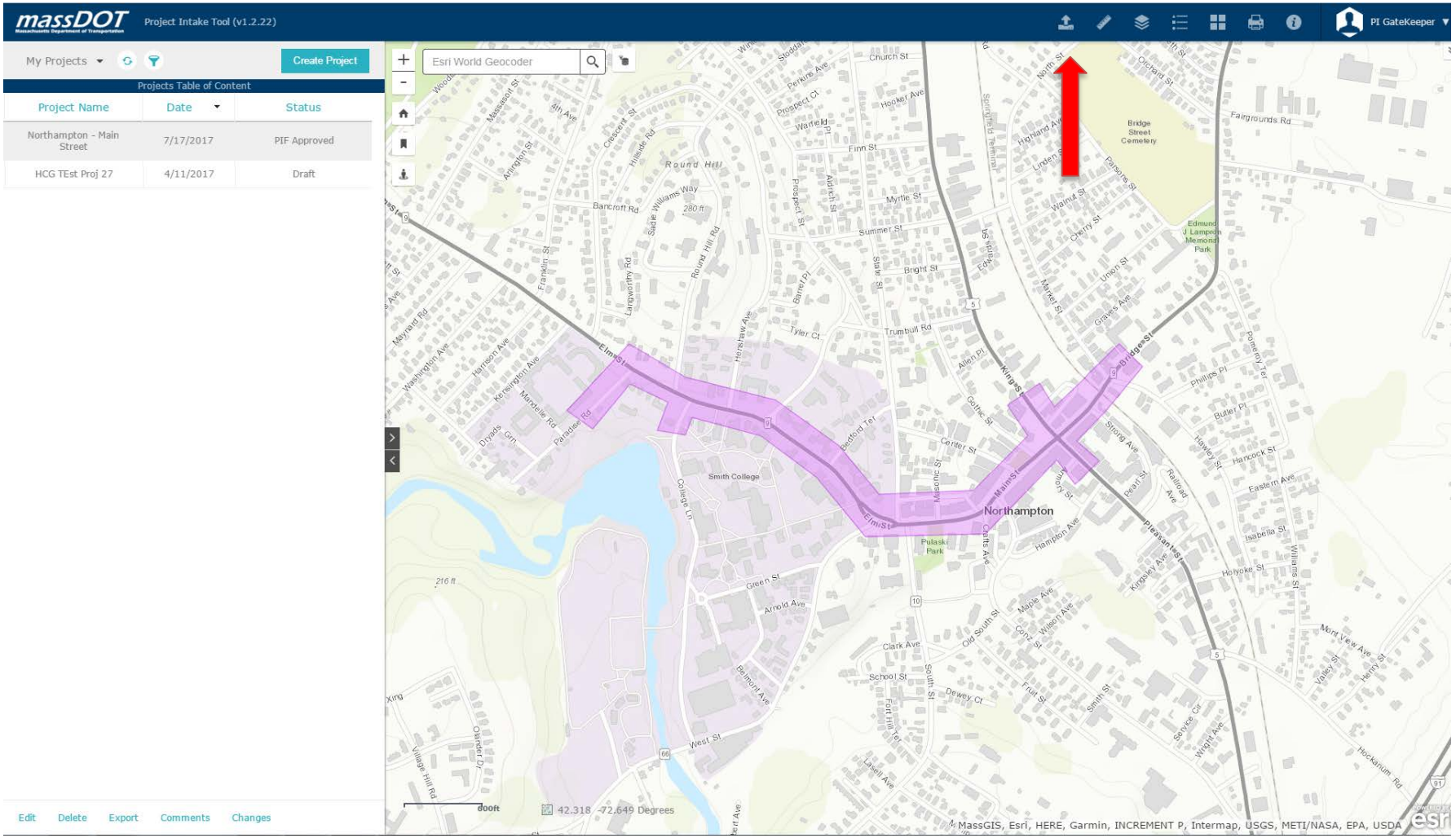
MaPIT – Project Creation

Notification sent to MassDOT District of PIF completion



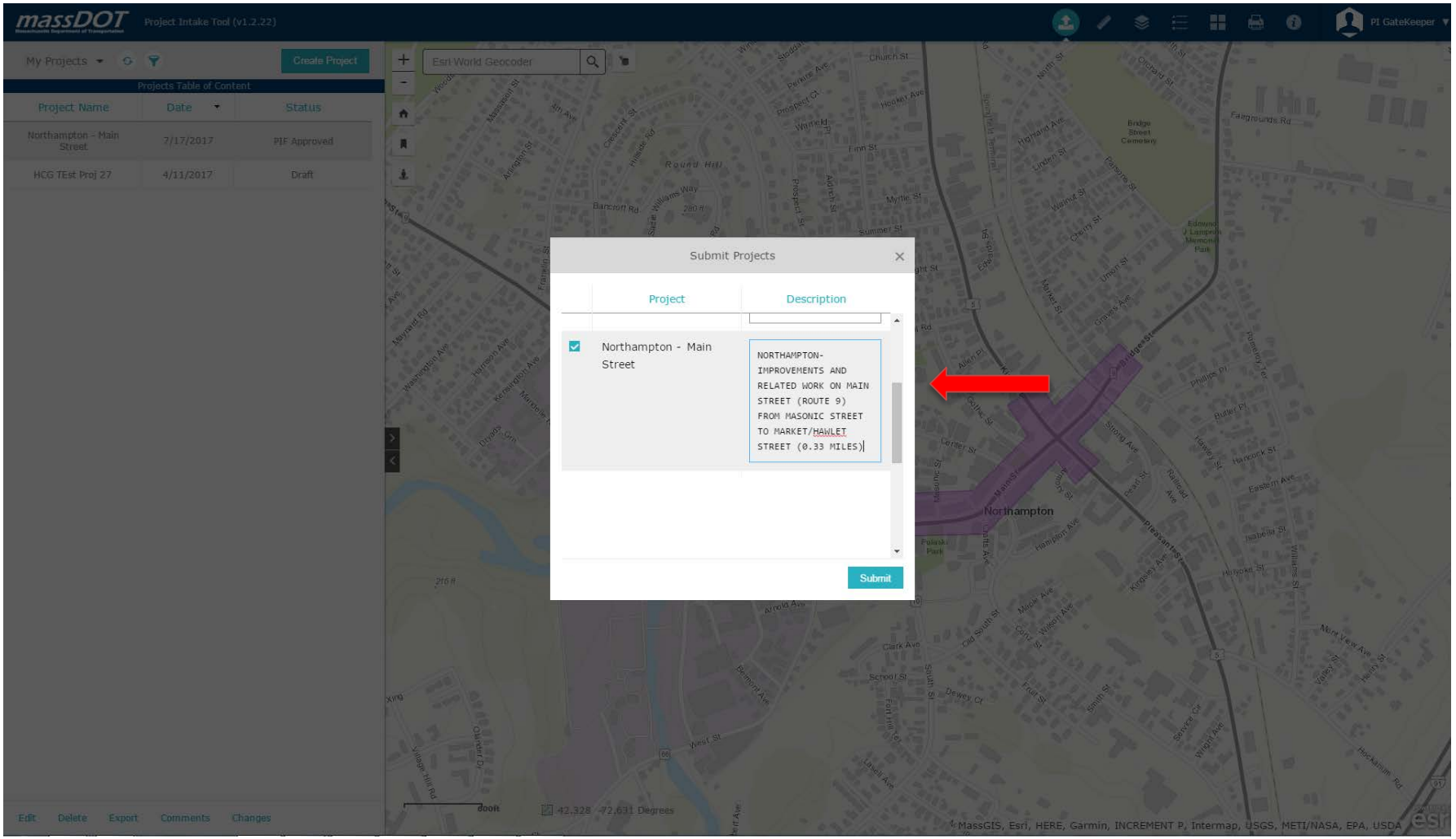
MaPIT – Project Creation

MassDOT Gatekeepers use widget to approve projects



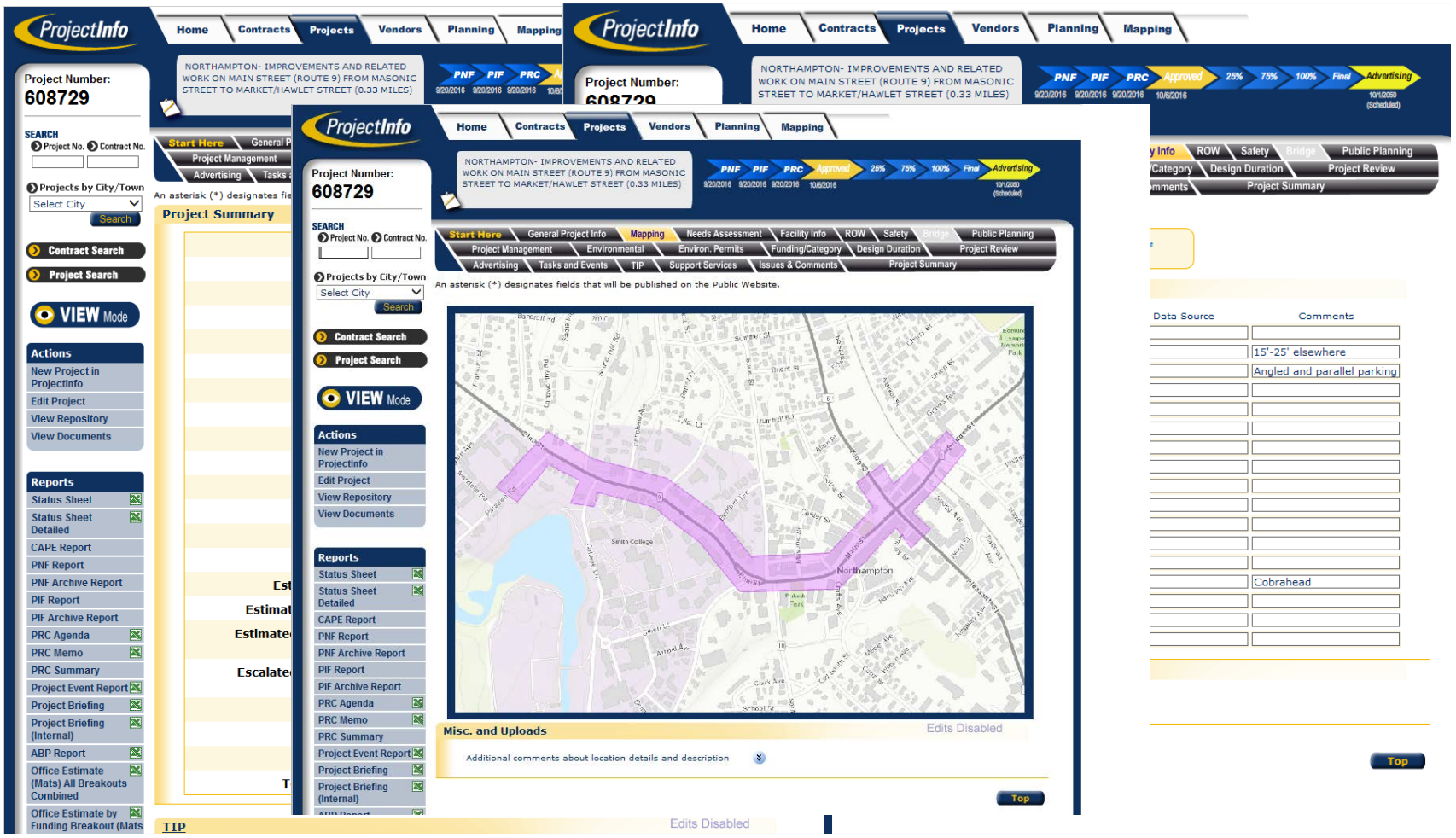
MaPIT – Project Creation

Project is submitted to ProjectInfo for official creation



MaPIT – Project Created

Project is officially created, information is automatically pushed from MaPIT to MassDOT's internal database, and a project number is created



MaPIT – Scoring

Project is then scored using information provided by forms and GIS

C. Safety - Problem, Need, or Opportunity

1. **Motor Vehicle Safety:** Please describe any safety concerns on the facility. Please note the presence of any MassDOT crash clusters, regionally identified high-crash locations, or any other documented need for improvements. Provide any crash history within the project limits, including number and severity of crashes, type crashes and whether there have been any fatalities. Include the calculated crash rate, if available. If the project location contains any MassDOT identified crash clusters, a Road Safety Audit will need to be conducted prior to making a 25% submission.

The proposed reconfiguration of Main Street's travel lanes will lead reduced crash potential for motorists. Currently, the single very-wid travel lane in each direction is used as two unmarked lanes.This lead to frequent "lane" merges which can lead to side-swipe and rear-end collisions. The proposal includes one lane in each direction with dedicated left-turn pockets at all side streets and signalized intersections in order to reduce the crash potential (and corridor/intersection LOS).

This location has been identified as a Top 200 high crash location. road safety audit must be performed prior to the 25% submission, as noted in the 25% Design Submission Guidelines, Section IC5. (http://www.massdot.state.ma.us/Portals/8/docs/traffic/FunctionalDesi eportGuidelines.pdf)

This location has been identified as an Highway Safety Improvement Program (HSIP) eligible location. A road safety audit must be performed prior to the 25% submission, as noted in the 25% Design Submission Guidelines, Section IC5. (http://www.massdot.state.ma.us/Portals/8/docs/traffic/FunctionalDesi eportGuidelines.pdf)

r MassDOT Projects

oject #: 608729 District: 2

C	SAFETY				Project # 608729
	The extent to which the project addresses transportation safety issues.				
	This section is worth 15% of the final score			Maximum Points for this Section:	10
	Criterion	Factor	Points	Note	Score
1	**HSIP Eligibility and Safety for Motor Vehicles** (Score based on a intent to improve motor vehicle safety)	Project targets critical motor vehicle safety issues identified through a Road Safety Audit	6	Project is HSIP Eligible with multiple Top 200 crash clusters.	5
		Project may be HSIP eligible based on data from a state or regional HSIP eligibility program, and project targets safety issues	5		
		Crashes are higher than state or district average and project specifically address crashes	4		
		Project includes improvements to a Strategic Emphasis Area of the Strategic Highway Safety Plan (examples may include lane departures, intersection improvements, traffic calming measures, etc.)	3		
		Crashes are lower than state or district average, but project will implement known safety improvements	2		
		Project is an NHS roadway or documented evacuation route AND project will improve its condition	1		
		Safety improvements not applicable / no specific safety improvements	0		
2	**Effect on Safety for Other Users** (Score based on a project's intent to improve bicycle and pedestrian safety)	Project targets critical bicycle or pedestrian safety issues identified through a Road Safety Audit	4	Project is HSIP Eligible with multiple bike/ped crash clusters.	3
		Project may be HSIP eligible, and/or data clearly indicates a need for improved bicycle or pedestrian safety that the project addresses	3		
		Project includes improvements to a Strategic Emphasis Area of the Strategic Highway Safety Plan (examples may include separated bike lanes, shared use paths, complete streets, safe routes to school, crossing signal improvements, traffic calming measures, etc.)	2		

Cost per

Evaluated by: Mike Bolduc Date Scored: 1/12/17 Previous Score: 61

Version: 2.0

Future Additions

- Many more layers will be added to the screening feature; continual process
- Some layers will include buffers to incorporate areas of concern that may not overlap with project limits (nearby impaired waterways, schools, etc.)
- Regional Planning Agencies have many GIS layers that could be added; RPAs can use screening feature to help with their own priority scoring
- Economic Data will be added, including Priority Development Areas, Brownfield Redevelopment Sites, undeveloped commercial properties, etc.
- Other MassDOT Divisions such as the MBTA will have versions of MaPIT to help initiate their projects
- A separate scoring module will be developed to allow MassDOT

Summary & Benefits

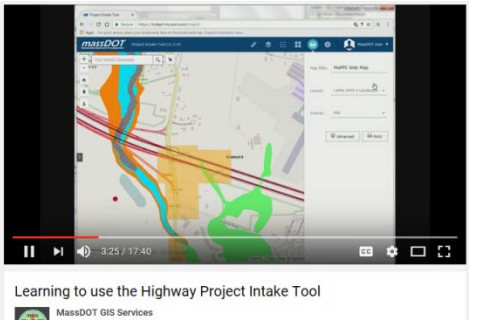
- MaPIT allows municipalities and other proponents to initiate projects quicker, easier, and more efficiently with less reliability on a consultant
- Identifies issues and vulnerabilities early
- Lends efficiency to generating a scope of work, environmental permitting, safety audits, scoring, and project delivery
- Maps project locations for DOT and public viewing
- Lends transparency to MassDOT's project development and scoring processes

Next Steps & Rollout

- **Tool in QA/Final Testing now**
- **Anticipated go-live by end of summer 2017 as part of *geoPASS* (The Geo-spatial Planning, Analysis and S**
- **Train rly fall and**
- **Tool ith inpu n and colla**

Additional Information

YouTube Video demonstrating MaPIT use:
https://www.youtube.com/watch?v=fM1qDgt2GiI
(or search “Learning to use the Project Intake Tool” in YouTube)



MassDOT geoDOT:
http://massdot.maps.arcgis.com/home/index.h

Massachusetts geoDOT GIS For Transportation

massDOT Massachusetts Department of Transportation Highway Division

MassDOT Contacts (MaPIT Project Managers):

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Michael Bolduc, Transportation Planner:
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202-366-4074

American Association of State Highway and Transportation Officials
AASHTO

U.S. Department of Transportation
Federal Highway Administration

SHRP2 on the Web

- **GoSHRP2**
  www.fhwa.dot.gov/GoSHRP2
  – Learn how practitioners are using SHRP2 products

- **SHRP2 @AASHTO**
  http://SHRP2.transportation.org
  – Implementation information for AASHTO members

- **SHRP2 @TRB**
  www.TRB.org/SHRP2
  – Research information

- **FHWA C19 Website**
  https://www.environment.fhwa.dot.gov/strmlng/shrp2-c19/default.asp