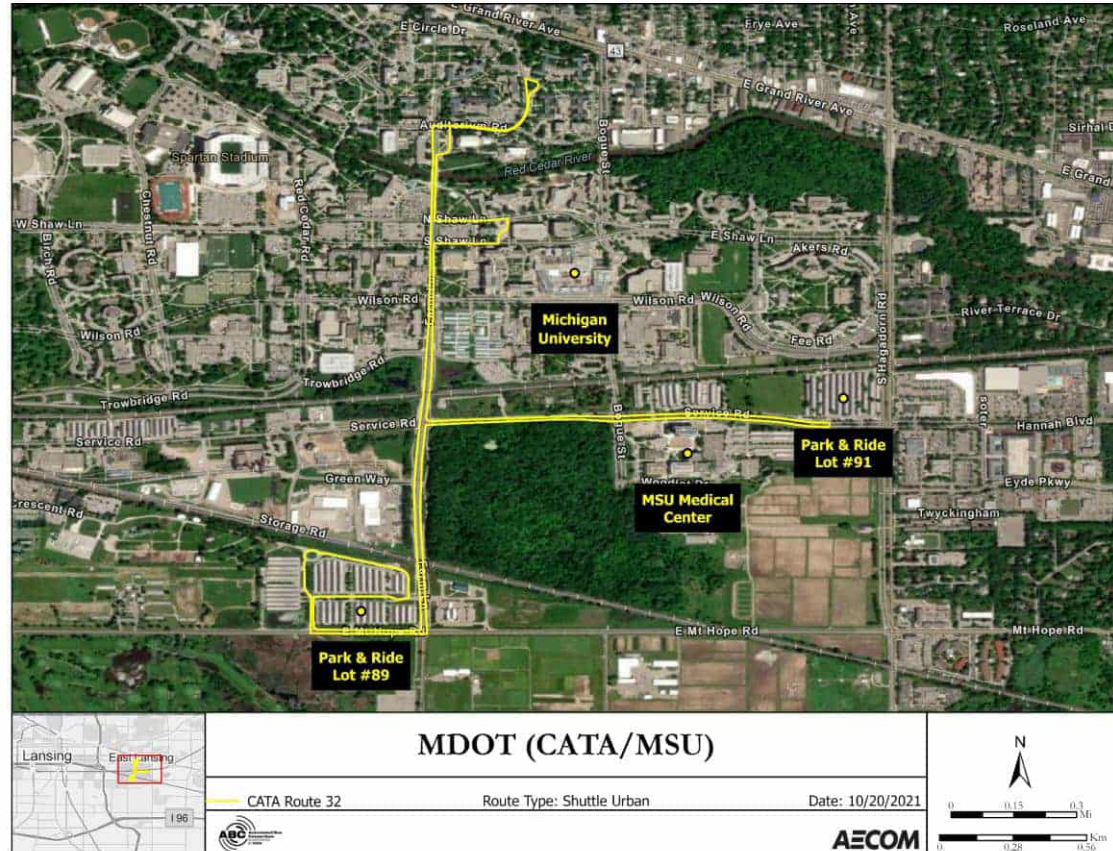


CATA/MSU Route 32

- Span of Service
 - 7:00 am – 12:00 am, weekdays
- Headways
 - 10 minutes with MSU in session
 - 30 minutes with MSU not in session
- Travel Time
 - 25 minutes round trip
- Layover
 - Ramp 1 – Bay 6 (5 min.)
- Charging Location
 - CATA's Administration Offices, 4615 Tranter Street, Lansing, MI
- Fleet
 - 4 buses (3 plus 1 spare)
- Average Daily Ridership (Feb 2020)
 - 2,188 weekdays



CATA/MSU Route 32 Bus Stops

OUTBOUND

- #5957 - RAMP 1 BAY 6
- #4646 - NBD - FAIRCHILD AUD.
- #4526 - NBD PHYSICS BEFORE DORMITORY RD
- #5645 - SBD FARM PAST S SHAW
- #2890 - SBD FARM PAST WILSON
- #6059 - EBD SERVICE ROAD AT CLINICAL CENTER
- #6060 - WBD SERVICE ROAD AT LOT 91
- #5951 - LOT 92 - MSU CLINICAL CENTER
- #5802 - SBD FARM LANE PAST GREEN WAY DRIVE
- #5714 - SBD FARM BEFORE MT HOPE
- #4812 - COMMUTER LOT 89-3

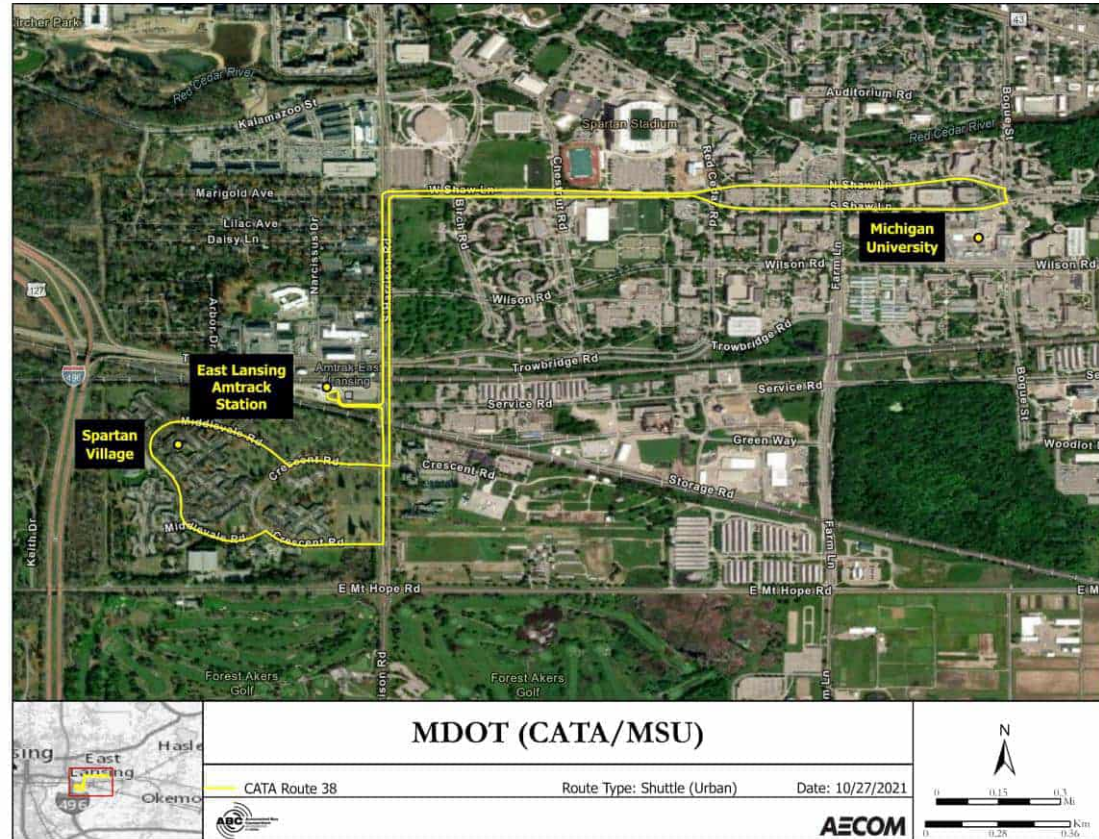
INBOUND

- #4812 – COMMUTER LOT 89-3
- #178 - COMMUTER LOT 89-4
- #4810 - COMMUTER LOT 89-1
- #4811 - COMMUTER LOT 89-2
- #5803 - NBD FARM LANE BEFORE GREEN WAY DR.
- #4630 - NBD FARM PAST TROWBRIDGE
- #4540 - NBD FARM PAST WILSON
- #5957 - RAMP 1 BAY 6



CATA/MSU Route 38

- Span of Service
 - 7:00 am – 10:30 pm, weekdays
- Headways
 - 30 minutes
- Travel Time
 - 25 minutes round trip
- Layover
 - None
- Charging Location
 - CATA's Administration Offices, 4615 Tranter Street, Lansing, MI
- Fleet
 - 2 buses (1 plus 1 spare)
- Average Daily Ridership (Feb 2020)
 - 344 weekdays

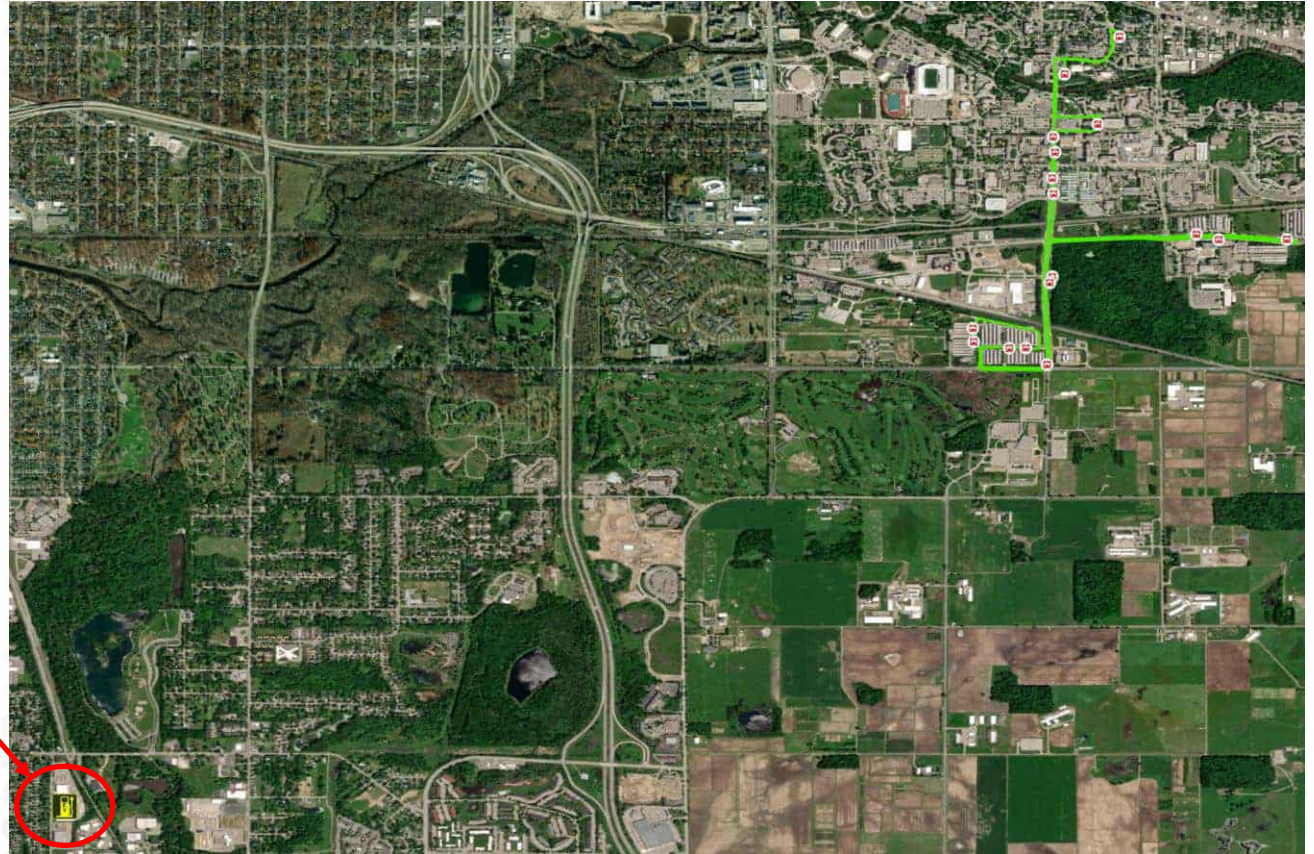


CATA/MSU Route 38 Bus Stops

OUTBOUND	INBOUND
#87 - WBD SHAW BEFORE FARM LANE	#2574 - WBD S CRESCENT BEFORE S MIDDLEVALE
#4523 - WBD SHAW BEFORE RED CEDAR RD	#4752 - MIDDLEVALE BEFORE ELEMENTARY SCHOOL
#4813 - WBD N SHAW AT LOT 79 (STADIUM)	#2576 - MIDDLEVALE NEAR LAUNDROMAT
#4814 - WBD N SHAW PAST CHESTNUT	#4753 - MIDDLEVALE BEFORE N CRESCENT
#3899 - SBD HARRISON BEFORE LILAC AVE	#2580 - EBD N CRESCENT BEFORE HARRISON
#2570 - SBD HARRISON RD BEFORE SEVER DR	#2581 - NBD HARRISON PAST CRESCENT RD
#3902 - SBD HARRISON BEFORE TROWBRIDGE RD	#6042 - MULTIMODAL GATEWAY
#2572 - SBD HARRISON BEFORE SERVICE RD	#5926 - NBD HARRISON PAST SERVICE
#4751 - SBD HARRISON PAST N CRESCENT	#4755 - NBD HARRISON PAST TROWBRIDGE
#6046 - SBD HARRISON BEFORE S CRESCENT	#2583 - NBD HARRISON PAST WILSON RD
#2574 - WBD S CRESCENT BEFORE S MIDDLEVALE	#4069 - NBD HARRISON BEFORE SHAW LN
	#5686 - EBD SHAW PAST BIRCH
	#2918 - EBD S SHAW BEFORE FARM
	#2586 - EBD S SHAW AT CHEMISTRY
	#87 - WBD SHAW BEFORE FARM LANE

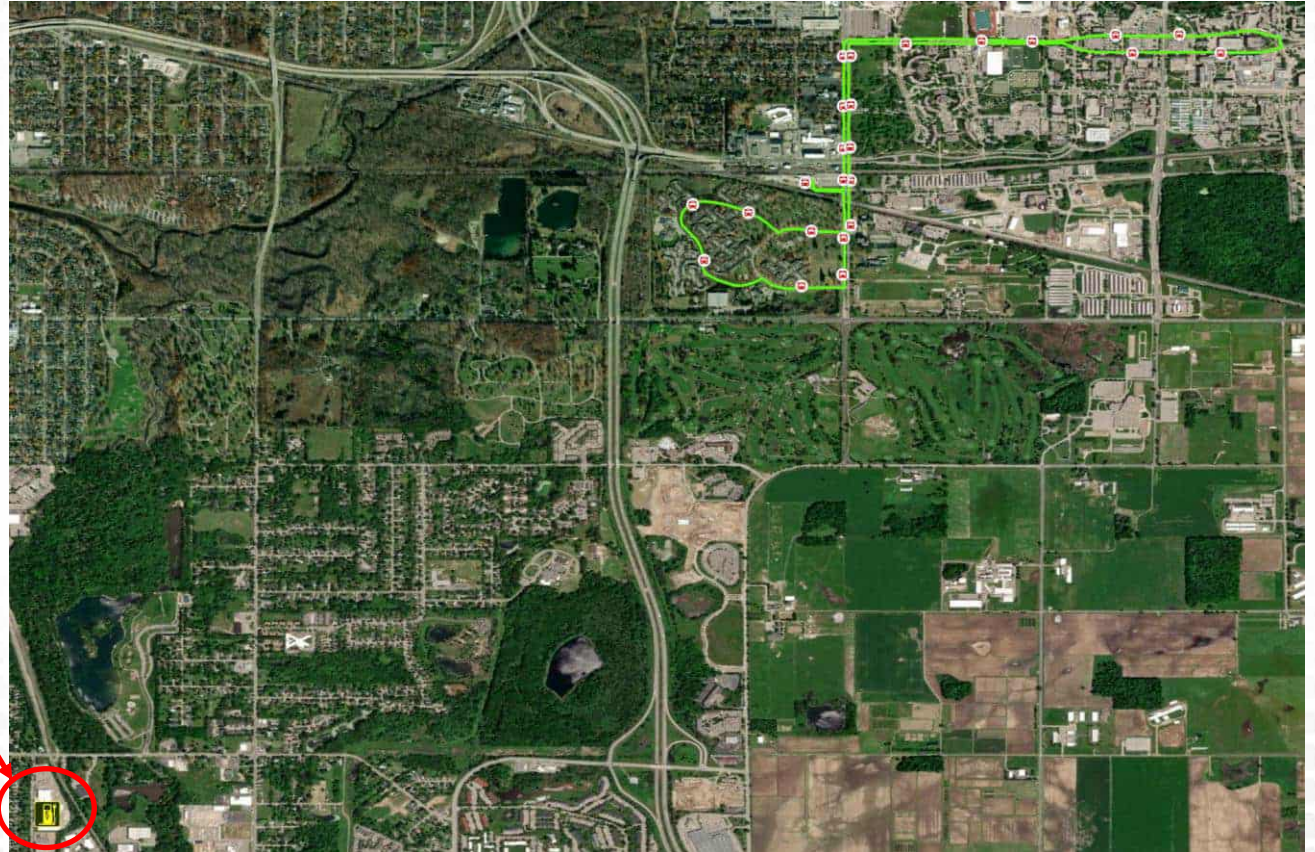


CATA/MSU Route 32 Charging Stations



Charging Stations
at CATA's
Administration
Offices, 4615
Tranter Street,
Lansing, MI

CATA/MSU Route 38 Charging Stations



Charging Stations
at CATA's
Administration
Offices, 4615
Tranter Street,
Lansing, MI

City of Detroit Route 12 Conant

12 Conant

Span of Service

	Current	Pre-COVID
Weekday	13 hours	15 hours
Saturday	13 hours	13 hours
Sunday	10 hours	10 hours

Headways

	Current	Pre-COVID
Weekday	60 min.	50 min.
Saturday	60 min.	50 min.
Sunday	60 min.	60 min.

Estimated Ridership (Typical Week*)

	Current	Pre-COVID
Weekday	225	500
Saturday	150	400
Sunday	65	300

*Ridership, especially on weekends, varies seasonally and with weather conditions due to Belle Isle destination.

Layover & Changing Direction

	Current	Pre-COVID
Weekday	NB: 20-23 min. SB: 18-21 min.	NB: 8 min. SB: 12 min.
Saturday	NB: 20-23 min. SB: 18-21 min.	NB: 8 min. SB: 12 min.
Sunday	NB: 20-23 min. SB: 18-21 min.	NB: 20-23 min. SB: 18-21 min.



Travel Times

One Way: 38-41 min.
Round Trip: 79-82 min.

Bus Stops

Southbound: 68 stops
Northbound: 70 stops
Total: 138 stops

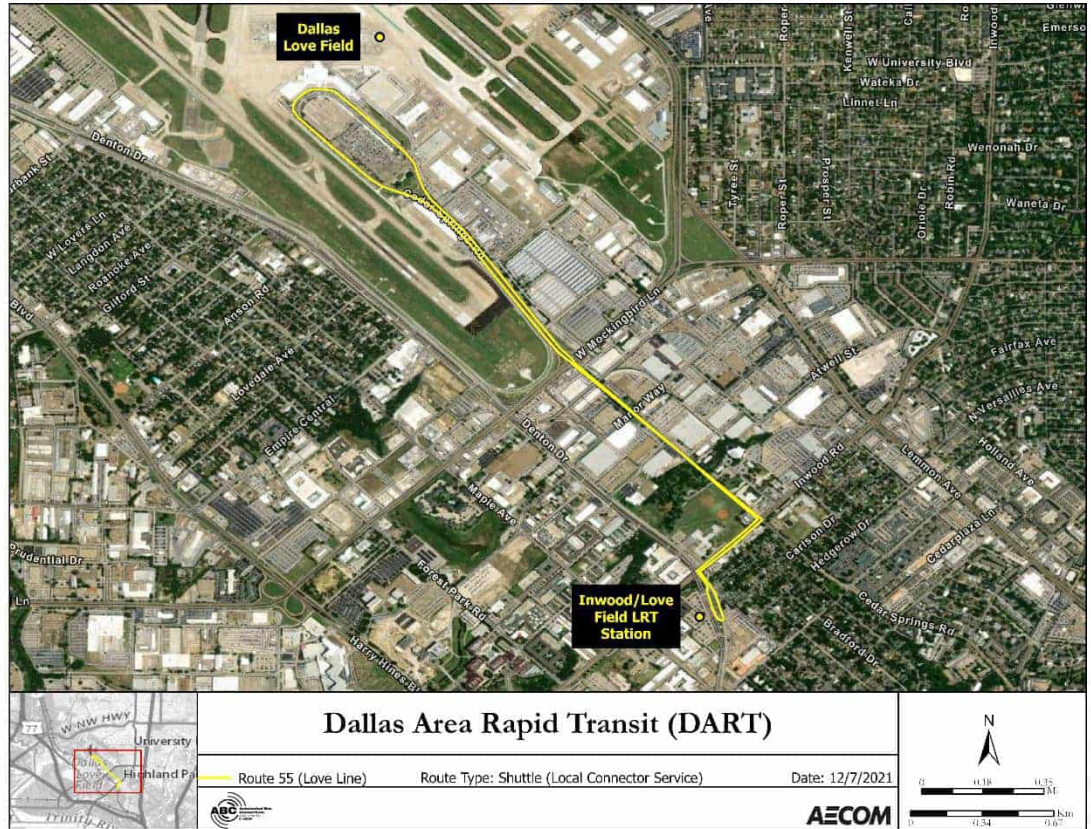
Fleet

Current: 2 buses
Pre-COVID: 2 buses



DART Route 55

- **Span of Service**
 - 4:00 am – 1:00 am, seven days per week
- **Headways**
 - 15 minutes: peak
 - 20 minutes: off-peak
- **Travel Time**
 - 17 minutes round trip
- **Layover and Charging Location**
 - Inwood/Love Field Station
- **Fleet**
 - 4 buses (2 peak, 2 spares)
- **Average Daily Ridership (August 2021)**
 - 320 weekdays, 296 Saturdays, 368 Sundays



DART Route 55 Bus Stops

INWOOD/LOVE FIELD STATION

CEDAR SPRINGS @ INWOOD - N - FS

CEDAR SPRINGS @ MANOR - N - MB1

CEDAR SPRINGS @ MANOR - N - MB2

CEDAR SPRINGS @ MANOR - N - NS

CEDAR SPRINGS @ MOCKINGBIRD - N - MB

CEDAR SPRINGS @ HAWES - N - FS

CEDAR SPRINGS @ TOM BRANIFF - N - FS

CEDAR SPRINGS @ HOWARD MEGREDDY - N - MB

LOVE FIELD AIRPORT (GROUND TRANSPORTATION)

LOVE FIELD AIRPORT (BAGGAGE CLAIMS)

CEDAR SPRINGS @ HOWARD MEGREDDY - S - NS

CEDAR SPRINGS @ TOM BRANIFF - S - N - NS

CEDAR SPRINGS @ HAWES - S - NS

CEDAR SPRINGS @ MOCKINGBIRD - S - FS

CEDAR SPRINGS @ MANOR - S - NS

CEDAR SPRINGS @ INWOOD - S - MB1

CEDAR SPRINGS @ INWOOD - S - MB2

CEDAR SPRINGS @ INWOOD - S - NS

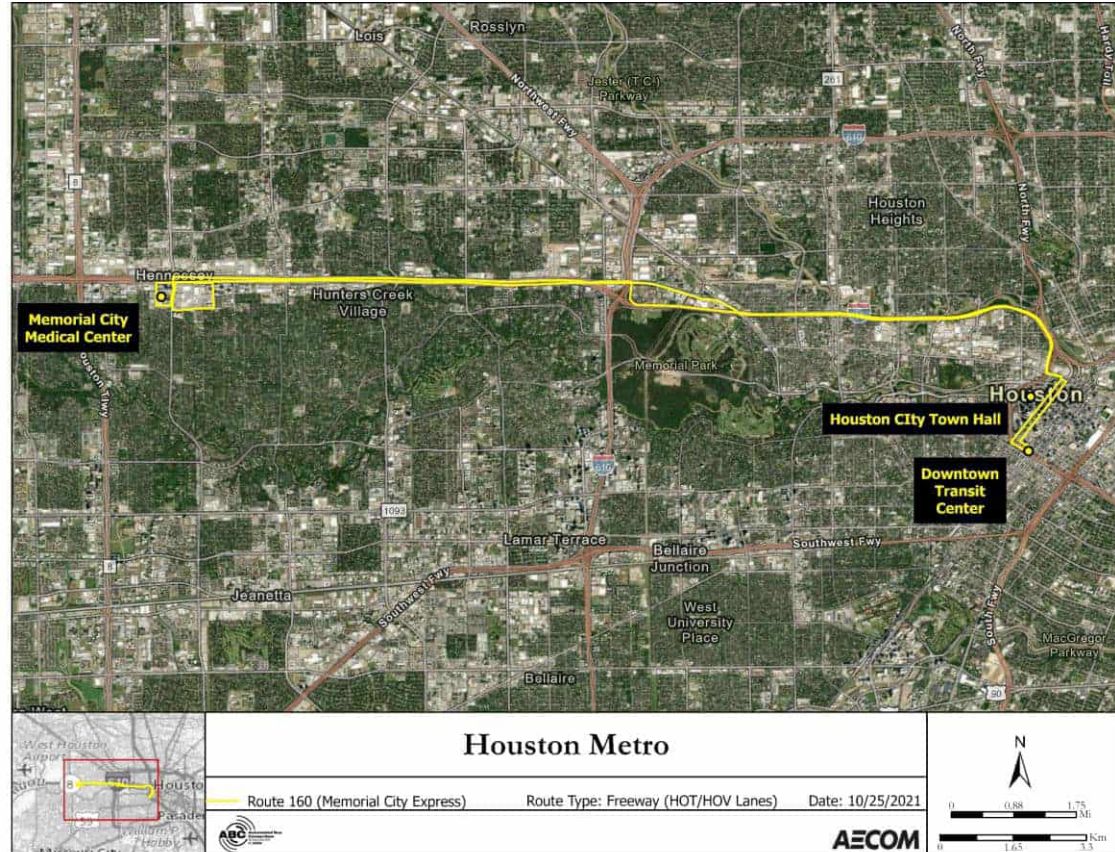
INWOOD @ CEDAR SPRINGS - S - FS

INWOOD/LOVE FIELD STATION



Houston METRO Route 160

- Span of Service
 - 6:01 am – 9:00 am; 3:01 pm – 6:00 pm, weekday peak
 - 9:01 am – 3:00 pm, weekday off-peak
 - 6:00 am – 6:01 pm, weekend
- Headways
 - 60 minutes
- Travel Time
 - 80 minutes round trip, 30 – 37 minutes one way
- Layover
 - Downtown Transit Center
 - Memorial City Way/Barryknoll
- Charging Location
 - METRO West Bus Operations Facility
- Fleet
 - 8 buses (6 plus 2 spares)
- Average Daily Ridership (December 2019)
 - 1,139 Weekdays
 - 567 Saturdays
 - 406 Sundays



Houston METRO Route 160 Bus Stops

WESTBOUND

DOWNTOWN TRANSIT CENTER

LOUISIANA @ PRAIRIE

NORTHWEST TRANSIT CENTER

GESSNER @ I-10 KATY FREEWAY

MEMORIAL CITY WAY @

BARRYKNOLL

EASTBOUND

MEMORIAL CITY WAY @

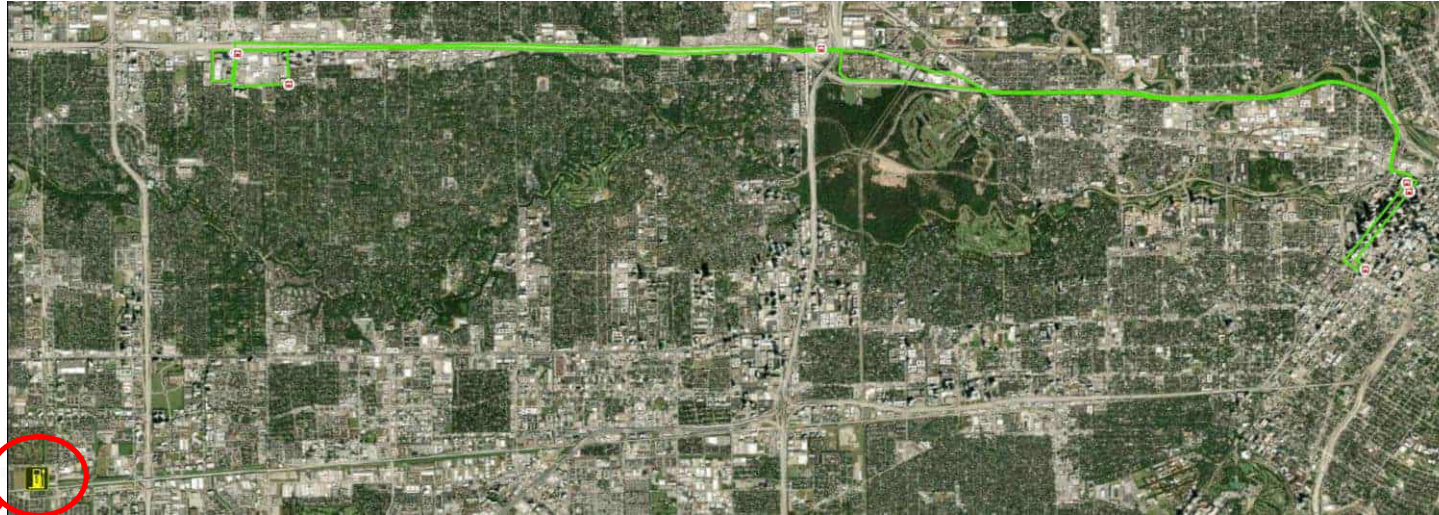
BARRYKNOLL

GESSNER @ I-10 KATY FREEWAY

NORTHWEST TRANSIT CENTER

SMITH @ PRESTON

DOWNTOWN TRANSIT CENTER



Charging
Stations at
METRO West
Bus Operations
Facility

HTC Regional Saginaw Route

THIS IS A PROPOSED NEW ROUTE FOR HTC.
BUS OPERATIONS DETAILS WILL BE
DETERMINED AT A LATER DATE

- Span of Service
 - TBD
- Headways
 - TBD
- Travel Time
 - TBD
- Layovers
 - TBD
- Charging Location
 - Huron Transit Corporation Offices, 1513 Bad Axe Road, Bad Axe, MI 48413
 - Saginaw Location TBD
- Fleet
 - 4 buses (3 plus 1 spare)
- Average Daily Ridership (Projected)
 - TBD

MDOT/HTC Regional Saginaw Route



HTC Regional Saginaw Route Bus Stops

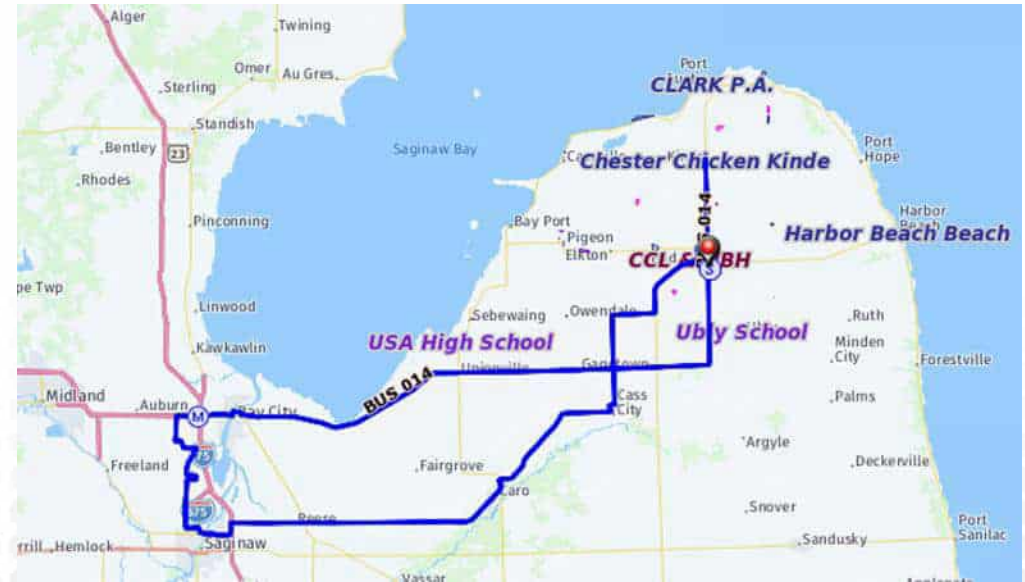
OUTBOUND

TBD

INBOUND

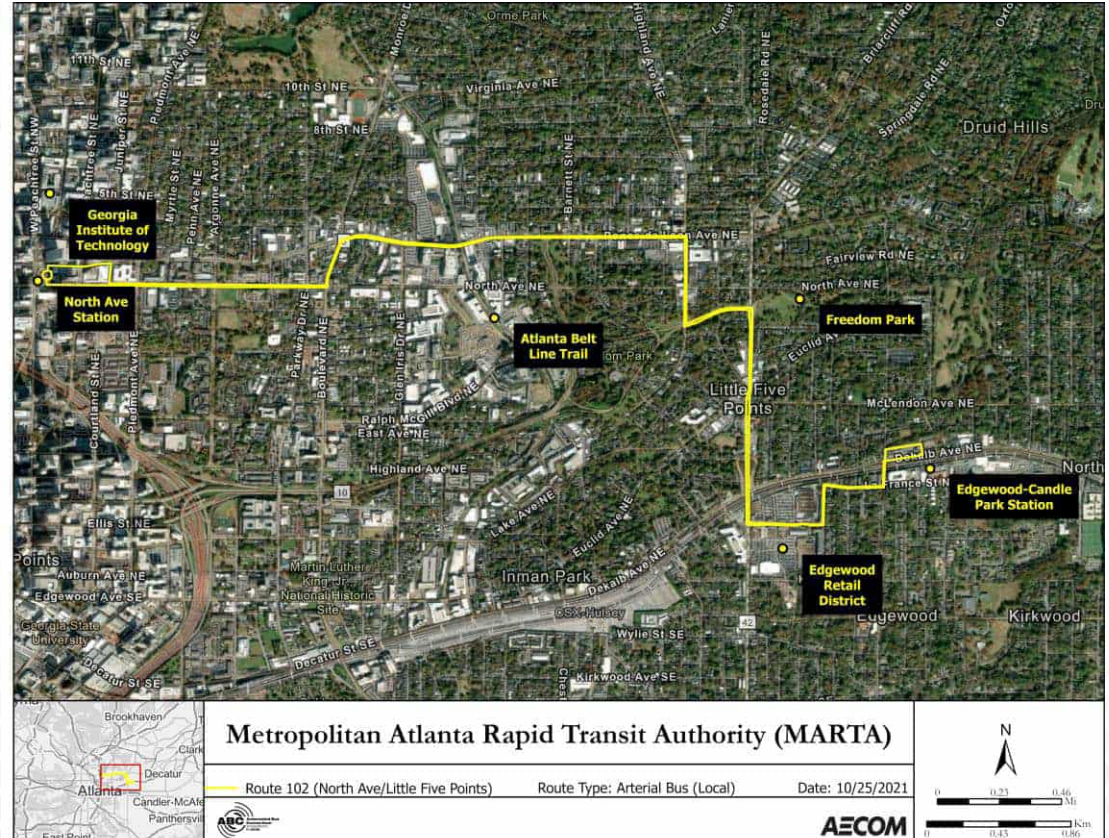
TBD

THIS IS A PROPOSED NEW ROUTE FOR HTC. BUS STOPS ARE EXPECTED AT REGIONAL CONNECTION POINTS BUT WILL BE DETERMINED AT A LATER DATE



MARTA Route 102

- Span of Service
 - 4:45 am – 12:57 am; weekday
 - 5:15 am – 12:57 am, weekend
- Headways
 - 30 minutes
- Travel Time
 - 64 minutes round trip
- Layover
 - Edgewood-Candler Park Station
 - North Ave Station
- Charging Location
 - Laredo Operations and Maintenance Facility
- Fleet
 - 6 buses (4 plus 2 spares)
- Average Daily Ridership (April 2020)
 - 1,120

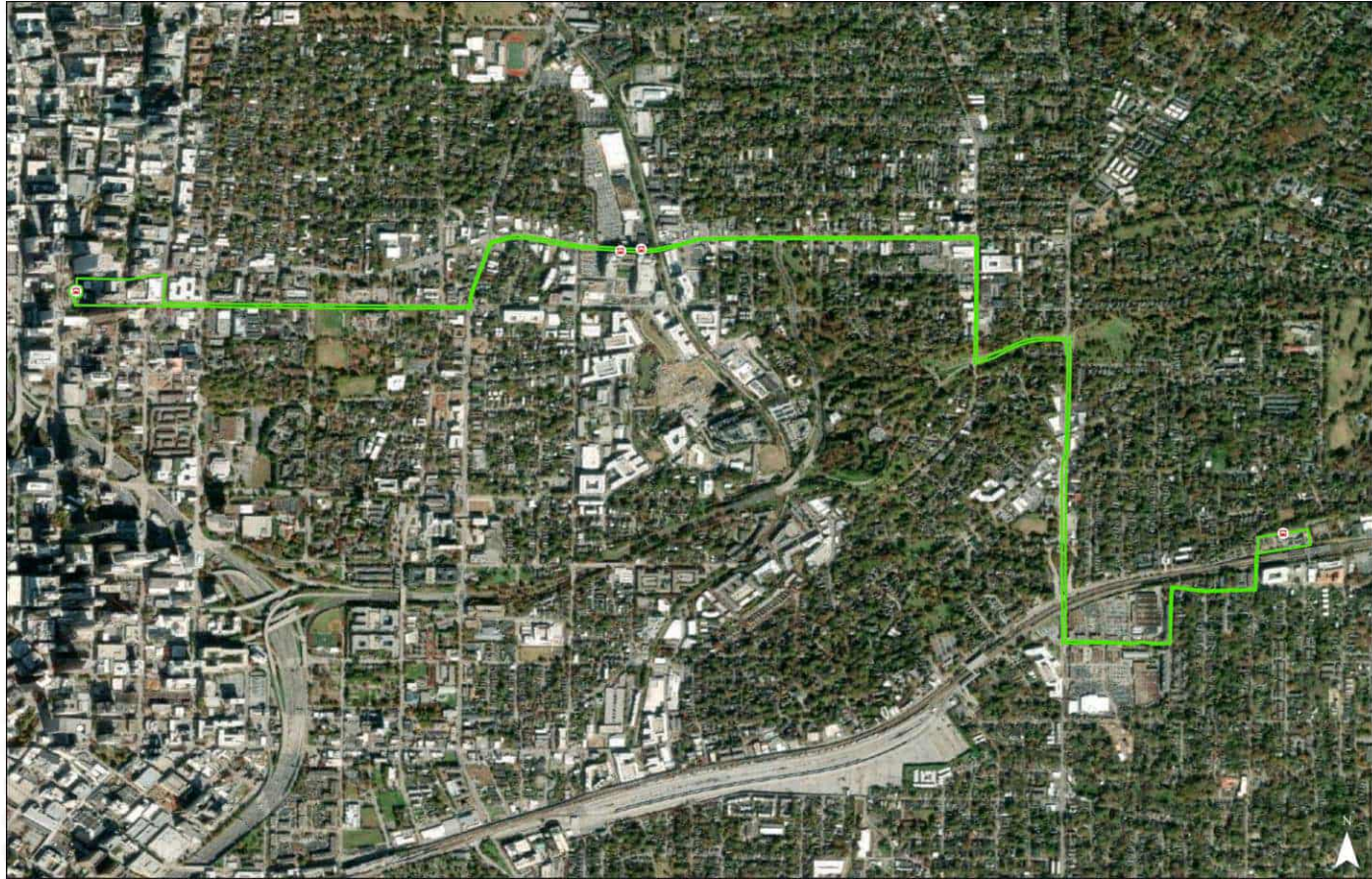


MARTA Route 102 Bus Stops

EDGEWOOD - CANDLER PARK STATION

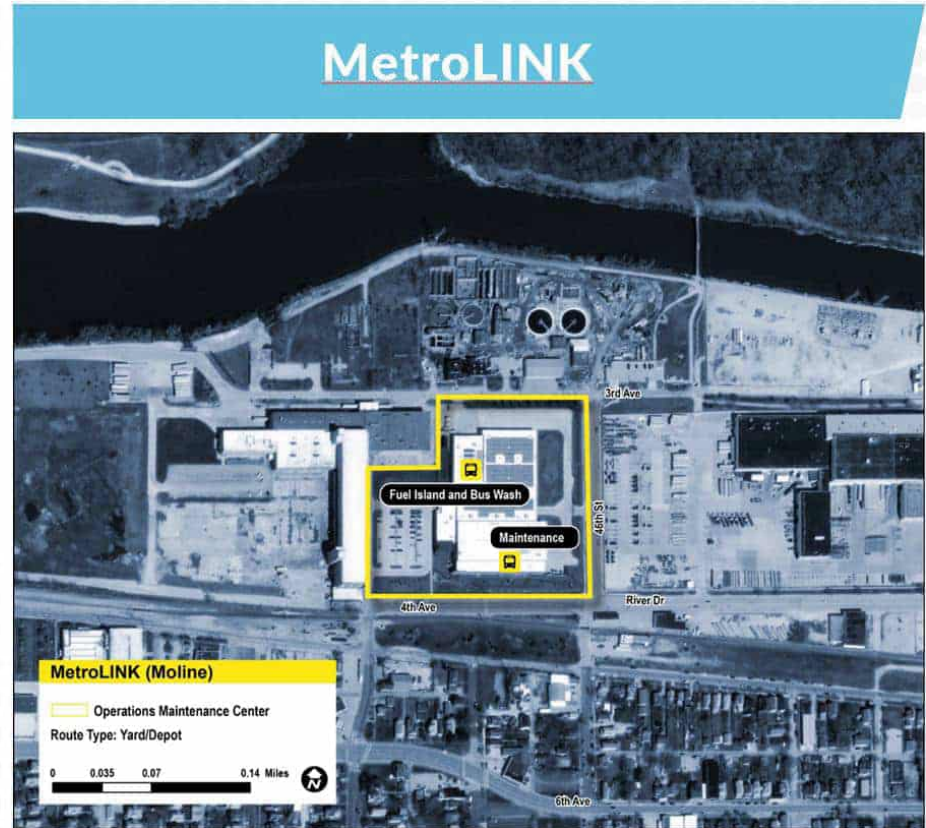
PONCE DE LEON @ PONCE CITY MARKET

NORTH AVENUE STATION



MetroLINK Depot Automation

- Span of Depot Service
 - 4:30 am – Midnight, daily
- Route Headways
 - 15, 30 or 60 minutes, 7 days per week
- Travel Time
 - Varies by bus route
- Layover
 - Various
- Charging Location
 - Operations Maintenance Center (OMC), 4501 4th Avenue, Rock Island, IL 61201
 - Existing 7-60 kW plug-in overnight charging stations for 440 kWh battery electric buses
- Fleet
 - Existing 12 fixed-routes and 60 buses
 - Proposed 5 – 7 ABC buses
- Average Daily Ridership (Pre-COVID)
 - 9,600 (over 3.5 million a year)



MetroLINK Depot Pilot Route Overview

Possible Vehicle Paths

Bus must wait until cleared to proceed to next station



Starting point for automated operation (if required)



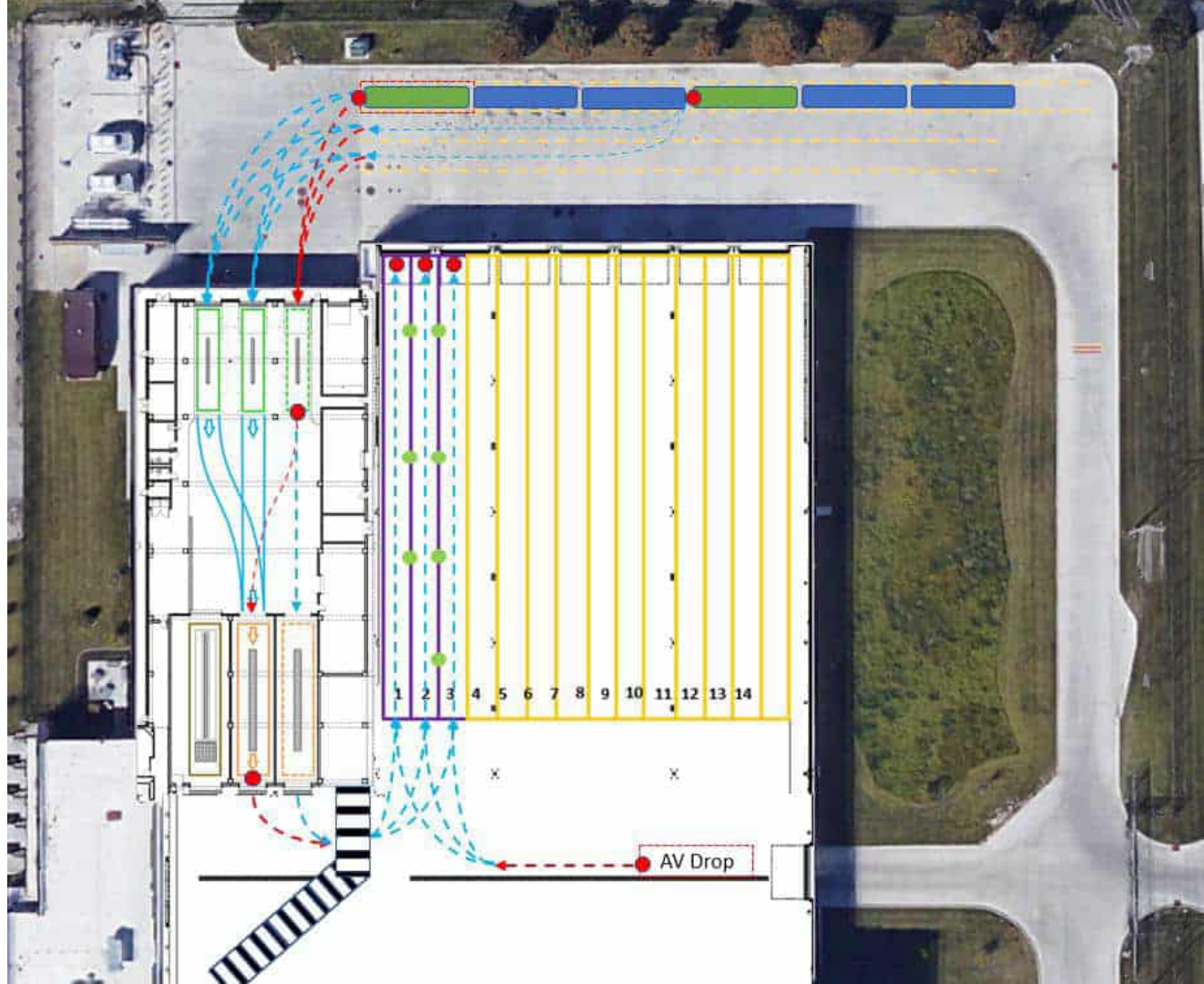
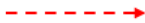
Automated Bus



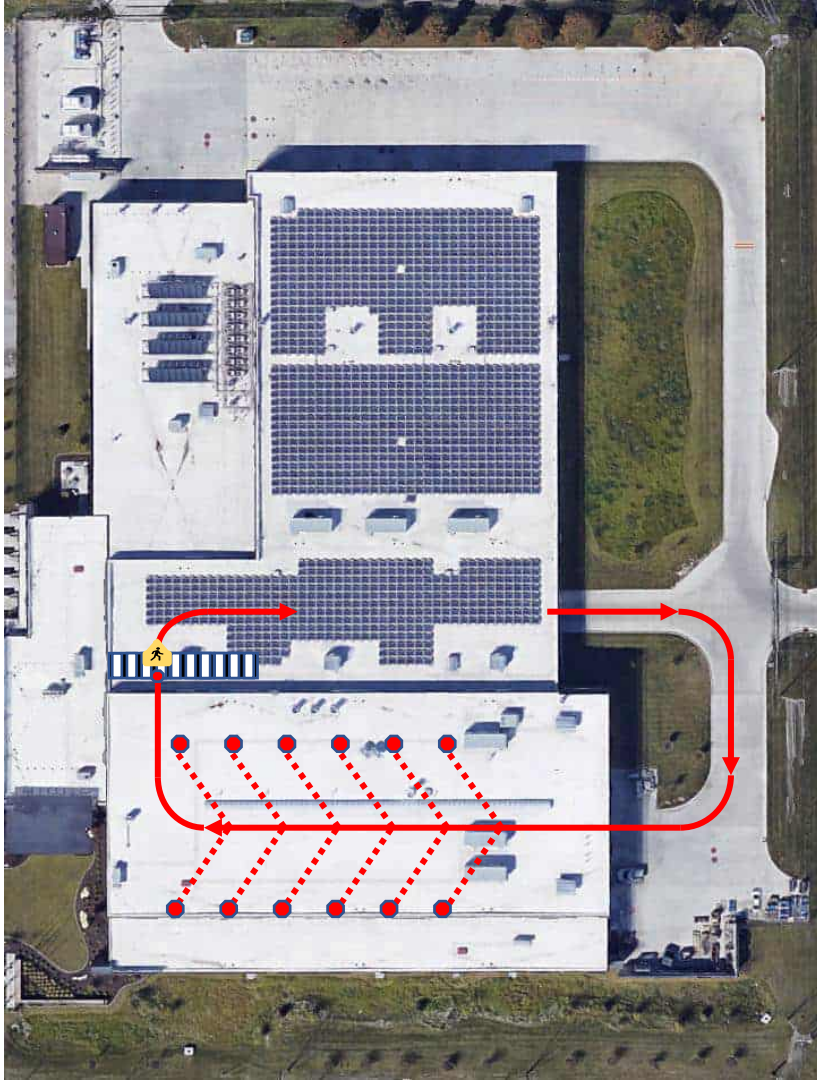
Possible path



Default path



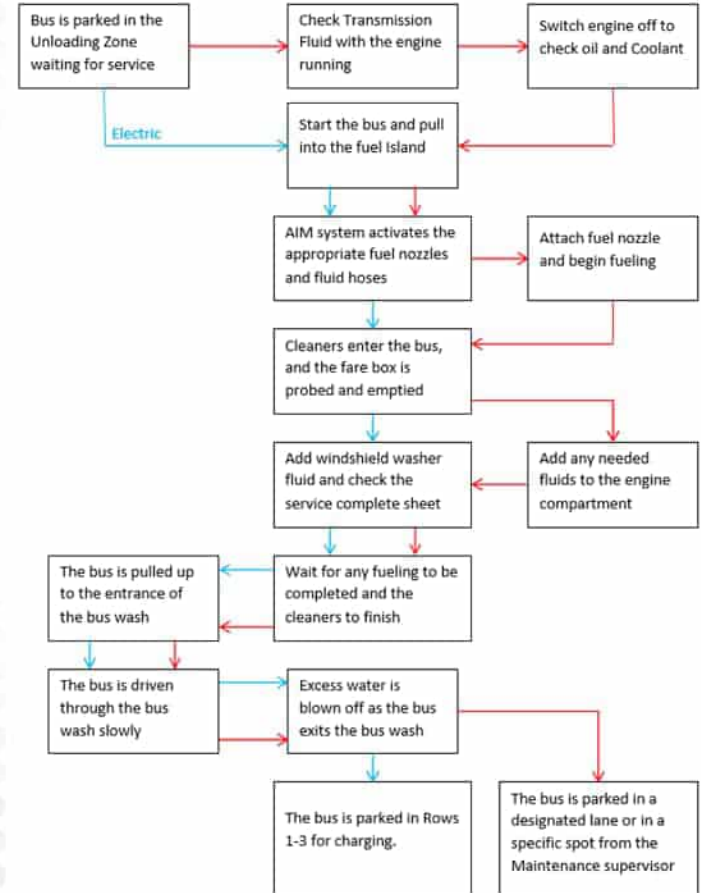
Maintenance Loop



Possible path to maintenance bay



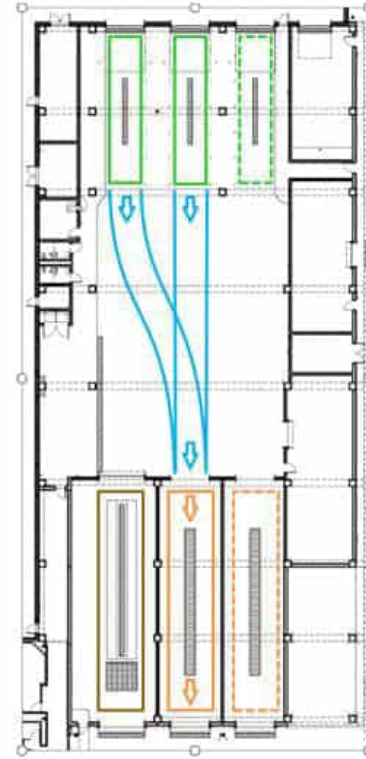
MetroLINK Depot Existing Operations and Workflow



MetroLINK Depot Existing Service Times

Average Service and Fuel Times

Average times Service/Fuel Times:	Electric	Diesel	CNG
Start (Unloading Zone)	0:00 min	0:00 min	0:00 min
Parked in fuel Island	1:00 min	2:30 min	2:30 min
Enter bus wash	6:00 min	7:30 min	10:00 min
Bus Parked in storage	8:30 min	10:00 min	12:30 min



Architectural Drawing of Fuel Island and Bus Wash

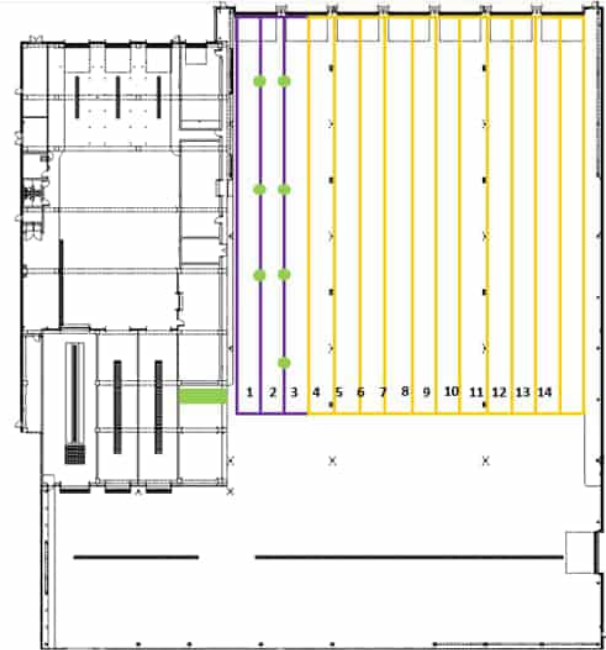
MetroLINK Depot Existing Charging and Bus Storage



Existing Charging Stations



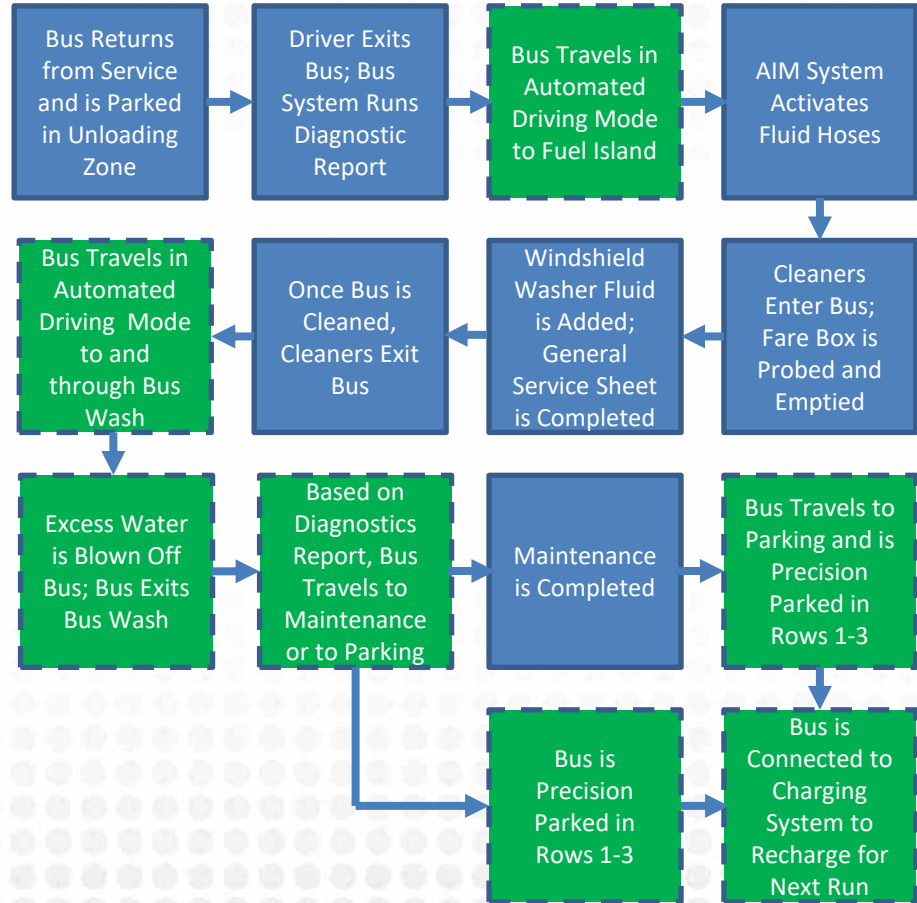
Bus Charging Area



Yellow lanes	Bus storage
Purple lane	Lane reserved for electric buses
Green dots	Electric charger dispensers (ceiling-mounted)
Green square	Electric charger bases

Architectural Drawing of Bus Storage Area

Proposed MetroLINK Automated Depot Operations

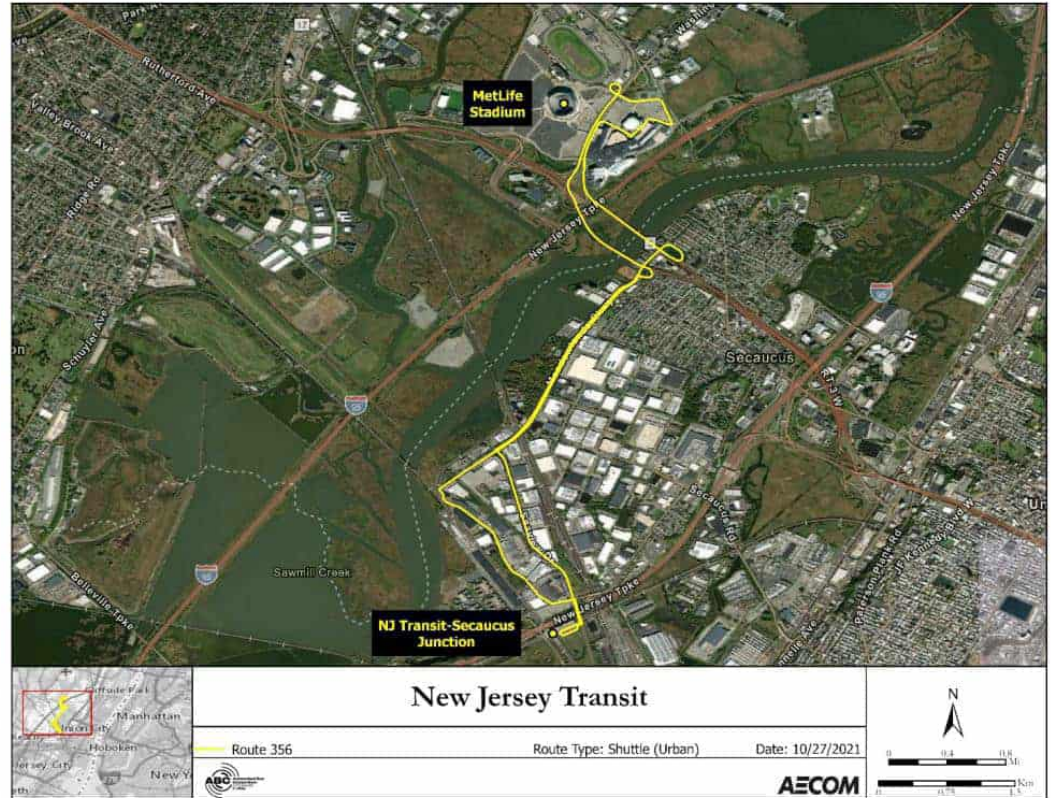


Automated Driving Mode and/or Automated Charging



NJ Transit Route 356

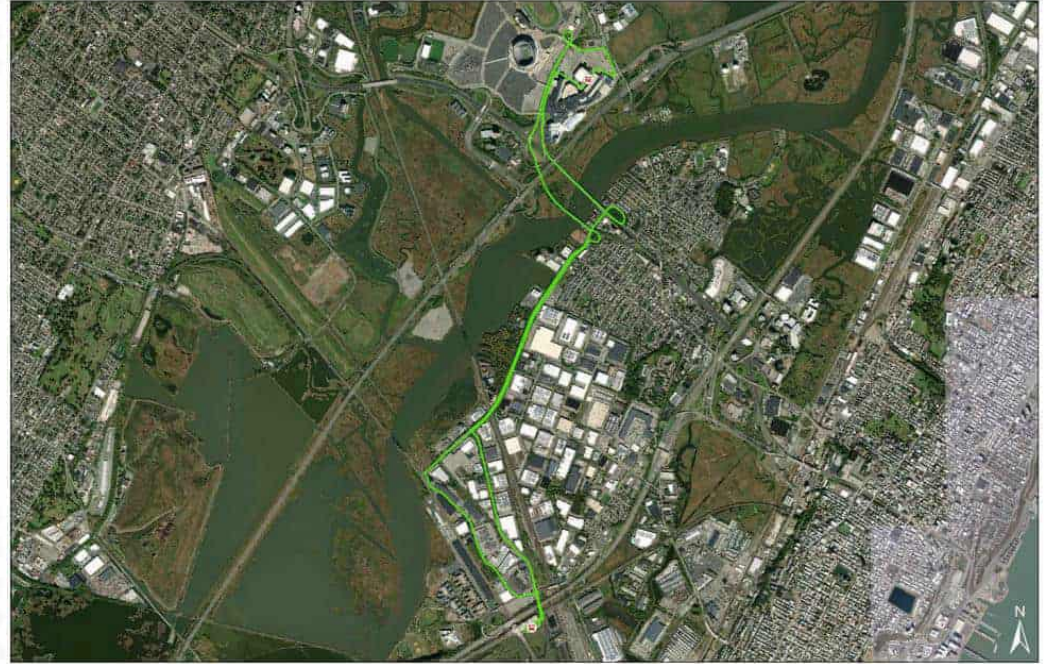
- Span of Service
 - 8:00 am – 12:45 am; weekday
 - 7:55 am – 12:45 am; weekend
- Headways
 - 30 minutes: peak
 - 30 minutes: off-peak
- Travel Time
 - 30 minutes round trip
- Layover and Charging Locations
 - Secaucus Junction
 - American Dream
- Fleet
 - 3 buses (2 peak, 1 spare)
- Average Daily Ridership (Jan. 2020)
 - 33 weekdays, 44 Saturdays, 26 Sundays



NJ Transit Route 356 Bus Stops

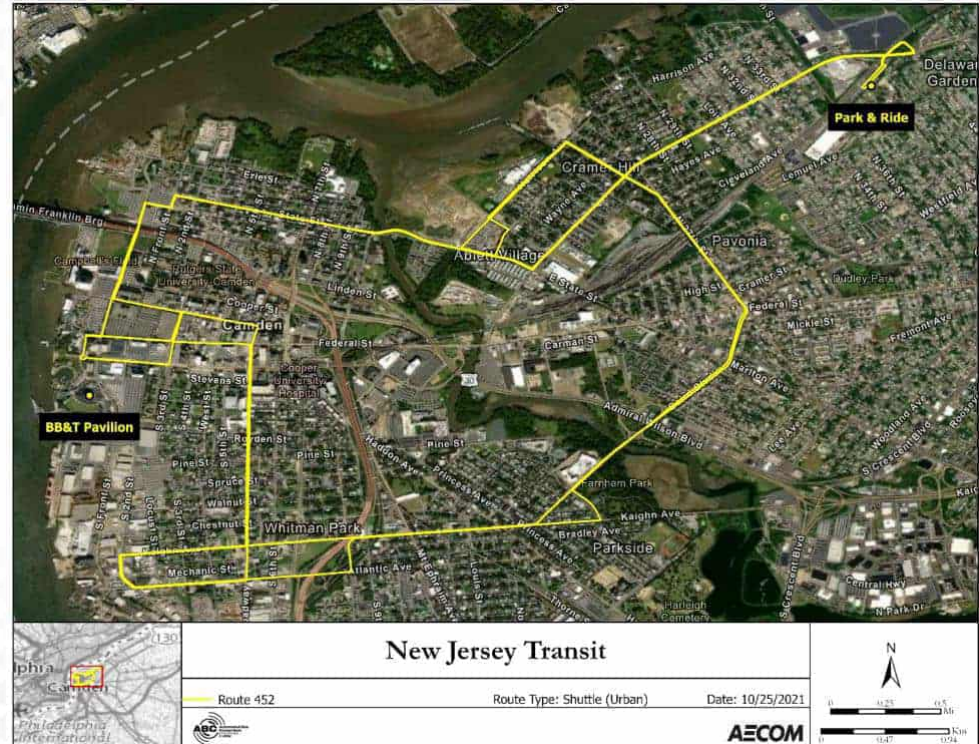
NJ TRANSIT – SECAUCUS JUNCTION

AMERICAN DREAM BUS STOP



NJ Transit Route 452

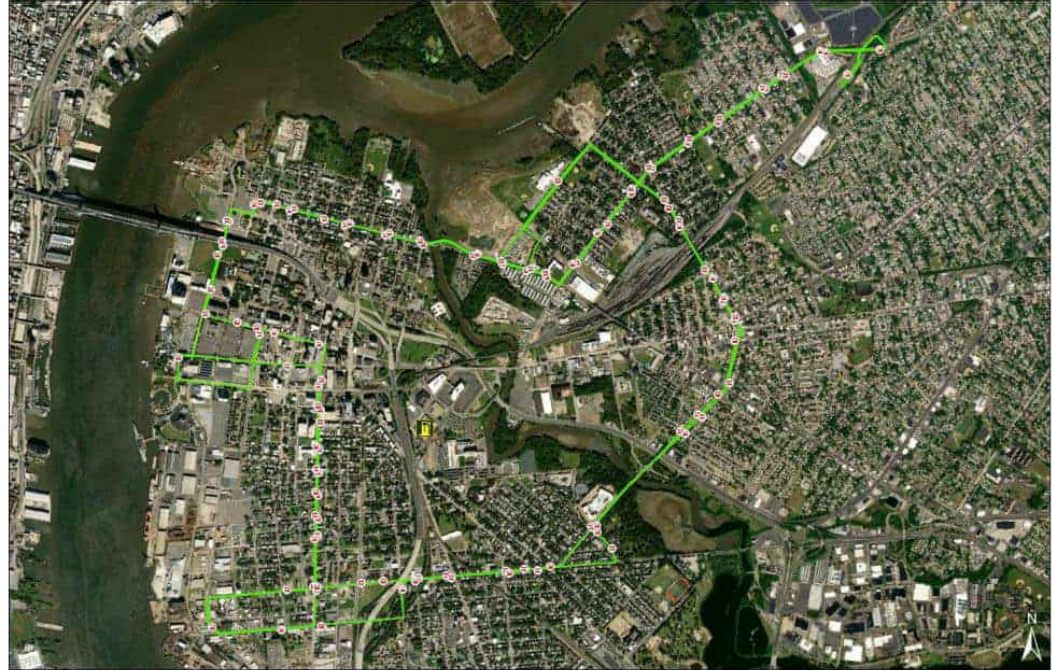
- Span of Service
 - 6:00 am – 12:00 Midnight, seven days per week
- Headways
 - 30 minutes: peak / off-peak
 - 45 minutes: weekends
- Travel Time
 - 51 - 56 minutes round trip
- Layover and Charging Location
 - Newton Avenue Garage in Camden
- Fleet
 - 8 buses (7 peak, 1 spare)
- Average Daily Ridership (Oct. 2019)
 - 1,243 weekdays, 510 Saturdays, 336 Sundays



NJ Transit Route 452 Bus Stops

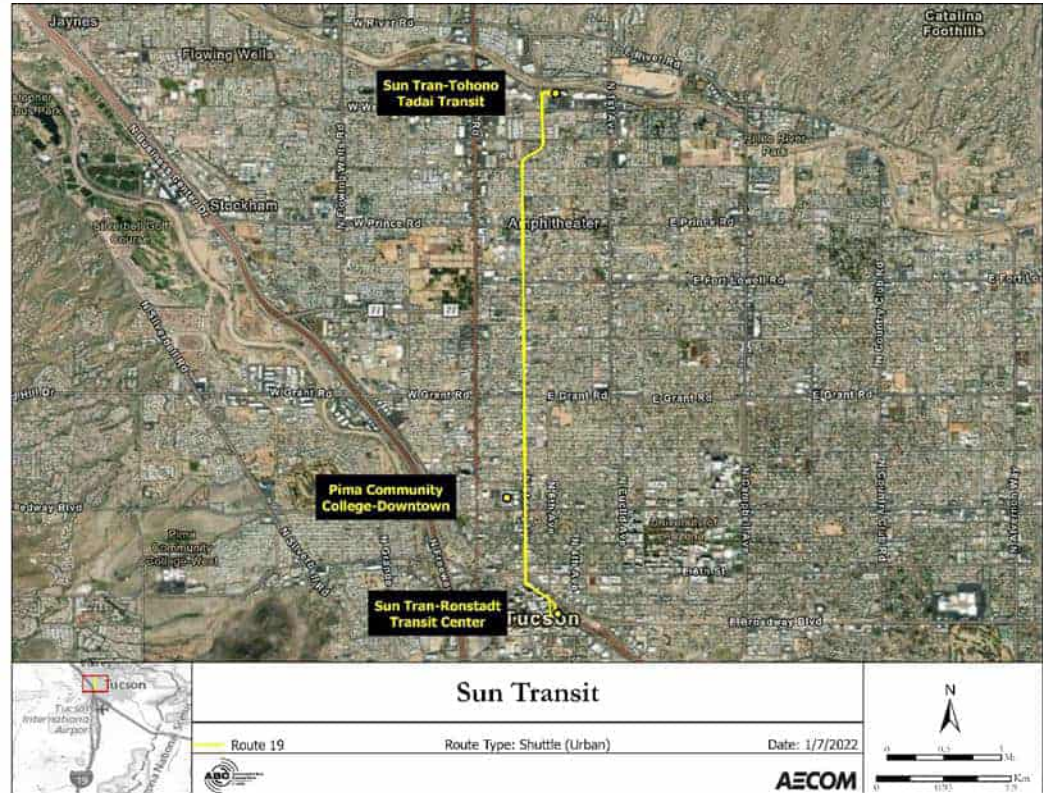
36TH ST RIVER LINE STATION
RIVER RD AT 37TH ST
RIVER AVE AT N 25TH ST
RIVER AVE AT N 21 ST ST
RIVER AVE AT N 17TH ST
RIVER RD AT STATE ST
STATE ST AT PIERCE AVE
STATE ST AT HARRISON AVE
STATE ST AT CONTINENTAL VILLAGE EAST
STATE ST AT 8TH ST
STATE ST AT N. 6TH ST
STATE ST AT N. 5TH ST
STATE ST AT 4TH ST
STATE ST AT N 2ND ST
FRONT ST AT STATE ST
DELAWARE AVE AT ELM ST
DELAWARE AVE AT LINDEN ST
FEDERAL ST AT S. 5TH ST
KAIGHN AVE (CR607) AT 4TH STREET
FERRY AVE AT MECHANIC ST
ATLANTIC AVE AT 4TH ST
ATLANTIC AVE 165'E OF BROADWAY
8TH ST AT LIBERTY ST
PARK BLVD AT BELLEVIEW AVE
PARK BLVD AT BAIRD BLVD
27TH ST AT SHERMAN AVE
27TH ST AT CLEVELAND AVE
27TH ST AT ARTHUR AVE
26TH ST AT HAYES AVE#
KROC CENTER
27TH ST AT HOWELL ST
27TH ST AT HIGH ST
27TH ST AT WESTFIELD AVE
BAIRD BLVD AT CARMAN ST
BAIRD BLVD AT MARLTON AVE
BAIRD BLVD AT RAND ST

BAIRD BLVD AT RARITAN ST
BAIRD BLVD AT PARK BLVD
KAIGHN AVE AT PRINCESS AVE.
KAIGHN AVE AT HADDON AVE
KAIGHN AVE AT LOUIS ST
KAIGHN AVE AT MT. EPHRAIM AVE
KAIGHN AVE AT S. 9TH ST
KAIGHN AVE AT MAURICE ST
KAIGHN AVE AT S. 7TH ST
KAIGHN AVE AT BROADWAY
BROADWAY AT KAIGHN AVE
BROADWAY AT WALNUT ST
BROADWAY AT SPRUCE ST
BROADWAY AT PINE ST
BROADWAY AT ROYDEN ST
BROADWAY AT BERKELEY ST
BROADWAY AT BENSON ST
BROADWAY AT STEVENS ST
BROADWAY ACROSS FROM WRTC
BROADWAY IN FRONT OF WRTC
MARKET ST AT N 6TH ST
MARKET ST AT N. 4TH ST
3RD ST AT MARKET ST
ADVENTURE AQUARIUM
MARKET ST AT N 3RD ST
MARKET ST AT N. 2ND ST
MARKET ST AT N. DELAWARE AVE
DELAWARE AVE AT COOPER ST
DELAWARE AVE AT PEARL ST
STATE ST AT N 10TH ST
RIVER AVE AT N 27TH ST
RIVER AVE AT N 29TH ST
RIVER AVE AT LOIS AVE
RIVER AVE AT N 33RD ST
RIVER AVE AT N 35TH ST
RIVER RD AT HILLSIDE TERRACE



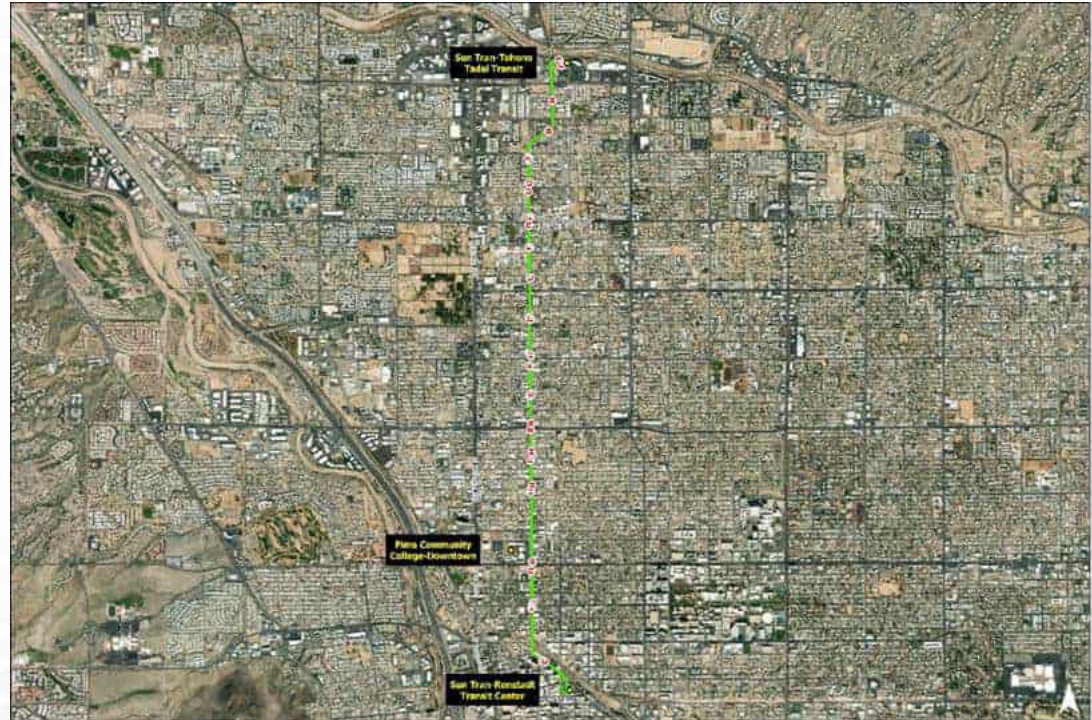
Sun Tran Route 19 Stone

- Span of Service
 - 17 hours / Mon-Fri
 - 14 hours / Sat
 - 13 hours / Sun
- Headways
 - 30 minutes: peak
 - 30 minutes: off-peak
- Travel Time
 - Approx. 45 minutes round trip
 - Approx. 22 minutes one way
- Layover and Charging Location
 - ~9 minutes Northbound
 - ~5 minutes Southbound
- Fleet
 - 1 bus
- Average Daily Ridership (11/01-11/30)
 - ~301 riders per week, ~480 riders Saturdays, ~258 riders per Sundays



Sun Tran Route 19 Stone Bus Stops

Northbound	Southbound
Ronstadt Transit Center	Tohono Transit Center
Toole/7th Av	Stone/Wetmore
Stone/University	Stone/Limberlost
Stone/Speedway	Stone/Roger
Stone/Drachman	Stone/Pastime
Stone/Lester	Stone/Prince
Stone/Flores	Stone/Yavapai
Stone/Grant	Stone/Ft. Lowell
Stone/Jacinto	Stone/Blacklidge
Stone/Glenn	Stone/Glenn
Stone/Blacklidge	Stone/Jacinto
Stone/Navajo	Stone/Grant
Stone/Yavapai	Stone/Flores
Stone/Prince	Stone/Lester
Stone/Pastime	Stone/Drachman
Stone/Roger	Stone/Speedway
Stone/C Arizona	Stone/University
Stone/Dorothy	Toole/7th Av
Tohono Transit Center	Ronstadt Transit Center

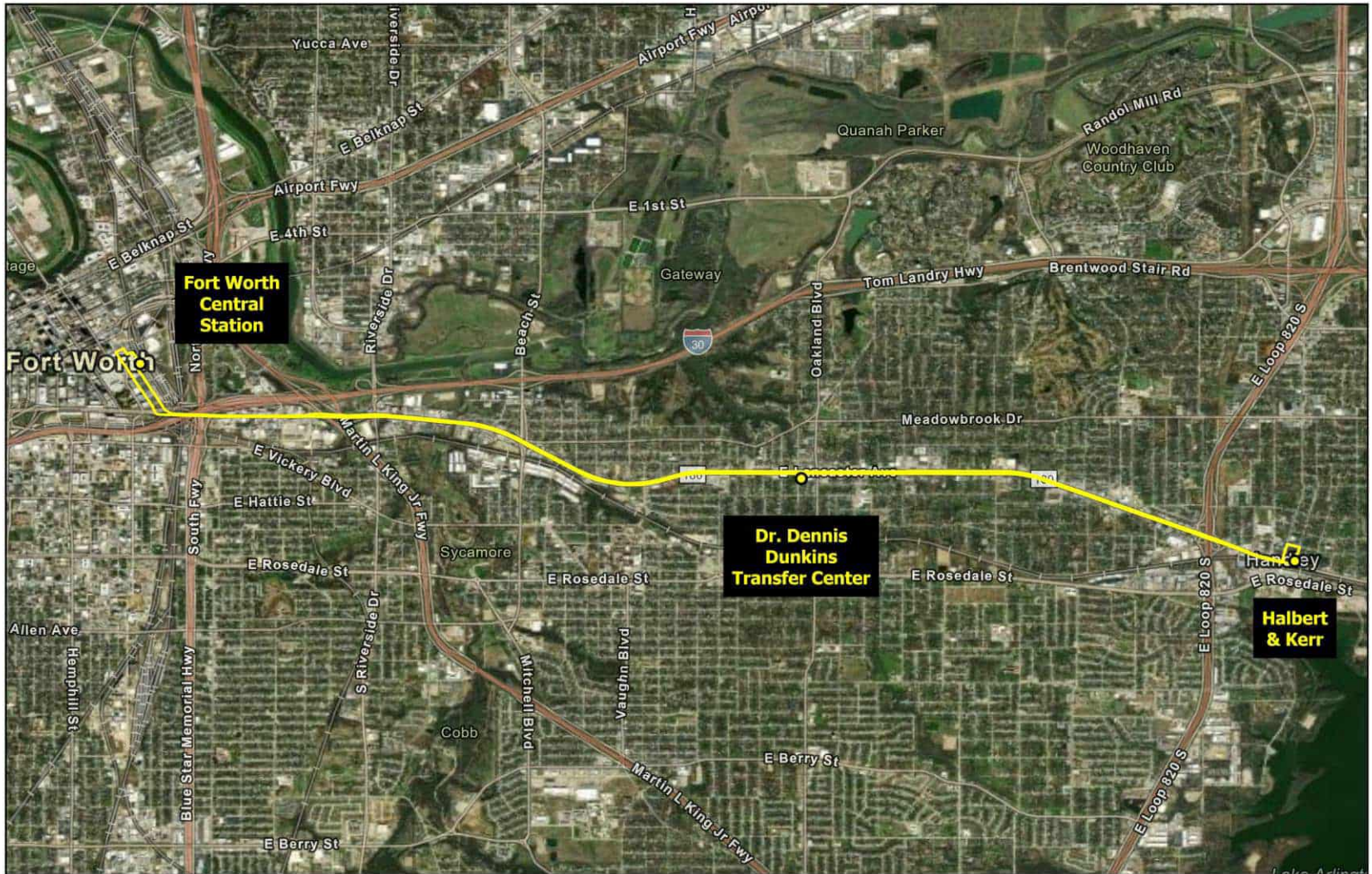


Trinity Metro Route 63



	<h2>Trinity Metro</h2>		
	Route 63	Route Type: Shuttle (Urban)	

Trinity Metro Route 89 Spur



<h2>Trinity Metro</h2>		Date: 1/3/2024
Route 89 Spur	Route Type: Shuttle (Urban)	

