# I - 293 Exits 6 and 7 Transportation Planning Study

*(Manchester #16099)*

**Public Informational Meeting #1**
**July 18, 2012**

New Hampshire DOT Department of Transportation

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# I-293 Exits 6 and 7 Transportation Planning Study

*(Manchester #16099)*

New Hampshire Department of Transportation (NHDOT)

**Study Team**

Vanasse Hangen Brustlin, Inc (VHB)

Southern New Hampshire Planning Commission (SNHPC)

RKG Associates

# Technical Advisory Committee

NHDOT

FHWA

SNHPC

City of Manchester

Town of Goffstown

Town of Hooksett

Greater Manchester Chamber of Commerce

Hooksett Chamber of Commerce

Manchester Community College

# The Process

- Part A – Planning Study
- Part B – Environmental Documentation & Preliminary Engineering
- Part C – Final Design

# You will leave tonight with:

- A clear understanding of the study and its purpose
- How the study will be accomplished
- And just as importantly, you'll have an opportunity to share your thoughts with us

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# Planning Study Purpose

The Purpose of this Planning Study is to consider transportation system modifications aimed at addressing ***capacity*** and ***safety*** related deficiencies along the mainline and at the interchanges (Exits 6 and 7) for a 3-mile segment of I-293 including consideration of relocating and reconfiguring Exit 7 into a fully directional interchange.

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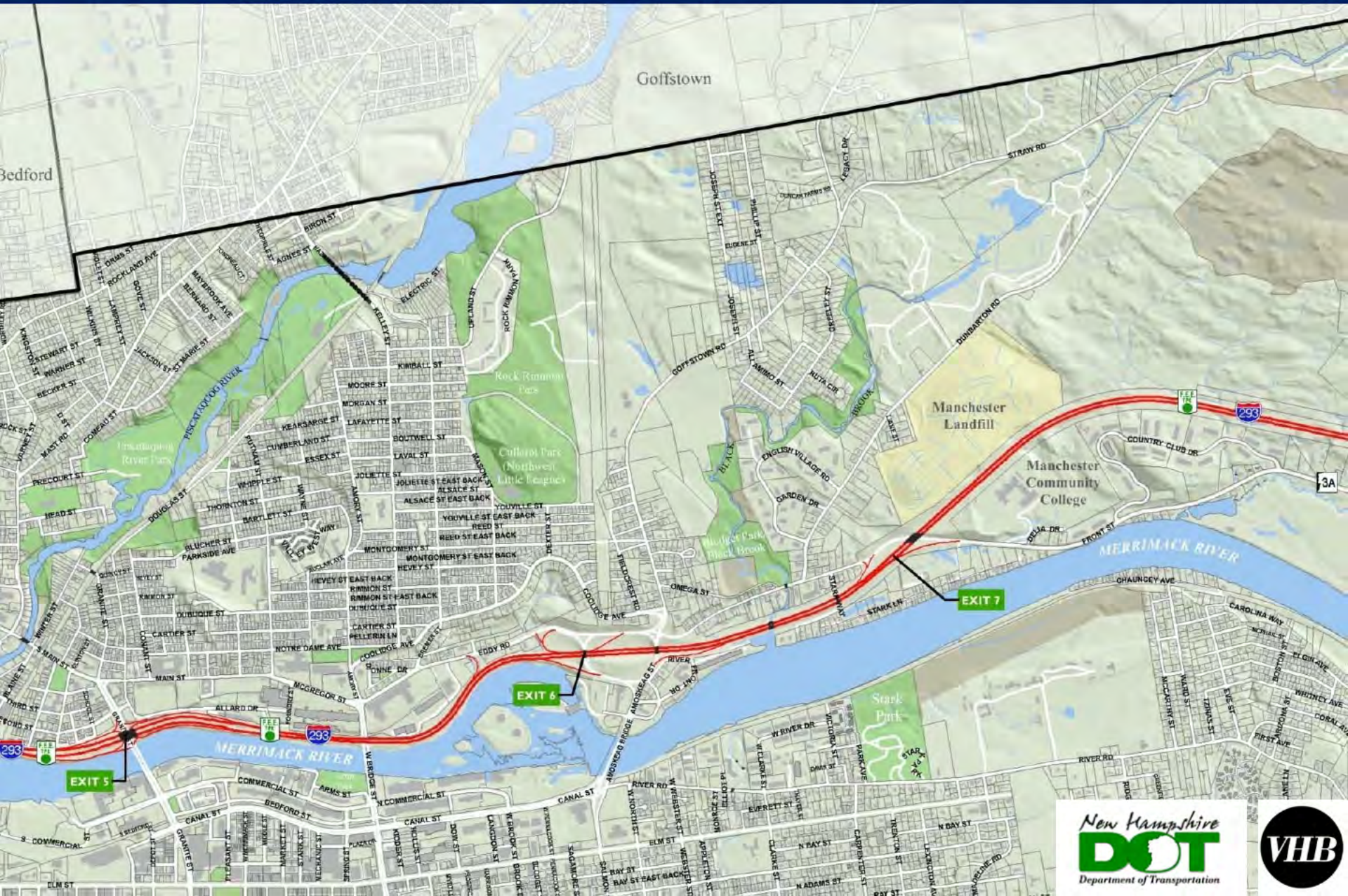
# Planning Study Purpose

The Planning Study will establish a range of practicable alternatives to be advanced to Part B for further development of preliminary engineering and formal environmental documentation and to assist the communities with long-range planning.

# Study Corridor



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# Planning Study Schedule

Phase 1 – (Spring/Summer 2012)
Data Collection/Problem Identification

Phase 2 – (Fall 2012)
Screening Criteria & Brainstorming Alternatives

Phase 3 – (Winter/Spring 2013)
Develop, Evaluate, & Screen Alternatives

Phase 4 – (Summer 2013)
Documentation

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# Public Outreach

Key to the success of the Planning Study will be an open and consensus-driven public participation process.

- Public Informational Meetings
- Technical Advisory Committee Meetings
- Local Officials Meetings
- Project Website
- Newsletters
- Press Releases

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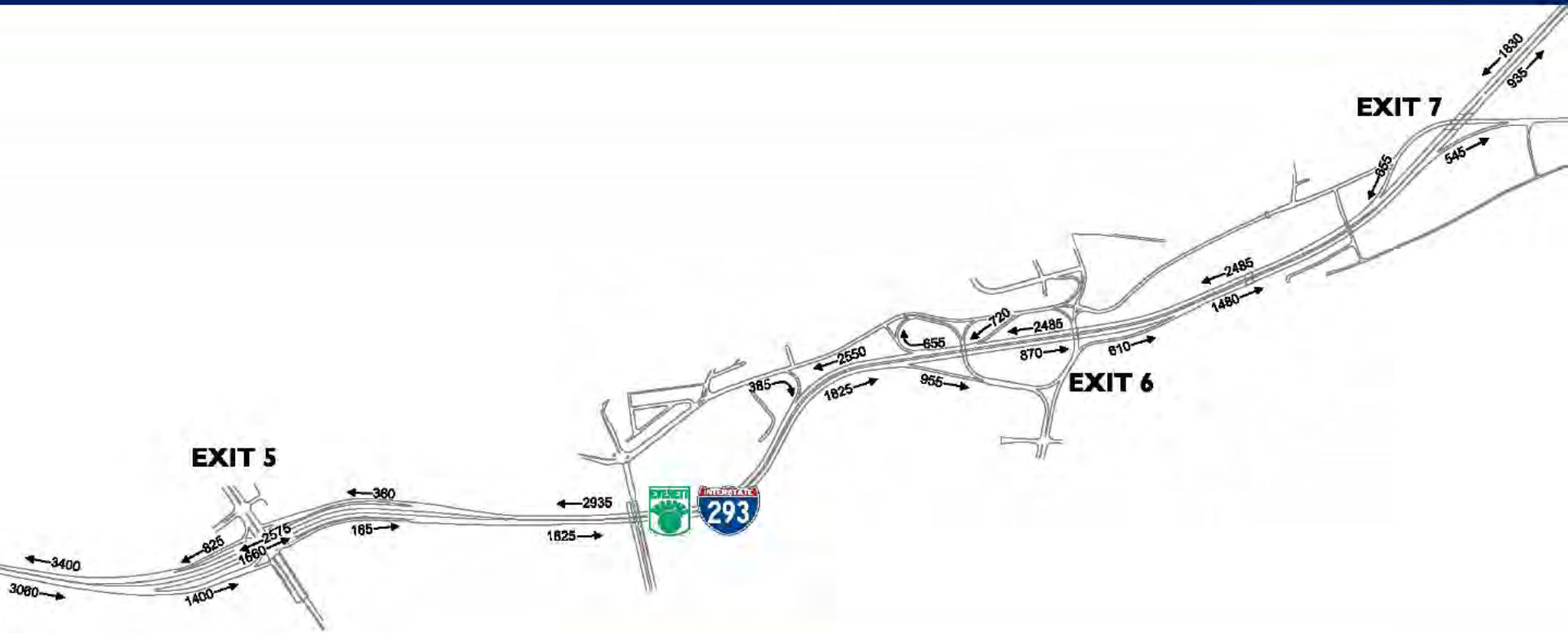
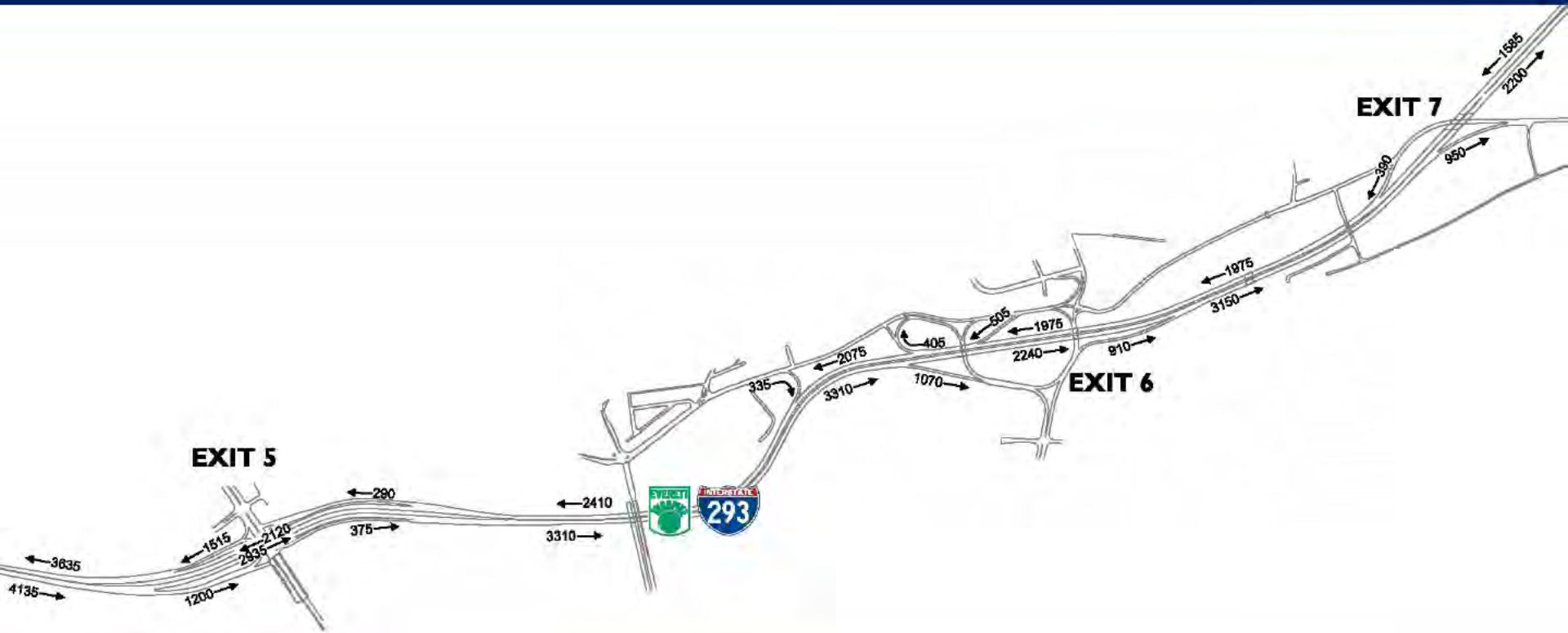
# Data Collection Effort

- Traffic Volume Counts
- Design Hour Volume
- Traffic Model
- Crash Data
- Transit
- Environmental and Cultural Resources

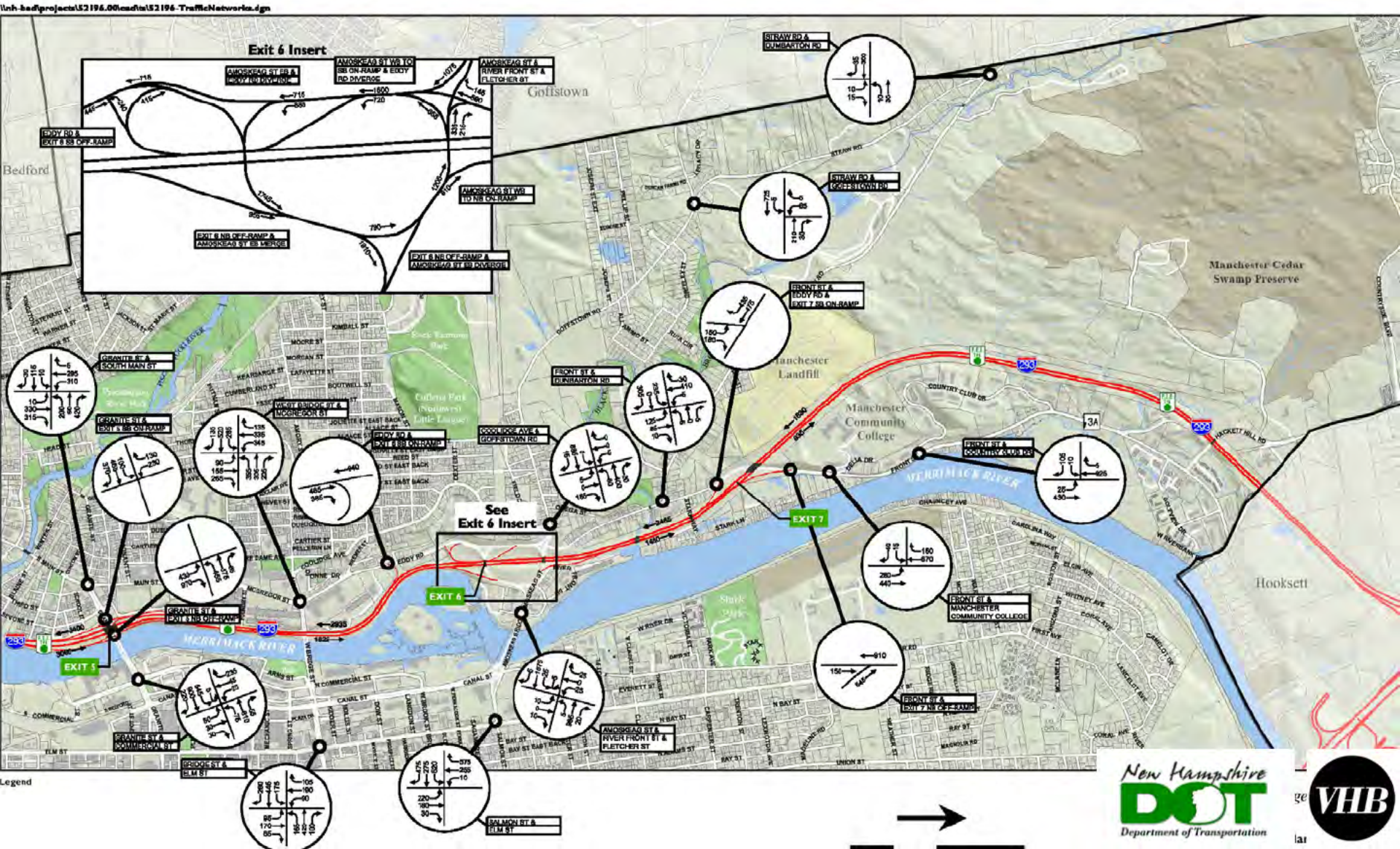
# I-293 Segment and Ramp Volumes
## (Weekday AM Peak Hour)



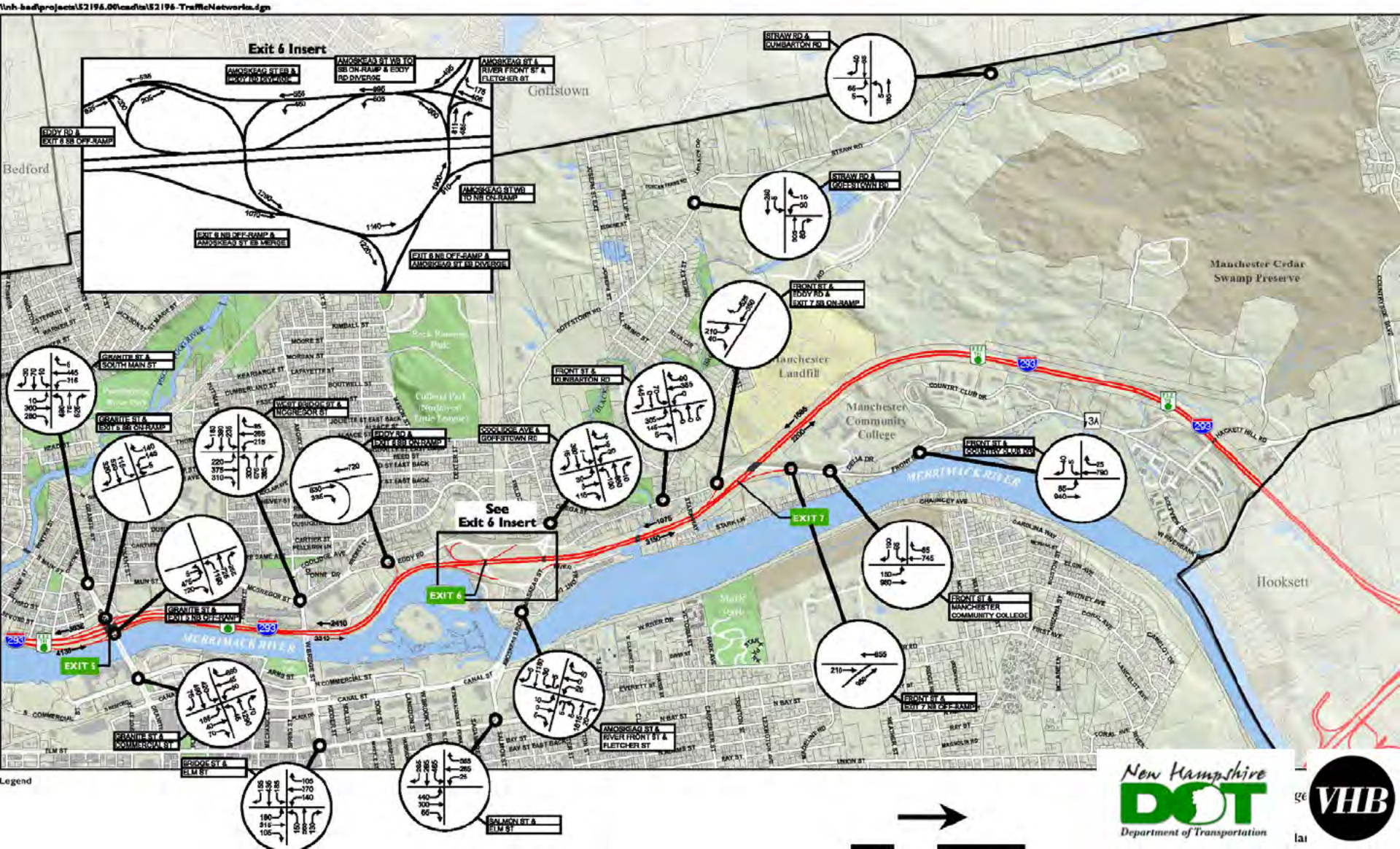
# I-293 Segment and Ramp Volumes
## (Weekday PM Peak Hour)



# 2012 Weekday AM Peak Hour

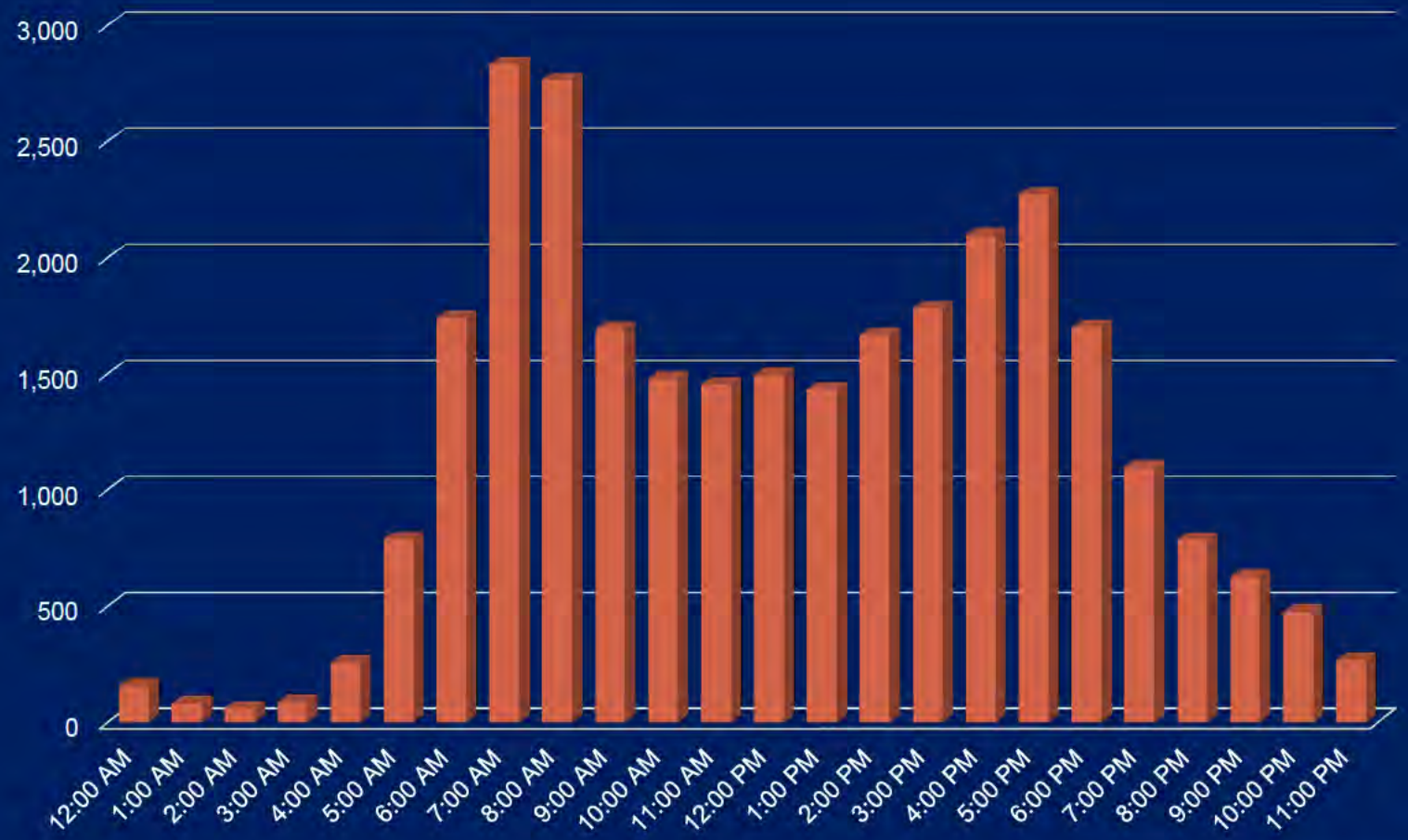


# 2012 Weekday PM Peak Hour



# I-293 Southbound Hourly Volumes

Wednesday June 6, 2012

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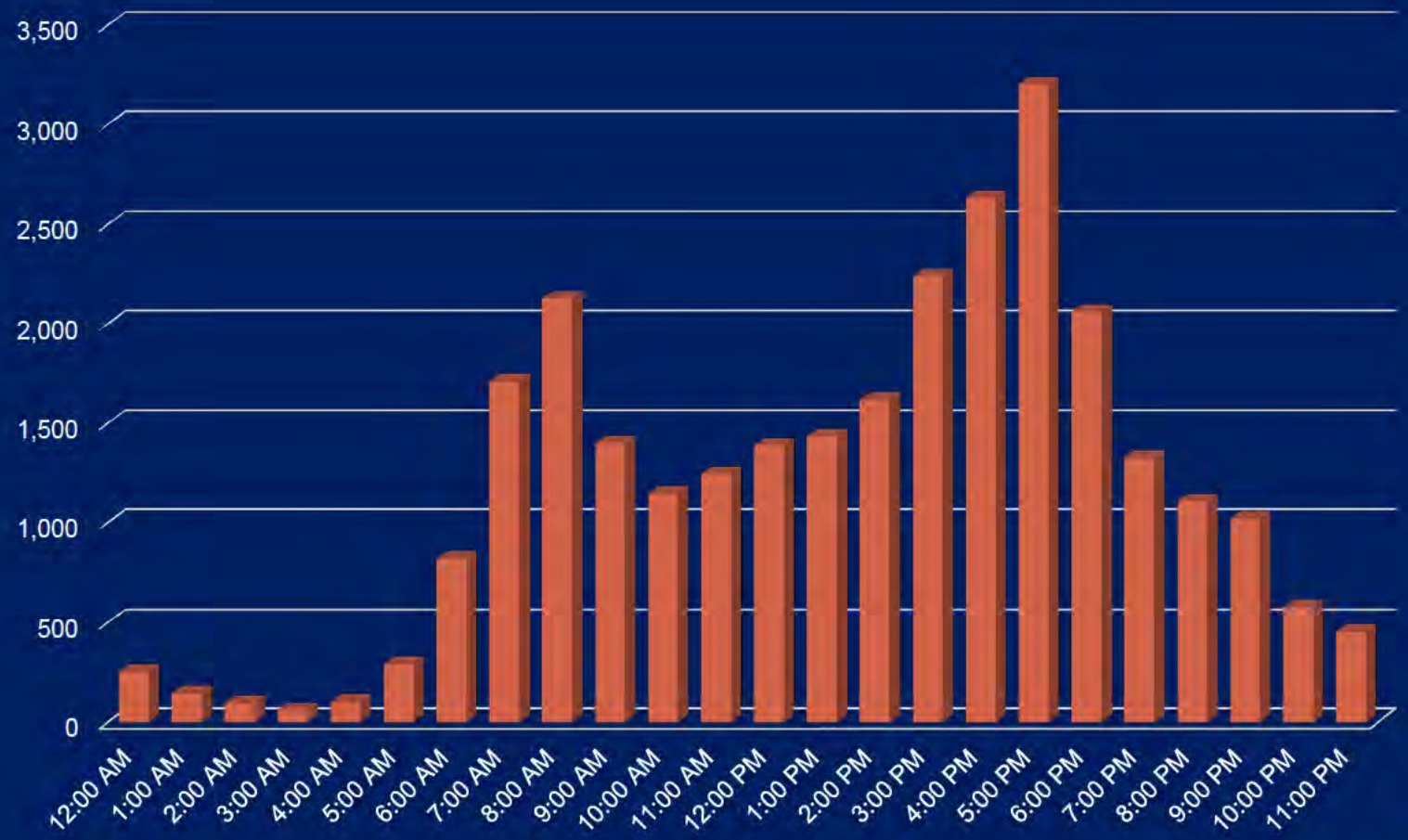
# I-293 Northbound Hourly Volumes

Wednesday June 6, 2012

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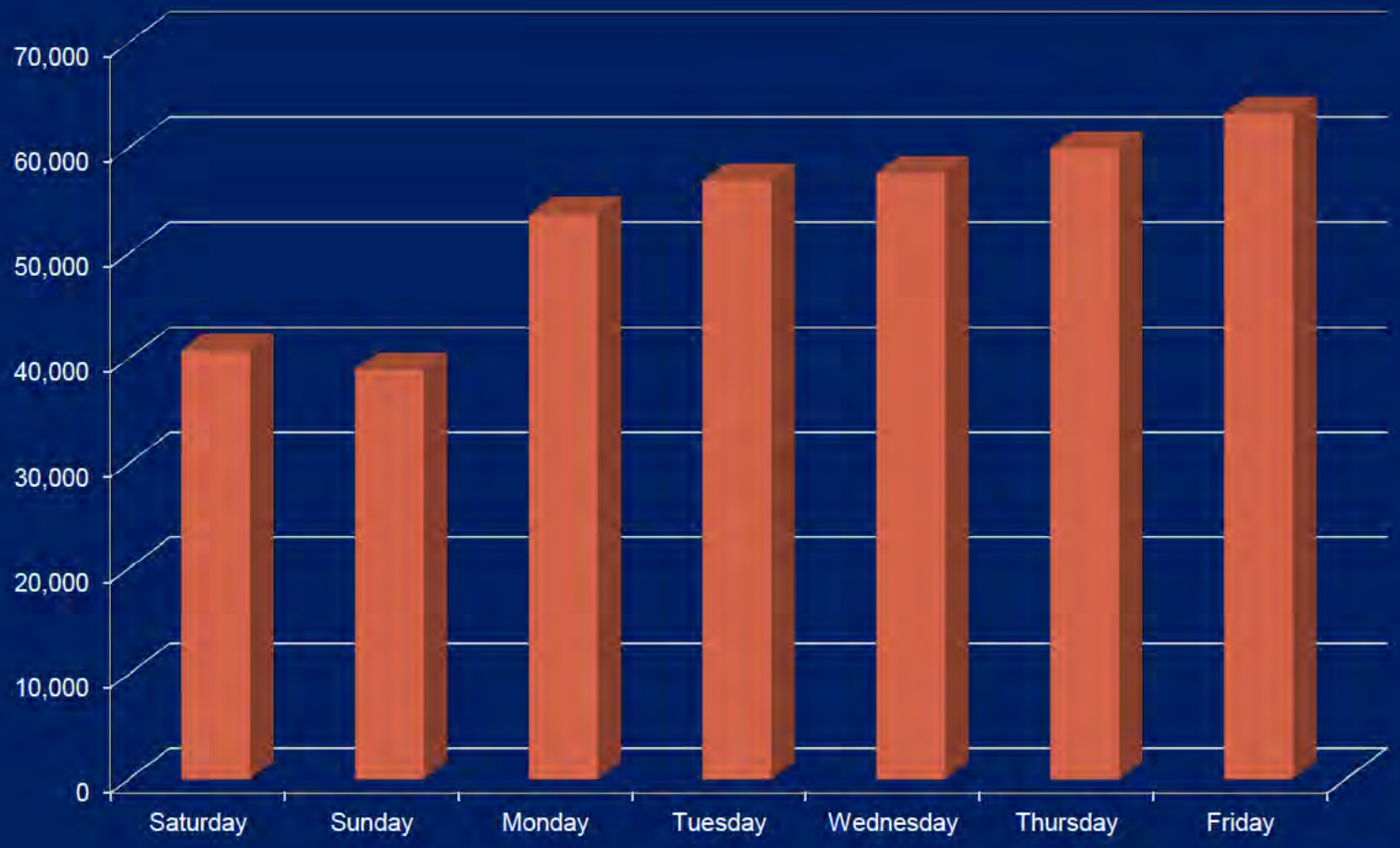
# I-293 Daily Traffic Volumes

Week of June 2nd to June 8th 2012

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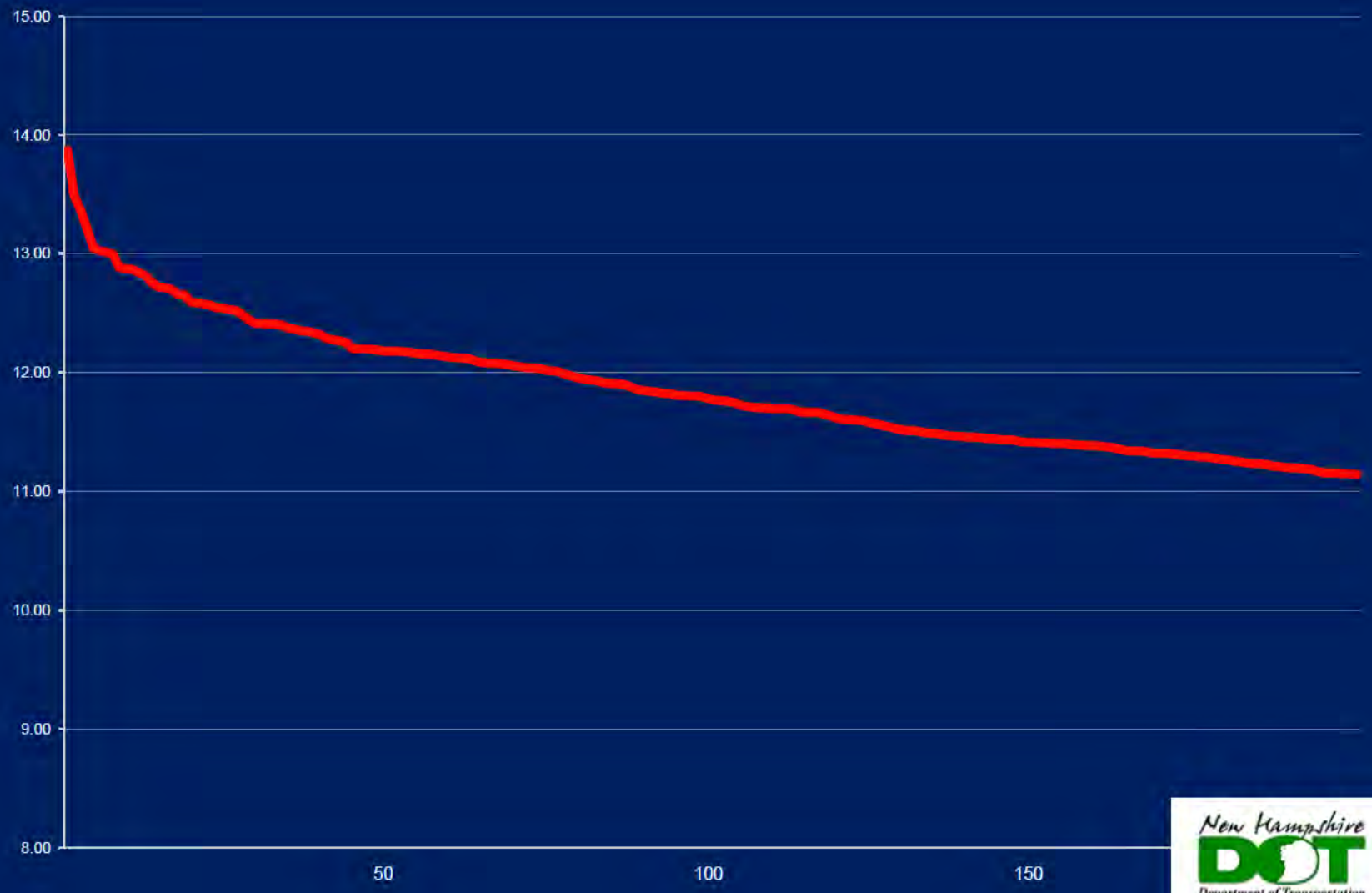
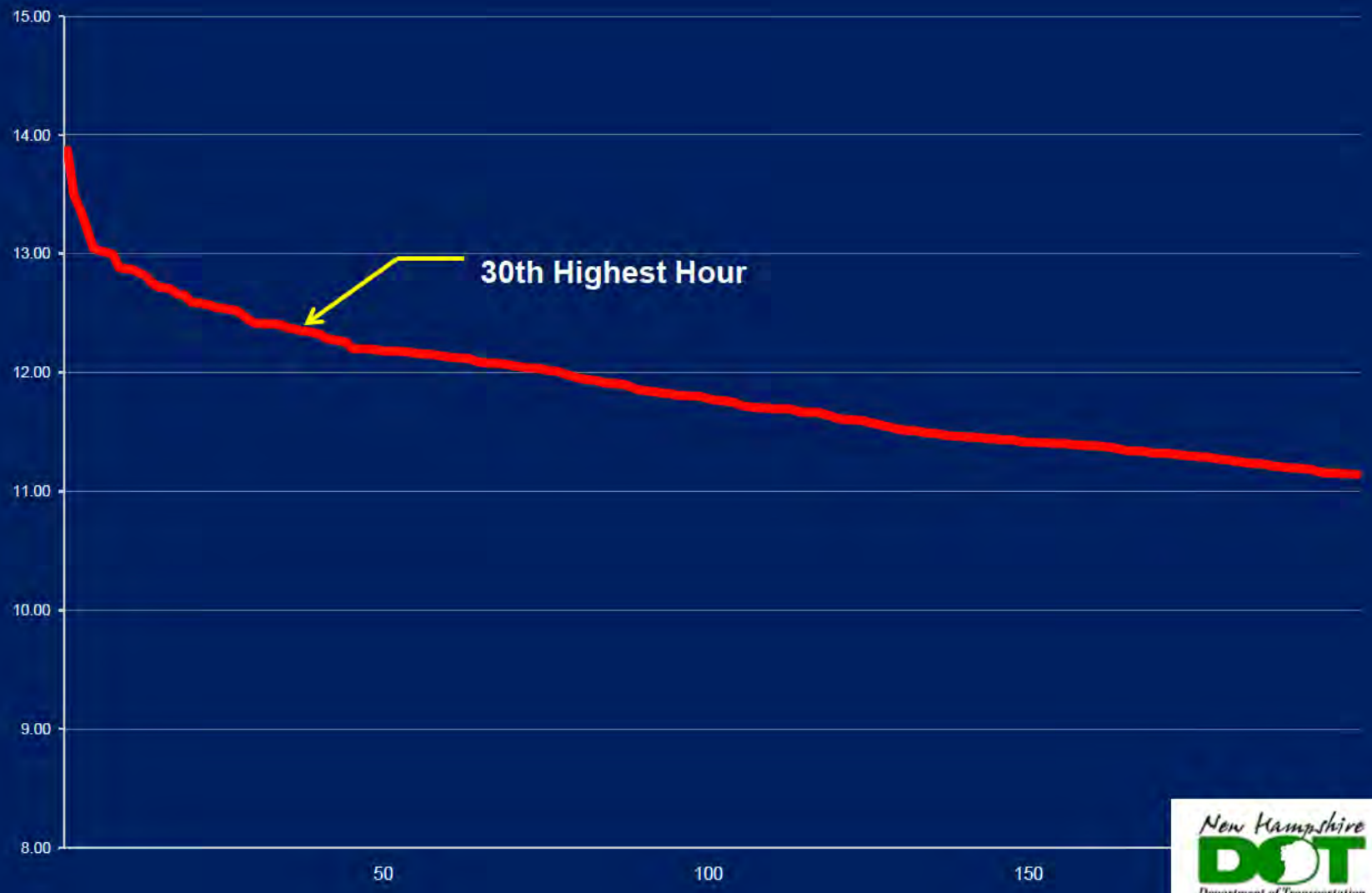
# I-293 Monthly Traffic Volumes

# Design Hour Volume (DHV)



# Design Hour Volume (DHV)



# Traffic Model

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# Traffic Model

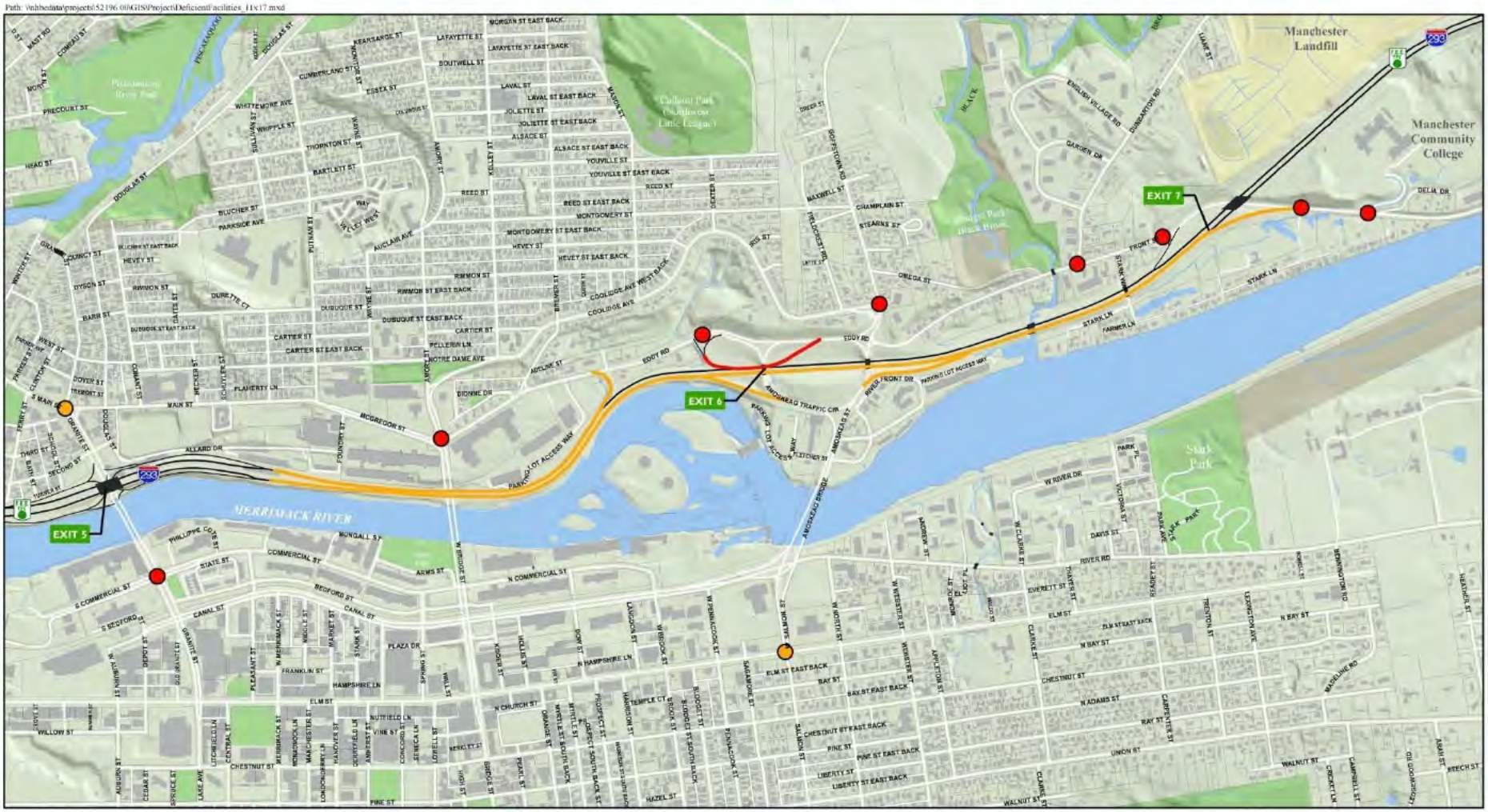
- SNHPC maintains and operates this regional transportation model including a socio-economic database and the updated 2010 Census data.
- Model is used to help us understand expected future traffic demand based on land use growth and anticipated roadway projects.
- Base model contains 290 internal traffic analysis zones (TAZs) and 67 external stations.
- Model calibrated to actual base year counts

# Traffic Model

Four Step Forecasting Process

- Trip Generation
- Trip Distribution
- Model Split
- Traffic Assignment

# Operational Analysis



# Crash Data

EXIT 6
EXIT 7
Manchester Landfill
Manchester Community College
Cullerot Park (Northwest Little League)
Stark Park
Bloodget Park Black Brook
Rock Rimmon Park
MERRIMA
ACK RIVER
MOORE ST
MORGAN ST
KEARSARGE ST
LAFAYETTE ST
BOUTWELL ST
ESSEX ST
LAVAL ST
JOLIETTE ST
JOLIETTE ST EAST BACK
ALSACE ST
ALSACE ST EAST BACK
YOUVILLE ST
YOUVILLE ST EAST BACK
REED ST
REED ST EAST BACK
MONTGOMERY ST
MONTGOMERY ST EAST BACK
HEVEY ST
HEVEY ST EAST BACK
RIMMON ST
RIMMON ST EAST BACK
DUBUQUE ST
CARTIER ST
PELLERIN LN
NOTRE DAME AVE
COOLIDGE AVE
DONNE DR
MCGREGOR
FOUNDRY ST
AMORY ST
WAYNE ST
VALLEY WEST WAY
AUCLAIR AVE
BREMER ST
DEXTER ST
MASON ST
FIELDCREST RD
OMEGA ST
ENGLISH VILLAGE RD
GARDEN DR
BLACK
BROOK
LANE ST
RUTA CIR
STARWAY
STARK LN
DELIA DR
FRONT ST
CHAUNCEY AV
COUNTRY
RIVER
FRONT DR
W RIVER DR
VICTORIA ST
PARK AVE
DAVIS ST
W CLARKE ST
STARK PARK
RIVER RD
W BRIDGE ST
N COMMERCIAL ST
ARMS ST
CANAL ST
W NORTH ST
N BAY ST
RIDGE RD
GREENFIELD ST
CHESTNUT ST
MARKET ST
STARK ST
MECHANIC ST
SPRING ST
PLAZA DR
KIDDER ST
HOLLIS ST
DOW ST
LANGDON ST
W BROOK ST
W PENNACOOK ST
SAGAMORE ST
BAY ST
BAY ST EAST
Legend
Assessor's Tax Parcels
Building
Surface Water
Stream
City Park Land
Conservation/Public Land
Bridge
Crash Location - No Injuries Reported (448 Accidents)
Crash Location - Injuries Reported (135 Accidents)
Crash Location - Fatality Reported (4 Accidents)
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# Transit Routes

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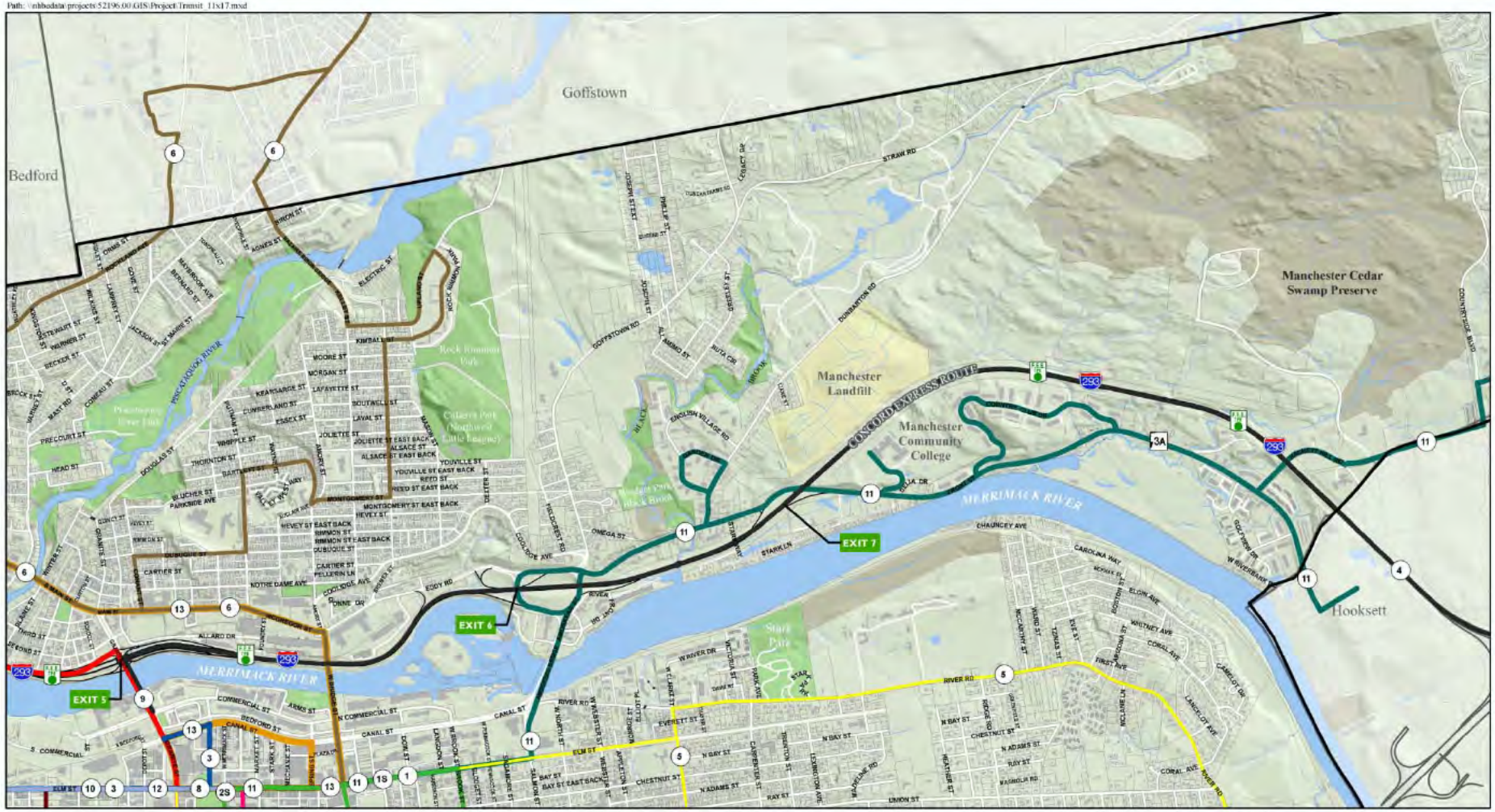


**Legend**

- Assessor's Tax Parcels
- Building
- Surface Water
- Stream
- City Park Land
- Conservation/Public Land
- Bridge

Manchester Transit Authority Routes

- Route 1 - Healthcare Shuttle/East Side Plaza
- Route 2 - Hanover St/East Side Plaza
- Route 3 - Brown Ave/Airport Industrial Area
- Route 4 - Concord Express
- Route 5 - River Road/SNHU
- Route 6 - Bremer St/Mast Road
- Route 8 - So.Willow St/Mall of NH
- Route 9 - Nashua Express
- Route 10 - Valley St/Weston Rd/Mall of NH
- Route 11 - Front Street/Hackett Hill Road
- Route 12 - South Beech St/Mall of NH
- Route 13 - Bedford Grove Plaza/Second St

0 1,500 3,000 Feet

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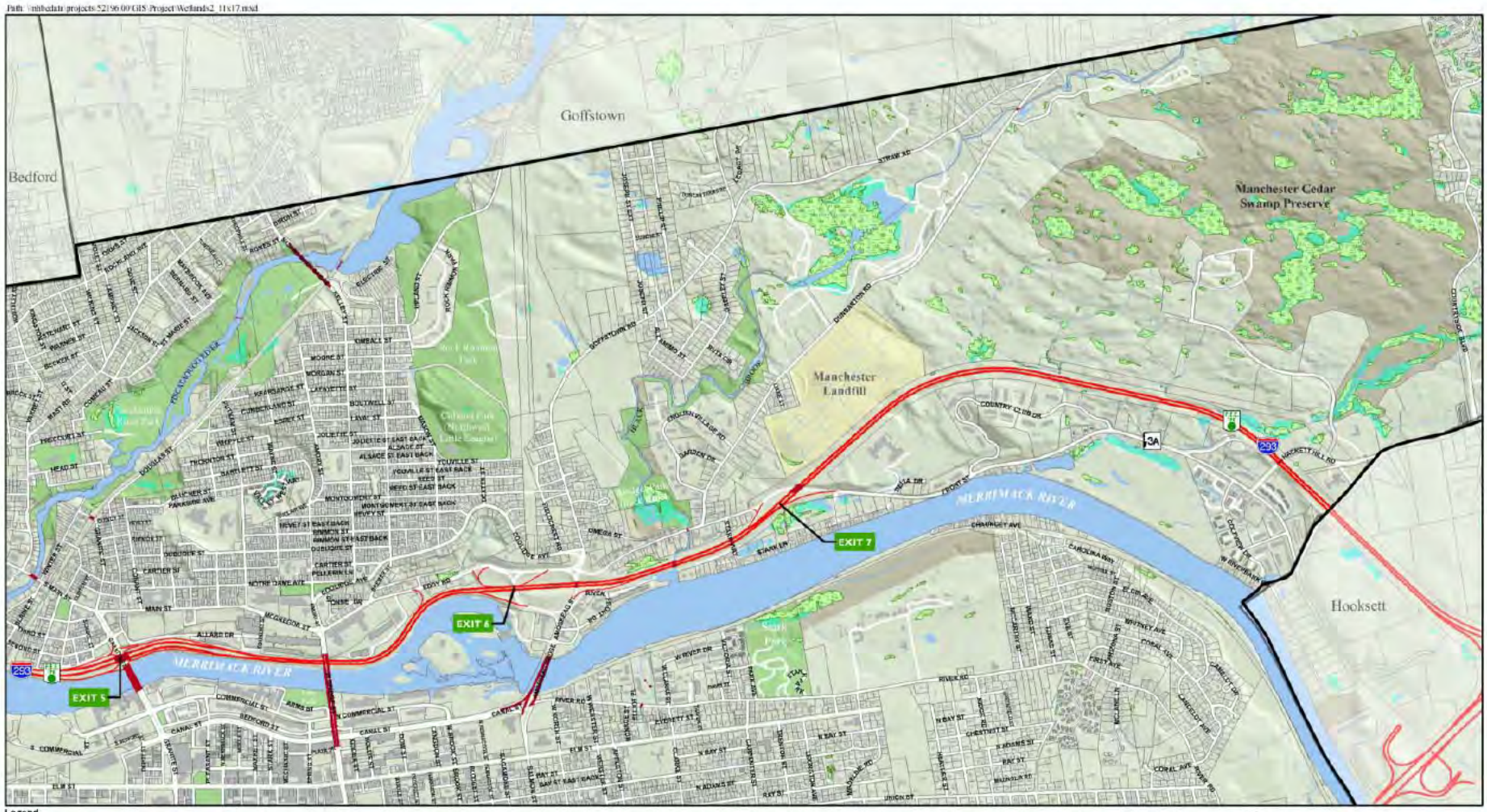
# Wetland Resources




Legend

- Assessor's Tax Parcels
- Building
- Surface Water
- Stream
- City Park Land
- Conservation/Public Land
- Bridge
- Wetland (Manchester & Hooksett)
- NWI Wetland

0 1,500 3,000 Feet

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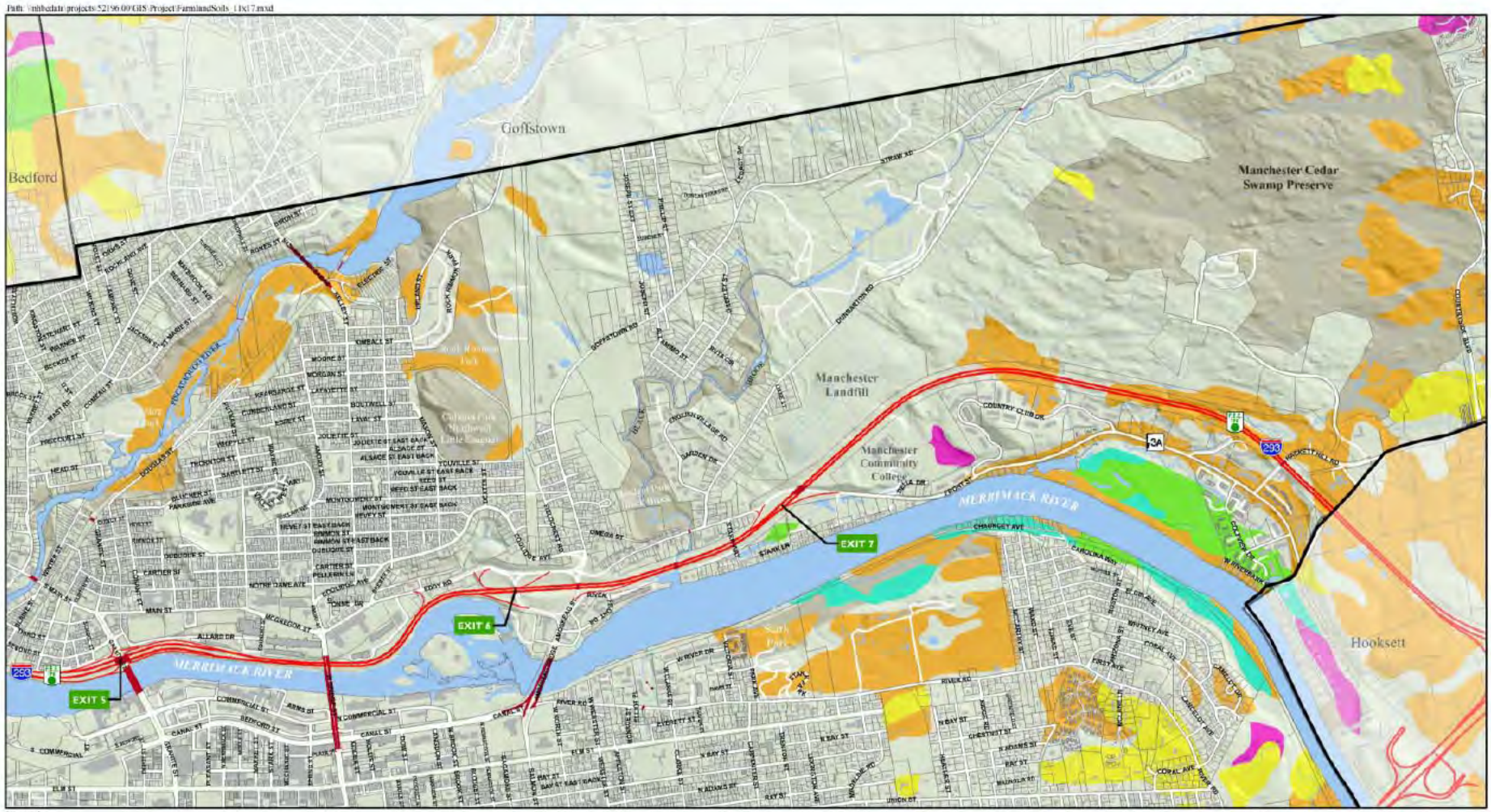
# NRCS Farmland Soils




**Legend**

- Assessor's Tax Parcels
- Building
- Surface Water
- Stream
- Conservation/Public Land
- Bridge

NRCS Farmland Soils

- All areas are prime farmland
- Farmland of local importance
- Farmland of statewide importance
- Prime farmland if drained
- Prime farmland if protected from flooding or not frequently flooded during the growing season

0 1,500 3,000 Feet

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# NHFG Wildlife Habitats

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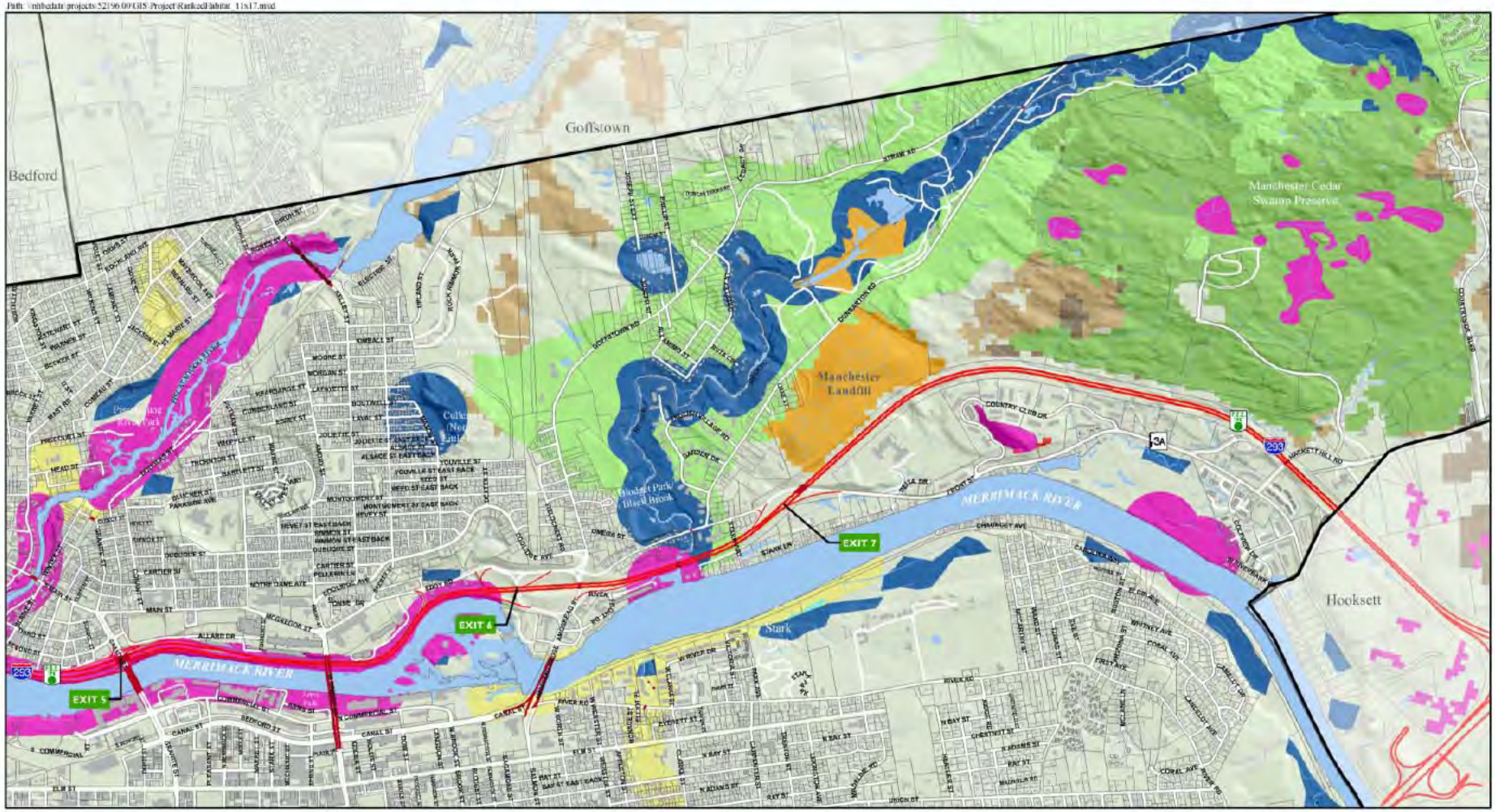


Legend

- Assessor's Tax Parcels
- Building
- Surface Water
- Stream
- Bridge

Ranked Habitat Tiers

- Tier 1 - Element Occurrence
- Tier 1 - Element Occurrence Elevated
- Tier 1 - Top Ranked Matrix Forest in NH
- Tier 2 - Top Ranked Matrix Forest in Region
- Tier 2 Top Ranked Other Habitat in Region
- Tier 2 - Top Ranked In Watershed Group
- Tier 2 - Top Ranked Watershed in Watershed Group
- Tier 3 - Matrix forest
- Tier 3 - Natural Heritage Bureau Elevated
- Tier 3 - Supporting Landscape
- Area not considered to priority habitat

0 1,500 3,000 Feet

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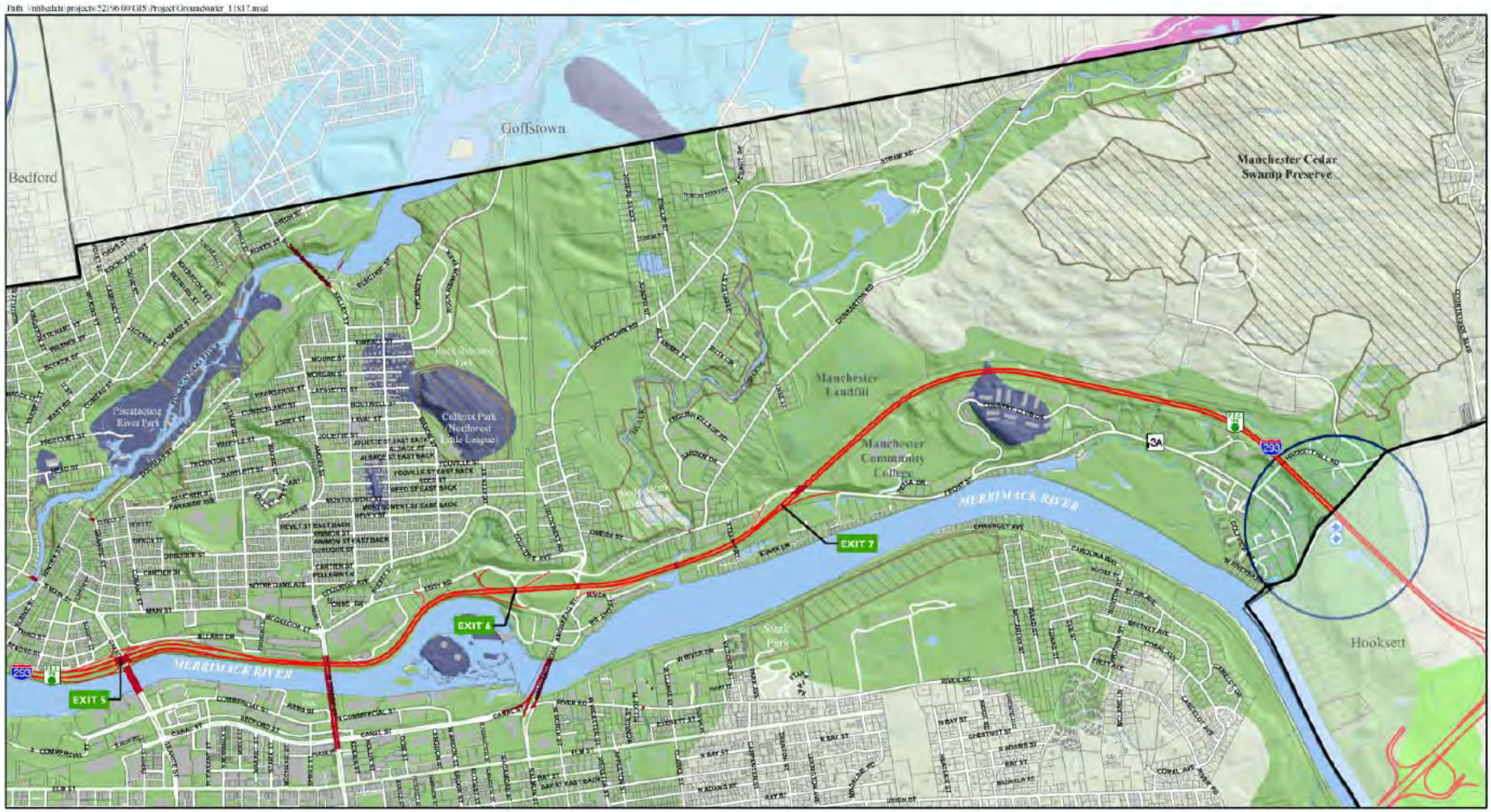
# Groundwater Resources



# Floodplains

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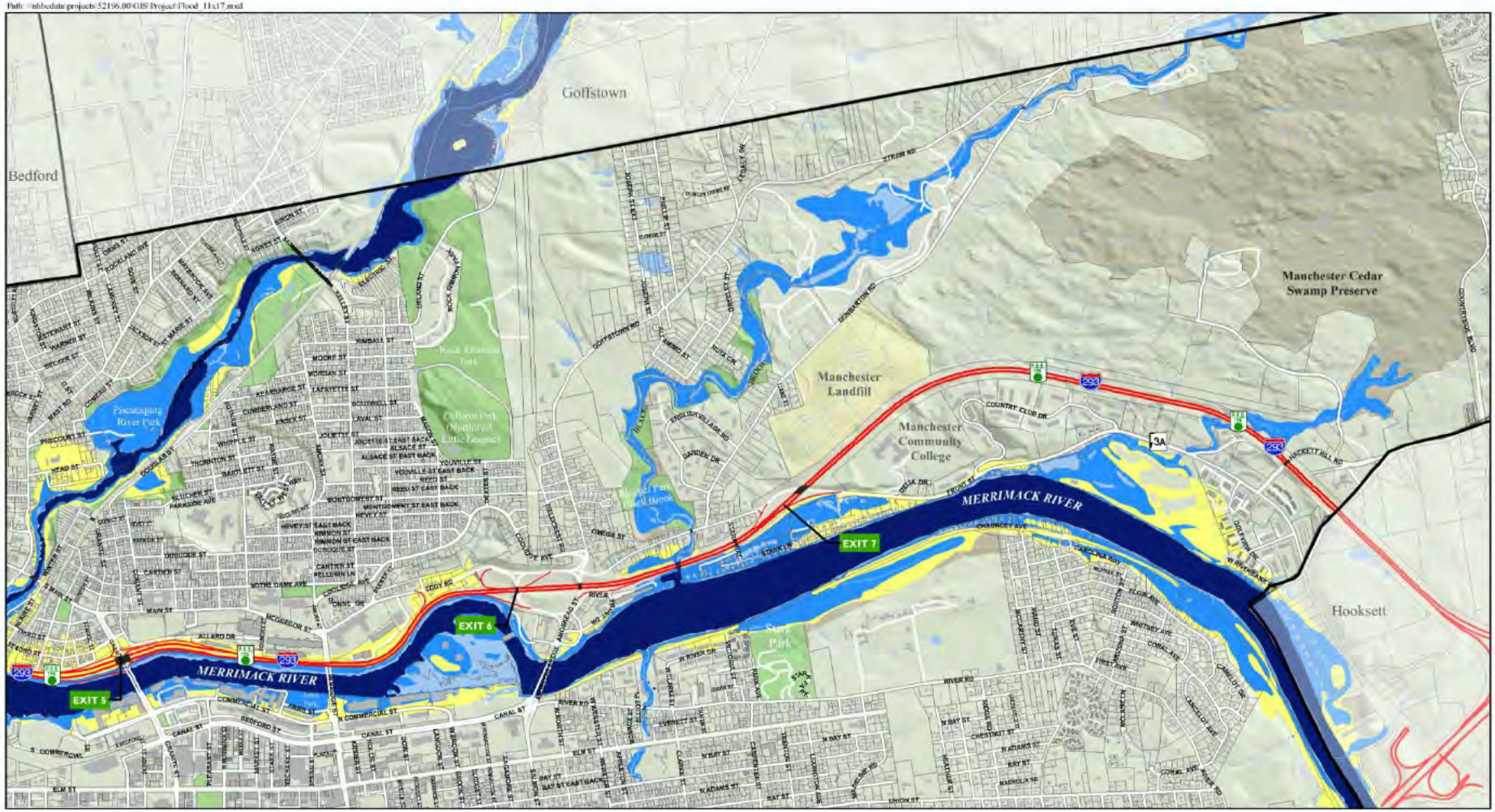


**Legend**

- Assessor's Tax Parcels
- Building
- Surface Water
- Stream
- City Park Land
- Conservation/Public Land
- Bridge

FEMA DFIRM Mapping

- 100-yr Floodplain
- 500-yr Floodplain
- Floodway

0 1,500 3,000 Feet

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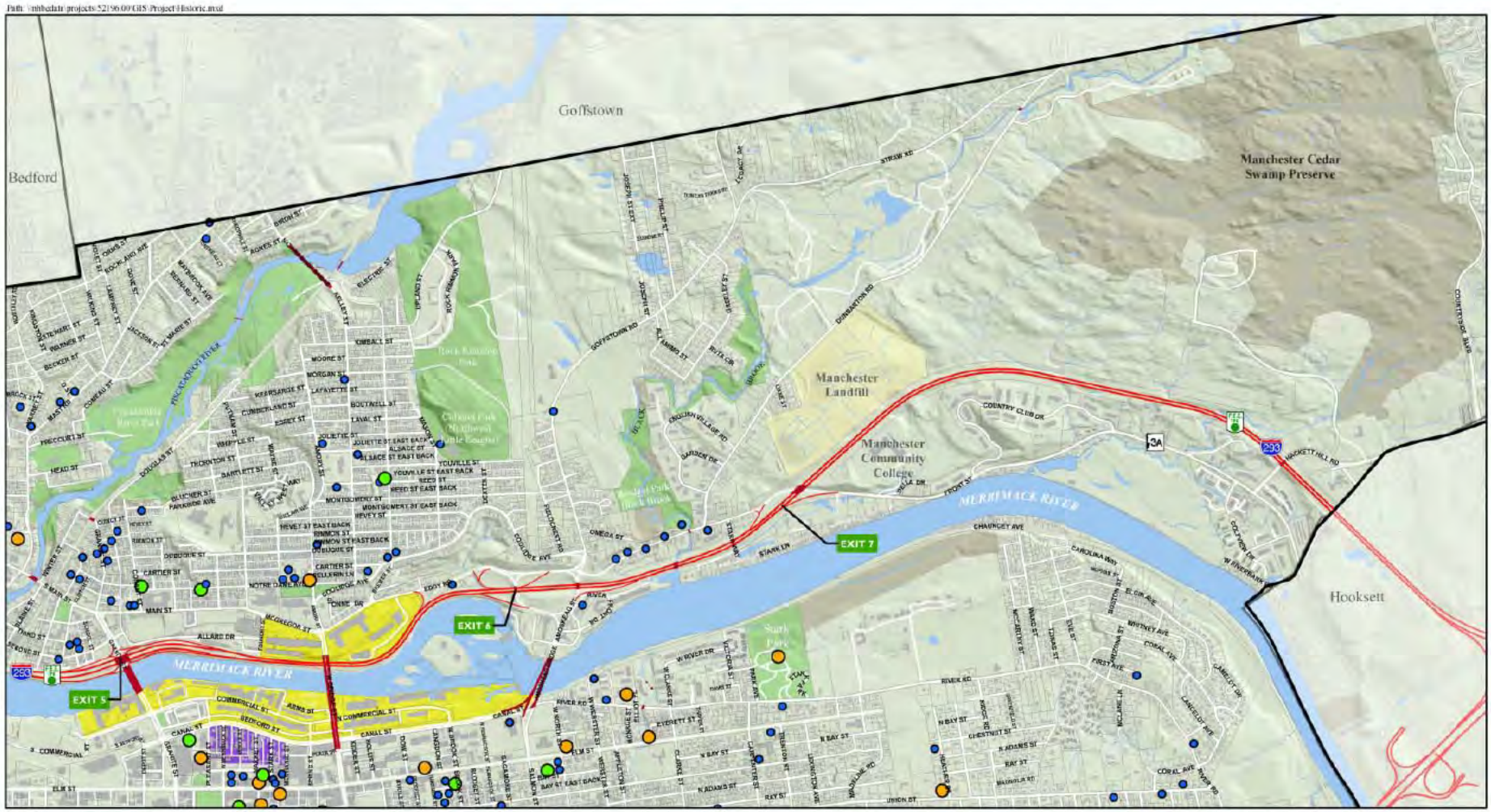
# Cultural Resources




Legend

- Assessor's Tax Parcels
- Building
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- Stream
- City Park Land
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- Bridge

National Register Historic Districts

- Amoskeag Corporation Housing Historic District
- Amoskeag Millyard Historic District

Historic Sites

- NR Listed
- NR Eligible
- Local Historic Site

0 1,500 3,000 Feet

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# Project Website

www.293planningstudy.com

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I-293 Planning Study
Manchester, New Hampshire

EXITS 6 - 7

NHDOT Homepage

- Home
- Study Schedule
- Documents
- Interactive Mapping
- Meetings
- Contacts
- Technical Advisory Committee
- Feedback

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## Study Overview

Interstate Route 293 is a major, north-south, arterial circumferential highway extending through and around the City of Manchester. It also functions as a local connection to Interstate 93 (north and south), NH Route 101 (east and west) and US Route 3 (F.E. Everett Turnpike south to Nashua and into Massachusetts) and thus providing critical accessibility and mobility within the greater Manchester area as well as throughout southern New Hampshire.

The New Hampshire Department of Transportation (NHDOT) has initiated a project to address the transportation needs of a 3-mile segment of I-293 extending northerly from the Granite Street interchange (Exit 5) to approximately one mile north of the NH Route 3A interchange (Exit 7) in Manchester, NH. The project will be conducted in three phases:

**Part A** consists of a planning-level study,

**Part B** consists of preparing preliminary engineering plans and environmental documentation suitable for a Design Public Hearing and formal project approval, and

### What's New

**The 1st Public Informational Meeting will be held 7/18 @ 7:00PM**
Manchester Community College
1006 Front Street, Manchester, NH
Wednesday, July 18th at 7:00 PM
View the July 18 meeting notice (Adobe PDF, 0.1MB)

**Meeting notes from the June 27th TAC meeting now available** (Adobe PDF, 1MB)

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# Interactive Mapping

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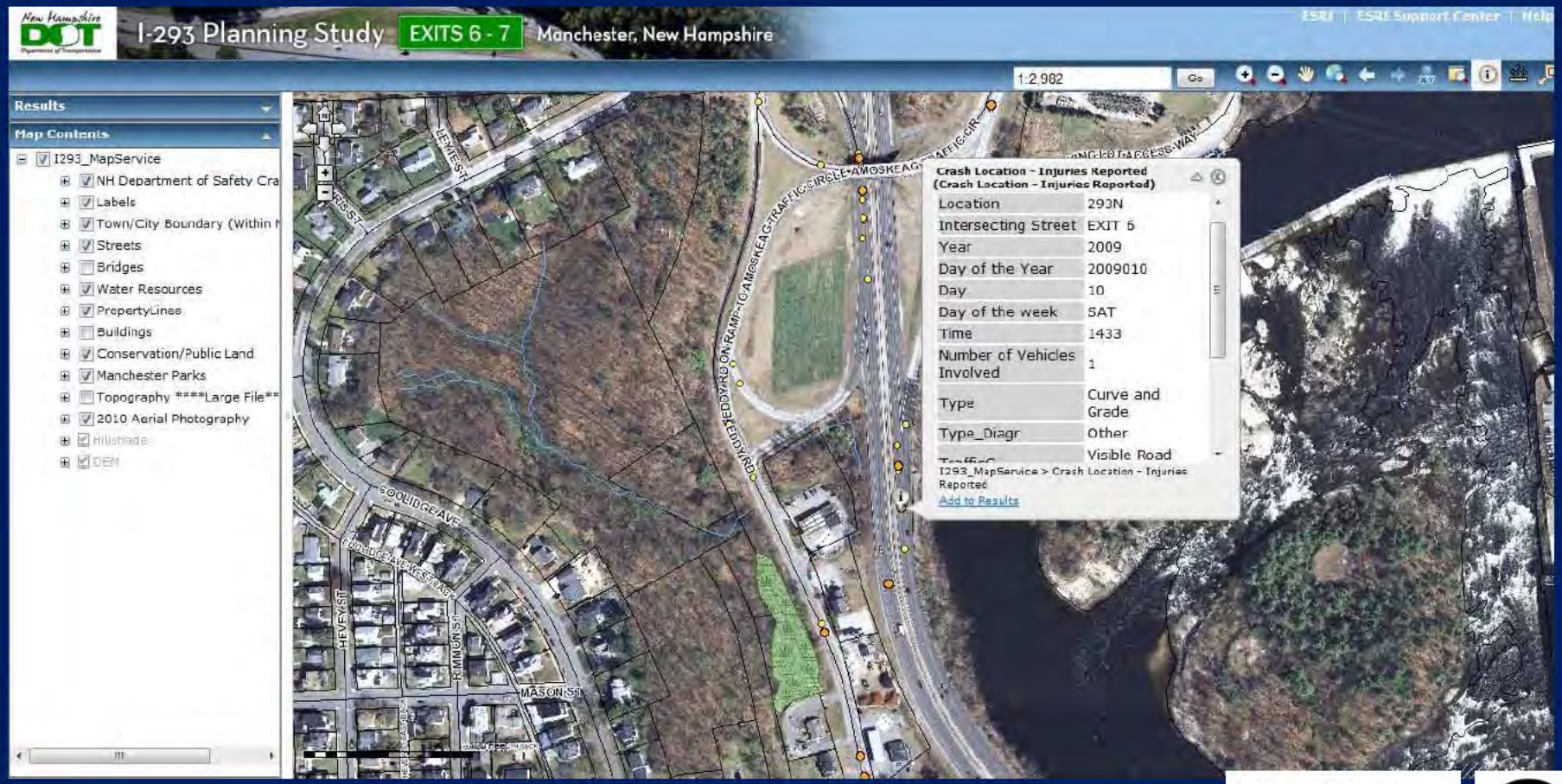
# Interactive Mapping

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# Interactive Mapping

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## NHDOT Contact

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Bureau of Highway Design
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Office: 603-644-0888
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Email: mkennedy@vhb.com

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Your thoughts, ideas, suggestions?

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