CITY OF ESSEX JUNCTION
PLANNING COMMISSION
REGULAR MEETING AGENDA

Online & 2 Lincoln St.
Essex Junction, VT 0545
Thursday, August 1st 2024,
6:30 PM

E-mail: cyuen@essexjunction.org *www.essexjunction.org* *Phone: 802-878-6944, ext. 1607*

This meeting will be held in-person at 2 Lincoln Street and available remotely. Options to join the meeting remotely:

- **JOIN ONLINE**: Join Zoom Meeting
- **JOIN CALLING:** *(toll free audio only)*: (888) 788-0099 | Meeting ID: 953 1240 7791; Passcode: 040339

1. **CALL TO ORDER** [6:30 PM]

2. **AGENDA ADDITIONS/CHANGES**

3. **PUBLIC TO BE HEARD**
   a. Comments from Public on Items Not on Agenda

4. **MINUTES**
   a. July 3rd, 2024

5. **BUSINESS ITEMS**
   a. Introductions for new Planning Commission member(s) [6:35 PM]
   b. Global Foundries Energy Storage 45 Days Notice Presentation* [6:45 PM]
   c. Transit Oriented Development Master Plan Existing Conditions Presentation* [7:00 PM]
   d. Vermont Climate Action Plan feedback* [8:00 PM]

6. **MEMBERS UPDATES** [8:25 PM]

7. **STAFF UPDATES** [8:27 PM]

8. **ADJOURN**

*attachments included in the packet

Agenda item timestamps are estimates of the starting time of each topic and are subject to change.

This agenda is available in alternative formats upon request. Meetings of the Planning Commission, like all programs and activities of the City of Essex Junction, are accessible to people with disabilities. For information on accessibility or this agenda, call the City Manager's office at 802-878-6944 TTY: 7-1-1 or (800) 253-0191.

CITY OF ESSEX JUNCTION
PLANNING COMMISSION
MINUTES OF MEETING
JULY 3, 2024
DRAFT

MEMBERS PRESENT: Diane Clemens, Chair; Scott McCormick, Vice-Chair; Elena Juodisius; Elijah Massey
ADMINISTRATION: Chris Yuen, Community Development Director
OTHERS PRESENT: None

1. CALL TO ORDER
In lieu of a chair, Mr. Yeun called the meeting to order at 6:33 PM.

2. REORGANIZATION
SCOTT MCCORMICK made a motion, seconded by ELIJAH MASSEY, to appoint DIANE CLEMENS as Chair. Motion passed 4-0.

ELIJAH MASSEY made a motion to nominate SCOTT MCCORMICK as Vice-Chair. Motion passed 4-0.

3. AGENDA ADDITIONS/CHANGES
Ms. Clemens requested to add Future Priorities as Item F.

4. PUBLIC TO BE HEARD
a. Comments from Public on Items Not on Agenda
None.

5. MINUTES
a. June 6, 2024
MOTION by SCOTT MCCORMICK, seconded by ELIJAH MASSEY, to approve the minutes of June 6, 2024. Motion passed 4-0.

6. BUSINESS ITEMS
a. Introductions for new Planning Commission member(s)
All Planning Commissioners, both new and existing, introduced themselves and provided information about their background. Ms. Juodisius introduced herself as the newest Planning Commissioner, and a new resident of Essex Junction.

b. H.687 Summary as it relates to Municipal Planning
Mr. Yeun said that H. 687 has been passed and is in effect. He discussed the four development-based tiers that the state is now separated into and said that Essex Junction will most likely fall under Tier 1B. Major changes include the following: municipalities must now allow for a duplex or four-plex on the same size lot that a single-family home is permitted, no restrictions for the number of non-related occupants are permitted, and hotels and motels that are converted to permanent affordable housing must be permitted.

For the most part, few changes to the Land Development Code (LDC) need to be made in response to this bill as Essex Junction has been proactive with their policies.

c. Essex A North Lot Solar Project Petition for Certificate of Public Good
Global Foundries has petitioned to the Public Utilities Commission for a certificate of public good to add solar panels on their site. The PC is not able to review such applications but can write to the Public Utilities Commission if they have feedback. Global Foundries is no longer attempting to bring other commercial entities on site, as envisioned in their 2012 Master Plan.

d. Land Development Code amendments, including discussion on following:
i. Recap of Changes previously discussed
Mr. Yuen said that this is the largest current project that the PC is working on right now and briefly reviewed the work that has been done to date.

iii. Approval of Temporary Uses – Food Trucks and Trailers
Recent additions have included the regulation of food trucks, as the former guidelines made it impossible for food trucks to operate year-round. Mr. Yuen discussed complaints about generator use and suggested that full-time food trucks need to be connected to utilities. All agreed that this was a good idea. The rear setback in the RO district was added back into the code, as this had been inadvertently deleted. Mr. Yuen said some zoning district consolidation could be completed once the Comprehensive Plan is updated.

iii. Review of Dimensional Standards, based on "Enabling Better Places: A Zoning Guide for Vermont Neighborhoods"
Mr. Yuen said that City staff has reviewed the Land Development Code (LDC) dimensional requirements with consideration of the "missing middle" housing. Some examples of enabling this type of housing include accessory dwelling units, duplexes, small-scale multi-household buildings, and neighborhood-scale mixed-use live/work buildings. These were more common before zoning began to separate different kinds of uses and building types. He said that infill development can be used to add more housing. The City applied to be a pilot community for the Homes for All initiative, and while not selected, this provides a good framework for changes to dimensional standards. The Enabling Better Places guide recommends incremental changes and offers sample language for updating allowable housing types. Some of the elements that Essex Junction can integrate include matching minimum lot size to local patterns, removing density caps, regulating coverage percentages carefully and aligning other dimensional standards with the existing or desired patterns. He compared suggested setbacks to Essex Junction's current setbacks in a variety of different districts and said that the front setback affects the owner's ability to park more cars in the rear in the case of a multi-family residence.

Mr. Yuen suggested that setback patterns match or exceed the existing built pattern in the historic parts of the City, noting that this would take years or decades to achieve. The reasoning for historical zoning and settlement patterns were discussed. Mr. McCormick said that it would be helpful to identify places within the City that would be good location for the infill suggested in the Homes for All program. Mr. Yuen compared the maximum lot coverage in certain zones of Essex Junction, noting that this could be replicated in other zones. He pointed out examples of other properties that exceed the lot coverage requirements. Mr. Yuen discussed changing housing needs and the housing crisis which have made ensuring that housing if densified more important than in previous generations.

Mr. McCormick spoke of engaging the public while designing a housing plan. Mr. Yuen said that the City has not had enough applicants to restart the Housing Commission, and noted that there are also openings in the PC and Development Review Board (DRB). He said that the PC should not wait for the creation of such to make housing policy decisions. Ms. Clemens described other efforts besides setbacks to help create infill development, stating that setback might create additional requirements and not be supported by the public. Mr. Massey said that it is important for the PC to both develop a formal plan and eliminate the "low-hanging fruit" to ensure housing growth. Mr. Yuen summarized the discussion, stating that there is an interest to test the waters on adjusting the dimensional requirements based on historical patterns in the inner and transitional zones. Mr. Yuen will create a memo offering potential changes for the PC's review at their next meeting. He said that there will be numerous opportunities to adjust the process based on public feedback. Ms. Clemens suggested having a discussion with the DRB or the City Council on these potential changes.

e. Vermont Climate Action Plan feedback

Mr. McCormick said that the Climate Action Plan has over 300 items which are prioritized. He discussed some of the projects proposed, especially those related to housing policy. He requested that the PC review this document at the next meeting, especially the section on how to get information on an issue from stakeholders.

f. Future Priorities

Ms. Clemens said that the Comprehensive Plan will need to be reviewed in the future and encouraged all Commissioners to read the current version.

7. MEMBERS UPDATES

Mr. McCormick discussed holding a joint meeting with the City Council to discuss upcoming initiatives.

8. STAFF UPDATES

Mr. Yuen discussed the work that had been done on the Transit Orientated Development study, and the public engagement for such. He detailed future public engagement that will be necessary to complete the LDC updates.

9. ADJOURN

MOTION by SCOTT MCCORMICK, SECOND by ELENA JUODISIUS, to adjourn the meeting at 9:04 PM. Motion passed 4-0.

Respectfully submitted,
Darby Mayville

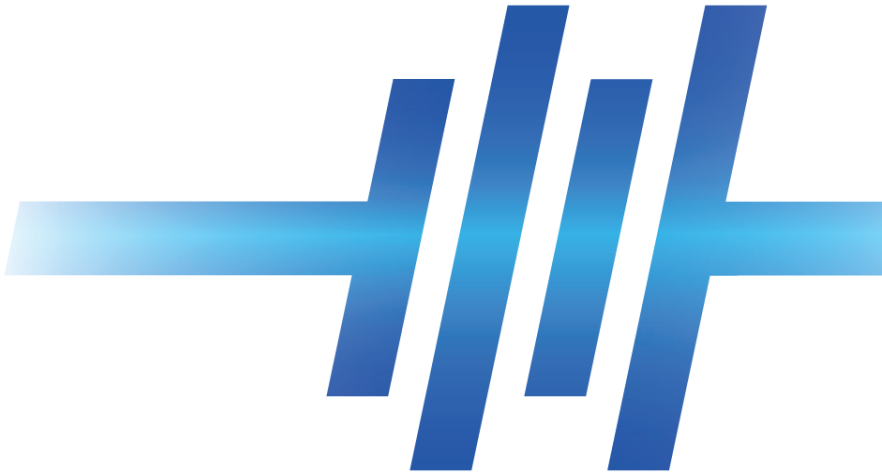
Lightshift/GlobalFoundries Energy Storage Project

Essex Junction Planning Commission
August 2024

LIGHTSHIFT ENERGY

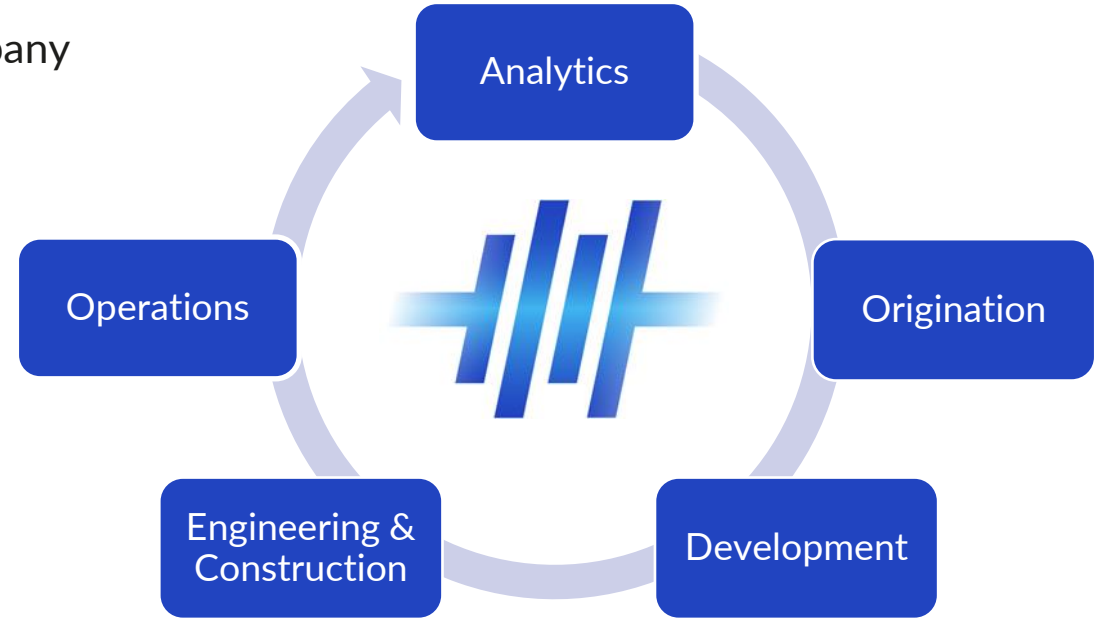
Agenda

- Company Overview
- Vermont Experience
- Project Benefits
- Site Overview / Layout
- Project Aesthetics
- Permitting Process / Timeline
- Battery Safety



Company Overview

- Lightshift Energy is a utility-scale energy storage development company and long-term owner/operator of energy storage projects
- With more than 4 GW of projects in development, Lightshift Energy is developing projects across the US
- Lightshift's first project achieved commercial operations in 2022 with Danville Utilities in Virginia



- In Massachusetts, two projects are operational as of July 2024, with two others currently under construction
- We take a holistic approach to energy storage development, from robust analytics and early site efforts to best-in-class operations and asset management

Lightshift Vermont Experience

VPPSA
Vermont Public Power Supply Authority

- **Northfield Project:** Received Certificate of Public Good through Section 248(j) process at Public Utilities Commission in March 2024.
  - Six-month permitting process
  - Must adhere to CPG conditions regarding project safety, aesthetics and environmental impact
  - Site preparation beginning Q3/Q4 2024
- Partnership with **Vermont Public Power Supply Authority** to deploy energy storage with members throughout the state, including Northfield.
- Development of similar projects maturing with multiple other Vermont utilities.

Project Benefits

LIGHTSHIFT ENERGY

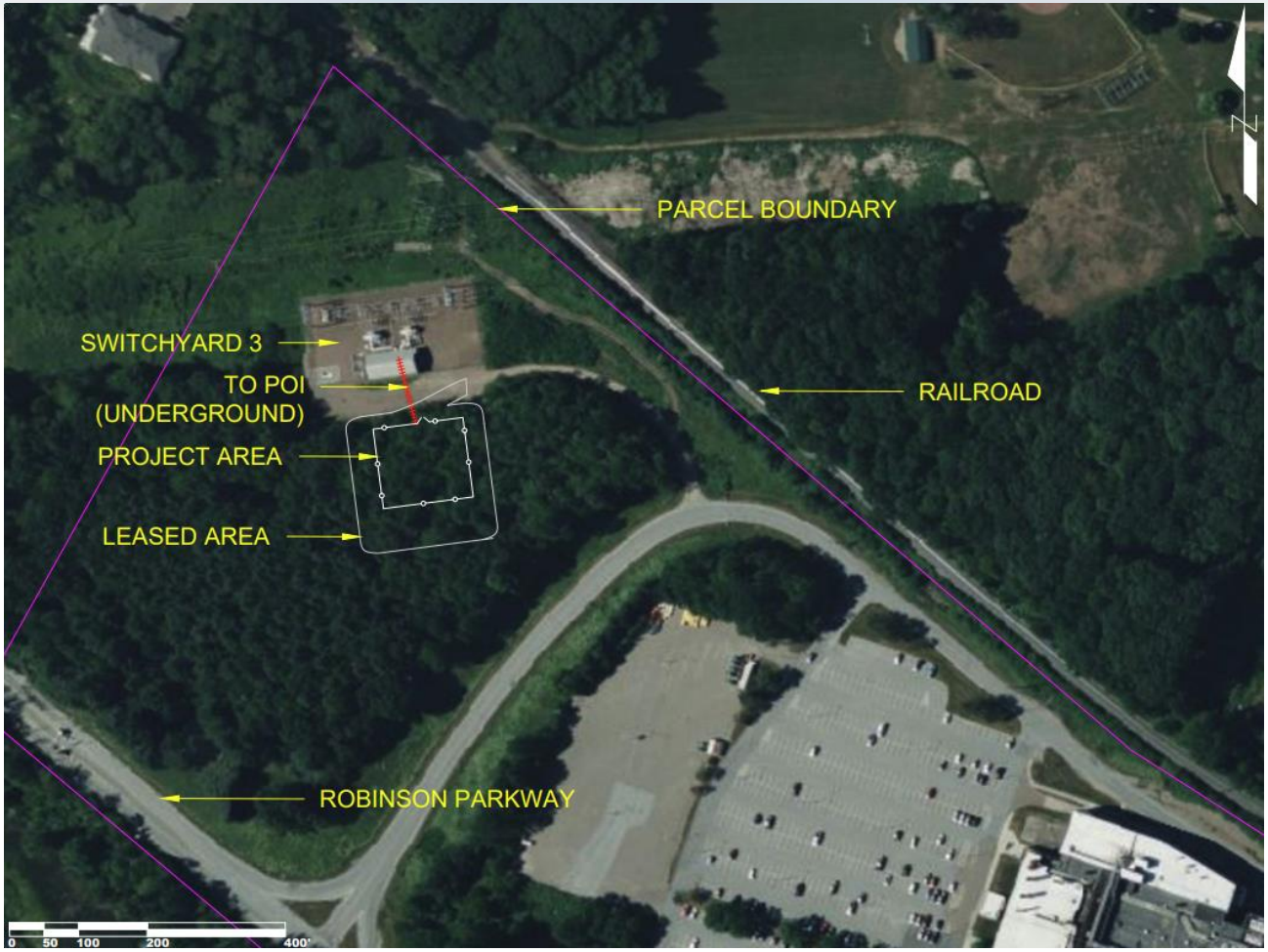
Energy storage offers numerous economic and environmental benefits

- Reduce operating costs at GlobalFoundries, Vermont's largest for-profit private employer
- Support renewable energy goals and integrate solar:
  - GlobalFoundries Utility goals
  - Essex Junction Community Energy Plan
- Support a resilient grid:
  - Minimize impact on transmission system
- Use of locally-based suppliers and labor, including consultants, equipment procurement, and construction/installation
- State and municipal tax revenue / construction jobs

City of Essex Junction

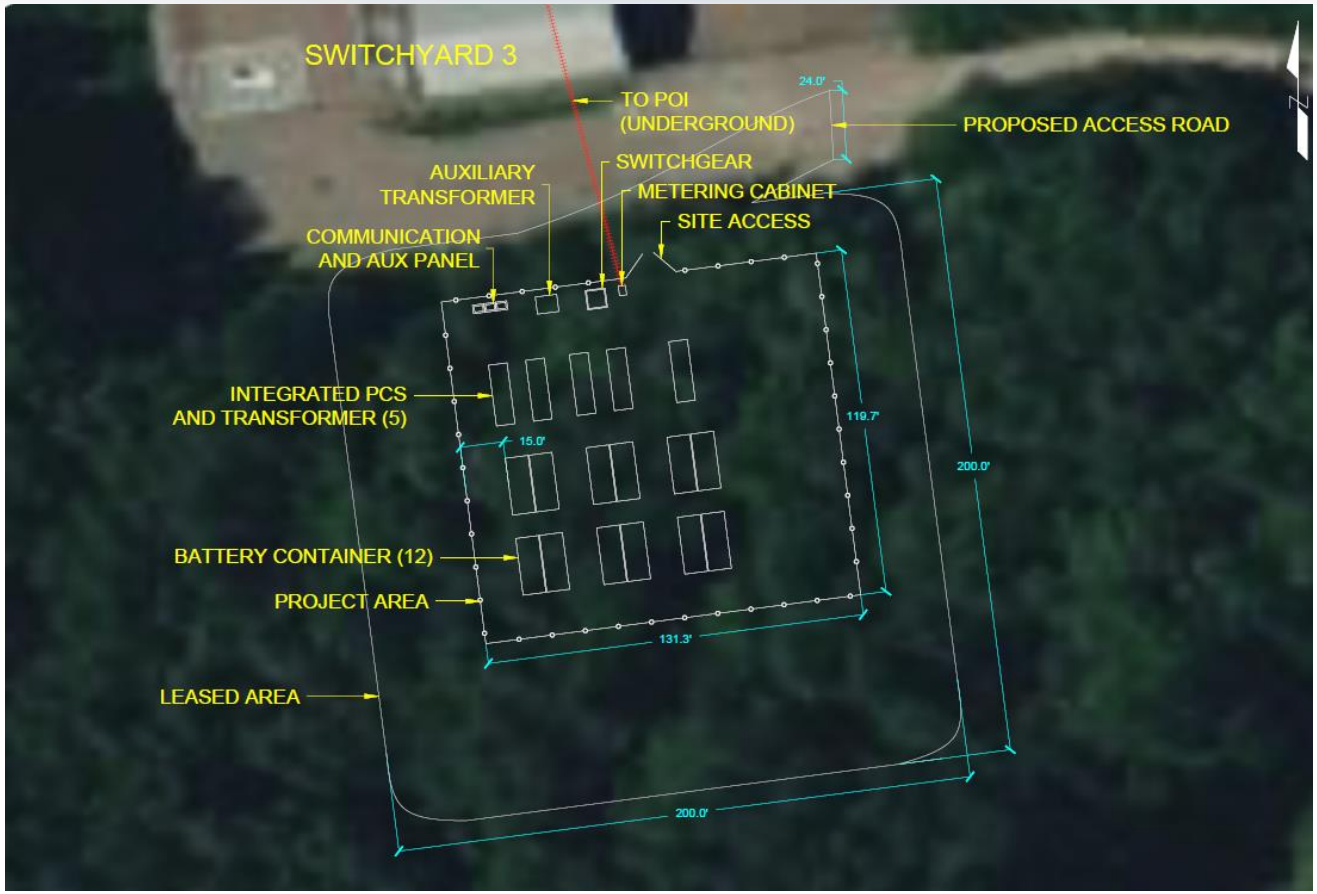
Lightshift/GlobalFoundries Project Location

Site Plan



- Footprint | 0.9 acres of the 227.6-acre (±) GlobalFoundries Campus
- Site Selection | Within GF Power territory, adjacent to the switchyard

Site Layout



- Access | One small access drive will be added from the switchyard to the project site
- Size | 16 MW / 52 MWh
- Infrastructure | (12) battery containers (5) transformer/inverter containers

Project Aesthetics

LIGHTSHIFT ENERGY

A battery energy storage system consists of batteries combined with controls, power conversion equipment, and auxiliaries to achieve safe interaction with the utility grid

- Site selected to minimize aesthetic impact
- Potential visibility of the Project is limited to locations north of the Project site
- The Project will be predominately blocked by the existing electrical switchyard and forested areas
- The Project will be shorter than the switchyard and transmission lines and will not change the character of the area

Project in Danville VA 10.5MW/24.6MWh

Updated Equipment

(L x W x H) 20’ x 8’ x 9.5’

(L x W x H) 21.3’ x 6.5’ x 7.2’

Potential Impacts and Mitigation Strategies

CPG Criteria	Mitigation to Date
Mapped Resources, Necessary Habitat, and Rare, Threatened, or Endangered Species	Natural resources assessment confirmed by the state to have no habitat or endangered species
Wetlands and Streams	No wetlands or streams are present on the Project site, as confirmed by the state
Rare and Irreplaceable Natural Area or Necessary Wildlife Habitat	Project site includes a small wooded area that does not constitute natural area or habitat
Stormwater	Project site will likely not need stormwater permitting due to limited size/impact
General Safety	Project site will meet all battery energy storage, electric safety and utility interconnection standards
Strain on Municipal Services	No undue burdens will be placed on town fire, police, or water/sewer services, nor will it impact educational services

Process Overview

Certificate of Public Good Process

- 45–Day Notice | Submitted to Public Utilities Commission in June 2024
- Neighbor outreach | Noticed all adjoining landowners (50+ landowners)
- Full CPG petition | Submitted after mid-August
- Reports and studies | Submitted with filing:
  - Natural resource and civil engineering studies
  - Archaeology study
  - Aesthetics studies including surrounding character assessment and orderly development
- Interconnection | Working with GlobalFoundries, ISO-New England to ensure integration with distribution and transmission grid

Overall Project Timeline

Battery Storage System Safety

Lithium-ion battery safety results from technology choice, system design, testing/certification, and preparedness

- **Safety by Design:** systems are designed to comply with **NFPA 855** (Standard for the Installation of Stationary Energy Storage) and latest best practices, including a Hazard Mitigation Analyses (HMA) to fully assess system safety
- **Testing and Certification:** systems certified to ***UL 9540*** industry standard for battery energy storage safety; ***UL 9540a*** provides data to ensure incorporation of adequate safety features and evaluates fire propagation; ***UL 1973*** tests and certifies battery and battery management systems meet safety requirements
- **Quality Assurance:** quality ensured throughout the project lifecycle through vendor qualification, supply chain diligence, factory audits, design reviews, in-process inspections, and testing
- **24/7 Operations & Monitoring:** we have eyes on our projects at all times to monitor project status and take immediate action in the event that any unsafe condition arises
- **Preventative Maintenance:** robust maintenance program ensures that systems are kept in good working order and that unsafe conditions that could lead to fires or other issues do not develop
- **Emergency Preparedness:** Lightshift collaborates with and trains local first responders to establish a tailored emergency operations plan for all our projects

Thank You – Questions?

Leadership

Rory Jones
Co-Founder/Managing Partner
roryjones@lightshift.com
617.852.1686

Michael Herbert
Co-Founder/Managing Partner
michaelherbert@lightshift.com
812.606.4996

Engineering & Construction

Joe Leavitt
Chief Technology Officer
josephleavitt@lightshift.com
802.318.6062

Matt Rariden
Director of Construction
matthewrariden@lightshift r.com
518.530.2192

Development

Ricky Elder III
Director of Development
rickyelder@lightshift.com
804.339.1270

Laura Coriell
Head of Market Development
lauracoriell@lightshift.com
802.558.2260

Appendix

Surrounding Landowners of Project

Site Photos

LIGHTSHIFT ENERGY

View from the intersection of Robinson Parkway south of the Project looking north toward the Project area.

Site Photos

View from Robinson Parkway looking southwest toward the Project area near the entrance to the electrical switchyard service road.

Site Photos

View from Franklin St. looking easterly toward the Project. The electrical switchyard and utility lines are visible in the distance.

Site Photos

View from Maple Street Park soccer fields looking southwesterly toward the Project. The top of the electrical switchyard is visible behind the vegetation in the midground.

Essex Junction TOD Master Plan

Public Engagement & Existing Conditions

Planning Commission

August 1, 2024

Project Background

- Transit-Oriented Development (TOD) Master Plan
- Federally funded: Rebuilding American Infrastructure with Sustainability and Equity (RAISE) program
  - 19 communities throughout Northwest Vermont to develop TOD Plans
- Study areas include a mix of commercial, mixed-use, and residential areas

City of Essex Junction

framework

Project Team

Jeff Arango

Lesley Bain

Sarah Lukins

Hope Freije

Saloni Agarwal

Framework Cultural Placemaking: Planners, designers, placemakers

City of Essex Junction

framework

Project Overview

CONNECT THE **JUNCTION**

a transit-oriented development plan for responsible growth

City of Essex Junction

framework

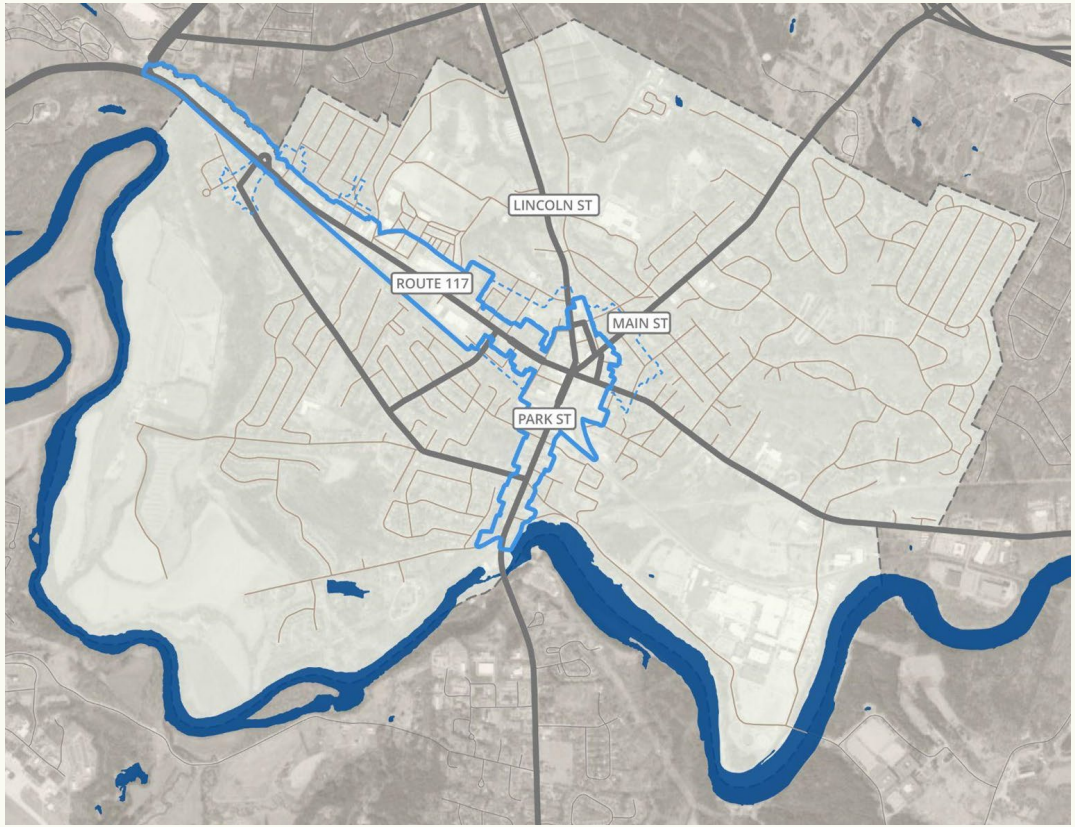
Project Scope

- Primary Focus Area:

  Village Center, Park Street, Route 15 Corridor

- Secondary Focus Areas:

  Potential transition zones; within short walk to transit but not planned for significant growth



City of Essex Junction

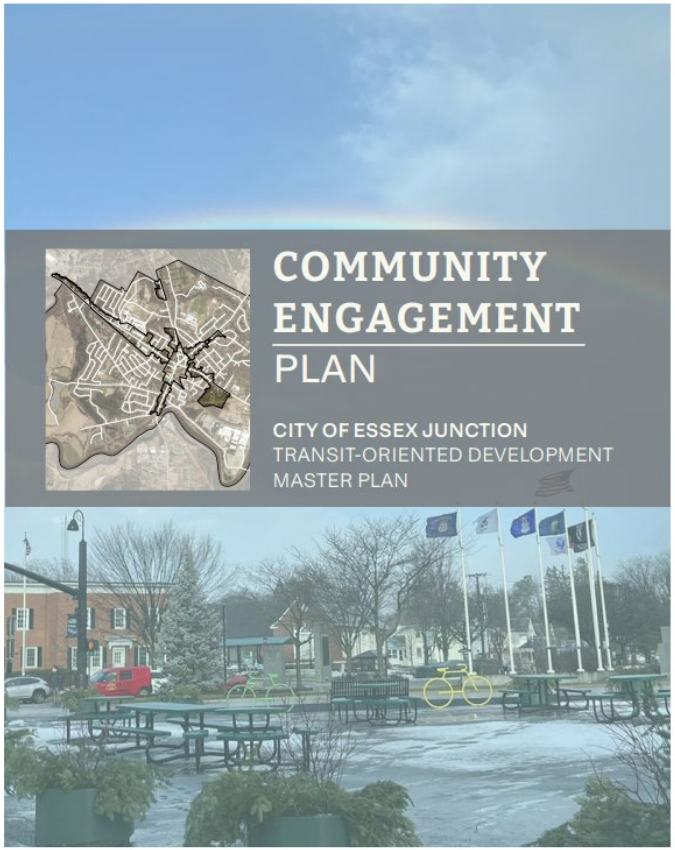
framework

Goals & Strategies

- **Develop land use and transportation strategies** to improve walking, biking, and transit access
- **Strengthen the community's proximity to housing**, jobs, and services
- **Improve connectivity and vibrancy of community spaces** and local economy
- **Build upon previous planning efforts**, including community vision for “thoughtful growth”
- **Prioritize community engagement** on multiple levels

Community Engagement Plan

- Project Website
- Focus Groups
- Design Charrette
- Junction City News

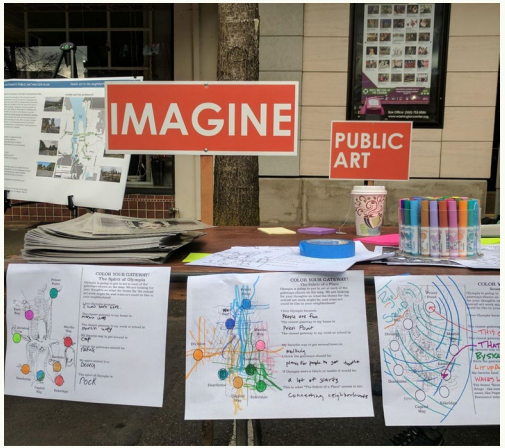


Focus Groups

- Goals:
  - Hear from stakeholder groups in an extended format that allows for dialogue
  - Get feedback on Existing Conditions Report to inform the Design Charette
- Proposed Groups:
  - Developers
  - Business Owners
  - Community Groups
  - Students
  - Public Space and Facilities Stakeholders

Design Charrette: October 4-8, 2024

- **Friday Oct 4:** Kick-off event with open house boards, presentation by design team, design exercise in small groups
- **Saturday Oct 5:** Community site walk and workshops
  - Potential use of a partially-closed off Main Street
- **Sunday Oct 6:** Evening open house with presentation by design team and feedback from community
- **Monday Oct 7:** Charrette debrief with city staff, focus groups with City and other key stakeholders
- **Tuesday Oct 8:** Final debrief



City of Essex Junction

framework

Public Engagement Schedule

2024 — 2025

JULY
Form focus groups

AUGUST
Launch website
Begin focus group meetings

AUGUST 1: Planning Commission presentation
AUGUST 26: Junction City News segment

SEPT/OCT
Continue focus group meetings

SEPT 27 - OCT 1: CHARRETTE

NOV
NOV 7: Planning Commission presentation of community feedback and master plan concepts

JAN
Post master plan scenarios to Konveio for feedback

FEB
FEB 1: present to City Council for final plan adoption

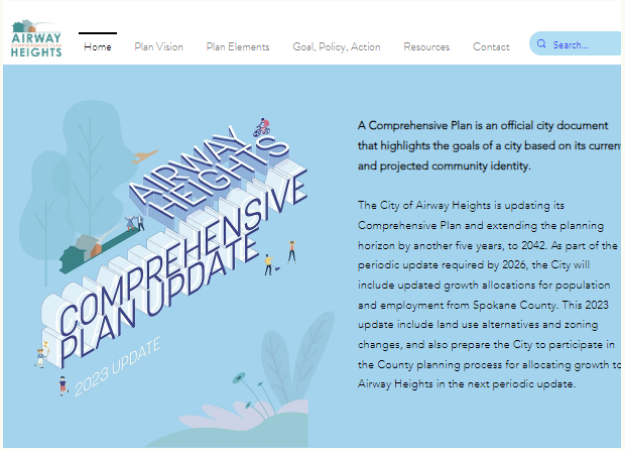
City of Essex Junction

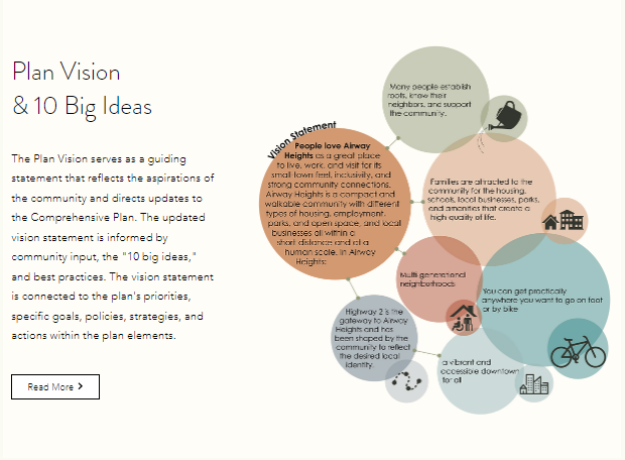
framework

Project Website

Public-facing tool for engagement and information sharing

- Project map, timeline, and goals
- Current conditions
- Event information (Design Charrette)
- Link to Konveio (to provide feedback online)





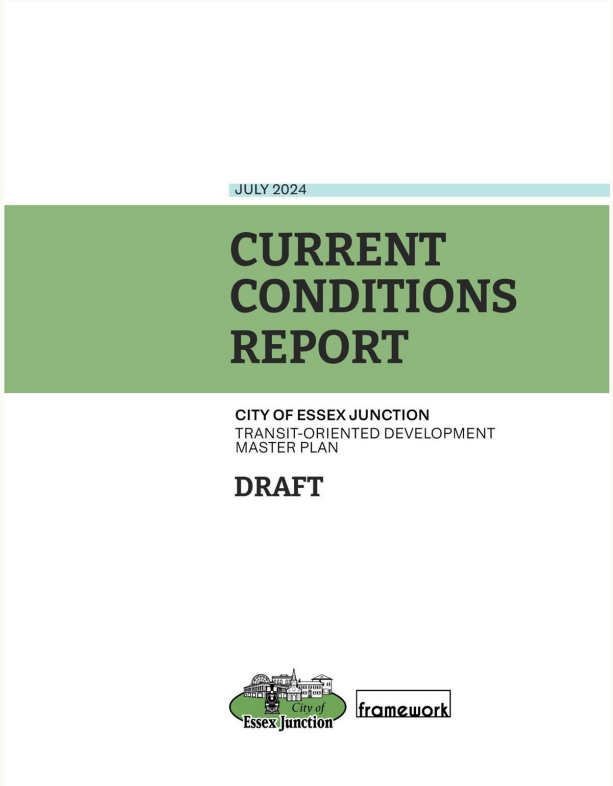
EXAMPLES

City of Essex Junction

framework

Existing Conditions: Overview

- History and Context
- Related Plans and Policies
- Land Use
- Community Design
- Streetscapes, Mobility, & Transit
- Capital & Community Facilities
- Land Development Code



City of Essex Junction

framework

Existing Conditions: Related Plans & Policies

- ‘Thoughtful growth’
  - prioritizes high-quality pedestrian space, economic vibrancy, connected multi-modal transportation networks, collaboration with surrounding communities, development of more diverse mixed-use spaces (Comprehensive Plan)
- Significant community interest in increasing housing stock, including more diverse and affordable options
  - (Chittenden County ECOS Plan and Building Homes Together campaign)
- Recent efforts towards a more walkable Town Center
  - Pedestrianizing Main Street, focusing infill along street edges, and increasing public green space (Design 5 Corners)

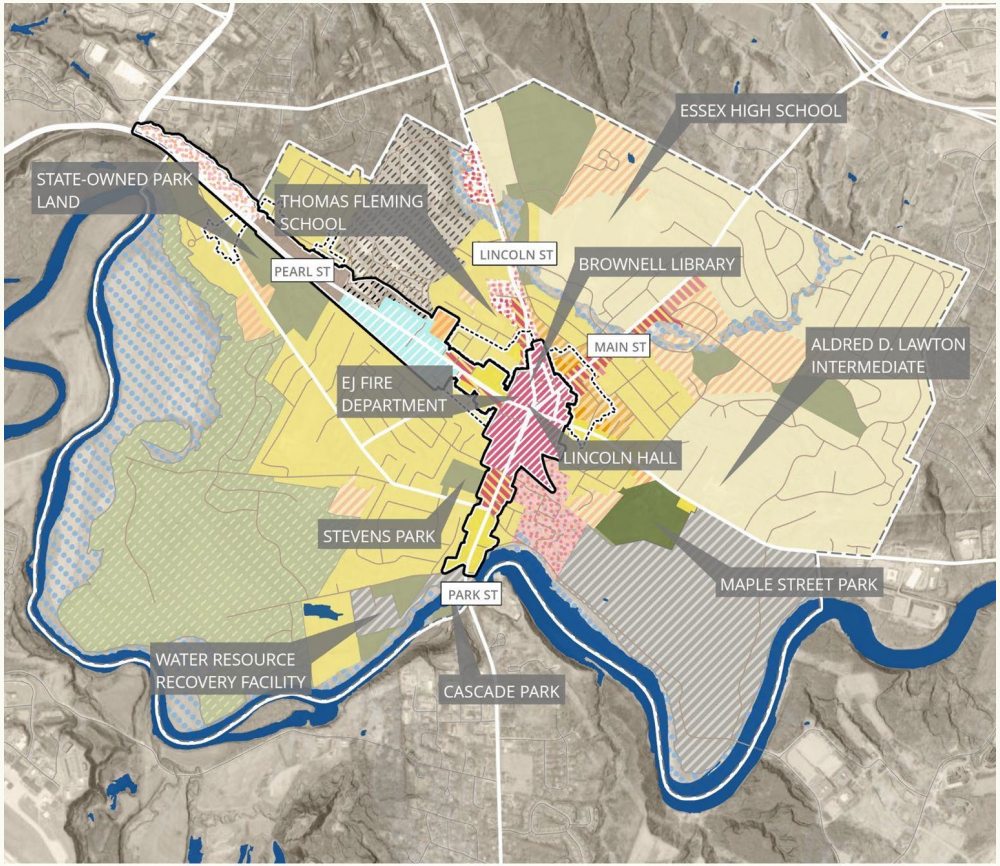
Design 5 Corners Proposal

City of Essex Junction

framework

Land Use: Zoning

- The study area contains a mix of land uses: residential, commercial, civic, and mixed use developments
- Most uses within the study area are along major transportation corridors and state highways
    - Impacted by traffic that may not have an origin or destination in EJ



Zones within Study Area

- RESIDENTIAL-OFFICE
- RESIDENTIAL 2
- MULTI-FAMILY RESIDENTIAL 1
- MULTI-FAMILY/ MIXED USE-1
- TRANSIT ORIENTED DEVELOPMENT
- PLANNED EXPOSITION
- HIGHWAY-ARTERIAL
- VILLAGE CENTER

Zones outside of Study Area

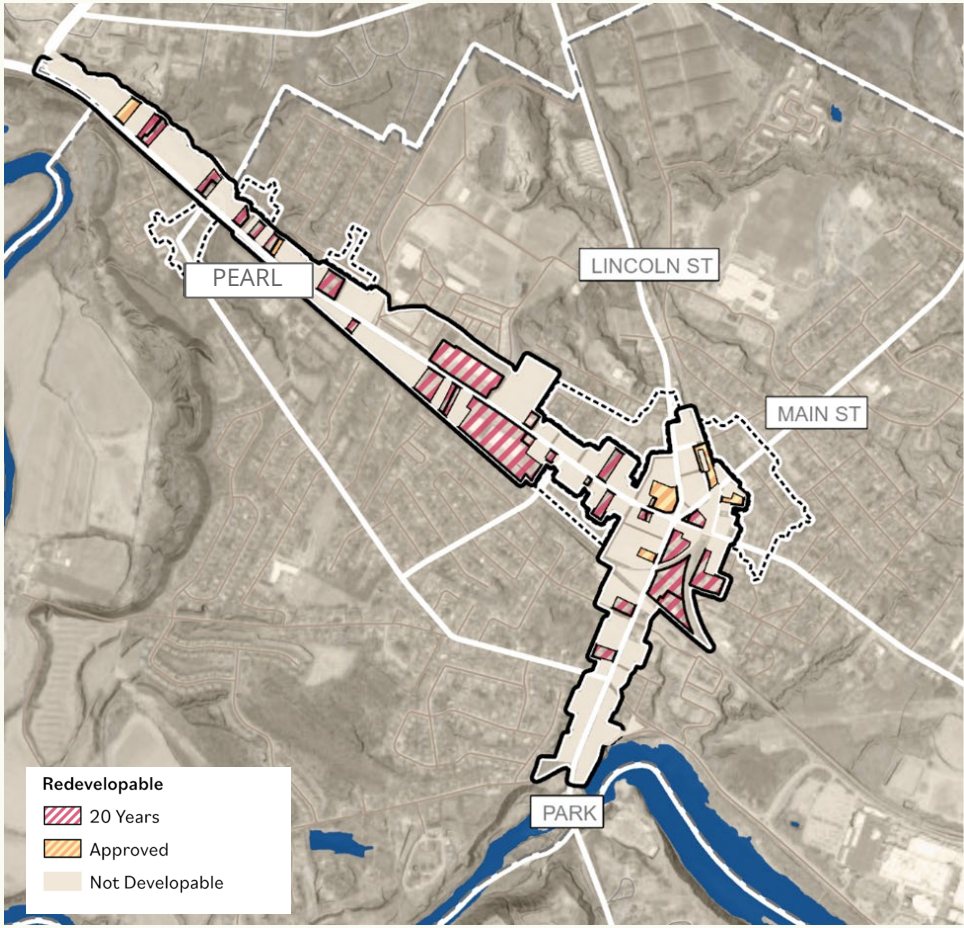
- RESIDENTIAL 1
- MULTI-FAMILY RESIDENTIAL 2
- MULTI-FAMILY RESIDENTIAL 3
- MULTI-FAMILY/ MIXED USE-2
- MIXED COMMERCIAL USE
- LIGHT INDUSTRIAL
- OPEN SPACE
- PLANNED AGRICULTURE
- FLOOD PLAIN

City of Essex Junction

framework

Redevelopable Land

- Many opportunities to realize community goals for more housing options and better access to transit
  - Large surface parking lots

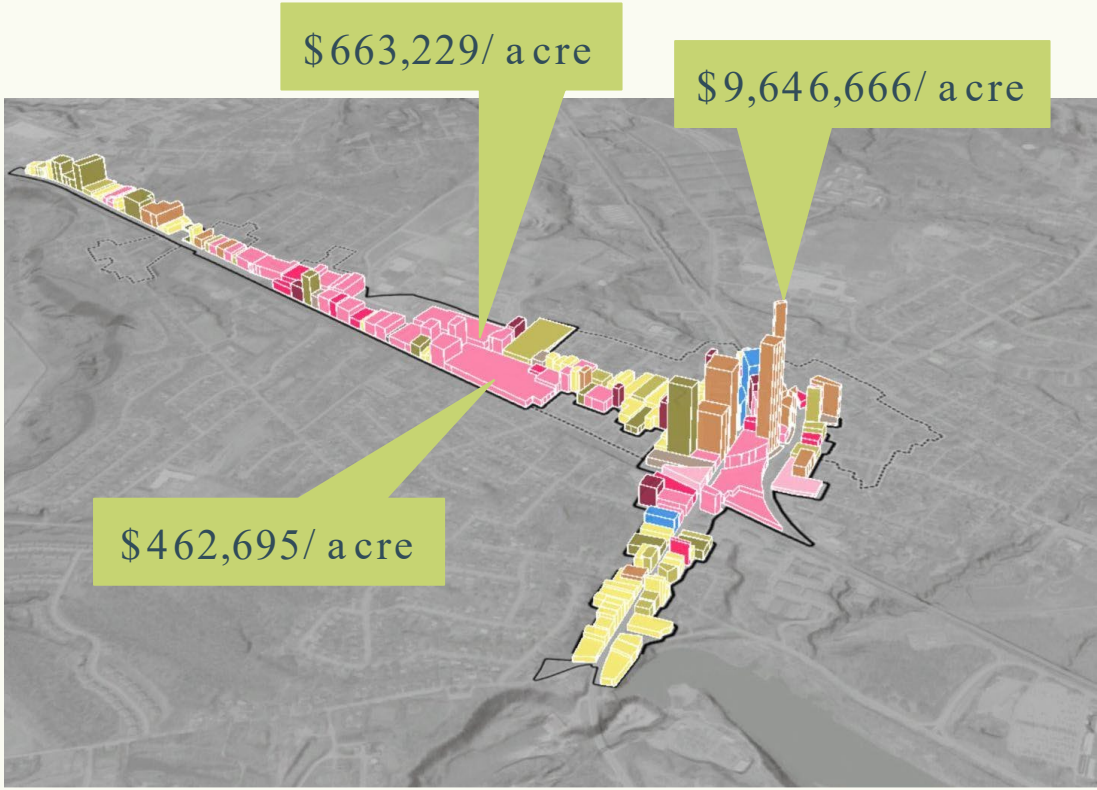


City of Essex Junction

framework

Land Value per acre

- Highest value per acre: Village Center, due to its compact mixed-use development
  - It's also the most walkable area within the study area despite the impact of traffic flow along state highways

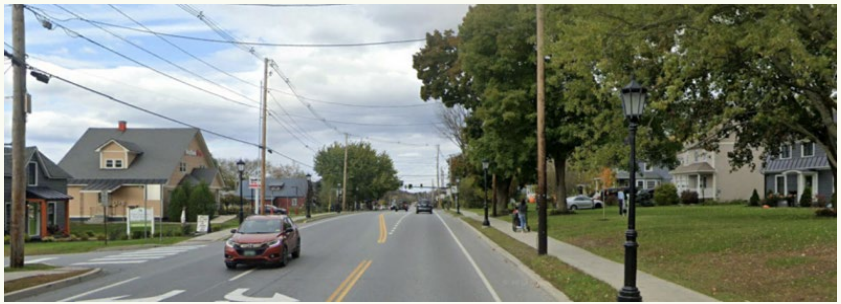


City of Essex Junction

framework

Community Design

- “Neighborhood Village” character
- Surface parking lots located behind and in front of buildings
- Range of land uses, lot configurations, and streetscape typologies



City of Essex Junction

framework

Streetscapes, Transit, & Mobility

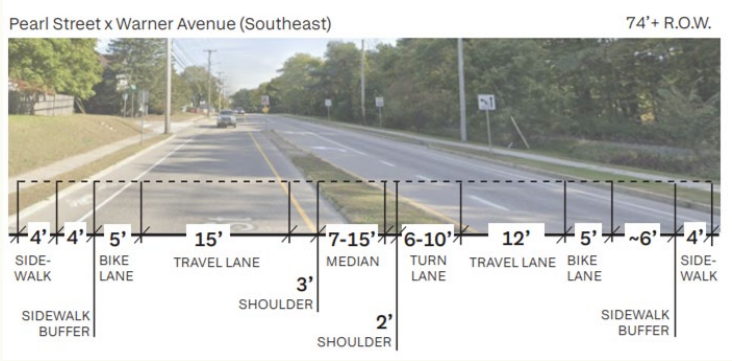
- Traffic counts have increased in recent years, with highest counts on Pearl Street (Susie Wilson Road to Post Office Square) and on Park Street at the Five Corners
  - Much of this traffic in and around Essex Junction is through-traffic, coming to/ from Burlington and to/from VT Route 289.
- Streets currently prioritize cars, with wide lanes and concrete-dominated streetscapes
  - Recent improvements create safer, more attractive space for pedestrians and cyclists along Pearl Street, but more can be done
  - The Crescent Connector will relieve traffic from Park Street and the Five Corners, allowing for greater focus on pedestrian and cyclist movement
- Opportunities to support transit ridership through addition of crosswalks and bus stop amenities

City of Essex Junction

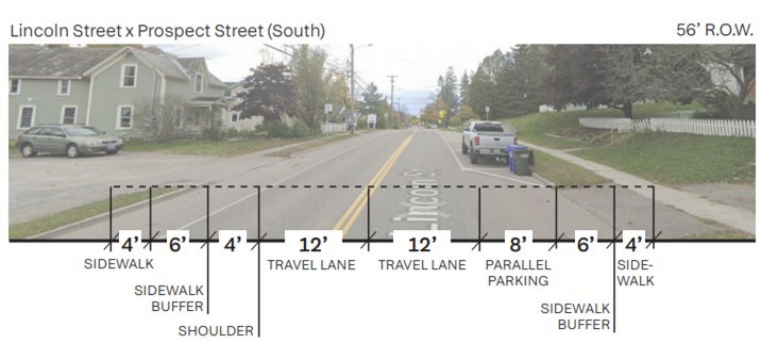
framework

Streetscapes, Transit, & Mobility

High vehicle traffic:



Low vehicle traffic:

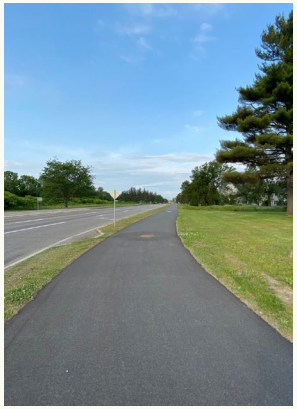


City of Essex Junction

framework

Bike Facilities and Transit
Routes

- Limited dedicated pedestrian or cyclist infrastructure in the study area
- Shared vision and focus on multi-use paths and improved facilities
  - Colchester/Essex Path: Route 15 from Colchester to Susie Wilson Road (completed 2022)
- Transit serviced by Green Mountain Transit: two bus lines in study area
  - Connections to Burlington and Williston
  - Running every ~20-30 min, >1hr on weekends and nights
  - #2 Essex bus line has second highest ridership of all GMT lines, highest weekend ridership

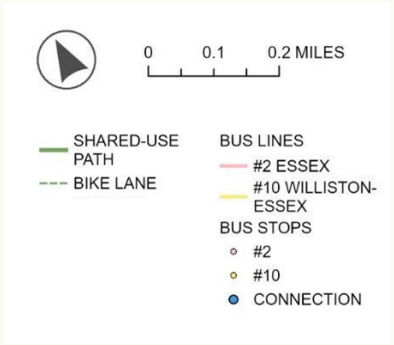


Colchester/Essex Path

City of Essex Junction

framework

Bike Facilities and Transit Routes

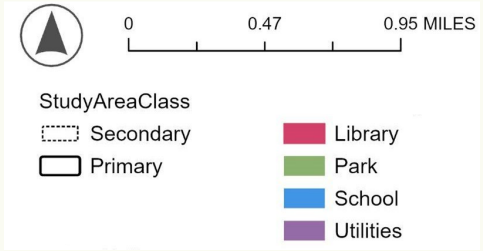


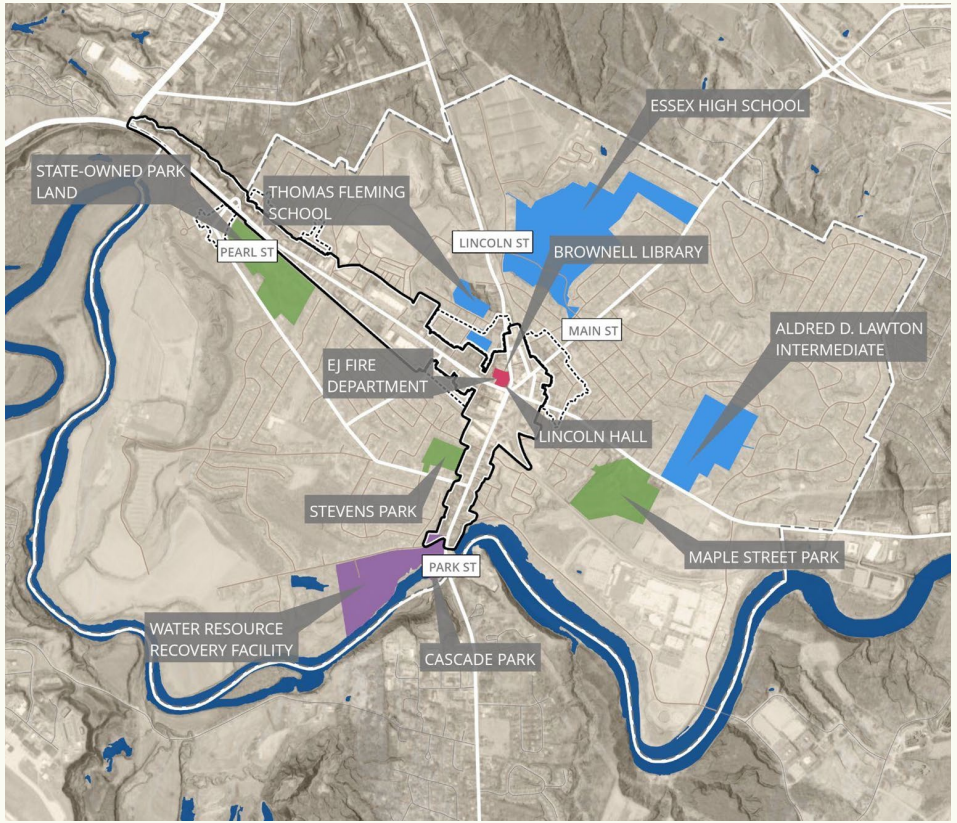
City of Essex Junction

framework

Community & Capital Facilities

- Changes to multi-modal facilities will affect how people access several parks and schools
- Parks adjacent but not within study area
- Lack of public plaza space in study area and park system in general





City of Essex Junction

framework

Community & Capital Facilities

- Several facilities clustered at Five Corners
- Opportunities to support these community uses through multi-modal and public space design

City of Essex Junction

framework

Land Development Code

- Current standards are generally supportive of TOD
  - Though building heights and parking requirements may limit flexibility
- R-2 allows 1 principal structure per lot, which is a barrier to middle housing
- Additional height and density allowances for affordable housing in many zones supports TOD objectives

Zoning District	Minimum lot size	Max # Units per lot (as planned development)	Affordability bonus density	Max lot coverage	Affordability coverage bonus	Min. Front Setback	Min. Side Setback	Min. Rear Setback	Maximum Height	Affordability height bonus
RO	*****	19 units per acre; 4 per lot max.		40%		*20'	8'		35'	
R2	7500	4		40%, 30% per unit		*15'	8'	25' ******	35'	
MF2	7500	3	+40%	50%		*15'	10'	10'	35'	48'
MFU1	15,000	N/A		65%	80%	20' min, 30' max	10'	10'	58'	72'
TOD	5,000	N/A		100%		no min, 20' max	N/A	N/A	58'	72'
HA	10,000	N/A	+40%	65%	80% ***	20'	10'	10'	58'	72'
PE	100 acres	N/A		40%		****	****	****	35'	
VC	5,000	N/A		**					58'	72'

City of Essex Junction

framework

Vermont Climate Action Plan

SUMMARY

The Vermont Climate Action Plan

Vermont and the world are facing the impacts of climate change and it's time to act. The initial Vermont Climate Action Plan, released on December 1, 2021, outlines steps to cut climate pollution and help Vermonters prepare for extreme weather and other impacts caused by climate change.

Vermont must get ready for a changing climate and cut its climate pollution, such as carbon and methane emissions, in half by 2030 to meet the target in Vermont's Global Warming Solutions Act. To do this, Vermont will need to prioritize helping the people who will be most affected by climate change.

The Legislature established the Vermont Climate Council to draft the plan. As they drafted the plan, the Climate Council incorporated ideas and feedback from a wide range of Vermonters. In addition, the Climate Council developed this plan in coordination with the State of Vermont's Comprehensive Energy Plan (released November 2021), which details energy opportunities and challenges for the state. Five subcommittees shaped the plan: Rural Resilience and Adaptation, Agriculture and Ecosystems, Cross Sector Mitigation, Just Transitions and Science and Data.

The initial Vermont Climate Action Plan is a first step in climate action and will be updated at least every four years. The plan includes an implementation section for legislators and other state-level stakeholders to inform decision-making. The Climate Council will continue to build out the framework for measuring and assessing progress that government, nonprofit, private sector and municipal partners across the state can use to evaluate their impacts in achieving plan goals.

VERMONT

Vermonters must be part of determining and implementing solutions to climate change. The Just Transitions subcommittee created *Guiding Principles for a Just Transition* to provide a framework for the Council and subcommittees to evaluate, adjust and prioritize recommendations based on how they will impact Vermont's impacted and frontline communities including those who are highly exposed to climate risks; experience oppression and racism, are excluded from opportunities or have less resources to adapt to climate and economic change; bear the brunt of pollution and negative effects from fossil fuels and extractive economies and are more likely to experience a job transition as Vermont addresses climate change.

Guiding Principles for a Just Transition

- Ensuring **inclusive, transparent, and innovative engagement** in the development of the plan and associated policies and program.
- Creating **accountable and restorative** recommendations that recognize inequality and seek to resolve them using clearly identified strategies.
- Moving at **the speed of trust** to provide adequate time to incorporate people's voices and prepare Vermonters for the transition to a sustainable climate future.
- Incorporating **solidarity** to create inclusionary spaces for all traditions and cultures, particularly for Indigenous communities, recognizing them as integral to a healthy and vibrant Vermont.
- Prioritizing the **most impacted first** through recommendations that address the needs of impacted and frontline communities first, providing the greatest benefits of transitions to these communities.
- Developing **supports for workers, families, and communities** that consider and plan for potential impacts on workers, families and their communities based on the implementation of Vermont's Climate Action Plan.

Climate Change in Vermont

The last decade was the warmest on record. The disruptions are already being felt, from extremely hot days in the summer to increasingly severe storms. If action isn't taken soon, by the end of the century, Vermont will see at least 57 days above 86°F a year under a high emissions trajectory.

Climate change presents many risks for Vermont, as the **Vermont Climate Assessment** shows. Not everyone is affected equally. This includes outdoor workers, low-income community members, BIPOC Vermonters, the old and young, people with health conditions or a disability, LGBTQ2 community members and others.

Here's what Vermont is facing:

- **More rain and flooding:** Extreme precipitation events, such as those with 2" or greater precipitation in a 24-hour period, will likely increase in frequency. These events could cause flooding that threatens homes, businesses, infrastructure, communication, and transportation systems.
- **Changes to agriculture:** Shifts in growing season lengths and more rain will complicate growing conditions for many crops, including apples and maple syrup, increasing the likelihood of crop damage or crop failure. Rising temperatures can also lead to heat-stress for livestock.
- **Different forests:** Ecosystems will be increasingly threatened by invasive species and shifts in the seasons.

Extreme weather events disrupt lives, and place people, communities, farms, forests, waterways, businesses and livelihoods at risk. At the same time, tackling the challenge of climate change presents opportunities. Reducing emissions and preparing for the impacts of climate change improves people's health, protects Vermont's farms, forests, and water bodies, and supports new jobs in clean energy.

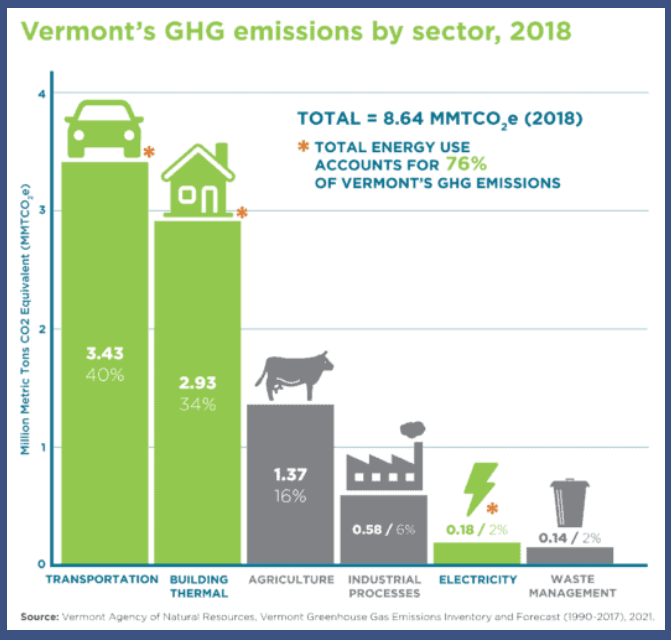
ENERGY ECONOMY AND OPPORTUNITIES RELATED TO CLIMATE ACTION

Vermont's current dependence on fossil fuels leads to high and unpredictable energy costs for Vermont households and businesses. Some are more burdened by energy costs than others. For example, renters and low-income Vermonters pay a greater percentage of their income for energy and rural households tend to spend more on transportation.

Transitioning off fossil fuels presents significant opportunities for Vermonters including lower energy costs, greater investment in the regional economy and more high-paying jobs in the weatherization, electricity and clean energy sectors.

With federal, state and utility incentives, the up-front costs of electric or renewable energy options can often be lower than costs for new fossil fuel equipment and less expensive to operate. For example, electric vehicles can save rural Vermonters more than $1,500 per year on average to operate, require less maintenance and cost less due to incentives.

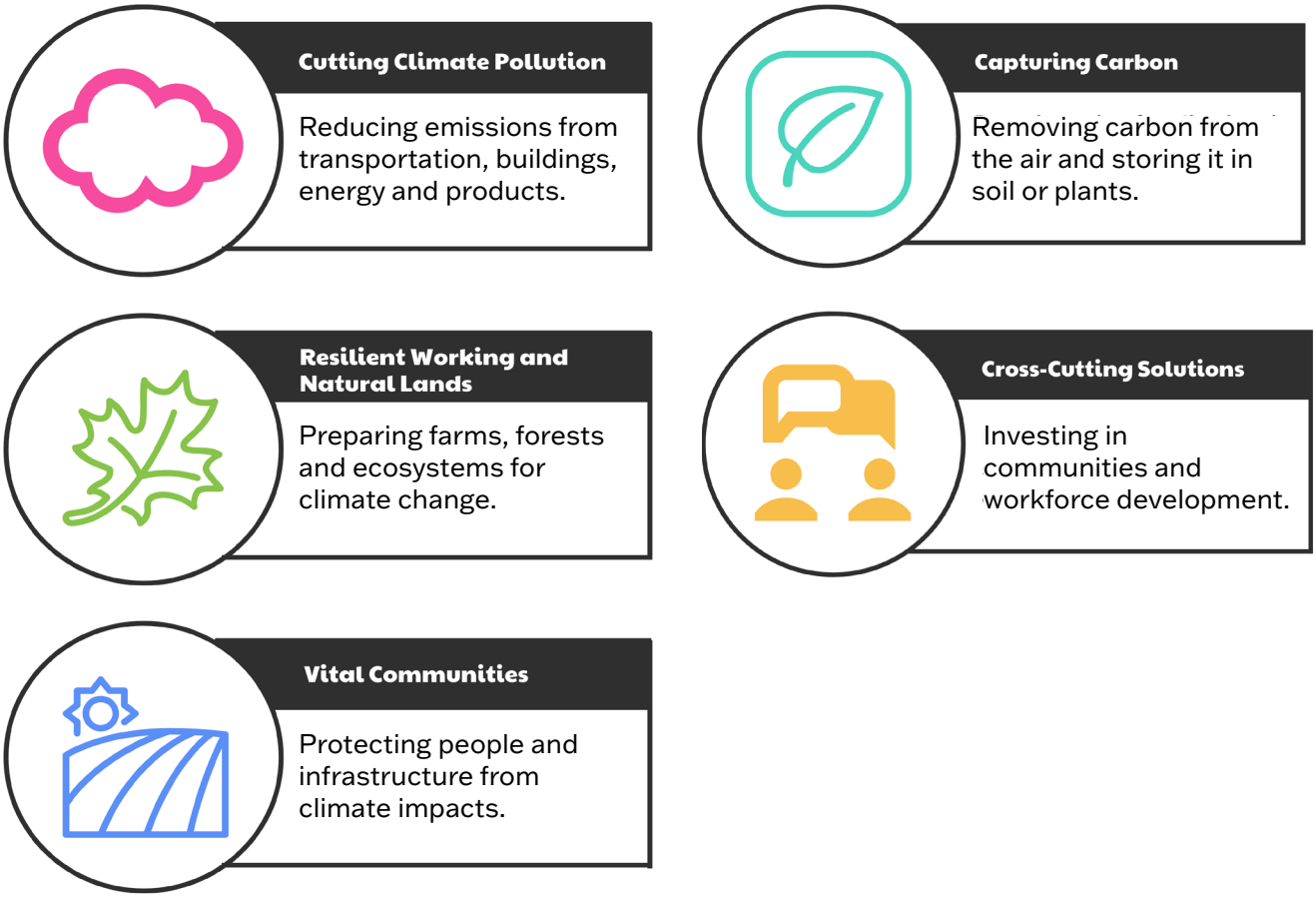
In Vermont, emissions come from the following sources and are addressed in the Climate Action Plan:



Delivering clean energy is also an opportunity for local energy providers, helping home and business owners weatherize buildings and install heat pumps or other alternatives. In 2020, clean energy jobs made up 6 percent of total employment in Vermont, with the median wage being higher than the statewide median. Growing this sector can be a win for the local economy, workers, and Vermont households.

Vermont Climate Action Plan Pathways and Strategies

The Vermont Climate Action Plan is organized into five impact areas:



The criteria used to evaluate strategies in the Vermont Climate Action Plan included the ability to reduce climate pollution and prepare for climate impacts, cost effectiveness, and how actions will have the most benefit and harm reduction for frontline communities.

A summary of each impact area is outlined in the Pathways, Strategies and Actions table. For more information including the cost effectiveness, co-benefits and feasibility of the actions visit https://climatechange.vermont.gov.