



Region 1 Planning Council
COLLABORATIVE PLANNING FOR NORTHERN ILLINOIS

Utilizing REMI to Plan Alternative Future Growth Scenarios

A BLUEPRINT FOR INVESTMENT OVER THE NEXT 25-30 YEARS

PRESENTED BY COLIN BELLE

OCTOBER 17, 2019



Special-purpose, regional government agency designated to coordinate intergovernmental collaboration.

Comprised of the designated metropolitan planning organization (MPO), the economic development district (EDD), geographical information system (WinGIS), and land bank authority (LBA).

Governance platform for local policymakers to convene on and understand the issues affecting the region and their respective jurisdictions.

Planning

Land use, transportation, economic development and redevelopment, workforce development, & more

Funding

Grant writing and administration, revolving loan funds, & program development.

Analytics

GIS, economic impact modeling, travel demand modeling, research, data collection and analysis, & RFP fulfillment.

Metropolitan Planning Organization

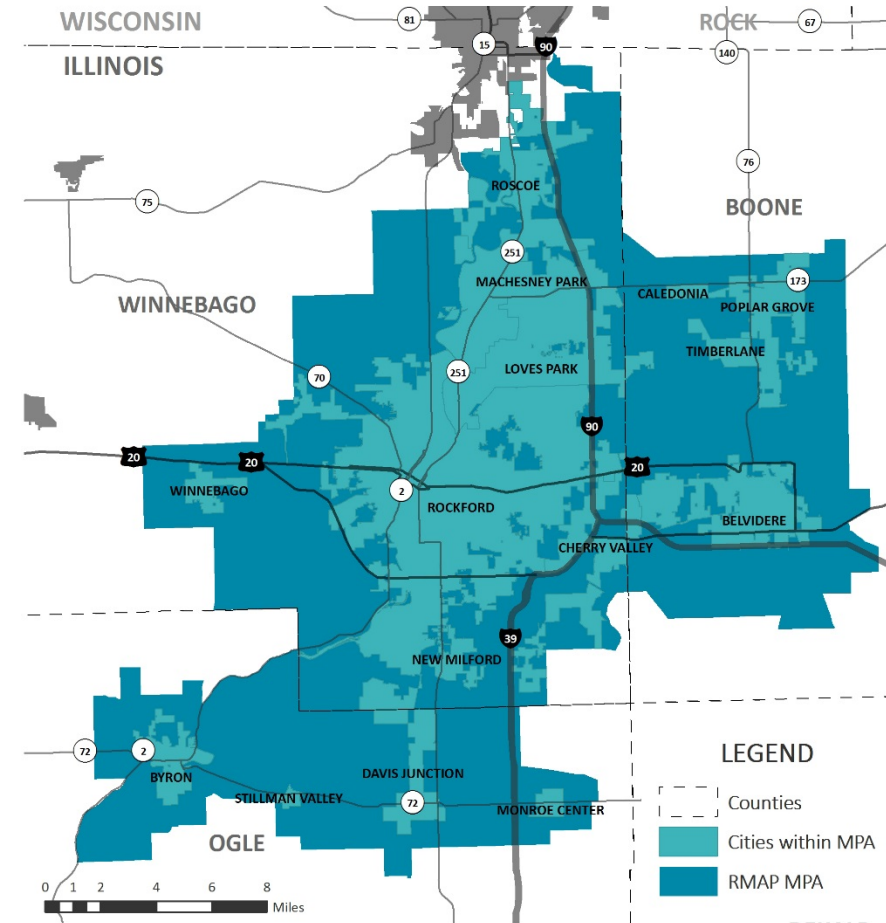
MPO'S must prepare a Metropolitan Transportation Plan (MTP) in accordance with 49USC 5303(1)

Following federal transportation law (MAP-21 and FAST Act), MPOs are required to transition to performance-driven, outcome-based programs

Carry out federally mandated transportation planning duties

Coordinate transportation planning initiatives and infrastructure with regional stakeholders

Serves the urbanized areas and forecasted urbanized areas of Boone, Ogle, and Winnebago Counties



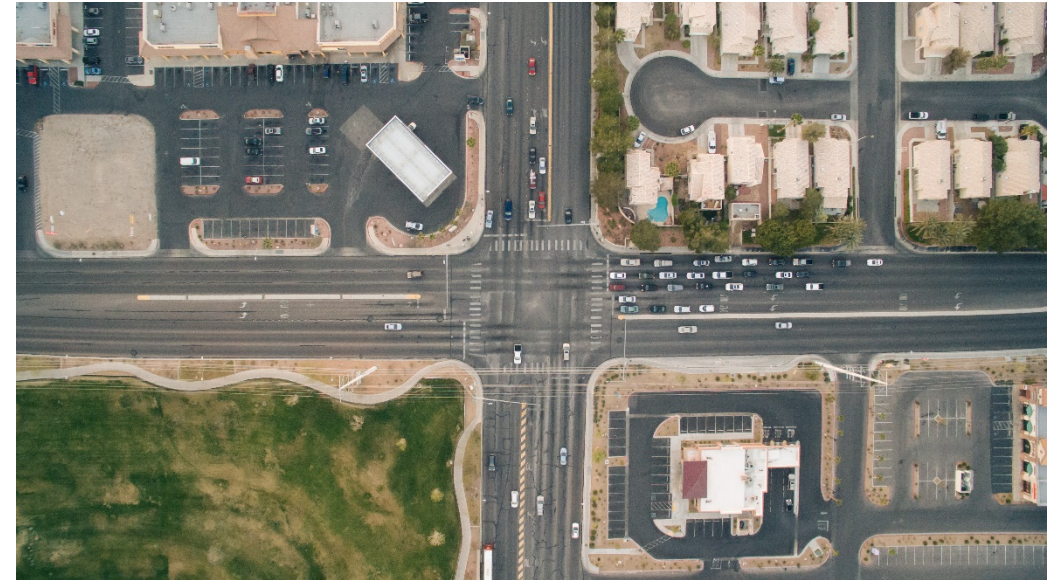
Alternative Scenario Development

These scenarios are not meant to be either-or-choices.

Our future will likely be some combination of each of these scenarios. These scenarios are meant to help us understand how the transportation decisions we make today about how to grow could affect our economy, environment, and community in the future.

1. Business as Usual (REMI Baseline)
2. Green Infrastructure
3. Business is Booming
4. Urban Centers & Corridors
5. Shifting Demographics

Many data inputs were derived from the 2018-2019 Transportation Needs & Priorities Survey.

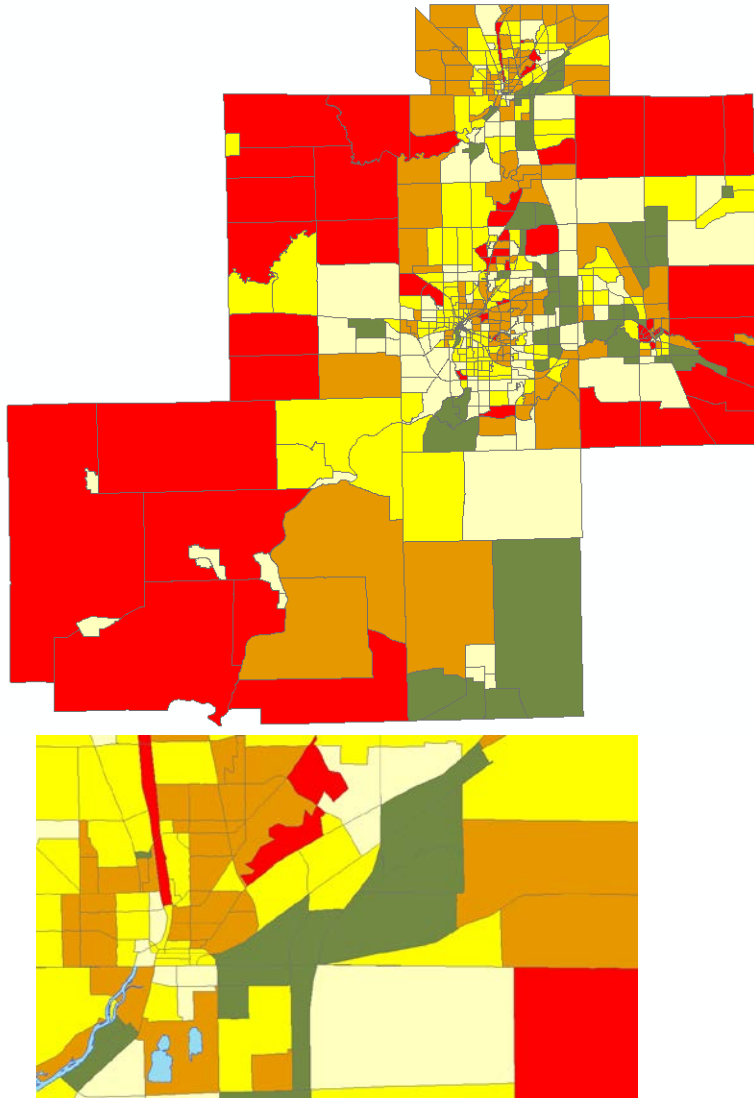


Projection Values – compound annual growth rates

Scenario-A BAU	Ag., Forest, Fish, & Related Activities	Mining	Utilities	Const.	Manufacturing	Whole sale Trade	Retail Trade	Transportation & Warehousing	Info.	Finance & Insurance	Real Estate & Rental & Leasing	Professional, Scientific, & Technical Services	Management of Companies & Enterprises	Administrative & Waste Management Services	Educational services; private	Health Care & Social Assistance	Arts, Entertainment, & Recreation	Accommodation & Food Services	Other Services, except Public Admin	Gov.	Farm	Total	Population 2040
Winnebago-IL	255	178	983	6,080	24,435	5,435	19,234	6,659	1,333	8,823	4,266	7,561	317	17,053	2,922	34,209	3,337	12,032	11,222	15,469	612	182,415	302,065
Boone-IL	141	7	1	1,869	7,577	552	2,142	1,362	166	758	736	1,079	76	825	204	1,626	341	1,022	1,507	2,101	410	24,502	54,239
Ogle-IL	292	71	35	1,670	3,686	2,372	3,007	1,404	112	1,110	811	12	0	1,127	135	2,320	303	1,170	1,348	3,111	867	24,963	52,744
	688	256	1,019	9,619	35,698	8,359	24,383	9,425	1,611	10,691	5,813	8,652	393	19,005	3,261	38,155	3,981	14,224	14,077	20,681	1,889	231,880	

Scenario-D Concentrated High Growth	Ag., Forest, Fish, & Related Activities	Mining	Utilities	Const.	Manufacturing	Whole sale Trade	Retail Trade	Transportation & Warehousing	Info.	Finance & Insurance	Real Estate & Rental & Leasing	Professional, Scientific, & Technical Services	Management of Companies & Enterprises	Administrative & Waste Management Services	Educational services; private	Health Care & Social Assistance	Arts, Entertainment, & Recreation	Accommodation & Food Services	Other Services, except Public Admin	Gov.	Farm	Total	Population 2040
Winnebago-IL	280	180	1,431	6,884	27,378	5,744	22,650	6,659	1,477	9,530	4,344	8,241	321	18,346	3,035	52,284	3,381	12,483	11,221	15,538	612	212,020	344,254
	1.5%	1.5%	0.5%	3%	-3%	1.5%	3%	3%	0.5%	1.5%	-3%	1.5%	1.5%	1.5%	1.5%	3%	1.5%	1.5%	0.5%	1.5%	-	-	
Boone-IL	153	7	1	2,478	7,840	582	2,215	1,453	190	816	762	1,280	81	846	212	2,526	350	1,037	1,531	2,130	410	26,700	57,682
	1.5%	1.5%	0.5%	3%	3%	1.5%	1.5%	3%	0.5%	0.5%	-3%	1.5%	0.5%	0.5%	1.5%	3%	1.5%	1.5%	0.5%	1.5%	-	-	
Ogle-IL	318	75	55	2,183	3,933	2,994	3,131	1,595	135	1,157	1,263	13	0	1,016	140	3,435	311	1,210	1,380	3,152	867	28,360	58,438
	1.5%	0.5%	0.5%	3%	3%	3%	1.5%	3%	0.5%	0.5%	3%	1.5%	-	0.5%	1.5%	3%	1.5%	1.5%	0.5%	1.5%	-	-	
	751	262	1,487	11,545	39,151	9,319	27,996	9,707	1,802	11,503	6,370	9,534	402	20,208	3,386	58,045	4,042	14,730	14,132	20,820	1,889	267,080	

Employment & Housing Data Distribution



Scenario-A BAU		BR 1	BR 2	BR 3	BR 4	BR 5	BR 1	BR 2	BR 3	BR 4	BR 5
Region		Employment	Employment	Employment	Employment	Employment	Housing	Housing	Housing	Housing	Housing
Winnebago-IL		80	10	5	5	0	80	10	5	5	0
Boone-IL		50	45	5	0	0	65	15	15	5	0
Ogle-IL		80	10	7	3	0	90	7	2	1	0

Scenario-C High Growth		BR 1	BR 2	BR 3	BR 4	BR 5	BR 1	BR 2	BR 3	BR 4	BR 5
Region		Employment	Employment	Employment	Employment	Employment	Housing	Housing	Housing	Housing	Housing
Winnebago-IL		60	25	10	3	2	63	15	15	5	2
Boone-IL		40	30	25	4	1	55	20	20	5	0
Ogle-IL		60	25	12	2	1	60	25	12	2	1

Scenario-D Concentrated High Growth		BR 1	BR 2	BR 3	BR 4	BR 5	BR 1	BR 2	BR 3	BR 4	BR 5
Region		Employment	Employment	Employment	Employment	Employment	Housing	Housing	Housing	Housing	Housing
Winnebago-IL		5	45	45	5	0	0	20	60	20	0
Boone-IL		15	5	45	35	0	65	8	20	7	0
Ogle-IL		20	70	10	0	0	15	70	15	0	0

Business As Usual

This scenario presents a future in which investments and policies continue the current land use and transportation trends.



Continued Trends
The population and economy continuing to grow at current rates.



Maintenance & Preservation
Primary focus on maintenance of existing transportation facilities and regional asset management over new facilities.



Auto-Oriented
Only incremental improvements to the alternative transportation network (i.e. public transit, bicycle, pedestrian, etc.)



Suburban Growth
Development occurs along outer edge of existing municipal service areas (e.g fire, water, and waste).



Increased Commute Times
Development patterns lead to longer commute/travel times.

Business As Usual



409,050



231,900



124,000 HHs



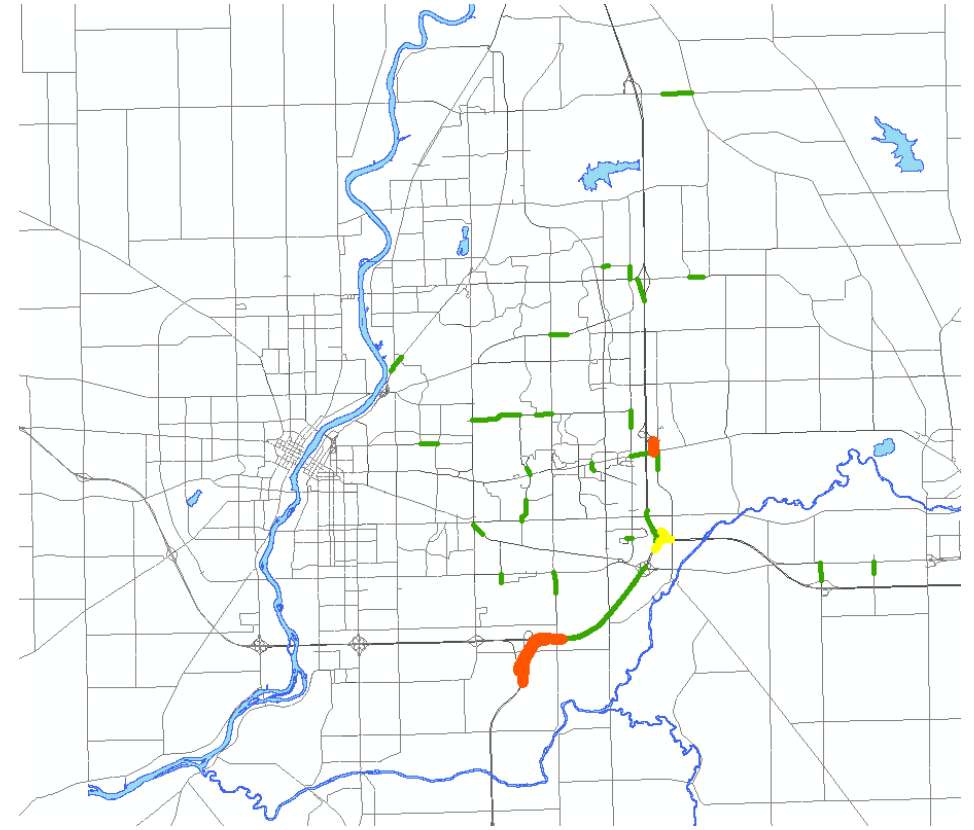
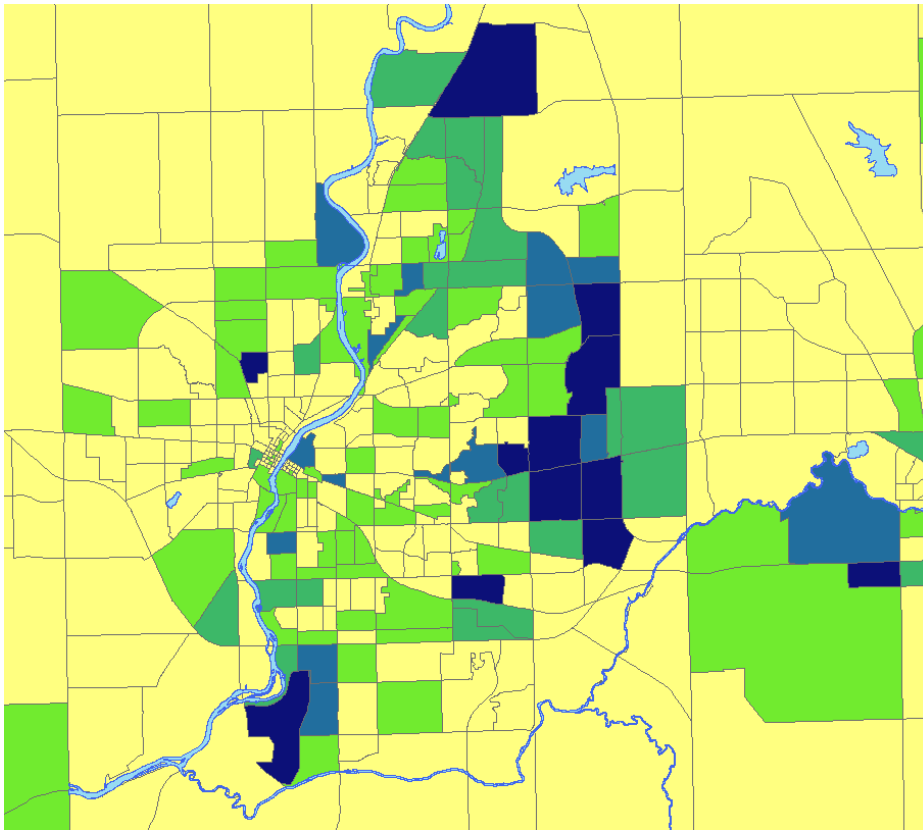
\$36.5mil



28.3 VMTs



1.7 mil tonnes CO2

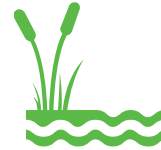


Green Infrastructure

This scenario presents a future in which there is an increased desire for green infrastructure (e.g. permeable pavement, bioswales, etc.) due to environmental considerations nationwide such as climate change.



Multimodal Transportation
Focus on expanded alternative transportation facilities with increased first & last mile connectivity.



Environmental Regulations
Restrictions become stricter on a national level in response to extreme weather events & changes in environmental conditions.



Alternative Fuel
Electric charging infrastructure & other alternative fuel sources are available along key corridors and urban cores.



System Resiliency
A multimodal transportation strategy is developed that emphasizes maintenance & resiliency.



Intelligent Transportation Systems
Investments in connected/ autonomous vehicle technology for transit that is implemented with a robust Intelligent Transportation System (ITS).



Flooding Mitigation
Due to increasing flooding potential, construction in the flood plains is discouraged & increasing mitigation is required.

Green Infrastructure



417,900 (↑2.16%)



236,600 (↑2.05%)



125,000 HHs (↑<1.0%)



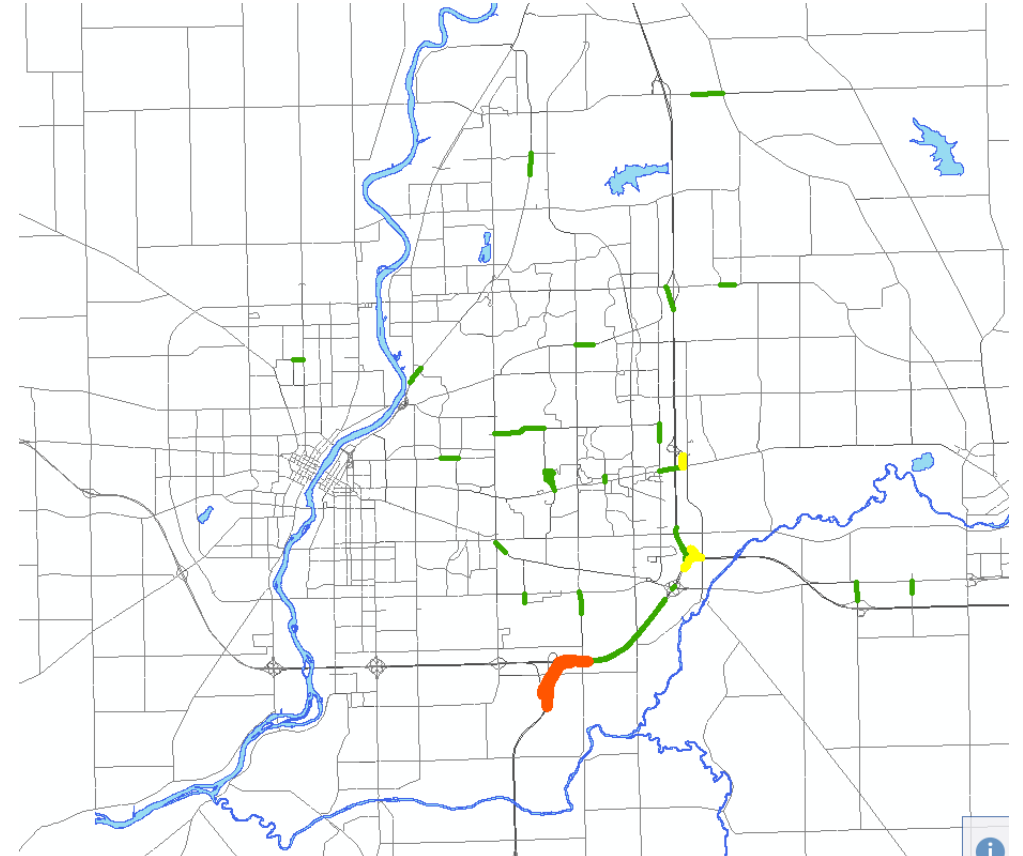
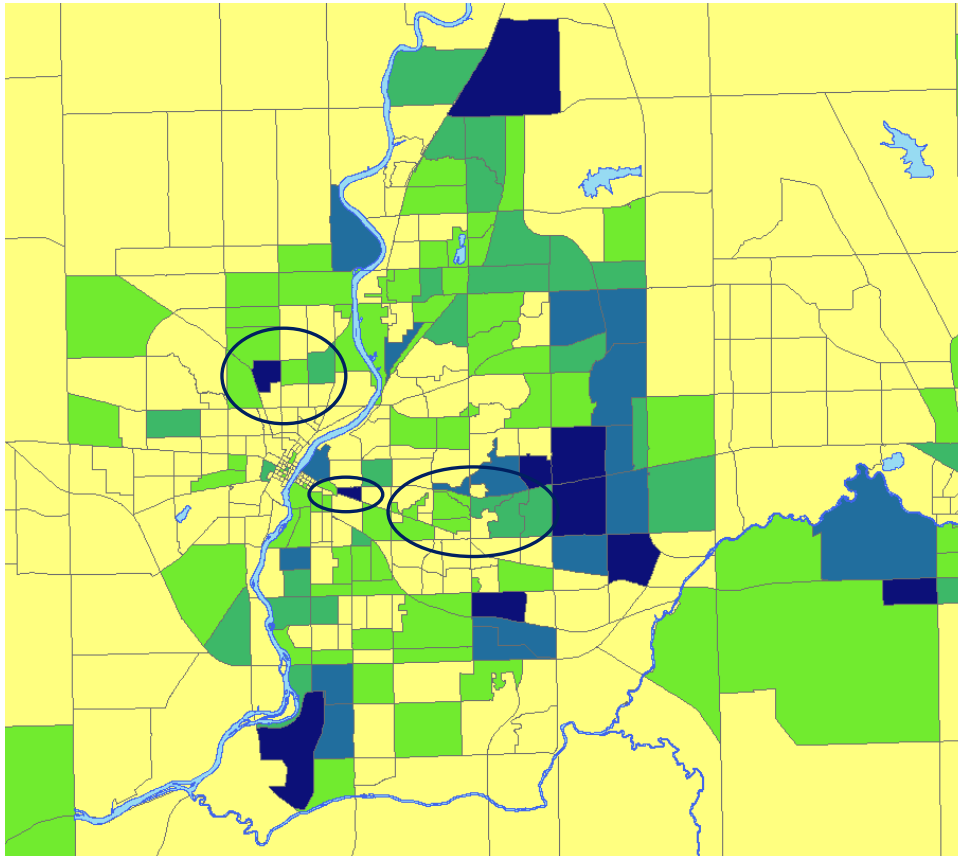
\$37.3mil (↑2.34%)



27.7 VMTs (↓ 2.1%)



1.7 mil tonnes CO2 (=)



Business Is Booming

This scenario presents a future in which there is growth of key economic sectors within the region, (i.e. manufacturing sector, healthcare sector, etc.) at a stronger rate in the upcoming years.



Employment Growth

High employment growth in key economic sectors drive the region.



Freight & Auto-Oriented

Freight and auto-oriented development lead to increased vehicle miles traveled (VMT) in the region.



Increased Technology

Investment in ITS and smart corridors to reduce congestion & promote system efficiency.



Increased Energy Needs

To offset the energy needs of the community, there is a regional push for alternative energy systems.



Market-Driven Sprawl

Market-driven growth for new development outside of existing service areas.



Air Quality Considerations

Potential air quality considerations & increased system maintenance costs.

Business Is Booming



460,400 (↑ 12.55%)



266,700 (↑ 15.02%)



133,000 HHs (↑ 7.3%)



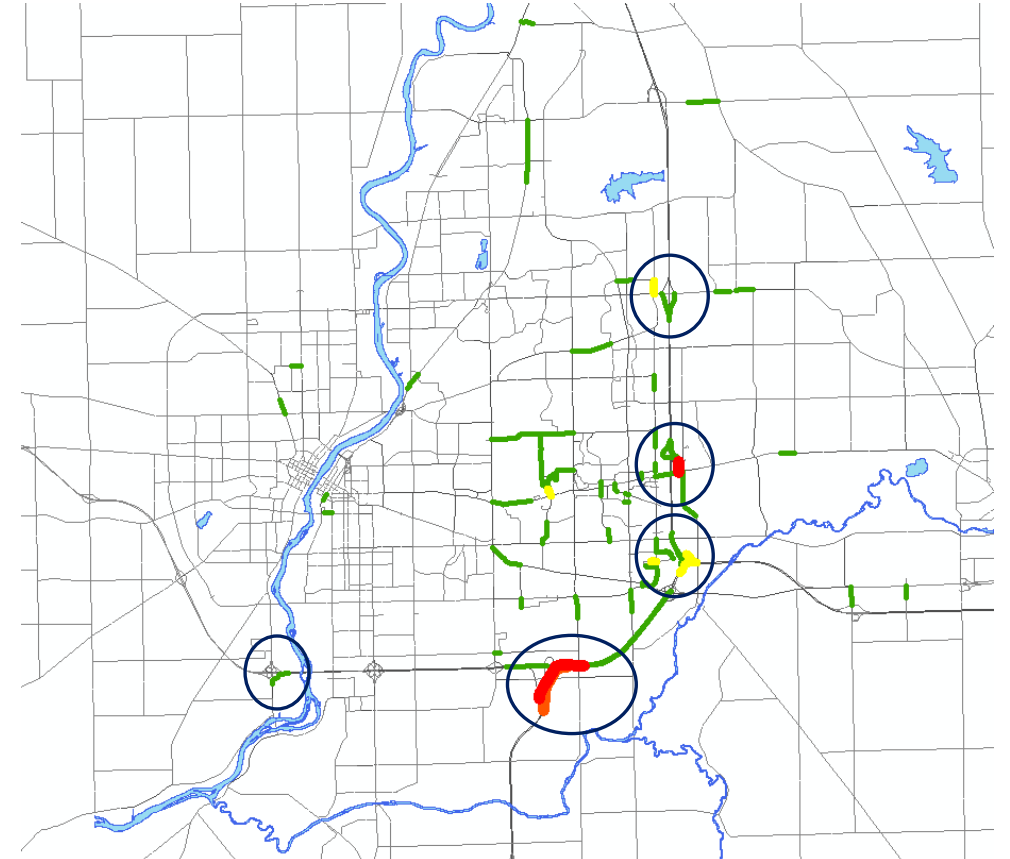
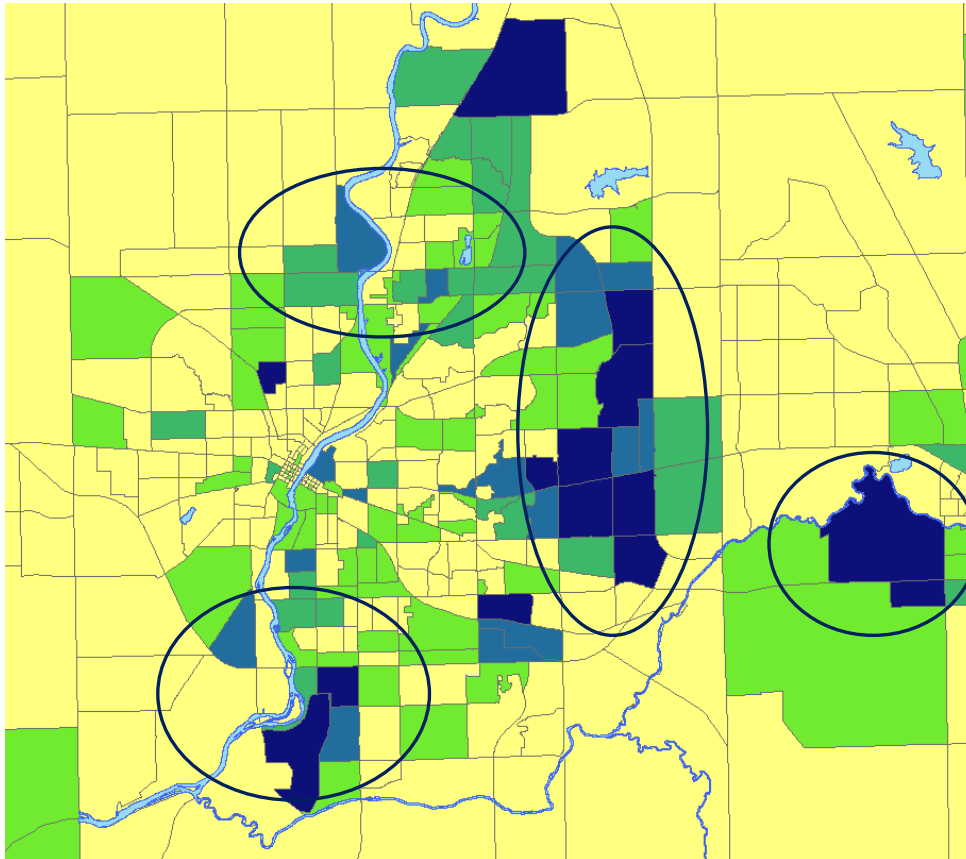
\$41.1 mil (↑ 12.67%)



27.8 VMTs (↓ 1.7%)



1.89 mil tonnes CO2 (↑)



Urban Centers & Corridors

This scenario presents a future in which there is increased investment in technological advancements to improve transportation system efficiency and policies that emphasize redevelopment of urban centers and major corridors.



Connected Vehicles

More connected network for personal vehicles, freight, & alternative transportation options.



Revitalization

Mixed-use development encouraged in urban centers and other strategic areas along major corridors.



Development Strategies

Transit-oriented development & strategic policies encourage infill in existing areas.



System Resiliency

Pursuit of transportation system resiliency & maintenance instead of expansion.



Multimodal Transportation

Increased alternative transportation options due to housing, employment, and commercial densities.



Employment Growth

High employment growth in key economic sectors drive the region.

Urban Centers & Corridors



460,400 (↑ 12.55%)



266,700 (↑ 15.02%)



137,000 HHs (↑ 10.5%)



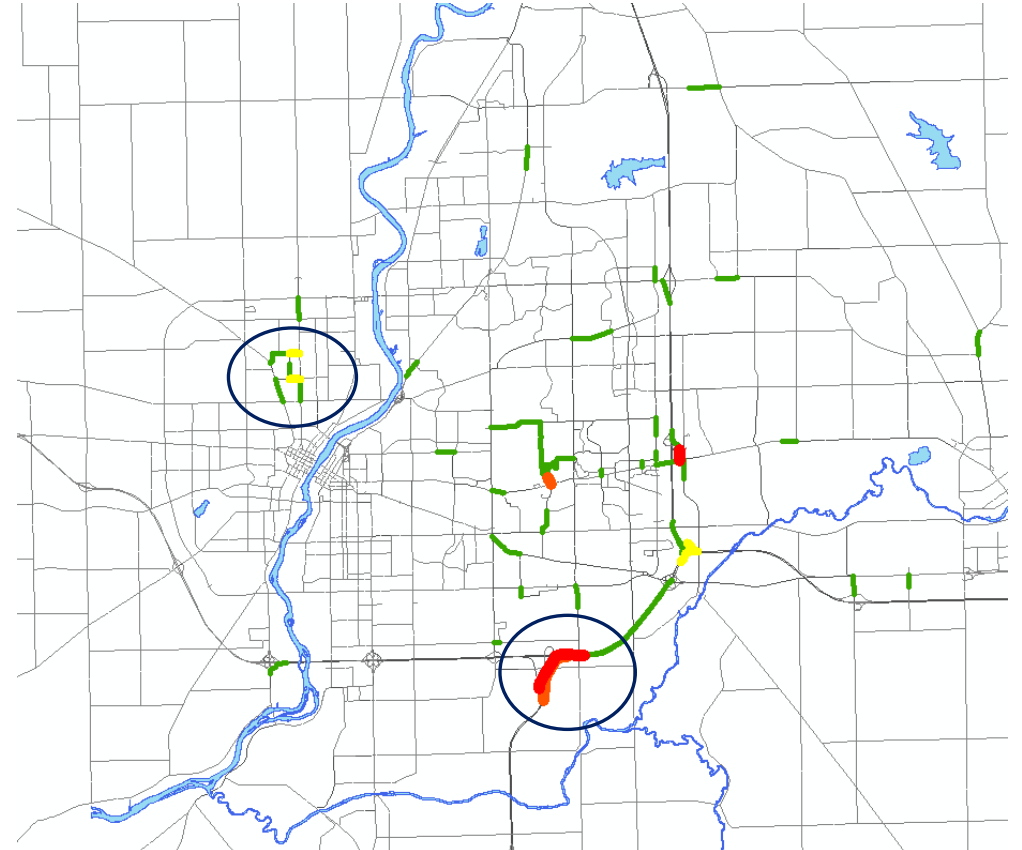
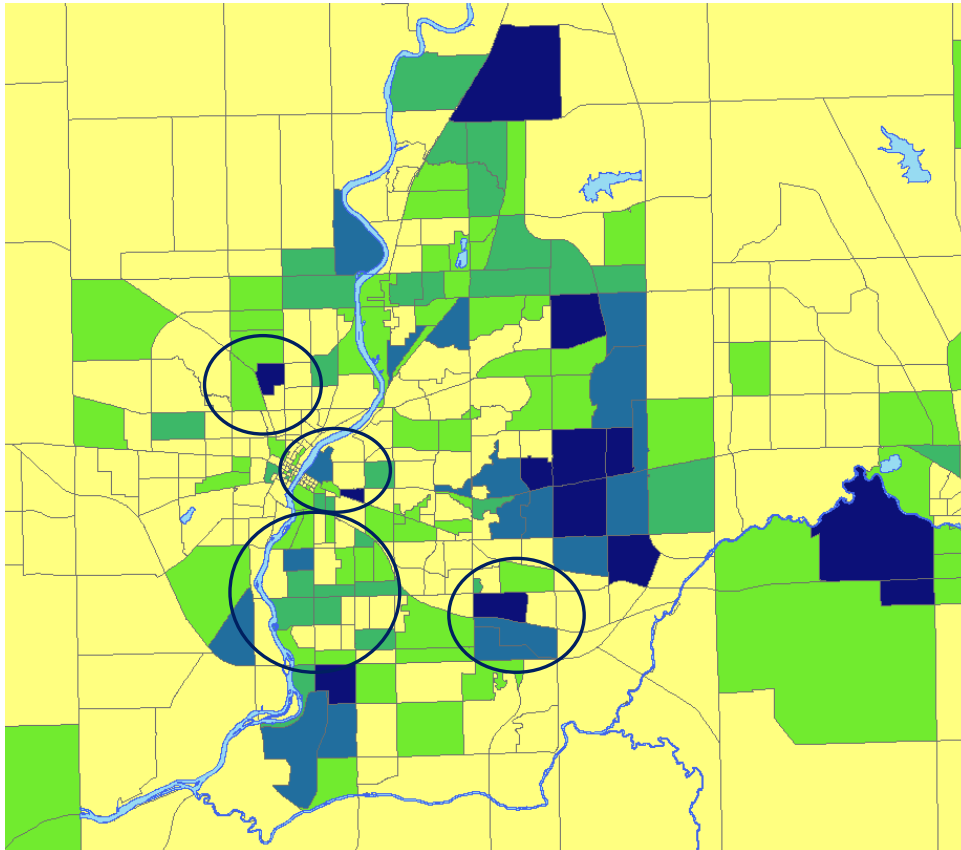
\$41.1 mil (↑ 12.67%)



21.0 VMTs (↓ 25%)



1.45 mil tonnes CO2 (↓)



Shifting Demographics

This scenario presents a future in which the region faces financial hardships due to major shifts in demographics and environment (both locally and statewide).



Limited Funds

Growth outside of the existing municipal service area (fire, water, etc.) is limited due to limited funds.



Shifting Demographics

Regional population remains at current levels due to declining birth rates and influx of migration.



Workforce Changes

Shift in workforce demographics due to “brain drain” and aging populations.



Alternative Transportation

The changing population is more likely to carpool, walk, use transit, or ride a bicycle than the previous generations.



Maintenance & Preservation

Minimal expansion of transportation facilities & maintenance of only strategic assets.

Shifting Demographics



396,250 (↓ 3.13%)



220,800 (↓ 4.8%)



123,000 HHs (↓ <1%)



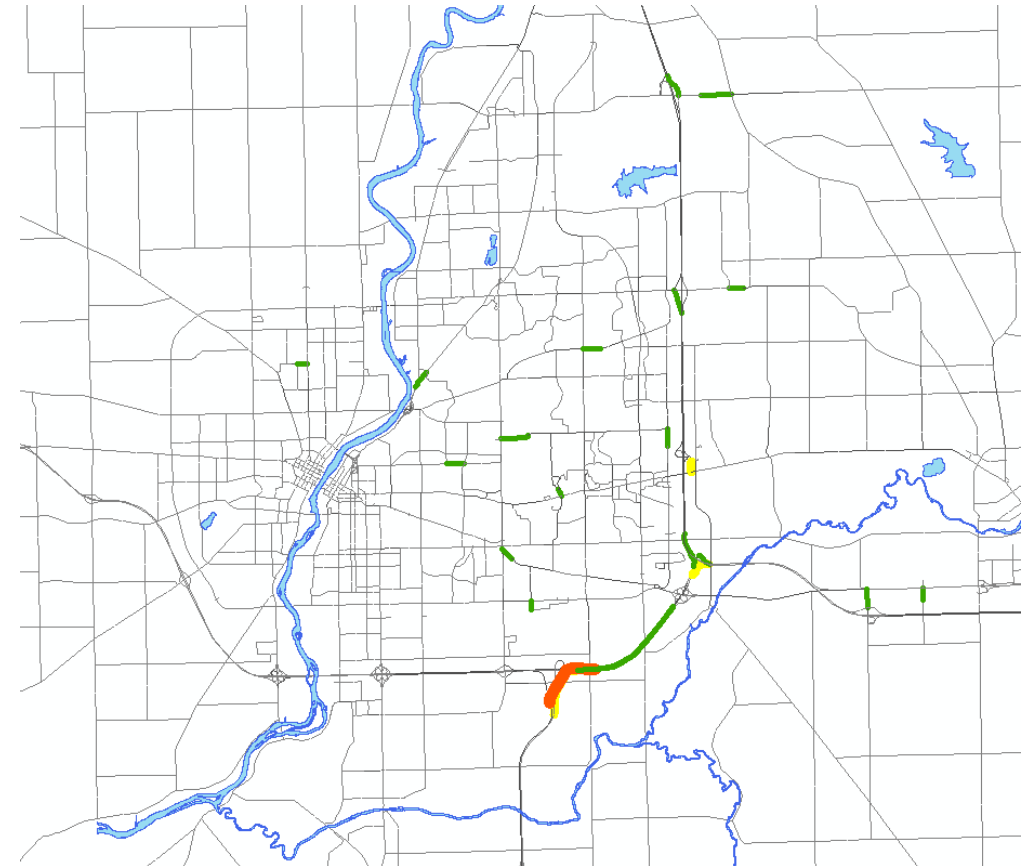
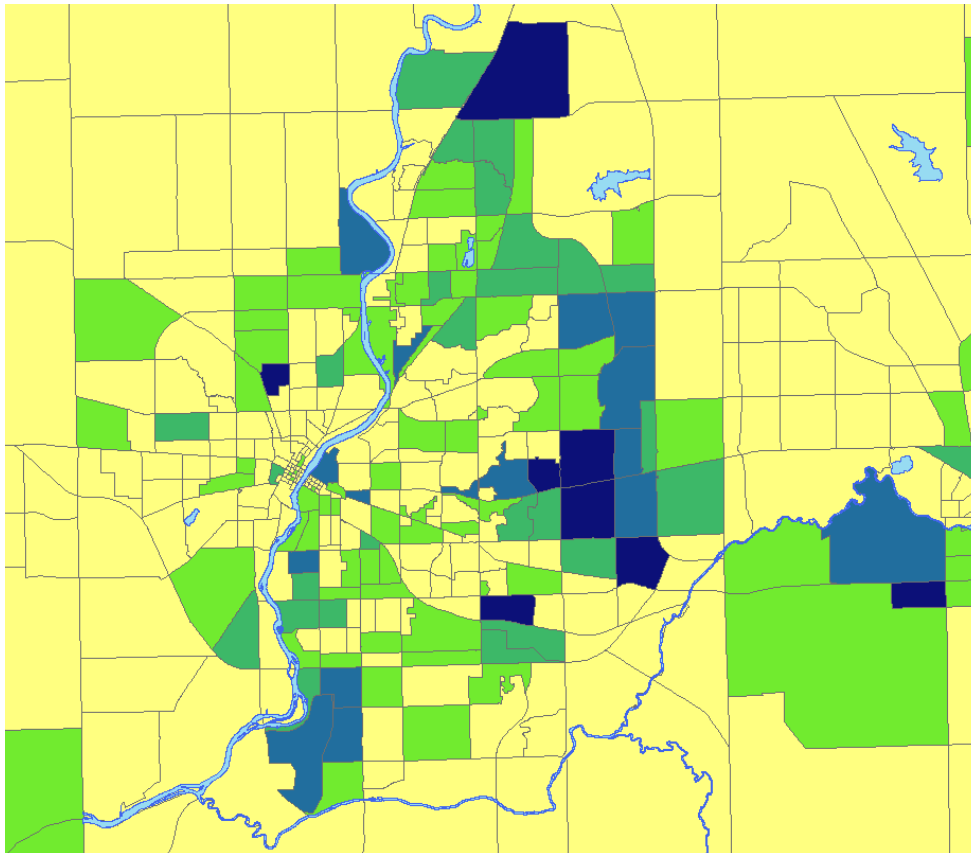
\$35.5 mil (↓ 2.75%)



27.7 VMTs (↓ 2.1%)



1.63 mil tonnes CO2 (↓)



Public Engagement

- The initial round of public engagement was especially key in not only identifying the transportation needs and priorities but also educating the public on the current conditions of the transportation network and building a foundation for future public and stakeholder support of the final plan.
- The second round of public engagement will focus on presenting the public and stakeholders the alternative scenarios developed by the MPO and ask the public which elements of the scenarios should be utilized to create the preferred scenario for the Rockford MPA in the year 2050.

WHAT IF WE IMAGINED OUR FUTURE DIFFERENTLY?

Take the survey or share your thoughts by
September 30, 2019 at:

r1planning.org/mtp

Responses to the survey will be used to inform a preferred
future scenario.



In Conclusion...

Again, these scenarios are not meant to be either-or-choices

- Scenario planning gives citizens the chance to ask the “what if?” questions about their communities future and the paths chosen to arrive there
- Our future will most likely be a combination of these scenarios
- Scenario planning helps us understand how today's decisions will impact our future in
- Allows for a more adaptive and sustainable approach to planning while setting guide posts through the development of future policy initiatives
- Scenario planning and development must occur regularly in order to keep up with emerging trends and information



What if We Imagined Our Future Differently?

Region 1 Planning Council (RPC) is working on the development of the Rockford Region's Metropolitan Transportation Plan (MTP). The MTP will be a blueprint to help shape growth and improve the transportation network.

What will the future look like in the year 2050? Take this simple survey, and tell us how you see the future of the Rockford Region.

- How old will you be in 2050? (Add 31 to your current age)**
 - ☐ 40 to 49
 - ☐ 50 to 59
 - ☐ 60 to 69
 - ☐ 70 to 79
 - ☐ 80 or older
- How should future growth and development be managed?**
 - ☐ Reinvest/redevelop high density areas, such as downtowns and major corridors.
 - ☐ Economic needs should be the driving force to determine where growth occurs.
 - ☐ Development along the edge of municipal service area (fire, water, sewage, etc.).
 - ☐ Transit-oriented development and strategic policies in existing municipal service areas.
- If you had a convenient commute and cost were not an issue, where would you choose to live?**
 - ☐ An urban neighborhood
 - ☐ Suburban community
 - ☐ Small town
 - ☐ Rural area
 - ☐ Other: _____
- What level of investment (e.g. staff, time, funding) would you want in alternative energy infrastructure, such as solar charging stations, alternative fuel sources, etc.?**
 - ☐ High
 - ☐ Moderate
 - ☐ Current
 - ☐ Limited
 - ☐ None
- What level of investment (e.g. staff, time, funding) would you want in alternative transportation options and connectivity, such as sidewalks, on-street bike lanes, and shared use paths?**
 - ☐ High
 - ☐ Moderate
 - ☐ Current
 - ☐ Limited
 - ☐ None
- What level of investment (e.g. staff, time, funding) would you want in public transit service and capital, such as buses, bus shelters, signage, etc.?**
 - ☐ High
 - ☐ Moderate
 - ☐ Current
 - ☐ Limited
 - ☐ None
- To mitigate flooding and other extreme weather, what policies and/or considerations should be put in place? (Check all that apply)**
 - ☐ Energy infrastructure improvements
 - ☐ Investment in “green infrastructure” elements (e.g. permeable pavement, bioswales, etc.)
 - ☐ Policies to reduce greenhouse gas emissions
 - ☐ Stricter development regulations in flood plains
 - ☐ None
 - ☐ Other: _____
- What should be the two major types of roadway investment?? (Select two)**
 - ☐ Bridges and structures
 - ☐ Capacity
 - ☐ Connectivity
 - ☐ Maintenance
 - ☐ New Construction
 - ☐ Reconstruction
 - ☐ Safety
 - ☐ Other: _____
- Where do you think the focus for autonomous/connected vehicle investment be?**
 - ☐ Connected vehicle (shares data with other devices both inside and outside the vehicle)
 - ☐ Freight sector
 - ☐ Personal vehicles
 - ☐ Public transit sector
 - ☐ All vehicles/sectors
 - ☐ None
- When investing in future infrastructure what is more important?**
 - ☐ High initial costs but lower maintenance costs over time
 - ☐ Low initial costs but higher maintenance costs over time

Please continue on the other side. ➔



Region 1 Planning Council

COLLABORATIVE PLANNING FOR NORTHERN ILLINOIS

QUESTIONS?

Presented by Colin Belle

October 17, 2019

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