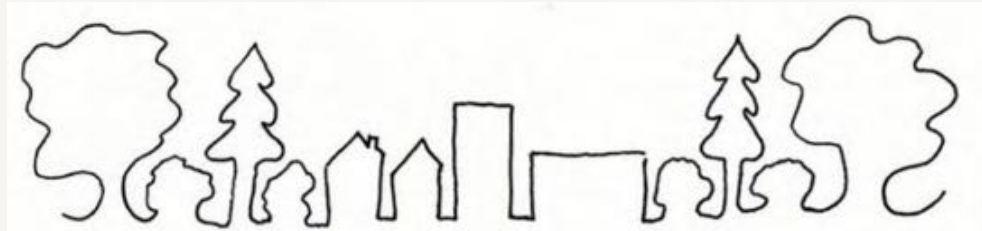


ROCKLAND P.L.U.S PLANNING LAND USE WITH STUDENTS



How can we build sustainability into community planning?



A Rockland County Program for High School Students
Concluding with a Symposium Event 3/27/20 at the
Rockland Fire Training Center 8:30-1:30 PM

Rockland P.L.U.S. 2020 is a collaborative partnership



1. Keep Rockland Beautiful
2. Lamont-Doherty Earth Observatory of Columbia University
3. Rockland Conservation & Service Corps
4. Rockland Office of Economic Development & Tourism
5. Rockland County Soil & Water Conservation District

Special thanks to our sponsors!

**Old York
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 **Rockland County**

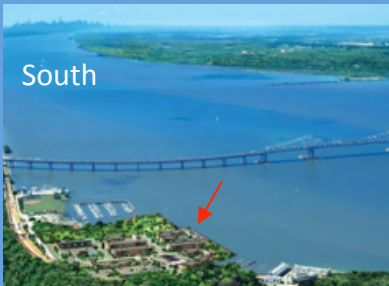
People's United[®]
Community Foundation

Rockland Municipal Planning
Federation

Community Scenario

You have been offered 2 dream jobs in Westchester that are the exact same EXCEPT for the location...

A Tarrytown Waterfront



- ❖ Waterfront condo: 2 Bd, 2.5 Bth
- ❖ Walkable community
- ❖ Close to Metro North train



B Waccabuc, NY



- ❖ Large Home: 5 Bd, 4 Bth
- ❖ Large plot of land
- ❖ Suburban, wooded area

Which job will you take? Jot down the benefits & concerns for each.



Do you think these two are 'Climate Smart Communities'?

Climate Smart
Communities

Climate Smart Communities: NYS program that helps local governments take action to reduce greenhouse-gas (GHG) emissions and adapt to climate change.

Implement Climate Smart Land Use:

- Planning & Infrastructure for Bicycles & Walking
 - Complete Streets
 - Design for Electrical Vehicles
 - Strategies to Increase Public Transit Ridership & Carpooling
 - Natural Resources Inventory & Local Tree Planting Program
 - Preserve Natural Areas through planning
- Community Solar
 - Community Task Force of Stakeholders
 - Enhance Community Resilience to Climate Change
 - Education to the Community





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In

★ **NYACK** ★

Rockland's first Bronze Certified Climate Smart Community!

- Municipal buildings currently use 100% green electricity sources
- Installing new LED streetlights to cut 68% of their lighting energy needs

- Community Solar
- Community Task Force of Stakeholders
- Enhance Community Resilience to Climate Change
- Education to the Community

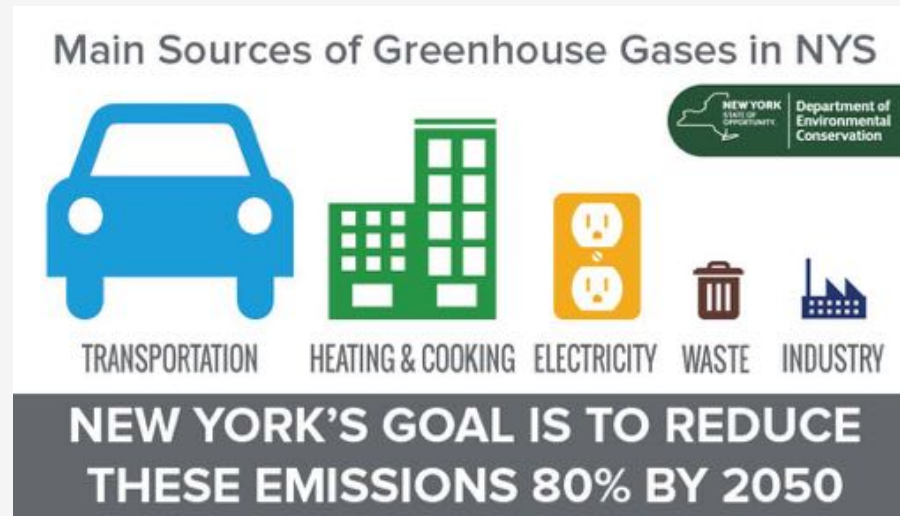


New York State is taking action!

With Climate Smart Communities



New York State is experiencing higher climate impacts than the national average. In response they have set some very aggressive energy reduction targets!



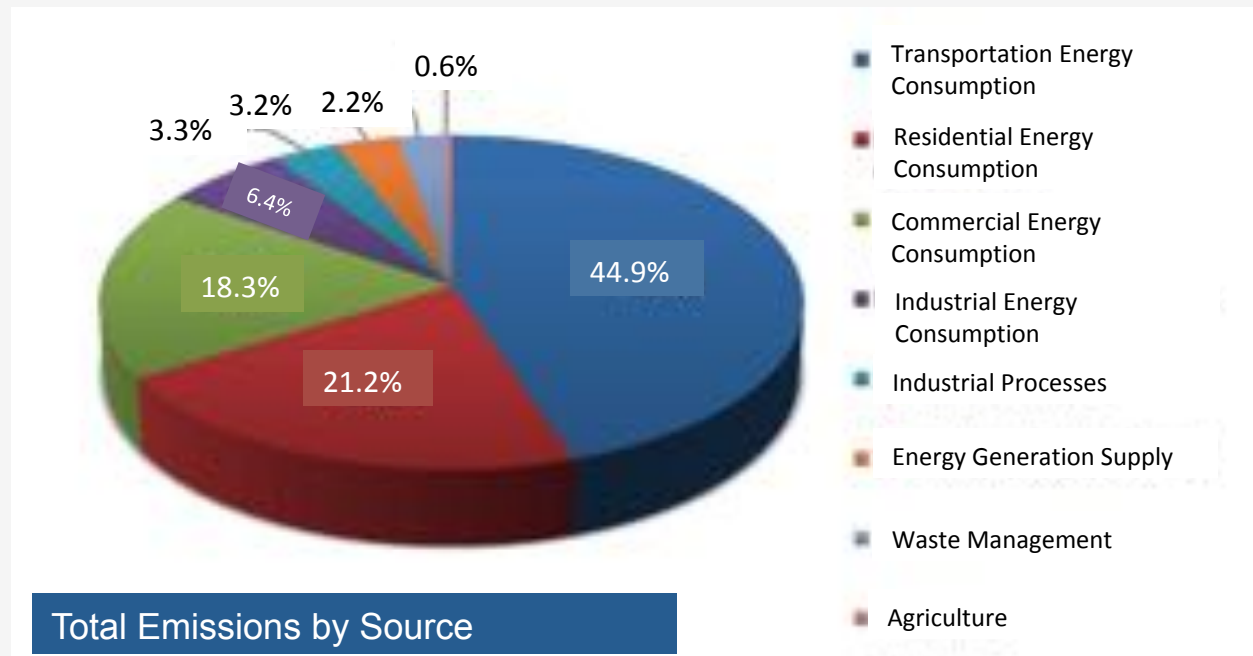
Reduce 40% by 2030 and 80 % by 2050 from 1990 GHG emission levels.

Every community must help!

What About the Mid-Hudson Region of NYS?



Mid-Hudson Regional Sustainability Report



82% of Rockland residents live & work in the county

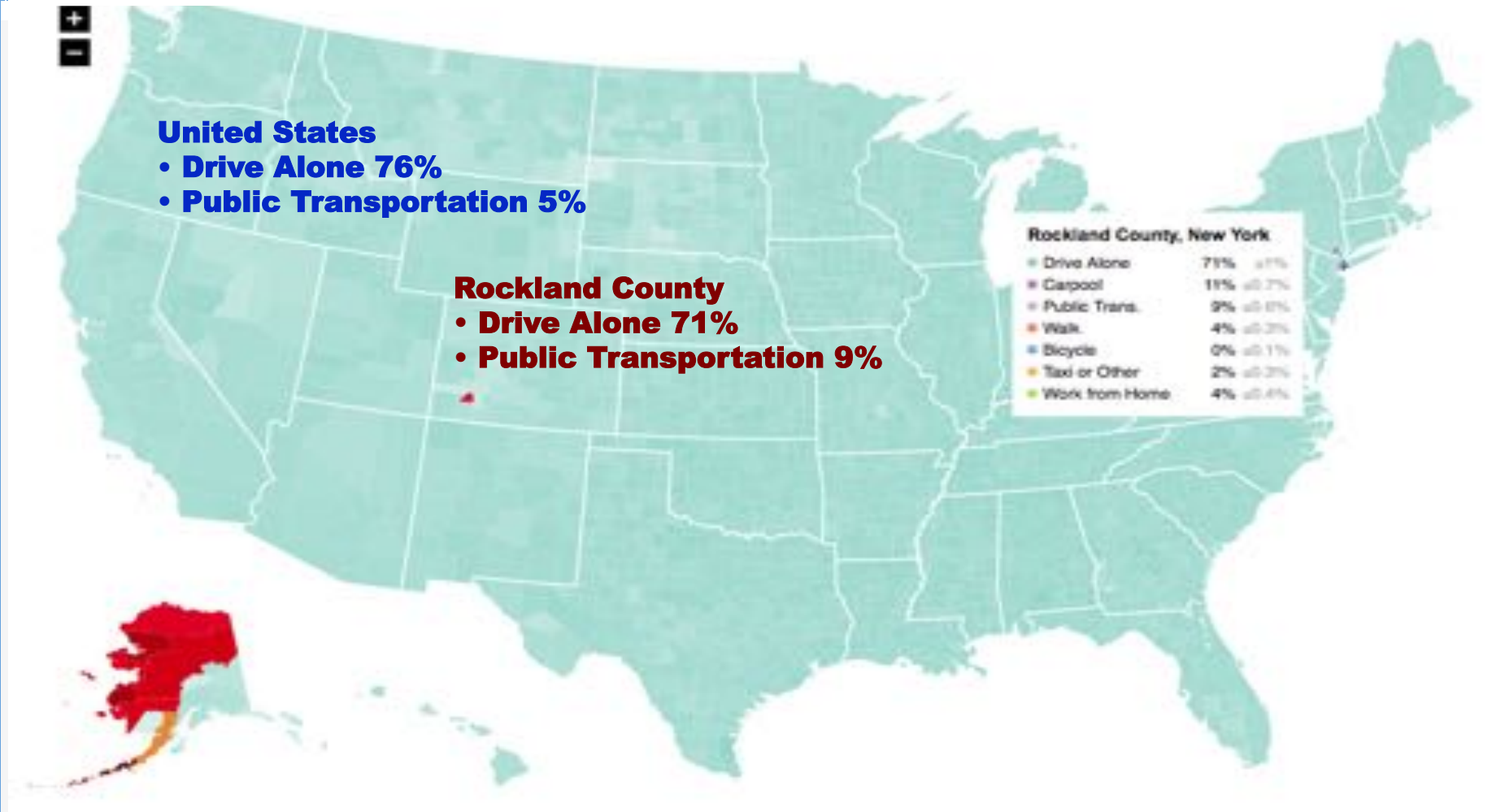
Almost half (44.9%) of our region's emissions come from transportation.

Emissions are a major contributor to Green House Gasses (GHG) so moving people more efficiently within in the county is an important piece in sustainable planning.

How do Rockland residents commute to work?

Slightly better than the national average where 76% drive alone.

How might local planning help?



How will the future differ from the past?

Shared transit can have a significant impact.



1 bus/car = 30 autos

Recent National Data on Work Commuting:

- **Driving** is still the most dominant form of commuting
- BUT as of Sep. 2018 **telecommuting** ranks 2nd!



GHG cause Global Warming which leads to Sea Level Rise (SLR)

We will see submerged waterfronts, rail lines even airports.

1 ft. SLR:

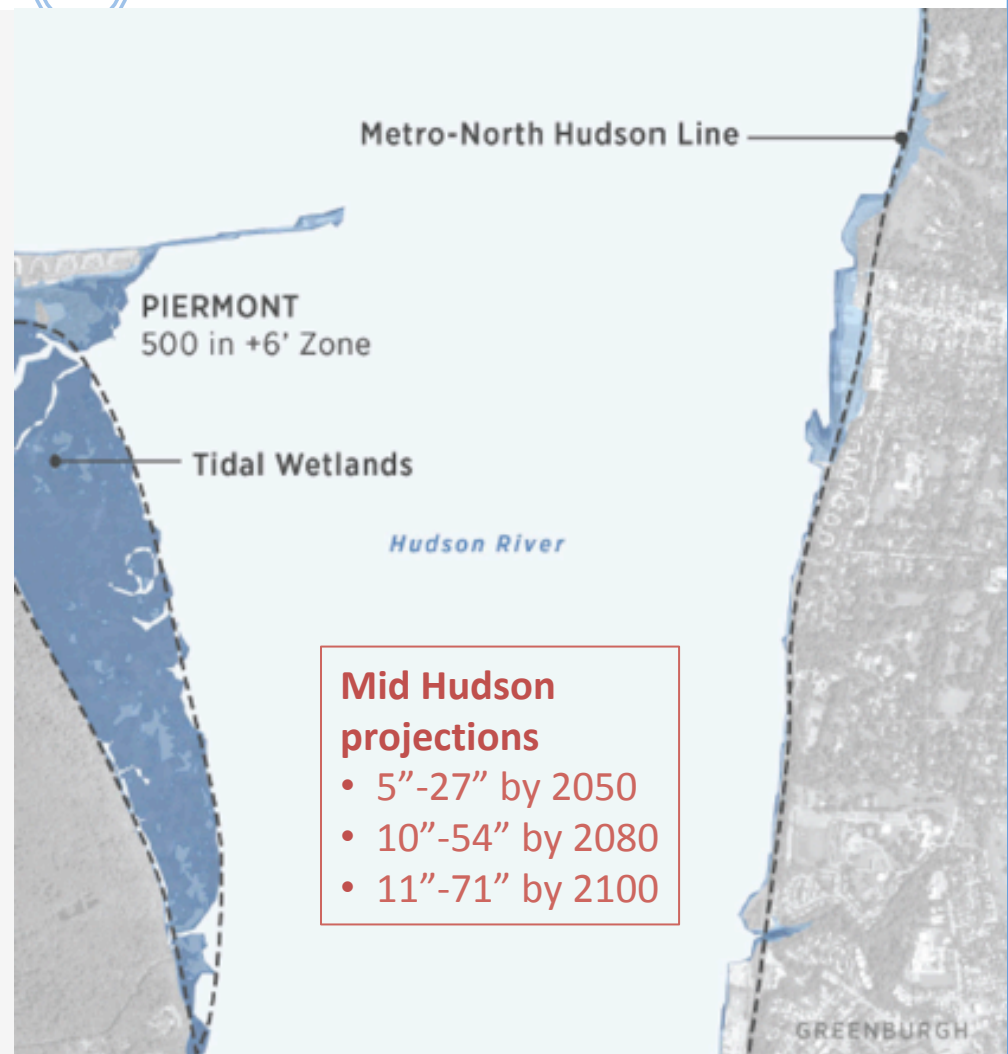
- Permanent flooding for developed waterfront edges and development on fill
- Areas of Piermont already face regular flooding at high tide

3 ft. SLR:

- Portions of Metro North flooded
- Permanent flooding for >2,000 Westchester & Rockland residents
- 3 ft. inundation for ~9% of Piermont's current residents

6 ft. SLR:

- Flooding of critical infrastructure:
 - East-west railroads
 - Wastewater treatment plants
 - Power generating facilities
- Flooding for >2,500 residents



Sea Level Rise is Accelerating

Do You Remember Super Storm Sandy? How Did it Affect You?

Several waterfront communities took this as a planning wake up call!

Photo from Hudson River flooding, but local streams and waterways also cause impacts.



Can planning decisions play a role in storm impacts?

Photo-simulation: Elevated roadway (black) & floating homes.



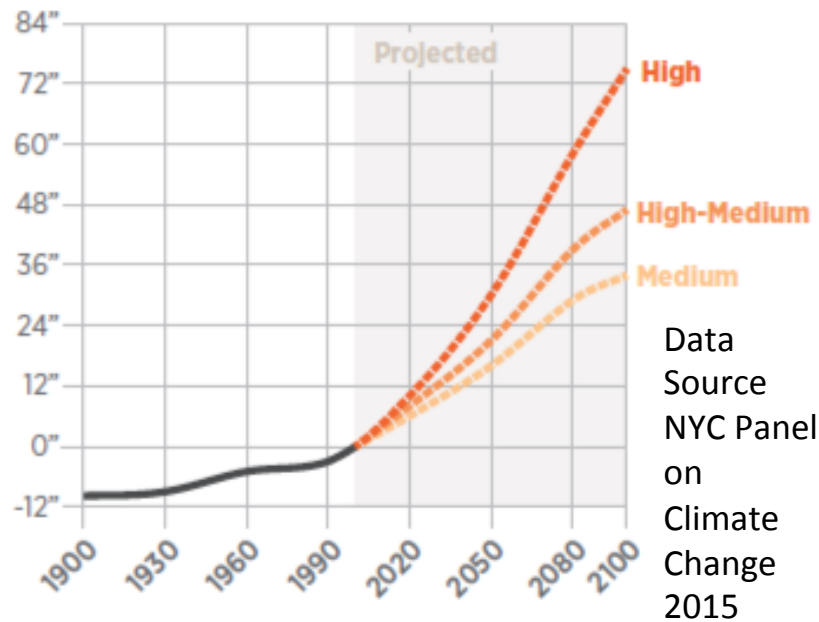
Photo-simulation: Elevated seawall & removable floodwall.



Sea Level Rise (SLR) is part of our present & our future

Regional Planning efforts are considering these issues

Historic sea level rise observations and future projections for New York City / Lower-Hudson Region.



Source: Adapted from NPCC and New York State projections.
Note: The Low scenario developed by the NPCC is not included in this chart. That scenario is dependent on a radical and immediate reduction in carbon emissions reduction that is considered by many experts to be unrealistic, and most consider the Medium scenario to be the lower range of what may occur.

RPA Regional Plan Association

Under Water

How Sea Level Rise Threatens the Tri-State Region



Sea Level Rise is Accelerating

How does all this relate to you and to planning?



- **Plan with resilience** in mind by leaving naturally planted areas with native planting to absorb water.
- **Reduce** filling, paving and hardening surfaces.
- **Stop** enclosing our streams in pipes and developing too close to waterways so they have no place to spill over.

Good news!

With thoughtful planning practices and land use decisions, we can create communities that are **more resilient, fun, environmentally friendly,** and **thriving** places to live and work!

Group Activity –

Planning Sustainably for all Ages and Stages



- Review the Community Enhancing Features worksheet in your folder.
- Consider the different age groups that make up your community. Which community features best meets the needs/interests of each age group?
 - Children (ES)
 - Teens (HS)
 - Adults (A)
 - Seniors (S)
- Individually, use the full sheet to choose 3 features for each of these 4 age groups.
- Next, narrow your choices to just 5 features that would serve the interests of all age groups in your community.
- Together in groups of 4 – 6 discuss why you chose each of the 5 features, and make a selection of 5 features between you that you all agree upon.

How can we plan for a healthy, sustainable community?



Sustainable Community Planning means thinking both locally and regionally & balancing various critical needs



Rockland P.L.U.S. helps us to S.E.E. the Community

Social, Economic, and Environmental community components



What will we be doing in this program?

Considering Sustainable Planning in Your Community



Develop a Sustainable Plan for a Local Space



Create a Poster to Share Your Project Plan



You will collaborate with peers from other Rockland high schools on planning a new community location.



Next time-

We'll discuss what you found in your community!



- Between now and next visit compile a list of places on the large sheet at the front of the room where you find:
 1. *Evidence that your community is forward thinking in terms of S.E.E. in planning your community. (reword)*
- As you compile this list, also think of what you have seen elsewhere that we feel is missing in our community. What would you want to see added? Feel free to jot this down as well.