

The Case for Transit

Public Meeting

13 May 2021

By Douglas Funke

President, Citizens for Regional Transit



Why We Should Invest in Transit Now!

**Federal
Support for
Infrastructure
Investment
(finally!)**

**Need to
Address
Equity
Disparities**

**The
Climate
Crisis**

**Economic
Growth**



Topics

Our Vision for Transit in Buffalo-Niagara

The Economic Arguments

The World's Greatest Waterfront

Transit and the Environment

Mobility Justice

Is there public support?

Conclusion

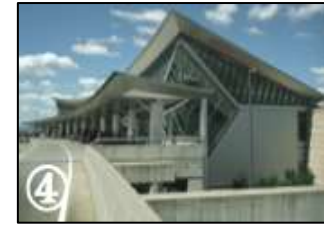


Topics

**Our Vision for
Transit in
Buffalo-Niagara**



CRT Mission: Connect Buffalo-Niagara with an Integrated Transit System

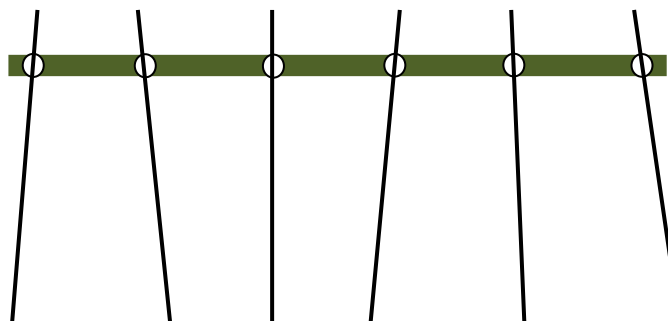


Robust Bus & Bike Networks Interconnected with **Fast** Metro Rail Spine



Light Rail Rapid Transit^{1,2}

600 – 700 passengers per 4-car train
Approx. 4,000 per hour
50 mph between stops
Dedicated ROW
5.2 million passengers / year (23%)



Bus¹

50 passengers per bus
300 per hour per route
1,800 per hour across 6 routes
35 mph between stops
Shares with traffic
17.5 million passengers / year (77%)

Note: Kensington Expressway carries over 60,000 cars per day
peak load just under 8,000 per hour³

1. NFTA. Service Guidelines & Deliver Standards. 2021 Revision
2. RAILFAN GUIDES of the U.S.”> Todd’s Railfan Guide to the Buffalo, NY NFTA Light Rail System.
3. New York State Traffic Volume Viewer, 5/13/2021.



Amherst Extension Beginning Engineering Design

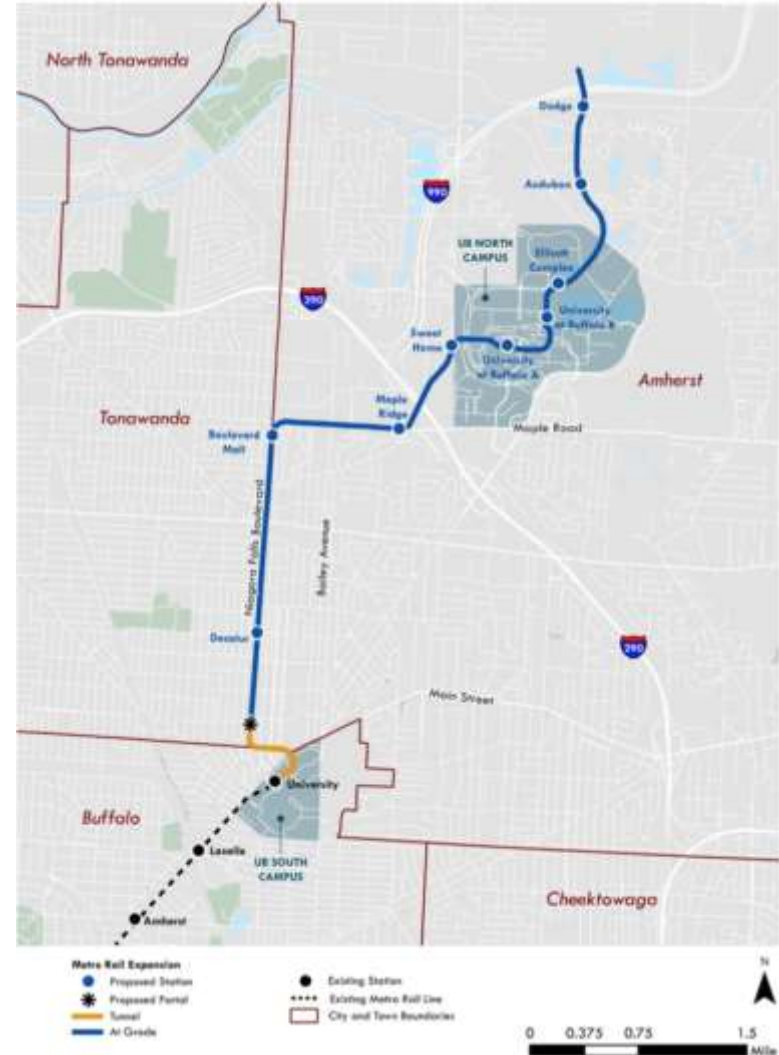


Image Source: NFTA Rail Expansion Draft EIS. December 2019



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DL&W Extension Under Construction!



Rendering of DL&W Station

Image Source: NYS Buffalo Billion Website. <https://buffalobillion.ny.gov/dlw-station>



Image Source: NFTA



Image Source: NFTA

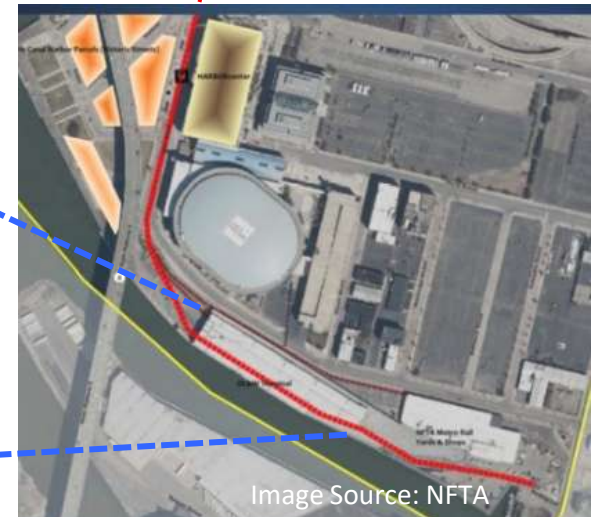


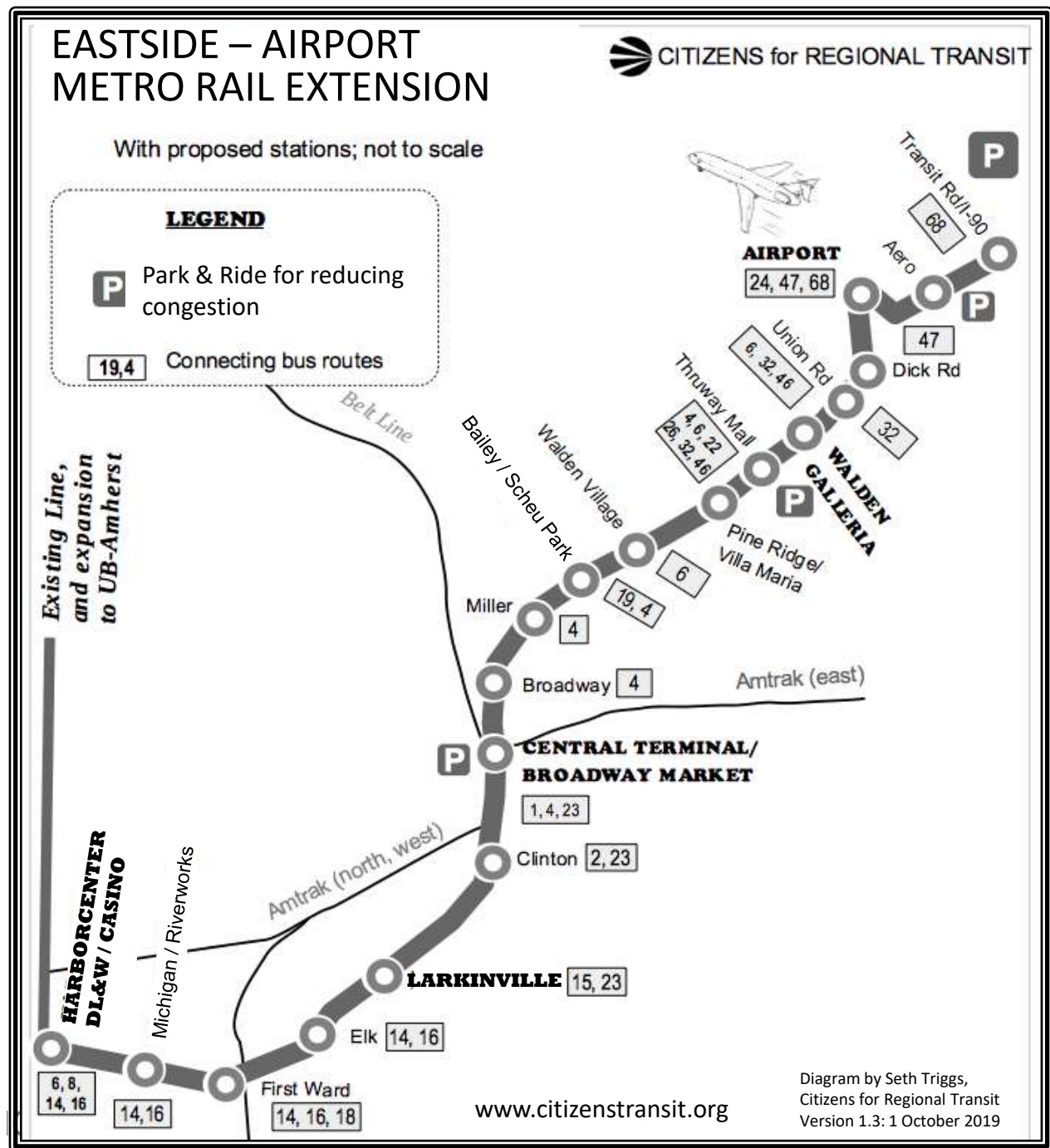
Image Source: NFTA



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Proposed Eastward Extension

(on existing,
publicly-owned
rights-of-way)



The Amherst Extension Needs to Be Part of a Comprehensive Plan

		V-RO Cost ¹² (\$M) ¹³	Funding ¹² Organization	Funding ¹² Status	2017	2018	2019	Phase I ¹² 2020	Phase I ¹² 2021	Phase I ¹² 2022	Phase II ¹² 2023	Phase II ¹² 2024	Phase II ¹² 2025	Phase II ¹² 2026	Phase II ¹² 2027	Phase III ¹² 2028	Phase III ¹² 2029	Phase III ¹² 2030	Phase III ¹² 2031	Phase III ¹² 2032	Phase III ¹² 2033	Phase III ¹² 2034	Phase III ¹² 2035	
Task																								
	Amherst Extension (6 miles)																							
1	Alternatives Analysis ¹	1.5	NYSDOT	Complete																				
2	Environmental Review (EIS) and Preliminary Design ¹	5	NYSDOT	Available																				
3	30% Engineering Design ¹	6	NYSDOT	Allocated																				
4	Engineering of Final Design (9.5% of construction) ²	95	NYSDOT	Needed																				
5	Construction^{3,4}	1,000	Fed/NYSDOT	Needed																				
	Contingency (15%) ⁵	150																						
	Metro Rail Expansion Opens (Milestone)		N/A	N/A																				
	Subtotal	1,258																						
	DL&W																							
6	DL&W Terminal (design) ¹	5	ESD/NFTA	Available																				
7	DL&W Terminal (Construction Begins) ¹	5	ESD/NFTA	Available																				
8	DL&W Terminal (construction continues) ¹	30	ESD/NFTA	Announced																				
	DL&W Terminal Station Opens to the Public (M)																							
	Subtotal	40																						
	Eastside (Airport) (13 miles)																							
9	Southern Eastern Light Rail Extension Study Initiated ⁶	0.5	NYSDOT	Needed																				
10	Environmental Review (EIS) and Preliminary Design	5	NYSDOT	Needed																				
11	25% Engineering Design (3.5% of construction) ⁷	34	NYSDOT	Needed																				
12	Engineering of Final Design (9.5% of construction) ²	93	NYSDOT	Needed																				
13	Construction (includes stations, controls, vehicles, and soft costs)^{4,8,9,10,11,12}	975	Fed/NYSDOT	Needed																				
	Contingency (30%) ⁵	293																						
	Metro Rail Expansion Opens (Milestone)		N/A	N/A																				
	Subtotal	1,400																						
	Southtowns (Hamburg: 13 miles; Orchard Park: 12 miles)																							
14	Environmental Review and Preliminary Design	10	NYSDOT	Needed																				
15	25% Engineering Design (3.5% of construction) ⁶	66	NYSDOT	Needed																				
16	Engineering of Final Design (9.5% of construction) ²	178	NYSDOT	Needed																				
17	Construction (Orchard Park)^{4,8,9,10,11,12}	900	Fed/NYSDOT	Needed																				
18	Construction (Hamburg)^{4,8,9,10,11,12}	975	Fed/NYSDOT	Needed																				
	Contingency (30%) ⁵	563																						
	Metro Rail Expansion Opens (Milestone)		N/A	N/A																				
	Subtotal	2,691																						



Topics

The Economic Arguments



Return on Transit Investments Are Significant^{1,2,3}

For every billion dollars invested transit, 50,000 jobs are created & sustained

Every \$1 invested in public transit generates \$5 in economic returns

Transit investments generate 31% more jobs per dollar than road and bridge projects

Beyond construction and manufacturing jobs transit is integral to connecting jobseekers to potential employers

Additional economic benefits accrue from reduced congestion, pollution and making land available for development due to release of land for parking

1. Price, Rebecca. Public Transit Has an Exceptional ROI. Let's Get On Board to Speed Economic Recovery. Alliance to Save Energy.
2. American Public Transit Association (APTA). Economic Impact of the Public Transportation Investment. 2020 Update.
3. APTA 2018 Public Transportation Fact Book.



Transit-Oriented Development Stimulates Economic Growth^{1,2}

An approach to development that focuses land uses around a transit station or within a transit corridor. Typically, it is characterized by:

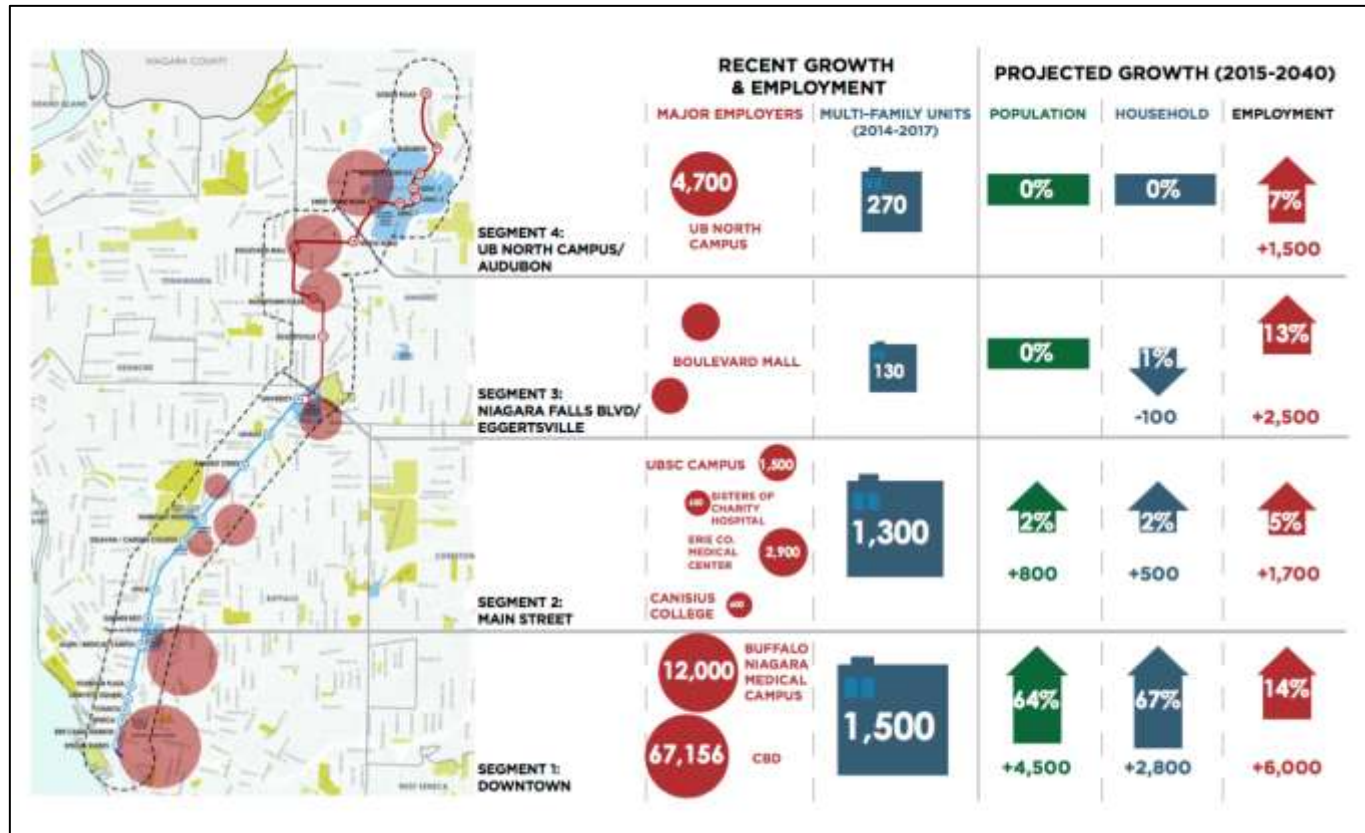
- **A mix of uses**
- **Moderate to high density**
- **Pedestrian orientation/connectivity**
- **Transportation choices**
- **Reduced parking**
- **High quality design**
- **Reverses disinvestment**

TOD occurs within ¼ mile, or a 5–7 minute walk of a transit station.

1. GBNRTC and WSP. Comprehensive Transit-Oriented Development Plan. Executive Summary. August 2018.
2. GBNRTC Website, TOD section.



GBNRTC /NFTA Transit-Oriented Development (TOD) Projections¹



Comprehensive Transit-Oriented Development Plan. Final Report. August 2018

1. GBNRTC and WSP. Comprehensive Transit-Oriented Development Plan. Executive Summary. August 2018.



CITIZENS *for* REGIONAL TRANSIT

Businesses Looking for Cities that Are Well Connected by Transit!¹

TALKING TECH 

BUZZ VIDEO PODCASTS NEWSLETTER

Amazon gets 238 proposals for its second headquarters

Amazon HQ2 Core Preference:

“Access to mass transit – direct access to rail, train, subway/metro, bus routes”

1. Mike Snider. USA Today. Published 11:34 a.m. ET Oct 23, 2017. Updated 5:45 p.m. Oct 23, 2017.



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Cities Across the US Are Building and Expanding Their Metro Rail Systems to the Airport^{1,2}

Atlanta, GA
Baltimore-Washington, MD
Boston, MA
Chicago, IL (O'Hare)
Cleveland, OH
Dallas/Ft. Worth, TX
Denver, CO
Miami, FL
Minneapolis-St. Paul, MN
Newark, NJ

New York City, NY (Kennedy)
Oakland, CA
Phoenix, AZ
Portland, OR
Salt Lake City, UT
San Francisco, CA
Seattle-Tacoma, WA
St. Louis, MO
Washington, DC (Reagan)
Washington, DC (Dulles)
(under construction)

1. More US airports add rail service to downtown. USA Today. Updated 6/5/09.
http://usatoday30.usatoday.com/money/industries/travel/2009-05-25-rail-lines-airport-city-center_N.htm.
2. Cheapest De\$tinations Blog. <https://www.cheapestdestinationsblog.com/2017/11/13/which-u-s-airports-have-a-train-to-the-city-center/>



Transit Can Stimulate Equitable Development

Important element for success of
East Side Avenues Initiative

Promote building of affordable
housing

Provide rapid transportation connections to
amenities throughout the region
(employment, education, healthcare,
shopping, recreation)



Image from The Forge on Broadway Website.

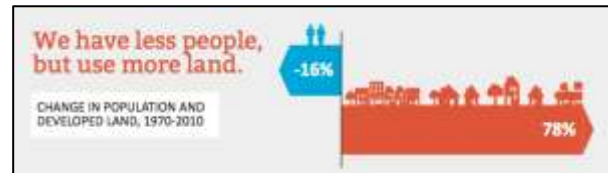
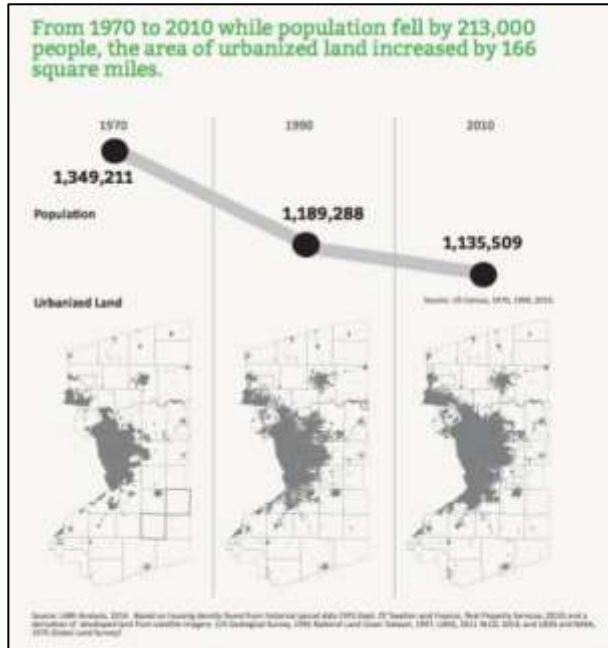


Image from East Side Avenues
2019-2020 Annual Report



Transit Service Is Hampered by Sprawl

Park & Rides Can Help



Graphic Source: One Region Forward. A New Way to Plan for Buffalo-Niagara. February 2015. Final Plan.



Park & Rides collect commuters from a wide radius, sparing city neighborhoods pollution and parking woes

Topics

The World's
Greatest
Waterfront



Visitors Find Little to Do Here!

The Buffalo News
November 13, 2013

Mist opportunities: Visitors to Falls find little reason to stay

BY: Aaron Besecker



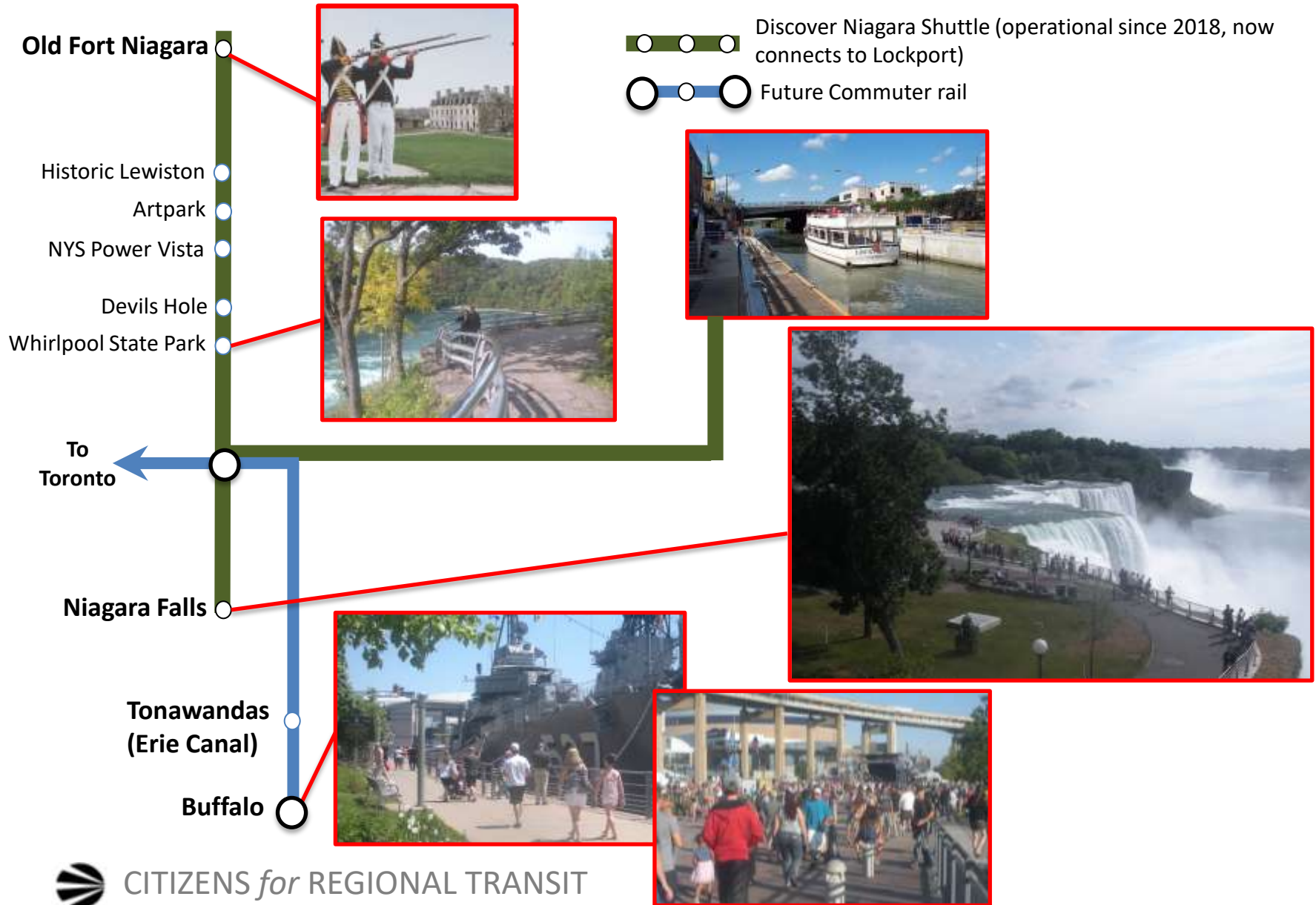
Crow's Nest in Niagara Falls is high on list for visitors to U.S. side, but the challenge is to make the list longer. Derek Gee/Buffalo News file photo

Little to do?
Really...???



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CRT Mission: Connect Our Waterfront

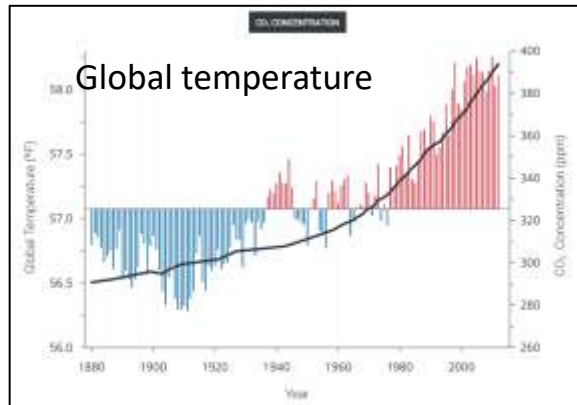


Topics

Transit and the
Environment



Greenhouse Gas Emissions Are the Problem

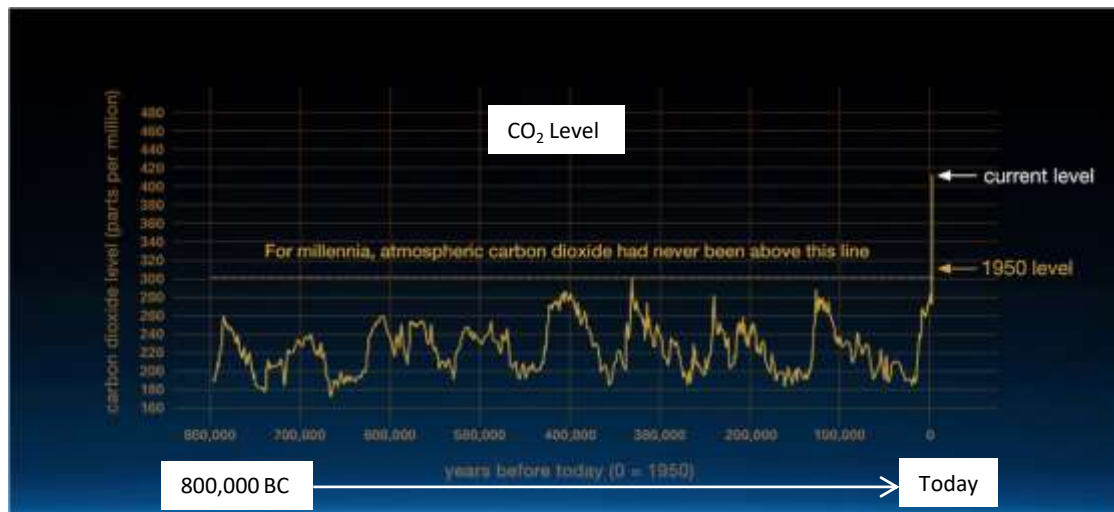


1880 —————> 2000

Source: National Climate Change Assessment Report. 2014.



Union of Concerned Scientists,
Numerous publications, 2018



Source: Climate.NASA.gov/evidence



Intergovernmental Panel on
Climate Change (IPCC), United
Nations, October 2018



CITIZENS for REGIONAL TRANSIT

Erie County Commits to US Paris Climate Agreement Targets

Reduce GHG emissions county-wide by 26-28% below 2005 levels by 2025

100% renewable energy for County operations by 2030

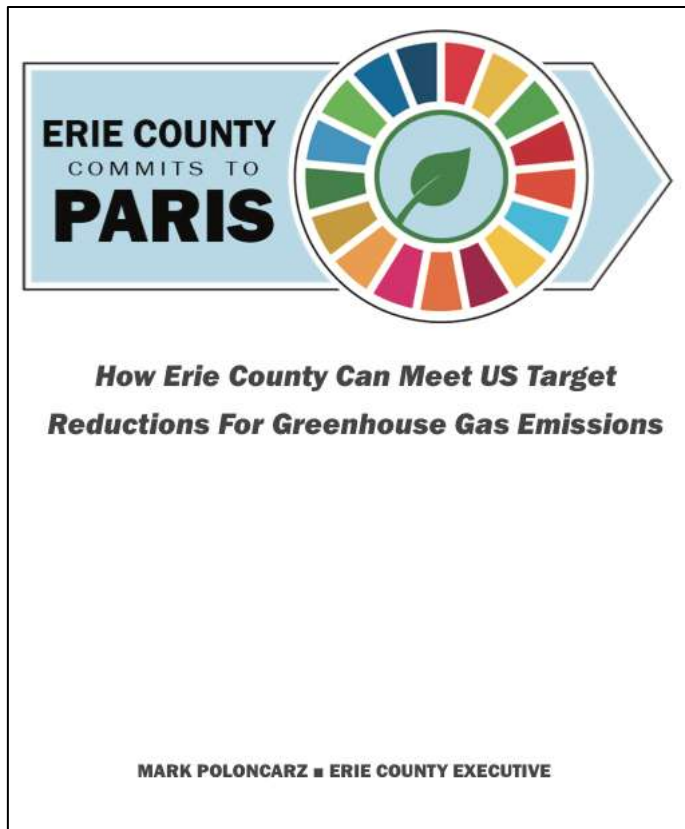
Actions:

Establish County Green House Gas (GHG) Inventory, update yearly

Establish County “Green Team” and “Energy Committee”

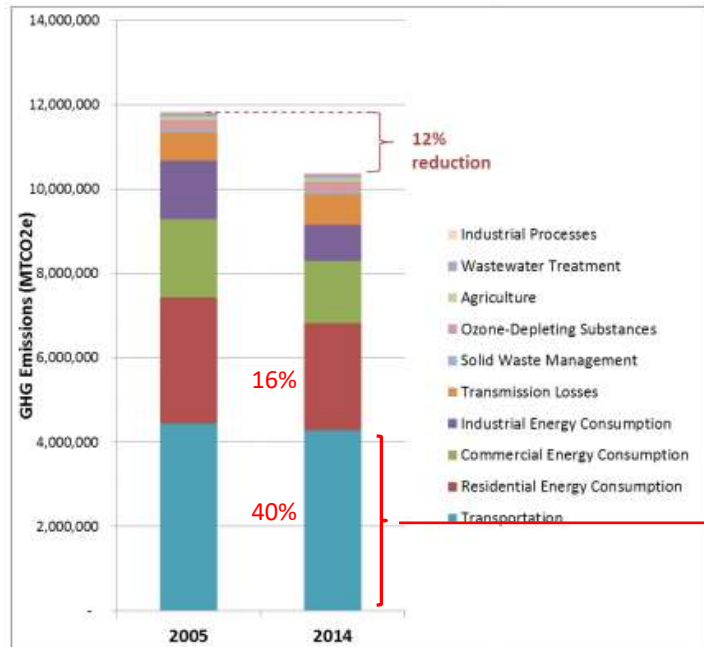
Establish green energy purchase programs

Incentivize use of public transportation



Source: Erie County Commits to Paris

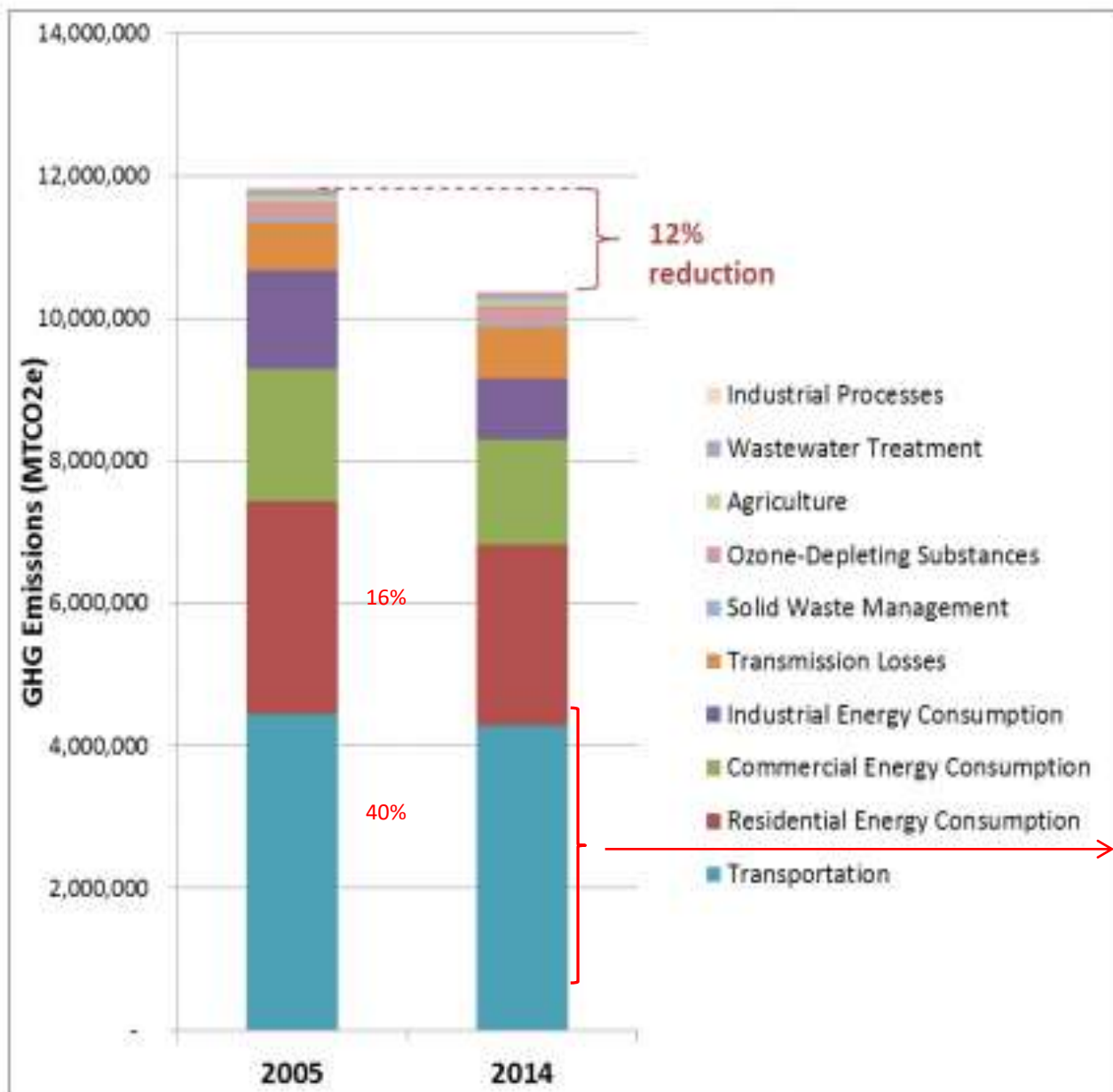
Opportunities for Reducing Energy Consumption: Transportation Sector



Source: Erie County Commits to Paris



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Source: Erie County Commits to Paris



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NYS Climate Leadership and Community Protection Act (CLCPA)

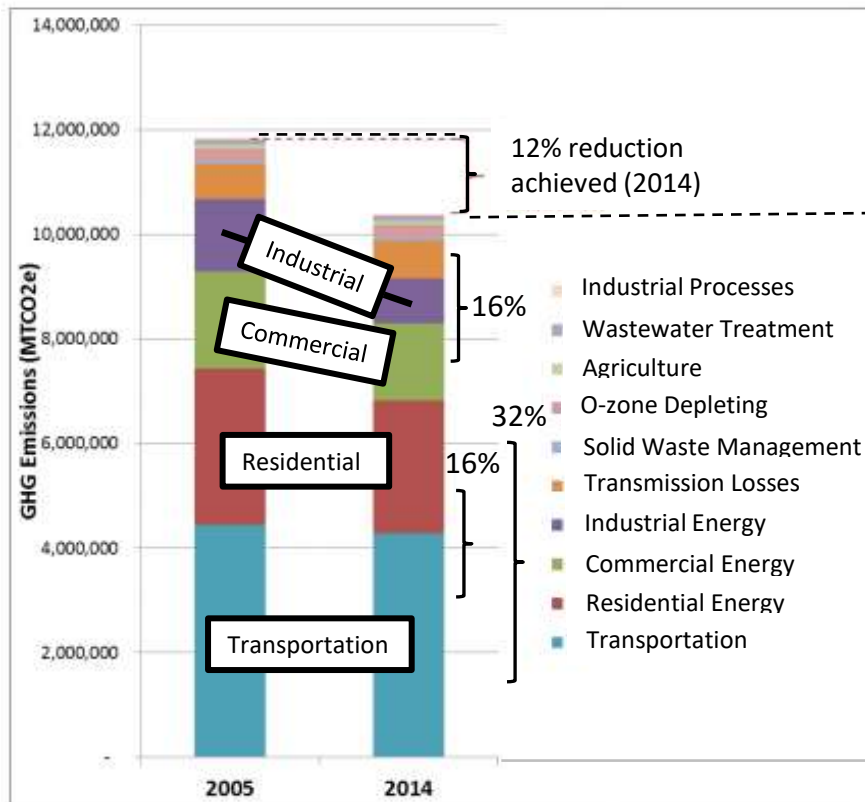
- Overview
 - **35-40% of benefits to historically disadvantaged communities**
 - Accelerates development of wind and solar energy
 - Facilitates growth of energy storage technology
- NYS Electricity from renewables
 - 70% by 2030
 - 100% by 2040
 - Specific targets for offshore wind, solar and energy storage specified.
- **Puts NYS on path to net zero emissions overall**
 - **40% GHG emissions by 2030**
 - **85% GHG emissions by 2050**
 - **This means reductions in the transportation sector!**
- Offsets
 - only where technologically impossible to reduce emissions by other means
 - must be verifiable and permanent



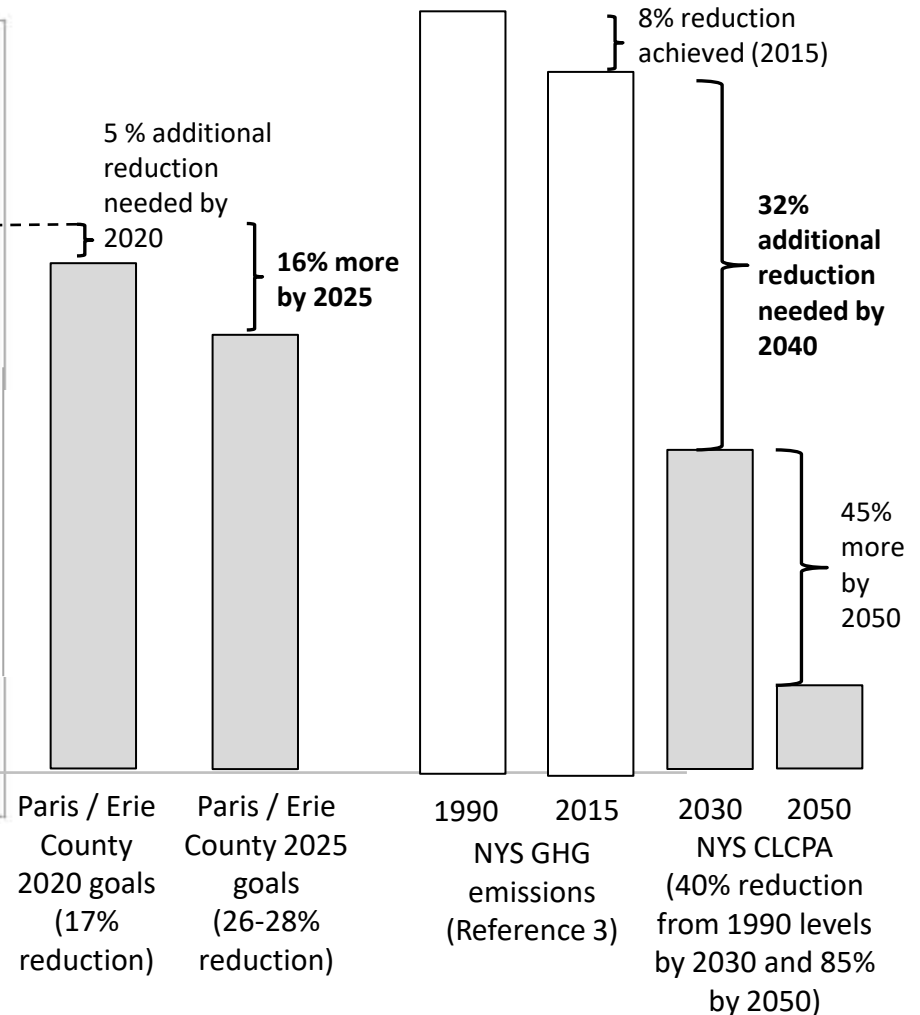
Pictures by: Doug Funke, CRT President

Erie County Commits to Paris

NYS CLCPA Commitments

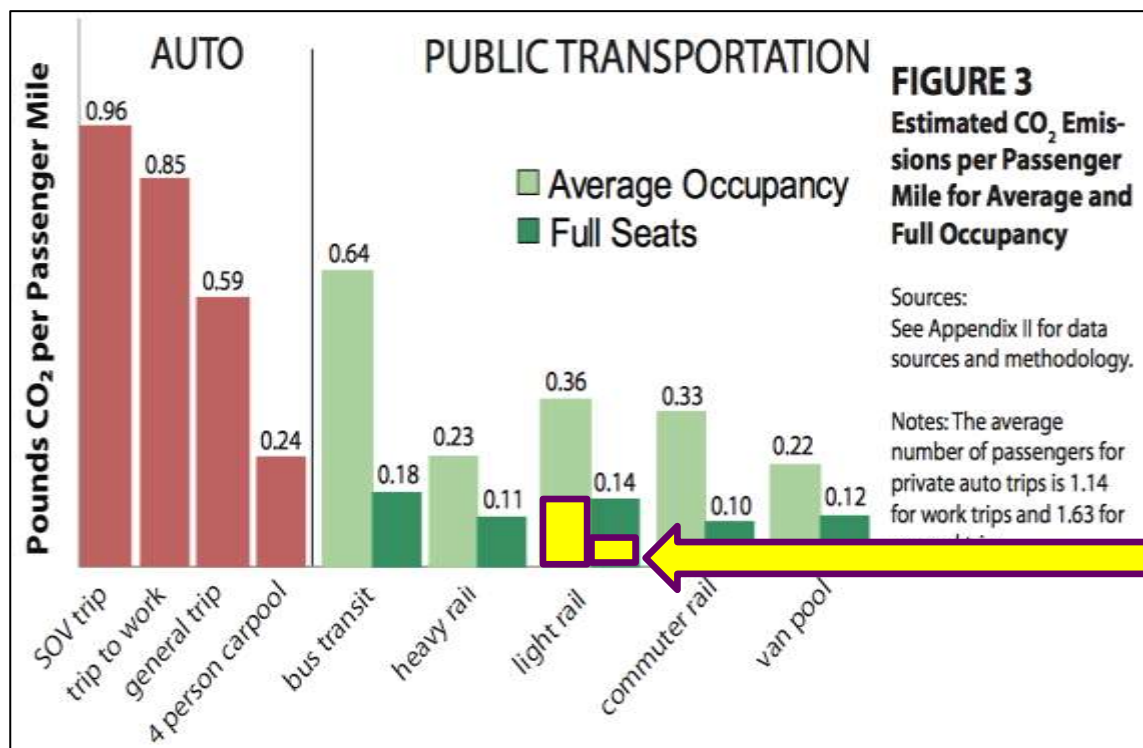


Erie County GHG emissions by sector
Source: Erie County Commits to Paris



Transit Can Reduce CO₂ Emissions

We Can Do Even Better in Buffalo!



**Buffalo's Metro Rail
Uses 60% hydro power
from Niagara Falls**

**So with average occupancy
CO₂ / passenger mile =
0.144 pounds**

**And with full seats
CO₂ / passenger mile =
0.056 pounds**

Table from Federal Transit Administration (FTA). US Department of Transportation. 2010



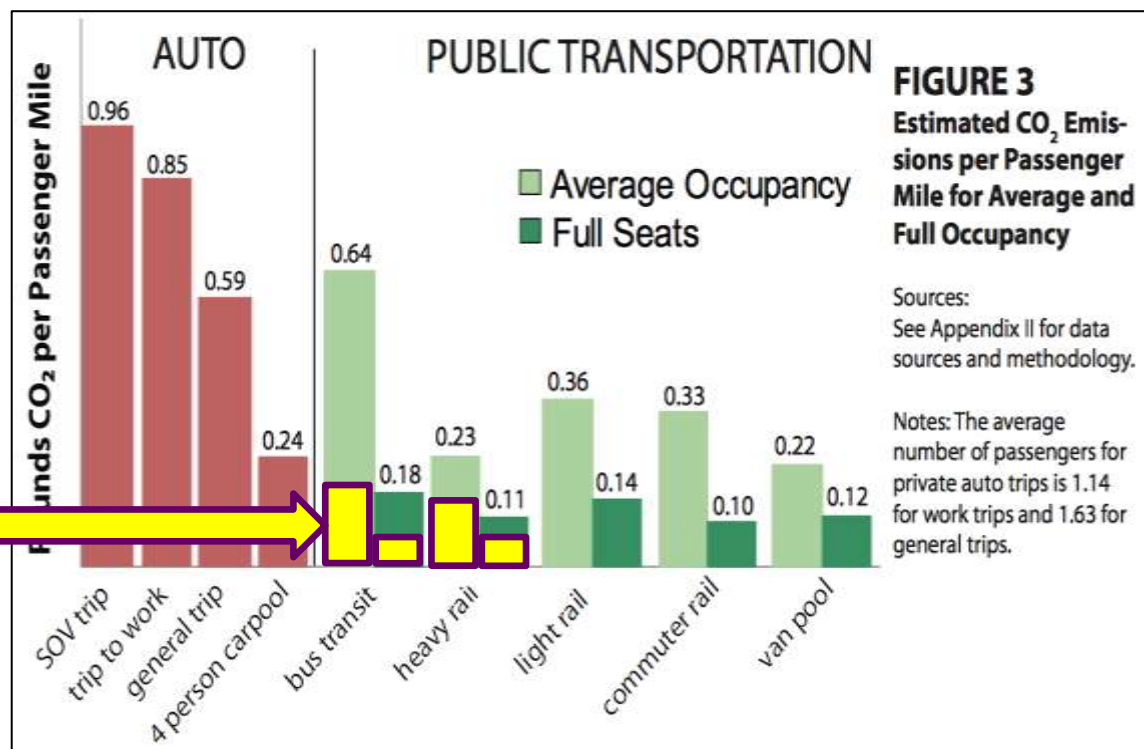
CITIZENS for REGIONAL TRANSIT

NFTA Is Moving to Electric Buses!

Buffalo's electric buses
will reduce CO₂ by 84%

So with average occupancy
CO₂ / passenger mile =
0.102 pounds

And with full seats
CO₂ / passenger mile =
0.083 pounds



Source: Aber, Judah, Columbia University. Electric Bus Analysis for New York City Transit. May 2016.

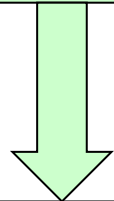
Table from Federal Transit Administration (FTA). US Department of Transportation. 2010



CITIZENS for REGIONAL TRANSIT

The Effect of Choosing Between Driving or Taking Transit

Choose Transit



Adds negligible CO₂ to bus or train already in service

Bus or train
0

But avoids CO₂ from auto



Pictures by: Doug Funke, CRT President

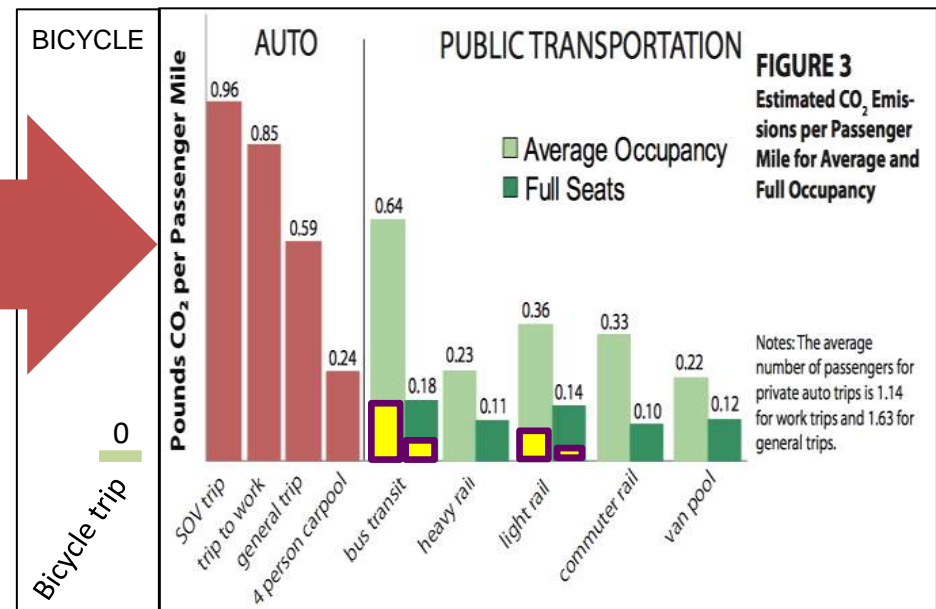
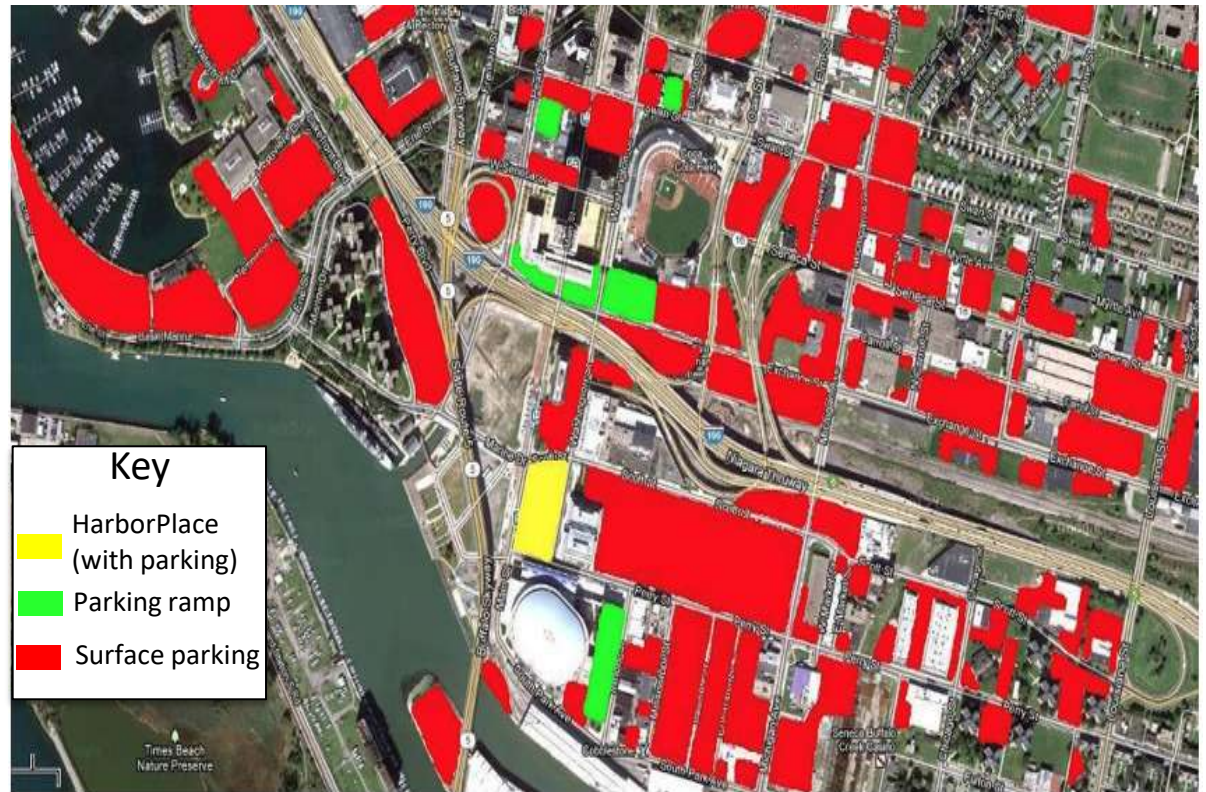


Table from Federal Transit Administration (FTA). US Department of Transportation. 2010



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Buffalo's Waterfront (Zoomed-Out): without transit, a congestion and parking magnet



Picture courtesy of Mark Paradowski from the Preservation-Ready Sites 32

Pictures by: Doug Funke, CRT President



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Electric Cars to the Rescue?

What if we all drove electric cars?
Won't that solve the problem?

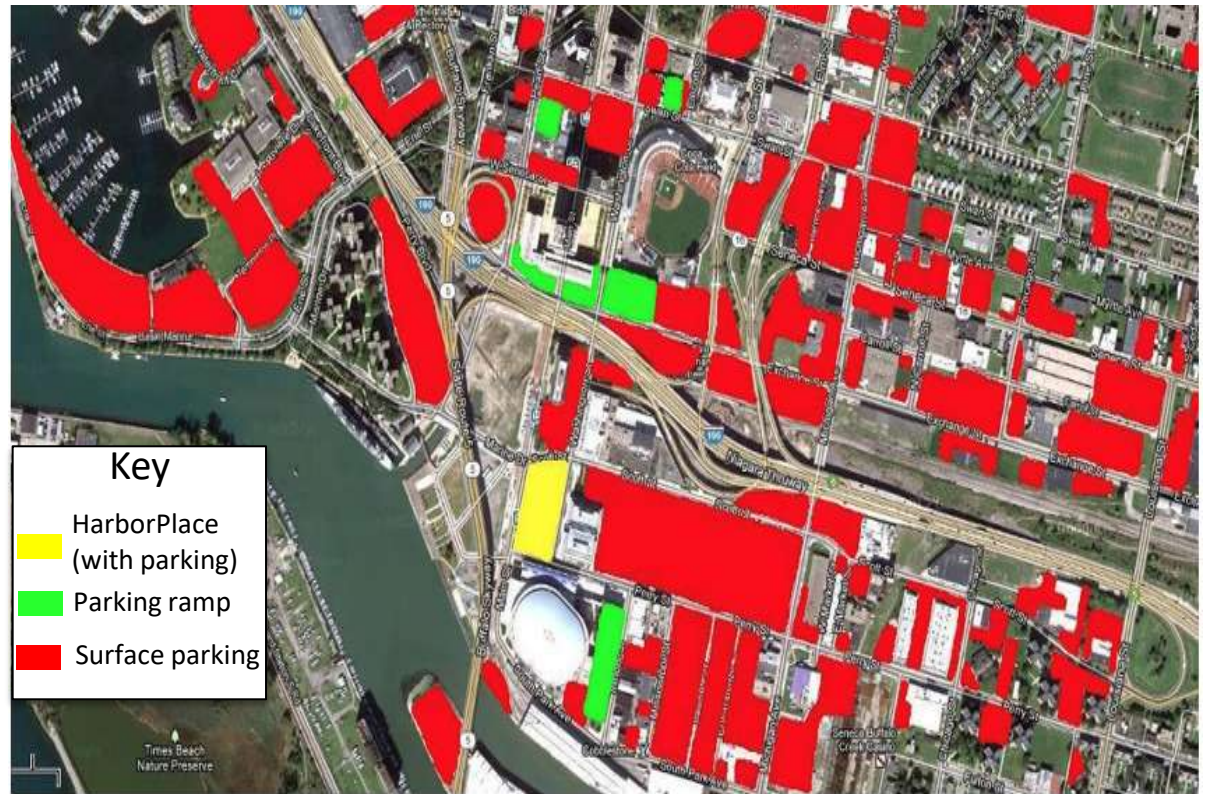


Image source: NYSERTA. Charge NY.



CITIZENS *for* REGIONAL TRANSIT

Not Exactly...



Courtesy of Mark Paradowski from the Preservation-Ready Sites

34

Pictures by: Doug Funke, CRT President



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Not Exactly...



National Archives at College Park, Public Domain, via Wikimedia Commons
https://upload.wikipedia.org/wiki/pedia/commons/f/fa/As_this_big_pile__of_used_auto_tires_indicates

An estimated 4 billion tires are currently in landfills and stockpiles*

Every ton of cement generates 1 ton of CO₂**

Every ton of steel generates 1.8 tons of CO₂**

50% of cars (by volume) are plastic**

* World Business Council for Sustainable Development, 200.8

** Gates, Bill. How to Avoid a Climate Disaster. The Solutions We have and the Breakthroughs We Need. 2021



CITIZENS *for* REGIONAL TRANSIT

Lithium-ion Batteries

Cars, buses and electronics



[This Photo](#) by Unknown Author is licensed under [CC BY-SA-NC](#)

Lithium extraction uses about 500,000 gallons of water per metric ton*

Cobalt is extracted from the ground by hand using child labor without protective equipment*

Not a single car manufacturer identifies or addresses human rights risks and abuses **

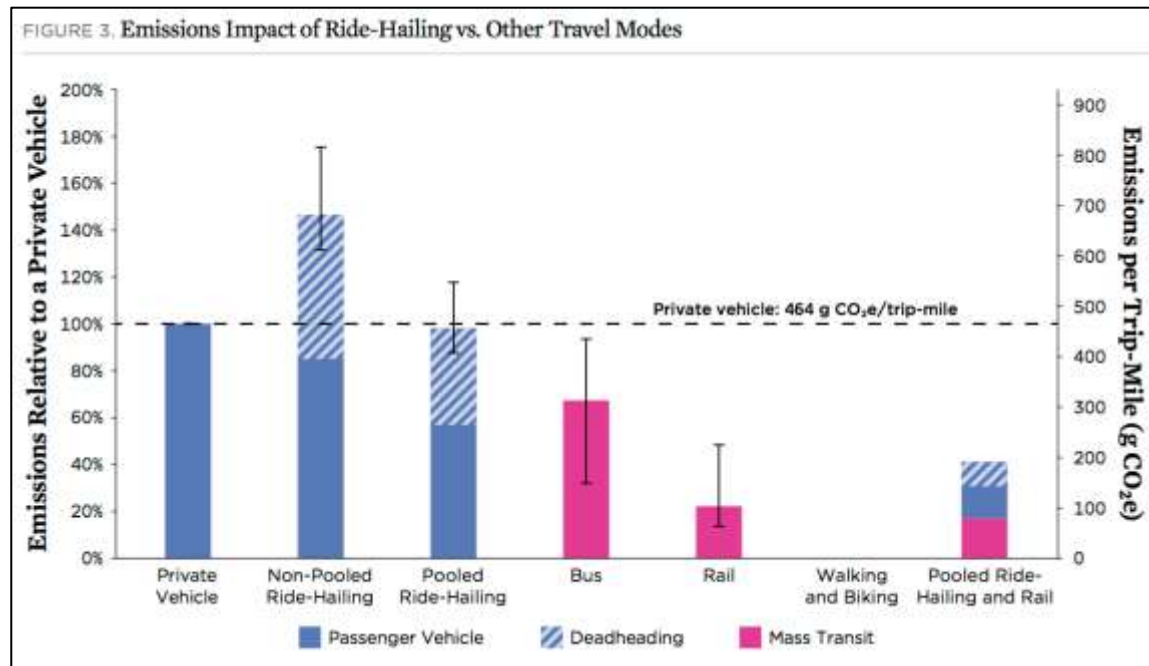
* Institute for Energy Research, November, 2020

** Dummett, Mark. The Dark Side of Electric Cars: Exploitative Labor Practices. Amnesty International, 2017



What if We Abandoned Transit in Favor of Ride Hailing?

Ride hailing can pollute more than driving yourself; works well with rail but increases VMT overall



Source: Ride-Hailing's Climate Risks. Steering a Growing Industry toward a Clean Transportation Future. Union of Concerned Scientists.



The Math Is Simple

What does it take to move 600 people?

1 four-car train



12 city buses



150 to 600 cars* (270 shown here)



**Every 10 minutes!
In each direction of
service!**



Sources:

1. Adapted from: Transport Sydney Trains (<http://www.sydneytrains.info/about/environment/>)
2. "RAILFAN GUIDES of the U.S"> Todd's Railfan Guide to the Buffalo, NY
3. NFTA Light Rail System (<http://www.railfanguides.us/ny/buffalo/lightrail/index.htm>)



Topics

Mobility
Justice



Mobility Justice

Making sure transportation systems and policies satisfy the needs of the economically most vulnerable

In Buffalo-Niagara:

30% of Buffalo households don't own cars; rely on public transportation for access to jobs, medical appointments, education, shopping, recreation, etc.

Transit is plagued by poor and infrequent service due to

- Years of disinvestment

- Inadequate operational funding

Poor service makes transit the mode of last resort

Recent NYS transit funding improvements are a good start; more is needed



Pictures by: Doug Funke, CRT President



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Commute Time Comparisons

Areas of High Levels of Poverty



Major Employment Areas



Minor Employment Areas



Weekday Travel times to Work from East and West Side of Buffalo for Driving vs. Transit

Arrive By	Home	Employer	Drive	Public Transit	Difference	
9:00 AM	Niagara/Porter	Sumitomo	10	25	15	150%
		Airport	21	64	43	200%
		GEICO	21	77	56	265%
	Bailey/Genesee	Sumitomo	19	58	39	200%
		Airport	13	22	9	70%
		GEICO	23	52	29	125%

Source: Partnership for the Public Good. Working Toward Equity, Updated: Race, Employment, and Public Transportation in Erie County. July 2017



CITIZENS *for* REGIONAL TRANSIT

Transit is a Life-Critical Service for those who Depend on it!

... for getting to jobs, medical appointments, education, recreation...



Picture by: Jim Gordon, CRT Treasurer



Picture by: Doug Funke, CRT President



The Biggest Injustice

States and local governments
are forced to pay a
30% penalty
if they choose transit projects
over road and highway projects



The Biggest Inequity

Road and Highway Projects get Priority



Federal share for transit is less than 50%
To be equitable, Transit funding must be shared
the same as road and highway funding



Topics

Is there public support?



Community Leaders Who Have Joined with Us to Demand a Transit Revolution!

City of Niagara Falls
(Aug 2016)
- Mayor Paul Dyster
- NF City Council



City of Tonawanda
- Mayor Rick Davis
(Mar 2015)



Erie County
- Executive Mark Poloncarz (July 2018)



City of Buffalo
- The Buffalo Common Council
(Dec 2015)



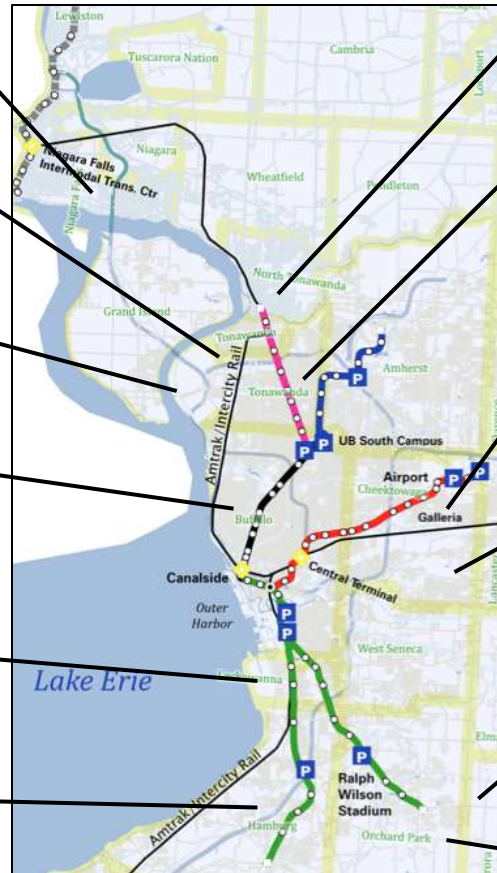
City of Lackawanna
- Lackawanna City Council (Sep 2018)



Village of Hamburg
- Mayor Tom Moses (Feb 2018)
-- Village Council (Nov 2015)



1. Extend Metro Rail along highest demand corridors
2. Provide inter-modal connectivity
3. Establish long-term sustainable transit funding



City of North Tonawanda
- Mayor Arthur Pappas
(Dec 2015)



Town of Tonawanda
- Supervisor Joseph Emminger (Feb 2019)
- Town Board (Feb 2019)



Town of Cheektowaga
- Town Council
(Oct 2015)



Town of Lancaster
- Town Council (Dec 2016)



Village of East Aurora -
Mayor Alan Kasprzak (Oct 2015)



Village of Orchard Park -
Mayor Jo Ann Litwin Clinton (Oct 2015)

Village of Orchard Park



CITIZENS for REGIONAL TRANSIT

Organizations That Have Signed

1. Amalgamated Transit Union (ATU) 1342
2. Alpha Kappa Chi
3. Buffalo-Niagara Gardening.com
4. BBN Homes LLC
5. Bijou Grill
6. Buffalo Computer Graphics
7. Buffalo Development Corporation
8. Buffalo First, Inc.
9. Buffalo Transportation Pierce Arrow Museum
10. Buffalo Urban League
11. Buffalo and Erie County Botanical Gardens
12. Buffalo Transit Central
13. Campaign for Greater Buffalo
14. Catholic Charities
15. Carmina Wood Morris
16. Cazenovia Community Resource Center
17. Central Terminal Restoration Corporation
18. Challenger Community News
19. Ciminelli Real Estate Corporation
20. Citizens 4 the Beautification of Lovejoy
21. Coalition for Economic Justice (CEJ)
22. Communications Workers of America (CWA 1133)
23. Concerned Ecumenical Ministry
24. Courtland Avenue Block Club
25. Daemon College Center for Sustainable Communications and Civic Engagement
26. Douglas Development Corporation
27. Eco_Logix Studio, Architecture & Engineering, PLLC
28. Earth Spirit Educational Services Inc.
29. Environmental Services Group
30. Fillmore Corridor Neighborhood Coalition
31. Fillmore Forward
32. Friends of Times Beach
33. The Fruitbelt Coalition
34. Go Buffalo Niagara
35. Geo Operative
36. Global Villages Coalition
37. GoBike Buffalo
38. Greater Eastside – Field of Dreams Block Club
39. Hostel Buffalo-Niagara
40. Housing Opportunities Made Equal
41. Human First Ergonomics
42. Interfaith Peace Network of WNY
43. iT Garden
44. Journey's End Refuge Service
45. Kaleida Health
46. Ken-Ton Chamber of Commerce
47. The Knoer Group, PLLC
48. Latin American Cultural Association
49. League of Women Voters (Buffalo Niagara)
50. Lincoln Memorial Church (UMC)
51. Masten Block Club Coalition
52. The Merry-Wood Block Club Association
53. NAACP Buffalo Branch
54. Network of Religious Communities
55. Partners for a Livable Western NY
56. Partnership for the Public Good (PPG)
57. Prisoners Are People Too
58. PUSH Buffalo (People United for Sustainable Housing)
59. Re-Energize Buffalo
60. Restore Our Community Coalition (ROCC)
61. Riverside Salem UCC / DOC
62. Roebling Avenue Block Club
63. Sail Buffalo
64. Sierra Club (Niagara Group)
65. South Fillmore Block Club
66. University District Community Development Association
67. University Park Historic Block Club
68. VOICE Buffalo
69. Wellness Institute of Greater Buffalo
70. Westside Stories
71. WNY Law Center
72. WNY Peace Center
73. Young and Wright Architectural
74. 21st Century Park on the Outer Harbor

Signers by Category

18 Business leaders

56 Community organizations



Community Support for Transit Reflected in One Region Forward Outreach

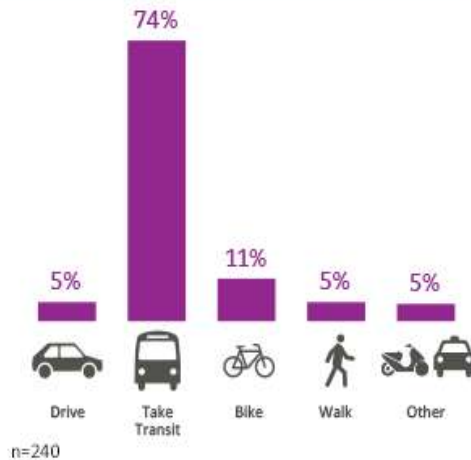


Question #3: To improve our transportation system, our top priority should be making it easier to...

- A. Drive
- B. Take Transit
- C. Bike
- D. Walk
- E. Other

A large majority of citizens (74%) responded that **making it easier to take transit** was key to improving our region's transportation system.

To improve our transportation system, we should make it easier to...



How should we move forward?

- “106 out of 115 (92%) maps said increase ways to get around without a car is a guiding principle”
- “On average participants added 59 miles of metro rail

How do our choices play out?

- “A larger percentage of jobs and homes would be served by transit”
- “We would depend less on cars for our daily trips, conserve more energy, and emit less carbon”

What could we do differently?

- “Connect land use to transportation, especially public transit”
- “The region should make transit funding and system improvement a top priority for advocacy and action”



CITIZENS for REGIONAL TRANSIT

90% of Ballot Initiatives Successful in 2020

2020 Snapshot	
53	Public Transit Measures on the Ballot
47	Wins for Transit (90.38%)
5	Losses for Transit
\$1,884,911,547	Revenue Total
\$926,265,547	Known Transit Revenue
Revenue Types	
36	Property Tax
11	Sales Tax
4	Bond
1	Payroll Tax

Source: APTA Center for Transportation Excellence.

- Sonoma, CA
- Fairfax County, VA
- Bellingham, WA
- St. Louis, Ithica, and Pine River Township, MI
- Austin, TX
- Newton County, GA
- Seattle, WA
- Portland, OR
- Bend, OR
- Wheeling and Bethlehem, WV
- Denver, CO
- San Antonio, TX
- Missoula, MT
- Durand, MI
- Shiawassee Township, MI
- San Francisco, Santa Clara and San Mateo, CA
- Monroe, MI
- Gwinnett County, GA
- Kalkaska County, MI
- Midland County, MI
- Escanaba, MI
- Genesee County, MI
- Friendship County, MI
- Clinton County, MI
- Arenac County, MI
- Oremaw County, MI
- Ludington and Scottville, MI
- Iosco County, MI
- Narquette County, MI
- Wexford County, MI
- Spring Lake Township, MI
- Statewide, Maine
- Parkersburg, WV
- Vienna, WV
- Huntington, WV
- Monongalia County, WV
- Fort Gratiot, MI
- Fort Huron, MI
- Lucas County, OH
- Belmont and Jefferson Counties, OH
- Hamilton County, OH
- Anchorage, AK
- Benzie County, MI
- Clare County, MI
- New Haven Township, MI
- Lansing, MI
- Kalamazoo County, MI
- Van Buren County, MI
- Saginaw Township, MI
- Manistee County, MI
- Marin and Sonoma Counties, CA
- Contra Costa County, GA
- Redlands, CA



Topics

Conclusion



Let's Connect our Region with Transit



Image courtesy for Dan Leonard, Economic Development Director at the Buffalo Niagara Partnership

Toronto – Hamilton - Buffalo-Niagara

Population = 8 million, GDP = \$400 billion

Canada's impact on WNY Economy = \$900 million

Source: Gallagher, Loomis and Balsom. Planning must begin for opening U.S.-Canada border. Another Voice. The Buffalo News. 11 May 2021.

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