



THE
NASSAU HUB STUDY
ALTERNATIVES ANALYSIS / ENVIRONMENTAL IMPACT STATEMENT



The Nassau Hub Study Public Open House Presentation

January 31, 2012



NASSAU COUNTY EXECUTIVE
ED MANGANO



NYS DOT



Agenda

- 1) Study Update
- 2) Refined Long-List Alternatives Development
- 3) Refined Long-List Alternatives Definition
- 4) Refined Long-List Alternatives Screening
- 5) Assessment Of Mode Options
- 6) Recommendations
- 7) Next Steps



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Study Update



Previous Alternatives Evaluation

- 14 Preliminary Long-List Alternatives Evaluated During The Fatal Flaw Screening
- Alternatives 9-14 Were Fatally Flawed
- Alternatives 1-8 Were Advanced To Refined Long-List Alternatives



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Refined Long-List Alternatives Development



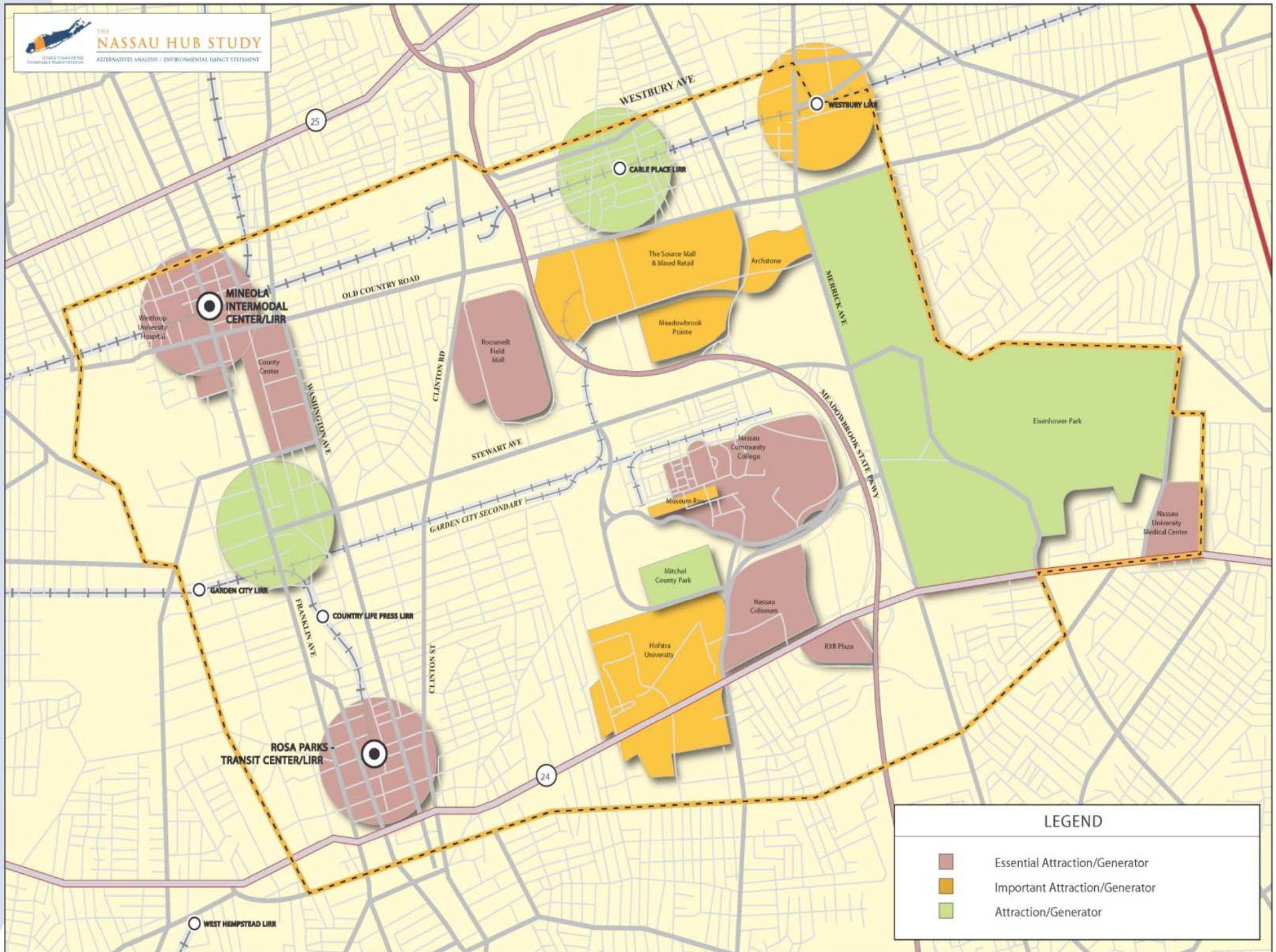
Refined Long-List Alternatives Development

- Alternatives Advanced to Long-List Were Further Defined / Developed With More Detail
- Items Considered Include:
 - Activity Center Connections
 - Land Use Compatibility
 - Stakeholder And Public Input
 - Infrastructure And Operational Characteristics
 - Ridership Potential



Activity Center Connections

- Previously Identified Study Area Attractors And Generators (Activity Centers)
- Activity Centers Grouped By Relative Significance



LEGEND

- Essential Attraction/Generator
- Important Attraction/Generator
- Attraction/Generator



Land Use Compatibility

- Evaluated Existing Land Use Patterns
- Identified Redevelopment Opportunities
- Determined Potential Transit-Oriented-Development (TOD) Opportunities / Constraints



Public Input

- Project Committees
- Project Website
 - www.nassauhub.com
- Public Meetings
- Origin / Destination Survey
- Stated Preference Survey
- One-on-One And Small Group Meetings





Infrastructure And Operational Characteristics

- Developed Preliminary Operating Scenarios
 - Running Within Mixed Traffic
 - Running In Exclusive Right-Of-Way
- Determined Travel Times Between Key Activity Centers
- Number Of Transfers A Key Service Factor
- Identified Track / Lane Miles



Ridership Potential

- Completed Comprehensive Origin / Destination And Stated Preference Surveys
- Developed Order-Of-Magnitude Ridership Estimates
- Ongoing Refinement Of Ridership Model For More Detailed Ridership Forecasting, Which Will Ultimately Lead To The Selection Of The Locally Preferred Alternative (LPA)



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Refined Long-List Alternatives Definition



Refined Long-List of Alternatives Definition

- Alternatives Were Defined For Evaluation Against Study Goals And Objectives
- Characteristics Include:
 - Travel Times
 - Number of Daily Trips
 - Trips Per Track/Lane Mile
 - Trips Per Annual Vehicle Mile
 - Transit Connections / Activity Centers Served



LIVABLE COMMUNITIES
THROUGH SUSTAINABLE TRANSPORTATION

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Refined Long-List Alternatives Screening



Methodology

- Created A Series Of Matrices Based On Defined Alternatives
- Ranked Alternatives Based On:
 - Relative Strength Of Ridership
 - Track / Lane Mileage
 - Annual Vehicle Mileage
 - Travel Times
 - Number Of Transfers
 - Transit Connections And Activity Centers Served



Screening Results

Alternatives Identified For Advancement

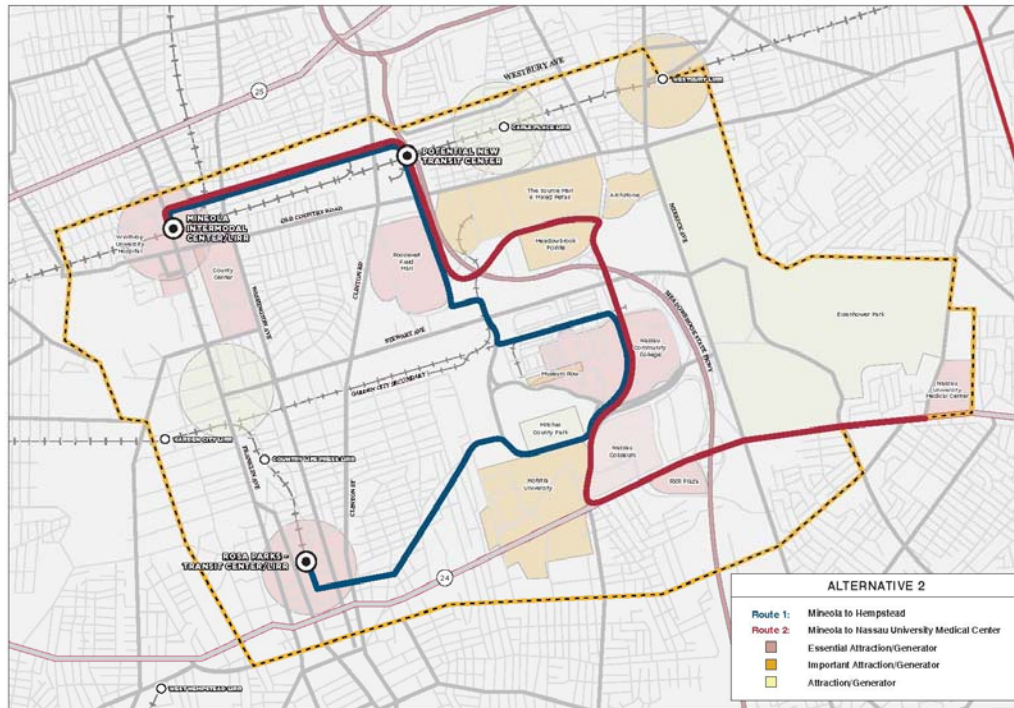
- Alternative 2
- Alternative 3

Alternatives Identified For Elimination

- Alternative 1
- Alternative 4
- Alternative 5
- Alternative 6
- Alternative 7
- Alternative 8



Alternative 2



Transit Connections	Mineola Intermodal Center Potential New Transit Center Hempstead Intermodal Center
Activity Centers Served	Downtown Mineola Downtown Hempstead Roosevelt Field Mall Nassau Community College Nassau Coliseum Hofstra University RXR Plaza Nassau University Medical Center Source Mall Museum Row Mitchel Field Eisenhower Park

	Hempstead to Roosevelt Field Mall		Mineola to Coliseum		Potential Daily Trips 2035	Trips per Track/Lane Mile	Trips per Annual Vehicle Mile
	Travel Time	Transfers	Travel Time	Transfers			
<u>Mixed Flow</u>	14:04	0	14:43	0	6,200	283	1.89
<u>Exclusive ROW</u>	10:30	0	10:47	0	8,100	370	2.47

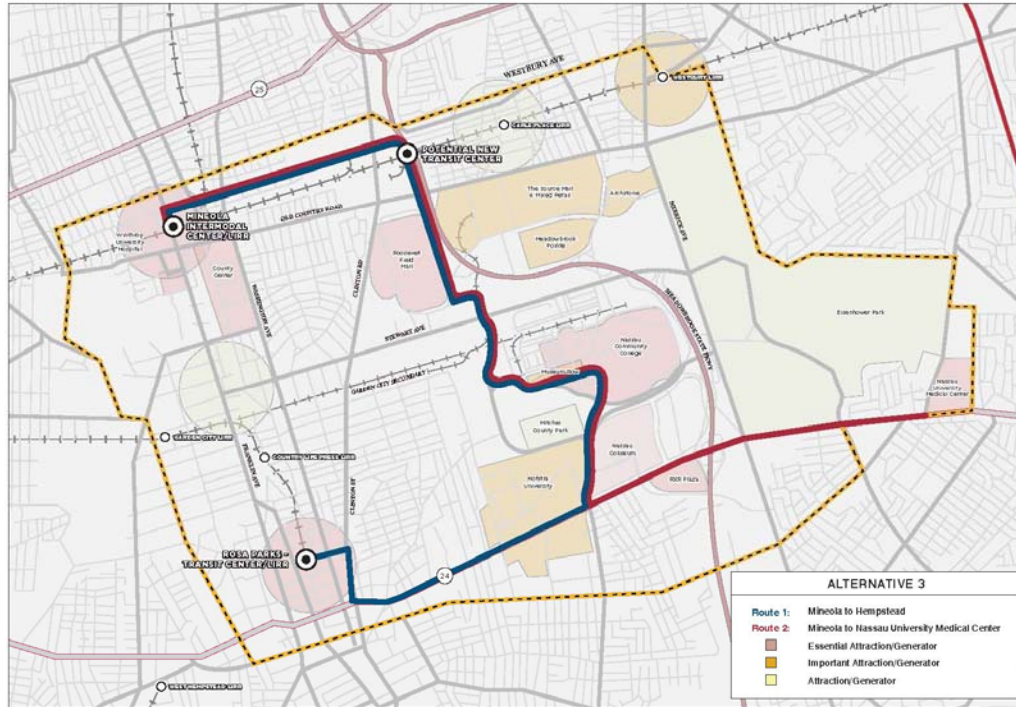


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Alternative 3



Transit Connections	Mineola Intermodal Center Potential New Transit Center Hempstead Intermodal Center
Activity Centers Served	Downtown Mineola Downtown Hempstead Roosevelt Field Mall Nassau Community College Nassau Coliseum Hofstra University RXR Plaza Nassau University Medical Center Museum Row Eisenhower Park

	Hempstead to Roosevelt Field Mall		Mineola to Coliseum		Potential Daily Trips 2035	Trips per Track/Lane Mile	Trips per Annual Vehicle Mile
	Travel Time	Transfers	Travel Time	Transfers			
<u>Mixed Flow</u>	14:13	0	14:44	0	6,100	349	2.33
<u>Exclusive ROW</u>	10:19	0	10:18	0	8,000	458	3.05



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Assessment of Mode Options



Modal Transit Technologies

- Street Transit
 - Jitney
 - Circulator Bus
 - Conventional Bus
 - Trolley Bus
 - Commuter Bus
 - Modern Streetcar
- Semi-Separated Transit
 - Bus Rapid Transit (BRT) / Premium Bus
 - Light Rail Transit (LRT)
- Separated Transit
 - Aerial Tram
 - Cable-Drawn Systems (CDS)
 - Automated Guideway Transit (AGT)
 - Commuter Rail
 - Heavy Rail



Criteria for Transit Mode Screening

- Flexibility
- Capacity, Ridership
- Service Frequency
- Effect On Congestion
- Cost
- System Accessibility
- Compatibility
- Proven Technology
- Land Use Compatibility
- Environmental Impact



Recommended Modes For Further Evaluation

- BRT / Premium Bus
- Modern Streetcar





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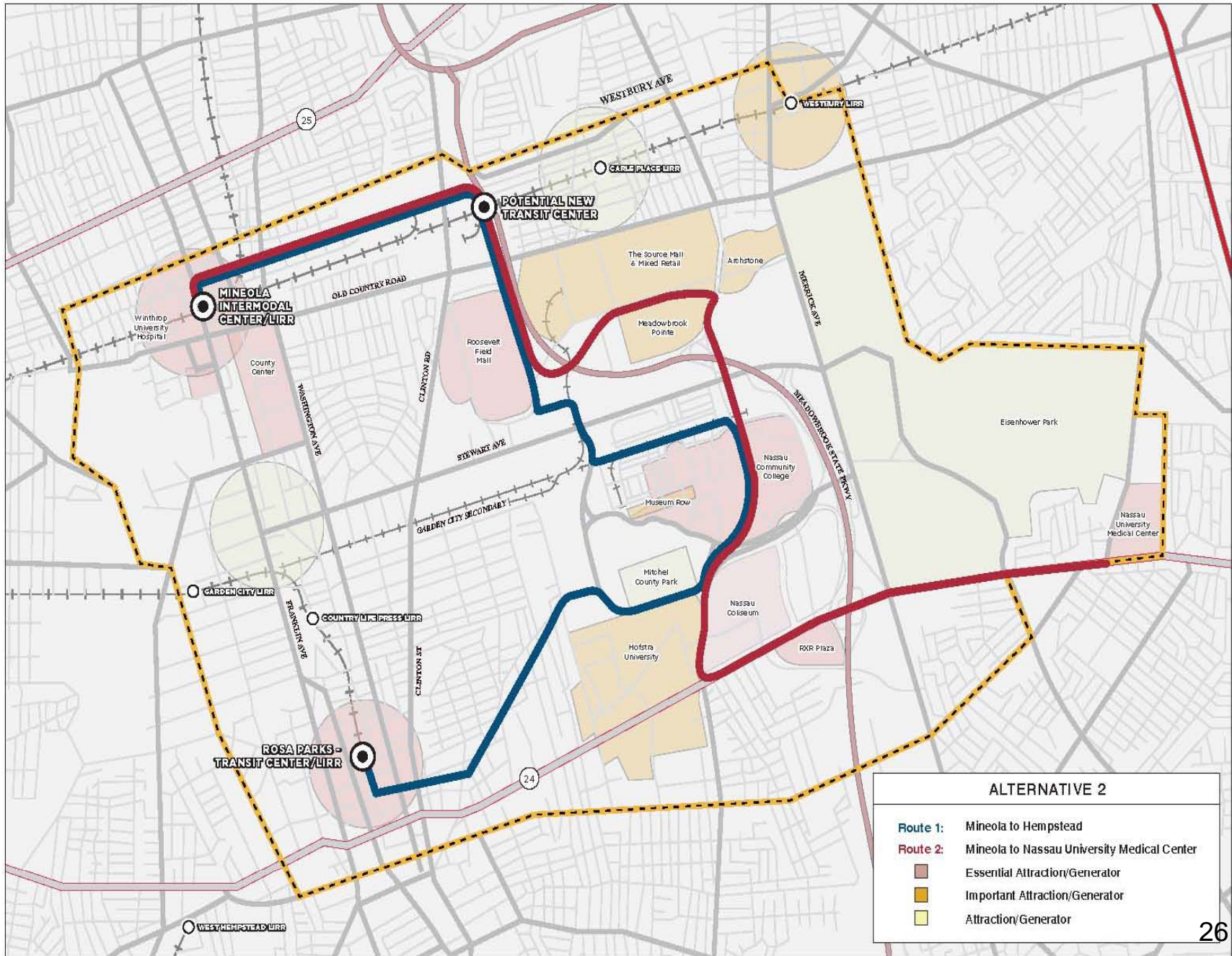


Recommendations and Next Steps



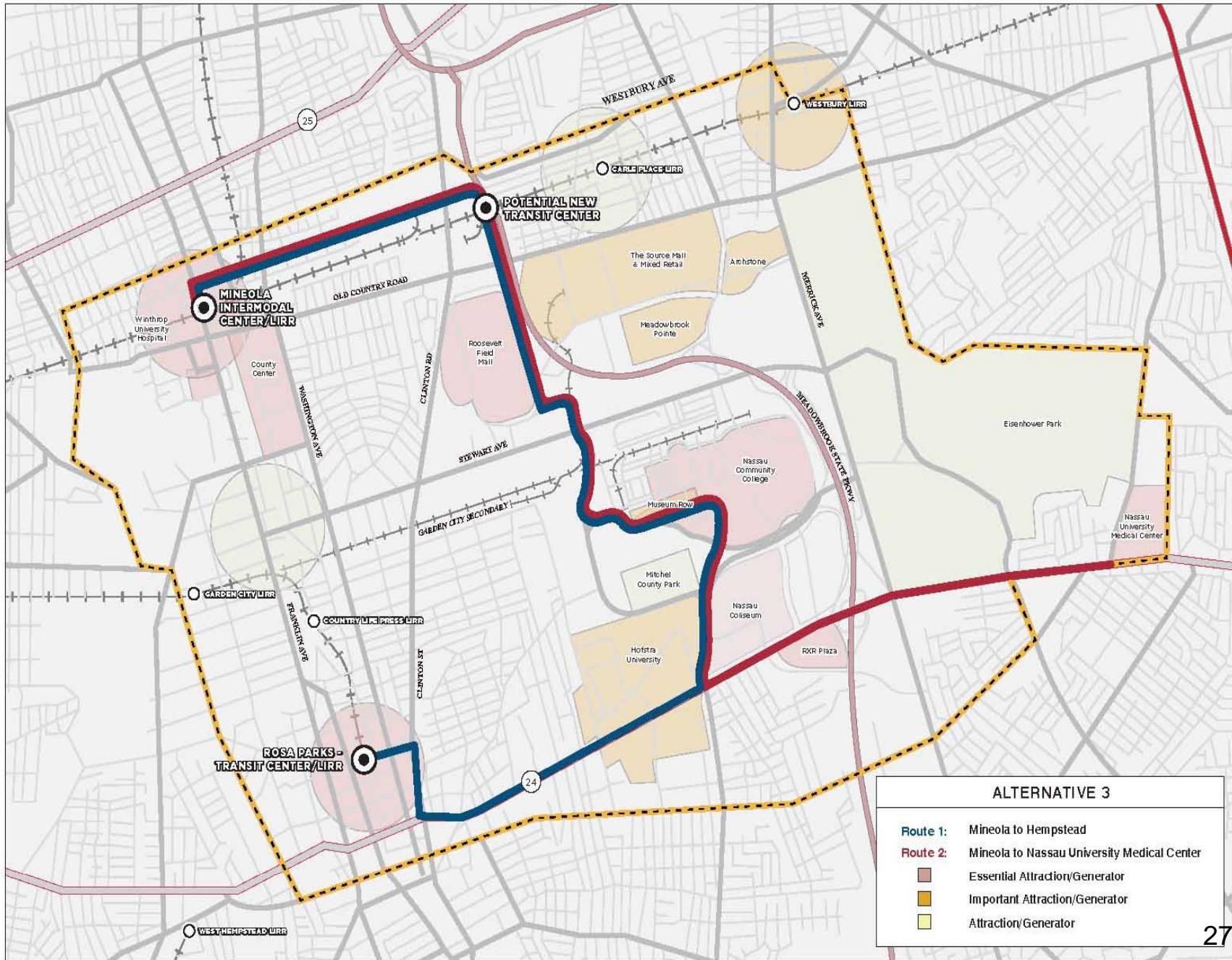
Recommended Alternatives to be Advanced

Alternatives 2 and 3
Each As BRT / Premium Bus And / Or
Modern Streetcar



ALTERNATIVE 2

Route 1:	Mineola to Hempstead
Route 2:	Mineola to Nassau University Medical Center
	Essential Attraction/Generator
	Important Attraction/Generator
	Attraction/Generator



ALTERNATIVE 3	
Route 1:	Mineola to Hempstead
Route 2:	Mineola to Nassau University Medical Center
	Essential Attraction/Generator
	Important Attraction/Generator
	Attraction/Generator



Next Steps

- Detailed Definition And Evaluation Of Alternatives
 - Refined Operating Plans
 - Cost
 - Ridership Forecasts
 - Environmental Considerations
 - Financial Considerations
 - Stakeholder And Public Input
- Selection of LPA



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Q&A



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