



Greater Buffalo Niagara Regional Transportation Council

The Greater Buffalo-Niagara Regional Transportation Council (GBNRTC) is a partnership of local and state governments working together to make decisions about transportation planning in the Buffalo-Niagara region.

### GBNRTC members include:

- City of Buffalo
- City of Niagara Falls
- Erie County
- Niagara County
- Niagara Frontier Transportation Authority (NFTA)
- New York State Department of Transportation (NYSDOT)
- New York State Thruway Authority (NYSTA)

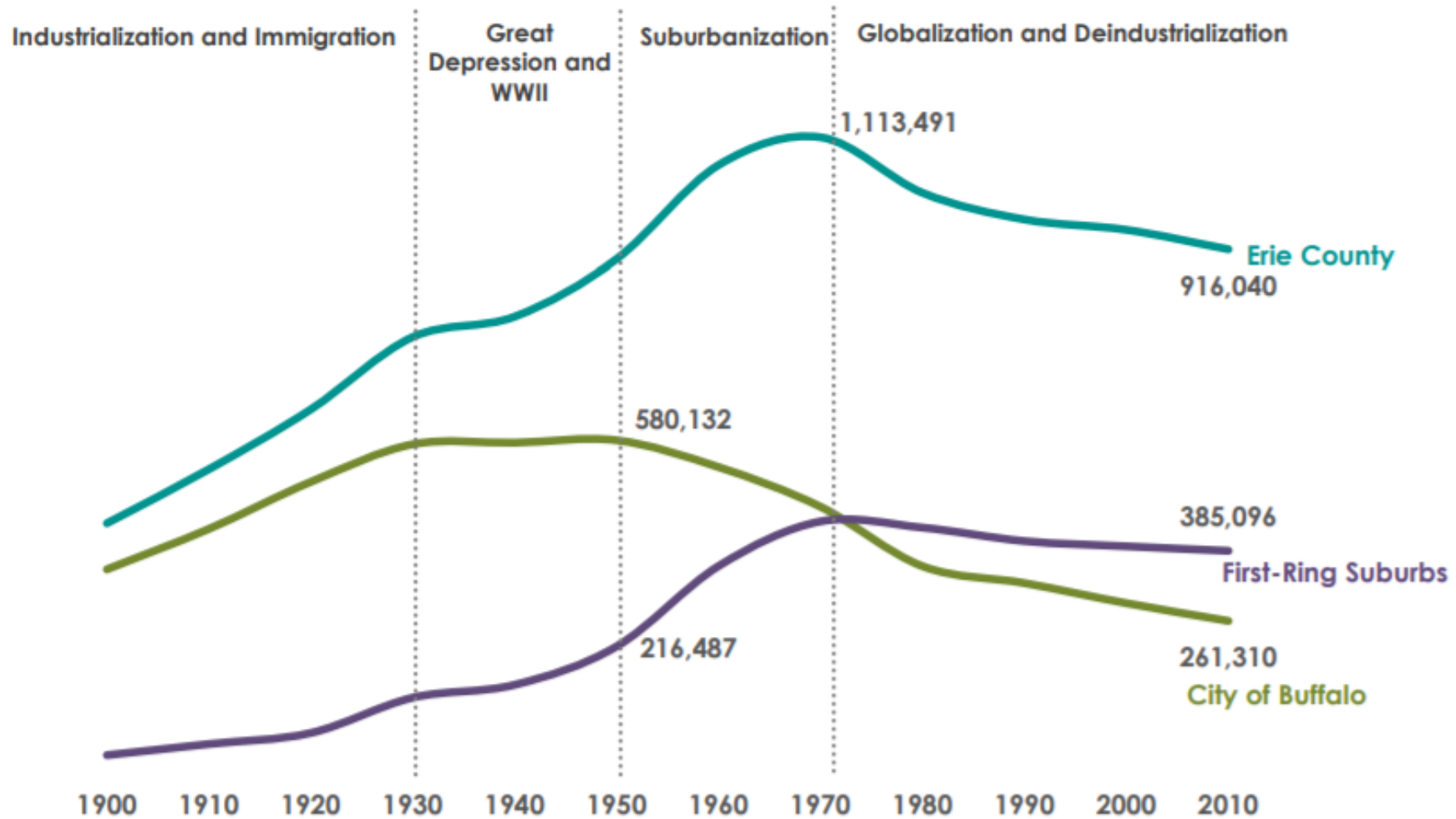


Buffalo Niagara Region: 1.1 million people  
City of Buffalo: 250,000 people

**Figure 6. Populations of Erie County, City of Buffalo, and First-Ring Suburbs\* 1900-2010**

Data Source: US Census Bureau, Decennial Census.

\*Amherst, Cheektowaga, Tonawanda (Town), Tonawanda (City), Kenmore, Lackawanna, Sloan, West Seneca



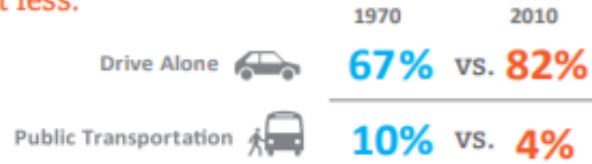
We have less people, but use more land.

CHANGE IN POPULATION AND DEVELOPED LAND, 1970-2010



We commute to work by car more and take transit less.

COMMUTING MODES, 1970 VS 2010



VEHICLE MILES TRAVELLED DAILY PER CAPITA, 1970 VS 2010



We drive more than twice as far.

We build new homes and roads, empty our cities, lose farmland, increase our infrastructure costs and tax burden.

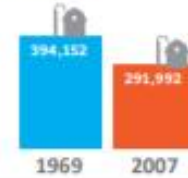
204%

% CHANGE IN TOTAL HOUSING UNITS VS. % CHANGE IN VACANT HOUSING UNITS, 1970-2010



ACRES OF FARMLAND 1969 VS 2007

OVER 160 SQ. MILES OF FARMLAND LOST



IN JUST THE PAST TWENTY YEARS, WE'VE ADDED...

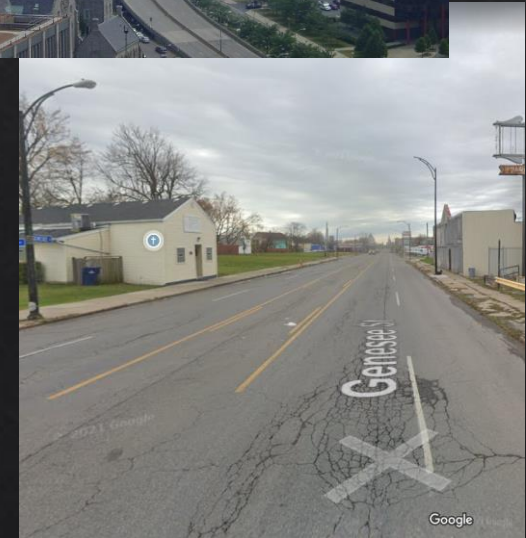
525 MILES OF NEW ROADS

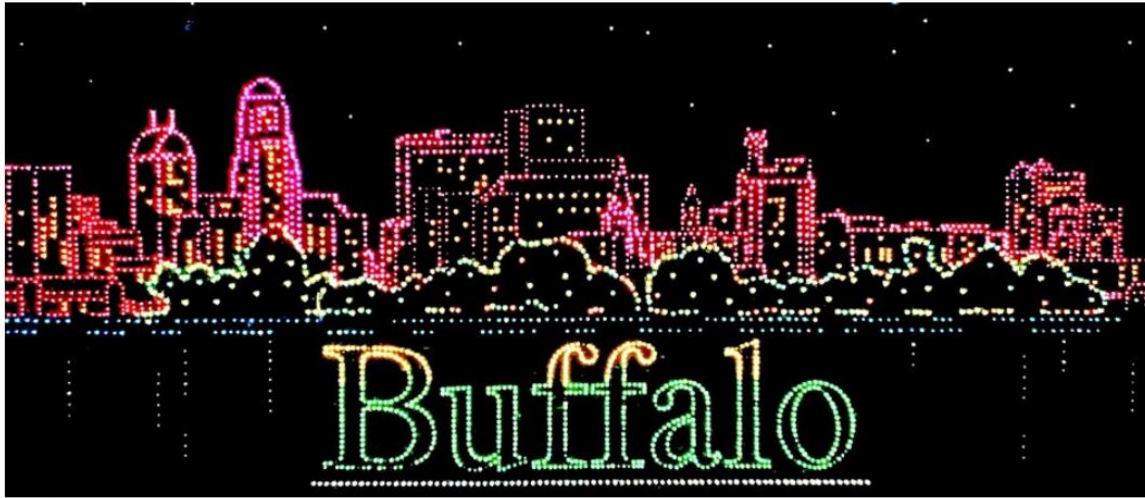
...COSTING US \$26 MILLION PER YEAR TO MAINTAIN

OUR LOCAL GOVERNMENTS SPEND AN AVERAGE OF

\$0.75

IN DEBT SERVICE FOR EVERY DOLLAR THEY COLLECT IN REVENUE





A storefront sign in Buffalo, which scientists say will be a refuge from worsening weather. // Nexus Media

## Will Buffalo Become a Climate Change Haven?

CITYLAB

JEREMY DEATON DECEMBER 5, 2019

## Immigrant and Hispanic population helping carry Buffalo's resurgence and population growth

Posted: 5:59 PM, Jul 02, 2019 Updated: 5:59 PM, Jul 02, 2019



## Buffalo Ranks #2 for Millennial Homebuyers



by Buffalo Rising

February 18, 2020, 2:20 pm

16 Comments

# Where we are starting from.

## ONE REGION FORWARD

A New Way to Plan for Buffalo Niagara  
2010-2015



## MOVING FORWARD 2050

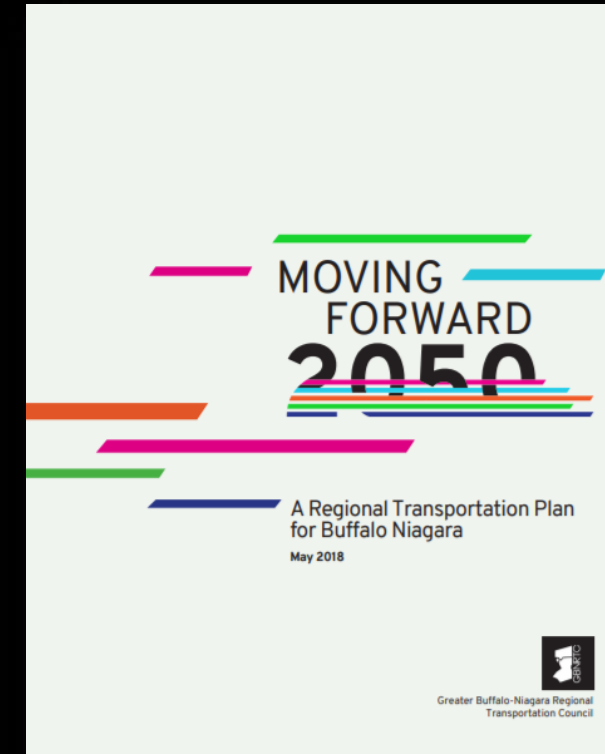
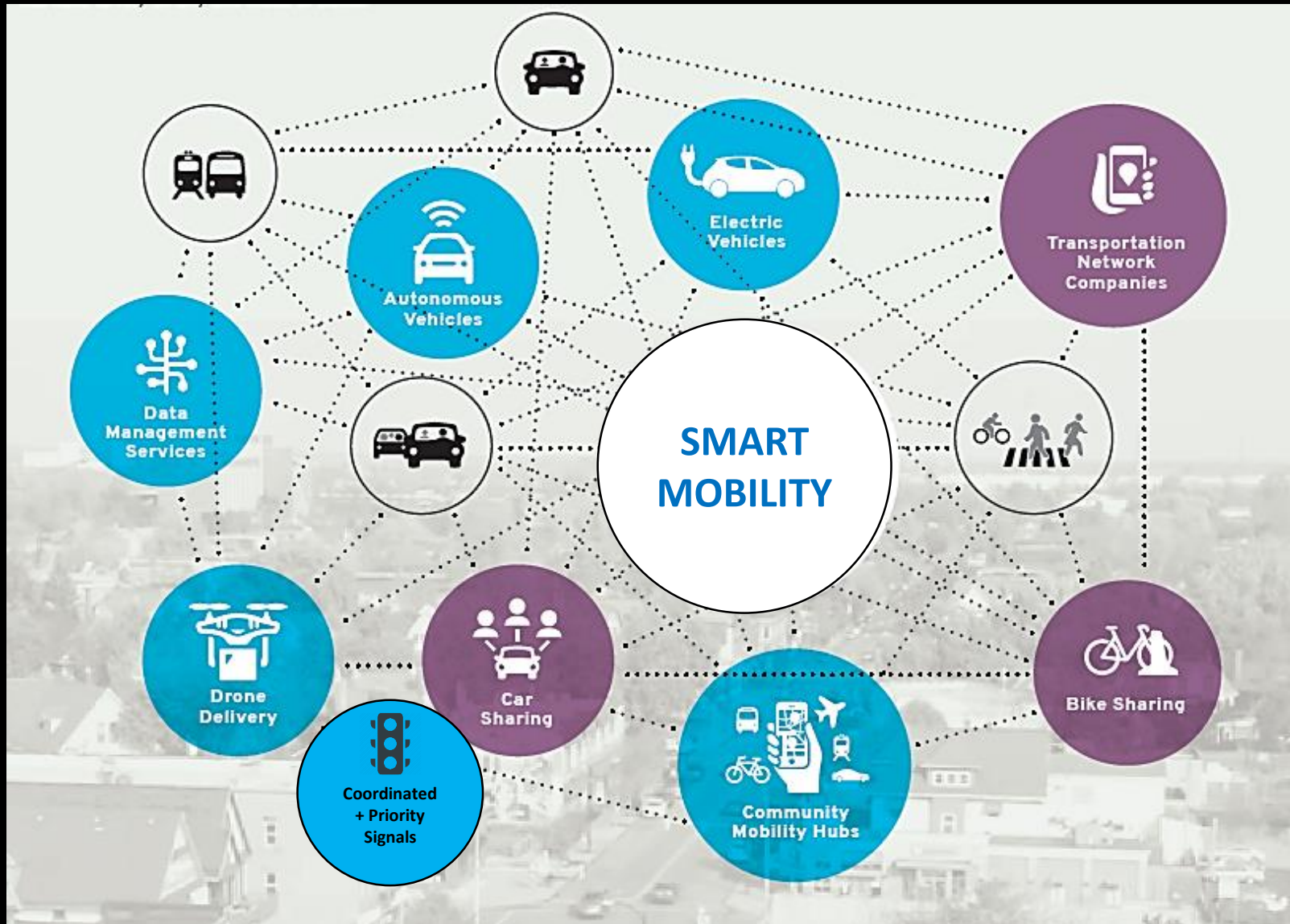
A New Way to Plan for Transportation  
2016-2018



**This input guides our transportation investments, today and into the future.**



# Regional Transportation Plan + Emerging Technologies



[gbnrtc.org/movingforward2050](http://gbnrtc.org/movingforward2050)

# Where we want to be in 2050

## Our Economy

In 2050, our economy will be globally competitive with shared prosperity that spreads economic opportunities and benefits to all residents in the region.

## Our Communities

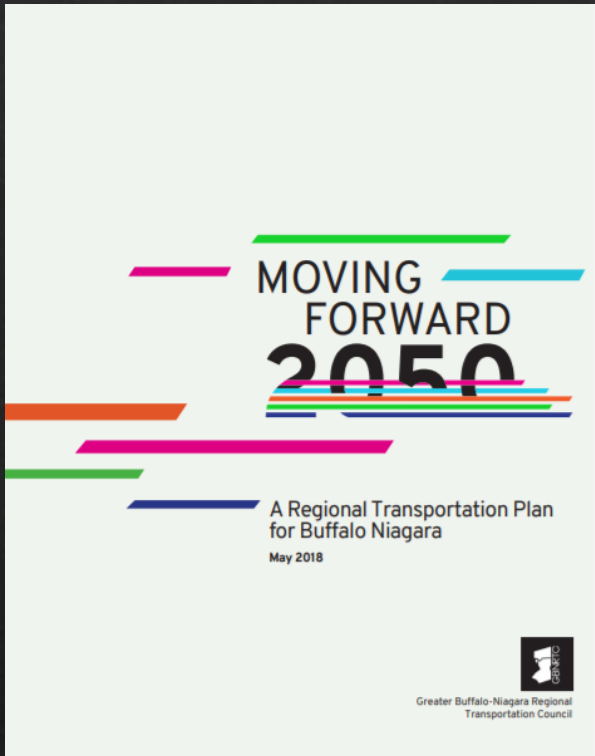
In 2050, our communities will be brimming with opportunities, providing residents with various lifestyle choices and attracting new, diverse residents, businesses and investments from all over the world.

## Our Environment

In 2050, our environment will be ecologically healthy and easily accessible so that all residents and visitors have abundant opportunities to enjoy our region's world class waterways and open spaces.

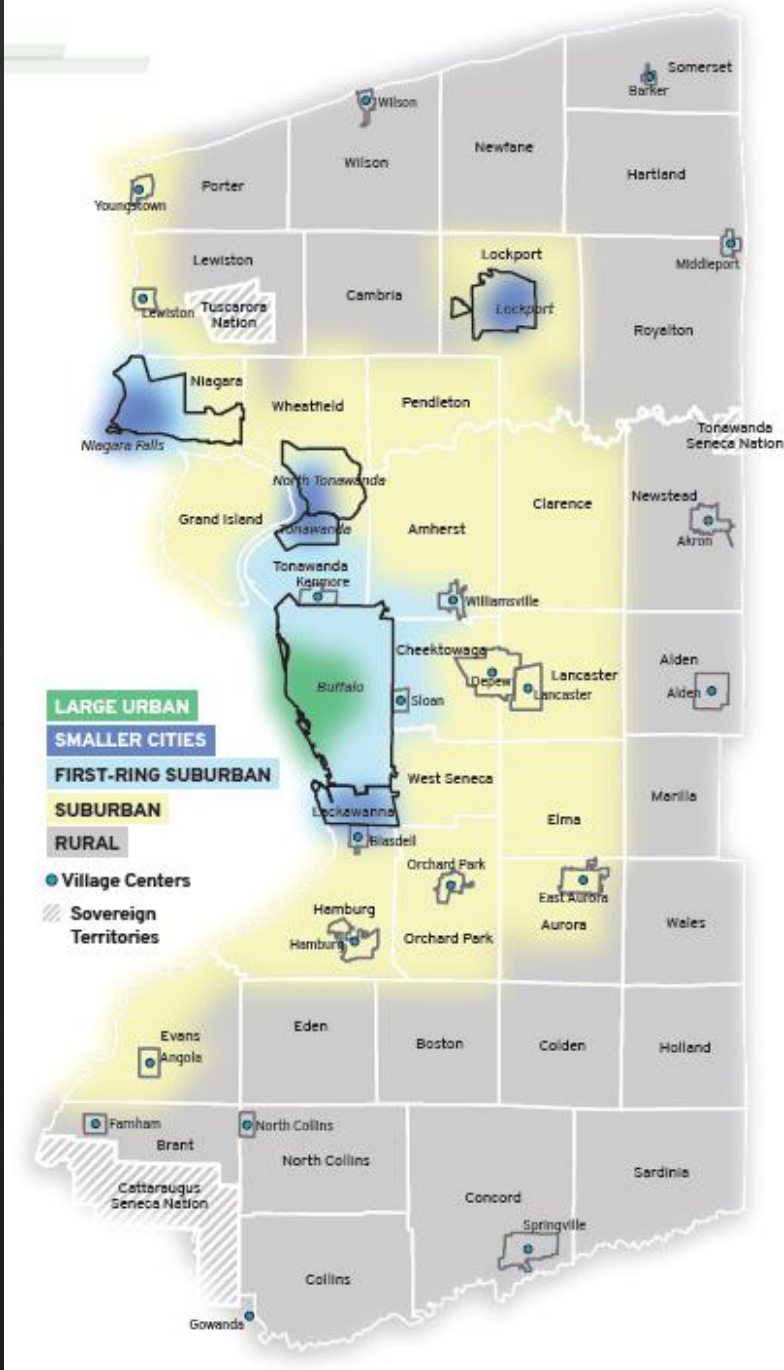
## Innovation

By 2050, we will be making transformative changes to the way we plan, fund and implement the region's transportation investments through harnessing technological advances, making data-driven decisions and utilizing creative and diverse partnerships and funding sources.



A FRAMEWORK TO  
GUIDE DECISIONS

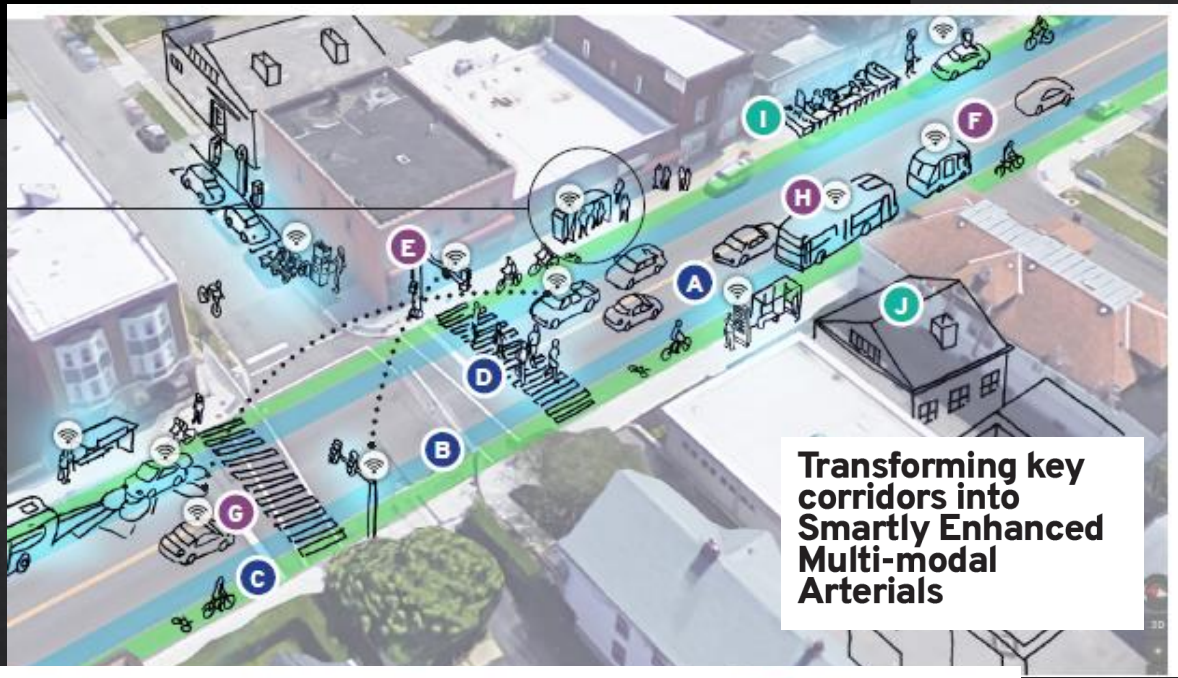
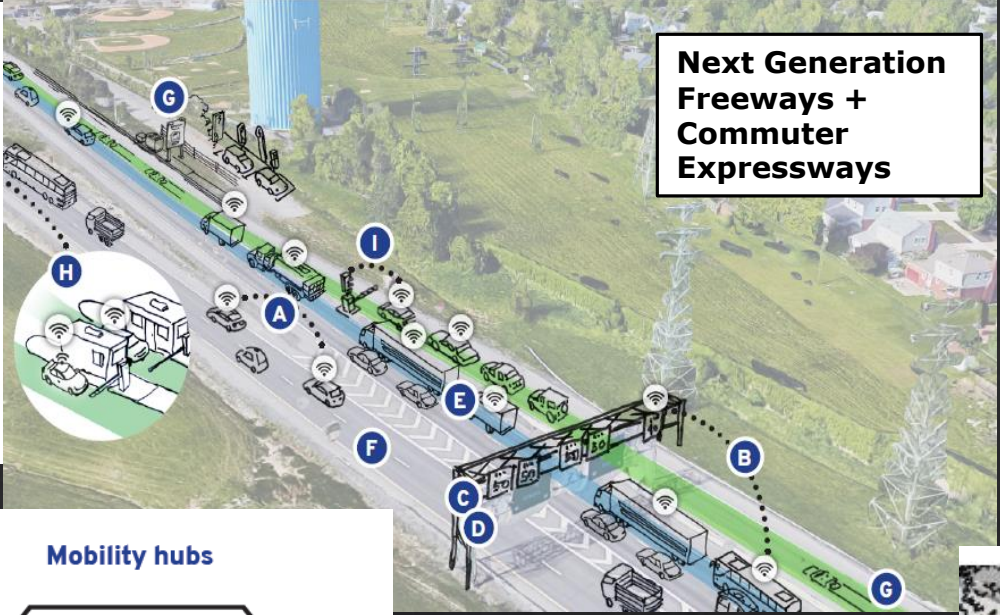
# Different places, different needs





# Visualizing the Future

- A** Vehicle-to-vehicle (V2V) communications
- B** Vehicle-to-infrastructure (V2I) communications
- C** Electronic signage
- D** Variable speeds
- E** Autonomous vehicle (AV) lane
- F** Sustainable materials
- G** Alternative fueling (charging stations and lanes)
- H** Electronic tolling

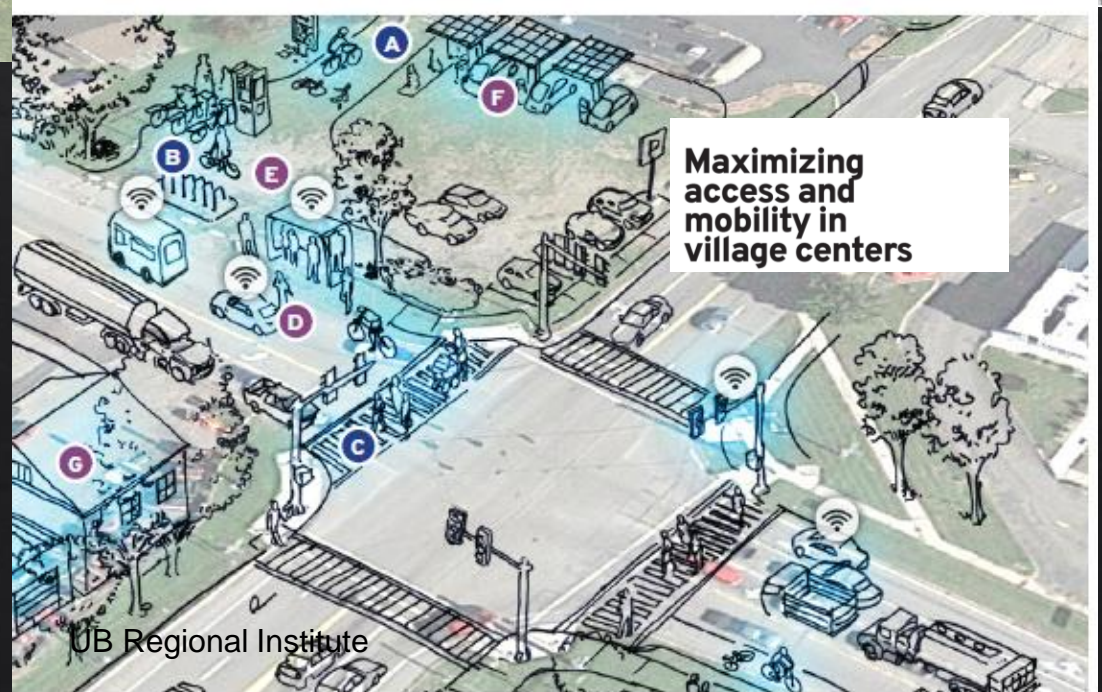


## Mobility hubs



Mobility hubs conveniently connect all these services at one location.

- |   |  |   |
|---|--|---|
| <p><b>Real-time travel information</b></p> <ul style="list-style-type: none"> <li>• Kiosks, trip planners and message signs for real-time navigation</li> <li>• Wi-fi access for on-demand trip planning on mobile devices</li> </ul> | <p><b>MaaS transportation options</b></p> <ul style="list-style-type: none"> <li>• TNCS</li> <li>• Bike shares</li> <li>• Car shares</li> <li>• Microtransit</li> <li>• Public transit</li> <li>• Smart parking</li> </ul> | <p><b>Mobility amenities</b></p> <ul style="list-style-type: none"> <li>• Electric vehicle charging stations</li> <li>• Bike repair stations</li> <li>• Proximity to services, shops, restaurants and more</li> </ul> |
|---|--|---|



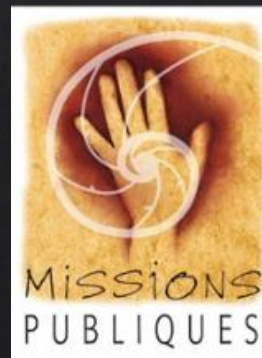
# OUR DRIVERLESS FUTURES

## COMMUNITY FORUM ON AUTOMATED MOBILITY

National and international collaboration to learn about citizens' hopes, dreams, and fears about automated mobility

- Austria
- Canada
- Croatia
- France
- Germany
- Netherlands
- Portugal
- UK
- USA (Boston, Buffalo, DC, Phoenix)
- Singapore

 **Center for Smart  
Cities and Regions**  
Arizona State University



[themobilitydebate.net](http://themobilitydebate.net)

# OUR DRIVERLESS FUTURES

Buffalo, NY  
August 2019



# Smart Mobility in Buffalo Niagara:

## Working Regionally to Integrate Technology into our Transportation System



**SMART MOBILITY IN  
BUFFALO NIAGARA**

October 30, 2020



**nittec**  
*Travel Smart.*



## Buffalo Niagara Mobility Data Business Plan Workshop



43 North Winner SparkCharge secures \$1 million from 'Shark Tank' investors

SparkCharge makes portable electric vehicle charging units, and has manufacturing operations in Buffalo. On "Shark Tank", they pitched SparkCharge's units, called the Roadie, as portable, modular and "ultrafast," providing recharging service to electric

# MPOs + Smart Mobility

- Be proactive, not reactive
- Use technology to support our goals
- Racial, socioeconomic and ability equity at the center
- Continue education and outreach
- Integrate tech into corridor, street improvements
- Rethinking mobility with (and post?) COVID
- Shrinking/low growth, excess infrastructure, and bi-national region = unique challenges and opportunities
- Univ. of Buffalo AV shuttle testbed project
- Implement e-micromobility (now legal in NY State)
- Envision how we can repurpose our excess infrastructure





Greater Buffalo Niagara Regional Transportation Council

[gbnrtc.org](http://gbnrtc.org)



Dr. Lisa Kenney

[LKenney@gbnrtc.org](mailto:LKenney@gbnrtc.org)