



Department of
Environmental
Conservation



Climate Smart
Communities

Comprehensive Plans with Sustainability Elements

This webinar will begin shortly

April 14, 2016

Welcome!

Today's topic: *Comprehensive Plans with Sustainability Elements*

Connect to the audio with your phone using

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“**Meeting Info**” tab:



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Quick Start Meeting Info

Comprehensive Plans with Sus

Host: Dazzle Ekblad

Audio connection: Local 1-518-549-0500
Toll Free 1-844-633-8697
[More call-in numbers](#)

Access code: 648 997 902

Attendee ID: 3

Meeting number: 648 997 902

Welcome!

Today's webinar topic:

Comprehensive Plans with Sustainability Elements

Questions?

Use WebEx chat function



Agenda

- I. **Introduction & Announcements** - *Dazzle Ekblad, NYSDEC*
- II. **Comprehensive Planning, Climate Action, and the Town of Dewitt** - *Samuel C. Gordon, Director of Planning & Zoning, Town of Dewitt, NY*
- III. **How the Town of Geneva Integrated Sustainability into its Comprehensive Plan** - *George R. Frantz, Principal, George R. Frantz & Associates, Ithaca, NY*
- II. **Q & A** - *Dazzle Ekblad*



Announcements

- TBD in May and June: Consolidated Funding Application (CFA) Workshops across NYS
- Thurs. May 12: 10:30am: [Climate Smart Communities Webinar – Community Choice Aggregation: Updates on Progress in NYS](#)
- June 13-15: [Clean Energy Economy Conference](#), Utica, NY



Aggregate Purchase Initiative

- Organized by DEC and OGS
- Open to any authorized user of state contracts
- Orders for Chevy Volts will be aggregated into one large bid to bring down purchase price
- Deadline to participate is **May 31st, 2016**
 - Vehicle deliveries in fall 2016
 - Contact Brendan Woodruff
(brendan.woodruff@dec.ny.gov) for more information



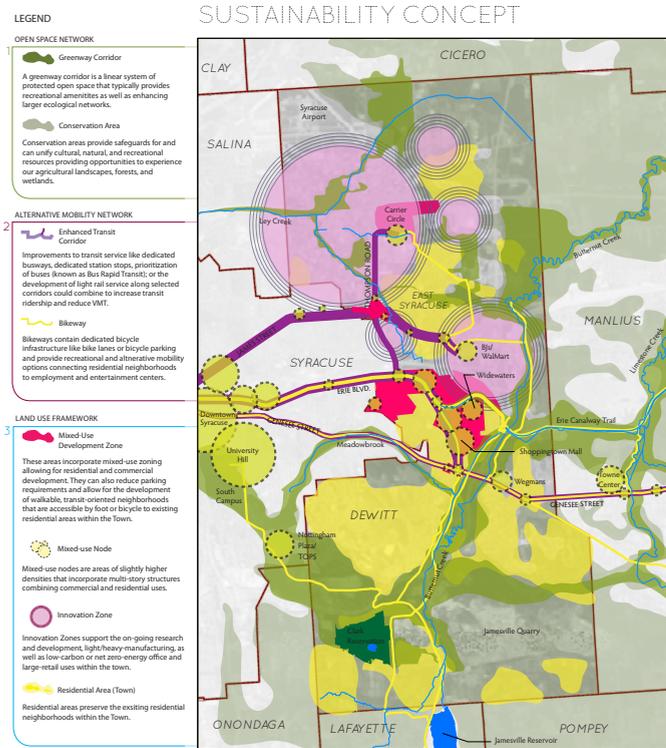
CSC Certification

- Revised CSC Certification Workbook available by emailing climatechange@dec.ny.gov
- Today's webinar relates to these actions:
 - **# 6.1** – Develop and adopt a comprehensive plan with sustainability elements (9 points)
 - **# 6.2** – Incorporate smart growth principles into land-use policies and regulations (9 points)

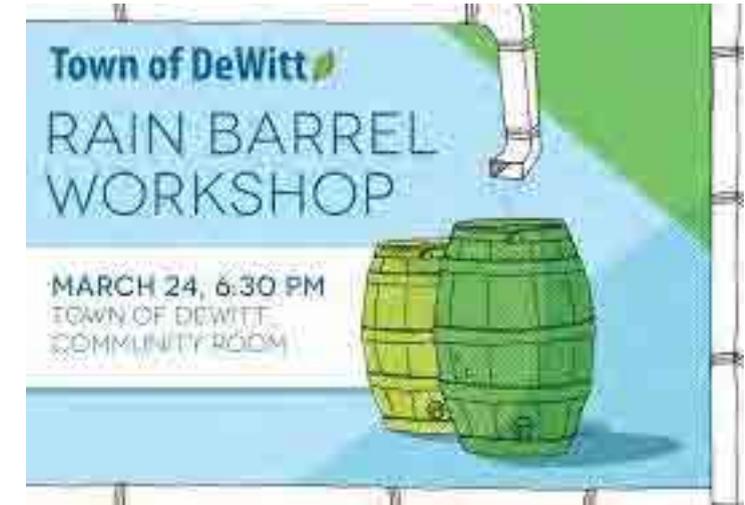
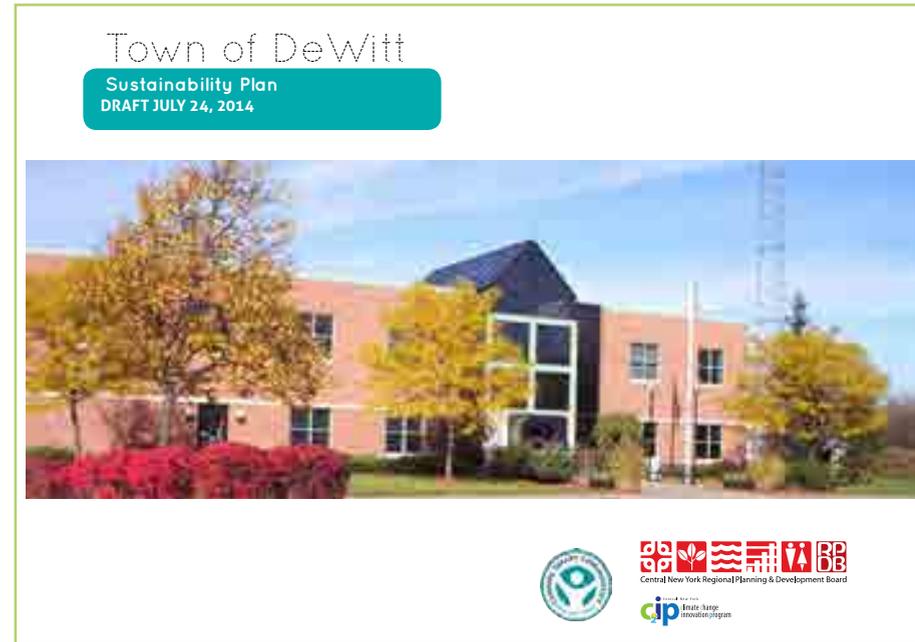
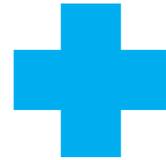
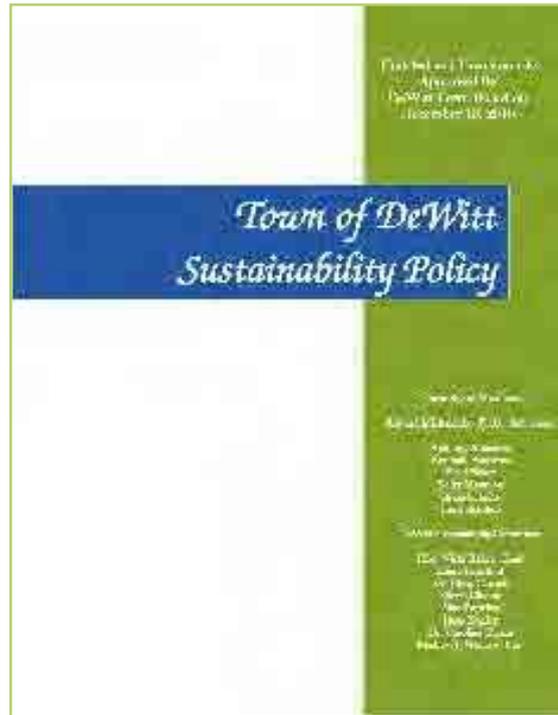


Comprehensive Planning & climate action

Samuel Gordon - Director of Planning and Zoning



COMPREHENSIVE PLAN 2002



Chapter 80. ENERGY CONVERSION SYSTEMS

[HISTORY: Adopted by the Town Board of the Town of DeWitt 5-9-2011 by L.L. No. 5-2011. Amendments noted where applicable.]

combining policy and action



town board

planning board

**planning
and zoning**

DACC + Tree Committee

Sustainability Committee

Town Code - (Lighting, Energy Conversion Systems, Zoning Ordinance)

Design Guidelines - (sidewalks, trees, stormwater systems)

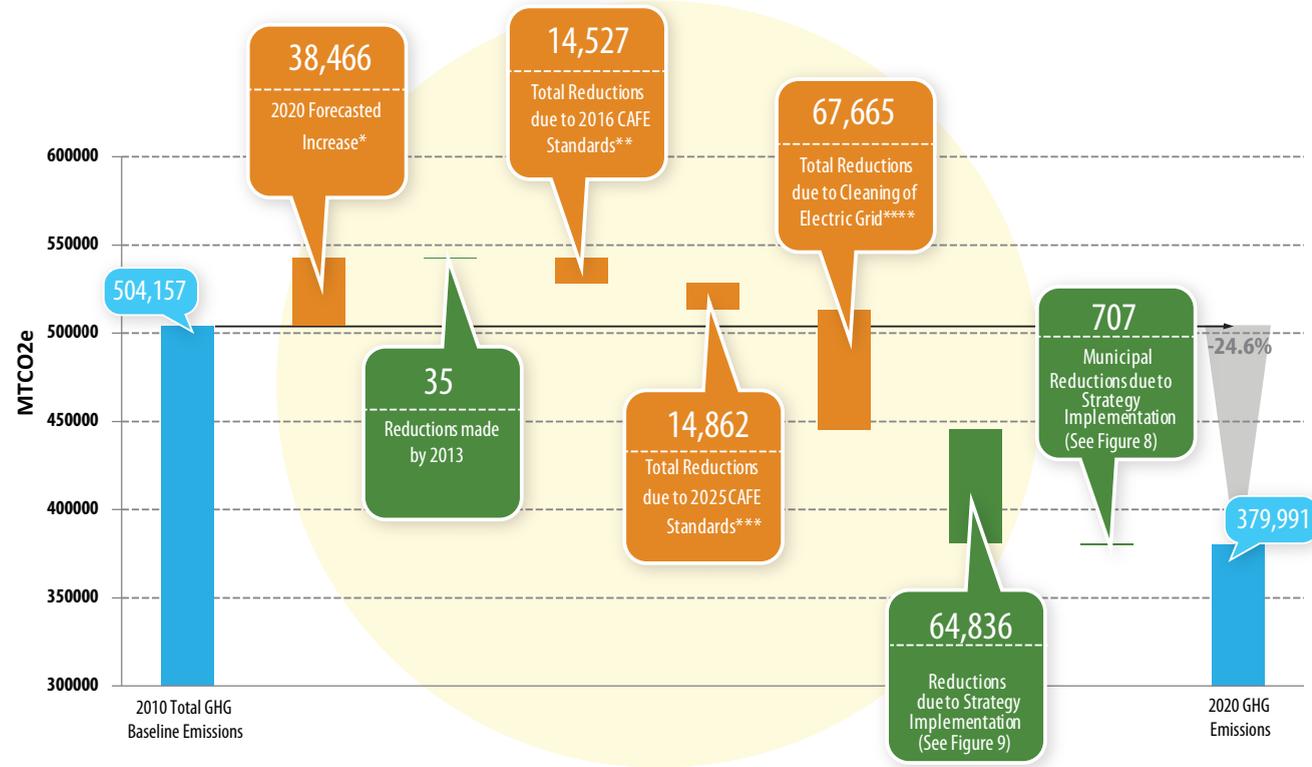
Policy Documents (Comprehensive Plan, Sustainability Policy, Sustainability Plan)

Advise Town Board on environmental concerns, engage in public outreach and education activities, and coordinate tree planting and management program

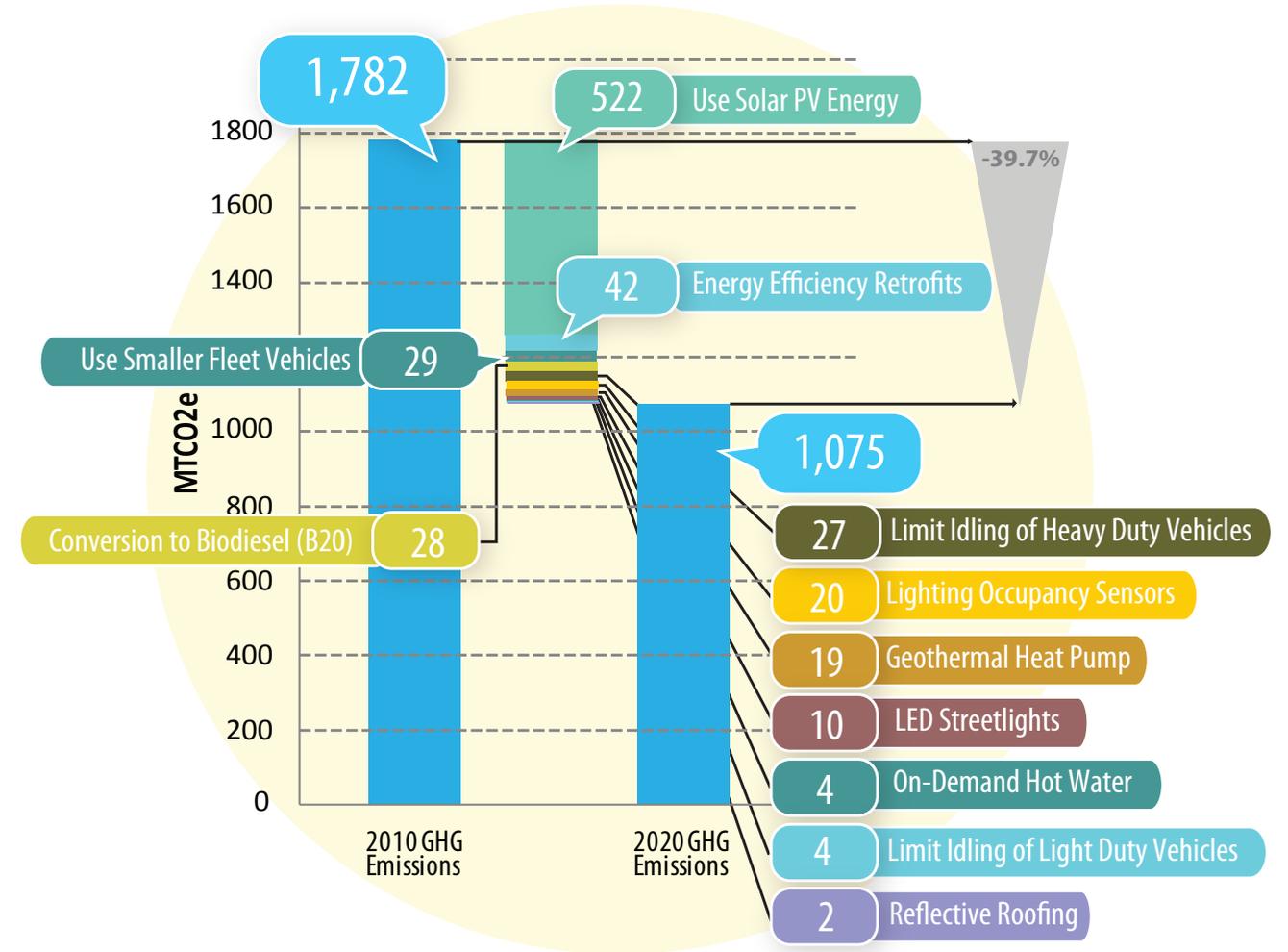
Advise Town Board on sustainability concerns, assist with the development of sustainability plan, and sustainability projects/initiatives

municipal coordination

TOTAL POSSIBLE REDUCTIONS BY 2020

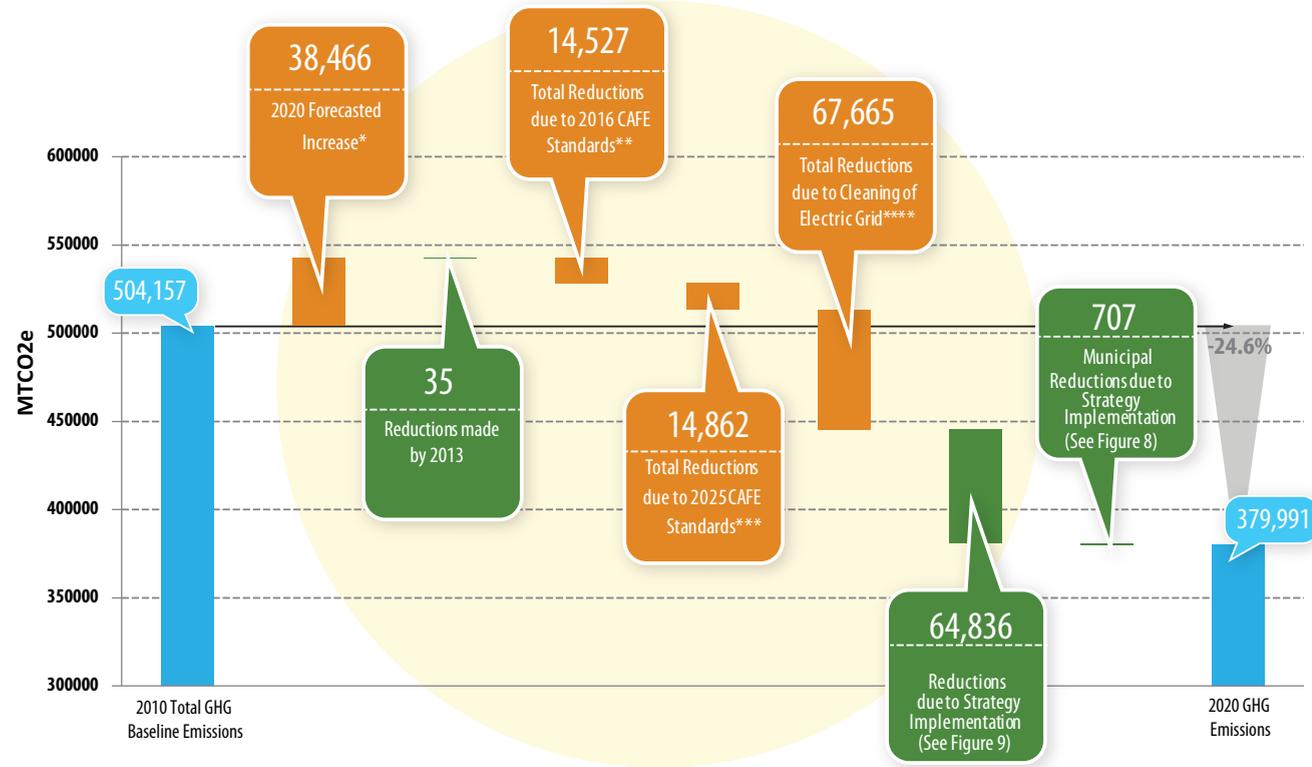


POTENTIAL MUNICIPAL REDUCTIONS FROM STRATEGY IMPLEMENTATION

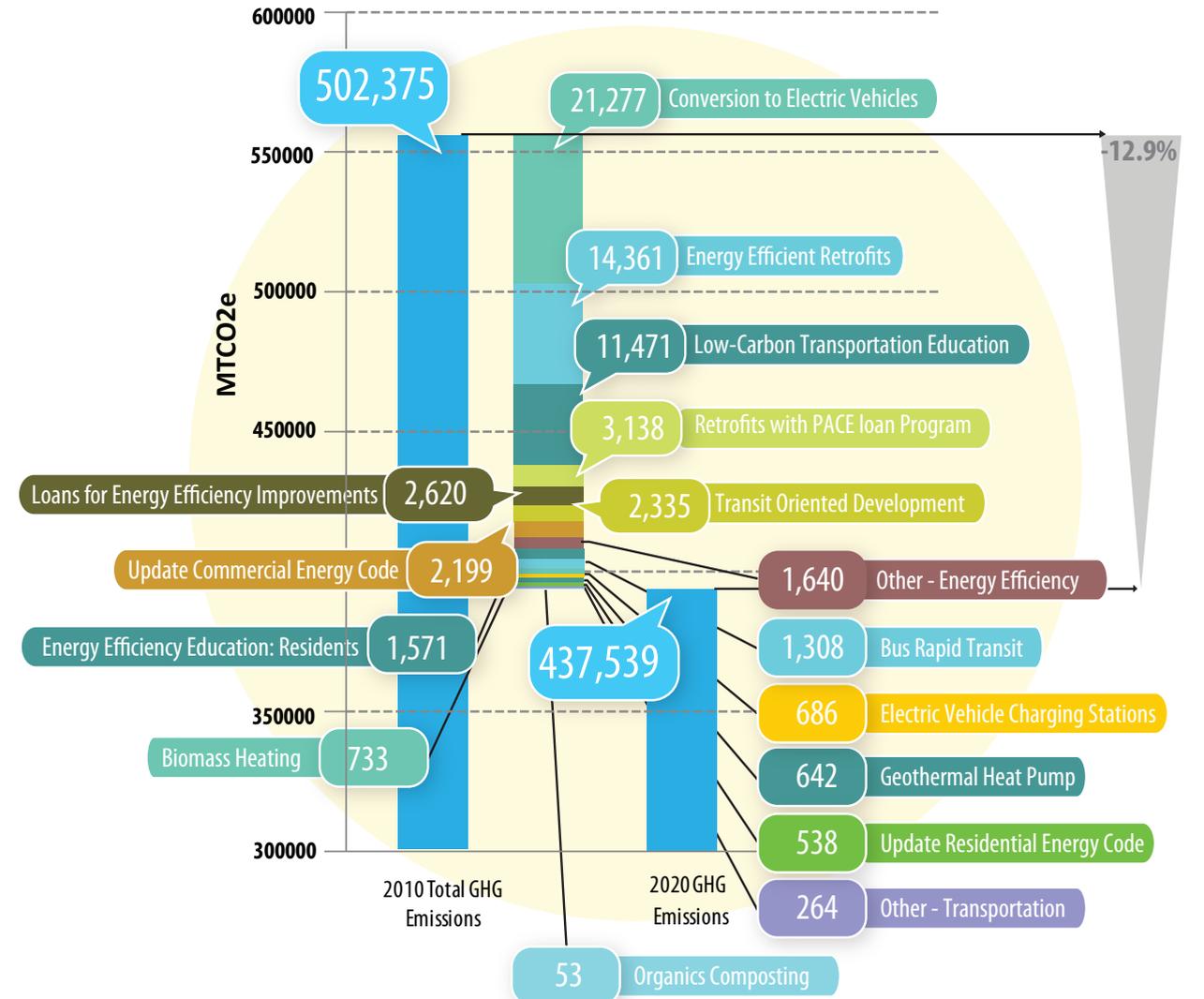


reduction goals

TOTAL POSSIBLE REDUCTIONS BY 2020



POTENTIAL COMMUNITY REDUCTIONS FROM STRATEGY IMPLEMENTATION



reduction goals

TRANSPORTATION

According to DeWitt's GHG Inventory Report, transportation accounted for 52% of government emissions and 49% of community emissions in DeWitt in 2010. The largest amount of GHG reductions is possible and necessary in this

sector. This Sustainability Plan addresses three main transportation emissions reduction goals: increase options for low-carbon transportation; increase use of alternative fuels; and reduce vehicle idling time.



Increase Options for Low-Carbon Transportation

Education about low-carbon transportation: 11,471 MTCO₂e annual reductions

This strategy assumes an 8% reduction in community VMT.

Transit Oriented Development: 2,335 MTCO₂e annual reductions

This strategy assumes 500 residential units are built in TOD with an annual VMT reduction of 4,770 miles per person.

Implement Bus Rapid Transit: 1,308 MTCO₂e annual reductions

This strategy assumes 800 new daily transit passengers with an average trip length of 10.1 miles.

Expand bicycling paths and facilities: 158 MTCO₂e annual reductions

This strategy assumes 2,000 weekly trips of an average of 4 miles in length are switched from car to bicycle.

Increase bus ridership: 32 MTCO₂e annual reductions

This strategy assumes there are an additional 150 daily bus passengers.

Acquire more fuel efficient government vehicles: 29 MTCO₂e annual reductions

This strategy assumes 16 vehicles will be replaced by 2020.

Safe Routes to School Program: 27 MTCO₂e annual reductions

This strategy assumes 500 students with average VMT of 3 miles to and from school are covered by the program.

Expansion of walking-friendly environments: 25 MTCO₂e annual reductions

This strategy assumes 500 weekly trips, or 3% of trips, are switched from car to walking.

Provide bikes for daily trips: 20 MTCO₂e annual reductions

This strategy assumes 20 bicycles are available with an average trip length of 4 miles and 20% of trips displacing car trips.

Increase use of alternative fuels

Conversion to electric vehicles: 21,277 MTCO₂e annual reductions

This strategy assumes that 20% of the community vehicle fleet is converted to electric vehicles.

Construct electric vehicle charging facilities: 686 MTCO₂e annual reductions

This strategy assumes that 150 charging spaces are constructed.

Municipal conversion of diesel fleet to biodiesel (B20): 28 MTCO₂e annual reductions

This strategy assumes that 10 of the municipal diesel vehicles are converted to biodiesel.

Reduce vehicle idling time

Limit idling of heavy duty municipal vehicles (trucks): 27 MTCO₂e annual reductions

This strategy assumes that municipal vehicles reduce idling time by about 35%.

Limit idling of light duty municipal vehicles: 4 MTCO₂e annual reductions

This strategy assumes that municipal vehicles reduce idling time by about 30%.

LAND USE

There is a growing acknowledgement by scientists and policy analysts that a substantial part of the global warming challenge may be met through the design and development of cities and towns. The form and function of human settlements can either reduce or increase the demand for energy, and can also influence how energy is produced, dis-

tributed, and used. Planning and urban design measures can substantially reduce the number and distance of vehicle trips by organizing human activity in compact communities with a range of housing types, providing reliable transit to and from employment, and placing services within easy walking distance of home.



BACKGROUND

Unprecedented human intervention will be required in the coming decades to reduce the extent of climate change and thereby avoid its worst potential consequences (referred to as mitigation), or make changes to accommodate those effects that are unavoidable (adaptation). Much of the mitigation policy discussion to date has centered on reducing greenhouse gas (GHG) emissions through fuel substitution and fuel efficiency for vehicles and on energy efficiency for buildings and industries.

The scale of intervention required to reduce and adapt to the effects of climate change will require action at all levels of government and society. International accords to limit overall carbon emissions will involve national governments. Setting carbon emission targets and standards by industry or sector, or fuel efficiency standards for vehicles, falls within the traditional purview of federal and state governments. New York State, for example, has set aggressive energy and climate goals, including meeting 30% of the state's electricity needs with renewable energy sources by 2030, and

reducing greenhouse gas emission by 80% below 1990 levels by 2050.

At the same time, there is a growing acknowledgement by scientists and policy analysts that a substantial part of the global warming challenge may be met through the design and development of cities and towns. The form and function of human settlements can either reduce or increase the demand for energy, and can also influence how energy is produced, distributed, and used. Planning and urban design measures can substantially reduce the number and distance of vehicle trips by organizing human activity in compact communities with a range of housing types, providing reliable transit to and from employment, and placing services within easy walking distance of home. For example, research has shown that miles driven are reduced by between 20 and 40 percent in compact urban development compared to miles driven in the auto-dependent suburbs that have predominated in North America since the Second World War.

Transportation activity of all forms contributes about 33 percent of energy-related GHG production in the United States, and single-occupant automobile travel makes up about half of that activity. The vast majority of vehicles now burn carbon fuels and will continue to do so for some time (even with aggressive fuel substitution and efficiency measures), so strategies that reduce travel by limiting low-density development and encouraging more compact, walkable, full-spectrum living and working environments can potentially make a significant contribution to overall climate change mitigation.

Studies indicate that a GHG reduction of up to 10 percent may result from a change in land use approach alone, and additional reductions will result from employing other strategies such as investments in transit, encouraging development around transit stops, and parking charges. By one estimate, approximately two-thirds of all development in 2050 will be new or will have been redeveloped since 2007, suggesting that combined land use and transportation strategies could be quite powerful in mitigating the increases in GHGs.

SUSTAINABILITY CONCEPT

LEGEND

OPEN SPACE NETWORK

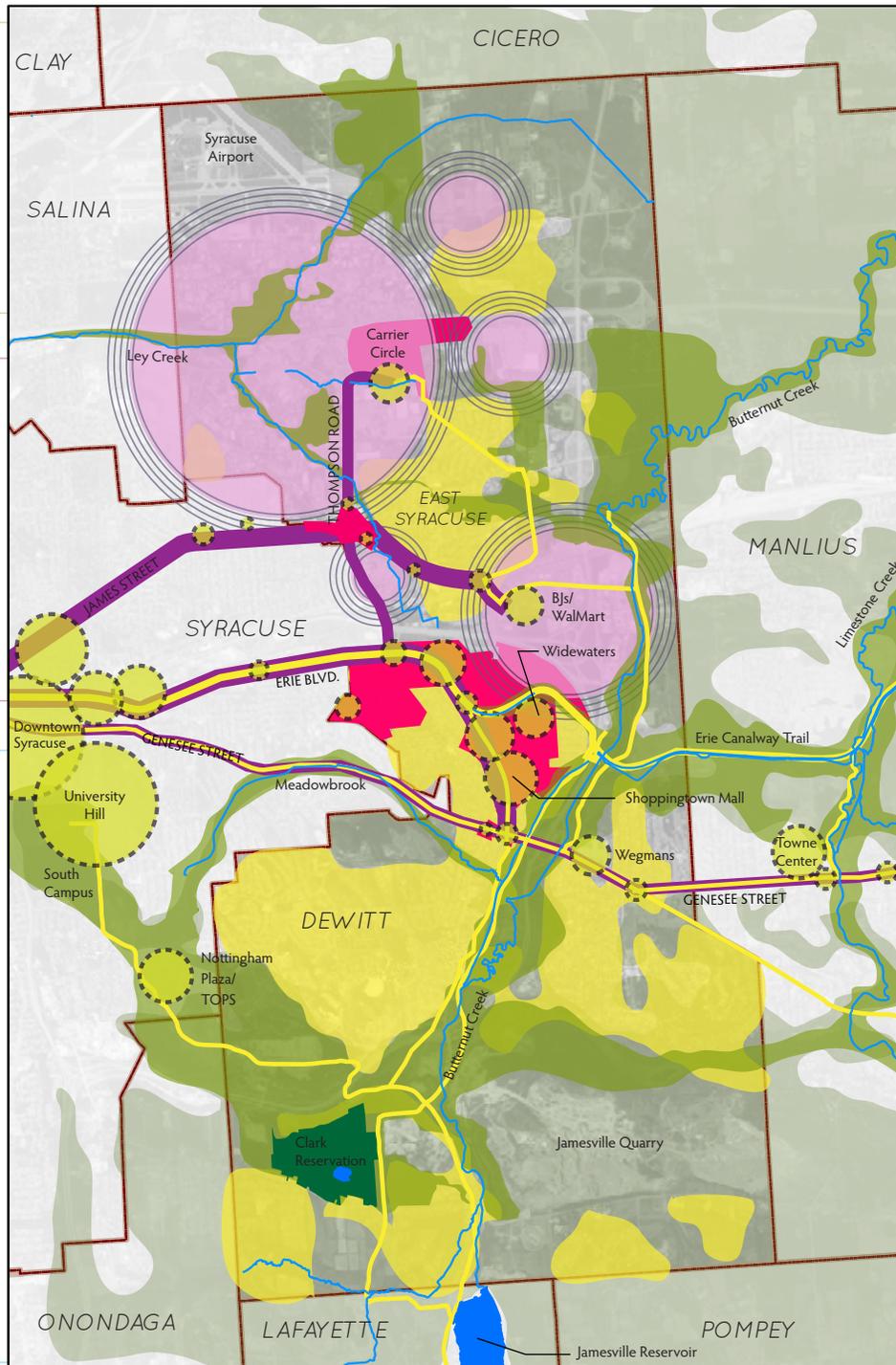
-  **Greenway Corridor**
 A greenway corridor is a linear system of protected open space that typically provides recreational amenities as well as enhancing larger ecological networks.
-  **Conservation Area**
 Conservation areas provide safeguards for and can unify cultural, natural, and recreational resources providing opportunities to experience our agricultural landscapes, forests, and wetlands.

ALTERNATIVE MOBILITY NETWORK

-  **Enhanced Transit Corridor**
 Improvements to transit service like dedicated busways, dedicated station stops, prioritization of buses (known as Bus Rapid Transit), or the development of light rail service along selected corridors could combine to increase transit ridership and reduce VMT.
-  **Bikeway**
 Bikeways contain dedicated bicycle infrastructure like bike lanes or bicycle parking and provide recreational and alternative mobility options connecting residential neighborhoods to employment and entertainment centers.

LAND USE FRAMEWORK

-  **Mixed-Use Development Zone**
 These areas incorporate mixed-use zoning allowing for residential and commercial development. They can also reduce parking requirements and allow for the development of walkable, transit-oriented neighborhoods that are accessible by foot or bicycle to existing residential areas within the Town.
-  **Mixed-use Node**
 Mixed-use nodes are areas of slightly higher densities that incorporate multi-story structures combining commercial and residential uses.
-  **Innovation Zone**
 Innovation Zones support the on-going research and development, light/heavy-manufacturing, as well as low-carbon or net zero-energy office and large-retail uses within the town.
-  **Residential Area (Town)**
 Residential areas preserve the existing residential neighborhoods within the Town.



Land Use and Sustainability

Sustainable landscape assessments analyze a series of ecological conditions and trends; natural and human influences; and opportunities for resource conservation, restoration, and development within a defined region or area. The assessment maps potential conservation elements, which are areas of high ecological value; and identifies areas that do not provide essential habitat, that are not ecologically intact or readily restorable, and where development activities can be directed to minimize impacts to important ecosystem values, as well as to enhance the relationships between already developed areas.

How can we make the Town of DeWitt a better place for walkers, runners, and bikers?
moving
DeWitt



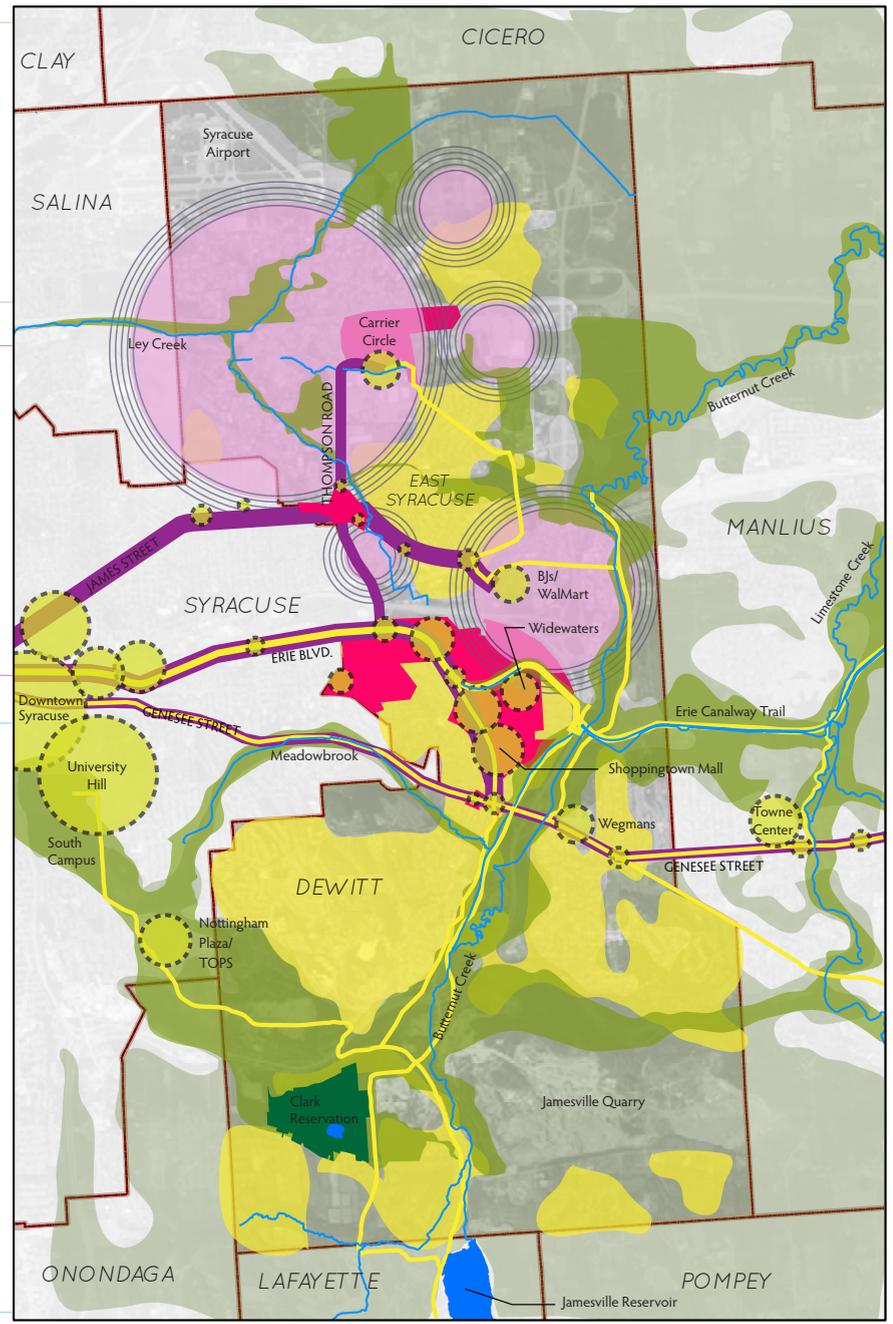
next steps



LEGEND

- 1 OPEN SPACE NETWORK**
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SUSTAINABILITY CONCEPT



COMPREHENSIVE PLAN DRAFT UPDATE STRATEGIES:

DEVELOP A NEIGHBORHOOD DESIGN MANUAL THAT PROVIDES GUIDANCE ON APPROPRIATE LIGHTING, ENTRY AND STREET PLANTINGS, TRANSIT STOPS AND SHELTERS, TRAFFIC CALMING TECHNIQUES AND OTHER DESIGN FEATURES. ESTABLISH A TOWN-WIDE WAYFINDING SYSTEM.

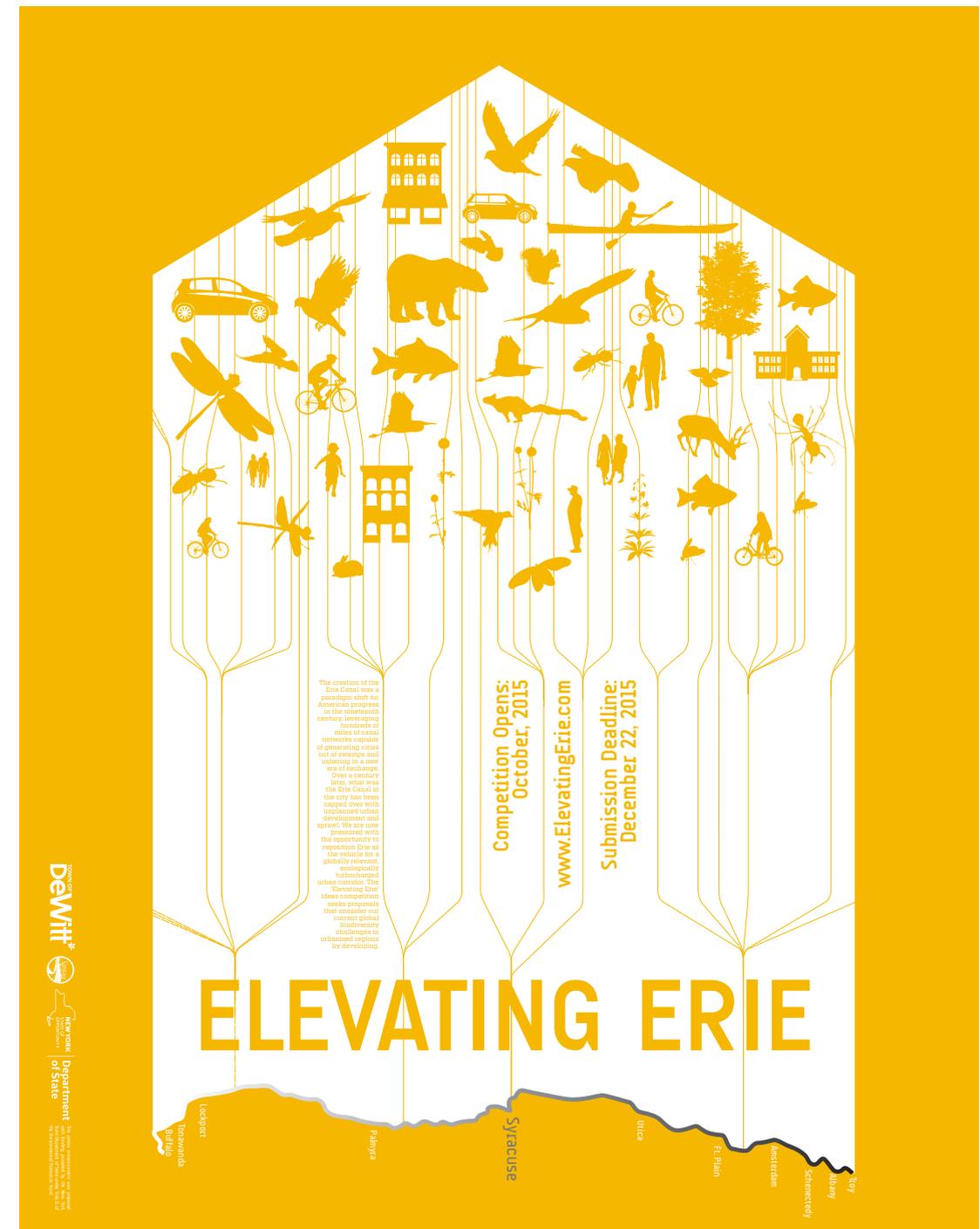
EXPLORE POTENTIAL AREAS WHERE MIXED-USE DEVELOPMENT SHOULD BE INCORPORATED AS RELATED TO THE TOWN OF DEWITT LAND USE VISION AND DEVELOP APPROPRIATE UPDATES TO THE TOWN OF DEWITT ZONING CODE. REVIEW AND UPDATE MIXED USE DEVELOPMENT GUIDELINES IN THE EXISTING CODE TO ESTABLISH PREFERRED DEVELOPMENT DENSITIES AS WELL AS TO OPTIMIZE ALLOWED USES BASED ON EXISTING ZONING DISTRICTS.

IMPROVE LIGHTING, PEDESTRIAN, TRANSIT, AND BICYCLE AMENITIES ALONG MAJOR THOROUGHFARES AS NEEDED.

DEVELOP A PEDESTRIAN AND BICYCLE MASTER PLAN FOR THE TOWN THAT IMPROVES PEDESTRIAN AND BICYCLE SAFETY AND MOBILITY. IDENTIFY IMPORTANT PEDESTRIAN GENERATORS (SCHOOLS, CHURCHES, TRANSIT STOPS), ACTIVITY NODES (PLAYGROUNDS, COMMUNITY PARKS), AND DESTINATION POINTS (MUNICIPAL OFFICES, LIBRARY, TRAILHEADS) THAT COULD BE LINKED BY PEDESTRIAN WALKS AND BICYCLE PATHS TO COMPLEMENT THOSE INCLUDED IN THE CANAL RECREATIONWAY TRAIL AND OTHER EXISTING AND PROPOSED WALKS AND PATHS.

QUESTIONS?

sgordon@townofdewitt.com
(315)446-3910 ext. 148
@movingdewitt

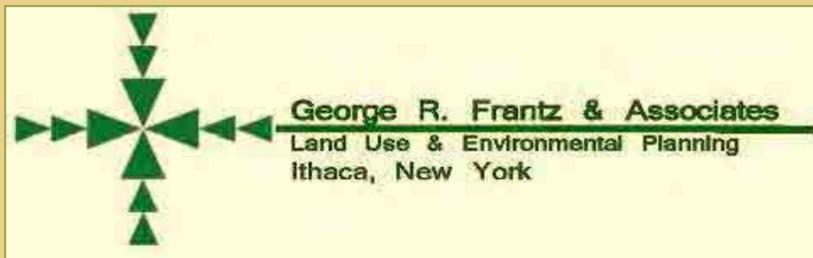


The Town of Geneva

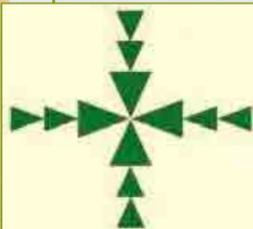
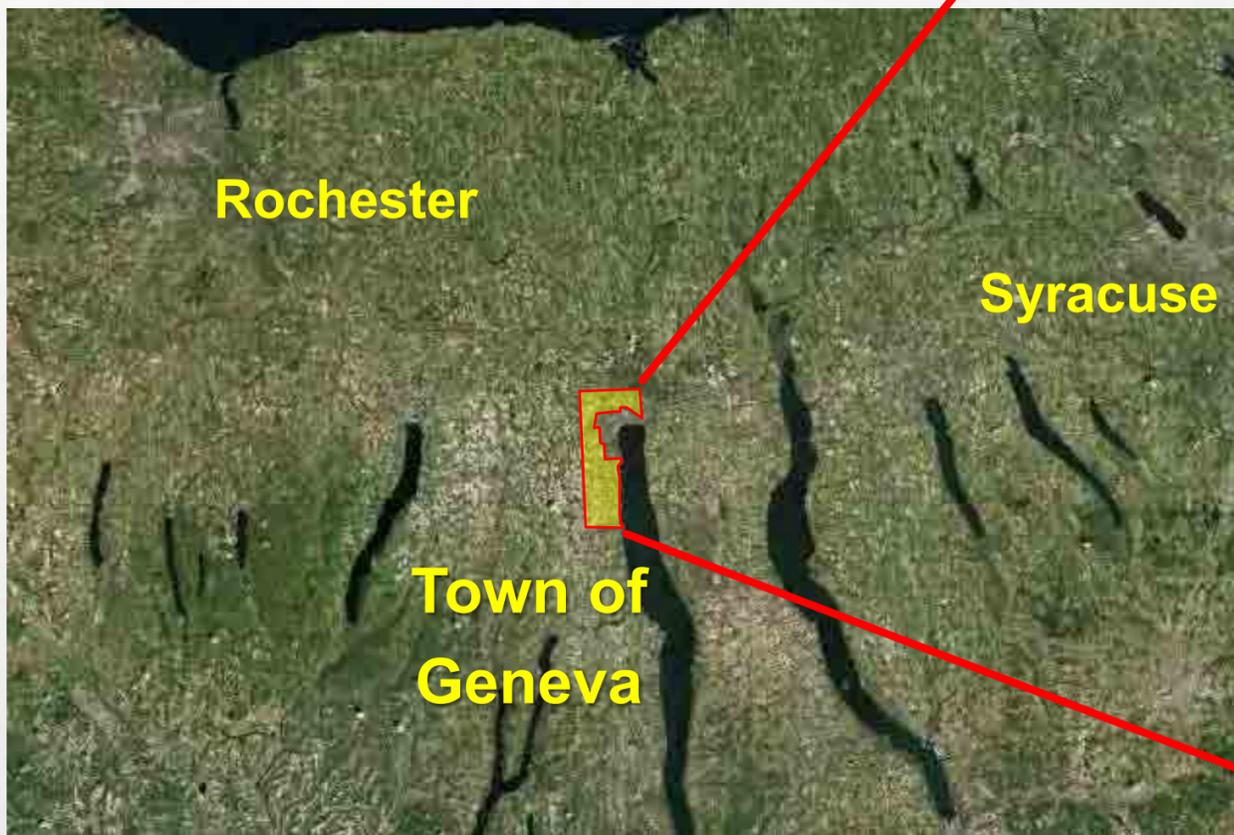
Integrating Sustainability into the Comprehensive Plan

George R. Frantz, AICP, ASLA

Thursday, April 14, 10:30 a.m. – 12:00 p.m.



Where are We?



George R. Frantz & Associates
Land Use & Environmental Planning
Ithaca, New York



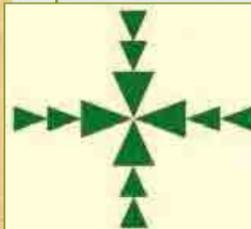
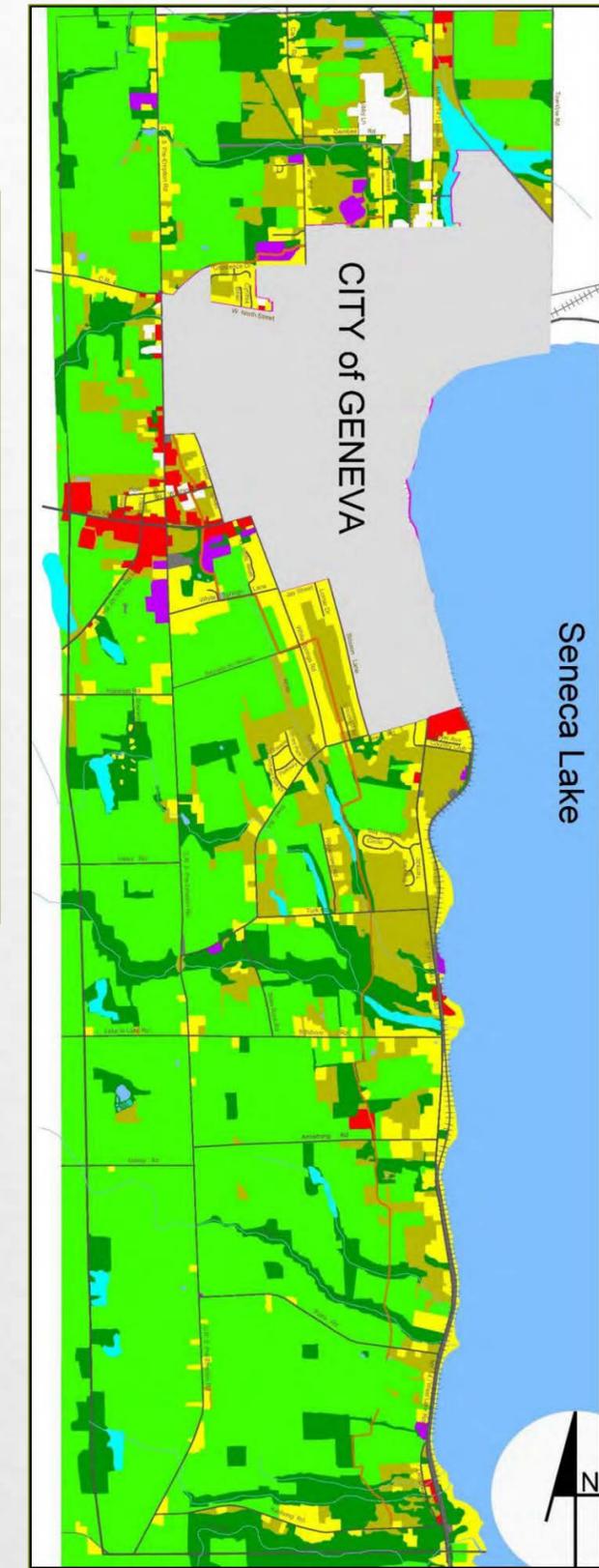
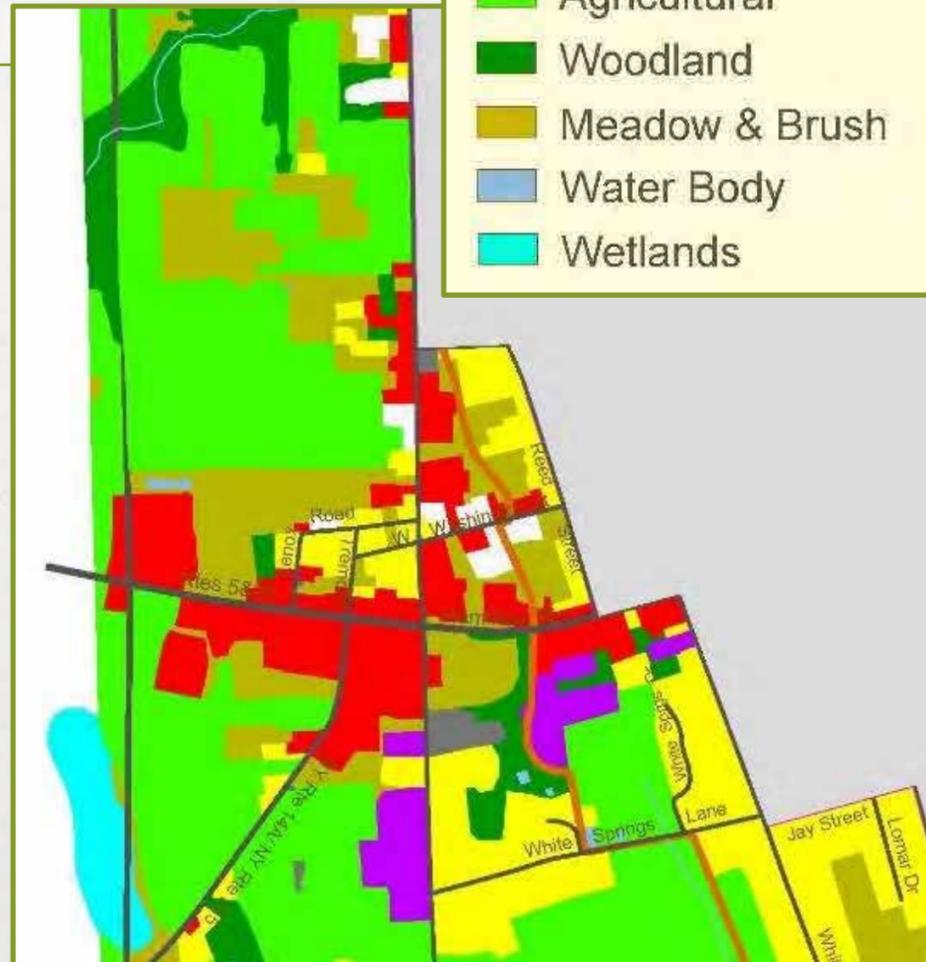
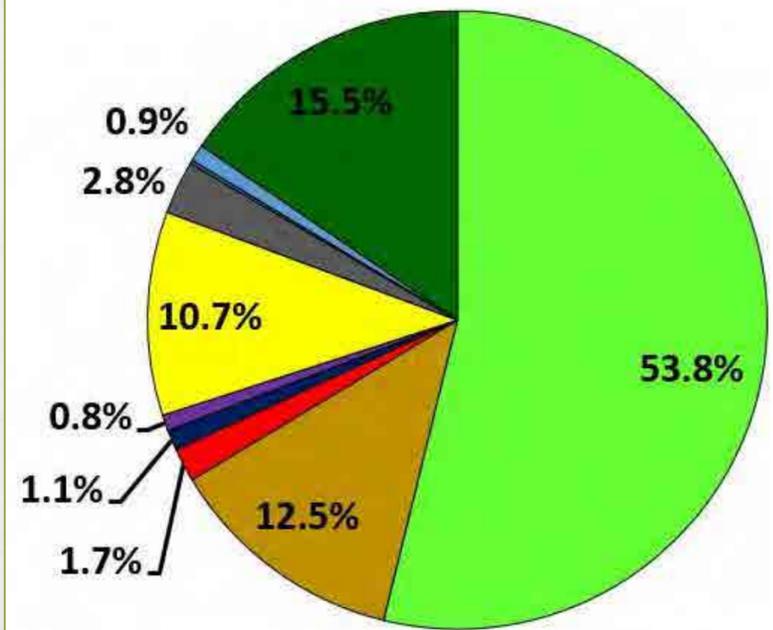
NEW YORK
STATE OF
OPPORTUNITY.

Climate Smart
Communities

Existing Land Use

LEGEND

- Residential
- Commercial
- Industrial
- Institutional
- Utility
- Agricultural
- Woodland
- Meadow & Brush
- Water Body
- Wetlands



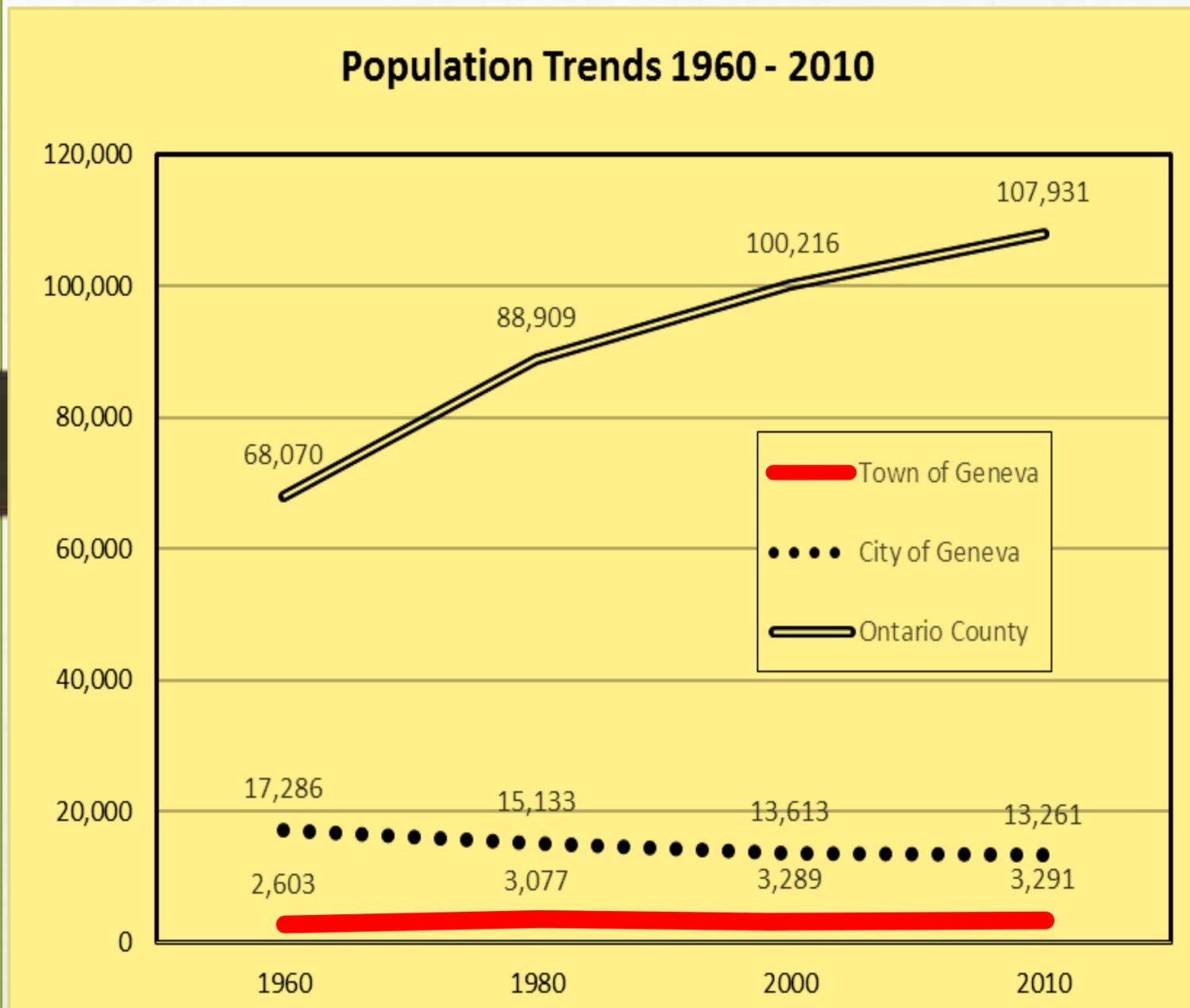
George R. Frantz & Associates
Land Use & Environmental Planning
Ithaca, New York



Climate Smart
Communities

Trends

- Overall low growth rate between 1960 & 2010;
- Highest growth between 1960 & 1980 = **18%**;
- Slower growth between 1980 & 2010 = **7%**;
- **40%** of residents age 55+ in 2010, up from **33%** in 2000.



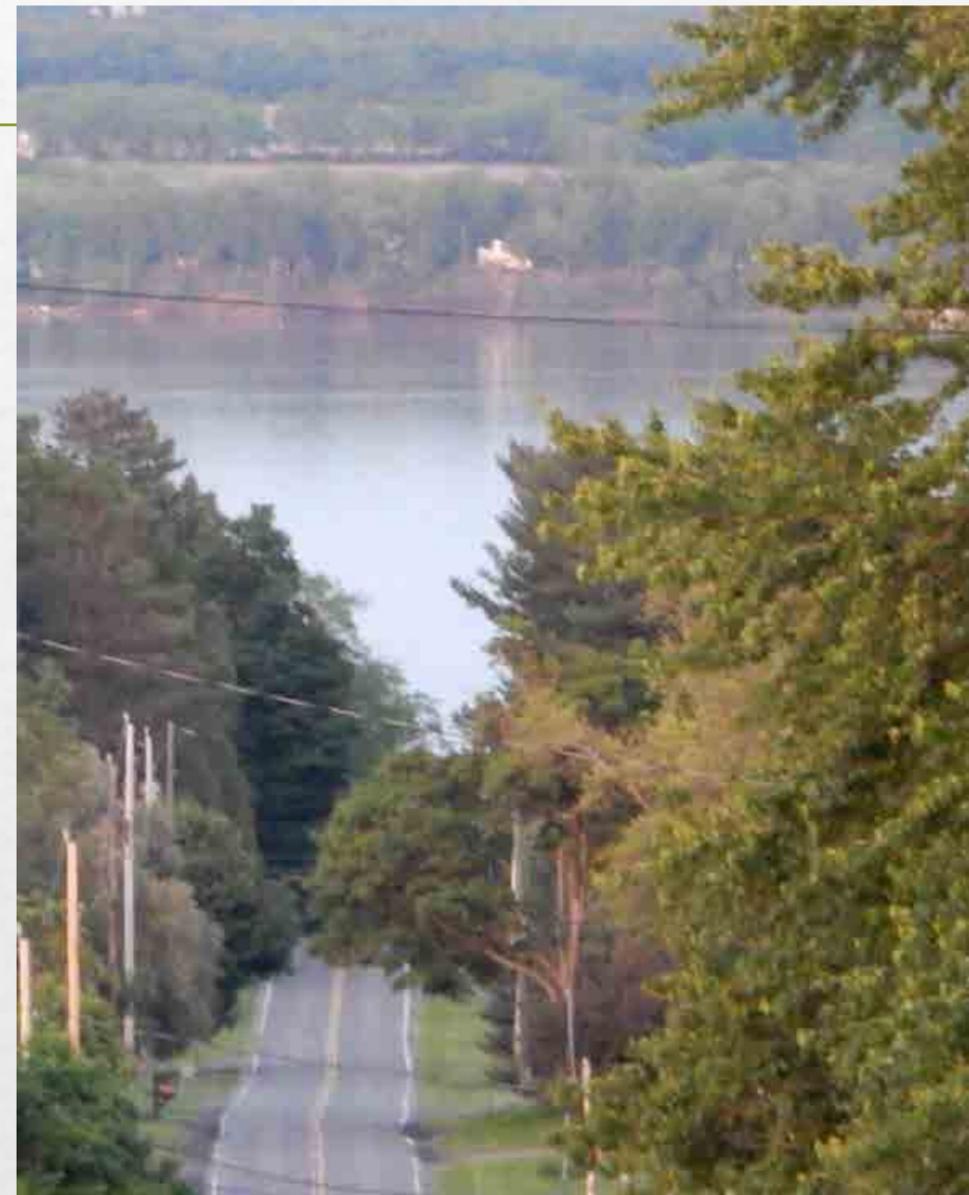
Overall Plan Principles



- Promote a pattern of growth that is more environmentally & economically sustainable;
- Provide for continued economic development;
- Provide for a diverse mix of housing for a diverse population;
- Protect the quality of life in existing neighborhoods.

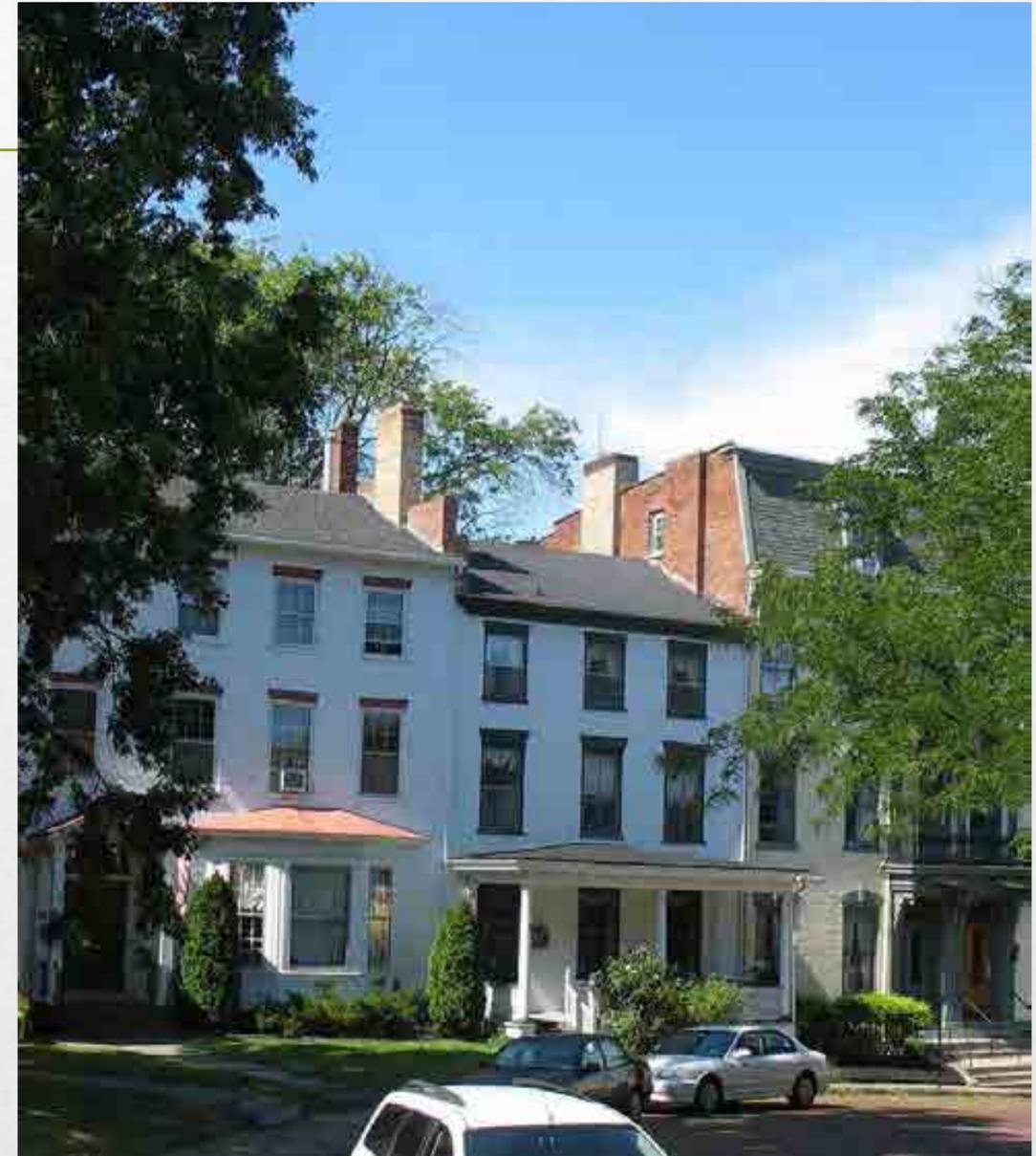
Overall Plan Principles

- **Protect the agricultural land resources;**
- **Protect the water resource;**
- **Make efficient use of existing public infrastructure & services;**
- **Recognize the interconnection between the health and vitality of the **City of Geneva** & the **Town of Geneva**.**

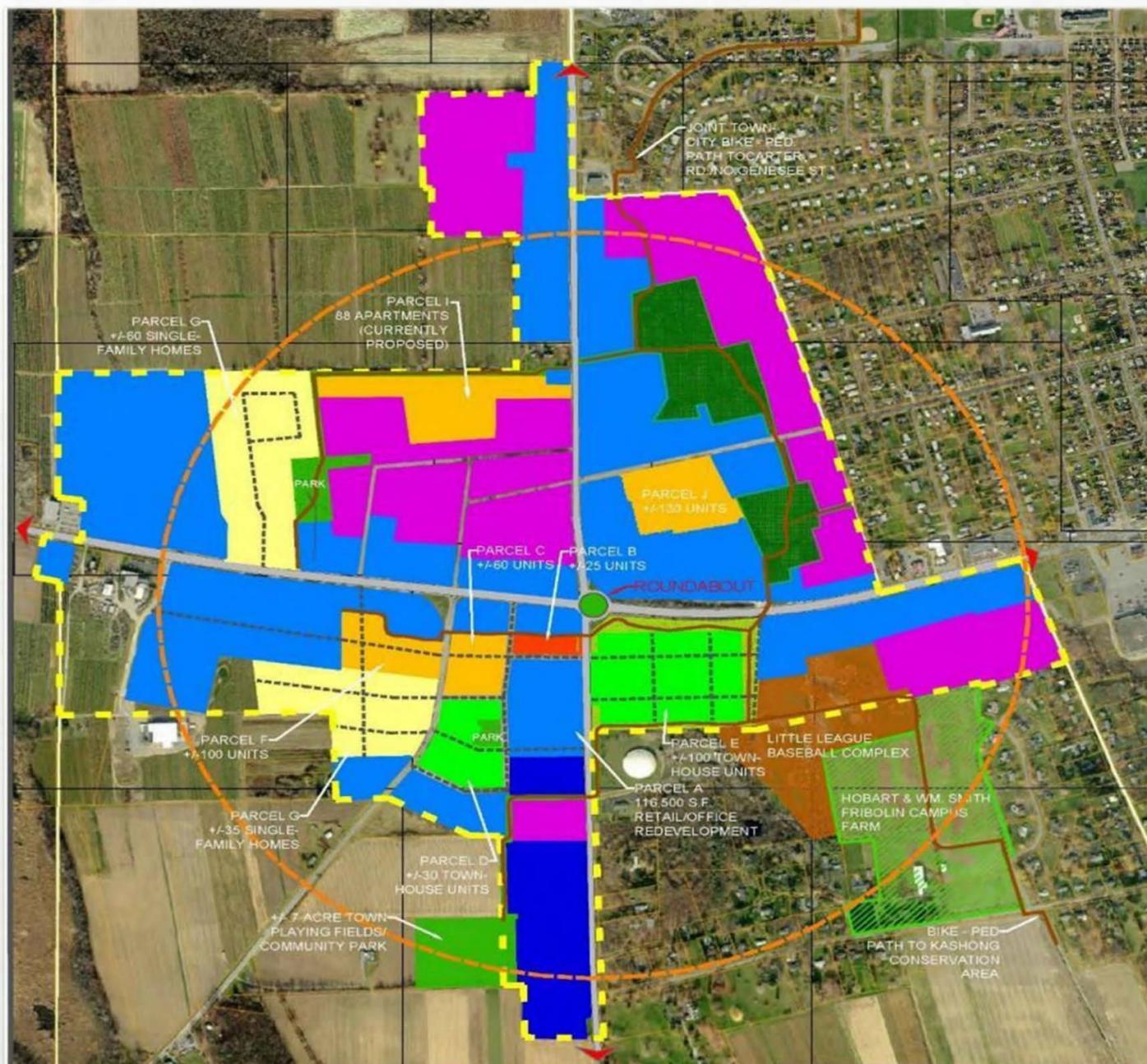


Future Land Use

- Most future residential and commercial uses in **Town Center**;
- Compact development that reduces the use of car;
- Increased bicycle & pedestrian infrastructure;
- Better manage stormwater runoff;
- Maintain the agricultural landscape;
- Promote a more environmentally sustainable community.



Town Center



- Re-purposing aging commercial area to compact urban village;
- Emphasis on creating walkable & bikable village center;
- Housing for aging in place;
- Road diet for 5&20/ retrofitting pedestrian facilities.

Town Center



Kentlands MD

Radburn NJ



Park Avenue, Rochester

- **Compact urban village;**
- **Variety of housing types:**
 - *Owner occupied young families;*
 - *Rentals & condos for downsizing empty nesters;*
 - *Specialized assisted living.*

Kentlands MD

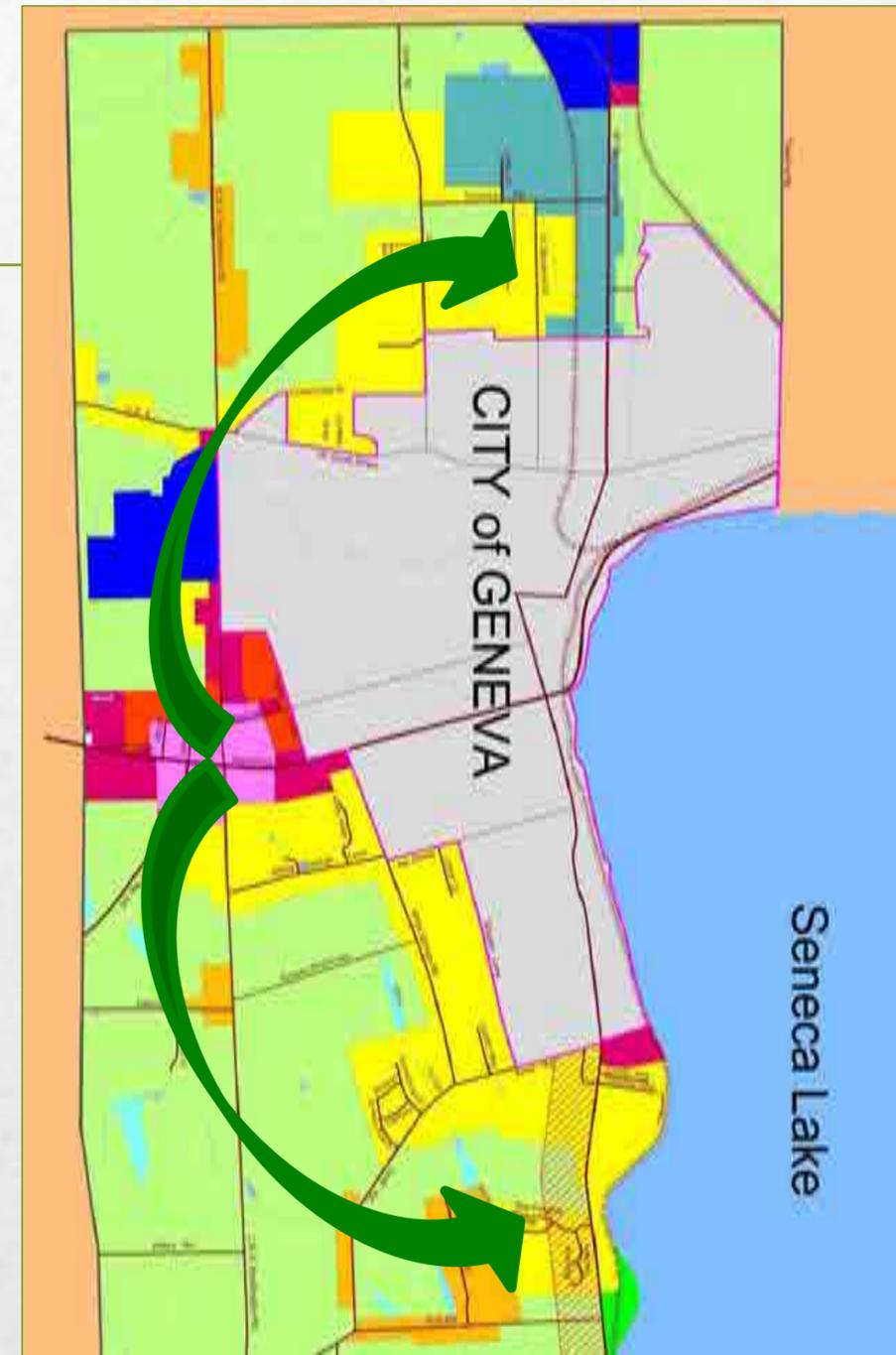
Transportation

- **Improved accessibility and mobility for all users;**
- **Implement “Complete Street” concepts in retrofits of 5&20, CR6, all new streets;**
- **Functional network of bicycle & pedestrian linkages.**



Transportation

- **Functional network of bicycle & pedestrian linkages;**
- **Connect existing and future residential and activity centers:**
 - **Town Center;**
 - **High School/Middle School;**
 - **Geneva Community Center;**
 - **McDonough Park;**
 - **Geneva Experiment Station;**
 - **Ontario Pathways regional network.**



Ecological Resources

- **Develop and implement unified plan for better managing and treating stormwater runoff:**
 - **District approach to retrofitting large area of impervious surfaces;**
 - **Wetland Preserve to manage stormwater and provide public park & open space;**
 - **Reduce flooding in city of Geneva downstream;**
 - **Reduce urban stormwater pollutants entering Seneca Lake.**



Ecological Resources

- Develop and implement design standards to promote **Low Impact Development**:
 - Green roofs/LEED building design;
 - Bioretention cells/rain gardens, infiltration trenches;
 - Permeable pavement designs;
 - Stormwater planters and tree box filters.



Energy & Climate



- Utilize the principles of climate-smart land use planning to create compact development to reduce carbon footprint;
- Establish a Climate Smart Task Force to coordinate Town initiatives toward renewable energy development;
- Ensure building & land use regulations are “clean energy friendly.”

Agriculture

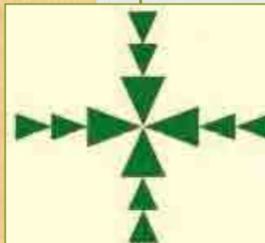
- Establish new zoning and subdivision designed to recognizes and protects agricultural operations;
- Promote sustainable land and water resources stewardship and economic development initiatives;
- Utilize purchase/donation of development rights to permanently protect key agricultural lands.



Agriculture



- Provide new markets for agricultural products and opportunities for agricultural tourism;
- Provide for small scale farm based businesses.



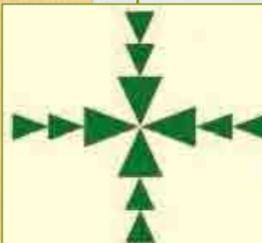
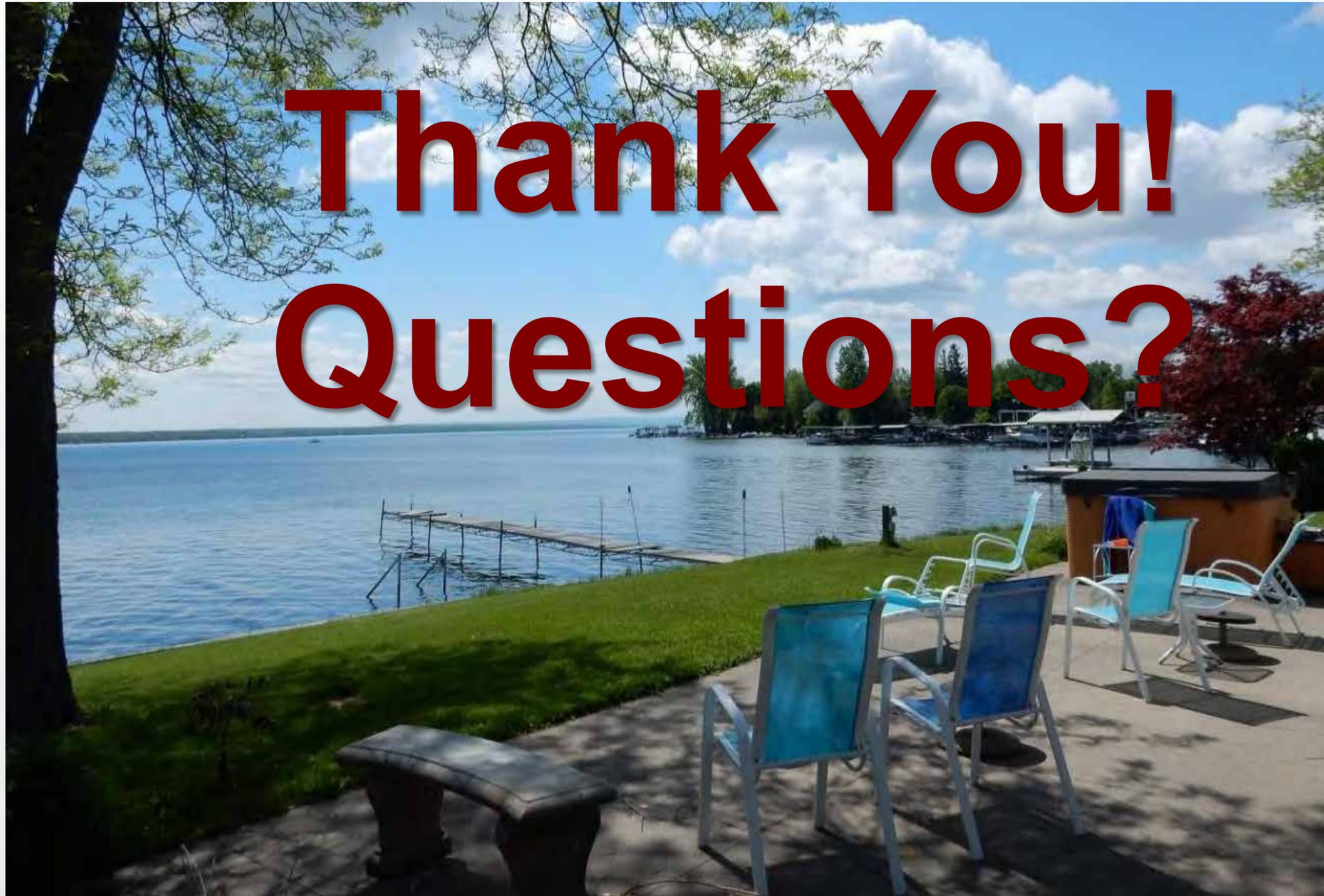
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Climate Smart
Communities

Thank You! Questions?



George R. Frantz & Associates
Land Use & Environmental Planning
Ithaca, New York



NEW YORK
STATE OF
OPPORTUNITY.

Climate Smart
Communities

Climate Smart Communities Webinar

Thanks for joining us!

Webinar slides and recordings will be posted at

<http://www.dec.ny.gov/energy/84359.html>.

Contact email:

Dazzle Ekblad

dazzle.ekblad@dec.ny.gov

