



Nicolls Road Bus Rapid Transit





CONNECT LONG ISLAND AND INNOVATION ZONE (I-ZONE)

Connect Long Island - a regional transportation and development plan to create sustainable economic growth through investments in housing, transportation and innovation.

Connect Long Island Goals

- Align land-use and transportation plans.
- Make transit investments to connect existing and proposed developments.
- Develop public transit connections to increase mobility.
- Connect educational and research institutions and innovation zones.
- Connect new and existing recreational assets and downtowns.

Innovation Zone (I-Zone) – part of the larger Connect Long Island initiative, I-Zone is a comprehensive plan to construct a major innovation and transportation hub along the Nicolls Road corridor.

I-Zone Components

- A multimodal corridor complete with Bus Rapid Transit (BRT) and an extensive hiking and biking network.
- The completion of the Ronkonkoma Hub adjacent to the Ronkonkoma LIRR Station.
- A “train-to-plane” connection between Long Island MacArthur Airport and the Ronkonkoma LIRR and the Hub.
- Relocation of the underutilized Yaphank LIRR Station to Brookhaven National Laboratory a few miles east.

The I-Zone and Connect Long Island plans are building a quality of life that is attractive to businesses and high skilled workers. It is necessary to retain these workers in Suffolk County to help grow our economy.



INNOVATION ZONE (I-ZONE) MAP



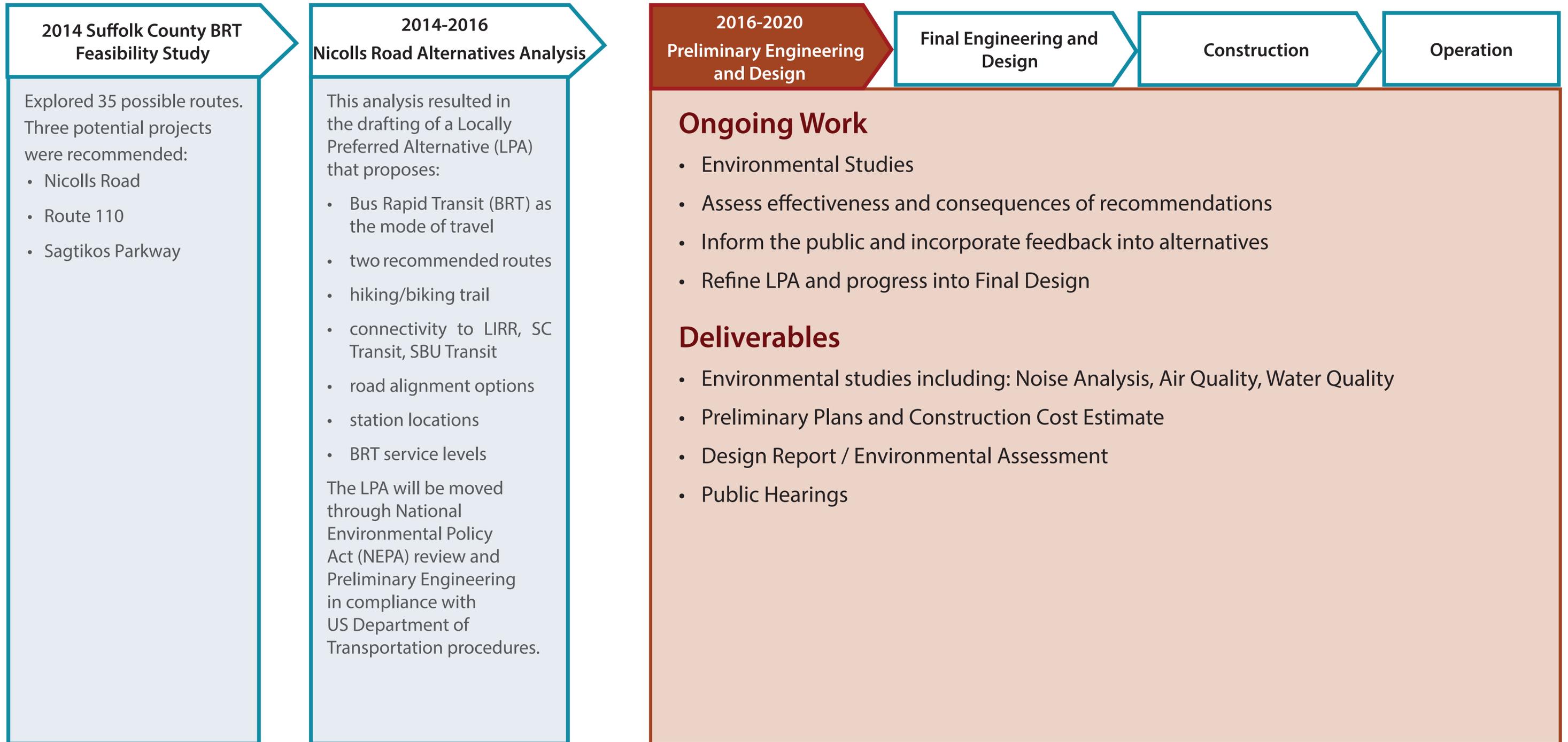


STUDY AREA





PROJECT DEVELOPMENT PROCESS





SUMMARY OF STUDY RECOMMENDATIONS

16

NUMBER OF STATIONS SERVING EXISTING AND FUTURE POINTS OF INTEREST

53%

PERCENTAGE INCREASE IN WEEKDAY TRANSIT RIDERSHIP BY 2040

16.5

MILES OF DEDICATED LANES TO BYPASS TRAFFIC CONGESTION

2,003

WEEKDAY BRT RIDES IN 2040 (1,790 NEW TRANSIT BOARDINGS, COMPARED TO NO-BUILD CONDITION)



PROPOSED BRT OPERATIONS

SERVICE FREQUENCY ON EACH ROUTE: (MORE FREQUENT SERVICE ON OVERLAP- PING SEGMENTS)	Weekday Peak	Every 10 minutes
	Weekday Off-Peak	Every 15 minutes
	Weekends	Every 20 minutes

A multi-modal Nicolls Road Corridor would provide connectivity between points of interest in the I-Zone. The addition of a hiking/biking trail would offer another travel option and healthy alternative to reduce automobile usage.



WHAT IS BUS RAPID TRANSIT (BRT)?

Bus Rapid Transit (BRT) is an innovative public transportation solution that provides fast, reliable, comfortable and convenient service. BRT will significantly improve our County's mobility and overall quality of life by helping to ease road congestion, reduce stress and increase productivity. With BRT, commuters can easily access major points of interest, transportation hubs and experience improved north/south travel. Some of the unique features of a BRT system are:

User-Friendly



Vehicles equipped with Wi-Fi, multiple doors and level boarding make riding comfortable, enjoyable and fast

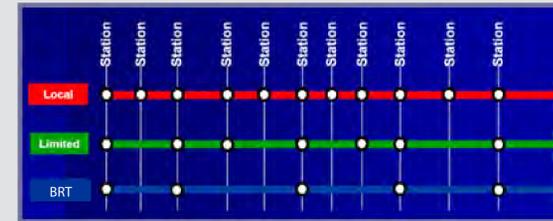


Modern, well-lit, safe and comfortable Stations

Faster Service



Bypass traffic in Designated Travel Lanes



More Frequent Service with Fewer Stops

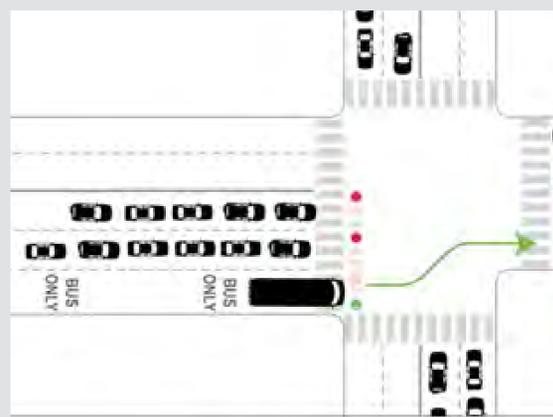
Options for Enhanced Bus Interiors for Customer Comfort and Convenience



Uniquely branded buses easily identify BRT



Convenient, real-time bus location and arrival times



Traffic Signal Priority and Queue Jumps put BRT first



Pre-paid and Electronic Passes speed you on your way

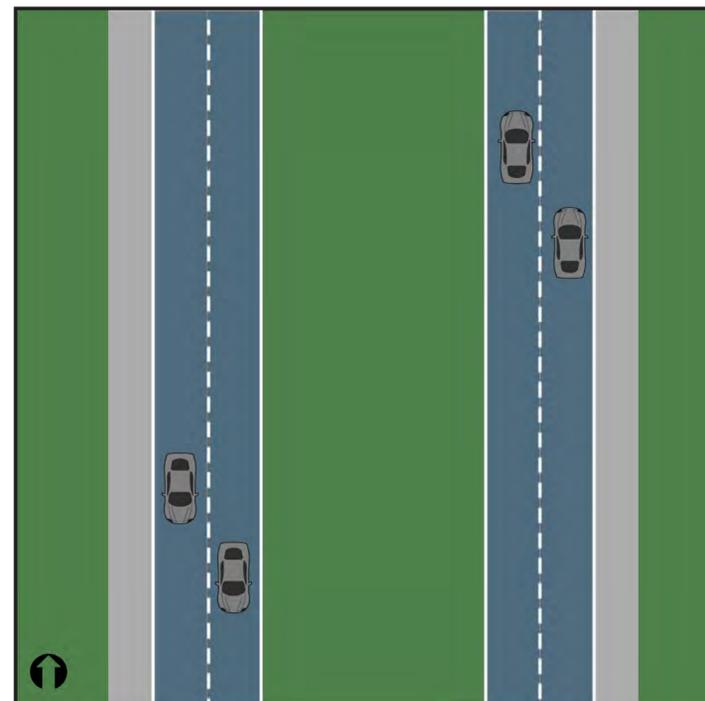




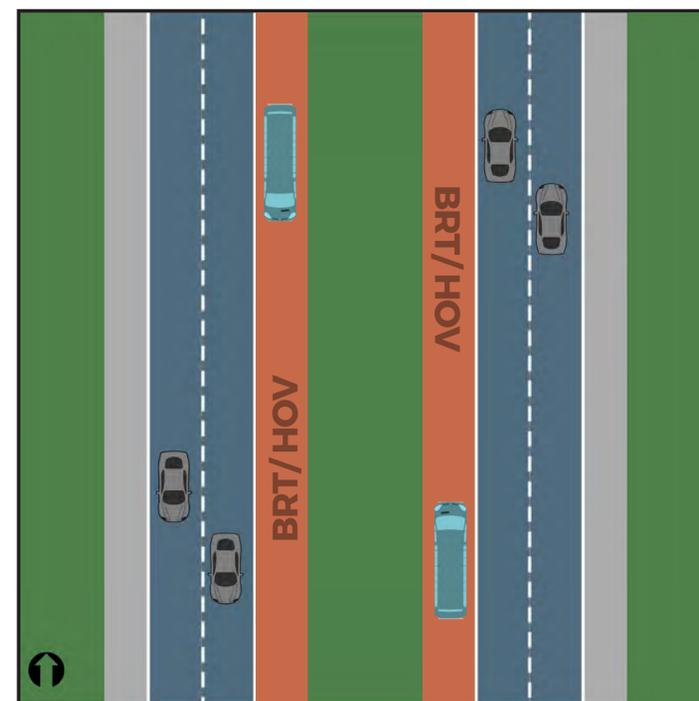
SCHEMATIC REPRESENTATION OF ALTERNATIVES

An HOV Lane is proposed wherever it is feasible and needed to accommodate traffic demand. It is recommended between Sunrise Highway to the south and Mark Tree Road to the north. BRT Vehicles will use the BRT/HOV Lane to bypass traffic congestion. Between NY Route 347 and Hospital Drive, BRT Vehicles will operate in a new shoulder lane.

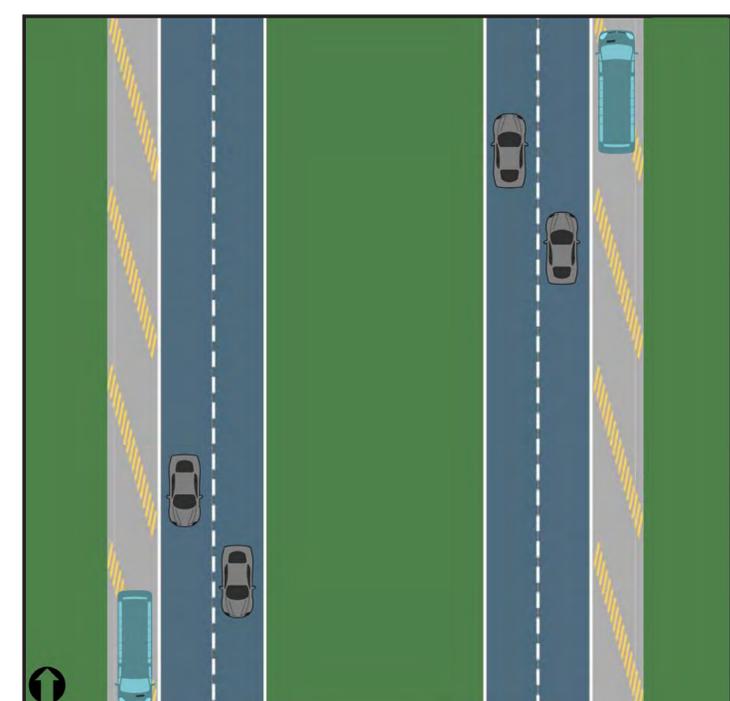
Existing Conditions



New BRT/HOV Dedicated Lane



BRT Shoulder-Running

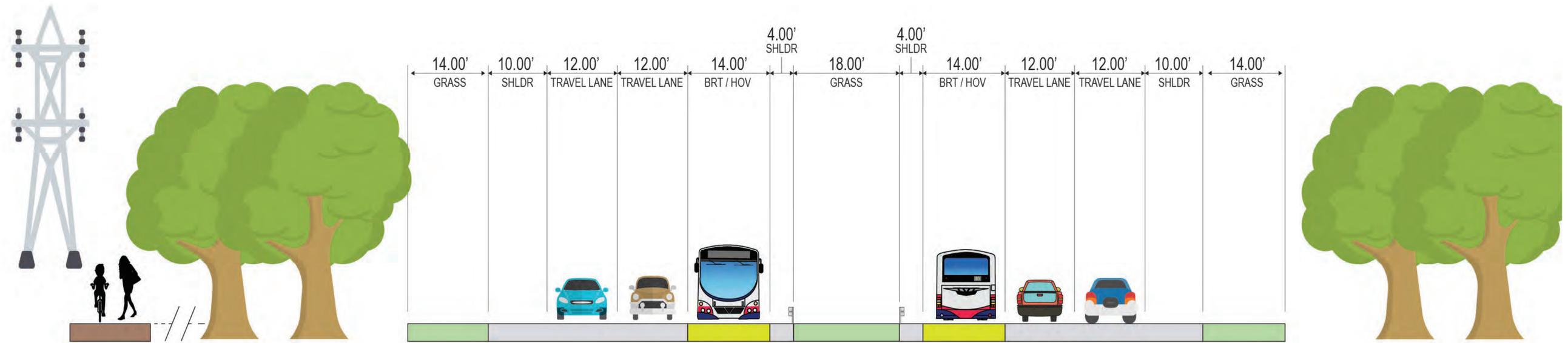




DEDICATED CENTER RUNNING BRT/HOV LANE

Construction of bi-directional Bus Rapid Transit (BRT)/ High-Occupancy Vehicle (HOV) Lanes in the center of Nicolls Road

Typical Section

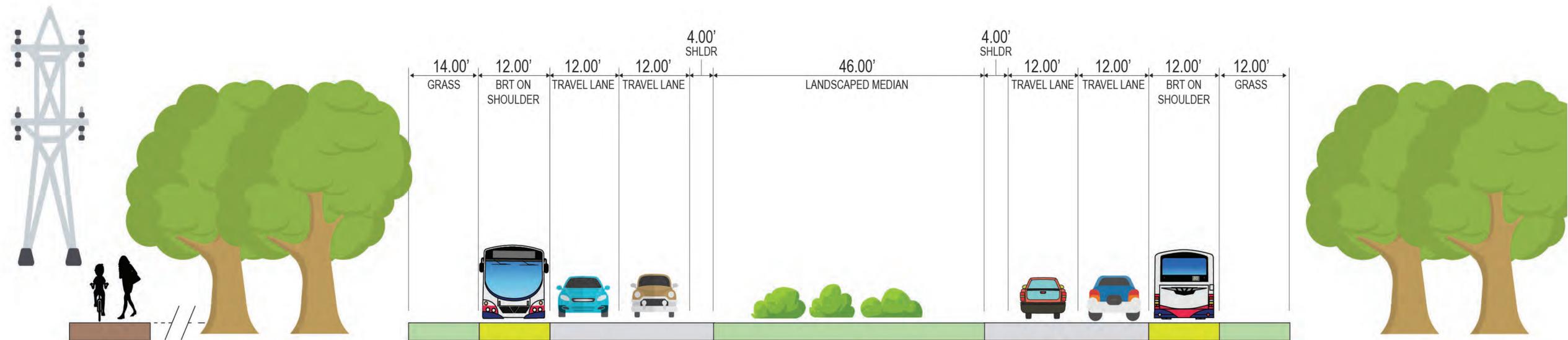


Metroway BRT, Alexandria, VA



BRT SHOULDER RUNNING

Repurposing (i.e., reconstructing and widening) the existing shoulder on Nicolls Road to be a dedicated BRT lane in each direction



Wilshire BRT, Los Angeles, CA

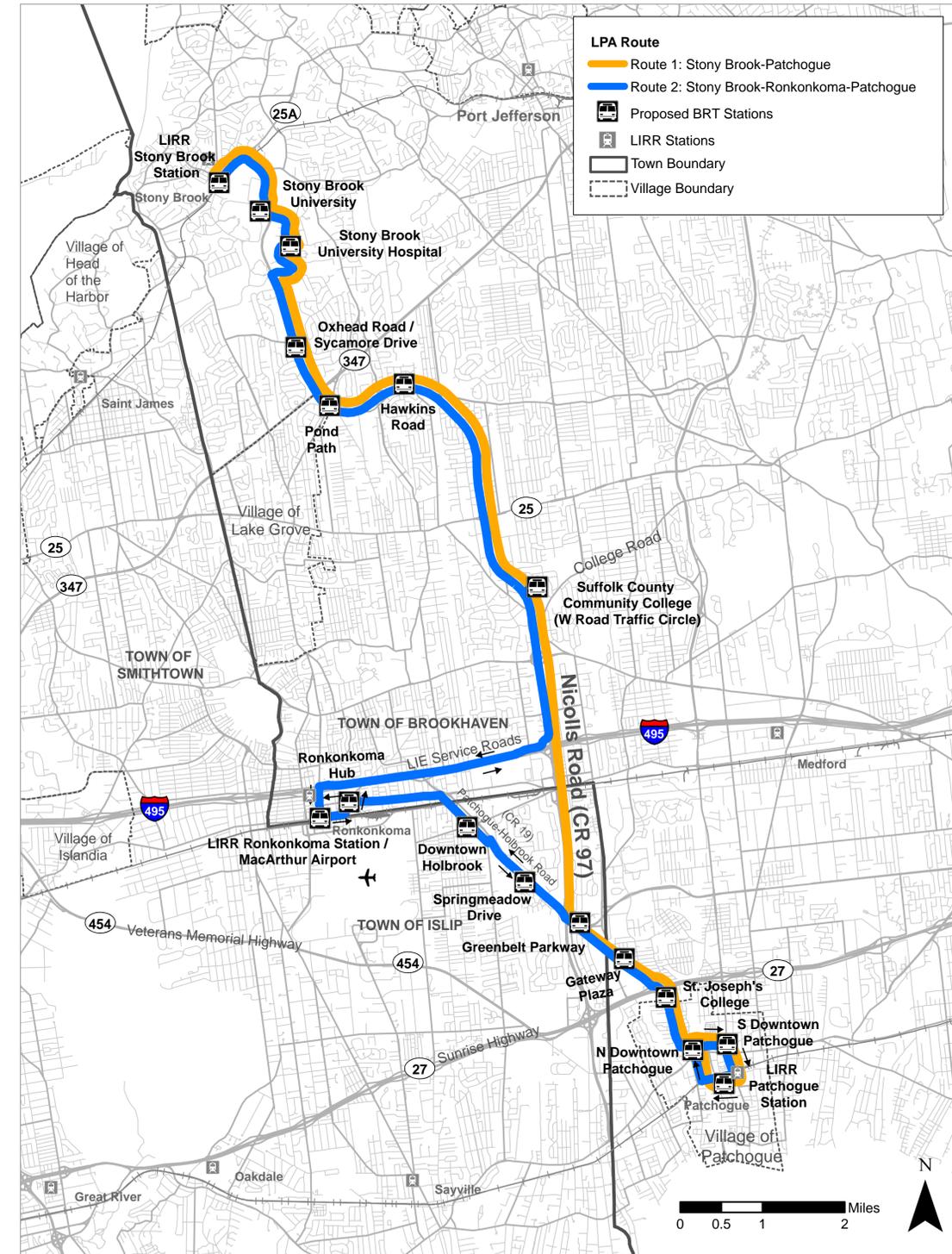


ALTERNATIVES: ROUTING, ALIGNMENTS & ROADWAY ELEMENTS

The two recommended BRT routes are (1) Stony Brook-Patchogue and (2) Stony Brook-Ronkonkoma-Patchogue.

Each route will make use of the dedicated BRT/HOV lanes along significant portions of Nicolls Road, which would enable BRT to bypass traffic congestion. Traffic Signal Priority (TSP) is proposed at most signalized intersections, which would limit time spent waiting at red lights. Queue jumps are also proposed at a number of signalized intersections to allow BRT vehicles to proceed before the other vehicles on the road.

LPA Route 1 & 2





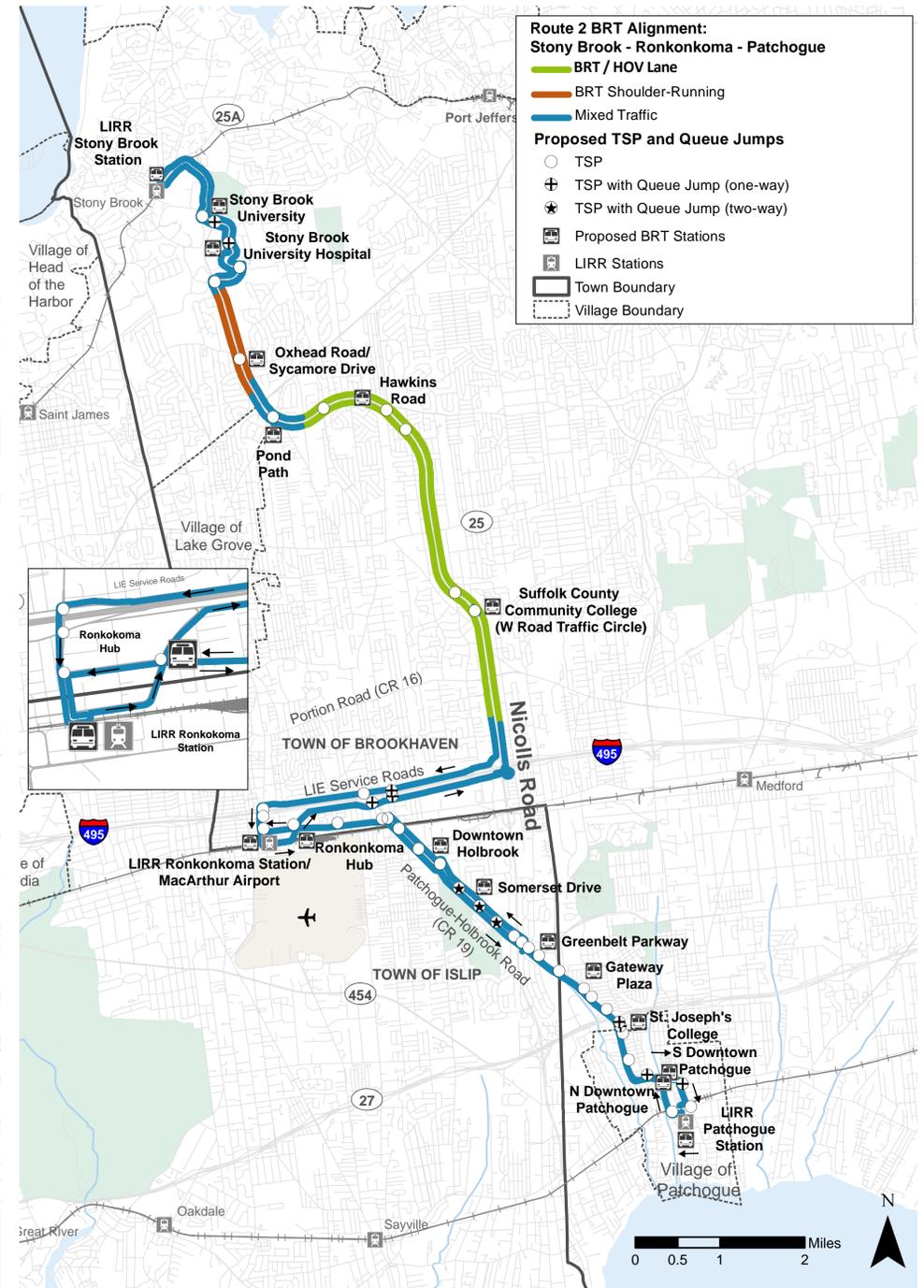
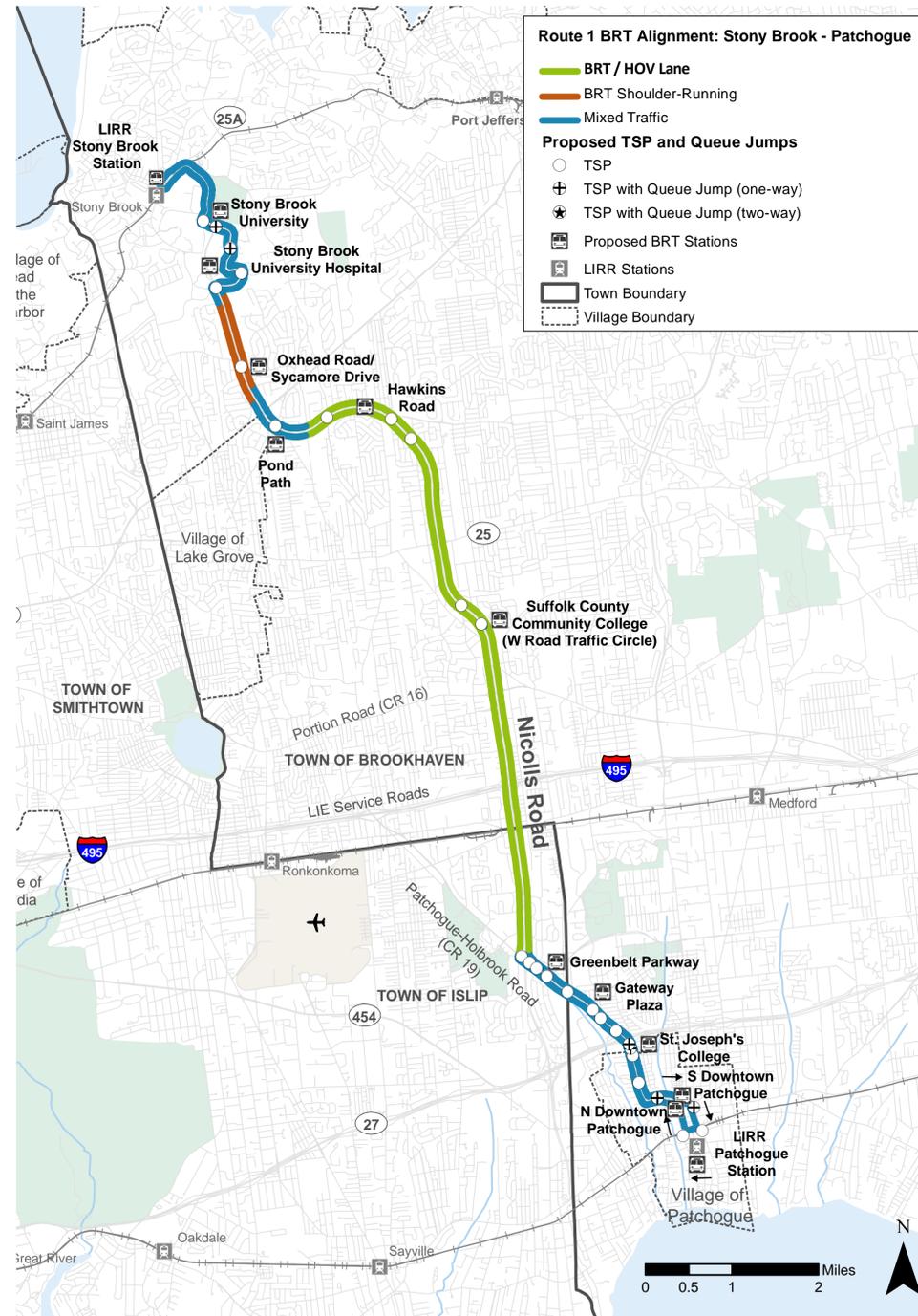
SHARED BRT/HOV LANE



Long Island Expressway - Long Island NY



Shirley Highway - Washington DC

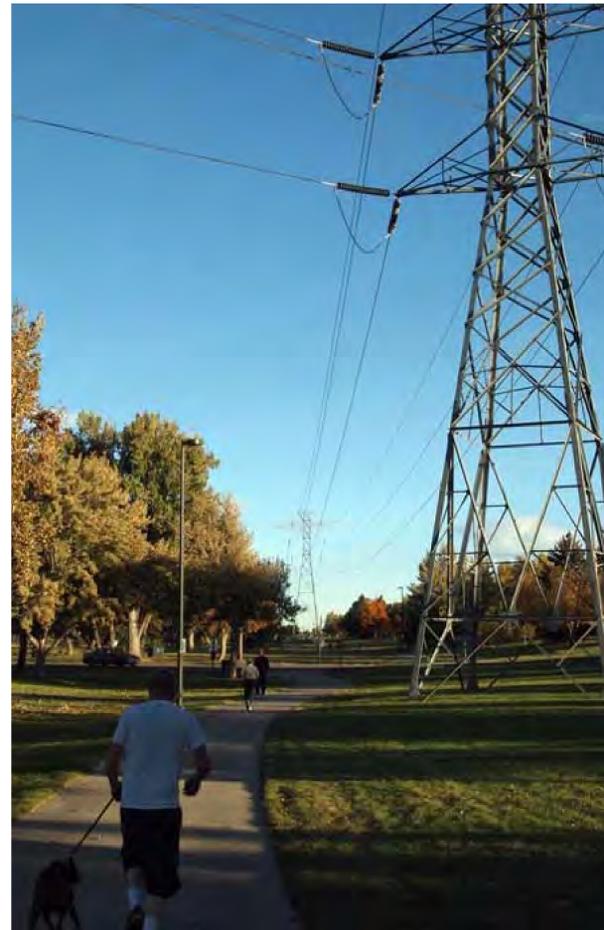




HIKE - BIKE TRAIL



A multi-use north-south hiking biking trail generally parallel to Nicolls Road could look similar to these images.





HIKE-BIKE TRAIL APPROXIMATE ALIGNMENT AND LAYOUT

