

A detailed map of the Greater Hartford area, including West Hartford, Hartford, East Hartford, South Windsor, and Glastonbury. The map is overlaid with various colored lines representing transit routes: blue, red, orange, green, purple, and pink. Several callout boxes provide specific information about express bus services, such as routes from the Park & Ride Lot to downtown Hartford, and routes to the University of Connecticut. The text is centered over the map in a large, bold, black font.

Comprehensive Transit Service Analysis: Greater Hartford Area

Kick-Off Meeting
September 3, 2014



Agenda

- Introductions
- Public Forum
- Project Overview & AC Responsibilities
- Transit Analysis General Scope
- Transit Data Repository
- tHUB
- Next Meeting
- Adjourn

Introductions

- Name
- Title
- Organization
- Homework: Top 1-2 goals for this study



Public forum



Project Overview

- Study Area
- Why we need this study
- Project Tasks
- Organizational Chart



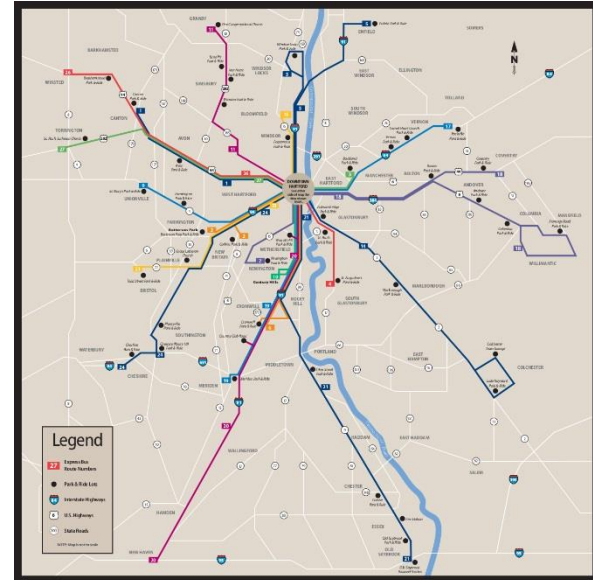
Study Area



CTTransit Hartford Local

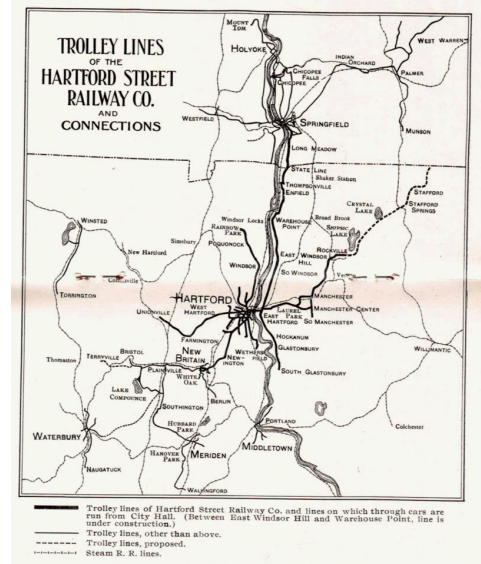


CTTransit Hartford Express

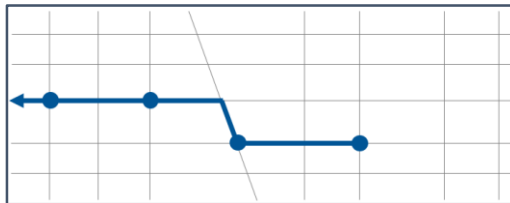


Why do we need this study?

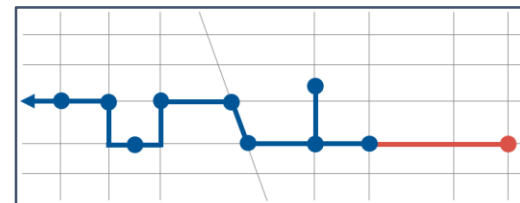
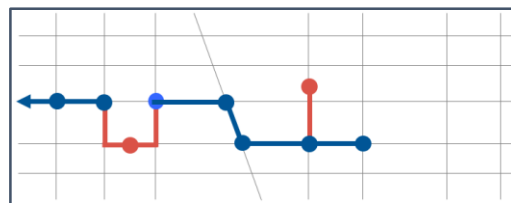
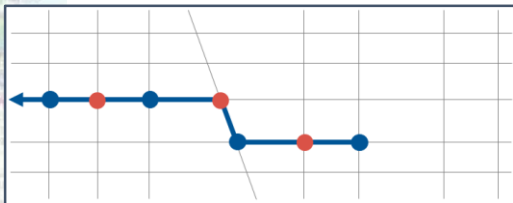
- Based on streetcar routes
- Modifications as needed



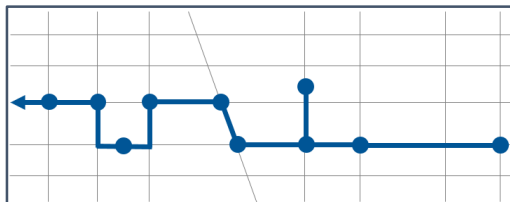
Initial Service:



Service Tweaks:



Resulting Service:



Why do we need this study?

- Areas outside downtown Hartford have grown



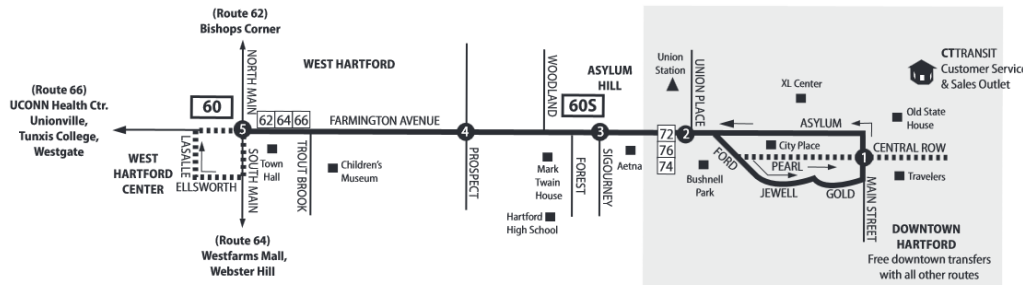
Why do we need this study?

- System can be confusing

ROUTE KEY

- 60** West Hartford Center
- 62** Bishops Corner
- 64** Webster Hill Boulevard
- 64W** Westfarms Mall
- 66** Westgate
- 66F** UCONN Health Center-Unionville
- 66H** UCONN Health Center
- 66T** UCONN Health Center-Unionville-Tunxis College

Hartford > Farmington Ave > W. Hartford Center						
Timepoints	1	2	3	4	5	
	Downtown Hartford Main at Travelers	Union Station	Asylum Hill Farmington & Sigourney	City Line Farmington & Prospect	West Hartford Center Farmington & Main	
Route						Continues to...
60	5:00	5:05	5:09	5:14	5:19	..
66T	5:35	5:40	5:44	5:49	5:54	Tunxis College
64W	5:50	5:55	5:59	6:04	6:09	Westfarms Mall
62	6:05	6:10	6:14	6:19	6:24	Bishops Corner
66F	6:15	6:20	6:24	6:29	6:34	Unionville
64	6:25	6:30	6:34	6:39	6:44	Webster Hill
62	6:35	6:40	6:44	6:51	6:58	Bishops Corner
66T	6:45	6:50	6:54	7:01	7:08	Tunxis College
62	6:55	7:00	7:04	7:11	7:18	Bishops Corner
64	7:05	7:10	7:14	7:21	7:28	Webster Hill
64W	7:15	7:20	7:24	7:31	7:38	Westfarms Mall
66	7:25	7:30	7:34	7:41	7:48	Westgate
66T	7:35	7:40	7:44	7:51	7:58	Tunxis College
62	7:45	7:50	7:54	8:01	8:08	Bishops Corner
64W	7:52	7:57	8:01	8:08	8:15	Westfarms Mall
66H	8:00	8:05	8:09	8:16	8:23	UConn Health Ctr
62	8:10	8:15	8:19	8:26	8:33	Bishops Corner
64W	8:20	8:25	8:29	8:36	8:43	Westfarms Mall
66T	8:30	8:35	8:39	8:46	8:53	Tunxis College
62	8:40	8:45	8:49	8:56	9:03	Bishops Corner
64W	8:50	8:55	8:59	9:06	9:13	Westfarms Mall
66H	9:00	9:05	9:09	9:16	9:23	UConn Health Ctr
62	9:10	9:15	9:19	9:26	9:33	Bishops Corner
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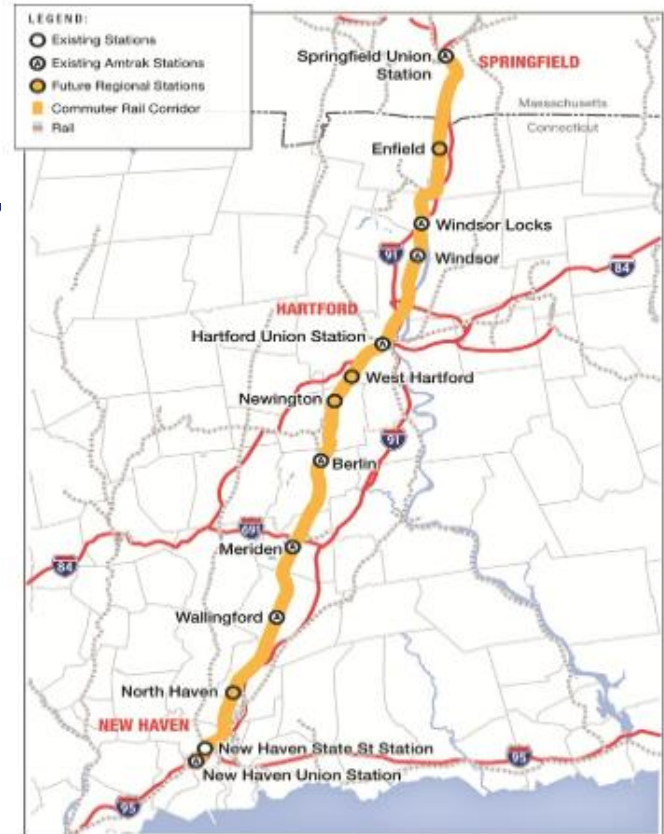
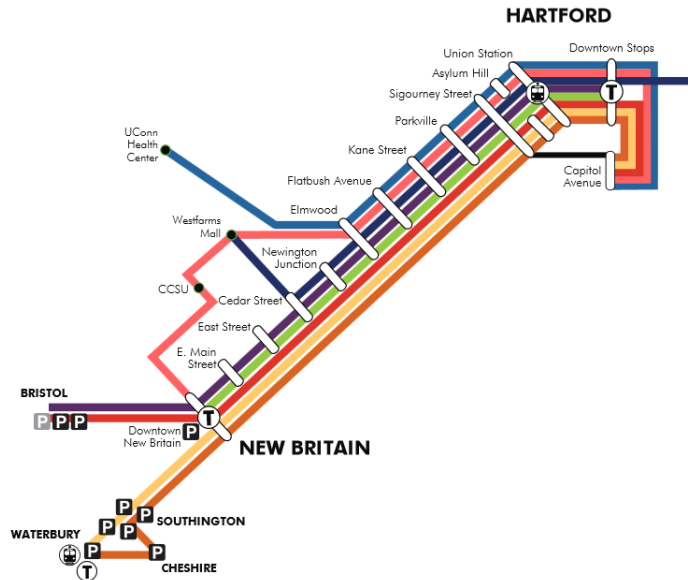


Why do we need this study?

- New services to align with



NEW HAVEN – HARTFORD – SPRINGFIELD RAIL PROGRAM



Why do we need this study?

- System performance tracking & comparisons

Please select the main query criteria:

Data Set:	Crash Time Settings	
<input checked="" type="radio"/> ConnDOT <input type="radio"/> DPS <input type="radio"/> ConnDOT and DPS	Select Data Range: From: <input type="text"/> To: <input type="text"/>	Limit Result Range: Selected Months: <input type="text" value="January - December"/> Limit Selected Days: <input type="text" value="1st - 31st"/> Limit Selected Days of the Week: <input type="text" value="Monday - Sunday"/> Limit Selected Time: <input type="text" value="12 midnight"/> to <input type="text" value="12 midnight"/> Add Limit...
Crash Severity:	<input checked="" type="checkbox"/> Fatality <input checked="" type="checkbox"/> Injury (No fatality) <input checked="" type="checkbox"/> Property Damage Only	

Please select the crash location:

Town and Route Class	Town and Road Name	Route and Range	Route and Intersection	
<input checked="" type="radio"/> Town: --All-- Andover Ansonia Ashford <small>(Select from Overview)</small>	<input type="radio"/> Planning Agency: --All-- Capitol Region Central Connecticut Central Naug Valle	<input type="radio"/> County: --All-- Fairfield Hartford Litchfield	<input type="radio"/> DOT District: --All-- District 1 District 2 District 3	<input type="radio"/> Route Class: --All-- Interstate US Route State Route Local Route Unspecified

If required, please select additional query criteria:

Summary	Traffic Unit	Involved Person	Road Characteristics
Contributing Factor:	--All-- Driving on the Wrong Side of Road Speed Too Fast for Conditions Violated Traffic Control Under the Influence Failed to Grant Right of Way		--All-- Daylight Dark-Not Lighted Dark-Lighted Dawn Dusk

A detailed map of Manchester, New Hampshire, showing major roads, parks, and landmarks. The map is partially visible on the left side of the slide, with the city name 'MANCHESTER' clearly visible in the lower-left quadrant. The map features various colored lines representing different types of roads and transit routes, and several circular icons indicating specific locations or points of interest.

Scope Overview

Task 1: Project Management

Task 2: Community Involvement

Task 3: Develop a Transit Data Repository

Task 4: Review of Current/Near Term Service

Task 5: Service & System Evaluation

Task 6: Assessment of Manchester P&R

Task 7: Develop Service Proposals

Task 8: Evaluate Service Proposals & Make Recommendations

Task 9: Final Report & Executive Summary

Organizational Chart



Advisory Committee

General Transit Analysis



Transit Data Repository



Future Statewide Tool



Service Design



Buckland Park & Ride



Community Outreach



Data & Outreach





Advisory Committee Responsibilities

- Participate in Advisory Committee Meetings (10 anticipated)
- Review distributed materials & provide guidance
- Participate in Technical Meetings as applicable
- Attend Public Meetings
- Help engage the public



Comprehensive Transit Service Analysis

Kick Off Meeting

SEPTEMBER 3, 2014

Study Goals

- **Review current and near term travel patterns and needs**
 - CTFAstrak, NHHS Commuter Rail and Bradley Airport
- **Assess system efficiency and how well services match needs**
- **Identify strengths and weaknesses of existing system**
- **Identify unmet transit needs**
- **Recommend service improvements**
 - Integrate with new system investments
 - Better serve existing riders
 - Attract new choice riders

technical approach



Evaluation of Current and Near Term Needs

- **Review relevant studies**
- **Identify existing and future markets for transit**
 - Existing travel flows
 - Population and employment density
 - Demographics
 - Survey Results



Massachusetts
Connecticut

Hartford

Tolland

Litchfield

New London

New Haven

Middlesex

Population Density

Residents per Acre



CTTransit routes





Massachusetts
Connecticut

Hartford

Tolland

Litchfield

New London

New Haven

Middlesex

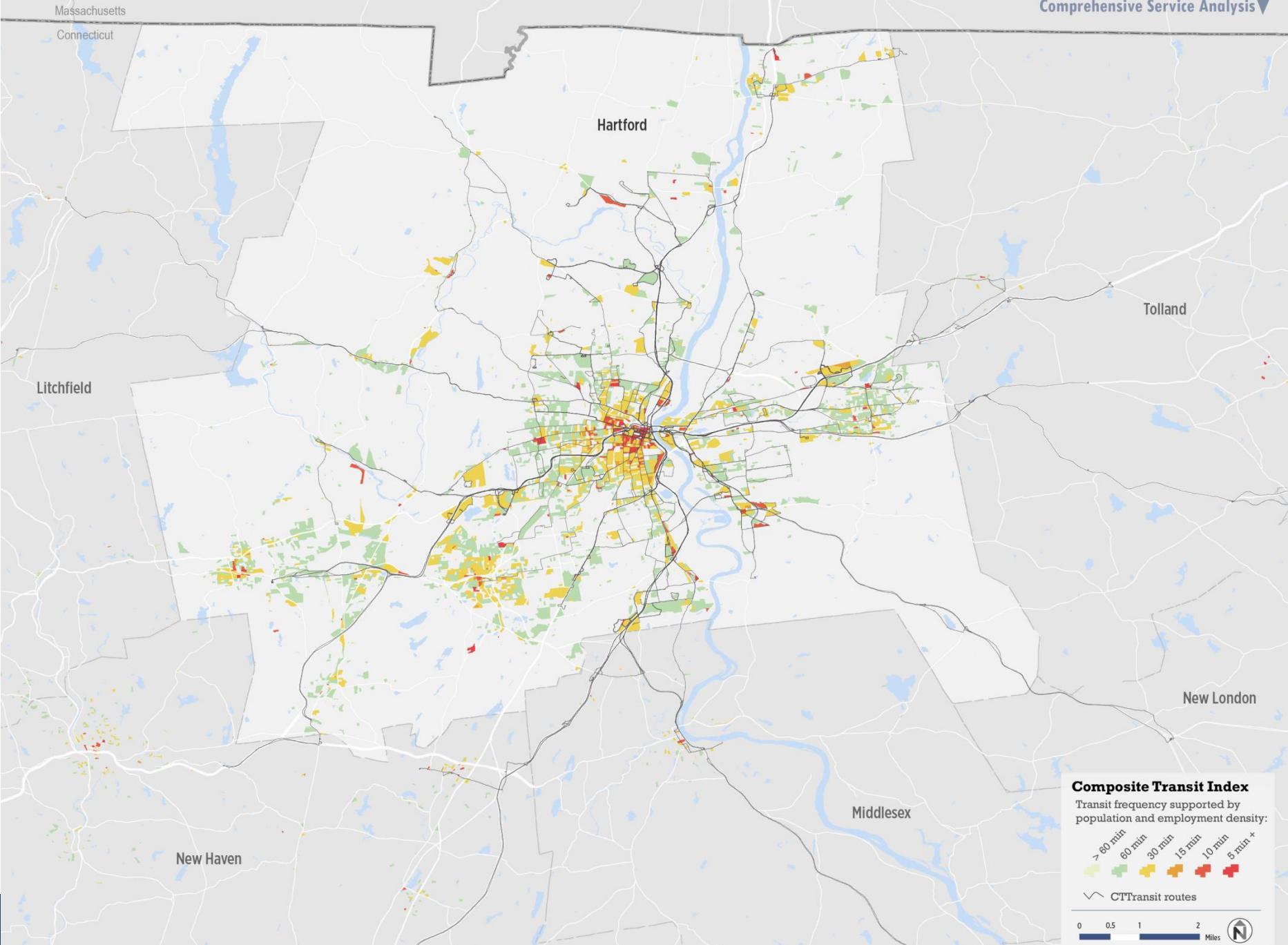
Employment Density

Jobs per Acre



CTTransit routes





Massachusetts

Connecticut

Hartford

Tolland

Litchfield

New London

Middlesex

New Haven

Composite Transit Index

Transit frequency supported by population and employment density:

- > 80 min
- 60 min
- 30 min
- 15 min
- 10 min
- 5 min +

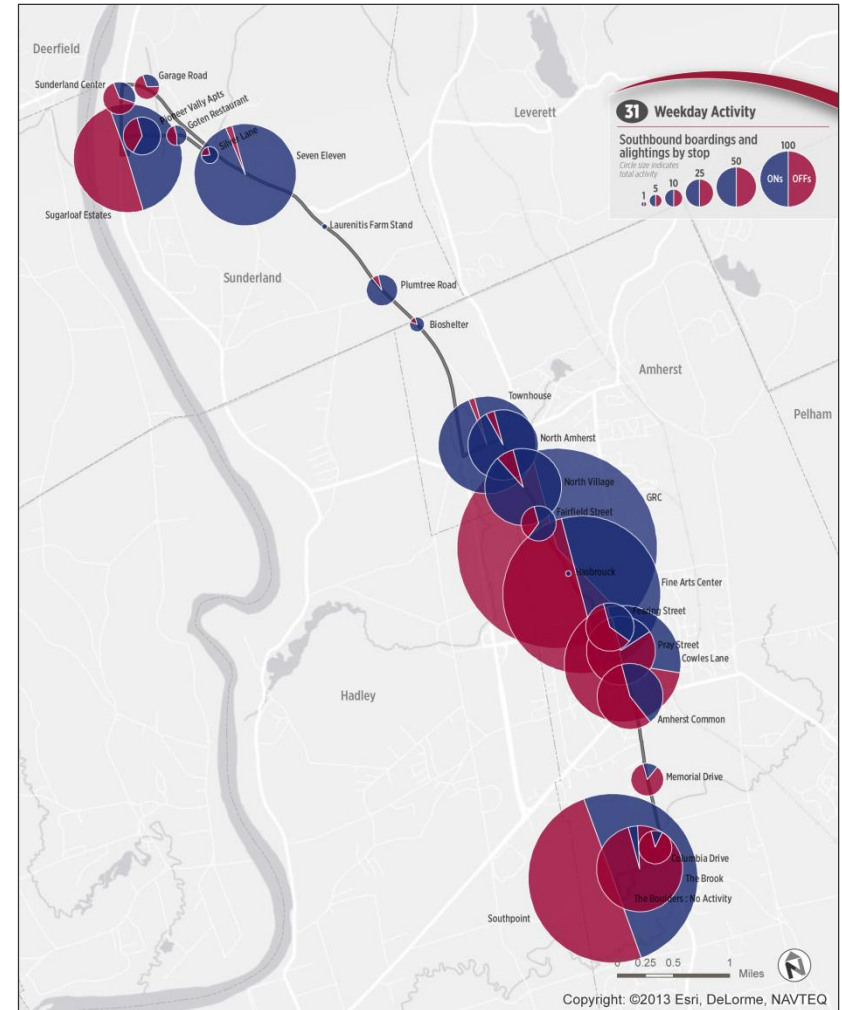
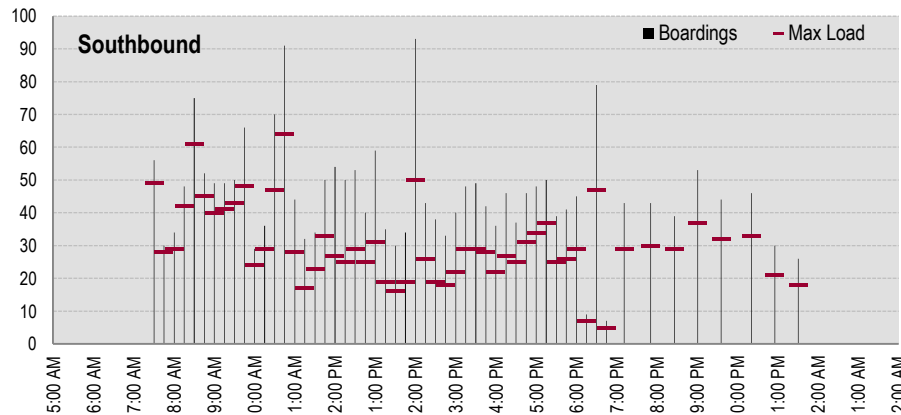
CT Transit routes



Service and System Evaluation

Route by route evaluation

- Ridership by stop
- Ridership by time of day
- Boarding/alighting profiles
- Productivity and performance



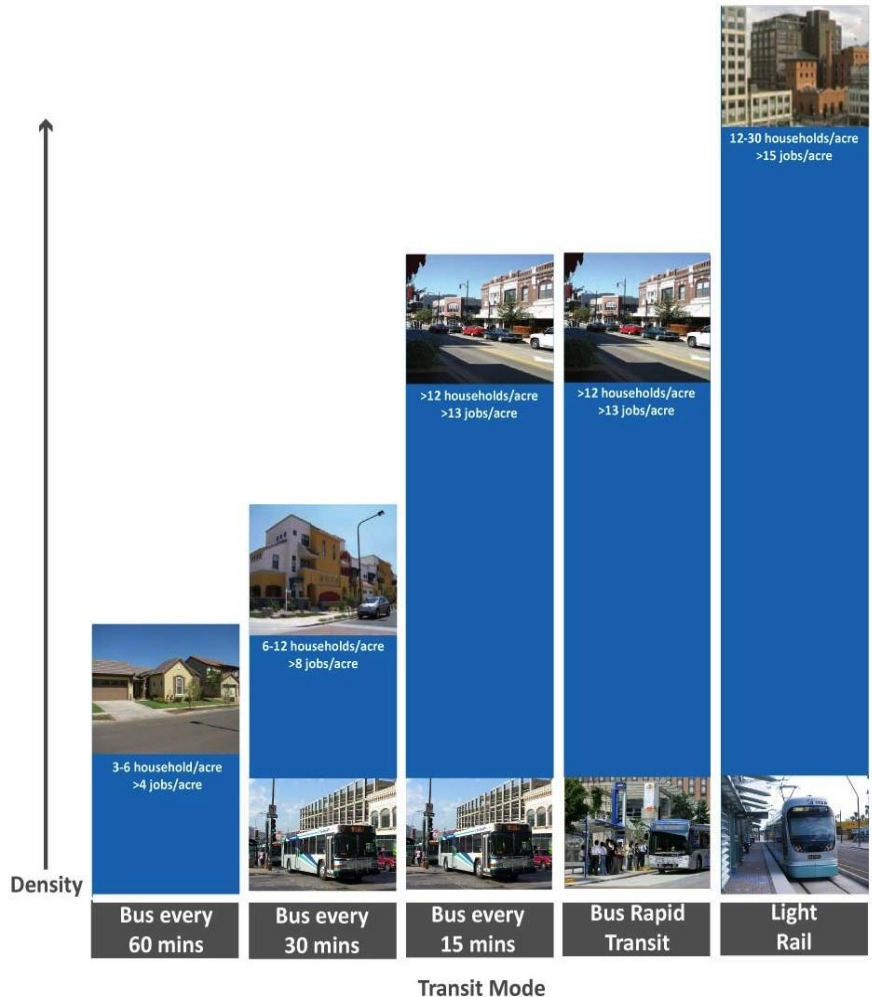
Manchester Buckland Hills Park and Ride Lot

- **Assess existing conditions**
 - Circulation to and within park and ride lot
 - Vehicular traffic and circulation
 - Bike and pedestrian needs
- **Determine short and long term facility needs**
 - Structures, buildings and parking
 - Passenger drop off and pick up areas and amenities
- **Develop three basic short term conceptual site plans**
 - Internal and access improvements
 - Order of magnitude costs
 - General assessment of TOD opportunities

Develop Service Proposals

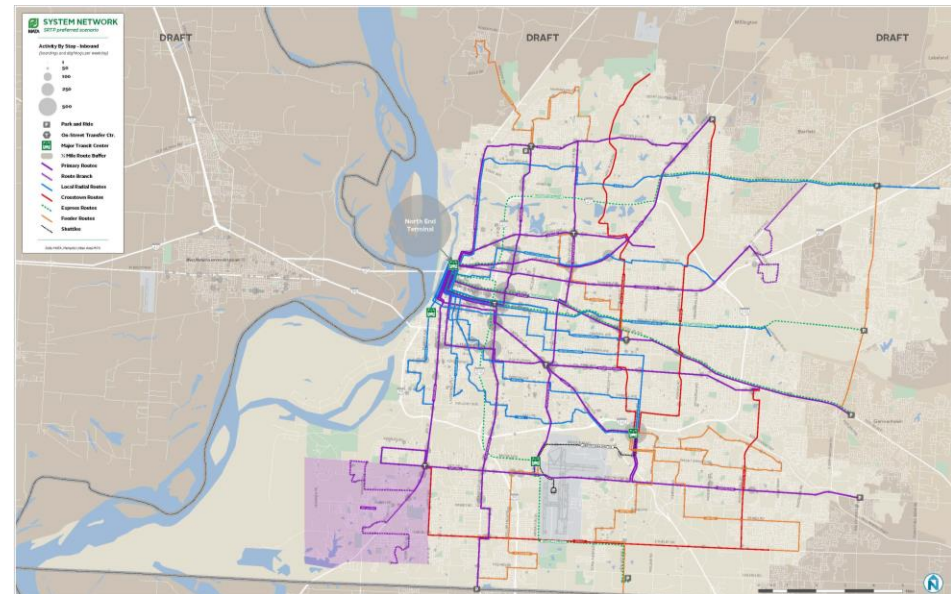
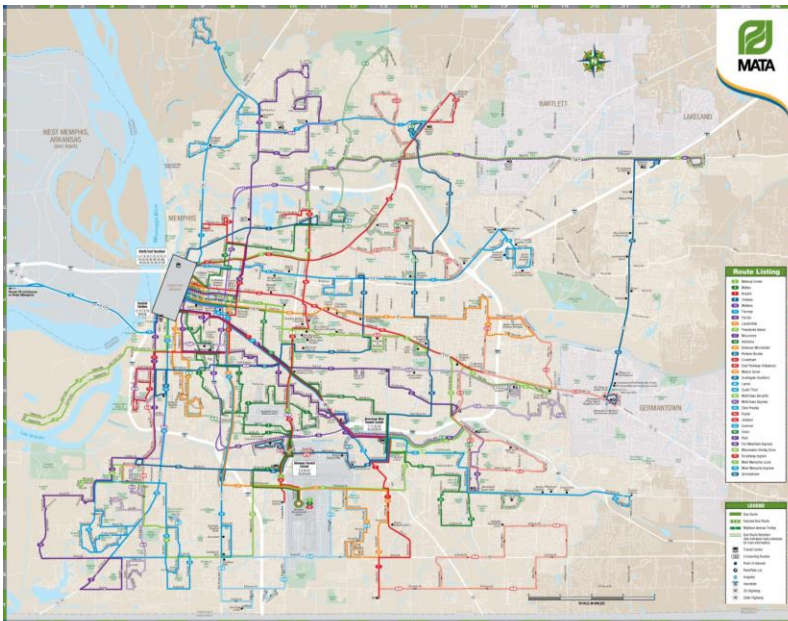
■ Create packages of service improvements

- Match service types with market needs
 - Density, demographic and geography
 - Full spectrum of transit service types
- Reflect realistic cost scenarios



Evaluate Proposals - Make Recommendations

- **Create packages of service improvements**
 - Match service types with market needs
 - Density, demographic and geography
 - Full spectrum of transit service types
 - Reflect realistic cost scenarios



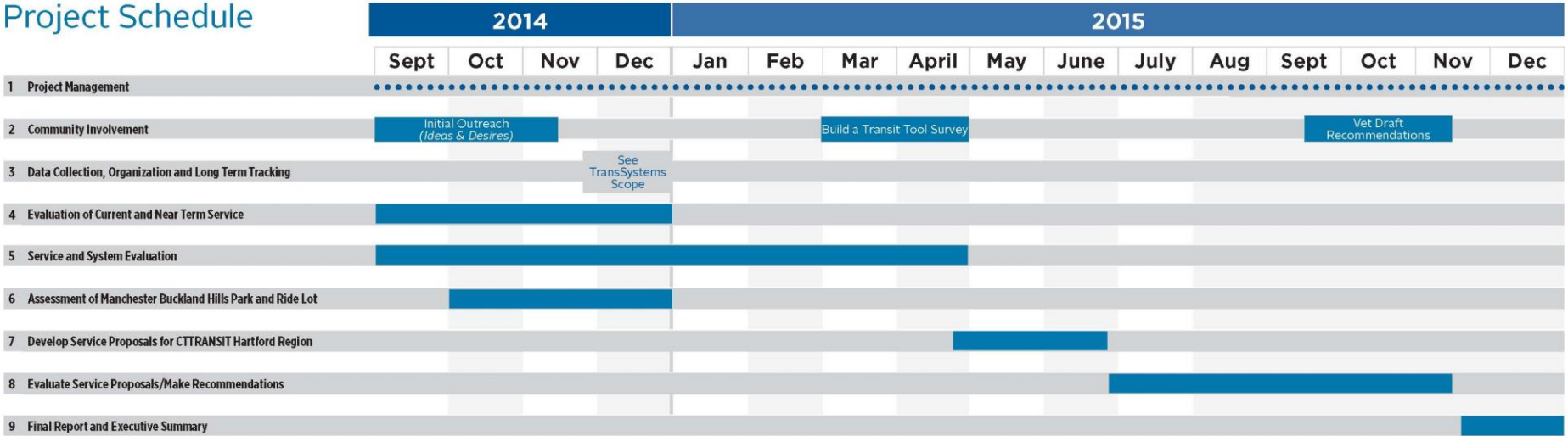
Public Involvement

- **Surveys**
 - Rider Surveys
 - Community Survey – “Build a System” tool (NN)
 - <http://bouldertransitdesign.com/>
- **Stakeholder Interviews**
- **Focus groups with riders**
- **Public Meetings**
- **Rider Drop In Sessions**
- **Website**
- **Presentations to CRCOG Policy Board/Transportation Committee**



study schedule

Project Schedule



Next Steps

- **Project Webpage**
 - NN to host webpage
 - Private portal for AC members
- **Stakeholder Outreach**
 - Identify stakeholders
- **Focus Group Research**
 - Target groups
- **Market Analysis/Needs Assessment**
- **Data Processing/Route Evaluations**
- **Buckland Hills Analysis**



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Transit Data Repository Development

Kickoff Meeting

September 3, 2014



EXPERIENCE | Transportation



Meeting Agenda

- ▶ **Project understanding**
- ▶ **Overview of tasks**
- ▶ **Tentative schedule**
- ▶ **Next steps**

Project Understanding

➤ Needs assessment

- Identify regional data sources
- Identify query/reporting Needs

➤ Develop data repository

- Initial repository
- Repository maintenance
- Develop data query interface

➤ Ensure tHUB compatibility

➤ Documentation and training

➤ Transition ownership to CRCOG

Needs Assessment

► Stakeholder Interviews

- 4 in-person meetings
- Data collection

► Determination of reporting/query needs

- Metrics
- Visual presentation of data
- Canned versus ad-hoc query capability

Needs Assessment (contd.)

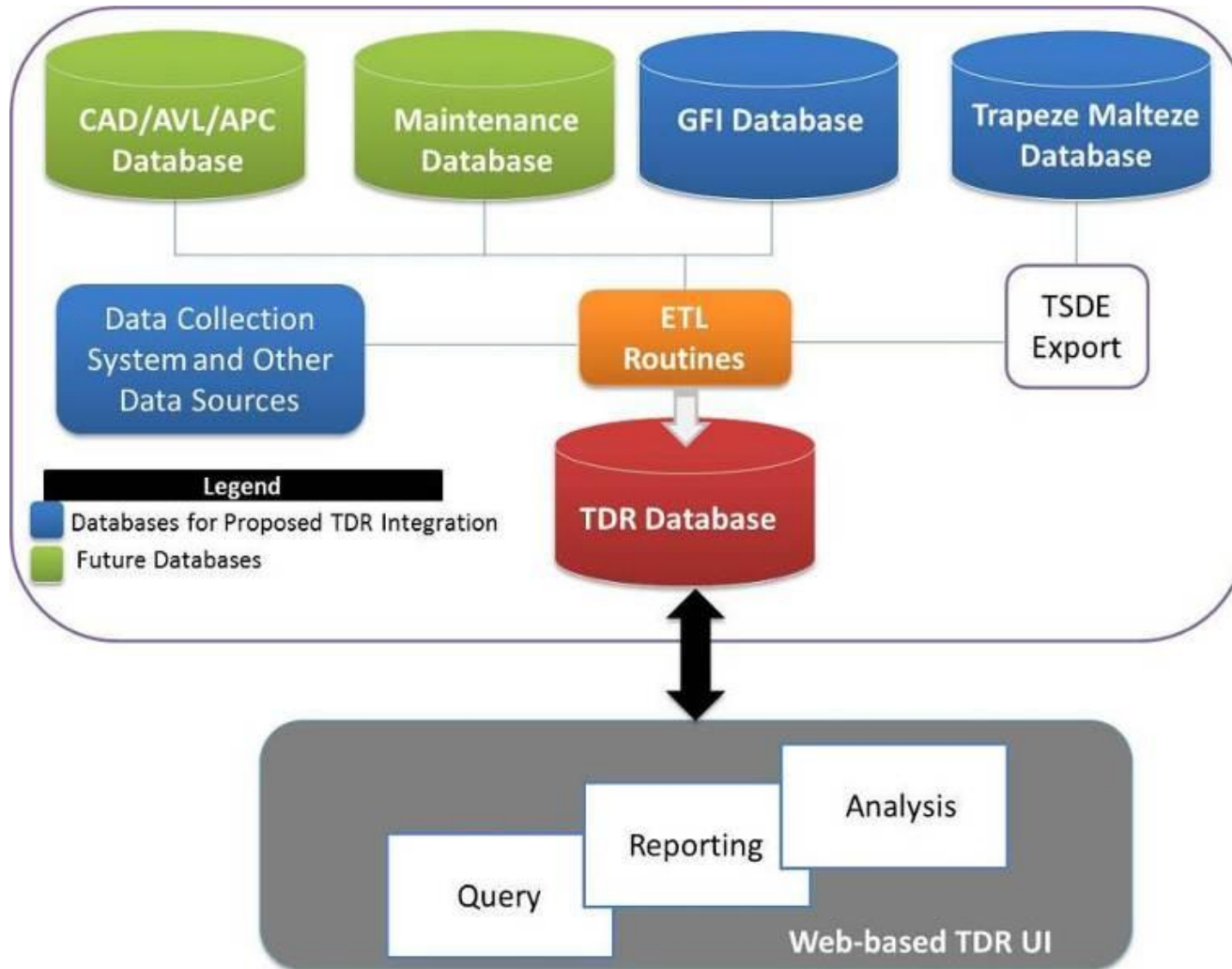
► Data sources

- Current data sources
- Future data sources
- Data collected by consultant
- Others

► tHUB Compatibility

Deliverable: Needs Assessment and Strategy Memo

Repository Development



Repository Development (contd.)

▶ Database and query interface design

- Scalability and expandability
- Other best practices
- Open source development

▶ Database development

- Coordination with stakeholders
- tHUB

▶ Data import and export

- Data validation
- Automated routines

Repository Development (contd.)

► Query and analysis interface development

- Development
- Testing

► Documentation

- Query interface manual
- Data access, import/export process
- Data maintenance process

► Transition to CRCOG

Deliverable: Repository & User Manuals

Tentative Schedule

Task	Completion Date
Task 3.1-Kickoff Meeting	September 2014
Task 3.2-Needs Assessment	December 2014
Task 3.3-Data Collection	Handled by CRCOG Consultant
Task 3.4-Develop Data Repository	May 2015
Task 3.4 Test Data Repository	October 2015
Task 3.4-Project Completion	December 2015

Next Steps

- ▶ **Detailed work plan**
- ▶ **Initial data review**
- ▶ **Scheduling of in-person stakeholder meetings**

Thank You !

Santosh Mishra

38 Chauncy St, Suite 200

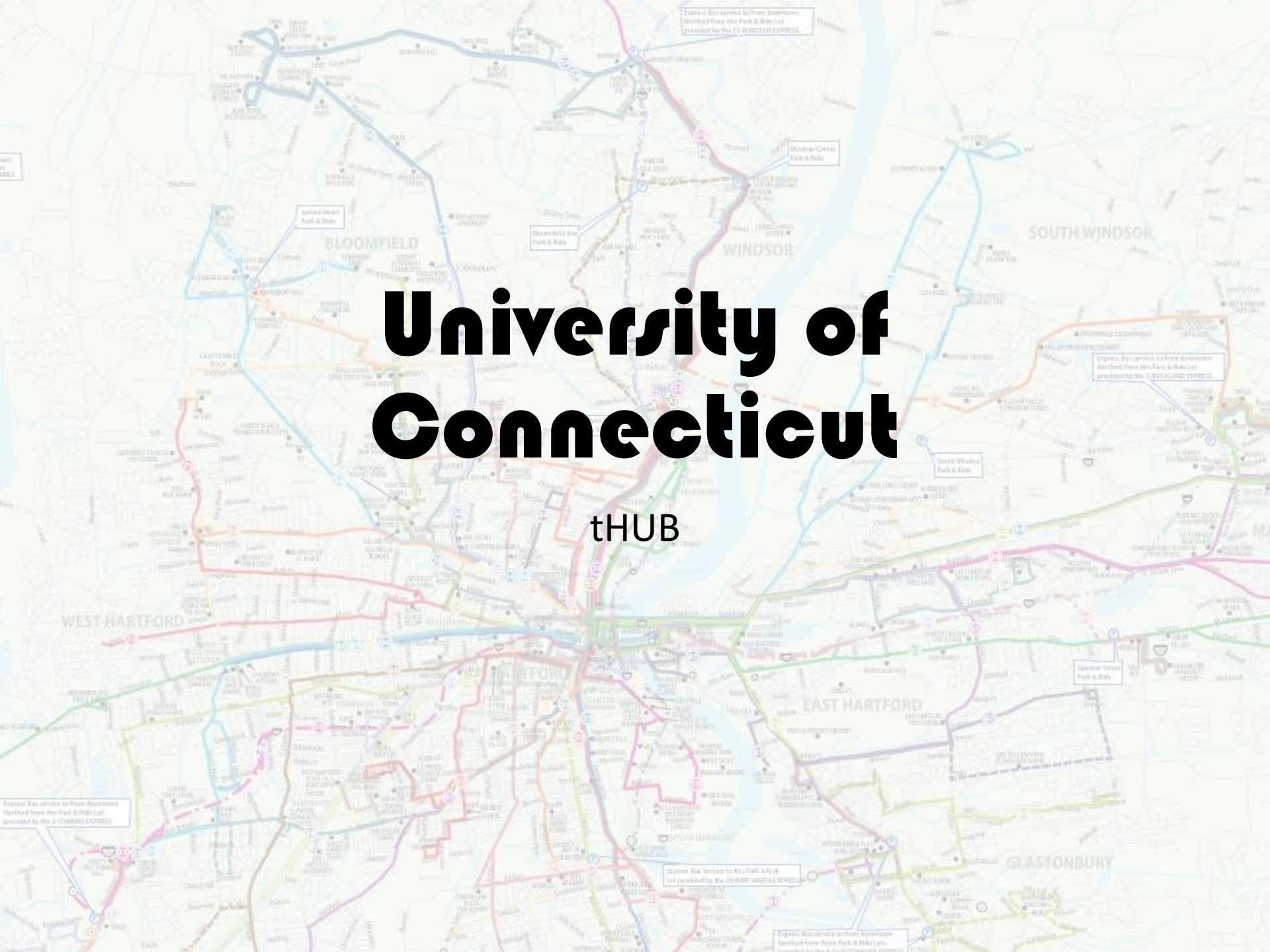
Boston MA 02111

skmishra@transystems.com

857-453-5466

University of Connecticut

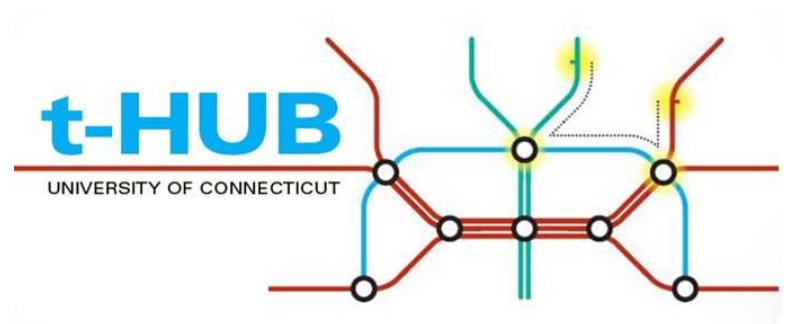
tHUB



t-HUB: Connecticut's public transportation data resource

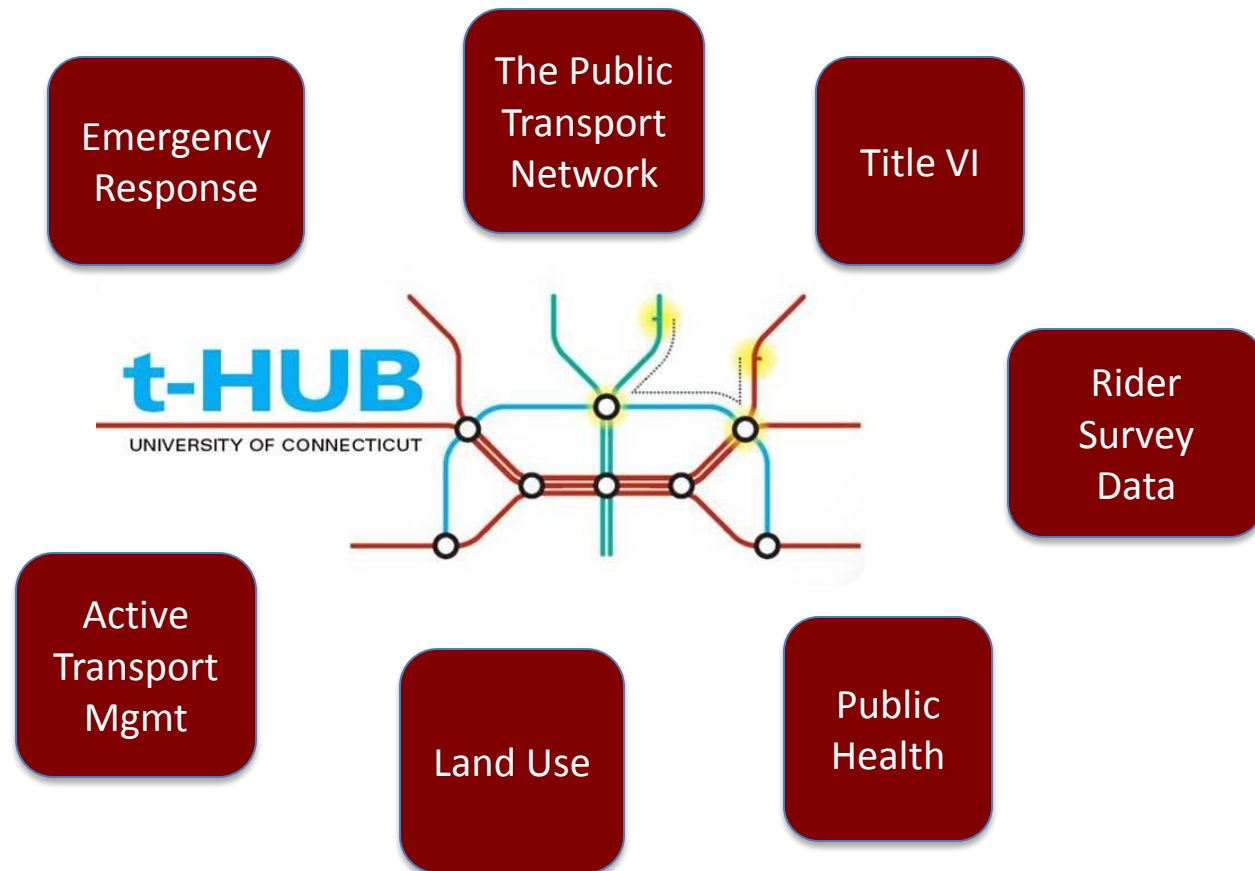
Nicholas Lownes, PhD, PE
September 3, 2014

UConn

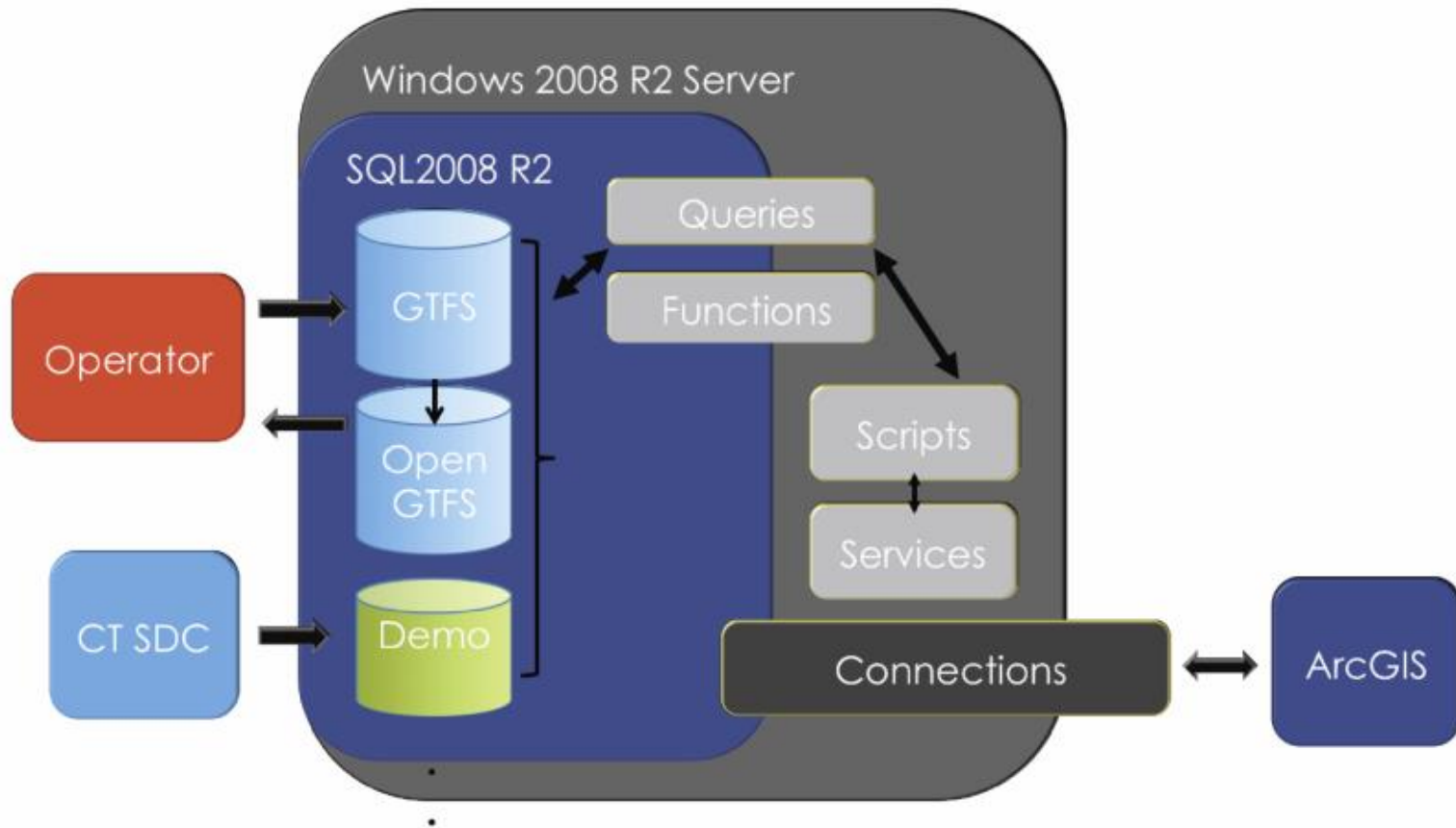


t-HUB Vision

...a Statewide public transport data resource



t-HUB architecture



Open, existing and available data sources: GTFS, Census (Connecticut State Data Center) and performance data.

Interactive Analysis

Change parameters for interactive analysis. Information provided in tooltips like these.

Parameters

Select Transit System

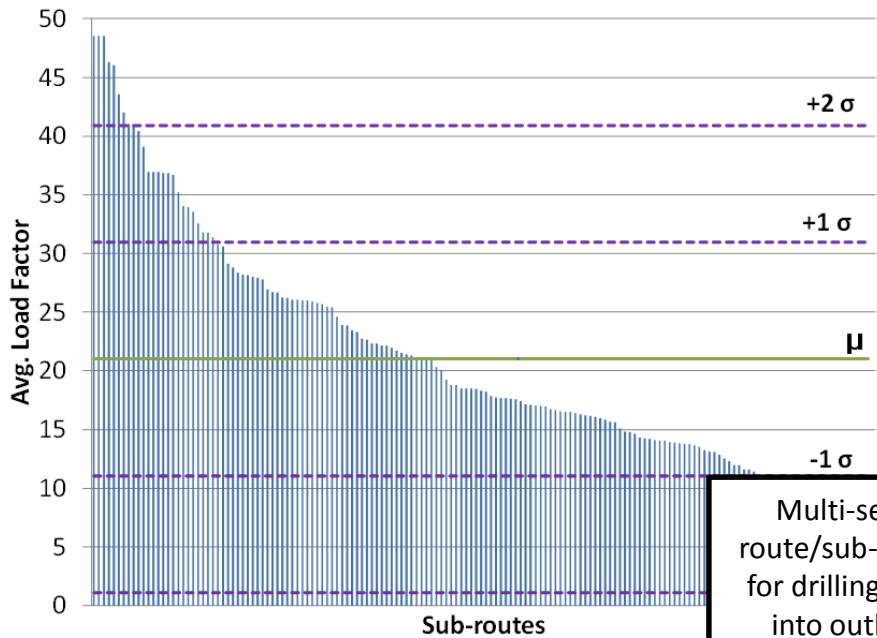
Select Performance Measure

Select Demographic Group

Select Demographic Spatial Unit

Select Buffer Distance

Histogram



Multi-select route/sub-routes: for drilling down into outliers.

Summary Results

Parameters:

Summary of selected parameters

System:

Summary results on the selected system.

Route:

Summary results on the selected route.

Ability to export data and generate printable report.

Outliers

Sub-route	Route	Value
MCC FLYER-HARTFORD VIA I-84	85	41
BURNSIDE AV-MAYBERRY VILL VIA SCOTLAND RD	88	41.01
BURNSIDE AV-MAYBERRY VILL VIA ROBERTS ST	88	42.01
MCC FLYER-MCC VIA I-84	85	43.57
HARTFORD VIA NEWINGTON CTR	41	46
NEW BRITAIN via Newington Ctr	41	48.55

Route/Sub-rout

Routes

30
31
32
33
34
35

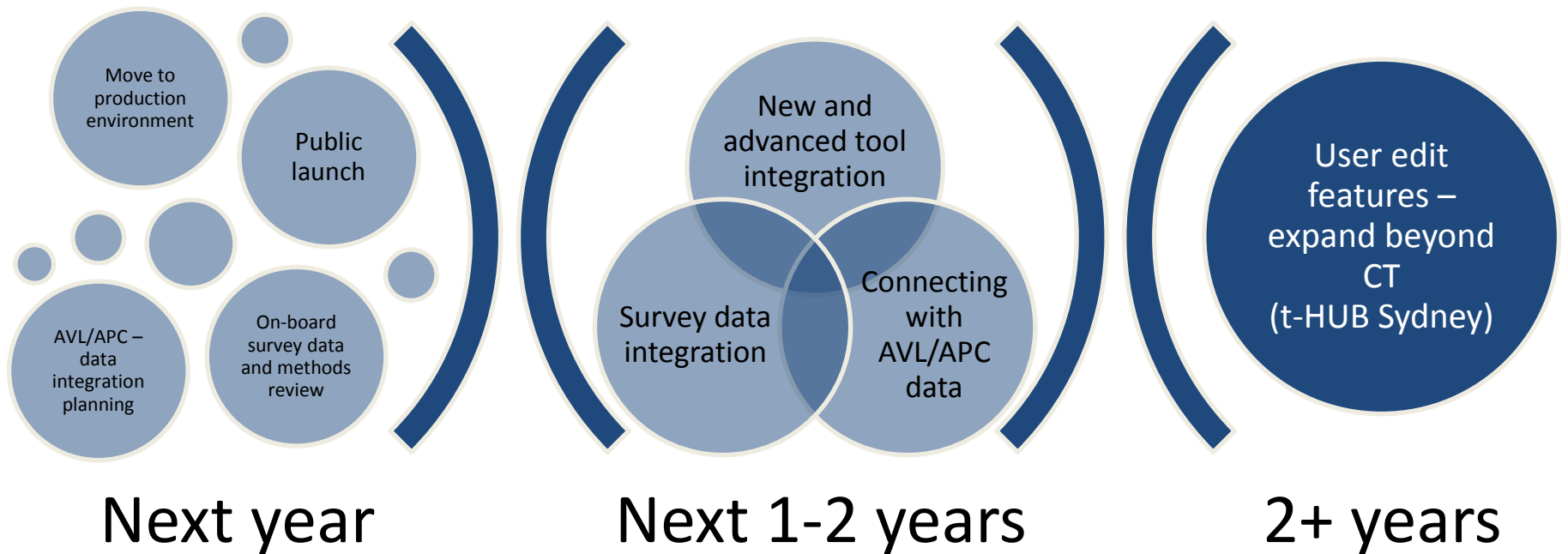
Map



Reports

- Generate Report
- Generate Data
- Start Over

t-HUB Next steps



Thank you

contact: nlownes@engr.uconn.edu

t-HUB workshop 9/24/2014 info:

www.thub.uconn.edu

Next Meeting Date

