

Maine-New Hampshire Connections Study

Public Informational Meeting

August 20, 2009



Meeting Overview

- Welcome
- Federal Stimulus Grant Update
- Bridge Inspections Update
- Study Update/Schedule Review
- Baseline Conditions and Analysis Overview
- Purpose and Need: Review and Discussion
- General Questions/Discussion

Federal Stimulus Grant Update

- Maine and NH are actively working to develop the application for submittal prior to the September 15 deadline
- If the grant is successful:
 - Memorial Bridge will be funded
 - The Connections Study scope of work will be modified to exclude further analysis of Memorial Bridge alternatives
 - The Connection Study will continue evaluating Sarah Mildred Long alternatives
- If the grant is not successful, Connections Study will provide direction for solutions going forward

Bridge Inspections and Cost Analyses (BICA) Status

- Field Inspection work on both bridges complete
- Full Report due in September
- Memorial Bridge Inspection Findings:
 - Accelerated Deterioration, including the Kittery approach
 - Bridge Posting Reduced from 20 tons to 10 tons
- Sarah Mildred Long Bridge Inspection Findings:
 - Posted for 20-ton loads as of June 27
 - Albacore Park Connector Road opened to improve truck access to the I-95 Bridge
 - Recent rail delivery to Portsmouth Naval Shipyard recently completed without incident
- **Both bridges remain safe for their respective posted load limits**

Study Update/Schedule Review

- August: Baseline Data completed
- September: Traffic analysis and travel demand model forecasts complete for no-build conditions
- September: Fatal Flaw Analysis and process
- September: Brainstorm alternatives (solutions)
- December: Fatal Flaw Analysis results yields list of feasible alternatives
- January: Analysis of feasible alternatives begins

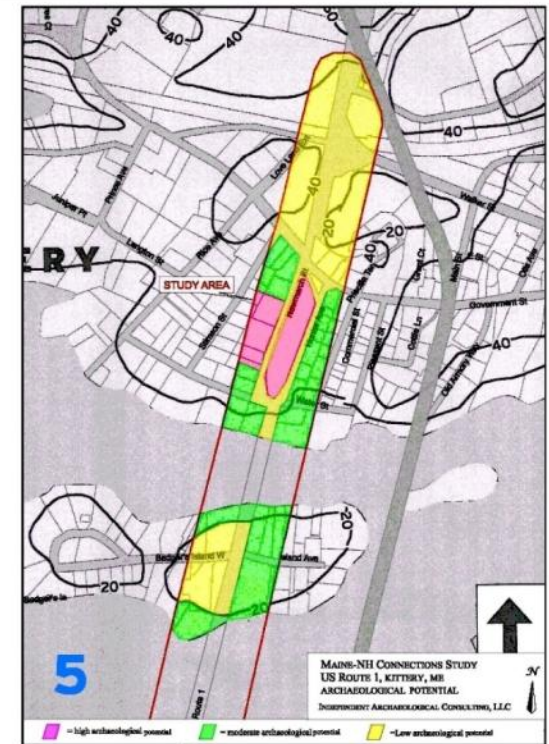
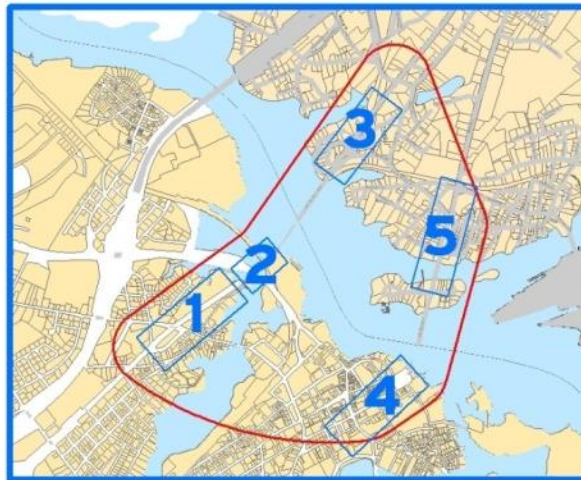
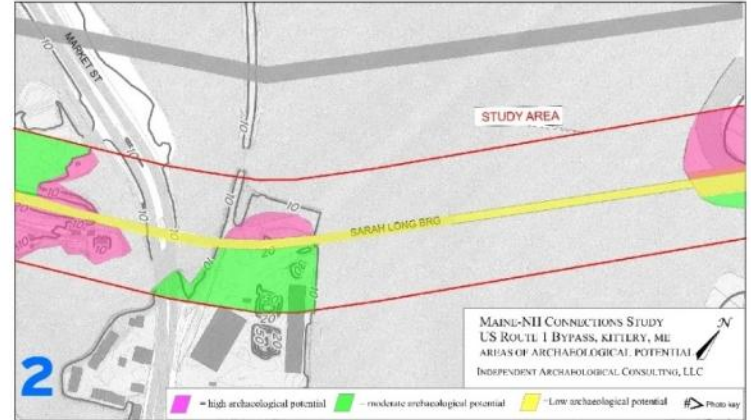
Baseline Conditions and Analysis

What did we learn??

Background Data Categories

- Cultural/Historic
- Natural Resource
- Land Use
- Transportation
- Origin-Destination

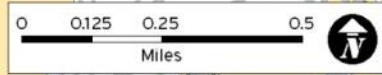
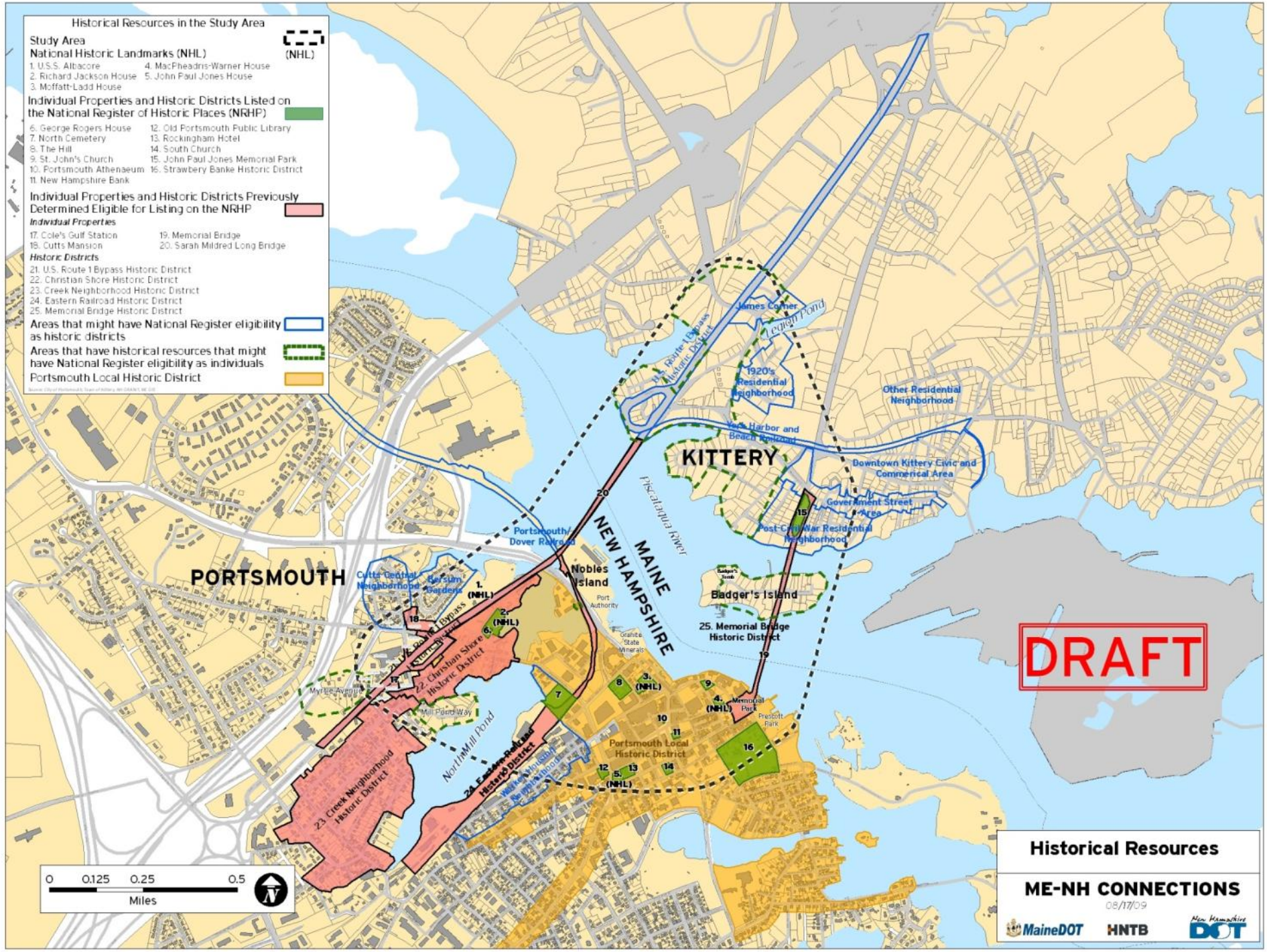
Cultural/Historic



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Areas of Archaeological Potential
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- Historical Resources in the Study Area**
- Study Area**
- National Historic Landmarks (NHL)** (NHL)
- | | |
|--------------------------|-----------------------------|
| 1. U.S.S. Albacore | 4. MacPheadris-Warner House |
| 2. Richard Jackson House | 5. John Paul Jones House |
| 3. Moffatt-Ladd House | |
- Individual Properties and Historic Districts Listed on the National Register of Historic Places (NRHP)**
- | | |
|--------------------------|--|
| 6. George Rogers House | 12. Old Portsmouth Public Library |
| 7. North Cemetery | 13. Rockingham Hotel |
| 8. The Hill | 14. South Church |
| 9. St. John's Church | 15. John Paul Jones Memorial Park |
| 10. Portsmouth Athenaeum | 16. Strawberry Banke Historic District |
| 11. New Hampshire Bank | |
- Individual Properties and Historic Districts Previously Determined Eligible for Listing on the NRHP**
- Individual Properties**
- | | |
|-------------------------|-------------------------------|
| 17. Cole's Gulf Station | 19. Memorial Bridge |
| 18. Cutts Mansion | 20. Sarah Mildred Long Bridge |
- Historic Districts**
- | |
|---|
| 21. U.S. Route 1 Bypass Historic District |
| 22. Christian Shore Historic District |
| 23. Creek Neighborhood Historic District |
| 24. Eastern Railroad Historic District |
| 25. Memorial Bridge Historic District |
- Areas that might have National Register eligibility as historic districts**
- Areas that have historical resources that might have National Register eligibility as individuals**
- Portsmouth Local Historic District**

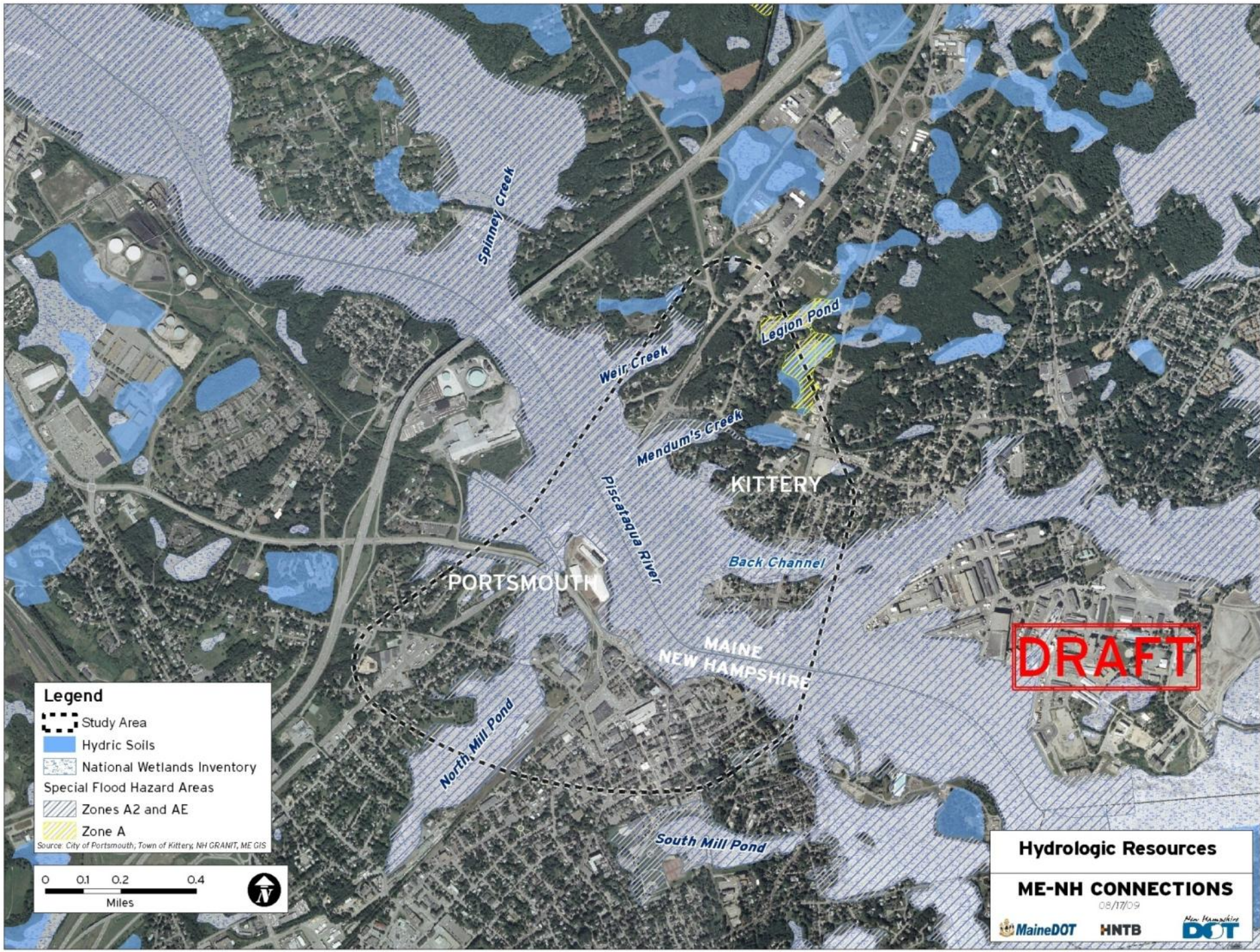


Historical Resources

ME-NH CONNECTIONS

08/17/09

Natural Resources

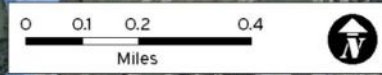


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Legend

- Study Area
- Hydric Soils
- National Wetlands Inventory
- Special Flood Hazard Areas
- Zones A2 and AE
- Zone A

Source: City of Portsmouth, Town of Kittery, NH GRANIT, ME GIS



Hydrologic Resources

ME-NH CONNECTIONS

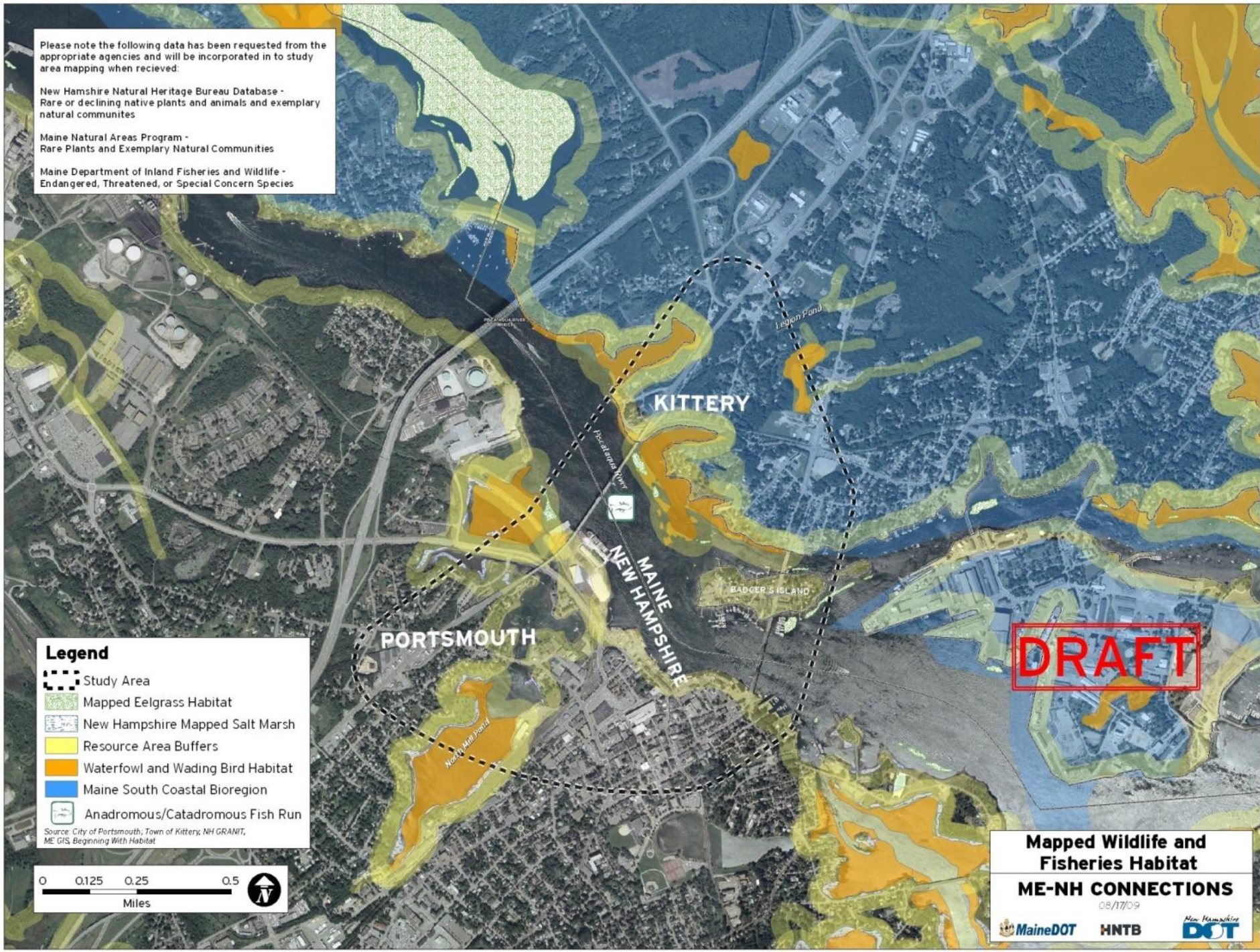
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Please note the following data has been requested from the appropriate agencies and will be incorporated in to study area mapping when recieved.

New Hampshire Natural Heritage Bureau Database -
Rare or declining native plants and animals and exemplary natural communities

Maine Natural Areas Program -
Rare Plants and Exemplary Natural Communities

Maine Department of Inland Fisheries and Wildlife -
Endangered, Threatened, or Special Concern Species



Legend

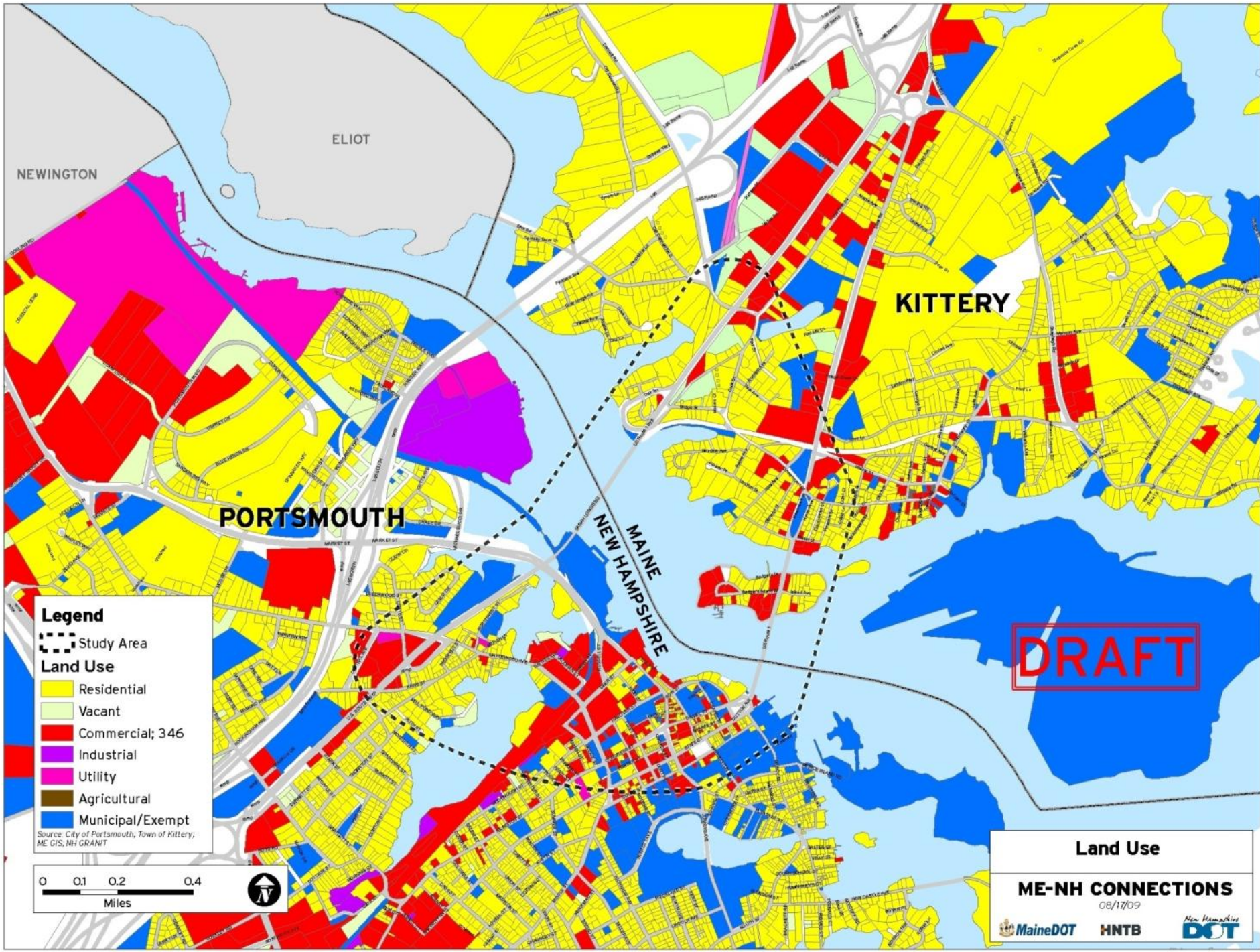
- Study Area
- Mapped Eelgrass Habitat
- New Hampshire Mapped Salt Marsh
- Resource Area Buffers
- Waterfowl and Wading Bird Habitat
- Maine South Coastal Bioregion
- Anadromous/Catadromous Fish Run

Source: City of Portsmouth, Town of Kittery, NH GRANIT, ME GIS, Beginning With Habitat



Mapped Wildlife and Fisheries Habitat
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Land Use



Legend

- Study Area
- Land Use**
- Residential
- Vacant
- Commercial; 346
- Industrial
- Utility
- Agricultural
- Municipal/Exempt

Source: City of Portsmouth, Town of Kittery, ME GIS, NH GRANIT



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Land Use

ME-NH CONNECTIONS
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Portsmouth Zoning

- | | |
|-------------------------------------|---|
| A: Apartments | M: Municipal |
| ABC: Airport Business Commercial | MRB: Mixed Residential Business |
| AI: Airport Industrial | MRO: Mixed Residential Office |
| AIR: Airport | NRP: Natural Resource Protection |
| B: Business | OR: Office Research |
| CBA: Central Business A | OR/MV: Office Research/ Mariner's Village |
| CBB: Central Business B | PI: Pease Industrial |
| GA/MH: Garden Apartment/Mobile Home | R: Rural |
| GB: General Business | SRA: Single Residence A |
| GRA: General Residence A | SRB: Single Residence B |
| GRB: General Residence B | WB: Waterfront Business |
| I: Industrial | WI: Waterfront Industrial |

PORTSMOUTH

KITTERY

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Kittery Zoning

- | | |
|----------------------------|--------------------------|
| BI: Badgers Island Urban | LB-1: Local Business 1 |
| BP: Business Park | MU: Mixed Use |
| CF: Commercial Fishing | RC: Rural Conservation |
| C-1: Commercial 1 | RR: Rural Residential |
| C-2: Commercial 2 | SR: Suburban Residential |
| C-3: Commercial 3 | UR: Urban Residential |
| I: Industrial | VR: Village Residential |
| KF: Kittery Foreside | Water |
| KPV: Kittery Point Village | Wet |
| LB: Local Business | |

Legend

Study Area
 Source: City of Portsmouth, Town of Kittery, ME GIS, NH GRANIT

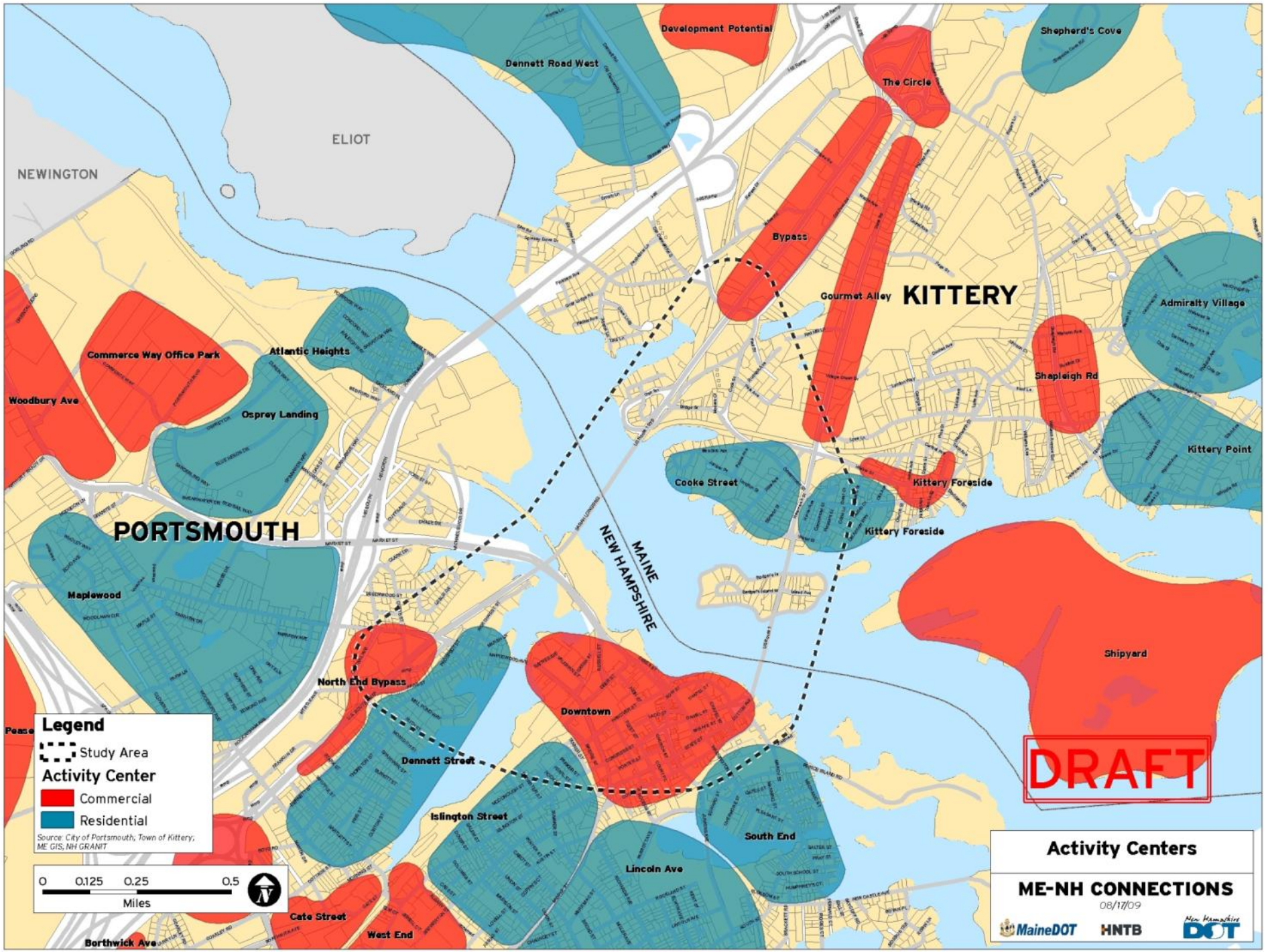


Zoning

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Legend

-  Study Area
- Activity Center**
-  Commercial
-  Residential

Source: City of Portsmouth, Town of Kittery, ME GIS, NH GRANIT



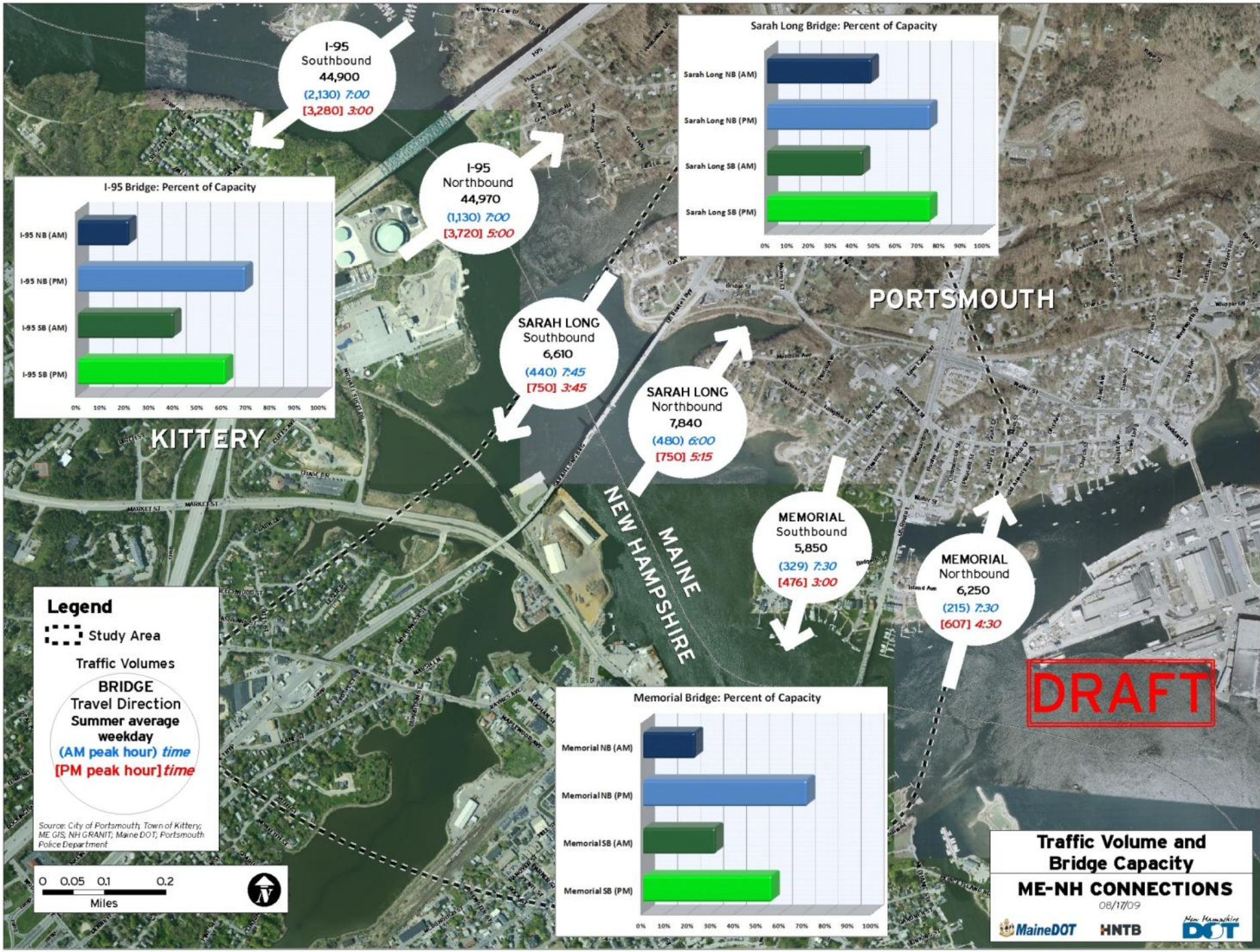
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Activity Centers

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Transportation



I-95 Southbound
44,900
 (2,130) 7:00
 [3,280] 3:00

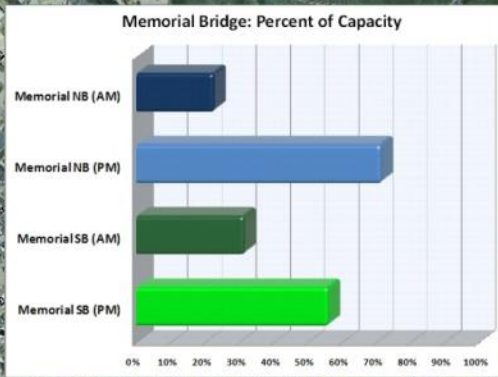
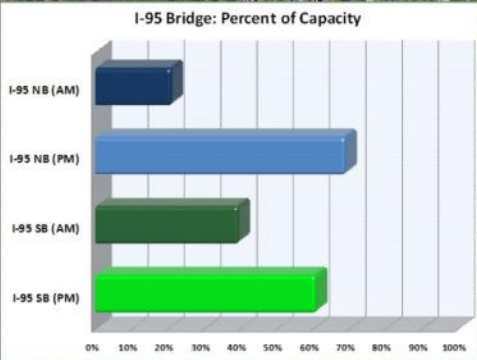
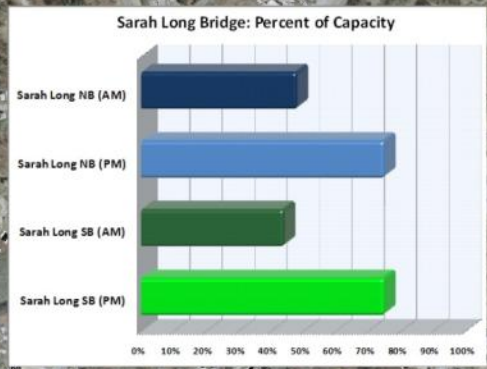
I-95 Northbound
44,970
 (1,130) 7:00
 [3,720] 5:00

SARAH LONG Southbound
6,610
 (440) 7:45
 [750] 3:45

SARAH LONG Northbound
7,840
 (480) 6:00
 [750] 5:15

MEMORIAL Southbound
5,850
 (329) 7:30
 [476] 3:00

MEMORIAL Northbound
6,250
 (215) 7:30
 [607] 4:30

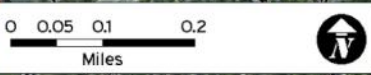


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Legend

- Study Area
- Traffic Volumes
- BRIDGE
- Travel Direction
- Summer average weekday
- (AM peak hour) time
- [PM peak hour] time

Source: City of Portsmouth, Town of Kittery, ME GIS, NH GRANIT, Maine DOT, Portsmouth Police Department





Legend

- Study Area
- Rail
- Wildcat (Route 4)
- COAST BUS**
- COAST (Route 2)
- COAST TROLLEY**
- Lafayette Southbound (Route 41)
- Lafayette Northbound (Route 41)
- Pease Outbound (Route 40)
- Pease Inbound (Route 40)

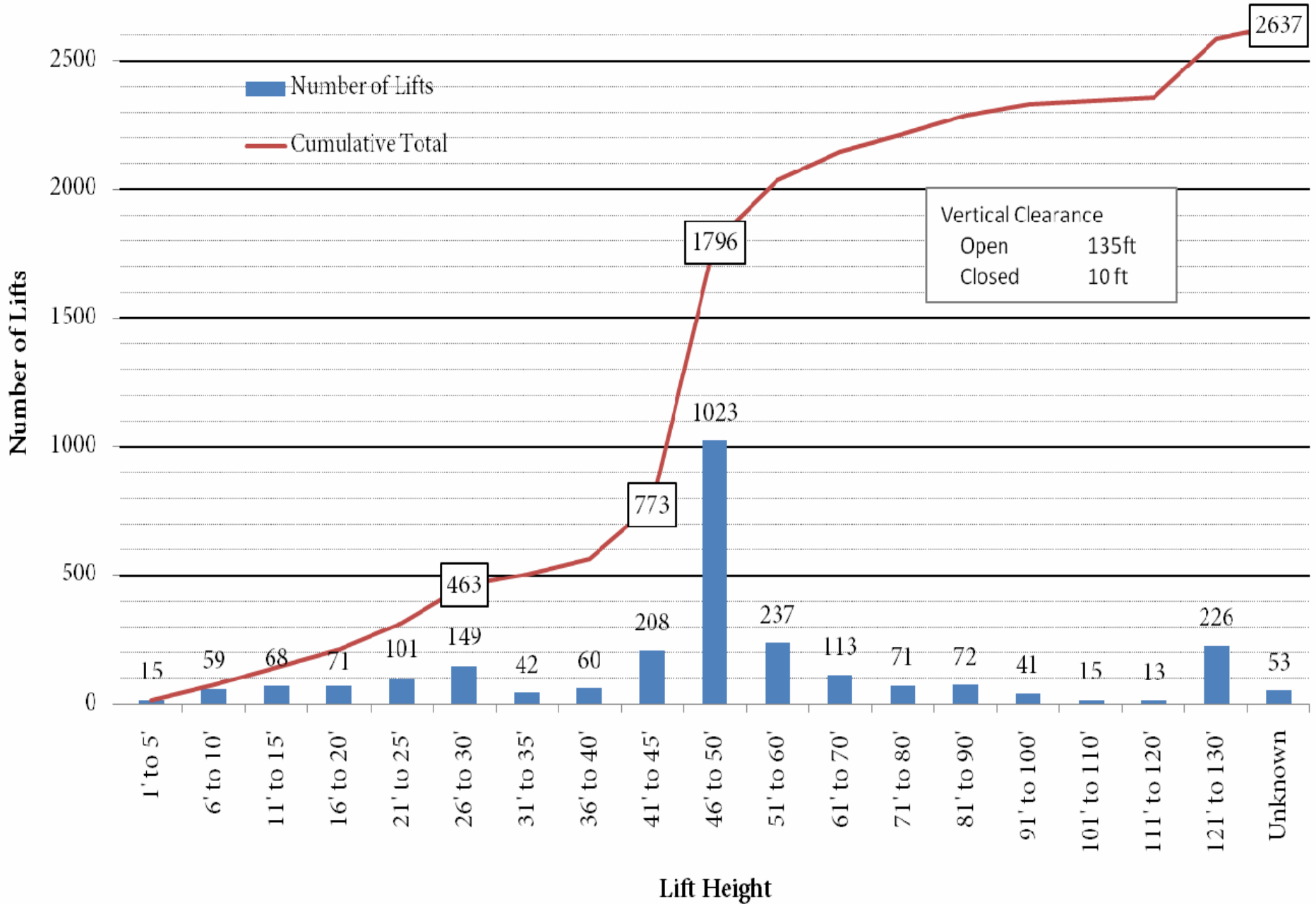
Source: City of Portsmouth, Town of Kittery, ME GIS, NH GRANIT, Strafford Regional Planning Commission, Rockingham Planning Commission



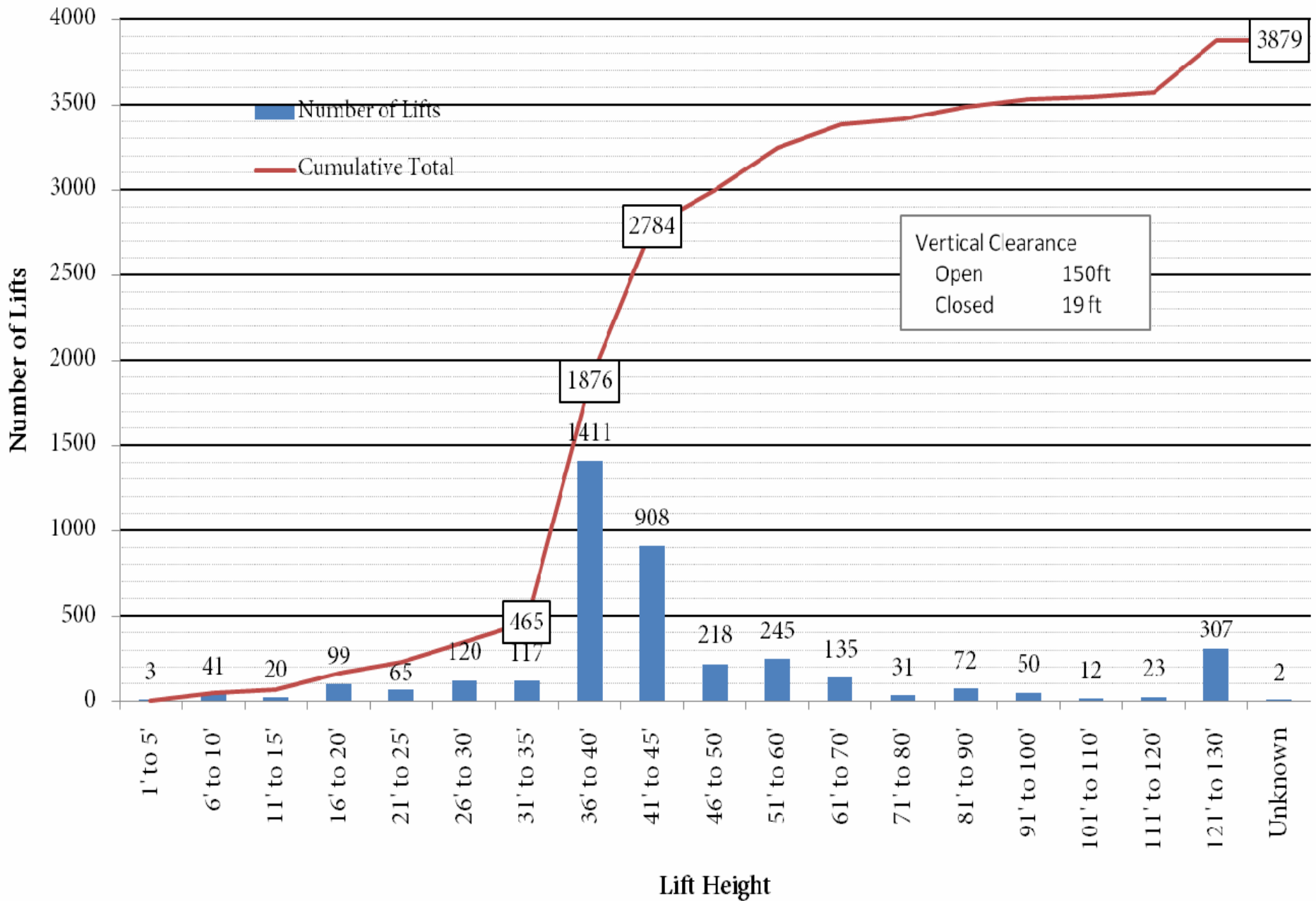
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Multi-Modal Transportation Services & Facilities
ME-NH CONNECTIONS
 08/17/09

2008 Sarah Mildred Long Bridge Lift Data Summary



2008 Portsmouth Memorial Bridge Lift Data Summary

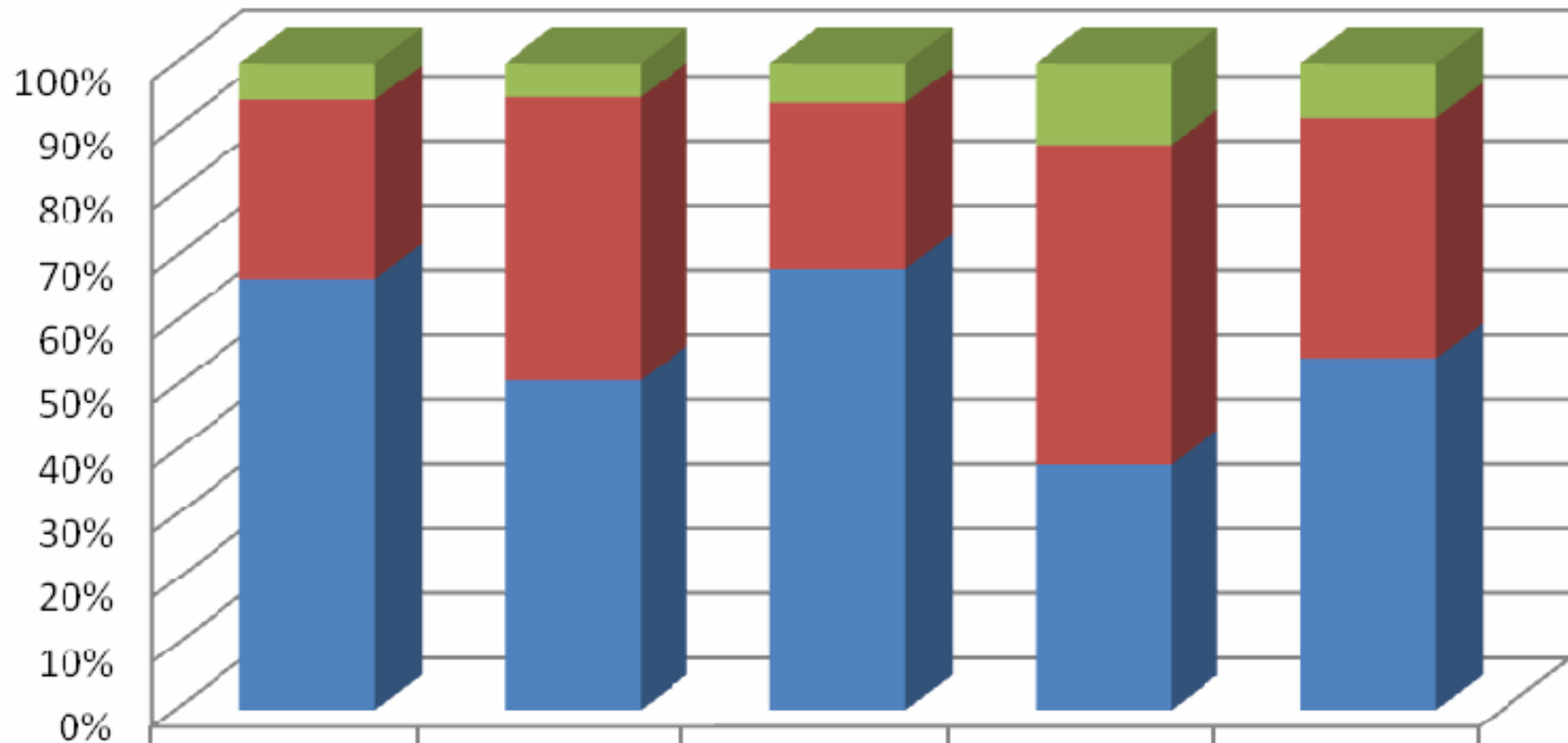


Origin Destination Survey Highlights

Vehicle Survey – May 2009

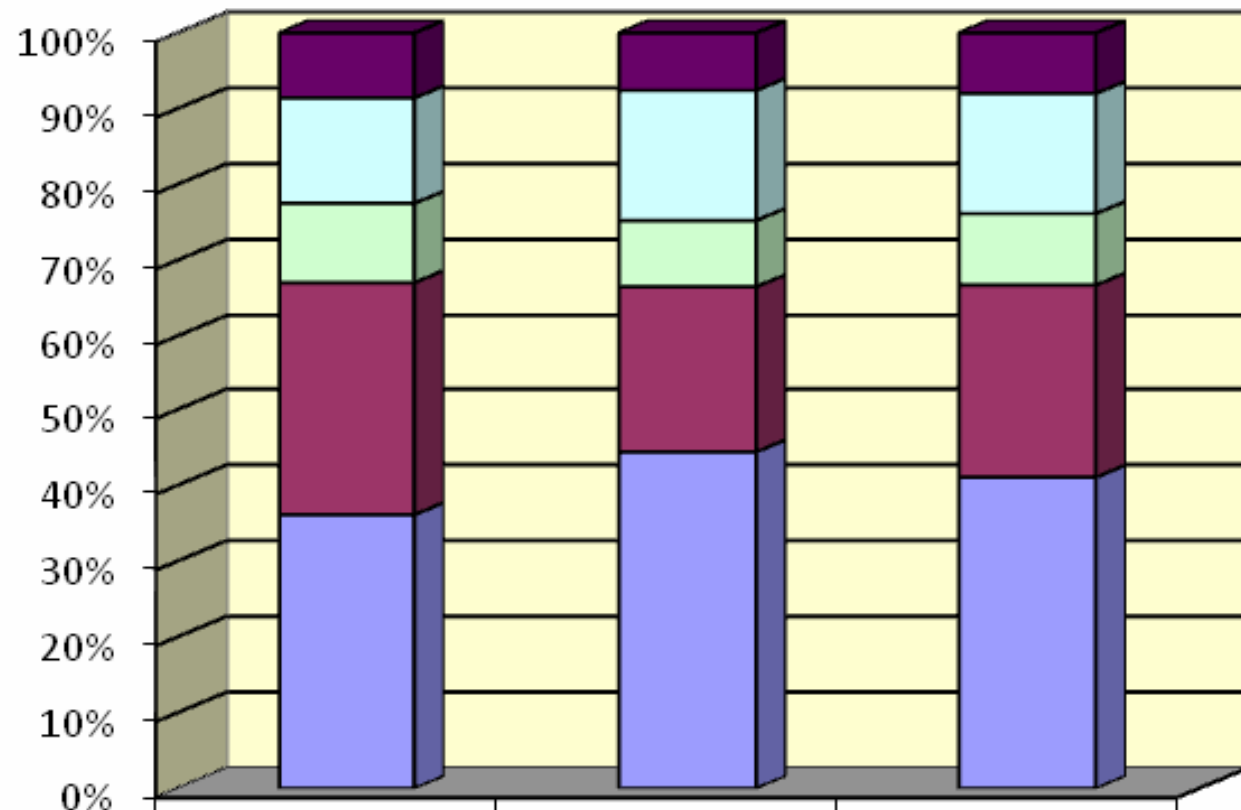
Bicycle/Pedestrian Survey – July 2009

State of Vehicle Registry



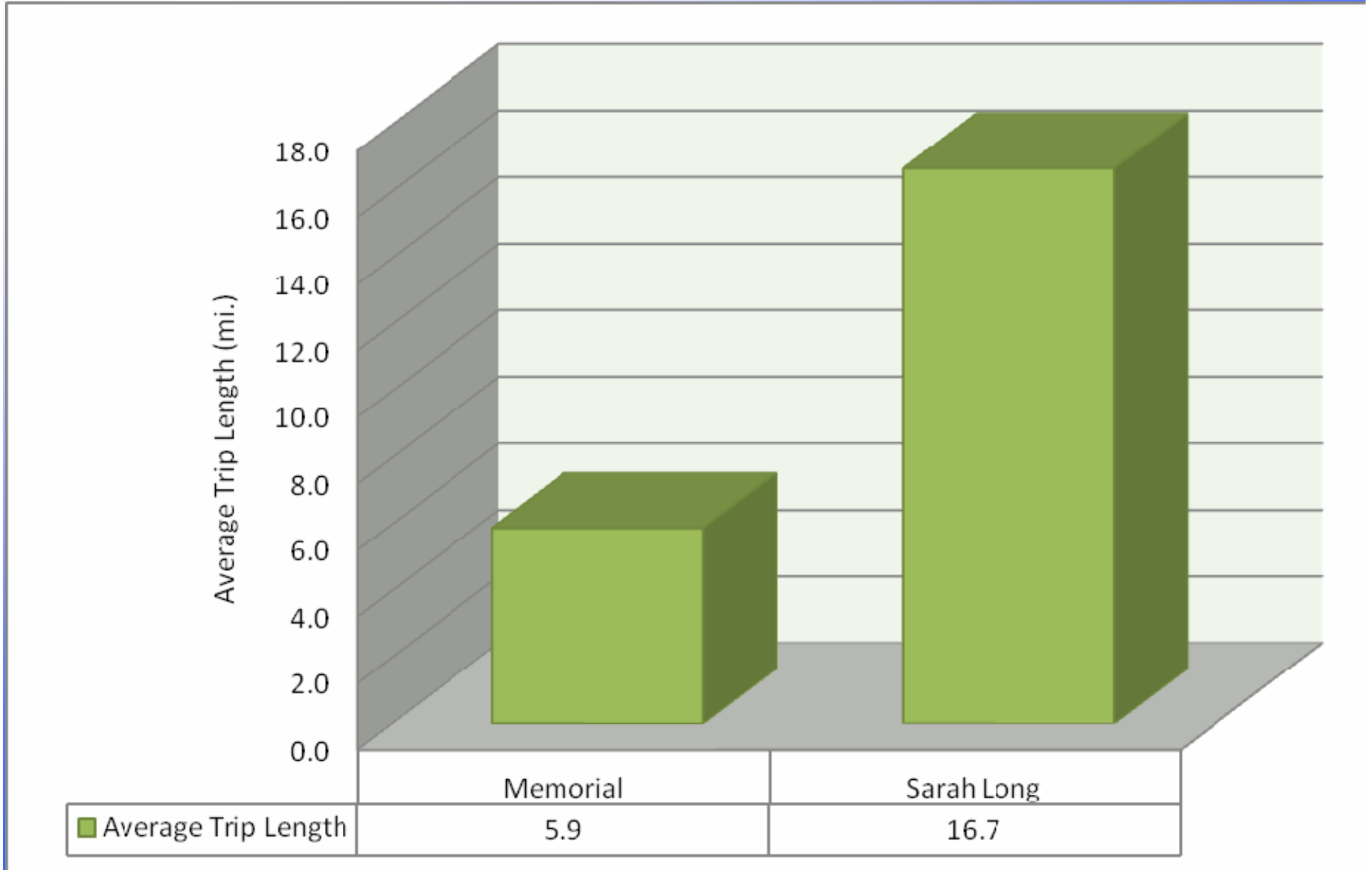
OTHER	6%	5%	6%	13%	8%
NH	28%	44%	26%	49%	37%
ME	67%	51%	68%	38%	54%

Vehicle Trip Purpose



	Memorial Bridge	Sarah Long Bridge	Overall
Other	9%	8%	8%
Work-based	14%	17%	16%
Home-to-Recreation / Leisure	10%	9%	9%
Home-to-Shopping / Personal Business	31%	22%	26%
Home-to-Work	36%	44%	41%

Average Vehicle Trip Length



Most Common

Origins:

External 105: 36.2%

External 106: 21.0%

Most Common

Destinations:

External 111: 66.7%

Subarea 9: 7.5%

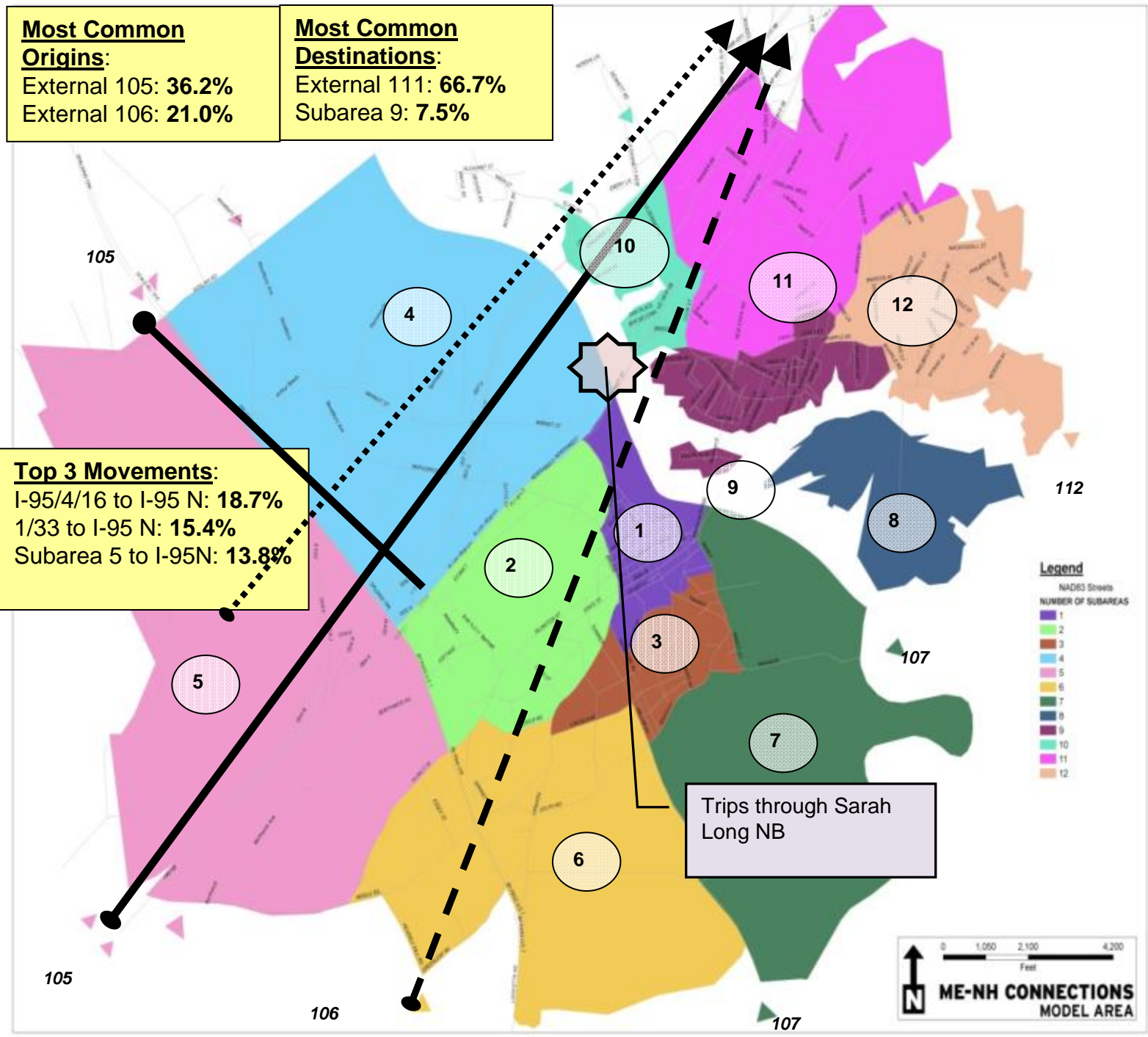
Top 3 Movements:

I-95/4/16 to I-95 N: 18.7%

1/33 to I-95 N: 15.4%

Subarea 5 to I-95N: 13.8%

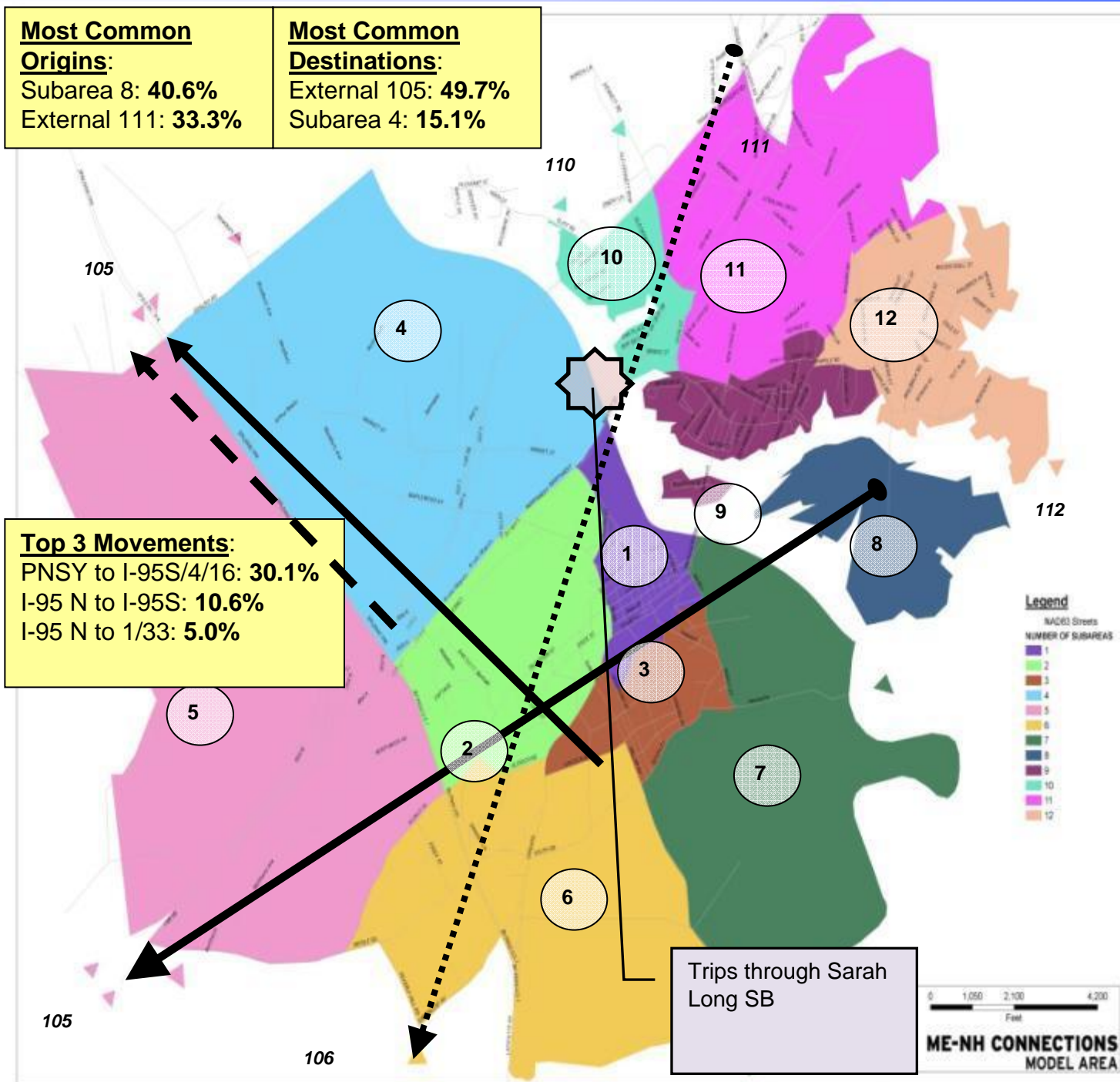
Trips through Sarah Long NB

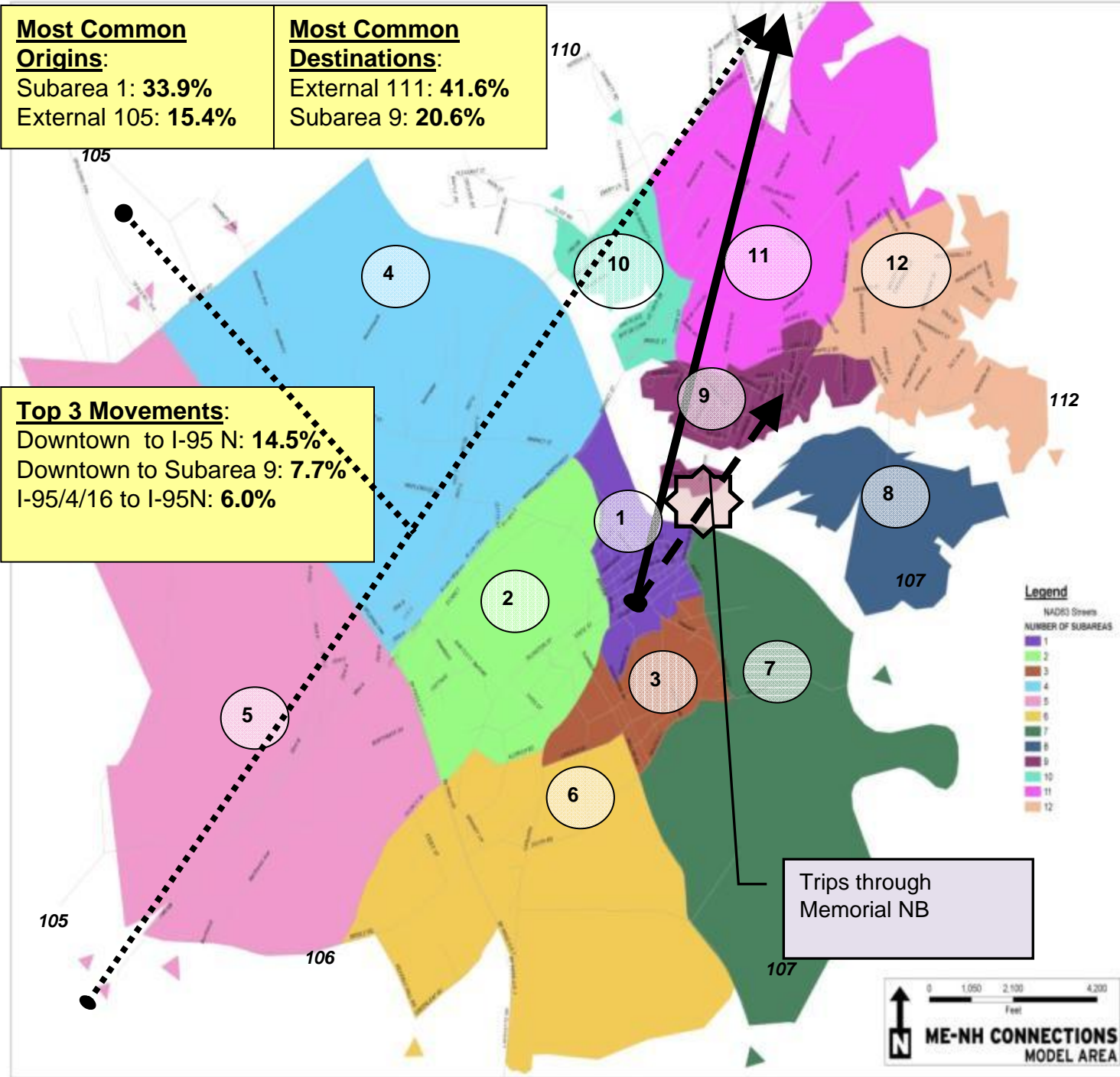


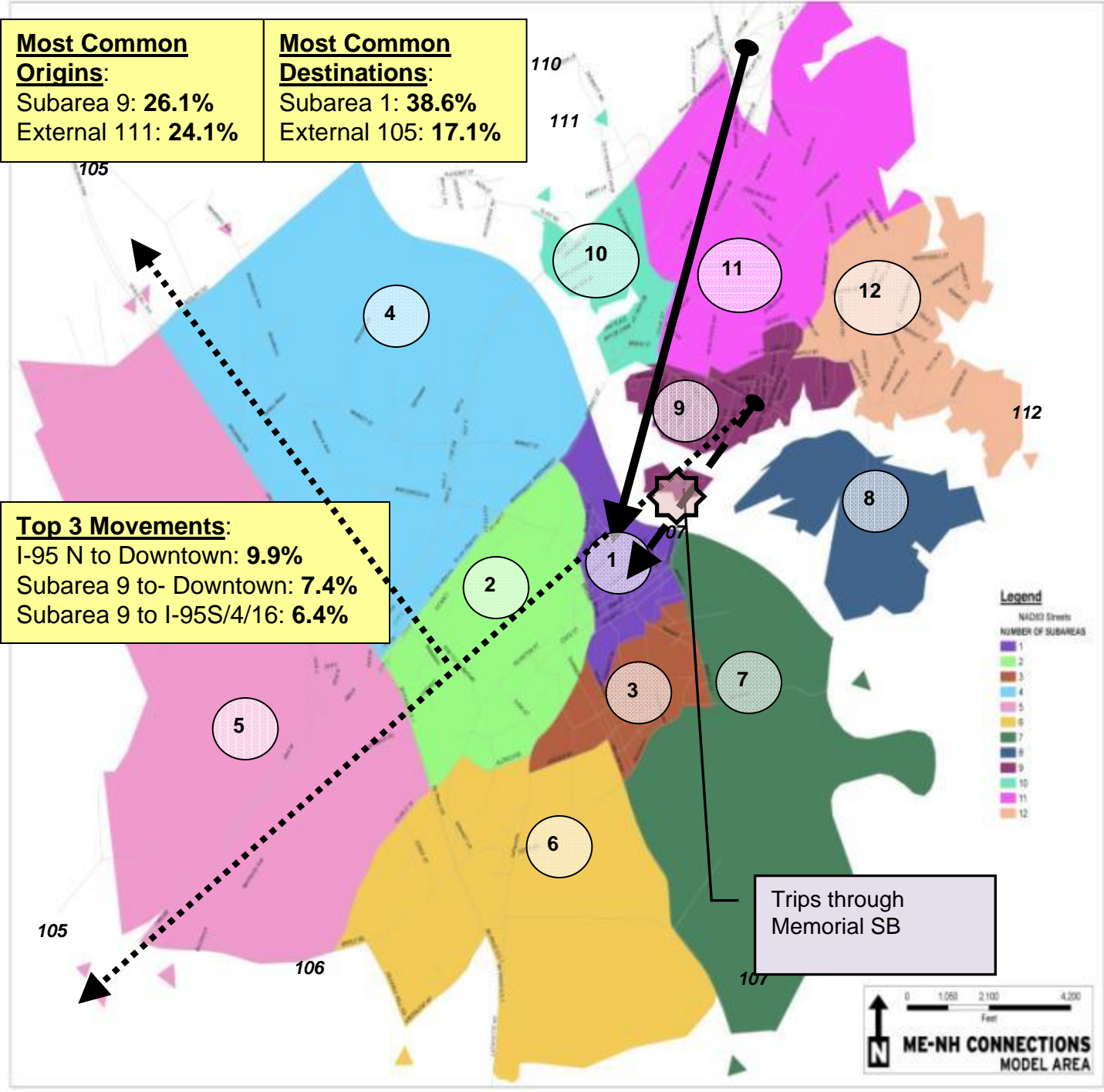
**Most Common
Origins:**
Subarea 8: 40.6%
External 111: 33.3%

**Most Common
Destinations:**
External 105: 49.7%
Subarea 4: 15.1%

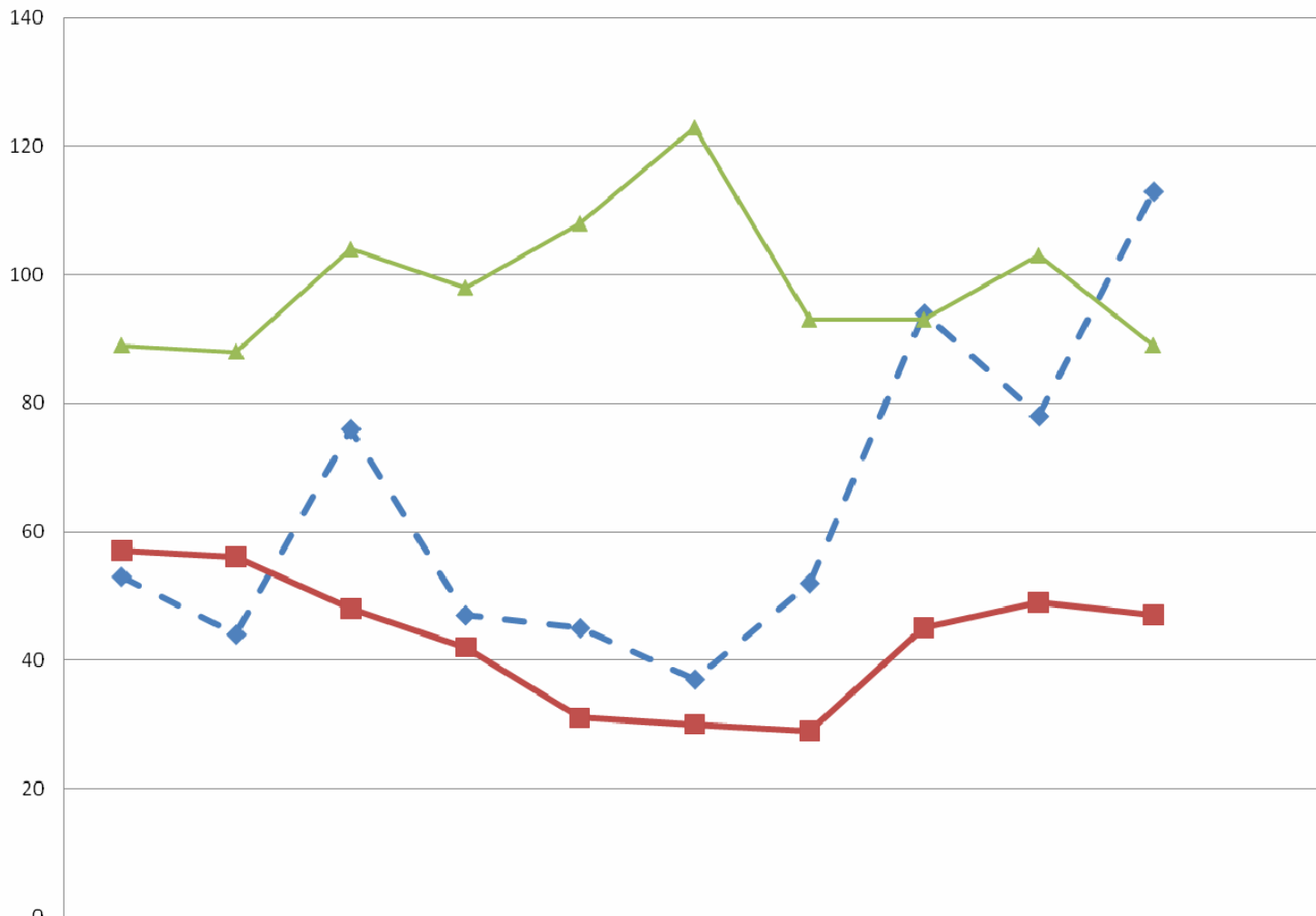
Top 3 Movements:
PNSY to I-95S/4/16: 30.1%
I-95 N to I-95S: 10.6%
I-95 N to 1/33: 5.0%





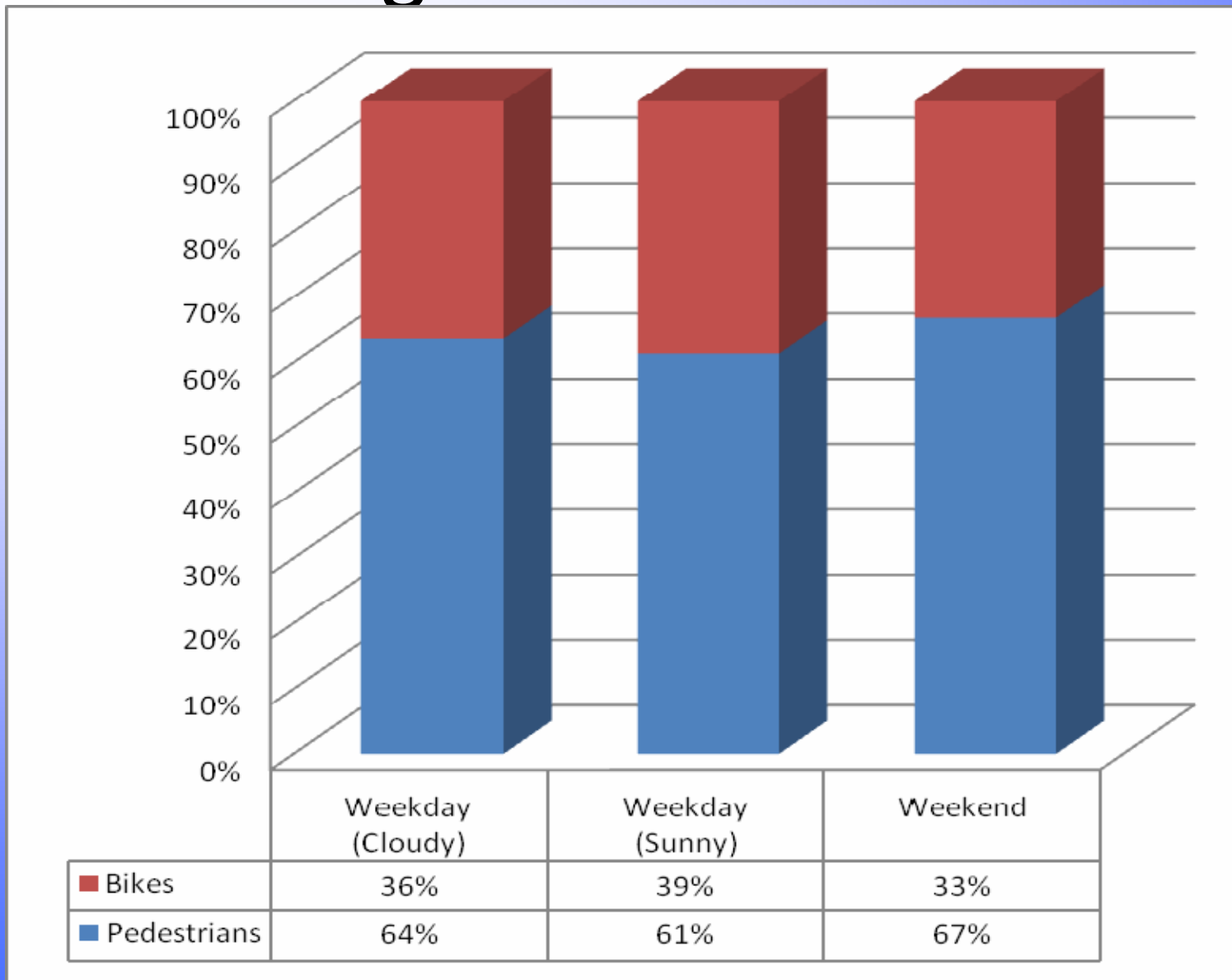


Summer Bike/Ped Volumes

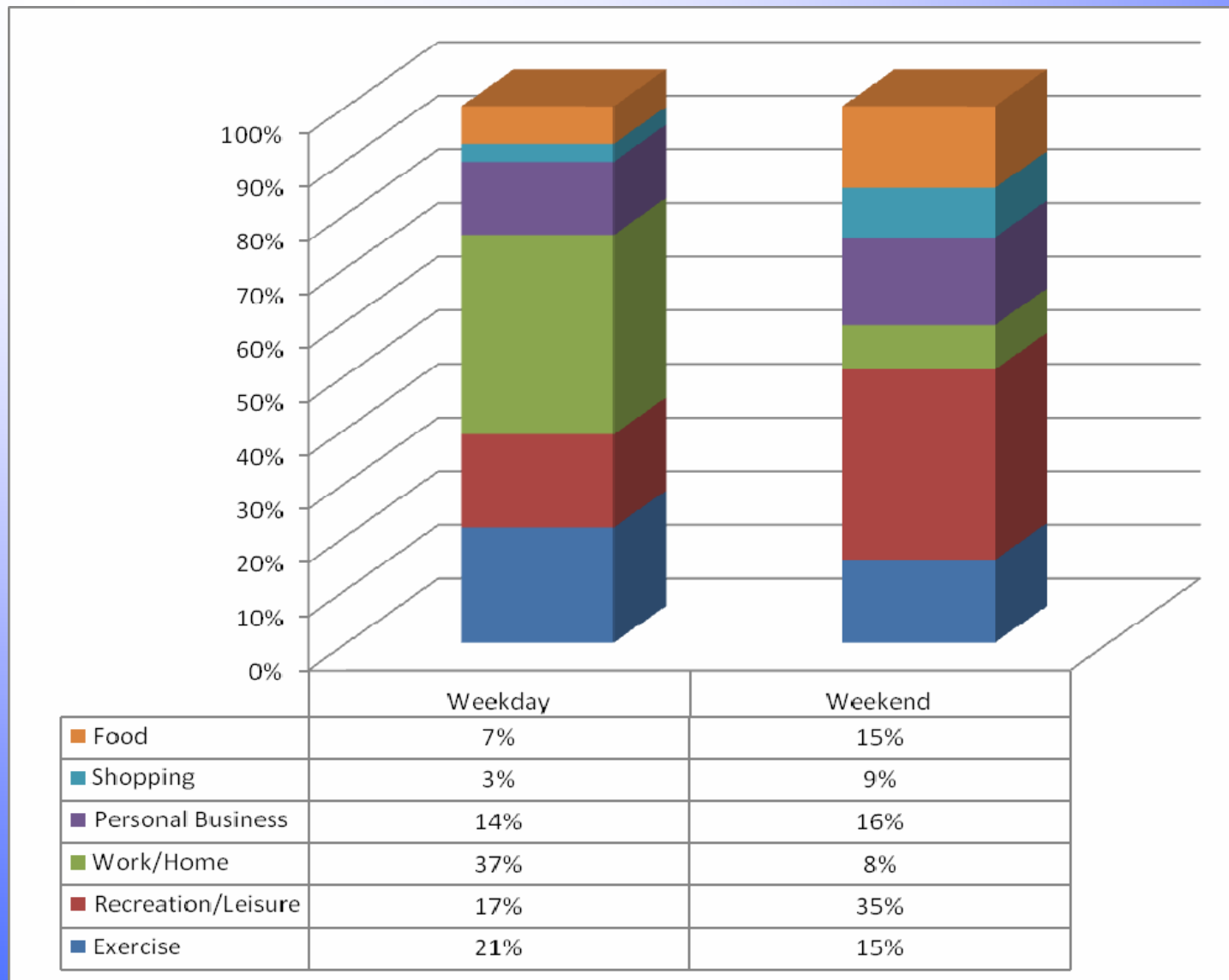


	8:00-9:00	9:00-10:00	10:00-11:00	11:00-12:00	12:00-13:00	13:00-14:00	14:00-15:00	15:00-16:00	16:00-17:00	17:00-18:00	Total
7/15/2009	53	44	76	47	45	37	52	94	78	113	639
7/16/2009	57	56	48	42	31	30	29	45	49	47	434
7/25/2009	89	88	104	98	108	123	93	93	103	89	988

Percentage of Bikes vs. Peds



Bike/Ped Trip Purpose Summary



Purpose and Need

Purpose and Need Statement

- A foundation for the Study
- A starting point for development of alternatives (solutions)
- Must clearly address transportation needs
- Must clearly state the Study's goals
- Used as a basis to *measure* which alternatives (solutions) will remain for more detailed analysis and final selection

Input from Public Meetings

- Bike/Ped access should be non-negotiable
- Bike/Ped access attracts tourists
- Bike lanes that meet safety requirements
- Bike lanes on all bridges
- Low bridges = historic appeal
- Historic nature important to region
- Economic link to downtown Kittery from Ports.
- Economic support for businesses on Rte. 103

Input from Public Meetings

- Must support PNS
- Must accommodate tourism needs
- East Coast Greenway a key link
- Must meet evacuation and safety requirements
- Need less maintenance in future
- Support rail transportation for future
- Should not solve summer traffic on I-95

Input from Steering Committee

- Local connection with bridges provides pride of place
- Portsmouth at capacity; businesses spilling over into Kittery
- Reduced maintenance cost very important due to state budgets
- Fewer trucks through downtowns is good
- Need better access to Sarah Long in new locations such as Market Street.

Input from Steering Committee

- Promoting ped/bike important for residents and tourism
- Access to downtown Portsmouth key to both communities
- Access for ALL modes is key
- Zoning shows compatibility
- Good to be able to cross river casually
- Knitting communities together is good
- Required to minimize or avoid adverse affects to a historic bridge.

Purpose and Need Statement: The Process

- Gathered initial feedback from Public – April 09
- Draft presented to Stakeholder Committee June 30
- Comments incorporated - revised P&N to Steering Committee and Stakeholder Committee on July 7
- Federal agencies commented on format
- SC met to discuss in early August and agreed to revised format with adjustments
- Revision sent to SHC on August 11
- Conference call with SHC on August 17 and 19
- Version 8: Still a “work in progress”

Purpose and Need Statement

Statement of Purpose

- The purpose of the Maine-New Hampshire Connections Study is to identify and evaluate feasible long-term (2035) transportation strategies that facilitate the safe, secure and effective multi-modal movement of people and goods across and upon the Piscataqua River between Kittery, Maine and Portsmouth, New Hampshire and which support the region's economic, cultural, historic, archeological and natural resources and its community quality of life.

Statement of Need:

(Statement of Transportation Deficiencies)

- a) Structural deficiencies exist that threaten accessibility and mobility to the region and require load postings on the Memorial Bridge and the Sarah Mildred Long Bridge,
- b) Decreased reliability of the lift spans and increasing maintenance needs of the Memorial and Sarah Long bridges are causing unnecessary delays to marine and land transportation, including response times of emergency vehicles
- c) Inadequate or outdated design features of these two bridges potentially adversely affect marine and land transportation safety,
- d) Multi-modal (*pedestrian, bicycle, rail, maritime traffic, vehicular*) opportunity is limited by inadequate or outdated facilities.

Study Goals:

In order to achieve the stated Purpose and Need, the Study will strive to achieve the following goals:

- Improve local and regional economic growth and stability, tourism and recreational opportunities
- Maintain or improve access to Portsmouth and Kittery downtowns and Portsmouth Naval Shipyard
- Improve local connections to regional transportation modes
- Minimize long-term costs for the regional transportation system
- Improve bicycle and pedestrian access across the Piscataqua River

Study Goals

- Reduce operational and maintenance costs (currently \$1.1+ M per year per bridge)
- Avoid or minimize detrimental impacts to the historic significance and integrity of the Kittery-Portsmouth area
- Conserve the aesthetic setting of the Piscataqua River
- Conserve the environmental quality of the Piscataqua River
- Avoid or minimize detrimental impacts to residential neighborhoods in Kittery, Portsmouth and neighboring areas.
- Reduce or maintain emissions of pollutants, including greenhouse gases

Fatal Flaw Analysis: How it works

- Used to evaluate and screen full range of alternatives (solutions) identified
- Remaining feasible alternatives receive “Higher” level of analysis
- Fatal flaw screening:
 - Does alternative satisfy purpose, need and goals?
 - Does alternative have significant impacts?
 - Is alternative permittable?
 - Is alternative financially/physically feasible?
 - Is alternative clearly inferior to other alternatives?

Fatal Flaw Analysis



All Alternatives
identified by
Steering and
Stakeholder
Committees,
Public,
Agencies



Fatal Flaw
Analysis



Evaluate
Feasible
Alternatives

Fatal Flaw Analysis: Examples of Potential Measures	Alt. 1	Alt. 2	Alt. X	Alt. Y
- Does the alternative increase structural strength and life of the Memorial Bridge and/or SML Bridge?	YES	NO	YES	YES
- Does the alternative increase the reliability of lift spans?	YES	YES	YES	YES
- Does the alternative increase navigation and land traffic safety?	NO	NO	YES	NO
- Does the alternative improve economic growth and stability?	TBD	TBD	TBD	TBD
- Does the alternative improve bicycle and pedestrian access (and all other modes)	YES	YES	YES	YES
- Does the alternative maintain or improve access to PNS and downtowns?	YES	NO	YES	NO
- Is the alternative financially feasible for the states to construct and maintain?	YES	YES	YES	NO
- Does the alt. avoid or minimize detrimental impacts to natural and physical resources?	YES	YES	YES	NO

Upcoming Meetings

- Sept. 11: Stakeholder Meeting
- Sept. 17: Steering Committee Meeting
- Sept. 24: Public Meeting

General Questions/Discussion