Bus Rapid Transit

NYCBRT
Study

MTA New York City Transit
NEW YORK CITY DOT

Project Sponsors

New York City Transit

New York City Department of Transportation

NYSDOT

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Schedule and Major Study Activities

Phase I (Fall 04 – Fall 05):

- Summarize lessons applicable to NYC from BRT systems around the world;
- Screen/evaluate all potential candidate corridors to identify 15 with the highest potential benefits and probability of early success; and
- Develop preliminary concept plans tailored to the unique market, operational and physical environments of each of the 15.

Schedule and Major Study Activities

Phase II (Fall 05 – Fall 06):

- Select five demonstration corridors and develop more detailed implementation plans for them; and
- Identify early action improvements elsewhere.

Bus Rapid Transit

BRT Possibilities for NYC

BRT: Bus Rapid Transit

- Flexible, ***integrated***, high performance ***system*** with a quality image and a strong ID
- Package of components appropriate to current and future:
  - Markets served
  - Physical environment

- ***Speed, reliability, identity*** essential

BRT System Elements

Vehicles

Bus Ways

Stations

Systems

Service Plan

Goals for BRT in NYC

- Introduce a new, high performance transit option for NYC
- Improve the speed, reliability and appeal of the bus system on high volume travel corridors
- Provide measurable benefits to current users as well as attracting new trips and supporting growth & redevelopment

Range of Bus Ways

Curb Bus Lane
NYC

Interior Bus Lane
Boston

Curb Bus Lanes
London, England

Arterial Median Transitways

Vancouver Translink 98B

Paris Val de Marne

Range of BRT Stations

LA Metro Rapid Bus

Brisbane SE Busway

Range of Vehicles

- Buses or specialized BRT vehicles
- Various sizes, floor heights
- Different interior, door configurations
- Propulsion systems

ITS: Signal Priority

Vancouver Translink 98B

Auckland, New Zealand

(Slide Backwards)

ITS: Passenger Information

At Stations
LA Metro Rapid Bus

On Board
Paris Val de Marne

BRT Service Plans

- All-day, frequent service
  - Minimum every 3-5 minutes in peaks
  - Minimum every 8-10 minutes off-peak

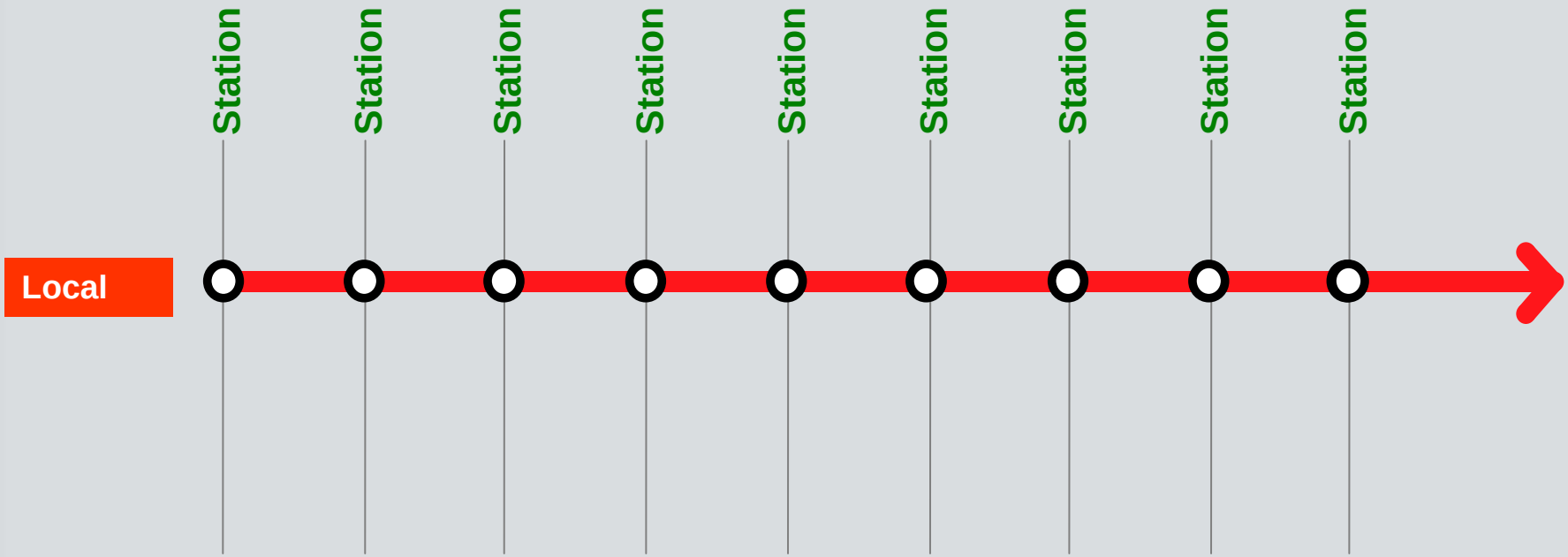
- Simple route structure
  - Direct, easy to understand
  - Minimum number of branches and variations

BRT Service Plans

- Integrated with other services
  - Overlay, not necessarily replacement
- BRT will require changes in mix of limited-stop and local services
- Relatively wide stop spacing
  - BRT averages 2,500-4,000 ft.
  - Current NYCT Limited route spacing averages 2,000-2,500 ft.

Most Common BRT Service Plan: Simple, Subway-Like

All-day, all-stops trunk line



Los Angeles Metro Rapid Bus

Conveying System Identity & Image

- Vehicles:
  - Design, colors, graphics, signage
- Stops, Stations, Terminals:
  - Design, colors, graphics, signage, materials
- Bus Ways:
  - Barriers, pavement markings/materials/ colors, graphics, signage, landscaping

Graphics and Icons

Brisbane: S.E. Busway

Vehicle Identity

LA Local Bus

LA Metro Rapid Bus

Station Design

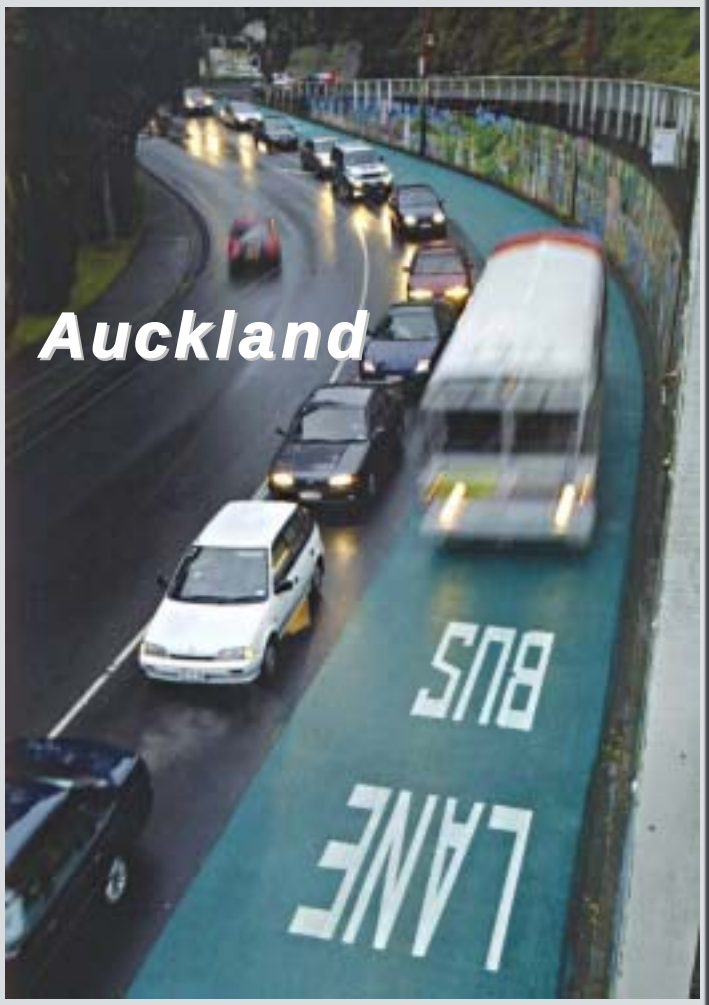
Metro Rapid

Local

Bus Way Color, Markings

Paris

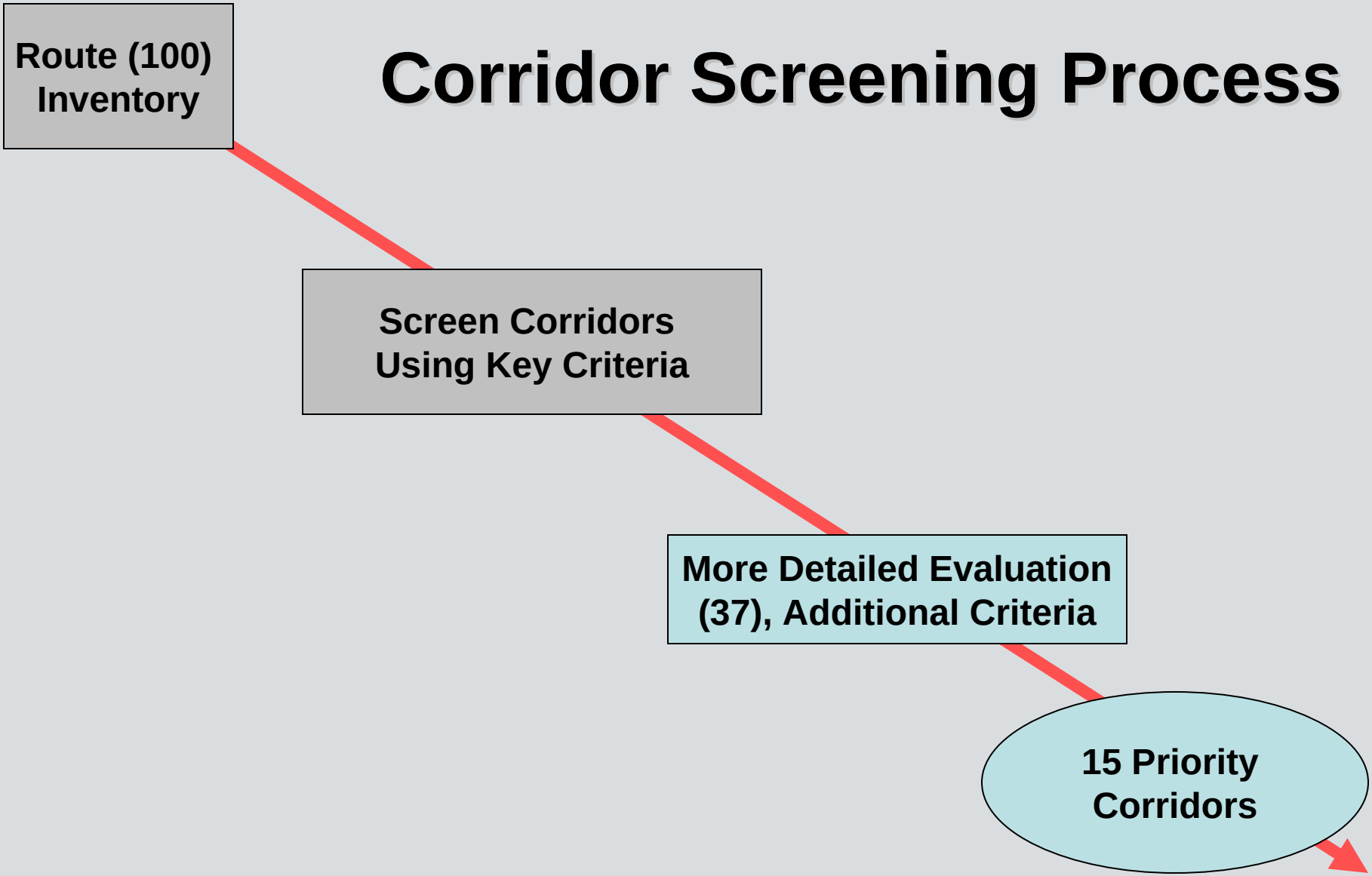

Sao Paulo



Auckland

Corridor Identification, Screening

Corridor Screening Process



Inventory of all “Potential Corridors”

- City Wide
- Medium trip length, high demand, largely intra-borough markets
- Starting point, routes with demand greater than 15,000 daily trips
- Cover “opportunities” as well as existing routes
- Identified approximately 80 candidates

Screening Criteria

- Ridership*
- Ridership growth*
- Limited stop service*
- Peak and base headways*
- Subway terminals, stations served
- CBD(s), major generators served*
- Load factor
- Peak/night speed ratio*

* Key Differentiator

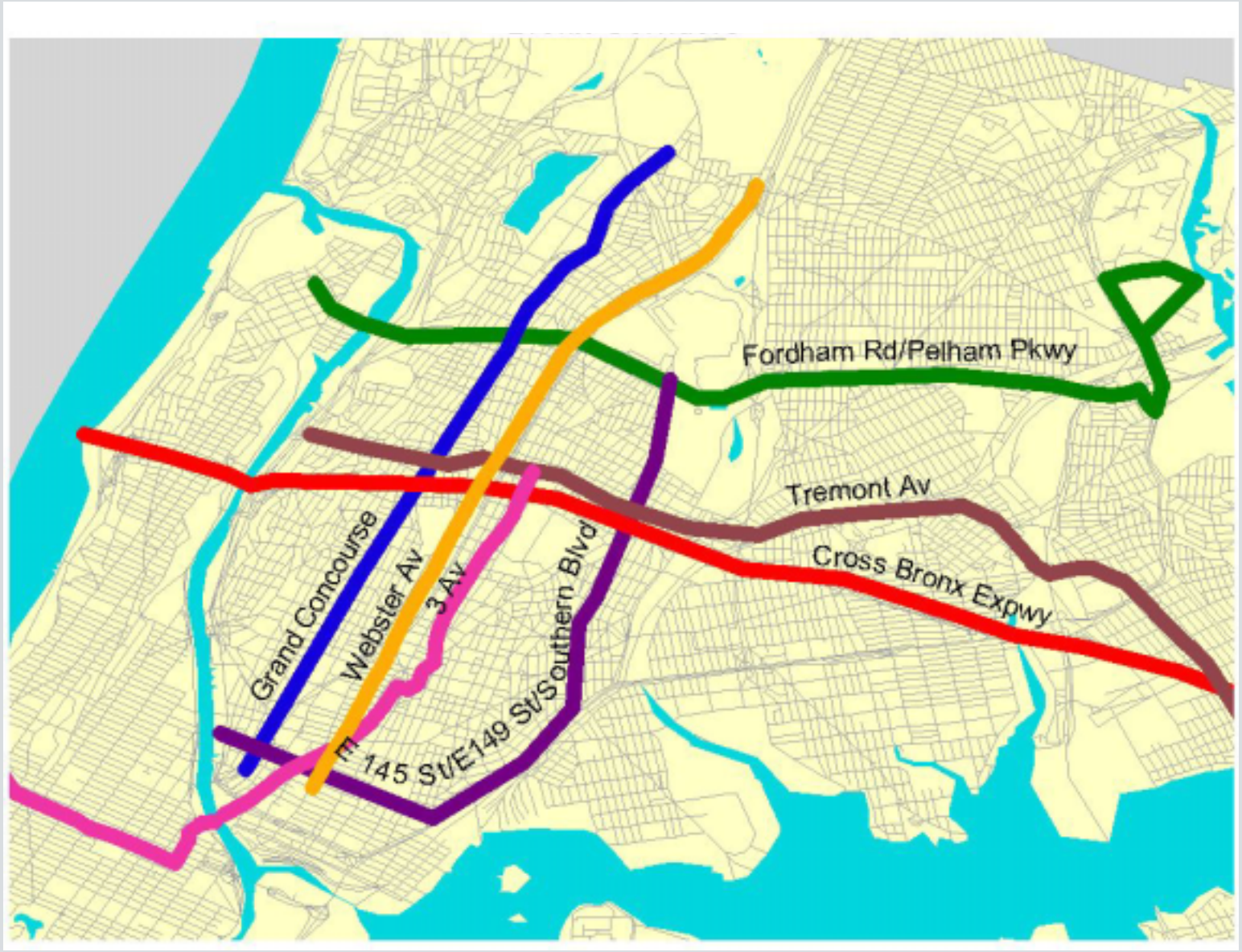
Field Survey Summary

- The Bronx: 7 corridors
- Brooklyn: 8 corridors
- Manhattan: 6 corridors
- Queens: 12 corridors
- Staten Island: 4 corridors

Bronx Corridors

- Fordham Road/Pelham Parkway (Bx12)
- Grand Concourse (Bx1/2/BxM4)
- 3rd Avenue (Bx15/55)
- Webster Avenue (Bx41)
- East 145/149 Street/Southern Boulevard (Bx19)
- Cross-Bronx Expressway (E 174/180 Street/W181 Street) (Bx36)
- Tremont Avenue (Bx40/42/36)

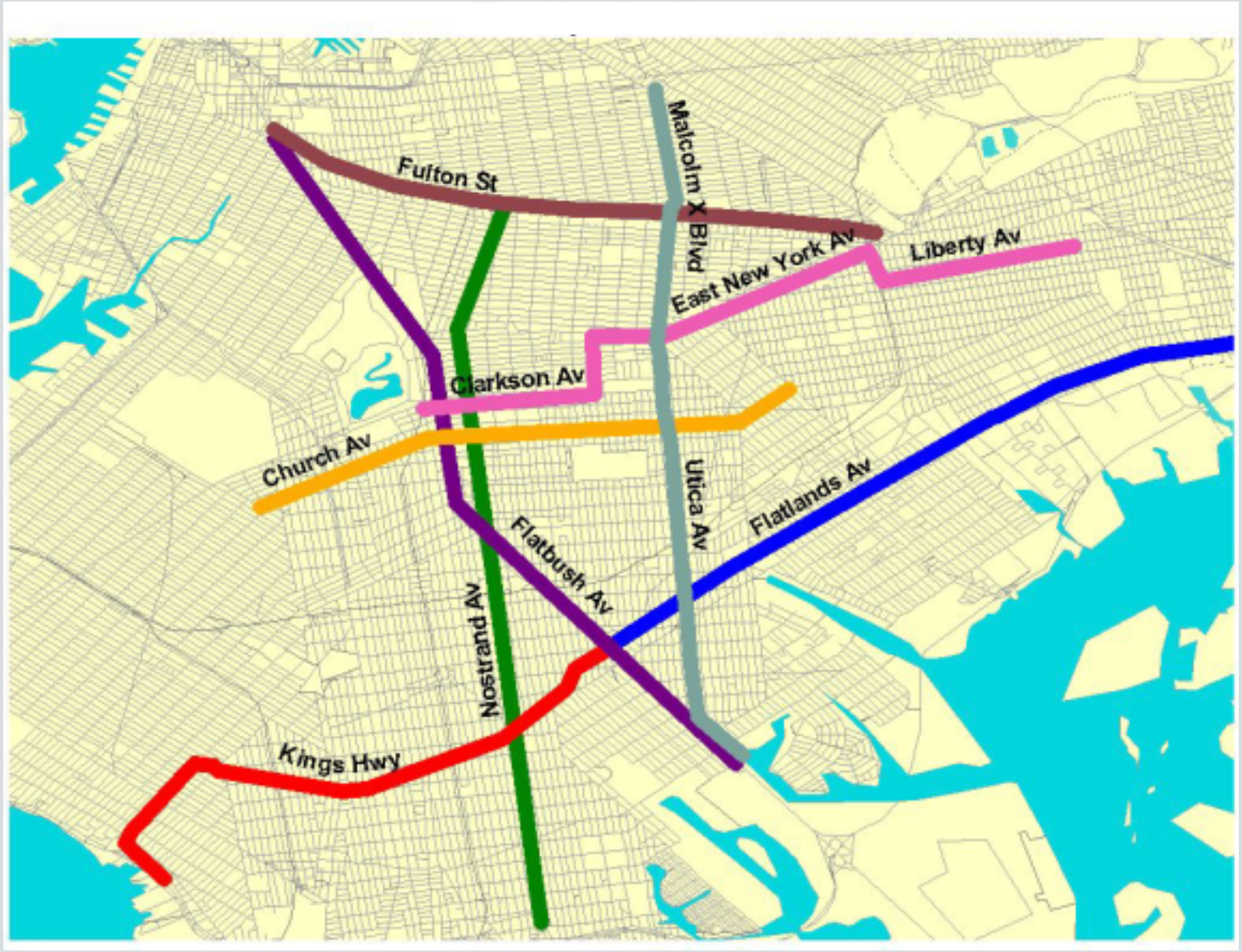
Bronx Corridors



Brooklyn Corridors

- Malcolm X Boulevard/Utica Avenue (B46)
- Nostrand Avenue (B44)
- Kings Highway (B82)
- Fulton Street (B25/26)
- Flatlands Avenue (B6/82)
- Flatbush Avenue (B41)
- Church Avenue (B35)
- Clarkson Avenue/East New York Avenue/Liberty Avenue (B12)

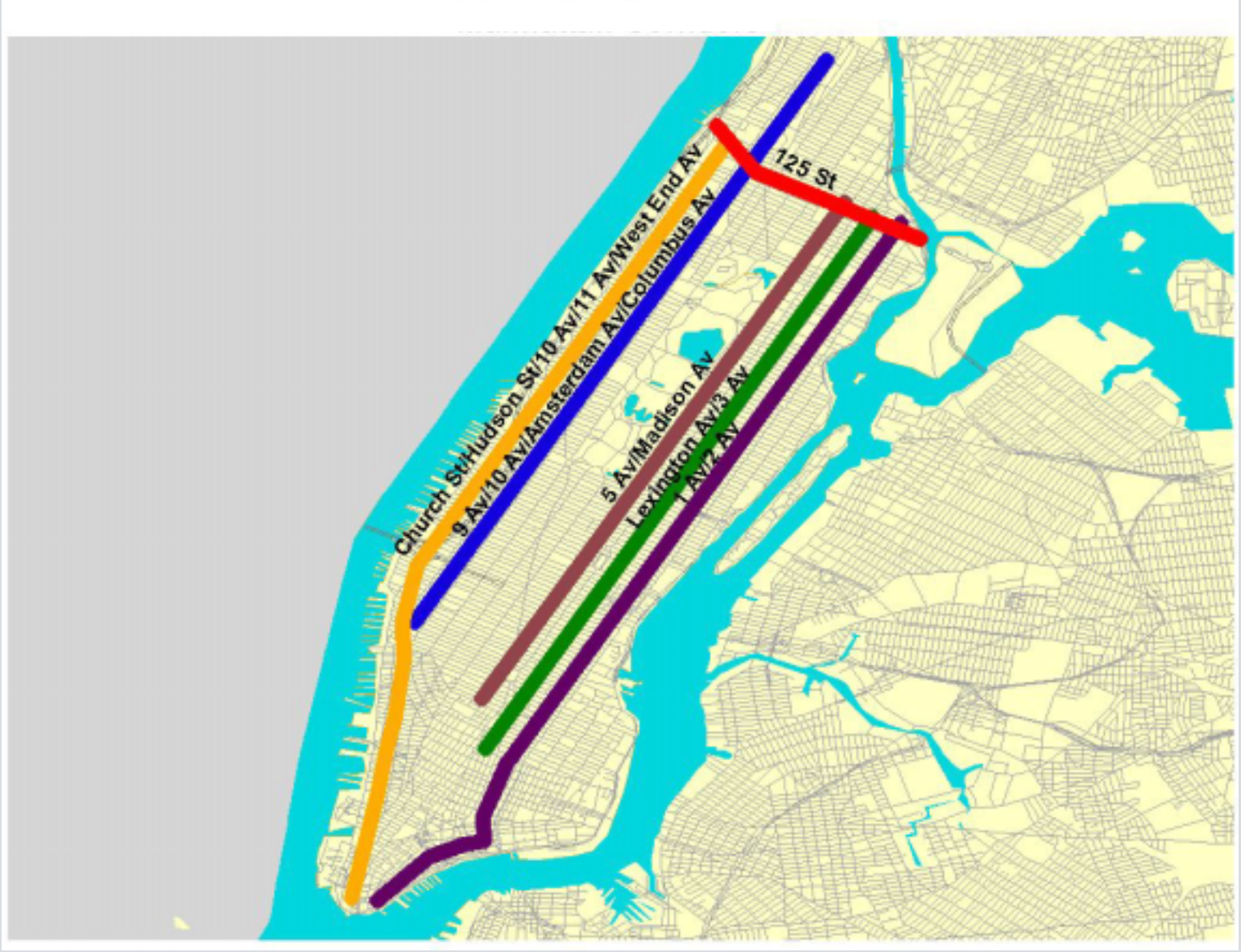
Brooklyn Corridors



Manhattan Corridors

- 1st/2nd Avenue (M15)
- 5th/Madison Avenue (M1/2/3/4/5/Q32)
- 3rd/Lexington Avenue (M98/101/102/103)
- West Street/10th/11th(M11/M20)
- Amsterdam/Columbus Ave. (M7/11/100/101)
- 125th Street (M60/100/101/Bx15)

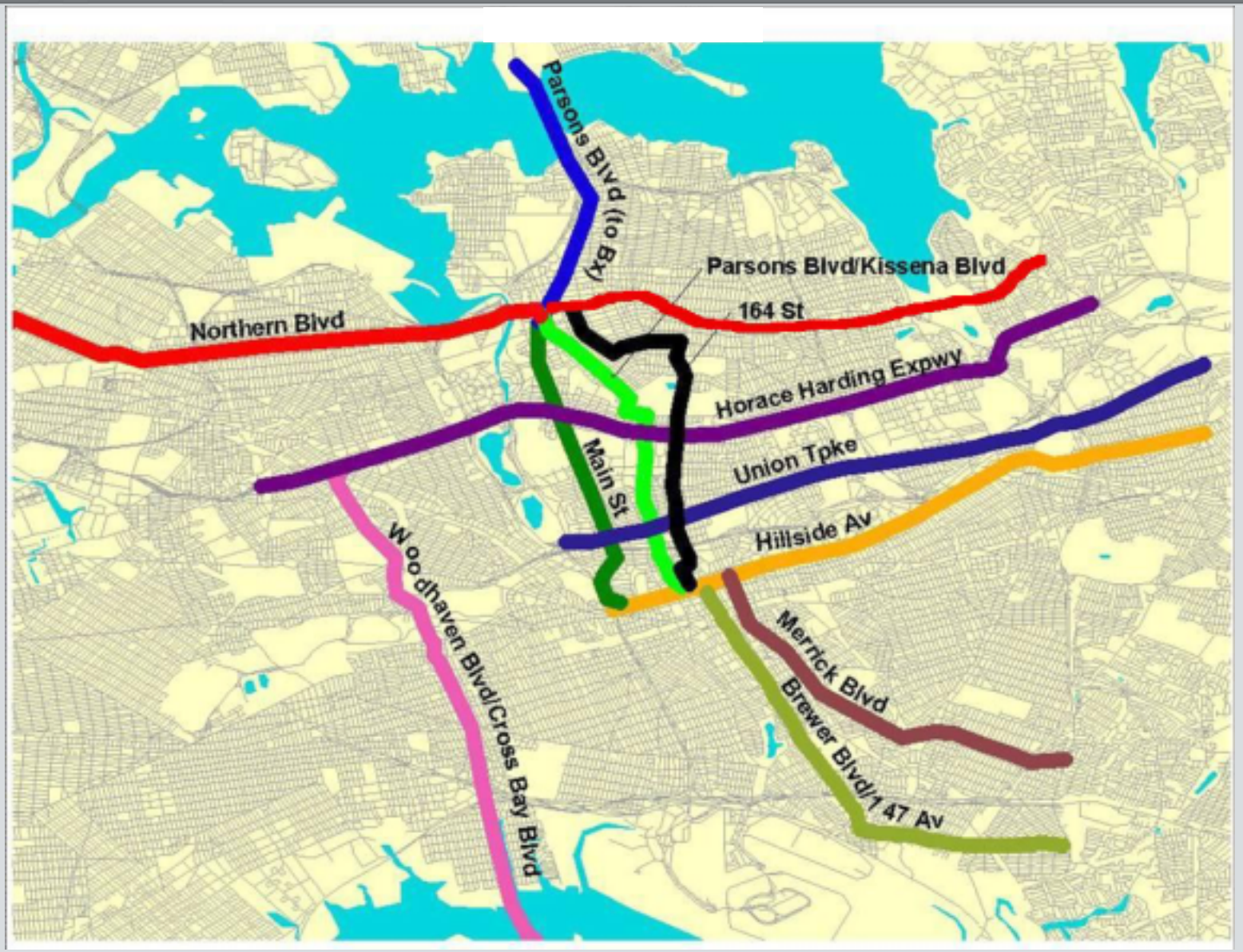
Manhattan Corridors



Queens Corridors

- Parsons/Kissena Boulevard (Q17/25/26/27/34)
- Main Street (Q20A/20B/44/74)
- 164th Street (Q65)
- Parsons Boulevard (Flushing/Bronx) (Q20A/20B/44/QBx1)
- Guy R Brewer Boulevard/147th Avenue (Q111/113/QM21)
- Merrick Boulevard (Q4/5/84/85/X63)
- Hillside Avenue (Q1/36/43/76/77/X68)
- Northern Boulevard West; Long Island City- Main St. (Q66)
- Northern Boulevard East; Main St.-Nassau (Q12)
- Horace Harding Expressway (Q17/30/58/88)
- Union Turnpike (Q46/QM1/1A)
- Woodhaven/Cross Bay Blvd (Q11/53/QM15/16/17/23)

Queens Corridors



Staten Island Corridors

- Richmond Avenue
  - S44/94/59/79
  - X1/4/5/6/10/17
- Forest Avenue
  - S40/90/48/98
  - X13/14/16/30
- Victory Boulevard
  - S48/98/61/91/62/92/66/67
  - X11/12/16/30
- Hylan Boulevard
  - S59/78/79
  - X1/2/3/4/5/6/7/8/9
- Staten Island Expressway (Currently Under Construction)
  - X10/11/12/17/19/42

Staten Island Corridors

Next Steps

- Evaluate remaining corridors and select 15 corridors for further study
- Development of preliminary plans for 15
- Evaluate 15 in detail
- Workshops on 15 corridors in Fall, 2005
- Select 5 for initial implementation
- Proceed into detailed concept planning

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