

# **GENESEE TRANSPORTATION COUNCIL**

*The Metropolitan Planning Organization for the Genesee-Finger Lakes Region*

# Regional Scenario Planning Tools

New York State Association of MPOs

May 9, 2023

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# Regeneration for Small Growth Region

## Challenges



- Slow population growth
- Change in employment
- Job sprawl
- Persistent poverty and environmental justice

## Opportunities

- Strong urban and regional cores
- Growth in multiple industries
- Investment in transit and active transportation
- Partnership across public, private, and civic sectors

# Need for Scenario Planning

1. Broaden the conversation about long-range issues and plans
  - Change the conversation from regional decline to future opportunities
  - Reach more audiences through visualizations and public involvement
  - Facilitate bringing multiple jurisdictions to the table
  - Provide technical resources, while letting locals lead
2. Provide technical resources to enable planning
  - Financial support and leadership for developing a scenario platform
  - TAZs do not provide the resolution necessary



# Need for Scenario Planning

## 3. Foster collaboration among existing and new partners

- *GTC Call for Partnerships*
  - Annual funding (~\$750k to \$1M) for local studies and plans
- Funding and technical support for (Sub-) Regional land use studies
- Lay foundation for multi-jurisdictional land use plans, polices, and agreements

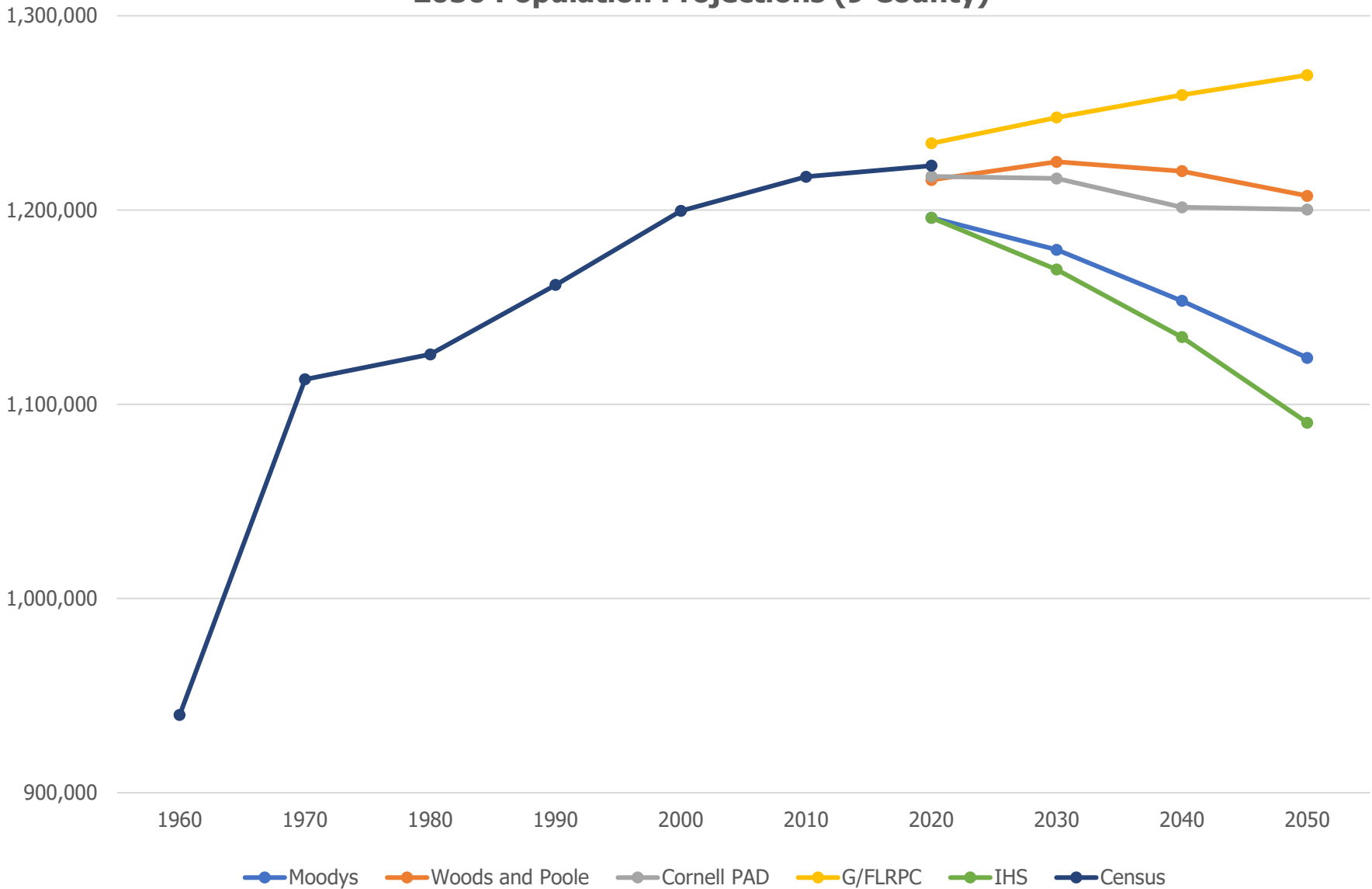
## 4. Preparation for future issues and regulations

- New York State Climate Leadership and Community Protection Act
- County Housing and Farm Protection plans

## Previous Projections

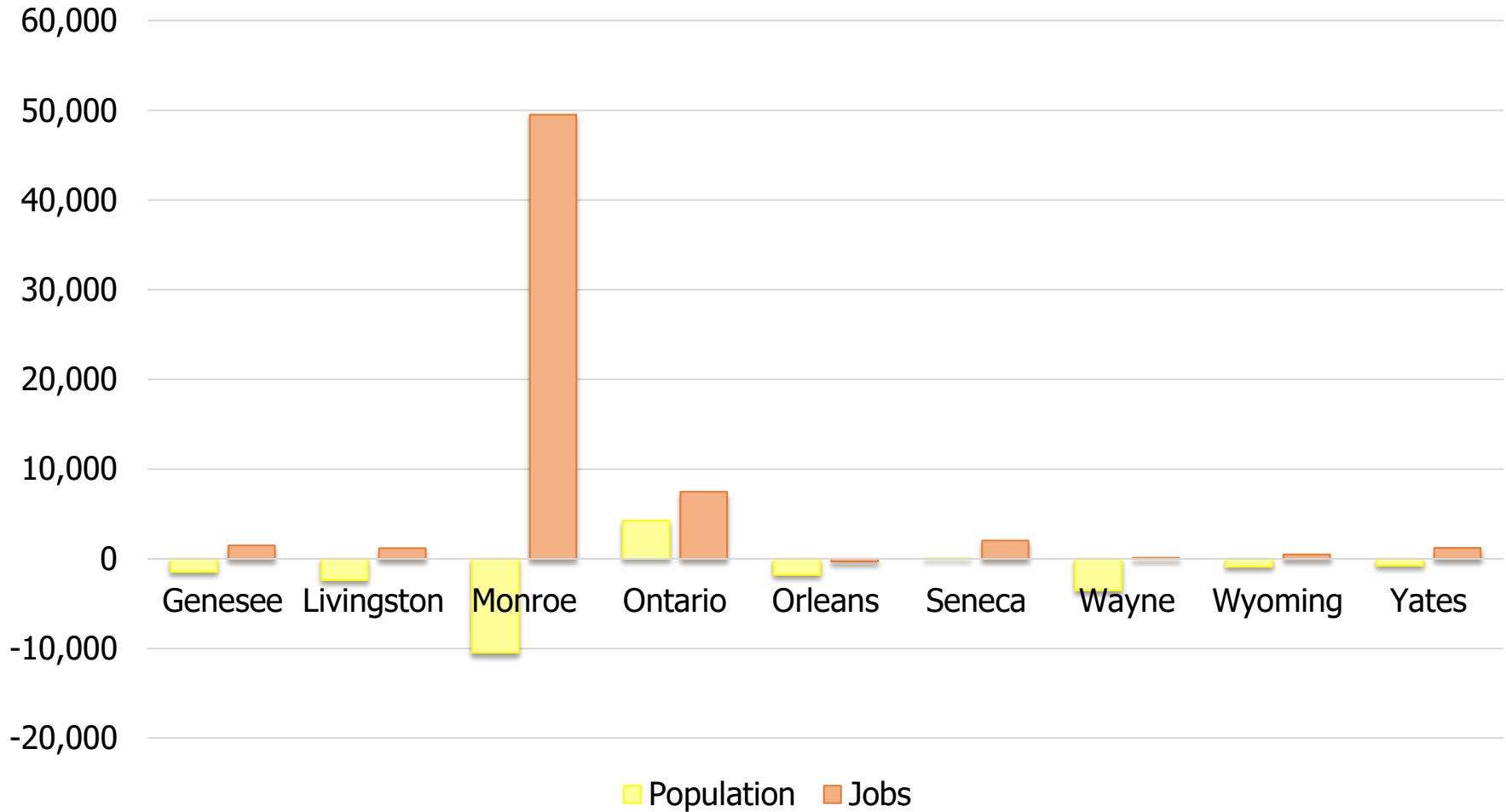
- Previous TAZ projections do not fully reflect the on-going redevelopment and reinvestment in the region
  - Monroe County only grew by 1.3% (~10k) from 2010-2020
    - Over 10,000 new housing units permitted
    - Nearly 20% within the City of Rochester
  - Continued decline in manufacturing
    - Growth in services, education, and medical sectors
  - ~30,000 net loss in domestic migration
    - Increase in international migration
    - Stabilizing share of 20-35 year olds

## 2050 Population Projections (9 County)

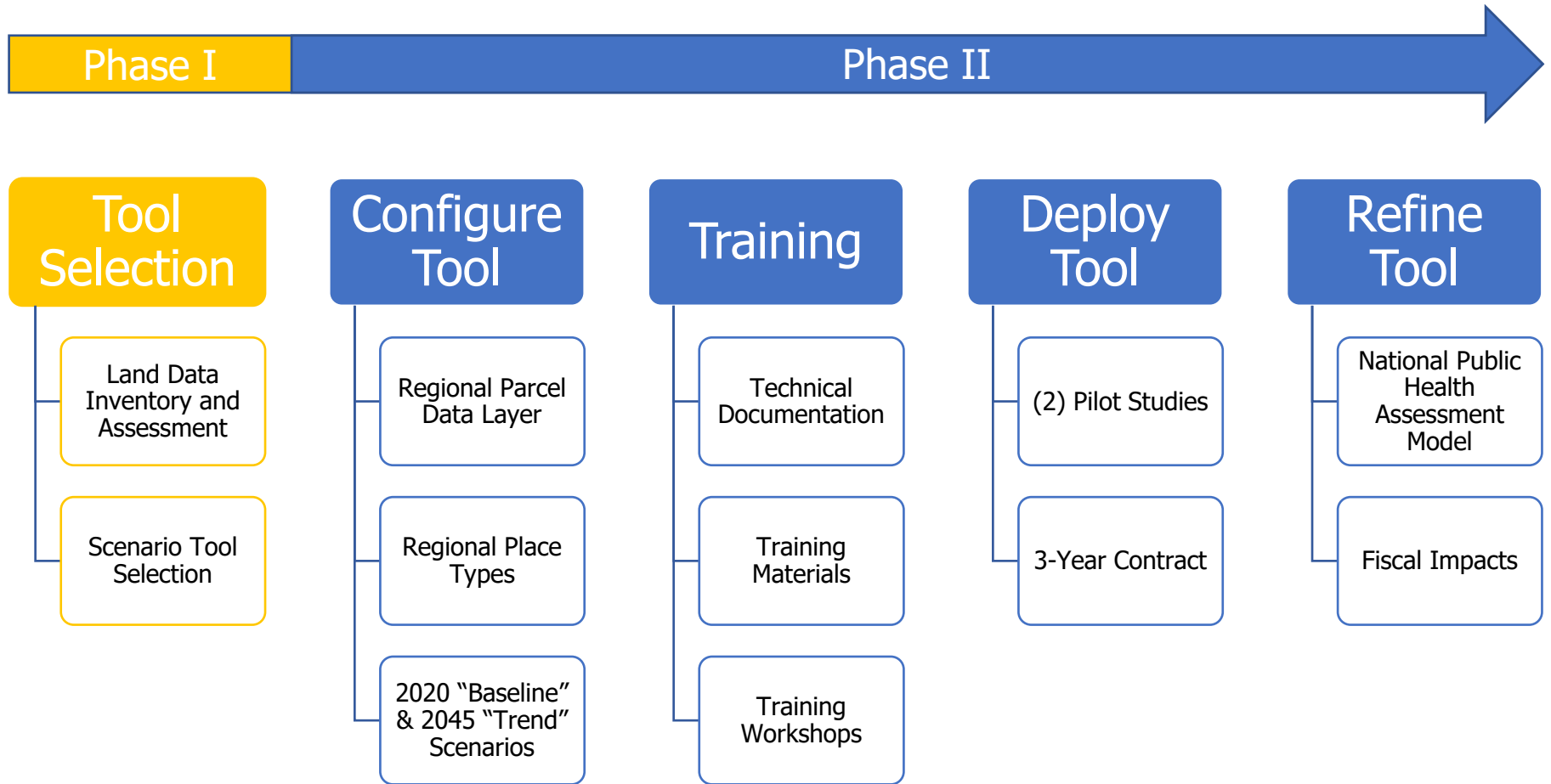


# 2050 Projections

## Population and Employment Change - Trend (2017 - 2050)



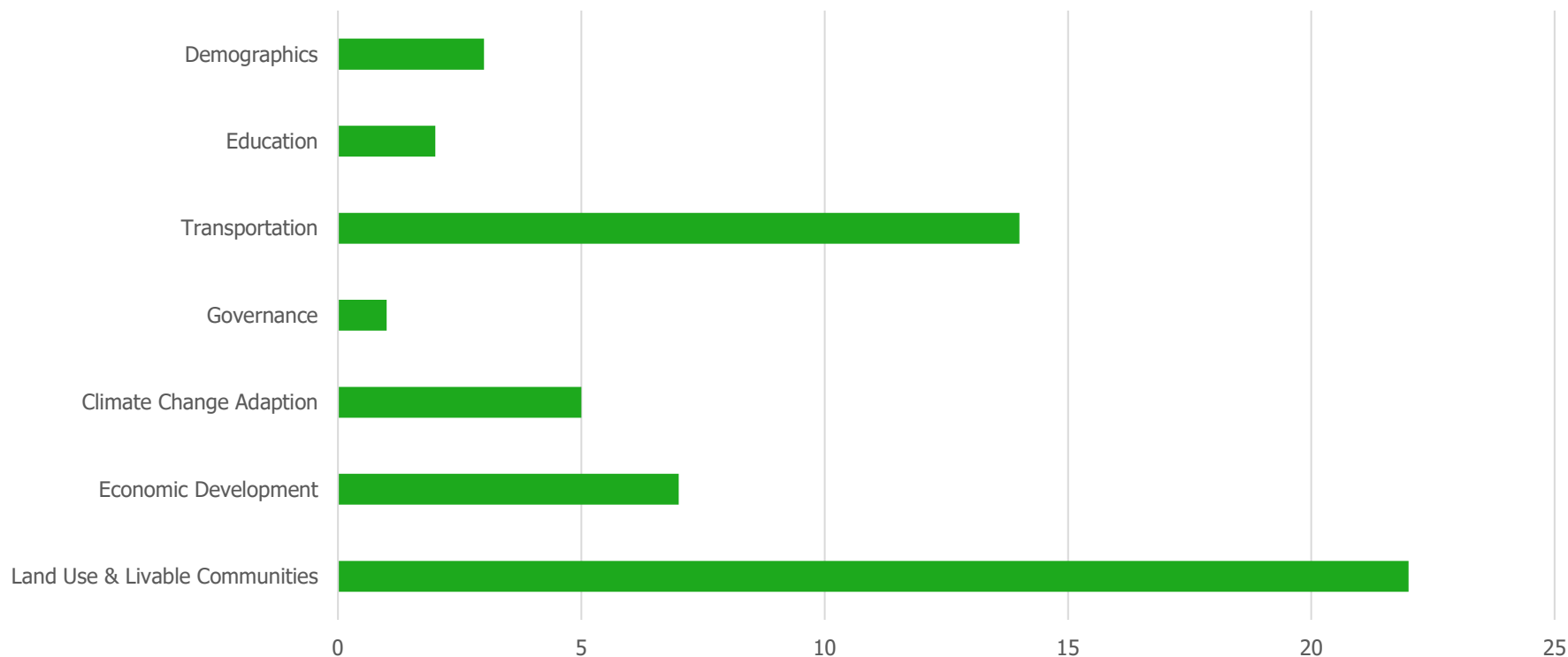
# Project Scope



# Future Directions - Exploratory

## Steering Committee –Exploratory Scenarios Planning

Comments by Category



# Phase 1: Scenario Tool Selection

## A. Level of Effort

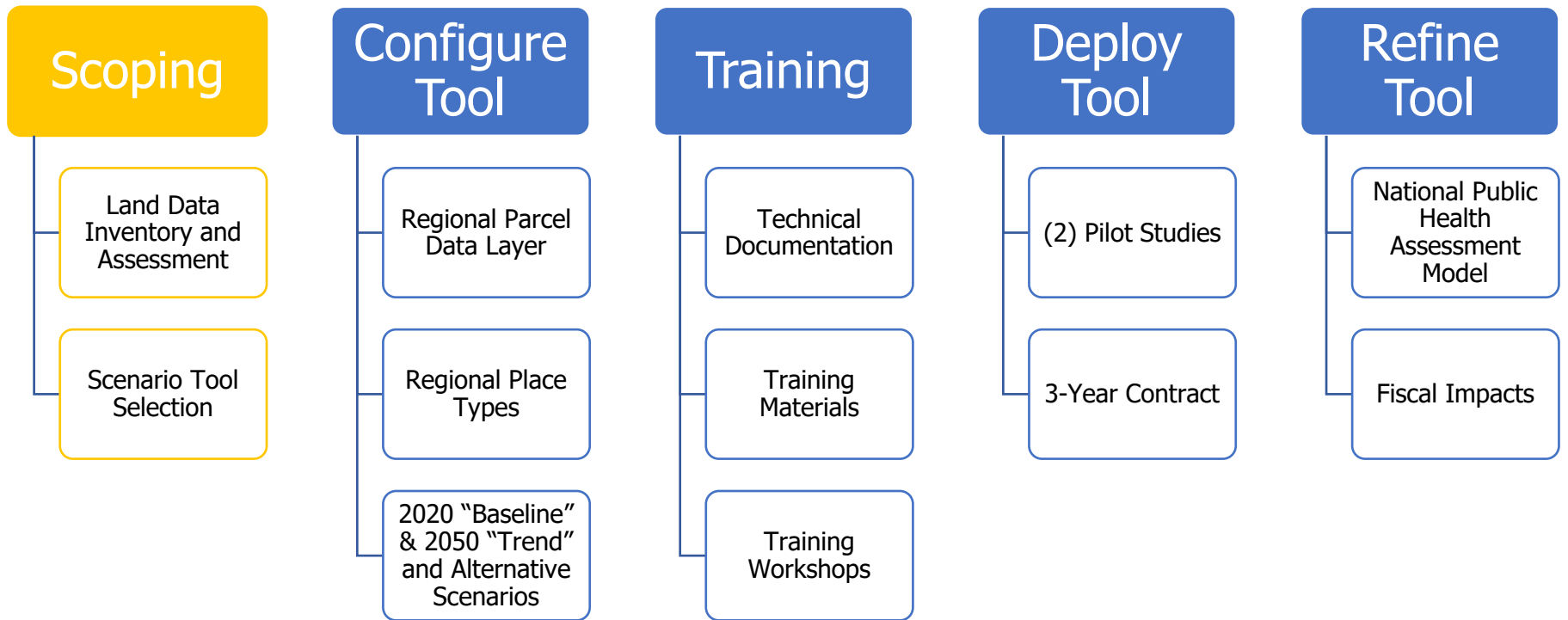


- Desktop vs. Software-as-a-Service
- Multiple models

## B. Meet the analysis needs of GTC and the Steering Committee



# Project Scope



# Regional Place Types

**T1**

**NATURAL**

**T2**

**RURAL**

**T3**

**SUB-URBAN**

**T4**

**GENERAL**

**T5**

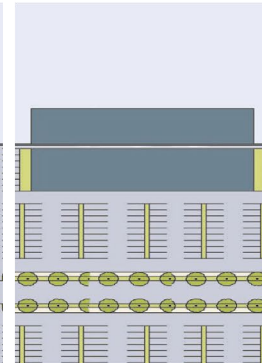
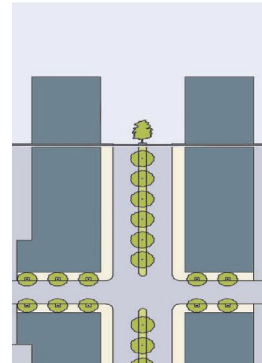
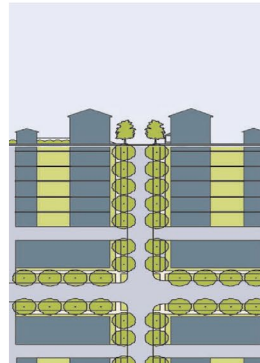
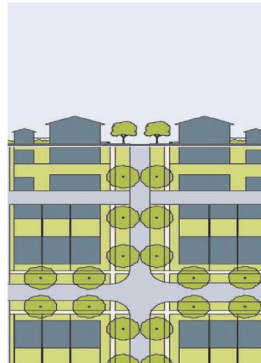
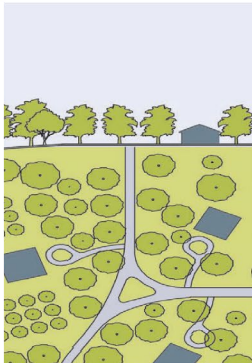
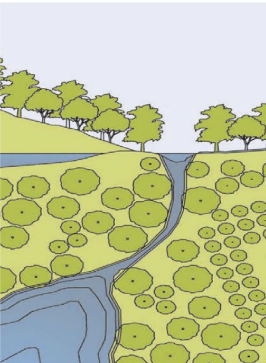
**URBAN CENTER**

**T6**

**URBAN CORE**

**SD**

**SPECIAL DISTRICT**



**NATURAL**

**RURAL**

- Rural Residential
- Agriculture

**SUB-URBAN**

- Office Park
- Light Industrial / Office
- Heavy Industrial
- Big Box
- Suburban Subdivision
- Suburban Multi-family
- Suburban Neighborhood

**GENERAL URBAN**

- City Residential
- Neighborhood Main Street
- T4 Mixed Use Corridor
- Traditional Neighborhood
- Main Street
- Light Industrial / Office
- Heavy Industrial

**URBAN CENTER**

- Main Street
- Urban Residential
- Mixed Use Corridor

**URBAN CORE**

- Downtown Mixed Use
- Downtown Residential
- Downtown Employment

**SPECIAL DISTRICT**

- Public / Quasi Public / Education

## Land Consumption

- Measure impacts on natural and agricultural lands by land developed/redeveloped



## Energy and Water

- Electricity/natural gas and water use for residential and commercial buildings based on building type and climate zone.



## Transportation

- Assess and map vehicle miles traveled, fuel use, and emissions for current and future scenarios.
- Transit and walking accessibility Measure and map walk access to transit stops, parks and schools, services, and other key amenities.



## Emissions

- Carbon and pollutant emissions associated with energy use, water use, and transportation.



## Fiscal Impacts

- Analyze annual household expenses associated with energy, water, and transportation use.
- Public sector costs relating to infrastructure maintenance and providing services



# Genesee-Finger Lakes Health Assessment Module

- Based upon National Public Health Assessment Module
- Post-processing of UrbanFootprint scenarios

## Health Impact

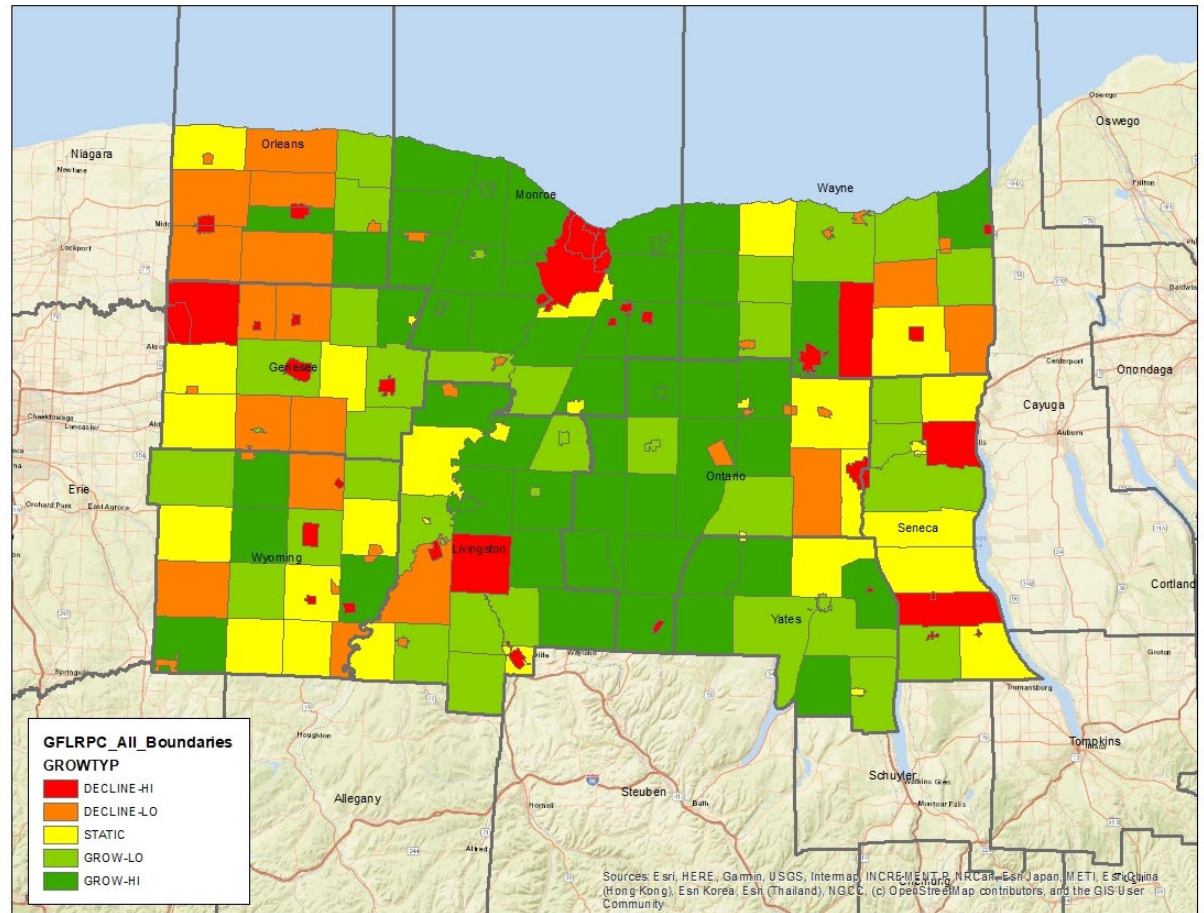
- Project rates of physical activity and changes in chronic disease rates.
- Responsive to changes in built environment types and air emissions.



# Regional Scenarios

## 2050 - Trend

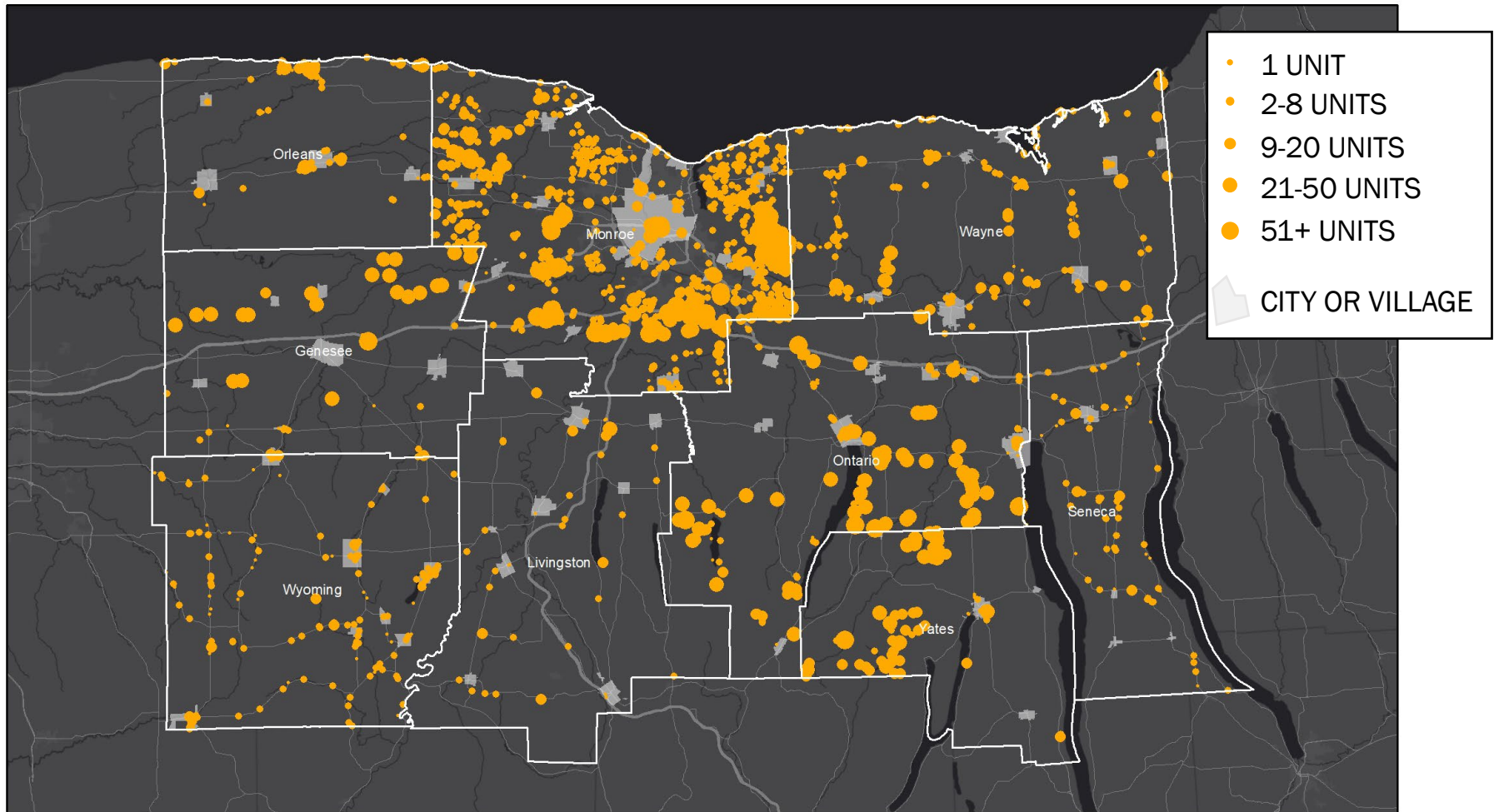
- Population and employment growth / loss follows 1990 – 2018 trend.
- Dwelling unit and employment loss concentrated in cities and villages
- Dwelling unit growth is primarily large lot single family in towns and exurban areas





# Regional Scenarios

2050 - Trend



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# Regional Scenarios

## 2050 - Alternative

- Housing growth meets demand of future residents (**50%+ multifamily**)
- Transit investments spur redevelopment in urban areas of Monroe County
- Villages see modest infill growth
- Population loss occurs primarily in townships / exurban areas.

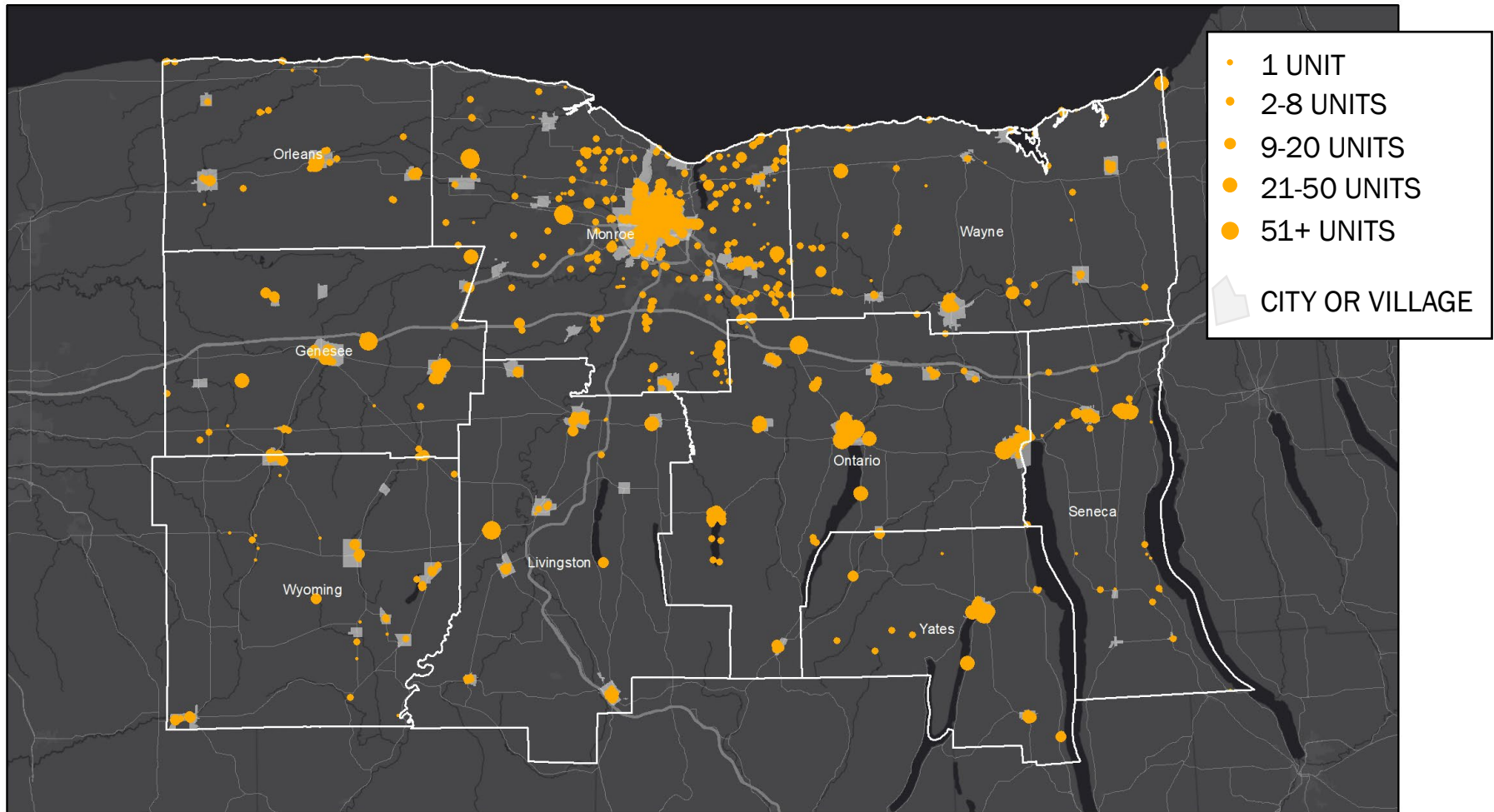
A Balanced Housing Profile for 2050

	Standard Large Lot SF	Small Lot SF	Town-home	Multi-family	Mobile Home/ Other	Total
Genesee	21	700	267	1,476	18	<b>2,482</b>
Livingston	0	600	263	1,641	109	<b>2,613</b>
Monroe	0	6,116	4,892	21,780	0	<b>32,788</b>
Ontario	0	844	645	3,153	0	<b>4,642</b>
Orleans	37	518	181	946	120	<b>1,802</b>
Seneca	20	429	159	751	150	<b>1,509</b>
Wayne	4	803	332	1,736	0	<b>2,875</b>
Wyoming	49	465	141	938	2	<b>1,595</b>
Yates	43	251	73	472	0	<b>839</b>
<b>Total</b>	<b>174</b>	<b>10,726</b>	<b>6,953</b>	<b>32,893</b>	<b>399</b>	<b>51,145</b>

Future Incremental Units (includes new units, rehabbed vacant units, and vacancy (2018-2050))

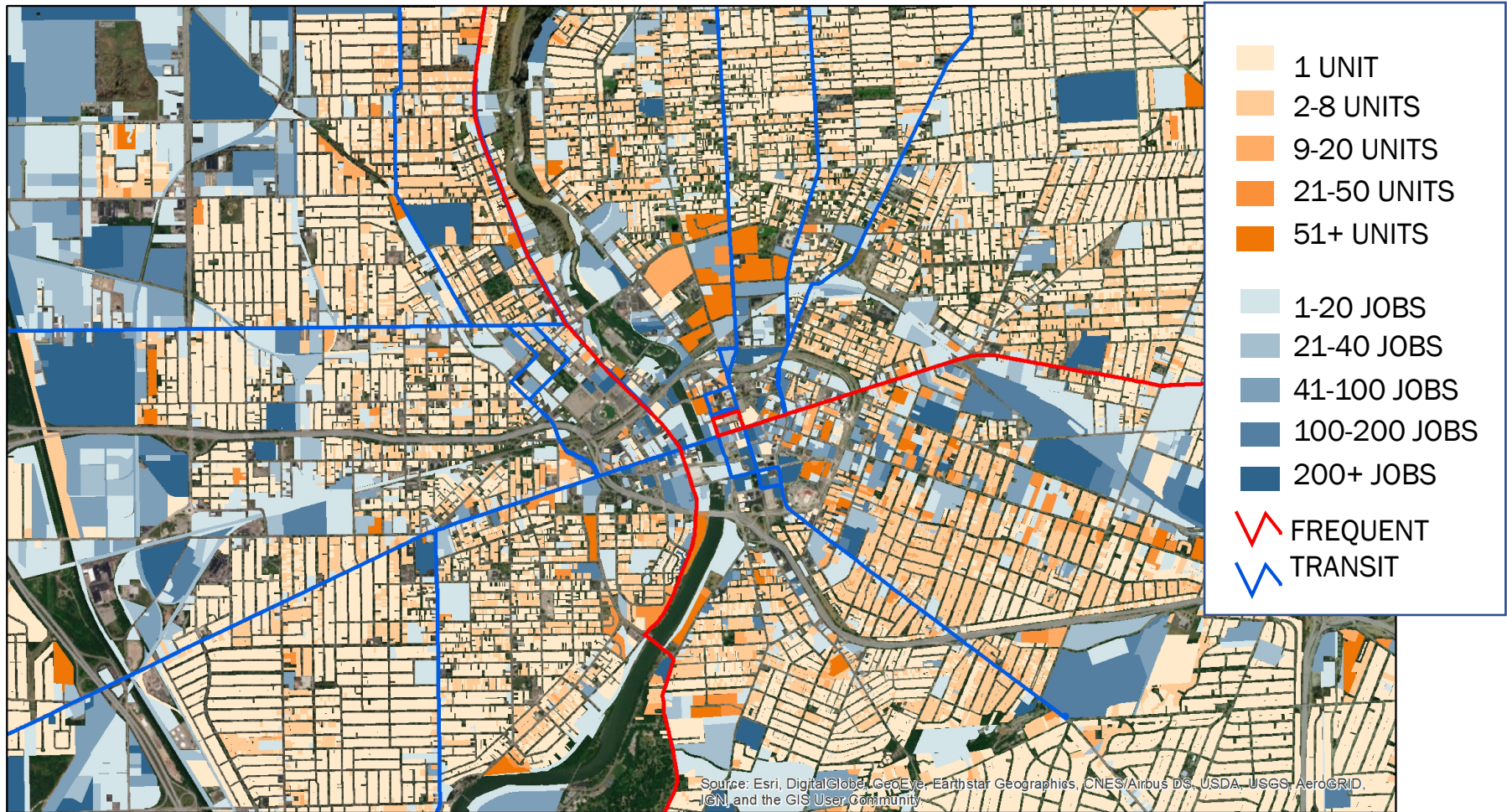
# Regional Scenarios

2050 - Alternative



# Regional Scenarios – Downtown Rochester

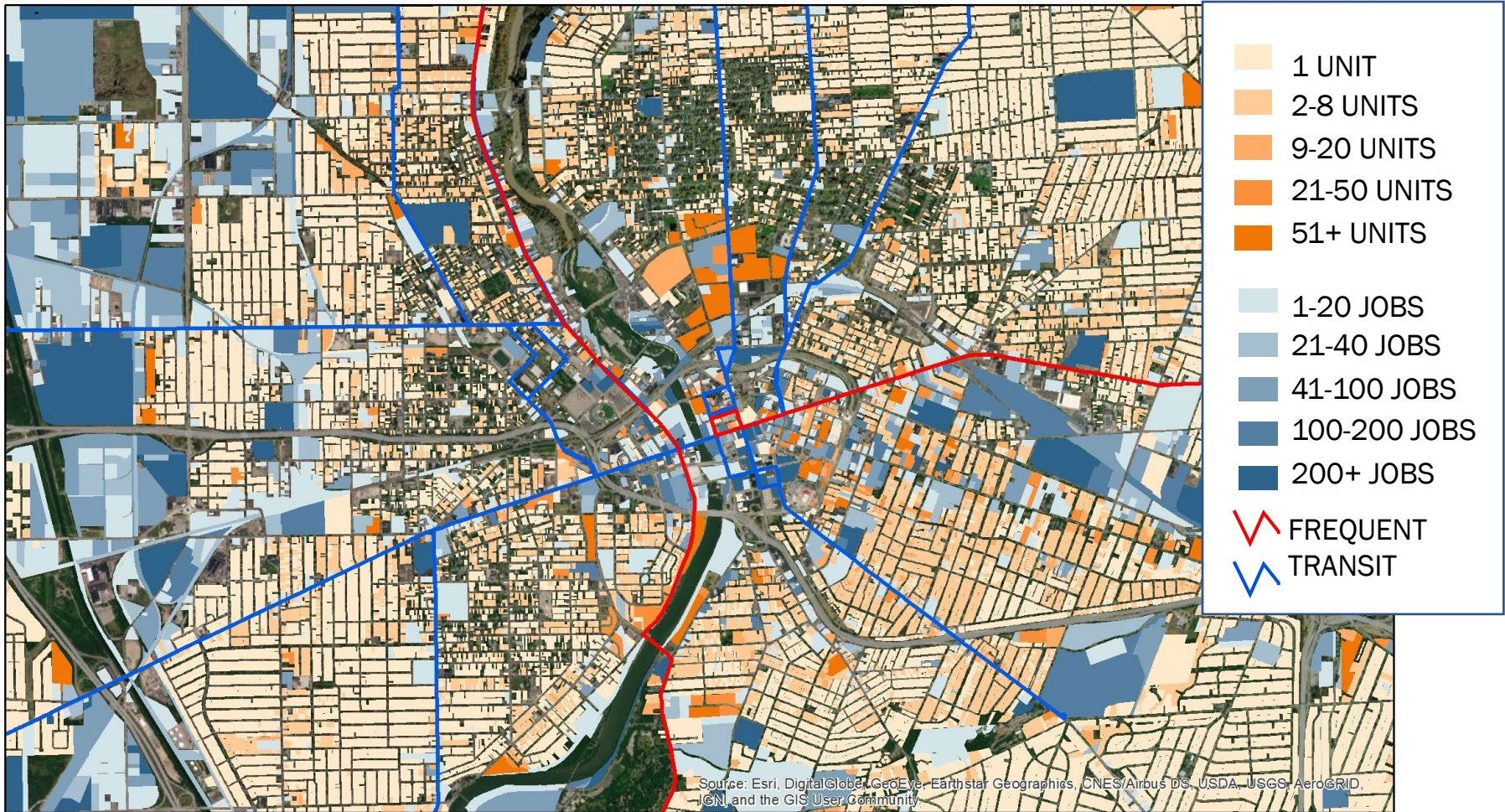
2017 – Base Year





# Regional Scenarios – Downtown Rochester

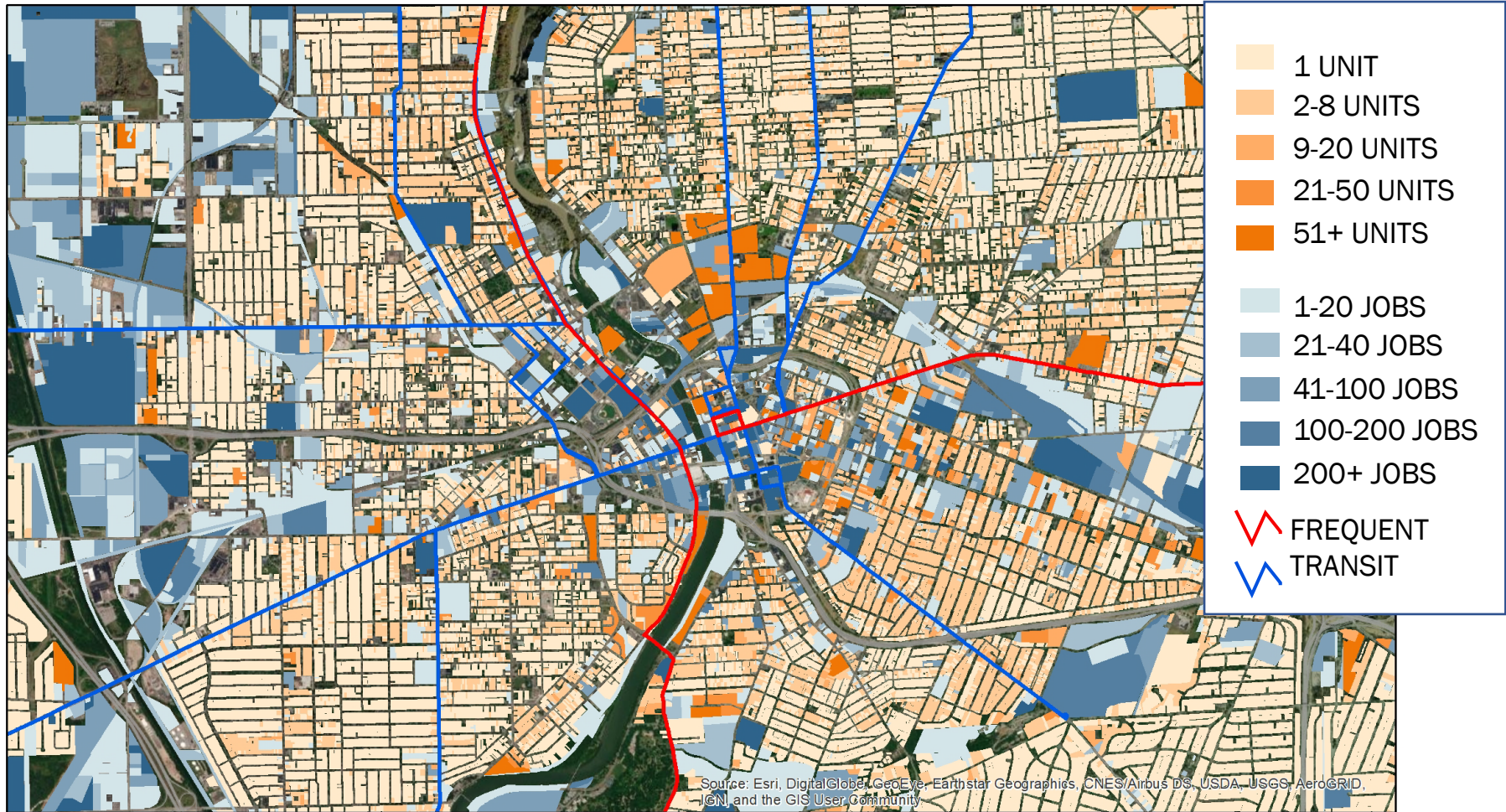
2050 – Trend





# Regional Scenarios – Downtown Rochester

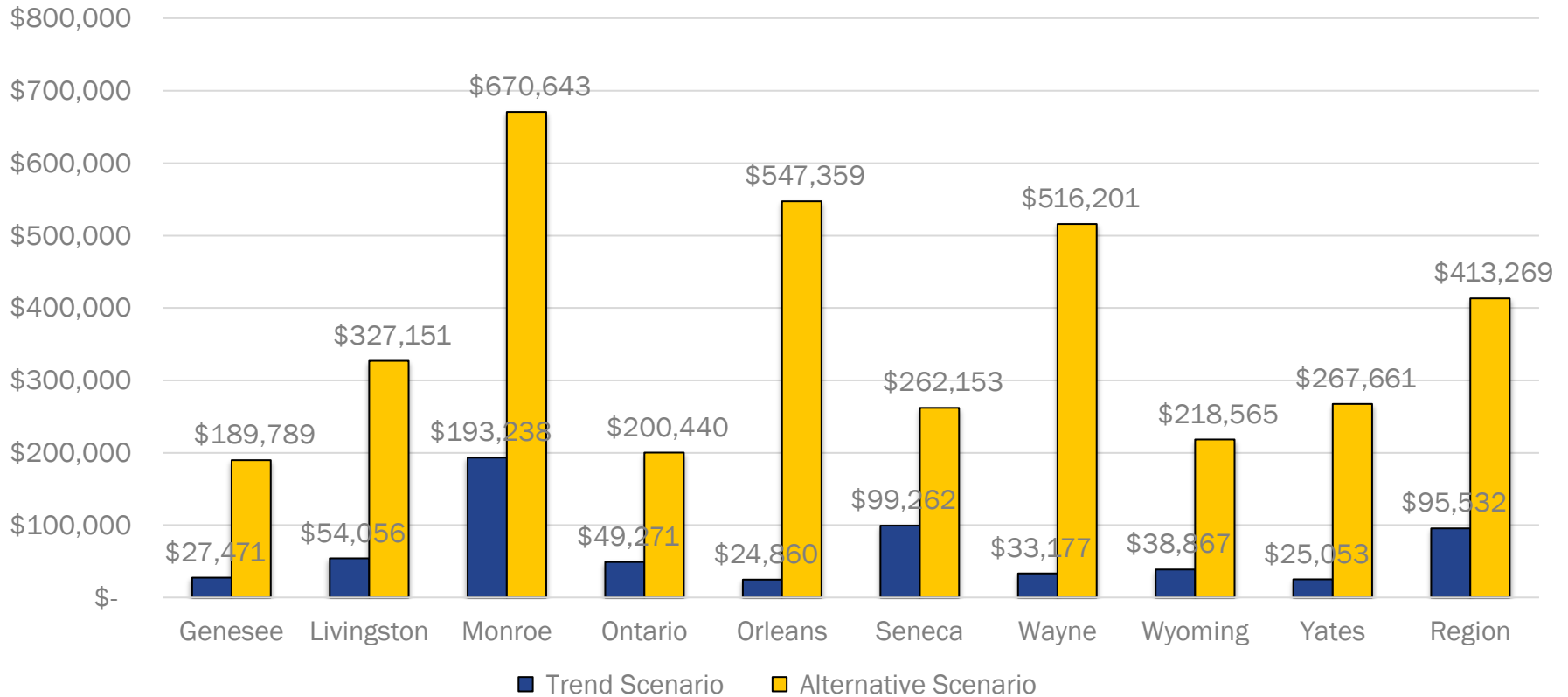
2050 – Alternative



# Regional Scenarios – Fiscal Impact



Average Tax Revenue per Acre from New Development



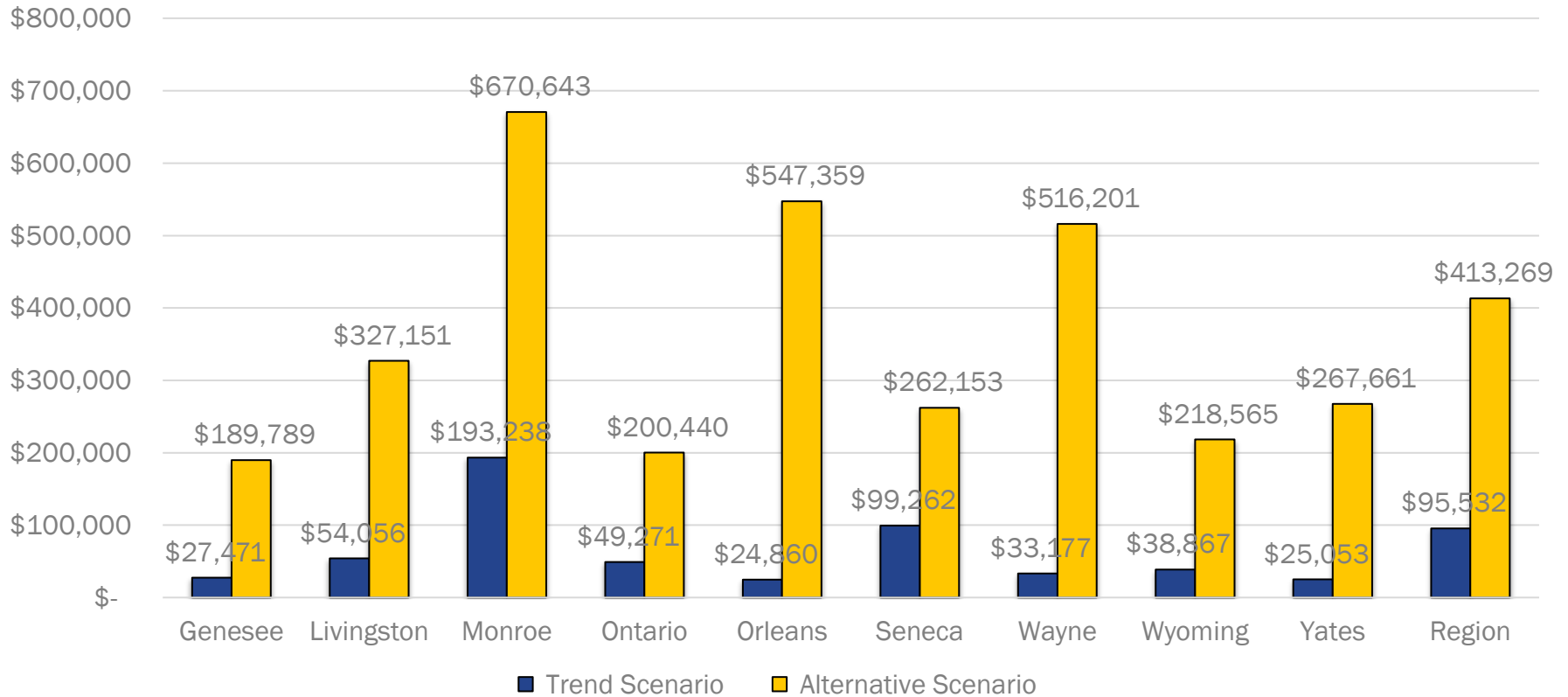
**x1**  
TREND

**x4**  
ALTERNATIVE

# Regional Scenarios – Fiscal Impact



Average Tax Revenue per Acre from New Development

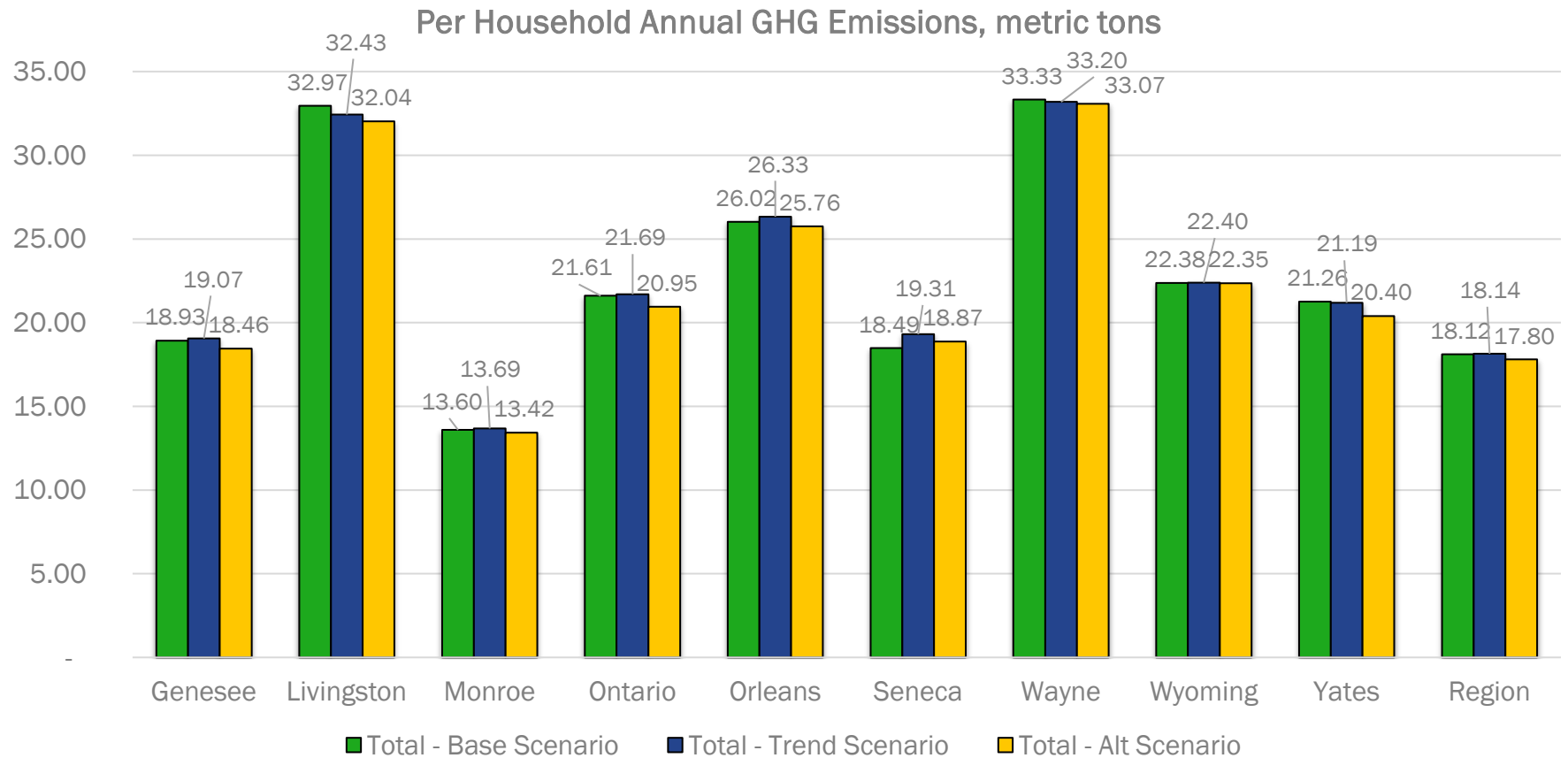


**x1**  
TREND

**x4**  
ALTERNATIVE



# Regional Scenarios - Emissions

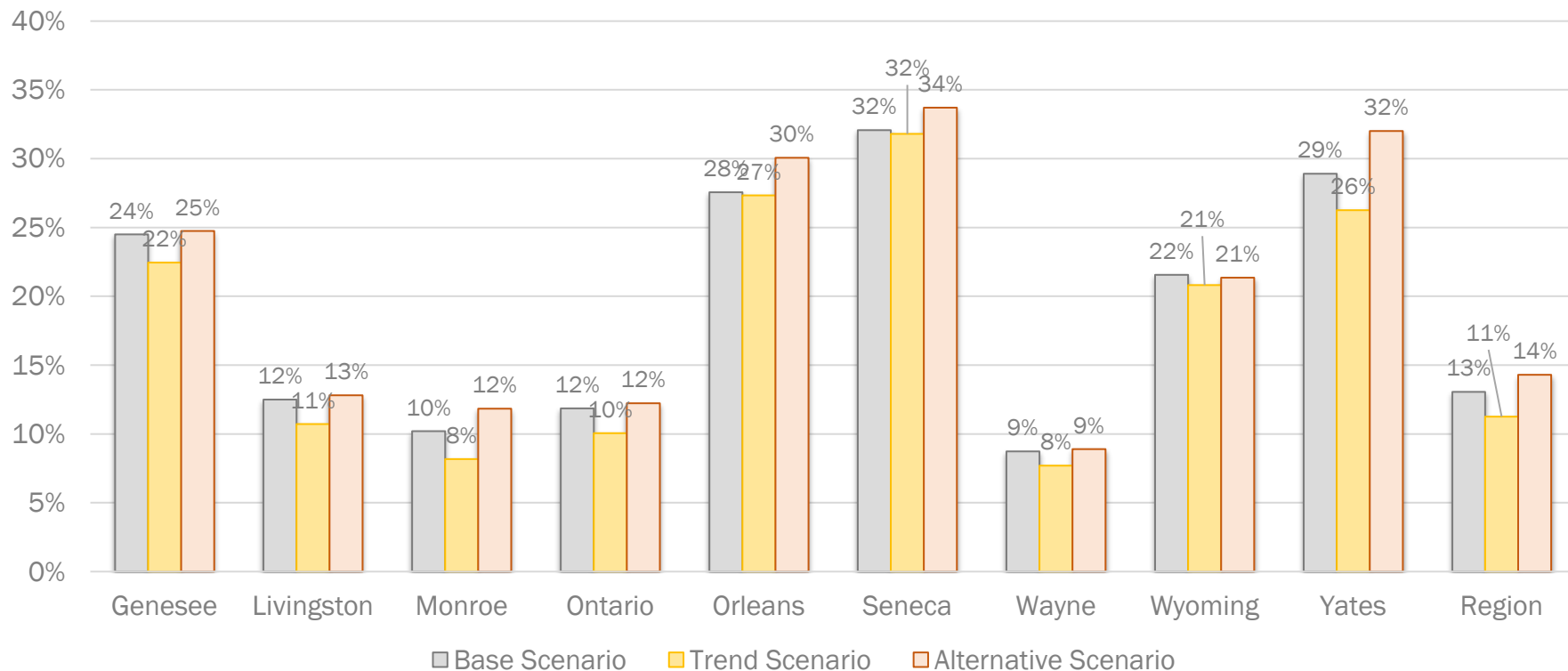


**+1%**  
TREND

**-2%**  
ALTERNATIVE

# Regional Scenarios - Accessibility

Percent of Population w/in 30 Minute Transit Trip of at least 10% of County Employment

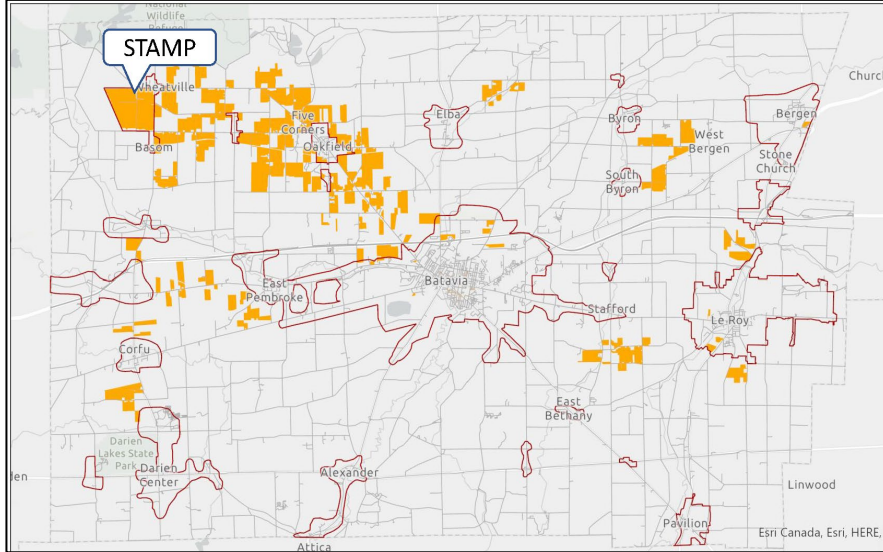


**-4%**  
TREND

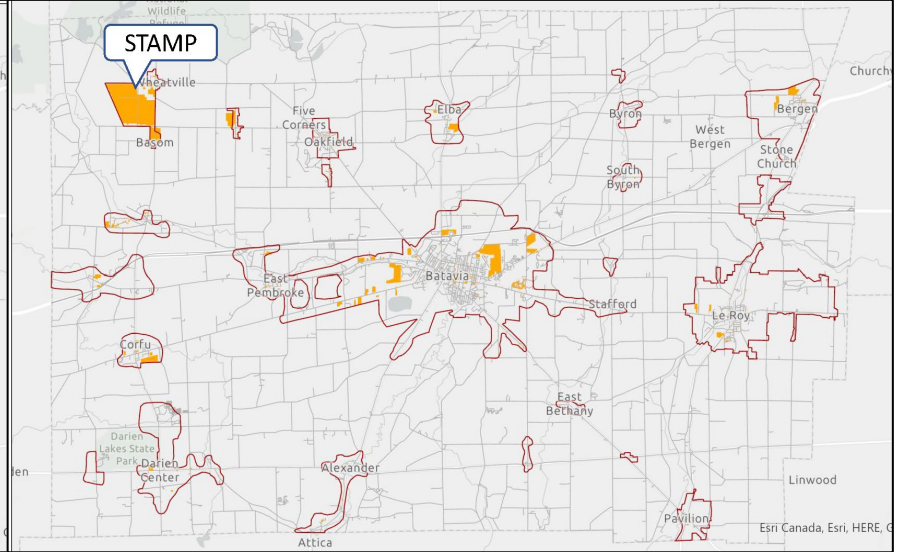
**+10%**  
ALTERNATIVE

# Case Studies – Genesee County

## Business as Usual – Land Use Change



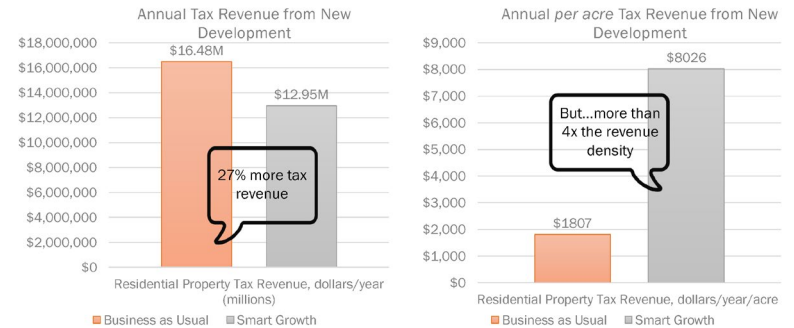
## Smart Growth – Land Use Change



### WHAT COULD SMART GROWTH MEAN FOR GENESEE COUNTY?



### GENESEE COUNTY SCENARIOS : FISCAL IMPACT

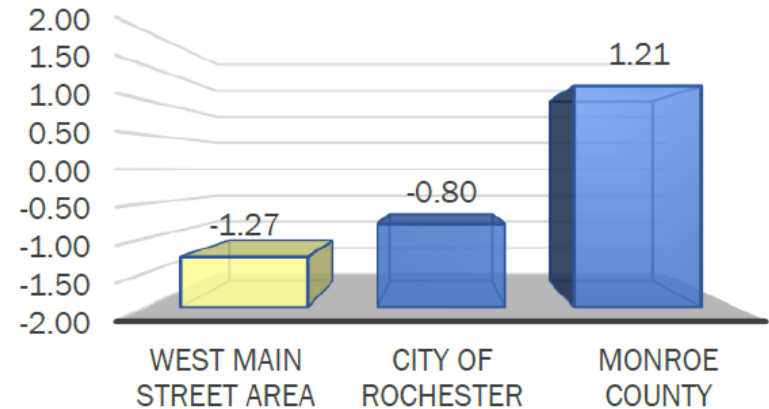


# Case Studies – Bulls Head BOA

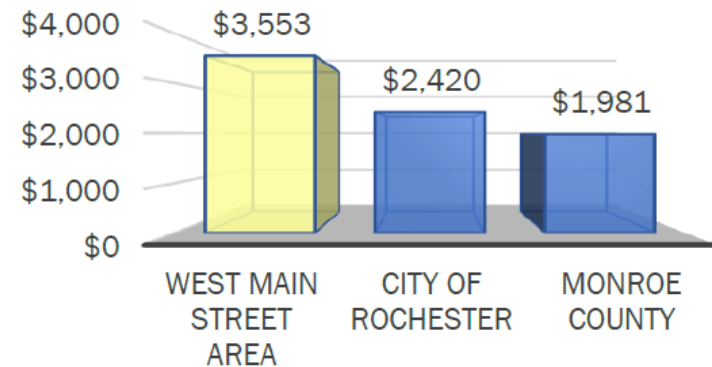
The **Genesee-Finger Lakes Public Health Assessment Module (GFL-PHAM)** was used to evaluate existing community health and physical activity conditions in the W. Main Street and Bulls Head Brownfield Opportunity Area. A scenario for the area that included increasing the average accessible park area to 5.0 acres (from .5 acres) and the percent tree canopy to match the County average level of 27% (from 17%) had the following improvements in health outcomes:

- **5% reduction** in obesity prevalence
- **2% reduction** in coronary heart disease prevalence
- **3% reduction** in high blood pressure prevalence
- **7% reduction** in type 2 diabetes

## Greenspace Index



## Cost of Illness



## Future Directions

1. Training – Training- Training !!!
2. Support more local planning initiatives
3. Updated Regional Place Types
4. Roll-up local plans into *2050 Long-Range Transportation Plan*

## **For more information**

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