

# I-91 VIADUCT STUDY

Springfield, Massachusetts



## Working Group Meeting #2

One Financial Plaza  
1350 Main Street  
3rd Floor, Community Room A  
Springfield, Massachusetts



- Welcome & Introductions
- Overview of Working Group Meeting #1
- Review & Discussion of Task 1 Draft Materials
- Review and Discussion of Task 2 Draft Materials
  - Existing Conditions
    - Traffic
    - Multi-modal
    - Land Use & Economic Development
    - Environmental & Public Health
- Issues & Constraints
- Next Steps

# Welcome & Introductions



Working Group Meeting #2

- Ethan Britland – Project Manager (MassDOT)
- Margaret Round – (Mass Public Health)
- Mark Arigoni, L.A. – Principal-in-Charge (MMI)
- Van Kacoyannakis, P.E. – Traffic (MMI)
- John Hoey – Facilitator (MMI)
- Michael Gagnon, P.E. – Environmental/Public Health (MMI)
- Alexandra Church, AICP – Land Use & Economics (MMI)
- Rod Motamedi – Economics (UMass Donahue Institute)
- Nancy Farrell – Public Involvement (Regina Villa)
- Sarah Paritsky – Public Involvement (Regina Villa)



- Task 1: Study Area, Goals & Objectives, Evaluation Criteria, and Public Involvement Plan
- **Task 2: Existing Conditions, Future No Build Conditions and Issues Evaluation**
- Task 3: Alternatives Development
- Task 4: Alternatives Analysis
- Task 5: Recommendations
- Task 6: Final Report



# Overview to Working Group Meeting #1



Working Group Meeting #2

## ■ Task 1

- Study Area
- Goals & Objectives
- Evaluation Criteria
- Public Involvement Plan





## ■ Goals

- Maintain or improve the safe and efficient function of I-91 Interstate and local street network within the project study area, while significantly improving the connection between the downtown urban core and the riverfront
- Improve the quality of life for city residents (surrounding neighborhoods), existing/future business owners, daily commuting workforce, and visitors to the City of Springfield and surrounding communities

## ■ Objectives

- Maintain or improve highway operations: I-91 North & South; I-91 & I-291 Interchange; I-291 on and off ramps within study area
- Improve safety on the Interstate
- Maintain or improve functionality, level of service and safety at key intersections within project area (regional and local)
- Enhance entrances/access points to City of Springfield from West (Memorial Bridge) and the riverfront
- Enhance and create new ADA compliant pedestrian (walking, jogging, bicycling, rollerblading, strollers, etc.) connections from the downtown (neighborhoods and business center) to the riverfront, as well as to the Hall of Fame and Union Station



- Coordinate with the Knowledge Corridor improvements and operations
- Create multimodal accommodations at street level for safe mobility to and from key destinations in conjunction with corridor improvements
- Create more attractive, economically viable waterfront connection(s)
- Enhance access to existing development parcels, and create new development parcels
- Minimize environmental impacts (air, water, noise)
- Improve public health and awareness
- Environmental Justice
- Enhance intermodal connectivity (passenger vehicle, bus, rail, parking)
- Improve the overall visual presence of the Interstate on the community(s) traversed or served

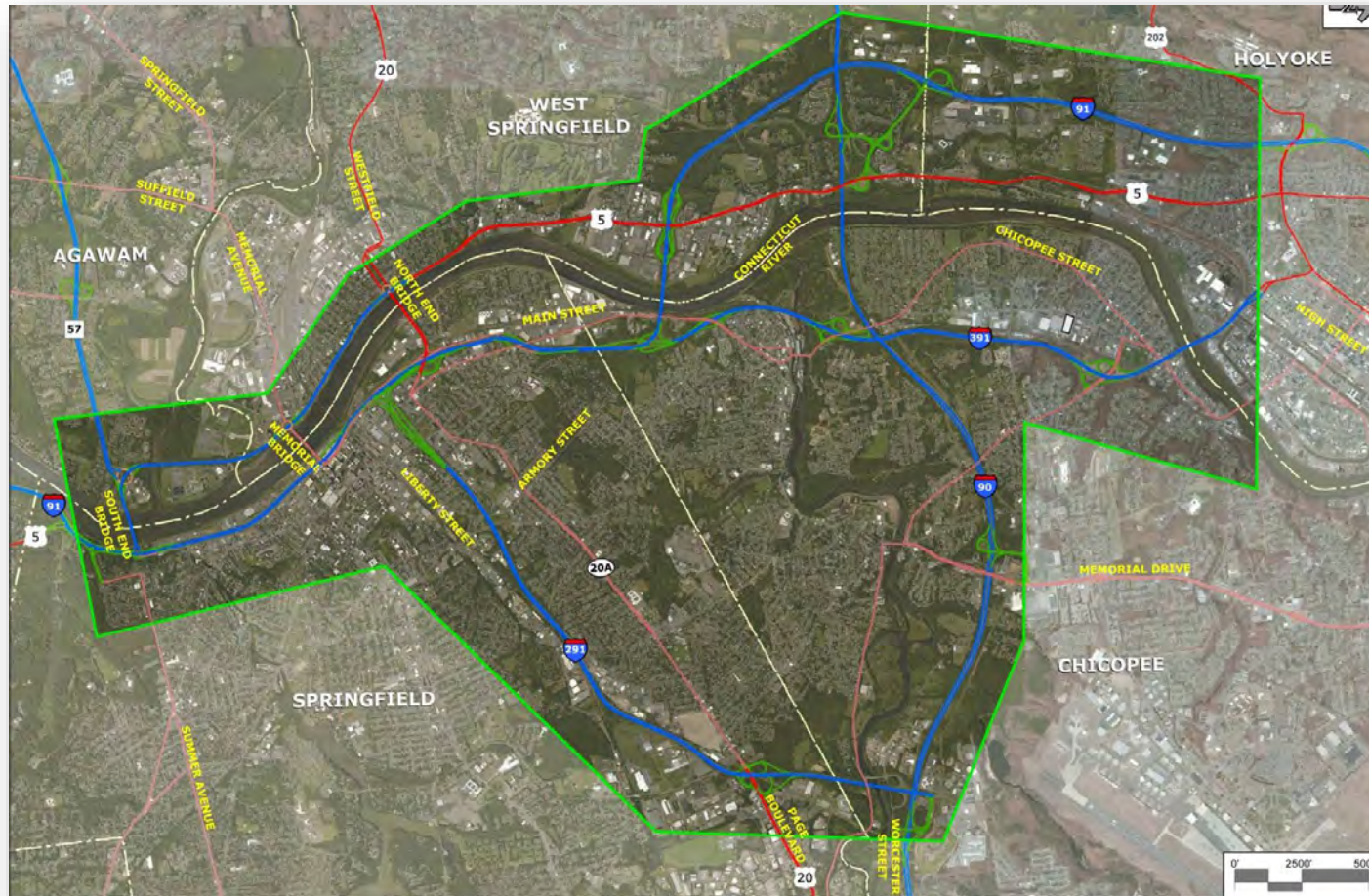


- Mobility and Accessibility
- Safety
- Health and Environmental Effects
- Land Use and Economic Development
- Community Effects
- Cost

# Draft Regional Transportation Impact Area



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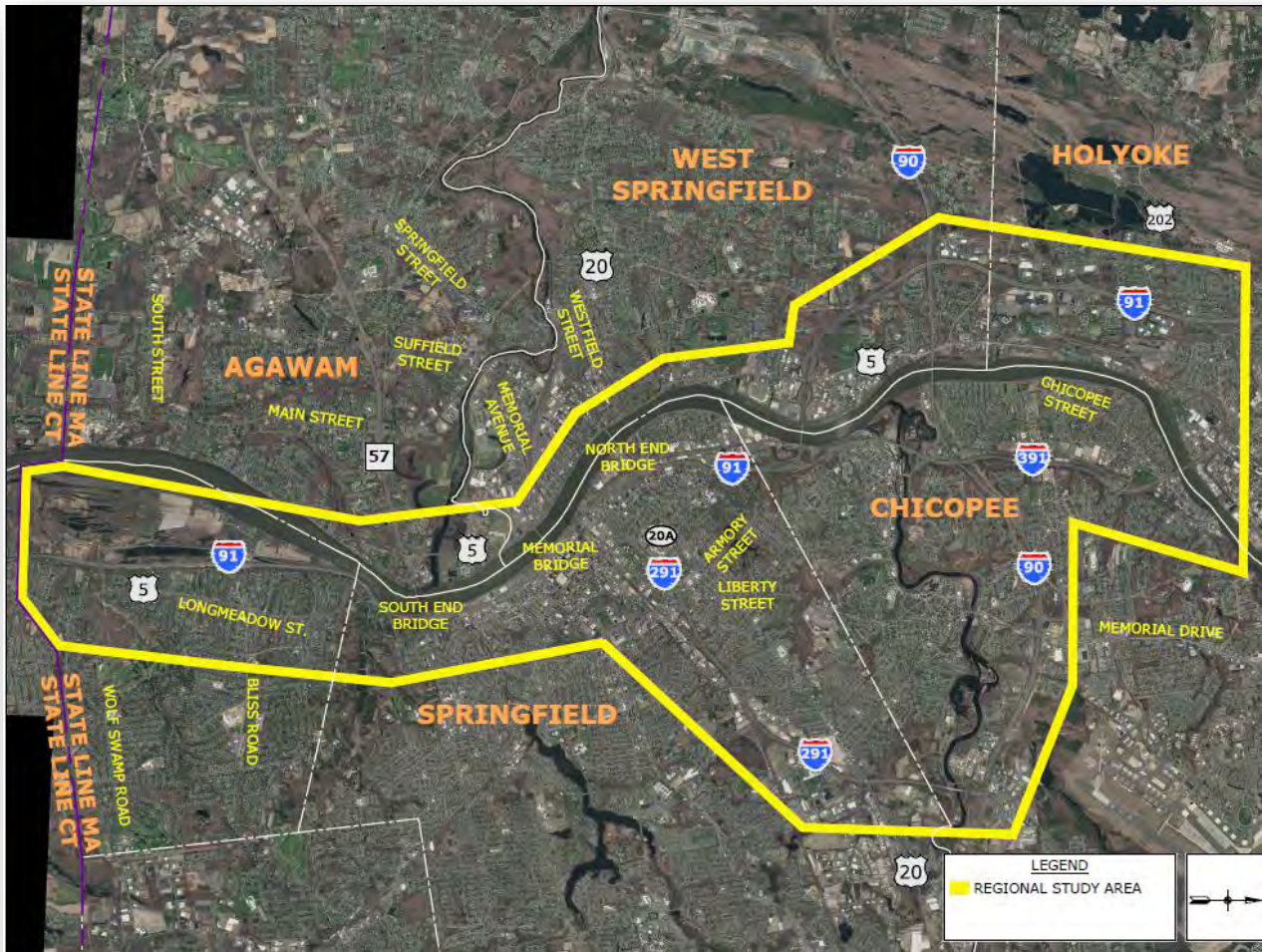




# Revised Regional Transportation Impact Area



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MACBROOM**

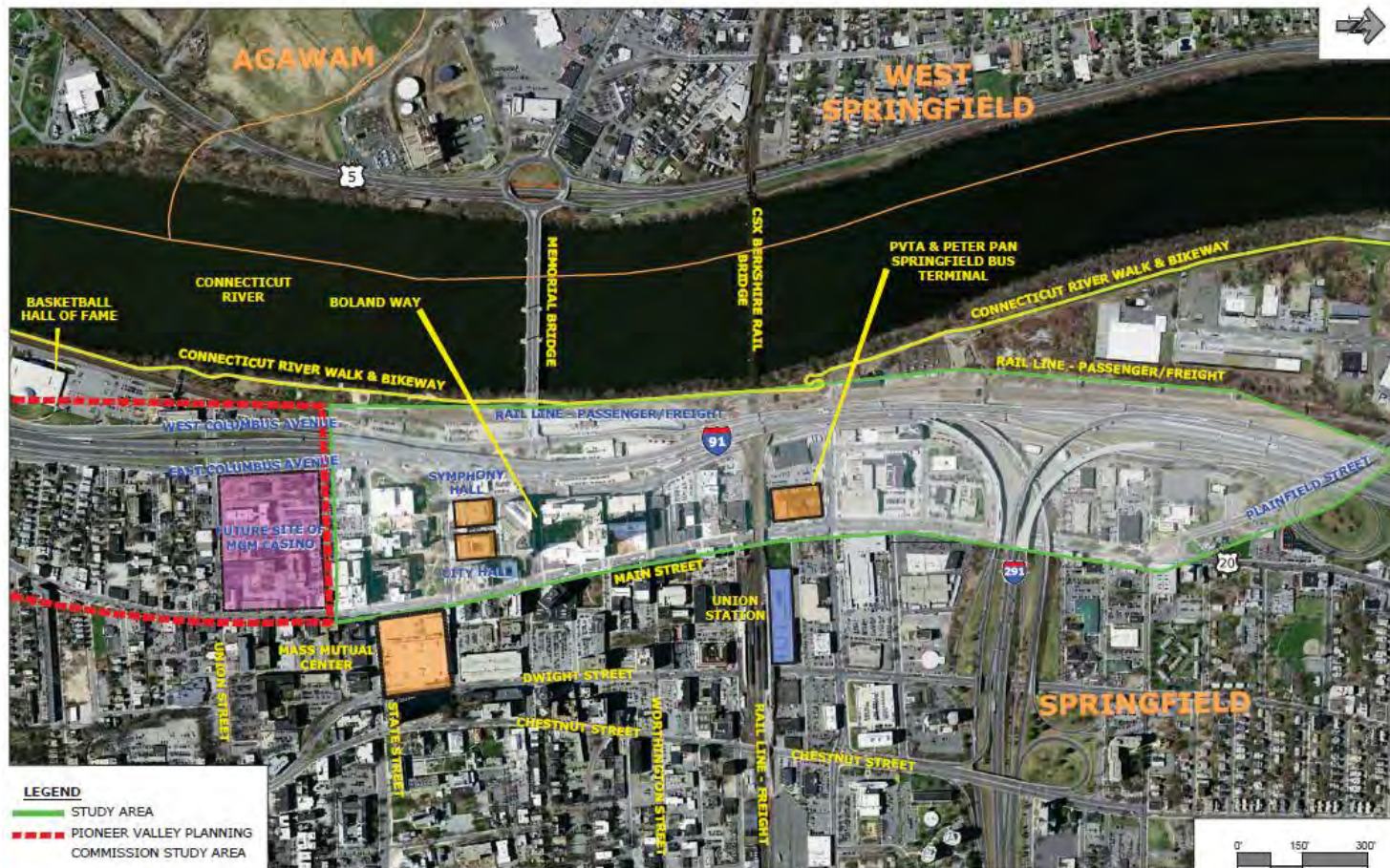




# Draft Primary Study Area



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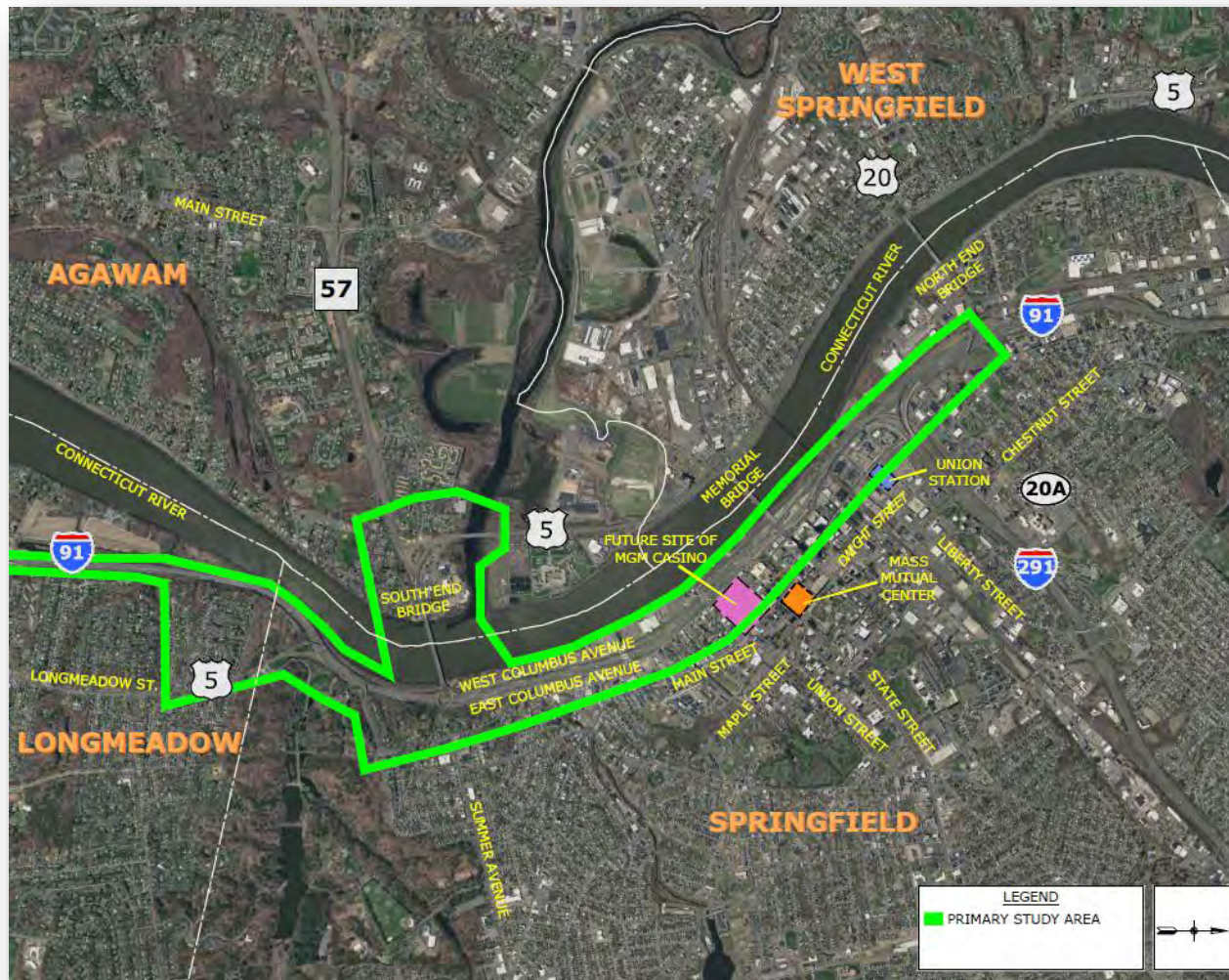




# Revised Primary Study Area



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# Review & Discussion of Task 2 Draft Materials



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## ■ Existing Conditions

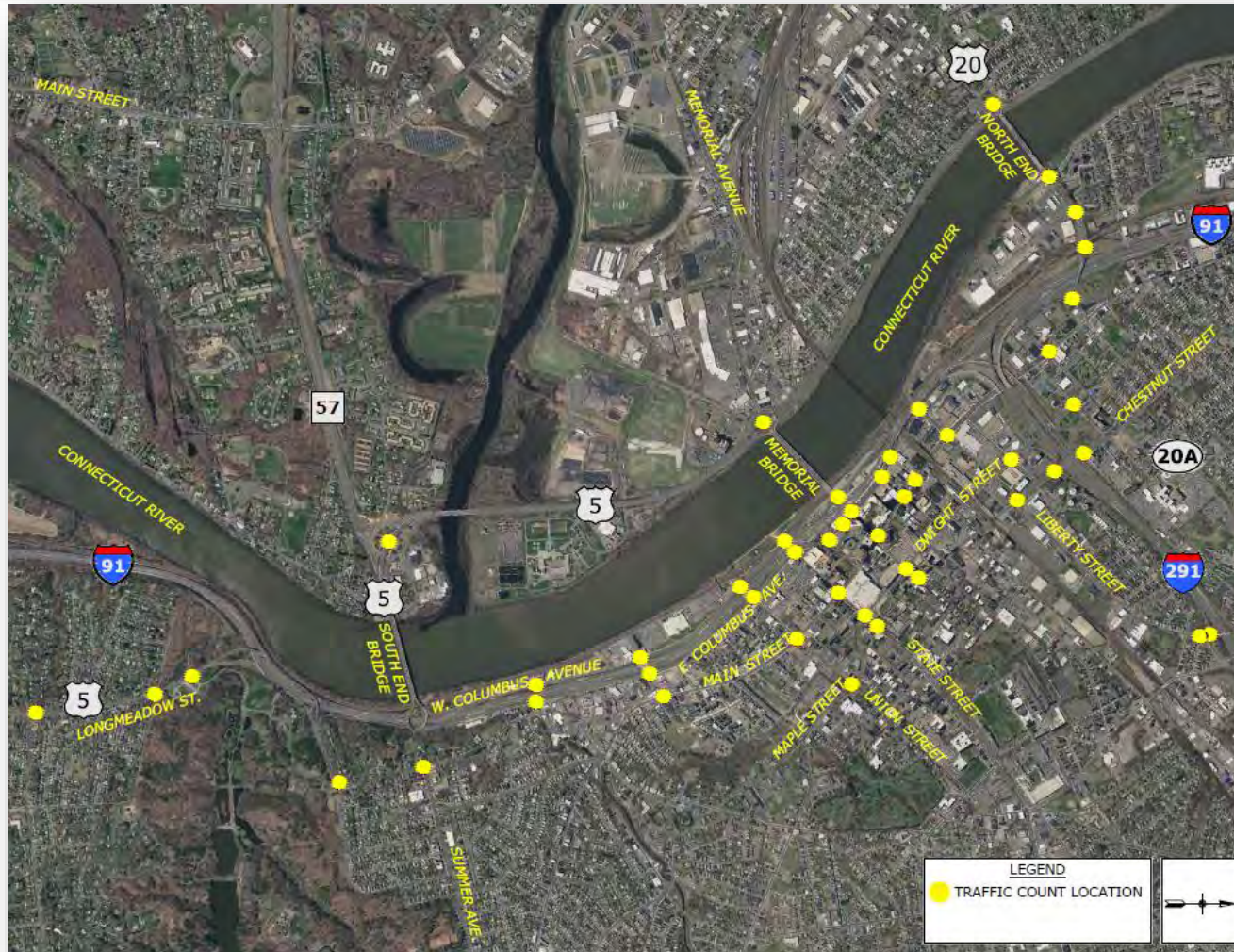
- Traffic
- Multi-modal
- Land Use & Economic Development
- Environmental & Public Health



# Traffic Count Locations



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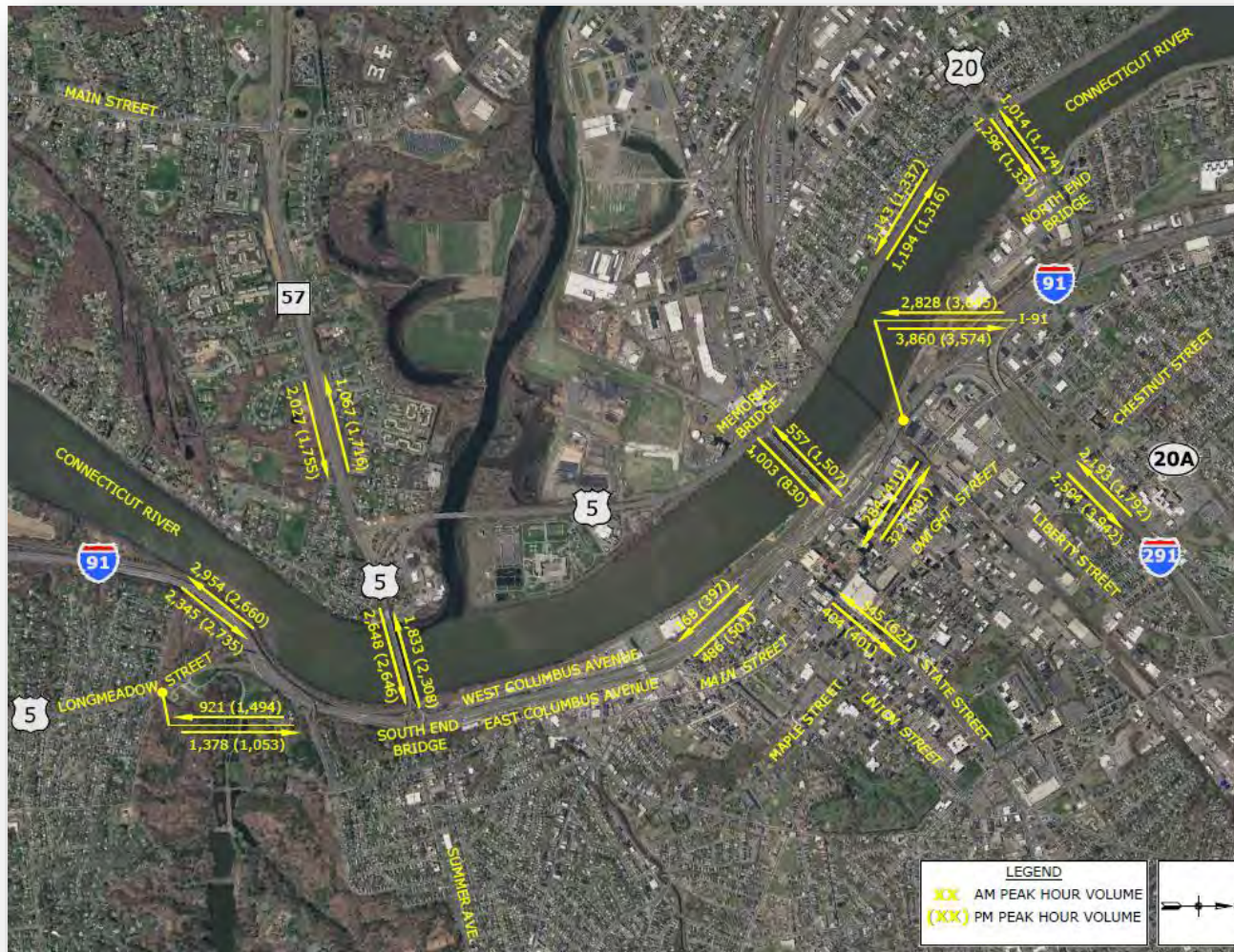




# Regional Traffic Volumes



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# Level of Service Criteria



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Level of Service	Signalized Intersections Delay (sec/veh)
A	$\leq 10$
B	>10-20
C	>20-35
D	>35-55
E	>55-80
F	>80

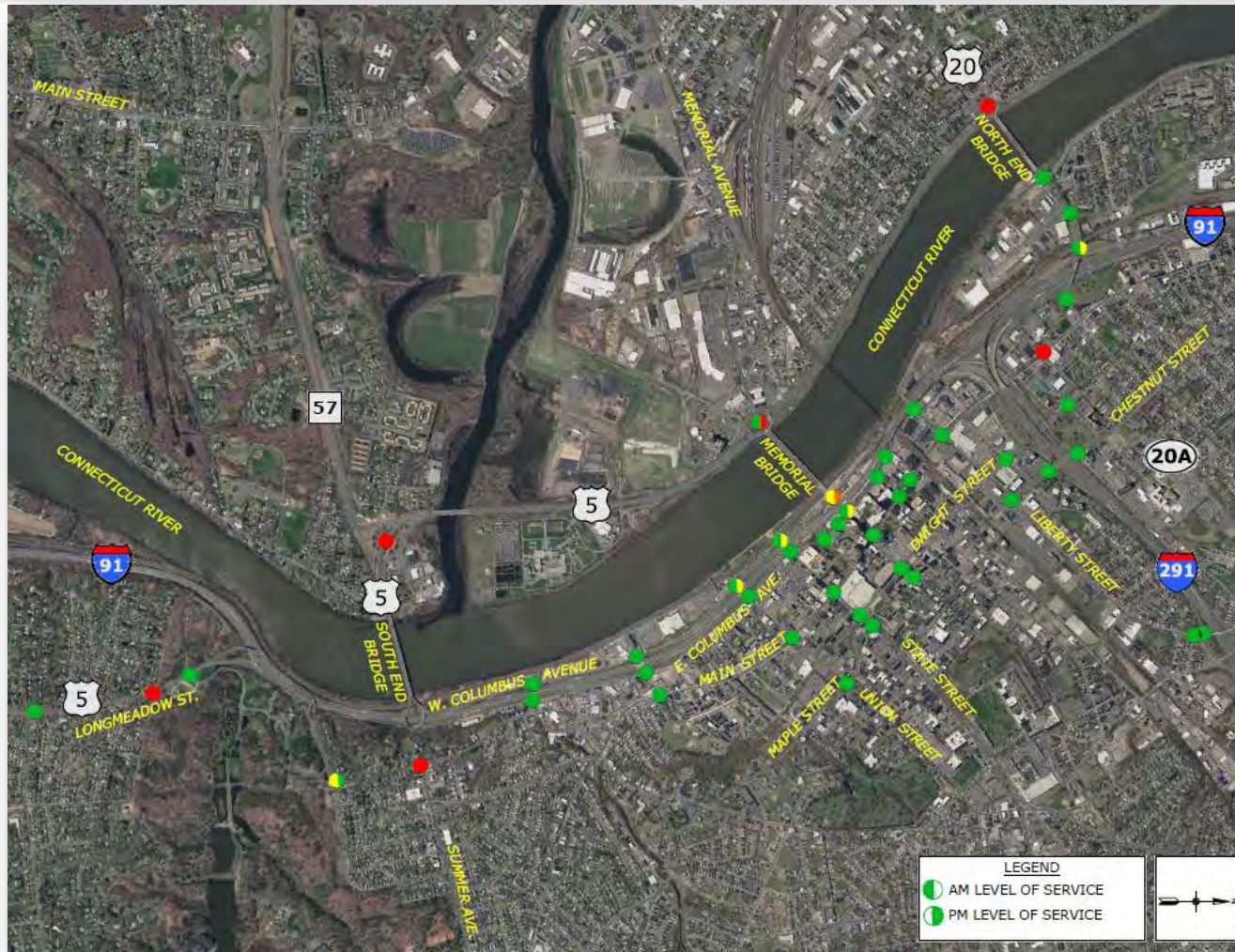




# Traffic Operations



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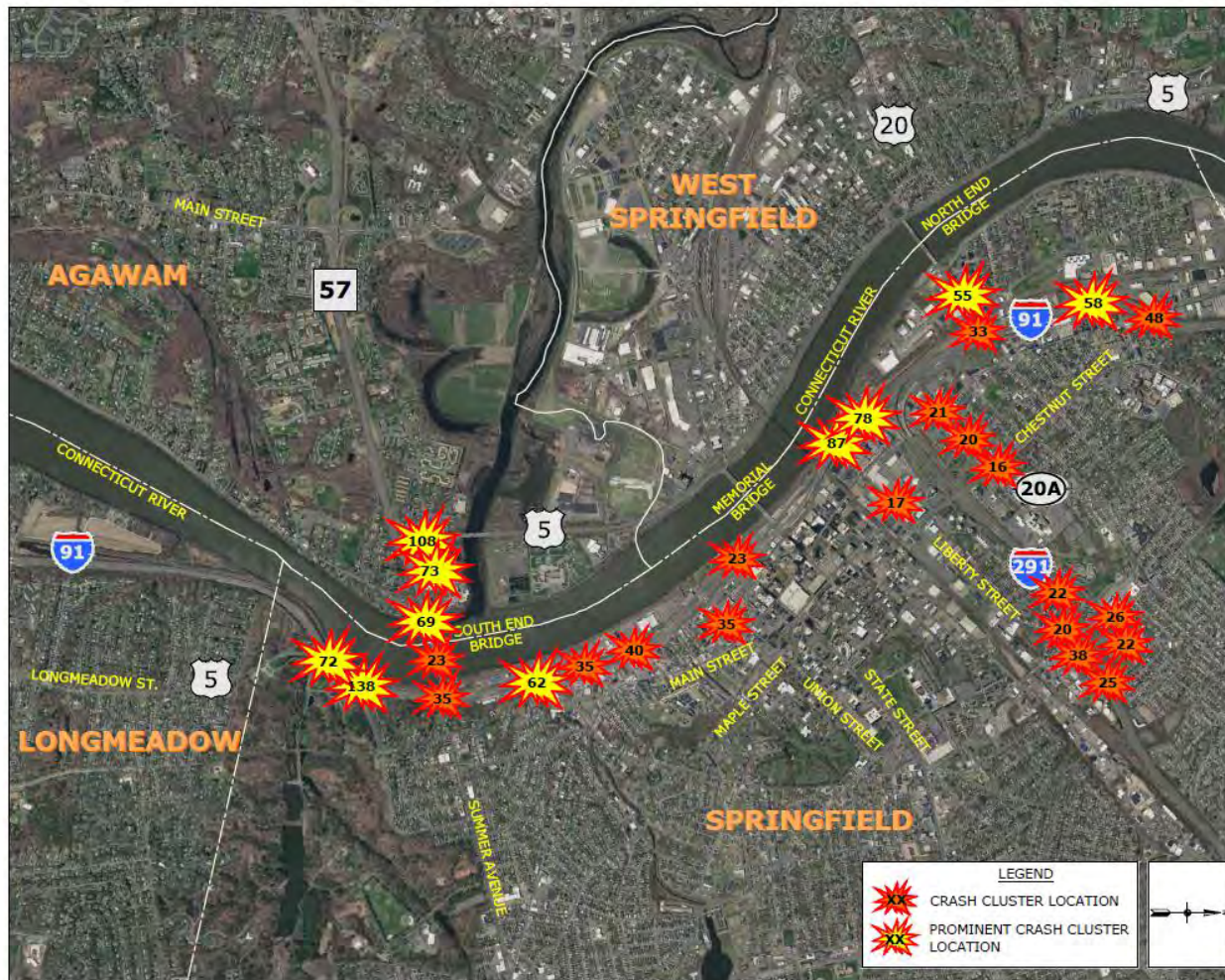




# Crash Clusters



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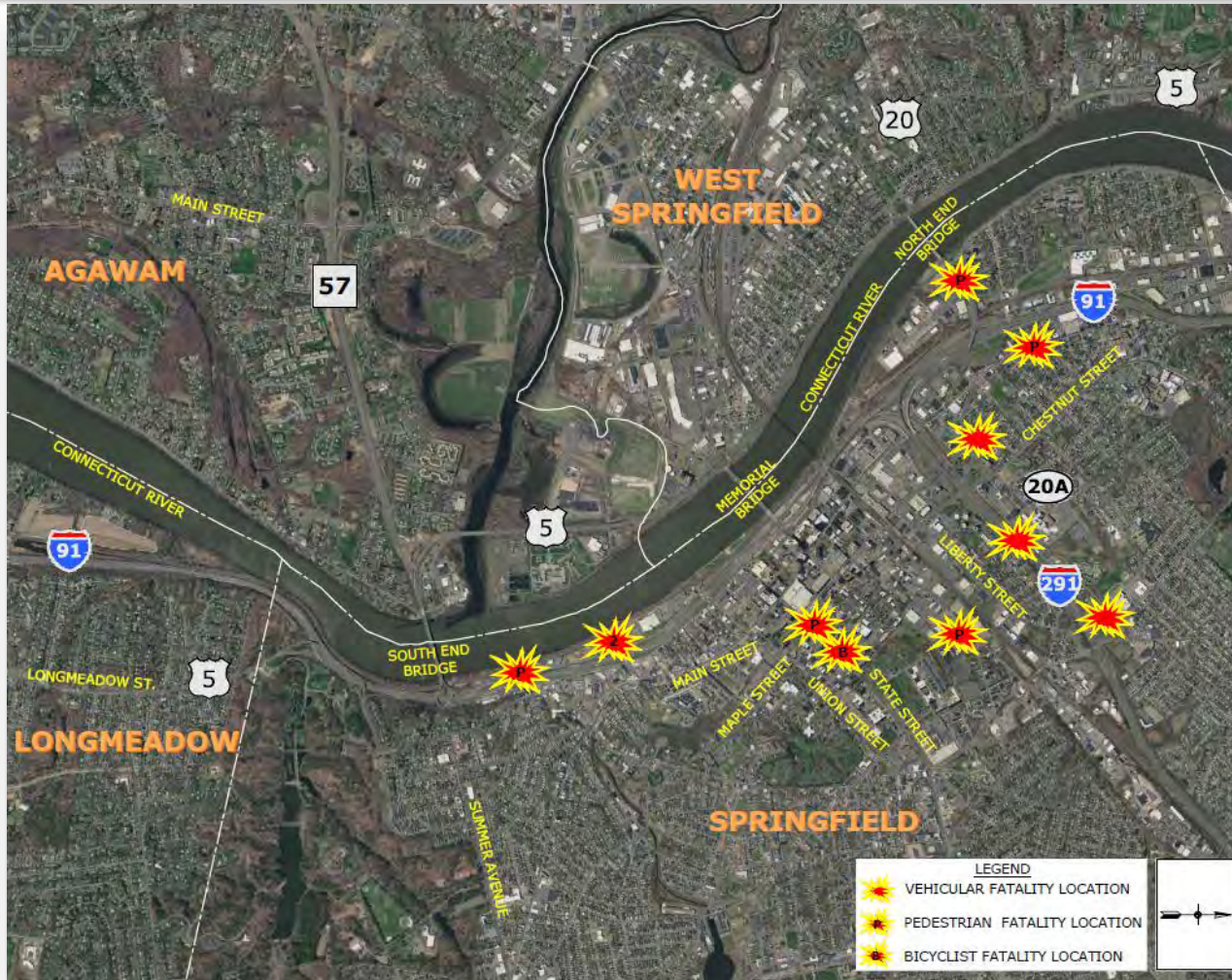




# Fatality Locations



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- Between 2010 and 2012, there were five fatalities within the primary study area, two crashes involved pedestrians.
- In 2013 and 2014, there were four fatalities within the primary study area, three involved pedestrians.
- Between 2007 and 2009, there were two fatalities list in the PVPC study in the study area.
- The South End Bridge is listed on the MassDOT 2012 Top Crash Locations Report.

- Between 2010 and 2012, there were 1004 accidents along I-91, I-291, and on and off ramps within the primary study area; ten of these accidents involved pedestrians.
- Between 2010 and 2012, an additional 314 accidents were reported on the South End Bridge, ramps and the Route 5/57 Rotary.
- There are 13 intersections within the primary study area on the PVPC 2007 – 2009 Top 100 List.



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# Bicycle & Pedestrian Routes



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**Boland Way under I-91**



**State Street under I-91**



**Union Street under I-91**



**Main Street under I-91**



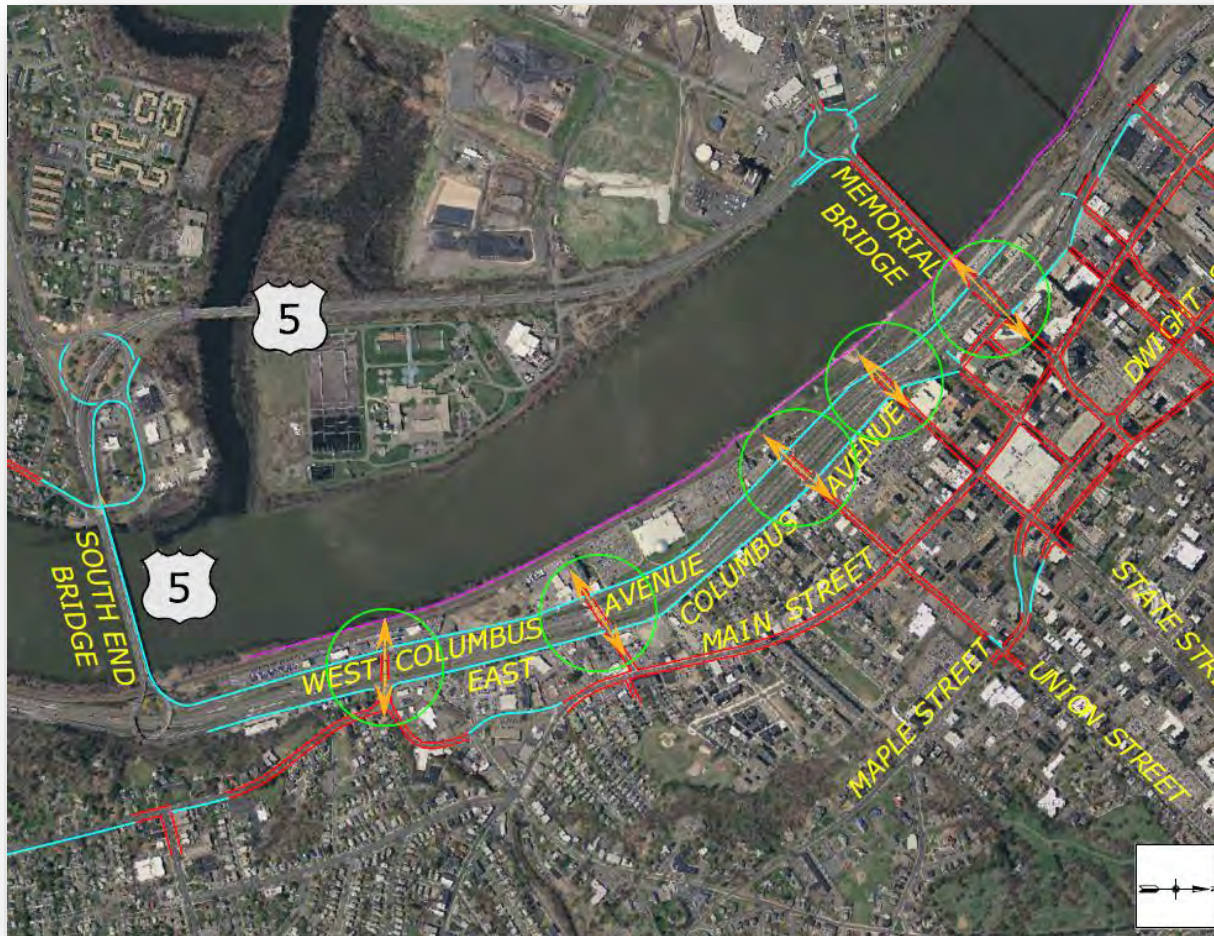
**Board Street under I-91**



# Bicycle & Pedestrian Routes Under I-91



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# Bicycle & Pedestrian Routes Across Railroad

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# Transit Headways



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## Pioneer Valley Transit Authority Springfield Route Headways

Route ID	Description	Monday through Friday			Saturday	Sunday
		Morning	Midday	Afternoon		
<b>Blue 4</b>	Plainfield Street	30	30	30	30	60
<b>Blue 6</b>	Ludlow via Bay	20	20	30	30	60
<b>Blue 7</b>	Walmart - Eastfield Mall	15 - 20	10 - 15	20 - 30	10 - 20	30
<b>Blue 12</b>	Stonybrook Express	4 Trips Per Day				--
<b>Blue 17</b>	Eastfield Mall - Wilbraham Rd - Parker St	45	45	45 - 60	45	--
<b>Green 1</b>	Chicopee Center - Big Y Sumner - Allen	20	20	20 - 30	30	45
<b>Green 2</b>	Carew - E.Springfield / Belmont - Dwight Rd.	20	20	20 - 30	30	60
<b>Green 3</b>	King - Westford - Hancock / Springfield Plaza	30	30	30	30	60
<b>Green 5</b>	Dickinson - Jewish Home SBT	45 - 60	45 - 60	30 - 45	30 - 60	--
<b>Red 10</b>	W Springfield / Westfield / Westfield State U	30	45 - 60	45 - 60	60	60
<b>Red 14</b>	Feeding Hills / Springfield	60	60	60	60	60
<b>Red 14E</b>	Springfield / Agawam Industrial Park	4 Trips Per Day			--	
<b>Red 27</b>	Wilbraham / Eastfield Mall / Sixteen Acres	5 Trips Per Day			--	
<b>Purple 11</b>	HCC Express	60	60	2 Trips	--	
<b>Purple 20</b>	Holyoke / Springfield via Holyoke Mall - Riverdale	30	15 - 30	30	15 - 30	30
<b>Purple 21</b>	Holyoke / Springfield via Chicopee	30 - 45	30	45	20 - 35	15 - 35
<b>X90</b>	Inner Crosstown	30	30	30	30	60
<b>X92</b>	Mid City Crosstown	45	45	45	45	--

Source: Pioneer Valley Transit Authority, 2015

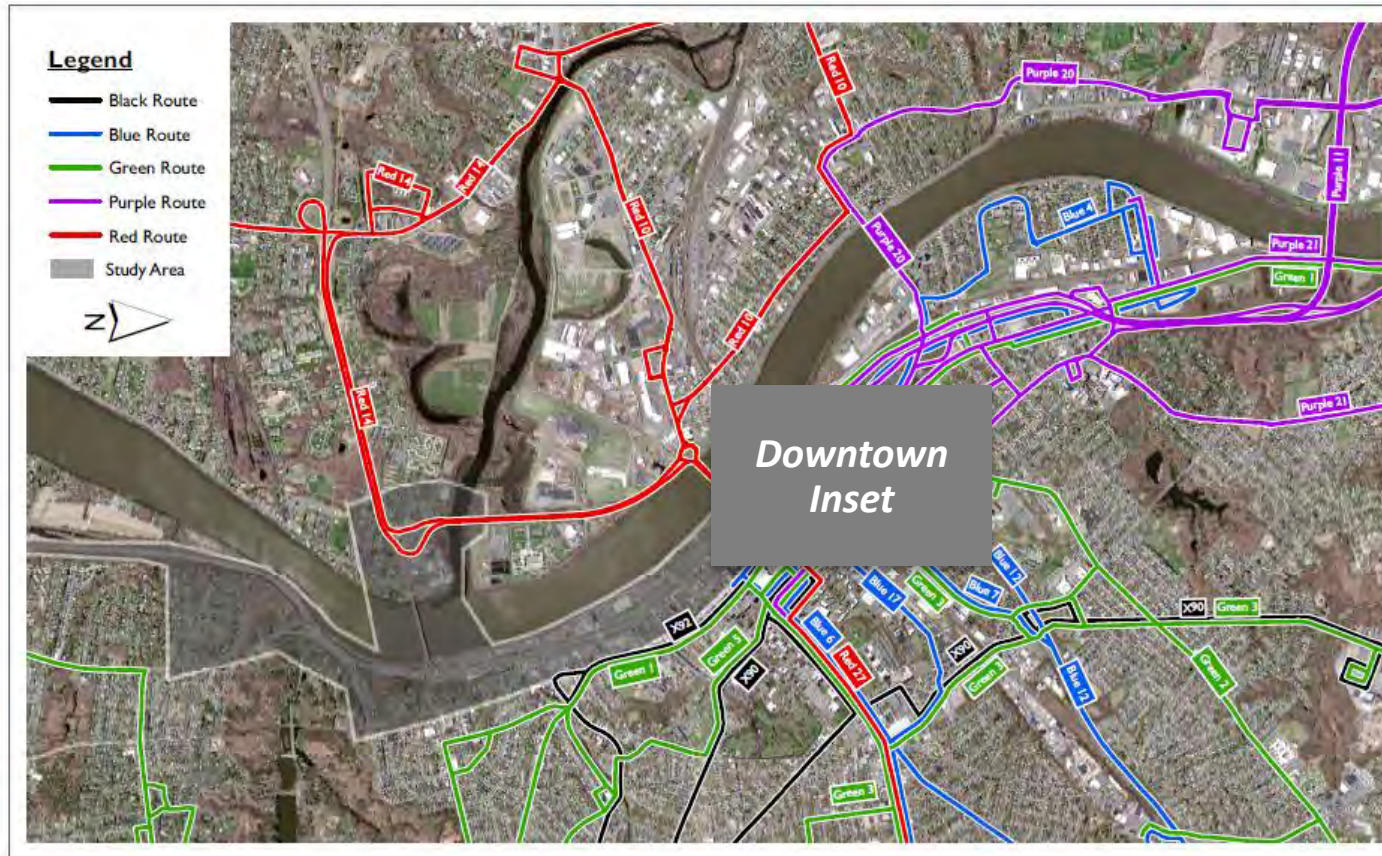




# PVTA Springfield Routes



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# PVTA Springfield Routes Downtown Inset



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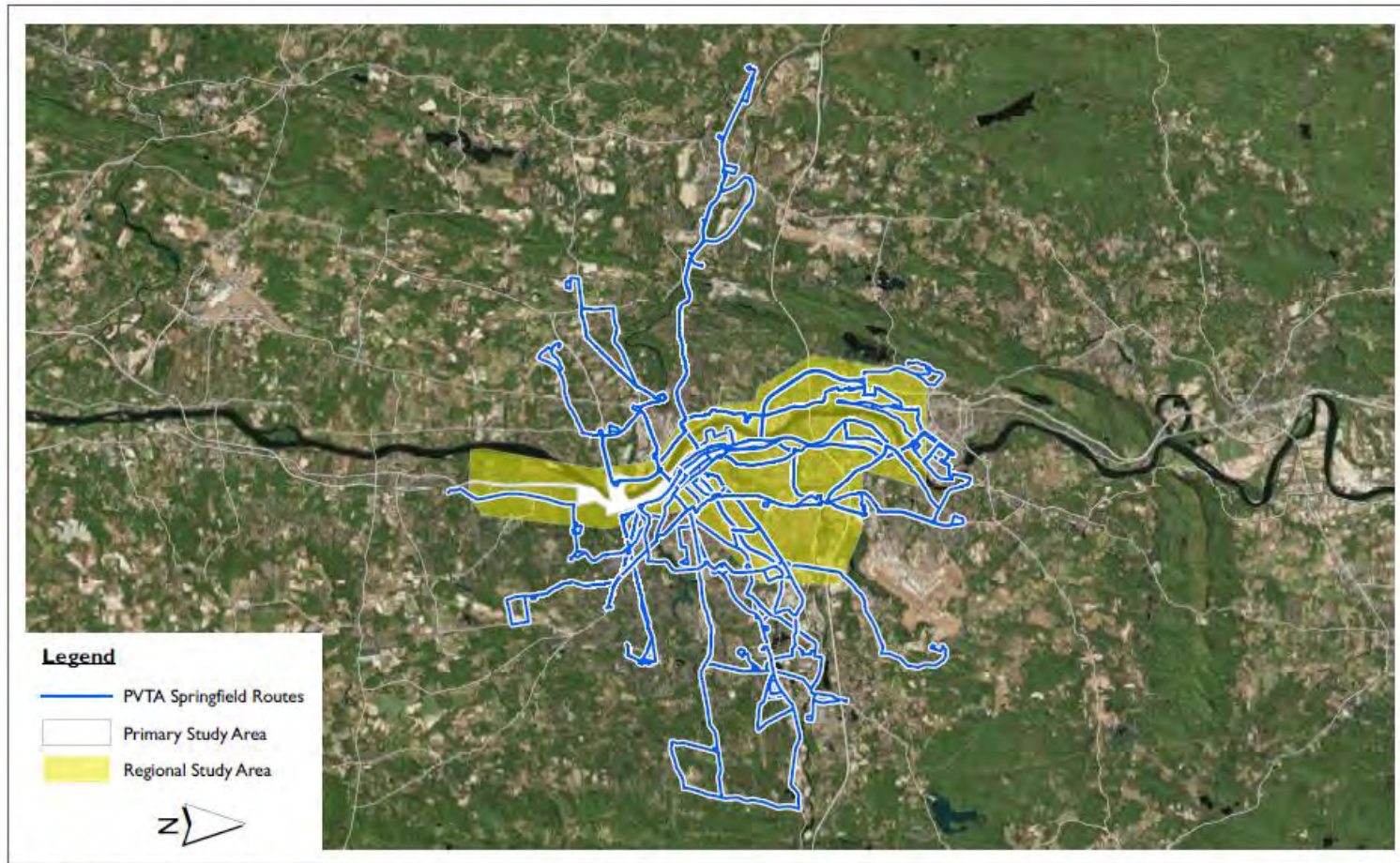




# PVTA Regional Extent



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Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community





# PVTA Route Ridership

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## Pioneer Valley Transit Authority Ridership October 2014

Route	Alighting	Boarding	Total
Blue 7	119,729	127,534	247,263
Green 1	104,146	104,162	208,308
Green 2	90,934	94,651	185,585
Purple 20	81,383	83,858	165,241
Blue 6	53,266	55,476	108,742
Green 3	40,811	41,527	82,338
Purple 21	38,385	40,363	78,748
Red 10	28,152	29,038	57,190
Blue 17	17,708	18,455	36,163
Blue 4	14,950	15,103	30,053
X90	13,852	14,872	28,724
Red 14	10,559	11,219	21,778
Green 5	10,012	10,817	20,829
Purple 11	9,051	10,544	19,595
Red 22	7,305	7,695	15,000
Green 19	3,080	2,995	6,075
X92	3,008	3,044	6,052
Blue 12	1,241	1,496	2,737
Red 27	657	746	1,403

Note: Routes Green 19 and Red 22 were combined with Route X90.

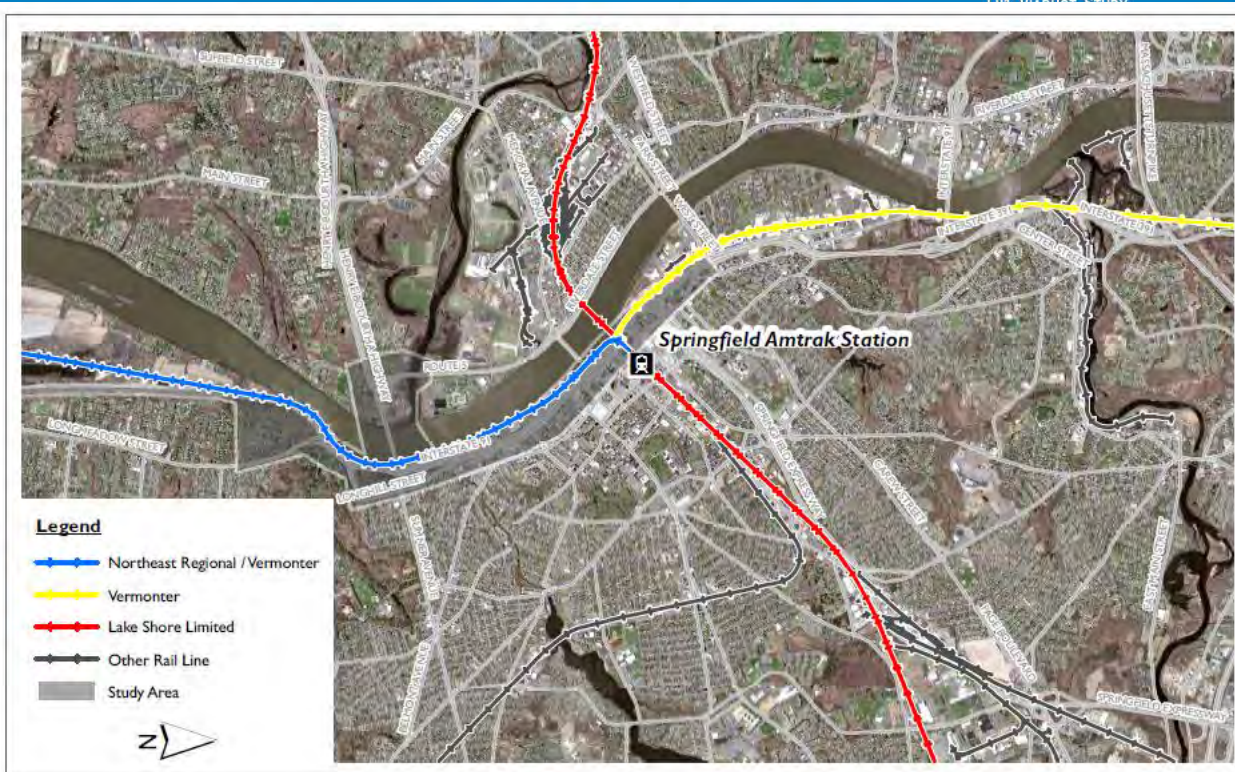
Source: Pioneer Valley Planning Commission, 2015



# Existing Rail Routes



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## Amtrak Springfield Station Daily Services



	Northeast Regional	Vermont	Lake Shore Limited
Weekday	5 northbound 5 southbound	1 northbound 1 southbound	1 eastbound 1 westbound
Weekend	6 northbound (7 on Friday) 6 southbound (7 on Sunday)	1 northbound 1 southbound	1 eastbound 1 westbound

Source: Amtrak, 2015





# Regional Rail & Bus Service



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