



N
NELSON
NYGAARD



Rhode Island Public Transit Authority
COMPREHENSIVE OPERATIONAL ANALYSIS

Advisory Committee Meeting #4

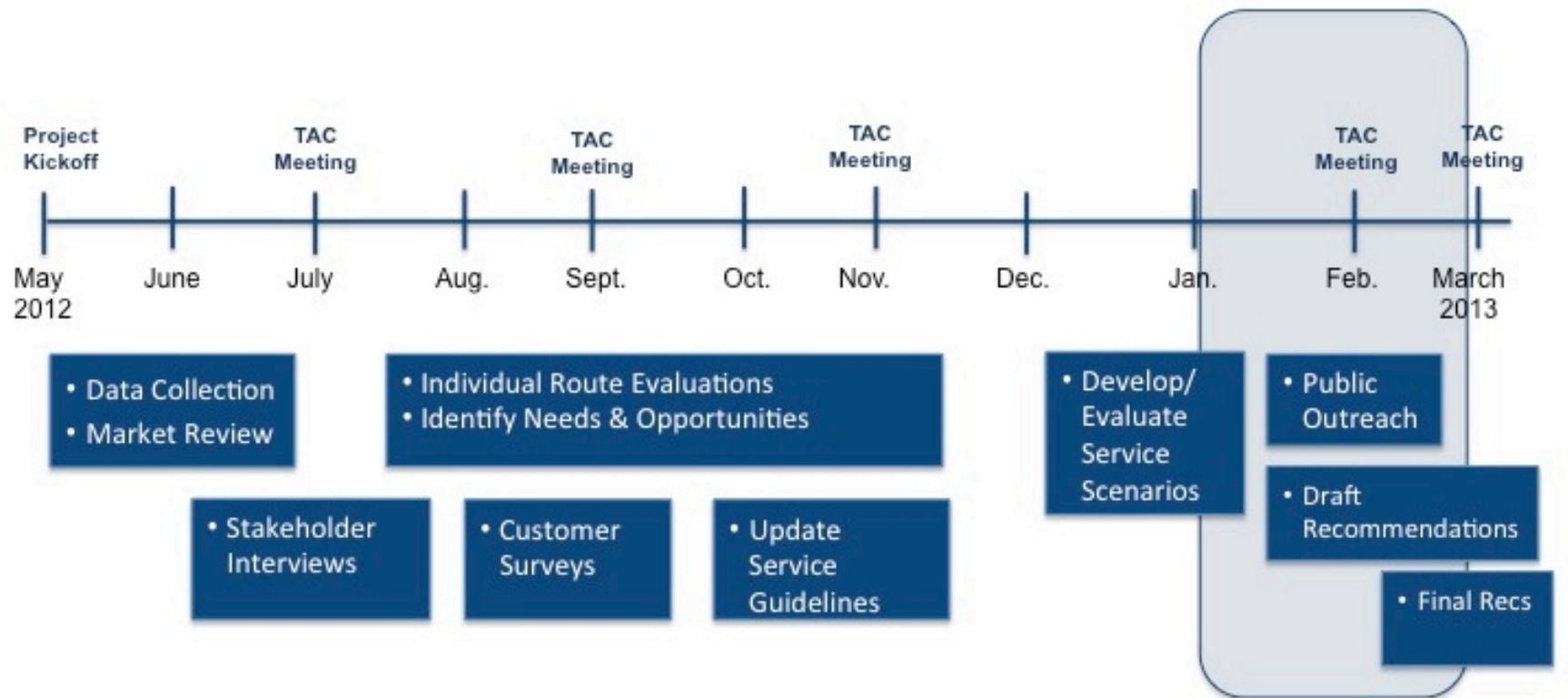
February 21, 2013

Today's Agenda

1. Project Update
2. Overview of Service Scenarios
3. Ongoing Public Outreach
4. Advisory Committee Discussion/Input
5. Next Steps

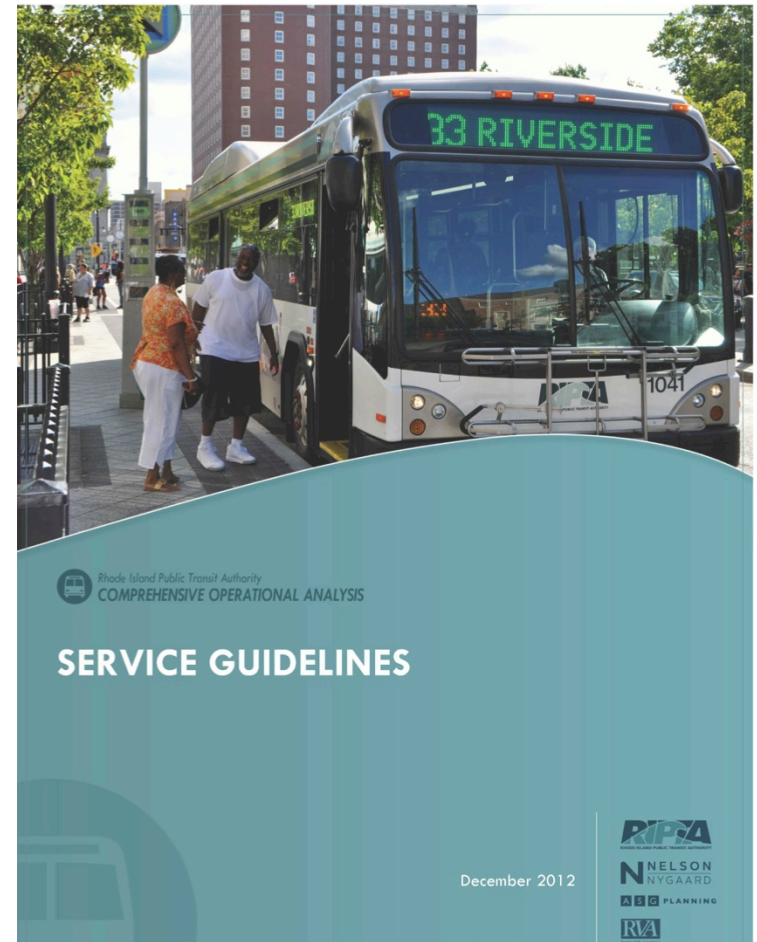


COA Timeline



Project Update

- RIPTA Board approved updated Service Guidelines in December
 - Family of Services
 - Guidelines for frequency, span of service, bus stop spacing, etc.
- Route Evaluations complete
 - 700 comments received
- Service Guidelines and Route Evaluation findings/comments used to develop Scenarios





Rhode Island Public Transit Authority
COMPREHENSIVE OPERATIONAL ANALYSIS

Overview of Service Scenarios

February 21, 2013

Service Scenarios

- Service scenarios present combinations of options for improving RIPTA service
- Designed to make service:
 - Easier to use
 - Easier to understand
 - More convenient
 - Faster and more direct
 - More productive
- Scenarios present choices for stakeholder input
- Scenarios are cost-neutral—adding in one place will require reducing in another
- *Similar themes in both scenarios, but different ways to implement*



Service Scenarios

- Service scenarios include many different types of improvements:
 - Service design
 - Schedule
 - Branding and public information
- Potential changes are presented for every route



Service Design

- Provide a “family of services” better matched to specific needs
- Develop a Frequent Service Network
 - Rapid Bus (R-Line)
 - Key Corridor Routes
 - Transit Emphasis Corridors
- Simplify service
- Improve hubs and develop Superstops
- Expand service to new areas
- Better integrate RIPTA and commuter rail service
- Improve express service
- Consolidate stops to speed service
- Consolidate duplicative services
- Discontinue some very poorly utilized services



Schedule Changes

- Operate service with regular/clockface headways
- Coordinate schedules
- Revise service frequencies and spans to better match demand
- Introduce all day scheduled Flex/fixed-route connections



Branding and Public Information

- Renumber and rename some routes to improve legibility/avoid confusion
- Highlight Frequent Service Network
- Improve schedule brochures and maps



Family of Services

Service Type	Characteristics
Rapid Bus	<i>Frequent, limited stop service using distinct vehicles and intelligent technology to reduce travel time</i>
Key Corridor	<i>Highest ridership or most productive routes offering direct service on major roads.</i>
Urban Arterial	<i>Operated in densely developed areas, serving downtown Providence or Pawtucket.</i>
Crosstown/Suburban/Non-Urban	<i>Operate outside the urban core, but may serve a hub via a more indirect or “crosstown” route.</i>
Regional	<i>Provide service between regional centers: Providence, Woonsocket, Newport, URI.</i>
Express/Commuter	<i>Designed primarily to serve commuters</i>
Flex	<i>Service to low density areas with demonstrated need</i>

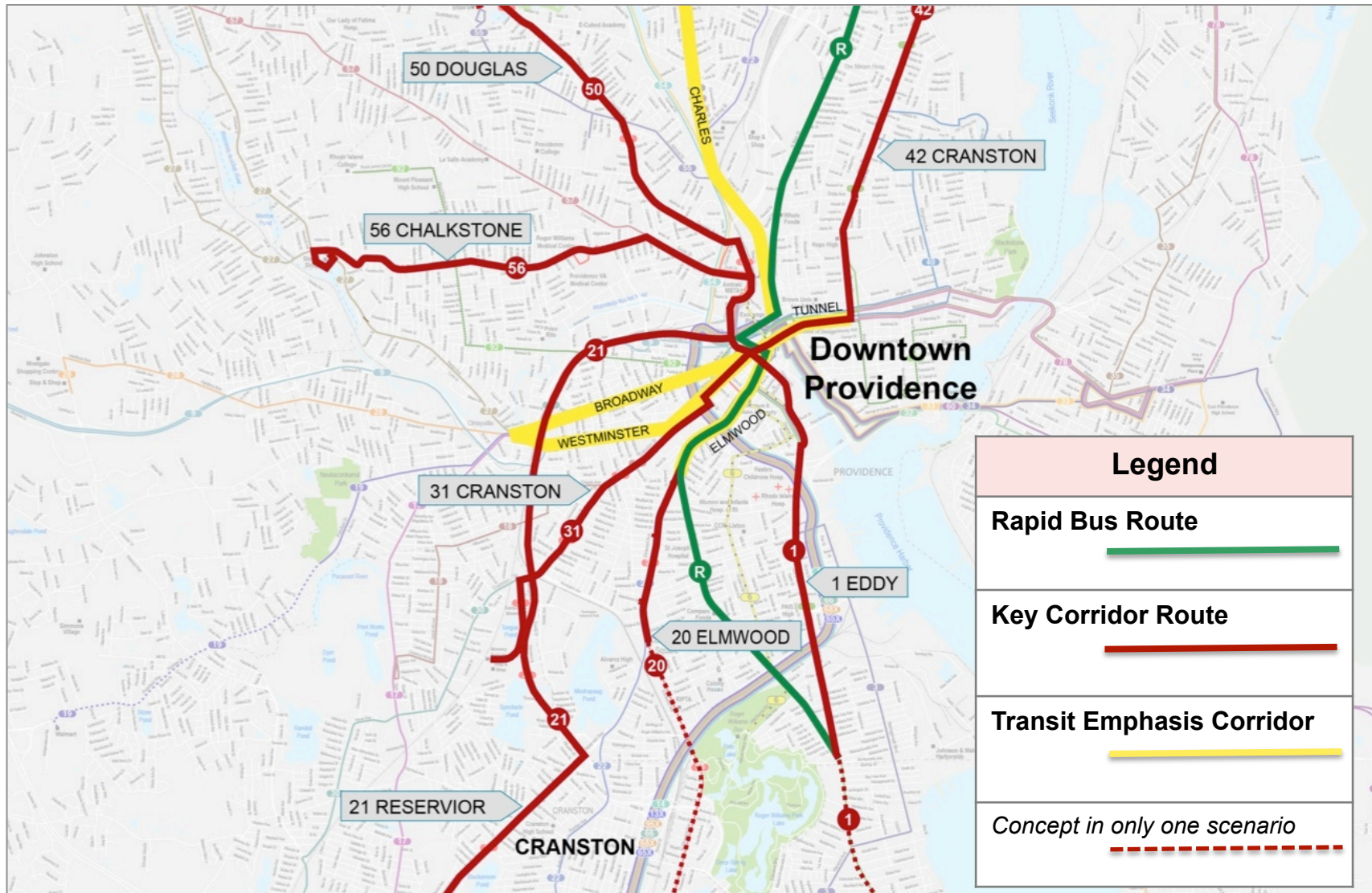


Develop Frequent Service Network

- Transit is most attractive when when people can easily understand what it does and use it without a schedule
- Orient service around Frequent Service Network:
 - Rapid Bus (R-Line)
 - Key Corridor Routes
 - Transit Emphasis Corridors
- Key characteristics:
 - Faster: service on arterial streets with appropriately space stops
 - Frequent: Contingent upon RIPTA's financial capabilities, every 10 to 15 minutes during peaks; every 10 to 20 minutes during the midday.
 - Long span of service: from early morning until late night
 - Every day: seven day a week service

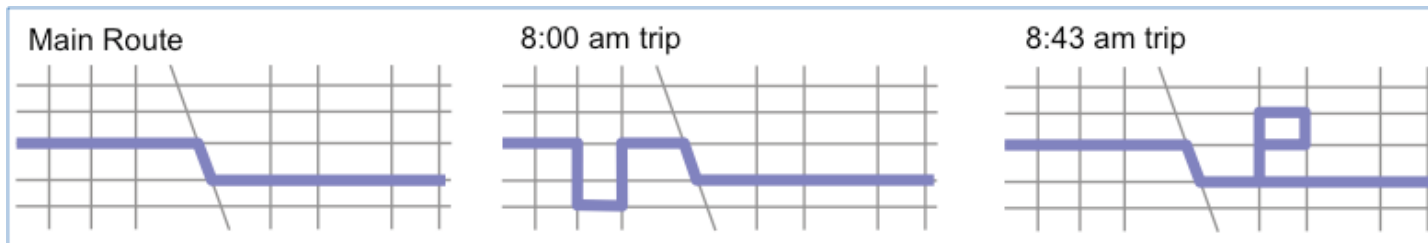


Proposed Frequent Service Network



Simplify Service

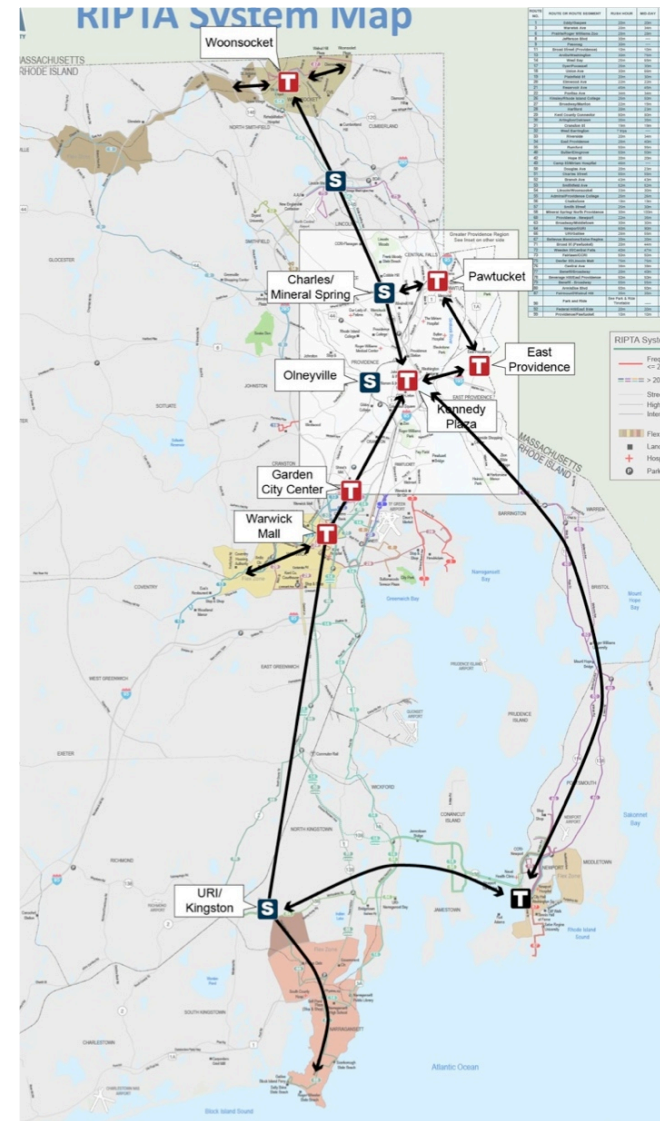
- Service changes based on following principles:
 - Routes should operate along direct path
 - Route deviations should be minimized (unless safety issue)
 - Major routes should operate on arterial streets
 - Routes should be symmetrical
 - Routes should serve well-designed markets
- Major issue is variants (detours)



- Redesign approach:
 - If significant demand along variants, all service should go there
 - If not, discontinue detour
- *Emphasize service to many rather than service to few*

Transit Hubs

- Much of RIPTA's service is already focused around transit hubs:
 - Kennedy Plaza
 - Pawtucket Transit Center
 - Newport Gateway Center
- Improvements to existing hubs and new hubs would enhance and expand travel opportunities



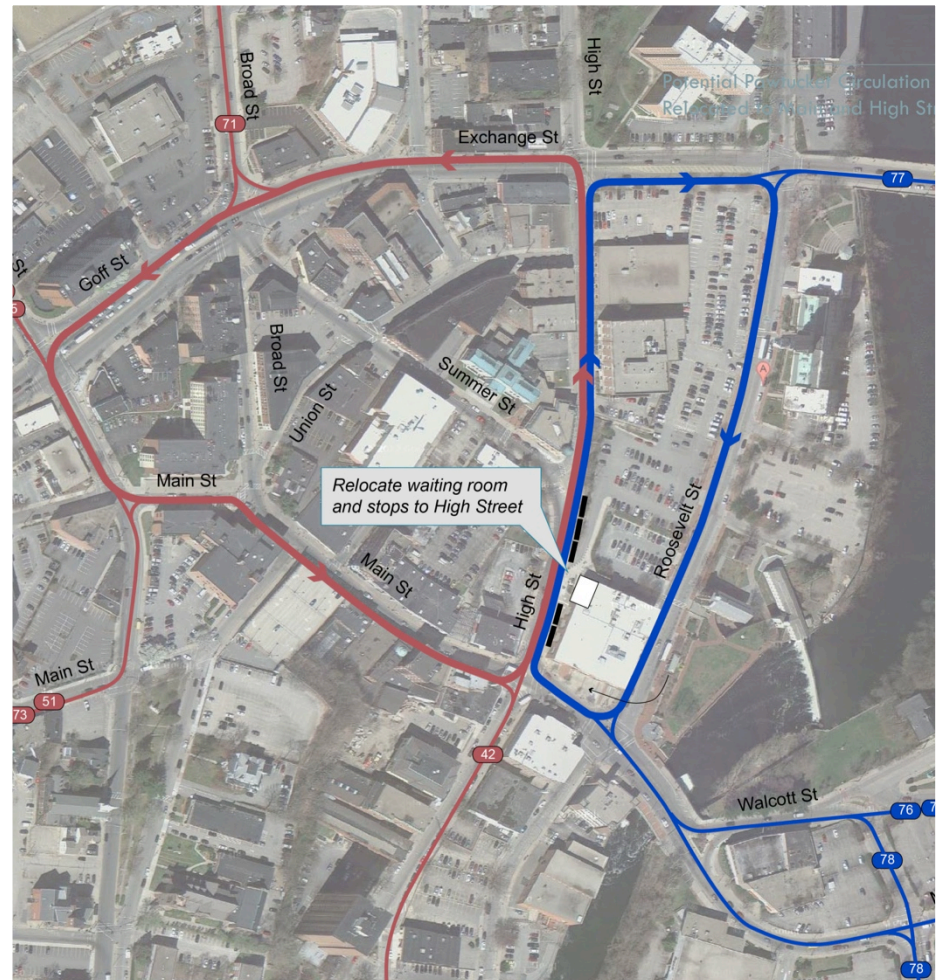
Kennedy Plaza

- Still a work in progress, but...
 - New and improved bus berths
 - Grouping of routes to make it easier for passengers to find and catch the first bus.
 - Fewer berths/more space for waiting passengers
 - Transit building improvements
 - Better integration with surrounding area



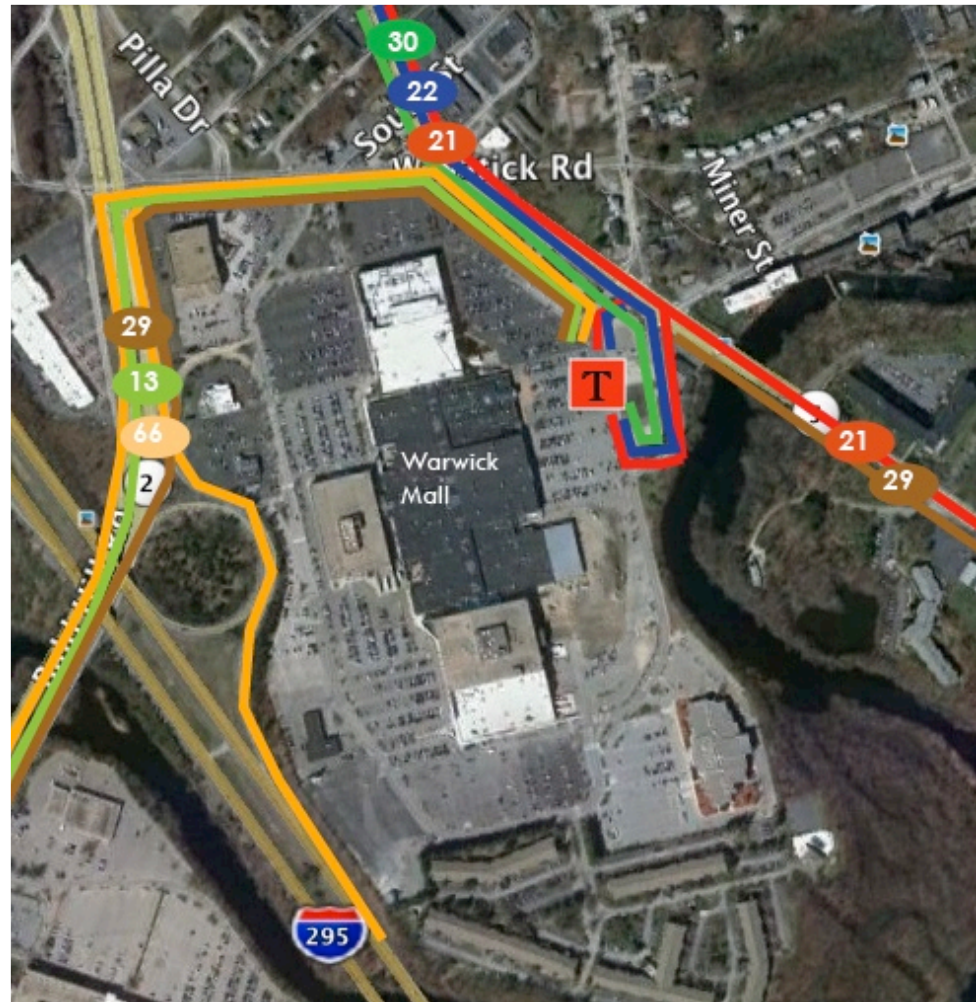
Pawtucket Transit Center

- Also a work in progress...
 - Relocation of the waiting room, bus berths, and other facilities to High Street
 - Closer to downtown activities
 - More efficient bus circulation through downtown



Warwick Transit Center

- Southern counterpart to Pawtucket
 - Strong connections to downtown Providence (Key Corridor service)
 - New and improved connections throughout Warwick and points south



Develop Superstops

- Important transfer locations with enhanced passenger amenities



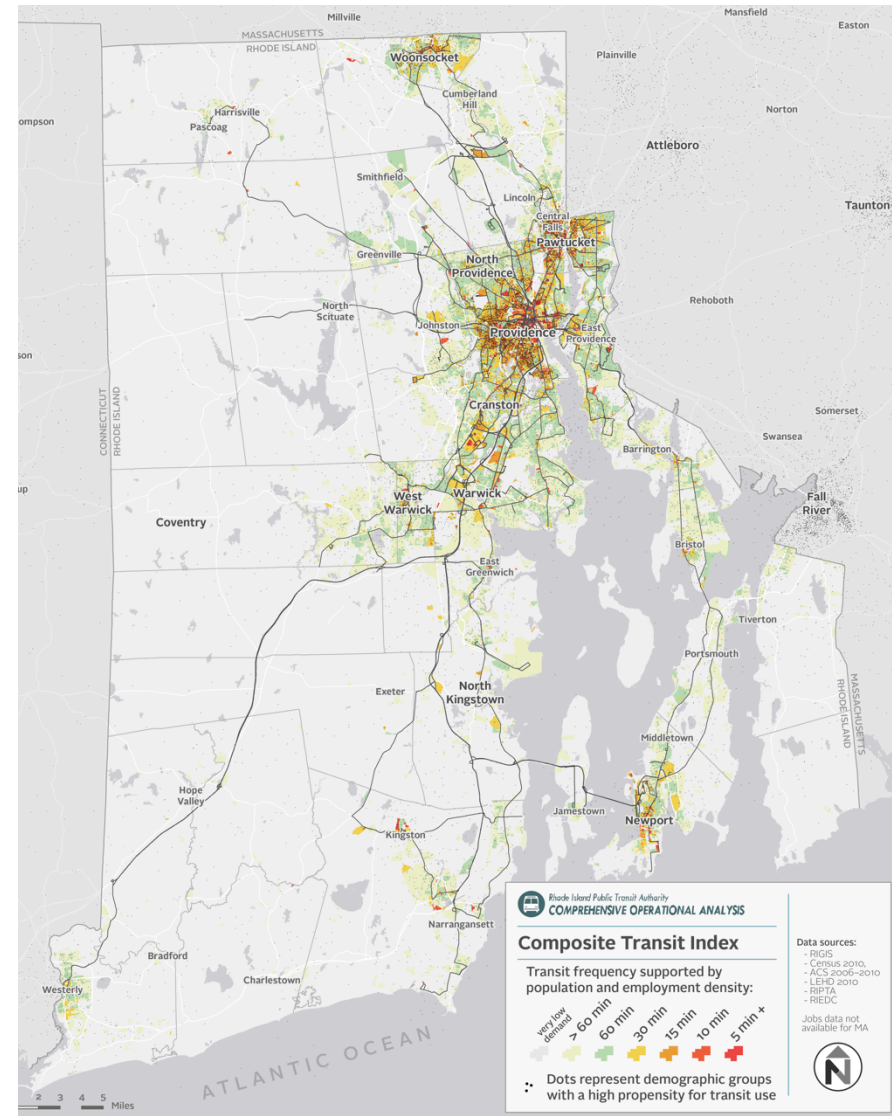
New and Expanded Service

- RIPTA provides service to most but not all areas that can support acceptably productive transit
- Scenarios include service expansion; for example:
 - New Key Corridor bus service between the Warwick Mall hub and downtown Providence
 - More frequent service to T.F. Green Airport and InterLink Station
 - Cranston cross-town service (Scenario 2)
 - Regular service to Bryant College and Smithfield Crossing
 - Service to Center of New England
 - More frequent and faster regional service (Woonsocket and Newport)



New and Expanded Service

- But: productive transit not feasible in all areas where people want it; for example:
 - Quonset Point
 - Tiverton
 - Rural areas of South County
 - Rail feeder service at southern stations
- *Expansion limited to areas that can support acceptably productive service*



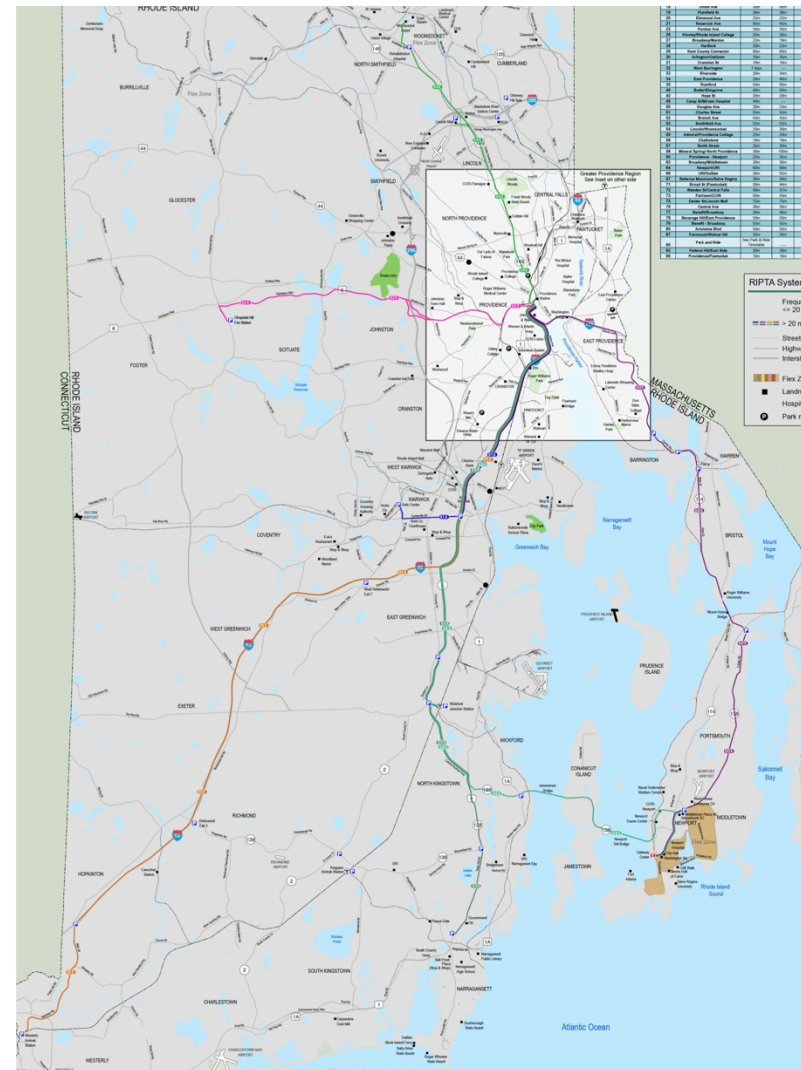
Better Integrate Bus Transit with Commuter Rail

- Providence Station:
 - Francis/Gaspee Transit Emphasis Corridor to improve link to downtown
- Warwick/Interlink:
 - Service between station and downtown to facilitate use of RIPTA in one direction and CR in other
 - Connections from West Bay and Warwick (Scenario 1)
- Wickford Junction:
 - Express bus service via station to facilitate use of RIPTA in one direction and CR in other
- South Attleboro:
 - New feeder service



Improve Express Service

- Current service difficult to understand, and some creates gaps in local service
- Both scenarios improve express service:
 - Simplified service structure
 - Unique branding of all express service
 - Minimum of three AM inbound and three PM outbound trips on most routes.



Consolidate Bus Stops

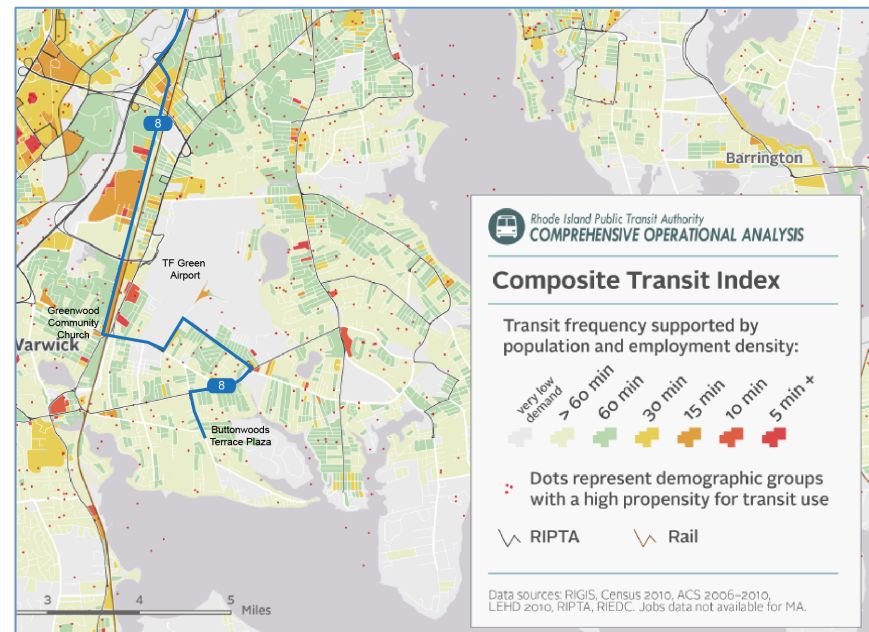
- Stop spacing involves a balance between making service reasonably fast and making it easy to get to
- RIPTA's current stop spacings are heavily skewed to minimizing walk distances at the expense of travel time
- Most riders prefer to walk slightly farther in exchange for faster service
- Stops to be re-spaced based on new Service Guidelines

Westminster Street Stop Spacings



Discontinue Poorly Utilized Services

- On some routes, ridership is very low, and well below the levels required by RIPTA's new Service Guidelines
- First priority was to identify changes to increase ridership that would increase ridership to acceptable levels.
- But in some cases not possible:
 - In a few cases, entire routes discontinued (Routes 8, 49, & 90S (Scenario 1))
 - In most cases, poorly utilized variants discontinued to improve service for large majority of riders inconvenienced by service irregularities



Consolidate Duplicative Routes

- In some areas, routes compete instead of compliment each other; for example:
 - The Route 146 corridor between Woonsocket and Providence
 - Eastern Pawtucket
 - Charles Street between Mineral Spring Avenue and downtown Providence
- Changes proposed to consolidate service to improve productivity



Schedule Improvements

- Both scenarios would:
 - Revise schedules to make service operate much more consistently
 - Greatly improve coordination between routes and in corridors where multiple routes operate

- Changes based on following principles:
 - Service levels should be set based on Service Guidelines
 - Service and schedules should be based on repeating patterns
 - Services should be well coordinated

BUS OPERATES FROM...	BUS STARTS at Mishnock Road & Route #3	BUS STARTS at Woodland Apts. & Coventry Credit Union	BUS STARTS at Job Lot Coventry	Bus Arrives at South Main & Tiogue Ave.	Bus Arrives at Hope Rd. & Rte. #116 (Hope)	Bus Arrives at Arctic Center	Bus Arrives at Providence & Tollgate Rd. (Westcott)	Bus Arrives at Old Spring Bus Transfer Loop	Bus Arrives at Garden City (Food Court)	Bus Arrives at Weybosset & Eddy Sts.	BUS ENDS at KENNEDY PLAZA STOP C
MONDAY TO FRIDAY											
Job Lot	517a	519a	.....	529a	538a	542a	551a	609a	611a
Job Lot	554a	556a	.....	606a	613a	619a	628a	646a	648a
Mishnock	648a	.....	.....	651a	.....	701a	708a	714a	723a	741a	743a
d Arctic/Crompton	90A Park	and	Ride	.....	.....	714a	Express	via	I-95	.....	752a
Hope/Arctic	90A Park	and	Ride	.....	705a	715a	722a	728a	737a	755a	757a
d Arctic/Crompton	90A Park	and	Ride	.....	.....	744a	Express	via	I-95	.....	822a
Woodland Apts.	730a	735a	738a	.....	748a	755a	801a	810a	828a	830a
Job Lot	818a	821a	.....	831a	838a	844a	853a	911a	913a
Woodland Apts.	869a	904a	907a	.....	917a	924a	930a	939a	957a	959a
Woodland Apts.	929a	934a	937a	.....	947a	954a	1000a	1009a	1027a	1029a
Job Lot	1006a	1009a	.....	1019a	1028a	1032a	1041a	1059a	1101a
Woodland Apts.	1123a	1128a	1131a	.....	1141a	1148a	1154a	1203p	1221p	1223p
Job Lot	1222p	1225p	.....	1235p	1242p	1248p	1257p	115p	117p
Job Lot	145p	148p	.....	158p	205p	212p	221p	239p	241p
Woodland Apts.	240p	245p	248p	.....	258p	305p	312p	321p	339p	341p
Woodland Apts.	358p	403p	406p	.....	416p	423p	430p	439p	457p	459p
Woodland Apts.	419p	424p	427p	.....	437p	444p	451p	500p	518p	520p
Woodland Apts.	517p	522p	525p	.....	535p	542p	549p	558p	616p	618p
Woodland Apts.	636p	641p	644p	.....	654p	701p	707p	716p	734p	736p
Job Lot	749p	752p	.....	802p	809p	815p	824p	842p	844p

Schedule Service with Regular Headways

- People can remember repeating patterns much better than irregular patterns
- It's also easier to remember schedules that repeat at the same time every hour (clockface headways)
- Both scenarios would reschedule most routes to operate with regular clockface headways

DEPARTURE TIME		
BAD (NON-REPEATING PATTERN)	BETTER (REPEATING PATTERN)	BEST (REPEATING PATTERN + CLOCKFACE TIMES)
7:00	7:00	7:00
7:12	7:14	7:15
7:35	7:28	7:30
7:50	7:42	7:45
<hr/>		
8:05	7:56	8:00
8:15	8:10	8:15
8:30	8:24	8:30
8:40	8:38	8:45

Coordinate Services

- RIPTA's current irregular schedules mean that coordinated service cannot be provided:
 - Long transfer times
 - Some buses will operate back-to-back followed by gaps in service

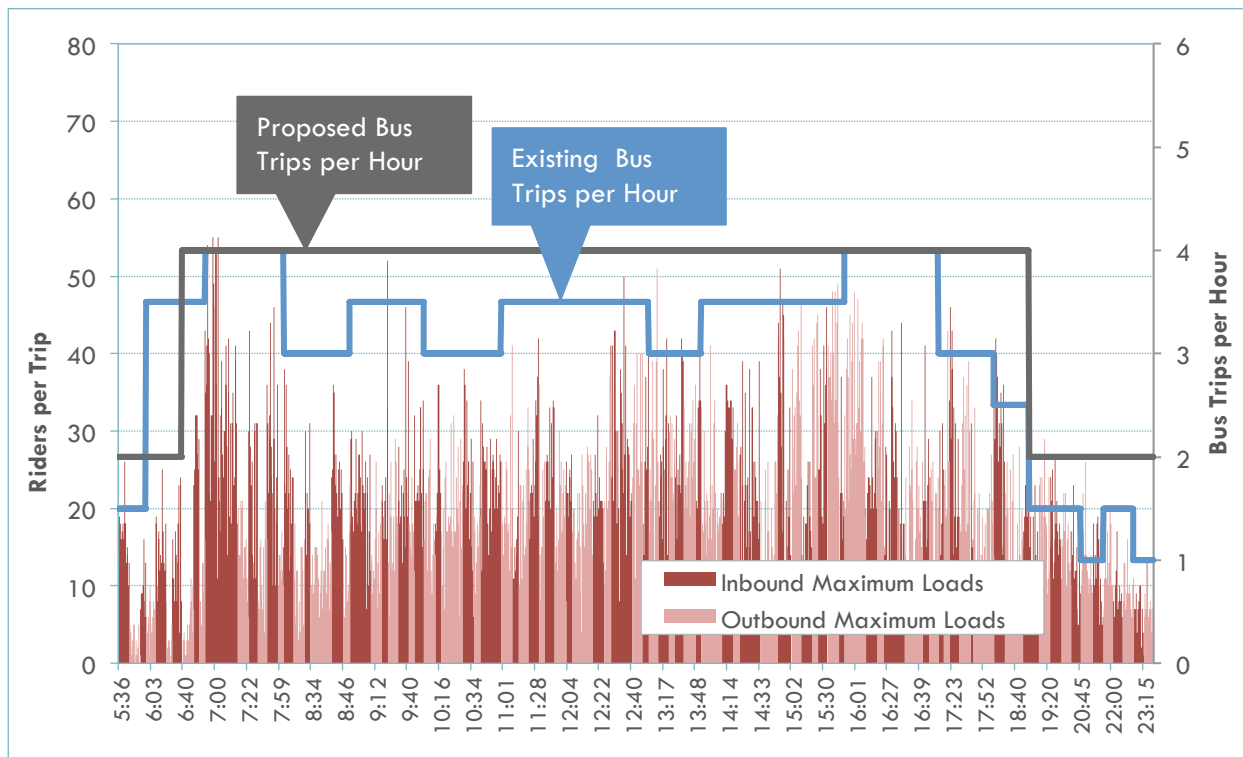
- Clockface headways will enable:

- Timed-transfers
- Pulse service at Gateway Center
- Even headways in Transit Emphasis Corridors to eliminate bunching and gaps

EXISTING		PROPOSED	
ROUTE	DEPAURTURE	ROUTE	DEPARTURE
27	4:06 PM	27	4:00 PM
28	4:10 PM	28	4:10 PM
27	4:25 PM	27	4:20 PM
28	4:30 PM	28	4:30 PM
27	4:44 PM	27	4:40 PM
28	4:50 PM	28	4:50 PM
28	5:10 PM	27	5:00 PM
28	5:30 PM	28	5:10 PM
27	5:34 PM	27	5:20 PM
28	5:55 PM	28	5:30 PM
27	6:04 PM	27	5:40 PM
		28	5:50 PM

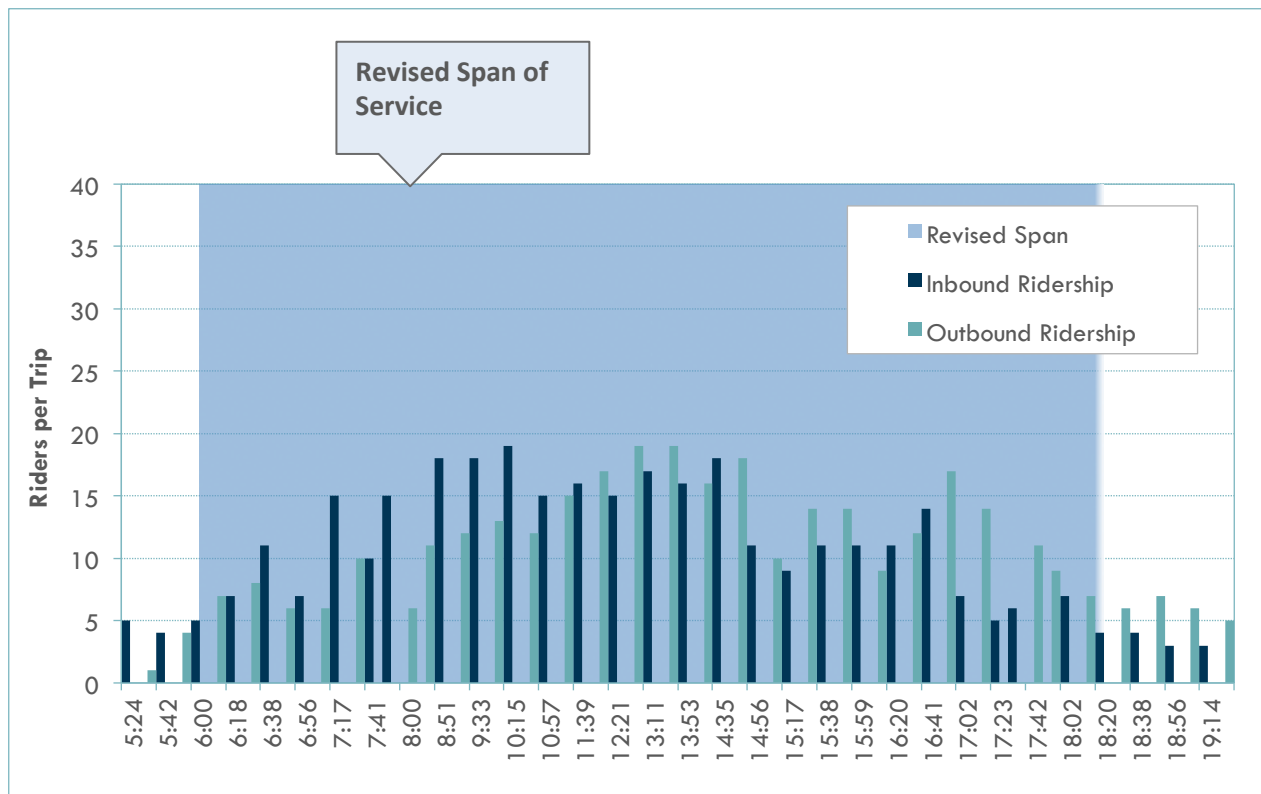
Scheduling: Adjust Trip Frequencies

- On some routes, too much service is provided
- On others, too little service is provided
- Service frequencies would be adjusted to better match service levels with demand by time of day.



Scheduling: Adjust Service Span

- Similarly, some routes begin service too early or too late, and/or end service too early or too late.
- Service start and end times adjusted based on Service Guidelines.



Branding and Public Information

- For people to be able to use transit, they must first know that it is there and be able to understand how to use it.
- Extremely important to provide clear and concise information on their available services.
- Proposed improvements include:
 - Renumbering and naming some routes to provide greater clarity on where they go
 - Improving schedule brochures
 - Improving RIPTA's system map.

31 Cranston St. Continuing *through-city* to 56 Chalkstone

**31
56**

BUS SERVES
Brewery Parkade
Central / Classical
High Schools
Hoyle Square
Mt. Pleasant
Providence Station
Amtrak MBTA
State Offices
West End

Effective 19/13
Printed 1/13
FREE Schedule

RIPTA System Map
Now available at www.ripta.com
Try our new trip planner at
www.google.com/transit

Convenient Through-City Routing

**#31 CRANSTON /
#56 Chalkstone SERVICE**
Mon-Fri: Service 5:30am-11:30pm
Every 19 Min. All Day Every 50 min. Night
Saturday: Service 5:40am-11:21pm
Every 27 min. All day
Sunday Service 7:10am-7:50pm
/ Holiday: Every 48 min. All day

RIPTA
RHODE ISLAND PUBLIC TRANSIT AUTHORITY



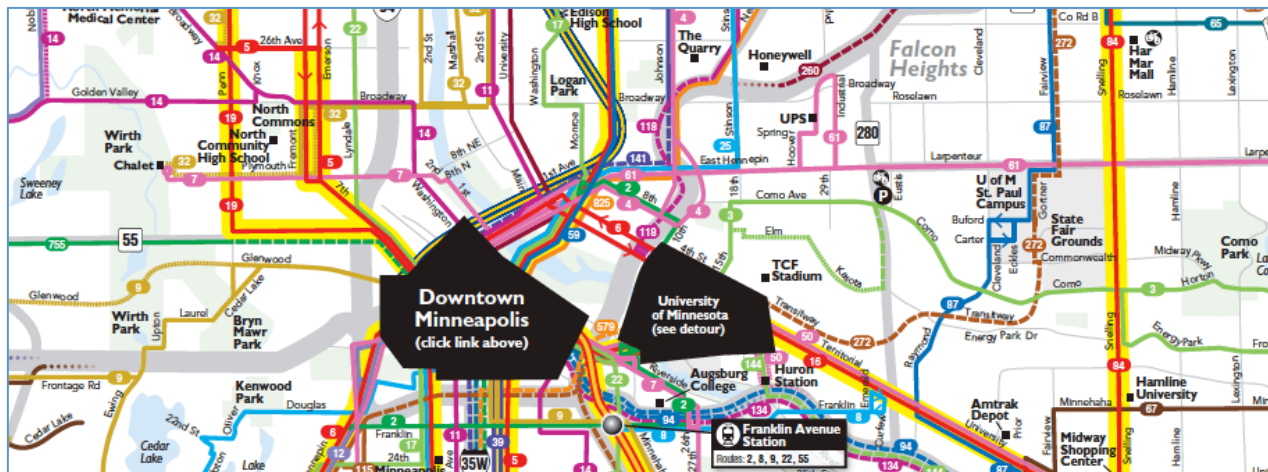
Renumber/Rename

- RIPTA's existing branding includes confusing elements:
 - The use of a single route number for similar express and local routes
 - The use of legacy route numbers for routes that formerly operated independently but that have since been joined into single routes
- To improve clarity:
 - Express routes will be given unique numbers that clearly identify the nature of the service
 - Routes that have been combined will be re-designated with a single route number and name when it improves ease of use for customers.

Existing Number/Name	Scenario 1 New Number/Name	Scenario 2 New Number/Name
<ul style="list-style-type: none">■ 90 Park-n-Ride	<ul style="list-style-type: none">■ 13X West Warwick Express■ 54X Woonsocket Express■ 95X Westerly Express	<ul style="list-style-type: none">■ 10X Scituate Express■ 13X West Warwick Express■ 54X Woonsocket Express■ 95X Westerly Express

Improve Schedule Maps and Brochures

- RIPTA mostly presents information on its existing services very effectively; however:
 - Many schedule brochures include route maps that are neither geographically correct or to scale
 - The Metro area system map excludes Warwick and Cranston
 - The system map does not include all express routes
- In conjunction with development of new materials required by COA changes, these materials will be improved.



Summary

- Service scenarios include large array of service design, schedule, and public information improvements and changes to improve productivity
- Service scenarios present potential changes to every route
- Emphasis on service to many rather than service to a few
- Designed to produce better system that is:
 - Easier to use
 - Easier to understand
 - More convenient
 - Faster and more direct
 - More productive



For More Information

- This presentation provides an overview of potential changes
- Much more detailed information is available:
 - A more detailed overview of the scenarios that expands on this presentation
 - A quick summary of the changes to each route
 - Descriptions of the specific changes that would be made to each route, including route maps
 - Metro area and statewide maps that illustrate the potential changes
- This information is available at:
www.ripta.com/coa-service-scenarios





Rhode Island Public Transit Authority
COMPREHENSIVE OPERATIONAL ANALYSIS

Ongoing Public Outreach

Ongoing Outreach

- COA webpage updated to accept comments on Scenarios in “blog format”

ROUTE 29 | KENT COUNTY



ROUTE 29 | KENT COUNTY



Ongoing Outreach

- 7 “Open Houses” scheduled over next 2 weeks
 - Providence: February 25th and 28th
 - Warwick: February 25th
 - Narragansett: February 26th
 - Newport: February 27th
 - Gloucester: March 4th
 - Barrington: March 6th
- Other presentations/meetings
 - Statewide Transportation Advisory Committee (TAC)
 - Accessible Transportation Advisory Committee (ATAC)
 - RIPTA Riders





Rhode Island Public Transit Authority
COMPREHENSIVE OPERATIONAL ANALYSIS

Discussion and Next Steps

Next Steps / COA Decisions

- Obtain Public Input
- Evaluate Cost Impacts
 - ProJo article had it wrong! (2/8/13)
 - COA changes are being designed to improve service in a cost neutral manner.
- Make Recommendations to RIPTA Board
 - Work with Board subcommittee on implementation
- Tough Decisions ahead.....
 - Improvements that cost money must be offset by actions that save money.
 - Need to balance ridership demands and coverage-based needs?
 - RIPTA has some very low ridership routes and variant services— is there a point below which RIPTA should not provide service?



Discussion / Next Meeting

- Discussion
- Final TAC Meeting
 - Late March?

