



NETZEROVERMONT

A Connector for Real Change

**Getting to Net Zero Communities:
BTV, Montpelier, Vermont and
Samso, Denmark**

VECAN 2016

**Sustainable Montpelier 2030
Design Competition**

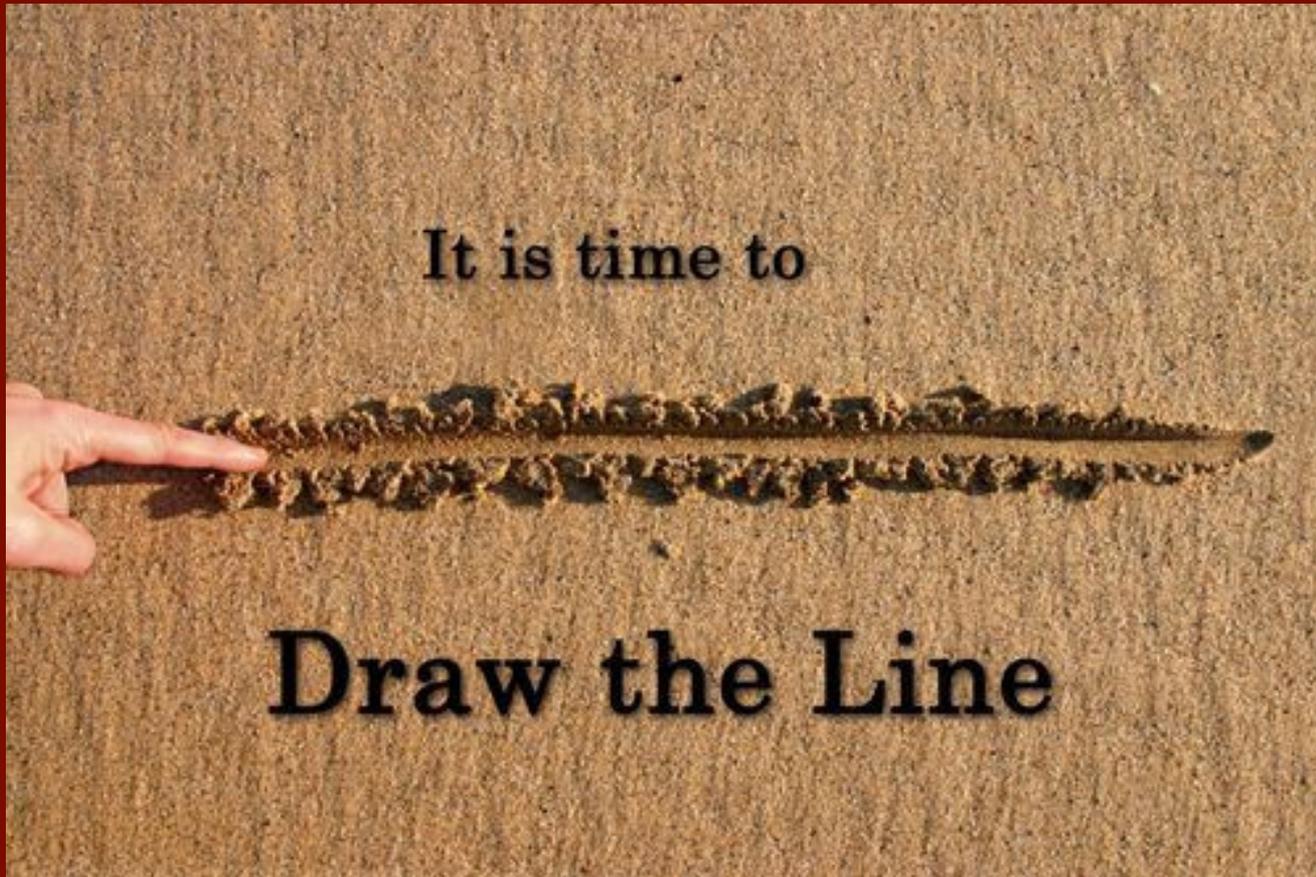
About



...is a 501c3 non-profit, advancing projects with a shared vision for vibrant, people-centered downtowns and transforming transportation and energy systems to low carbon alternatives

Fossil free economy -- Self sufficiency → Feeling proud

In 2014, Montpelier set a goal ...
to be Net Zero by 2030!



The Problem: The parking (in red) in Montpelier



Thank you to our corporate sponsors...



Unique Approach

“Visualize and Imagine”

Proposal, fundraise \$\$

RFP and Timeline

Pop-up Gallery & Accept Public Opinions

Expert Panel -- Evaluated on merits

→ teams advanced to finals

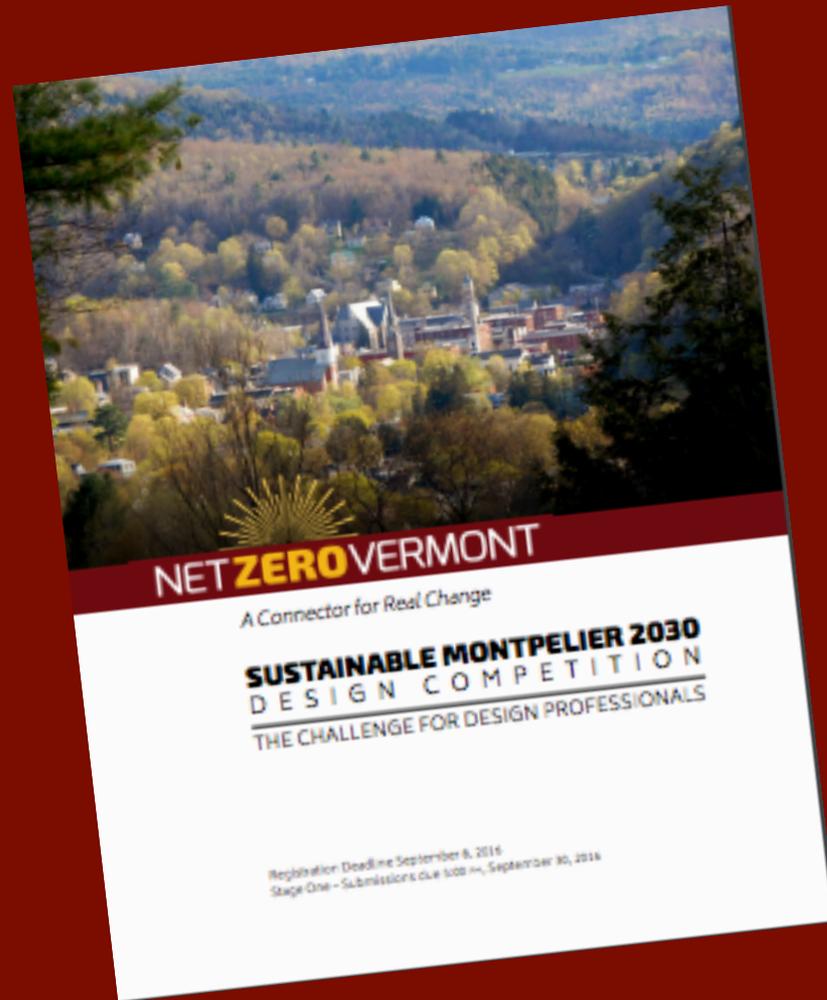
Imagining the future “Montpelier 2030”

Sustainable Montpelier

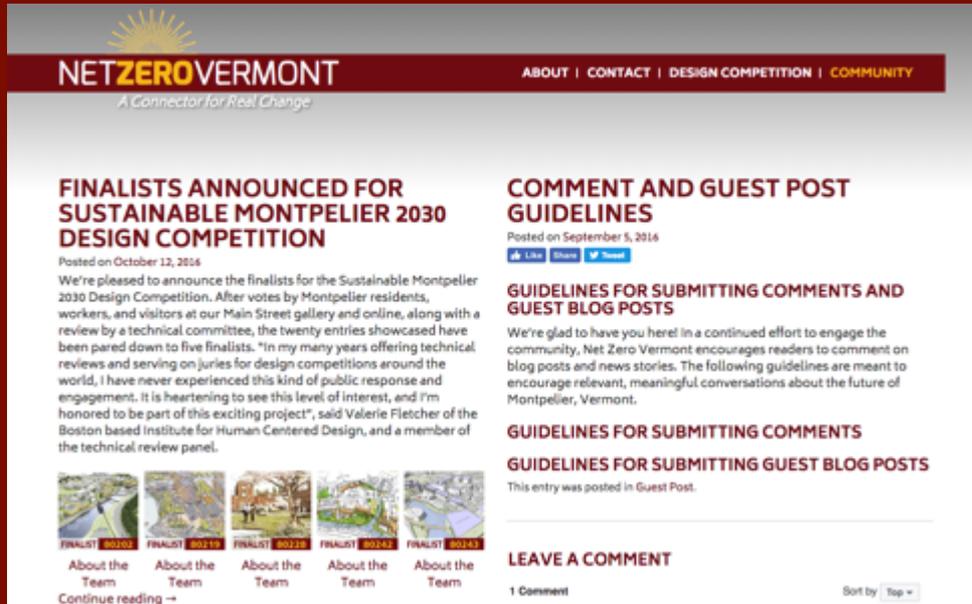
NZV launched a design competition.

Wonderful response

27 Teams Register



Website and Social Media



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ABOUT | CONTACT | DESIGN COMPETITION | COMMUNITY

FINALISTS ANNOUNCED FOR SUSTAINABLE MONTPELIER 2030 DESIGN COMPETITION

Posted on October 12, 2016

We're pleased to announce the finalists for the Sustainable Montpelier 2030 Design Competition. After votes by Montpelier residents, workers, and visitors at our Main Street gallery and online, along with a review by a technical committee, the twenty entries showcased have been pared down to five finalists. "In my many years offering technical reviews and serving on juries for design competitions around the world, I have never experienced this kind of public response and engagement. It is heartening to see this level of interest, and I'm honored to be part of this exciting project", said Valerie Fletcher of the Boston based Institute for Human Centered Design, and a member of the technical review panel.

COMMENT AND GUEST POST GUIDELINES
Posted on September 5, 2016

GUIDELINES FOR SUBMITTING COMMENTS AND GUEST BLOG POSTS

We're glad to have you here! In a continued effort to engage the community, Net Zero Vermont encourages readers to comment on blog posts and news stories. The following guidelines are meant to encourage relevant, meaningful conversations about the future of Montpelier, Vermont.

GUIDELINES FOR SUBMITTING COMMENTS

GUIDELINES FOR SUBMITTING GUEST BLOG POSTS

This entry was posted in Guest Post.

LEAVE A COMMENT

1 Comment

Continue reading →



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Status Photos / Video Offer, Event

Write something...

1 Draft
Created Tuesday, October 4 at 8:12am. See draft.

This Week See All

Education · Organization in Montpelier, Vermont

Page Tips See All

How Do Facebook Ads Work?
Reach at the right people where they're active and engaged.

How to Create Effective Posts
Short, visual posts created for the right audience are more successful.

Pop-up Gallery -- Visible Main Street Vacant Storefront

YOU'RE INVITED

**HELP IMAGINE THE
FUTURE
OF
MONTPELIER**

**Vote on your favorite
design concepts**

OCT 3, 4 & 5 • 10 am to 7 pm
62 MAIN STREET
(formerly One More Time)

Learn more at www.netzerovt.org


NETZEROVERMONT www.netzerovt.org

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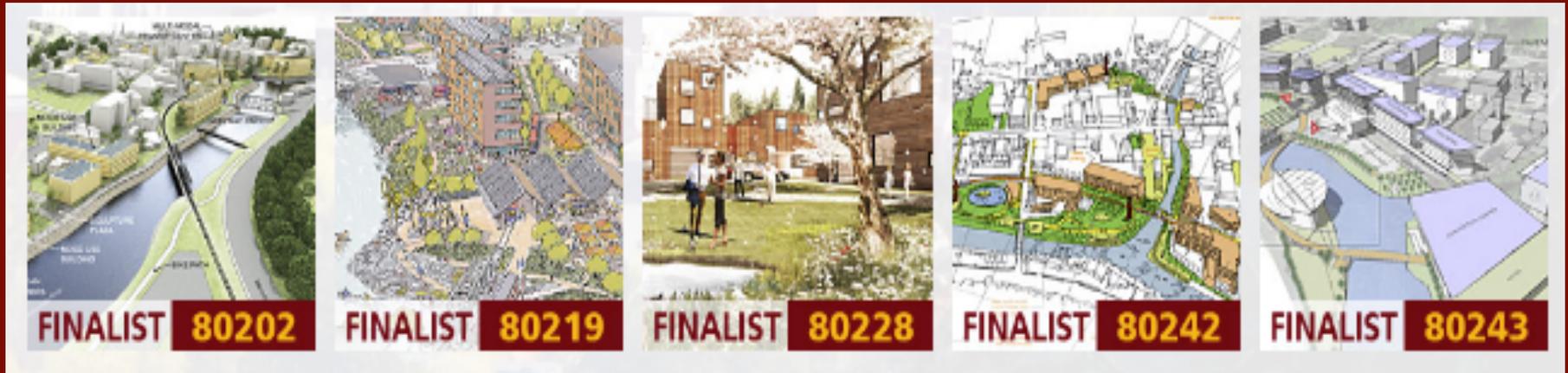
VIP Reception



TECHNICAL REVIEW PANEL ANNOUNCED



5 Team Finalists



Scott + Partners Architecture *Essex Junction*

Bridges *Cabot*

White + Arup *Stockholm, Sweden*

Gossens and Temkin *Montpelier*

Wiemann Lamphere *Colchester*

Gather the public opinions!?



Visioning, public excitement grows...



Farmers Market and Riverside Park

Here is Montpelier's new civic space, where you can shop for local produce and food products, enjoy the riverfront, ride the carousel, and catch a streetcar. Downtown is a short walk or bike ride via the new bridge over the North Branch River. People working at National Life can board the aerial tram and be downtown in minutes without using a car. And the new Taylor Street neighborhood is right next door.



Riverside Park

- Riverbanks along North Branch (and Winoski) offer many recreational amenities.
- Riverside Park brings nature to daily life—seasonal kayaking, fishing, walking, relaxing.
- Adjacent bike path and streetcar, and nearby aerial tram make "getting there" fun.



Taylor Street Transportation Center

- Taylor Street is new gateway to Montpelier, and meeting place for civic and commercial goings-on.
- Taylor Street transportation center realizes potential, offering many forms of transit.
- Ground floor shops in new residential buildings, aerial tram arriving from National Life, and streetcar line.

Riding the streetcar is the coolest way to commute, and I don't have to worry about traffic and parking even in peak foliage season.

Thanks to energy-efficient systems, we're warm in the winter, cool in the summer, and our new place has great river views and access.

The satellite lots and streetcar system make parking and getting around stress-free. I can park my bike in the covered bike shelter and it's safe and dry 'till I ride home. It's a quick ride - less than 10 minutes.

From the warmth of your super insulated, air to air heat pump micro apartment, watch a skater below carve figure 8s in the blue ice.

Car share, bike share, streetcar line...getting there is part of the fun - on a nice day I'm sure to get my 10,000 steps in and I feel healthier walking more.

Witness the buzz of Montpelier as you descend the aerial tram from National Life.

It's food heaven here at NECI by the river.

Look, mom, there's a moo-moo go-round in the park by the river!

Get off the shuttle in the heart of the Market Center and recall the times you used to waste in search of a parking place. Marvel at how many more farmers and craft tables occupy what used to be a sea of parking.

The streetcar connects me to my job at DMV, downtown, helps save time and money, and I can go to the coop on the way home.

We can walk, pedal and paddle to shops, restaurants, concerts, exhibits...

I love that the new Farmers Market building is also home to community events, year-round!

Put your kayak in at Riverside Park, paddle downstream to the High School and back, tying your kayak at the Southbank Cafe for a locavore lunch listening to Banjo Dan playing across stream at the market amphitheater.

Take a ride share bike from the rack on the path for a quick picnic at Hubbard Park and be back at work by 1:00

Climb aboard. Bask in the pride of place knowing Montpelier has achieved Net Zero and you are a part of it.

Watch the kids play carefree in the safety of a pedestrian street...on the raised Court Street promenade.

Feel the delight of new in-town neighbors enjoying activities freed-up by trading the time, energy, and fuel of a country commute.

Thanks to car-share, I get a new electric car without having to buy one. I'm saving a lot of money that used to pay for a car and insurance.

IN THE LOOP

celebrating the flow

ID 80228

Our vision for Downtown Montpelier is to create an urban design strategy for the local community through a series of innovative solutions by using a model that rises beyond Net Zero towards a level we call Net Zero+.

A true sustainable future stretches beyond energy efficiency and renewal; it is focused on people, by inspiring a sustainable way of life that ensures well-being.

Our proposal is based on the Scandinavian model that is defined by being Inclusive, Equitable, Robust and Adaptive to meet and allow for future change benefiting the community of Montpelier for generations to come.

A sustainable community lives in harmony with the surrounding nature and its assets, celebrating the flow.

The formulated goals, represented in the loop, are a starting point for a successful and holistic development vision, strategy and process.

... let's get in the loop.



TOGETHER TOWARDS

Net Zero+ Downtown Montpelier 2030 will require consistent innovation and most of all, collaboration. The proposal in THE LOOP places the community of Montpelier at the center of design, ensuring a truly sustainable future for Montpelier and also inspiring cities across the U.S. and worldwide.

NET ZERO+ MONTPELIER

Net Zero+ Downtown Montpelier, a robust urban design, is which innovative small-scale solutions are adaptive to meet and allow for future change to ensure the well-being of the community of Montpelier for generations to come.

RADICAL PRAGMATISM

The proposed solutions are locally informed but strategically driven.

AROUND THE BRIDGES

The proposal provides new program and usage of the river front to celebrate the river and its access to Montpelier.

STATE STREET LOOP

The proposal establishes strong connections to the river from State Street for a coherent urban plan.

WINDOKEE RIVER PARK

The inclusion of civic and cultural uses within the river zone provide multiple destinations with shared audiences.

DOWNTOWN LIFE

Reconnect a program within the center of Montpelier ensures a vibrant downtown.



3. EMBRACE nature

Describing the integration of city and nature.

We need nature for our survival. So, a sustainable community requires an effective usage of energy and resources to reduce the impact on nature. In THE LOOP, embrace nature, providing access and use of surrounding natural environments and assets and integrating nature into the design to include in everyday life.

Why: An ecological balance is a prerequisite for our social prosperity for people to live, flourish and thrive.



1. CELEBRATE Montpelier

Describing the urban character and identity.

The vision for a Net Zero+ Downtown Montpelier aims to establish a vibrant, dynamic and diverse community, making of new, distinctive and human, it is legible and inclusive, providing opportunities for all to live, work and play thriving upon and celebrating what makes Montpelier unique. The proposal is "behavior by design" implemented by efficient new buildings, modified existing buildings and improved operations to reduce energy consumption.

Why: Identity increases the sense of belonging and caring for the city while a clearer multi-functional urban fabric provides proximity, accessibility and diversity.



2. ENGAGE in urban life

Describing the open public space and connectivity.

Public space generates life in the urban environment. In THE LOOP, diverse diversity of public spaces into the urban fabric, integrated with an efficient transportation network consisting of pedestrian, bicycle and shared transportation. The well-designed public space and efficient network provide easy access for all people enjoying operations to reduce energy consumption.

Why: The space between buildings is what makes a city, enabling social interaction and movement in a safe environment.

LIGHT RAIL TO BARRIE

4. ENSURE energy

Describing the flow of energy.

Net Zero+ Downtown Montpelier will use energy and resources more efficiently reducing impact on public realm and local ecosystems. Energy usage is reduced by retrofitting existing buildings and by constructing new buildings and infrastructure with energy efficient methods and improved operations. Energy solutions are to be affordable, accessible and renewable, such as solar and water energy. The built urban structure and technical systems are robust to last longer and, at the same time, be flexible enough to allow for necessary future changes.

Why: A sustainable society requires the community to use energy and resources in an efficient way.

MONTPELIER JUNCTION - BARRIE
IN THE LOOP will bring the existing rail track back to life with a light rail train connecting Barre - Montpelier - Montpelier Junction, reducing car traffic in downtown. The train can be powered by electricity generated by the Windokee River and other natural sources.



Illustration of a vibrant street scene in Montpelier

IN THE LOOP

celebrating the flow

ID 80228

Strategies for how to reach the goals of Net Zero+ Montpelier



ADAPTATION
The strategy proposed increases the adaptive capacity of Montpelier. This is achieved by recognizing the fact that the future often brings changes and challenges that should be considered and addressed in advance. The strategy consists of four steps: 1. acknowledge future change 2. provide for a resilient urban design and community 3. initiate small scale solutions that can be changed rapidly and cost-effectively 4. place the community at the center.



TODAY
IN THE LOOP includes a step-by-step strategy towards a Net Zero+ mountain Montpelier 2030 and beyond. Innovative solutions allow for a gradual process. They ensure adaptive solutions allow for continuous planning the well-being of the community in future and by providing economic, support, and. The tactics allow for a wide variation and can be implemented in any order.

8. FARMERS MARKET
The proposal includes an indoor farmers market at the end of State Street. The building consists of a public space with two residential buildings that have direct access to the market. Proposed housing is for existing and younger generations. The outdoor market will be located adjacent to the church on State Street.

STRAINER STREETS
The proposal includes a series of "water streets" that connect the city to the river and offer an important role in storm water mitigation in the form of treatment, detention and infiltration. These can take the form of Low Impact Development, such as rain gardens, permeable surfaces with underlying structural soils.



7. 35 SQUARE METERS
The Boardman model, where no building permit is needed for structures less than 350 sq. ft. provides affordable opportunities for the densification of existing neighborhoods. We suggest the City of Montpelier make available C.U.V. lots that ensure safe and Net Zero construction.

TIMBER CONSTRUCTION
Wood might be the best building material there is. Timber construction features are outstanding from an environmental point of view, both in the short and long term. Timber construction has a regular carbon emission, construction time is two times faster than concrete construction. It has excellent acoustic qualities, weighs less, easy to transport, slow burning qualities and takes only a minute to subdivide. 10 count in the South Hill area.

SOULS
IN THE LOOP provides an extensive "toolbox" to help Montpelier address Net Zero+. New housing includes a Net Zero "core" that can be complemented as desired to provide personal identity while ensuring Net Zero standards.



2030
Net Zero+ mountain Montpelier is a vibrant urban design, by which innovative small scale solutions are additive to meet and allow for future change to ensure the well-being of the community of Montpelier for generations to come.

SPECTACLE OF DIVERSITY
The proposal includes a wide variety of mixed-use buildings to ensure a vibrant center.

CULTURAL CAPS
In addition to the commercial function of State Street, the new center park will be cultural venue including the new theater.

1. NET ZERO+ CENTER
The proposal shows the connectivity of Montpelier central to the design process. The new center is a place of meeting, education and collaboration for the process towards a Net Zero+ Montpelier and will become a center for analyzing, testing, and sharing.



3. STATE STREET PARKING
State Street Parking is a new symbol of a parking garage and a public park. The architecture park gallery circles the bridge construction formal parking that houses about 400 parking spaces allowing for a variety of outdoor activities during all seasons.



3. WINOOSKI RIVER PARK
The new Winoski River Park is the cultural campus for the community of Montpelier connecting the city to Winoski River. Its grassroots character will include a wide variety of activities including cycling and outdoor indoor activities. The strong connection to residential areas and to State Street ensures active public life. West of Taylor Street the park brings the people closer to the river while providing for flood mitigation. While east of Taylor Street the park helps the integrate the transit hub connection.



4. MAKER SPACE LIVING
A new hybrid of residential units and shared workspace with a highly flexible construction that enables the building to adapt to market demands - maker spaces can become residential and vice versa. This building typology provides excellent opportunities for all events, office space for start-ups and housing that meets especially well for a young generation.



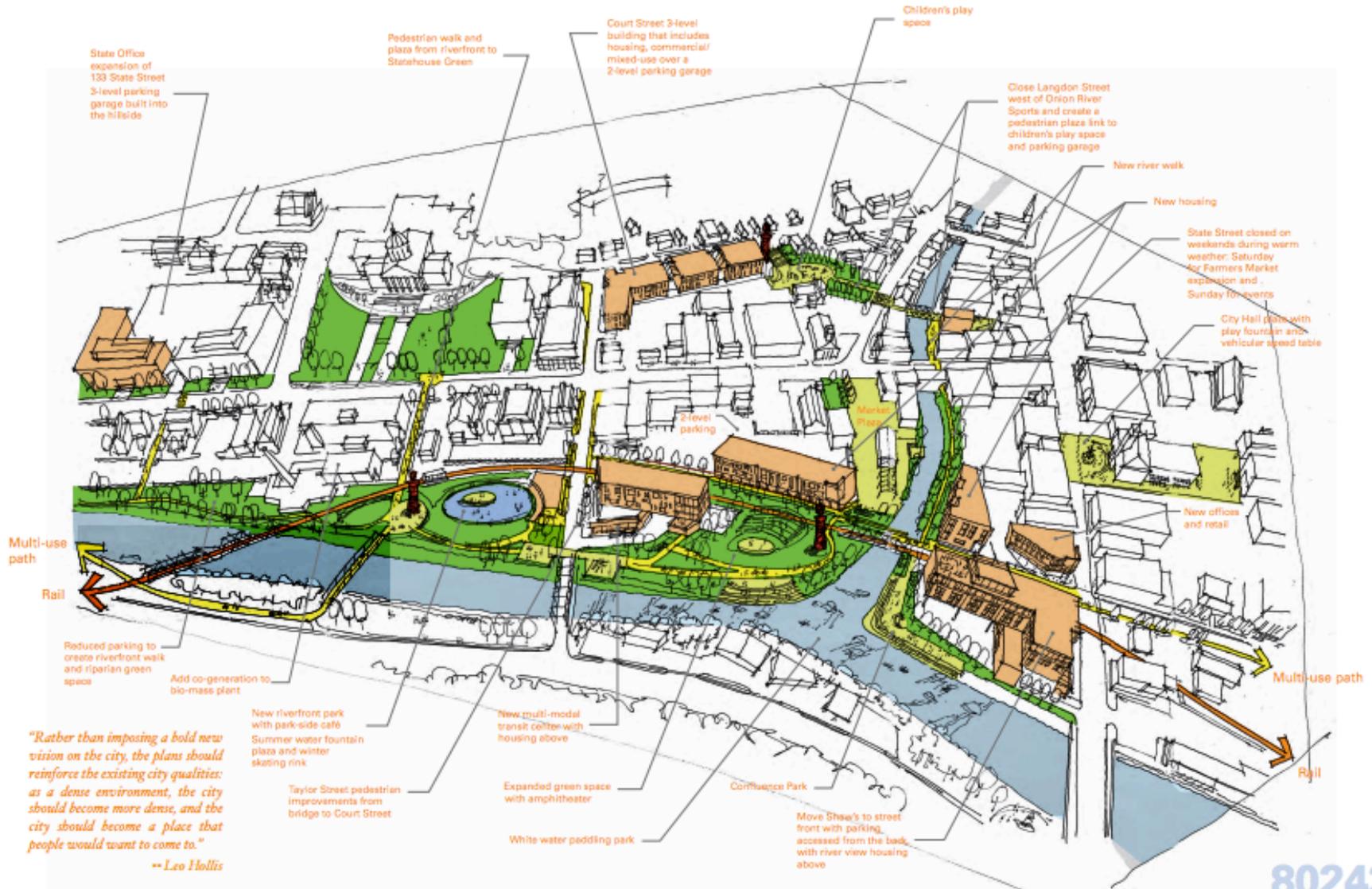
5. RIVER HOUSING
The River Housing is a building that includes a half-penthouse concept with apartments built in timber construction. The concept plan provides a solid foundation that can host an alternative design using post-tensioned concrete, while the linear alignment allows the placement of the building.



6. NORTH BRANCH BRIDGE
The redesign of the existing rail bridge over the North Branch includes pedestrian and bike paths connecting Winoski River Park to the Main Street and connects Montpelier's Stone Culture Way Development providing a seamless progression on the north bank.

THE LOOP
IN THE LOOP introduces a clear urban structure based on logic for pedestrian and bicycle traffic. These cores start at the river north and end include 1. Main Street / State Street, 2. Hubbard Street / State Street, and 3. College Street / State Street.





Can we re-imagine Montpelier, infill and integrated transportation system?



Existing rail line is spine of 21st Century Montpelier

- Streetcar service on existing rail line connects satellite parking lots outside downtown area.
- New residential neighborhoods—downtown, Sabin's Pasture, and National Life (connected to Taylor Street transportation center by aerial tram).

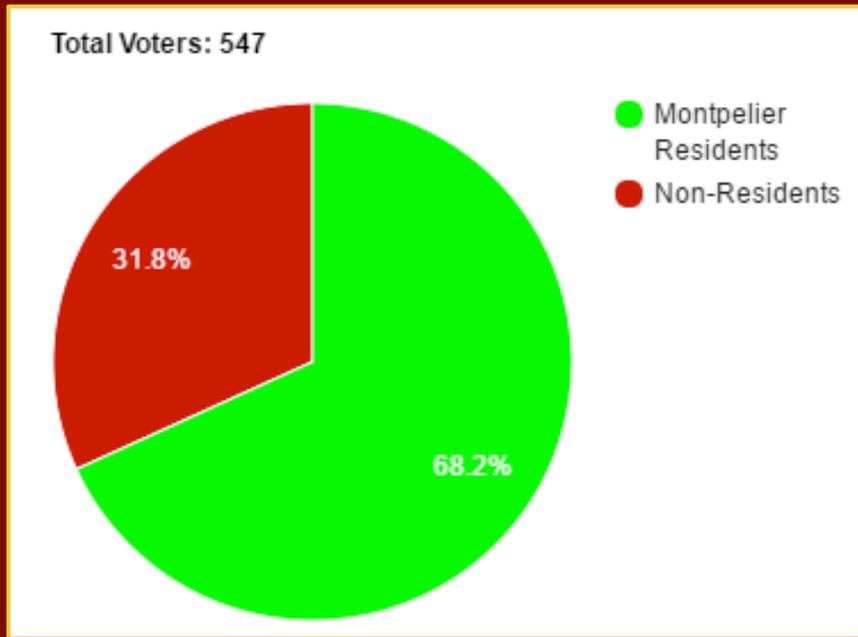


Montpelier's new downtown residential neighborhood

- Nearly 1,000 new residential units along both sides of Winooski River, flanking Taylor and along Court streets.
- Banks of the Winooski and North Branch rivers provide views and recreational access.
- Existing location of farmers market is enhanced by adding year-round multi-purpose pavilion.

Public Opinion Results

Over Three Days....



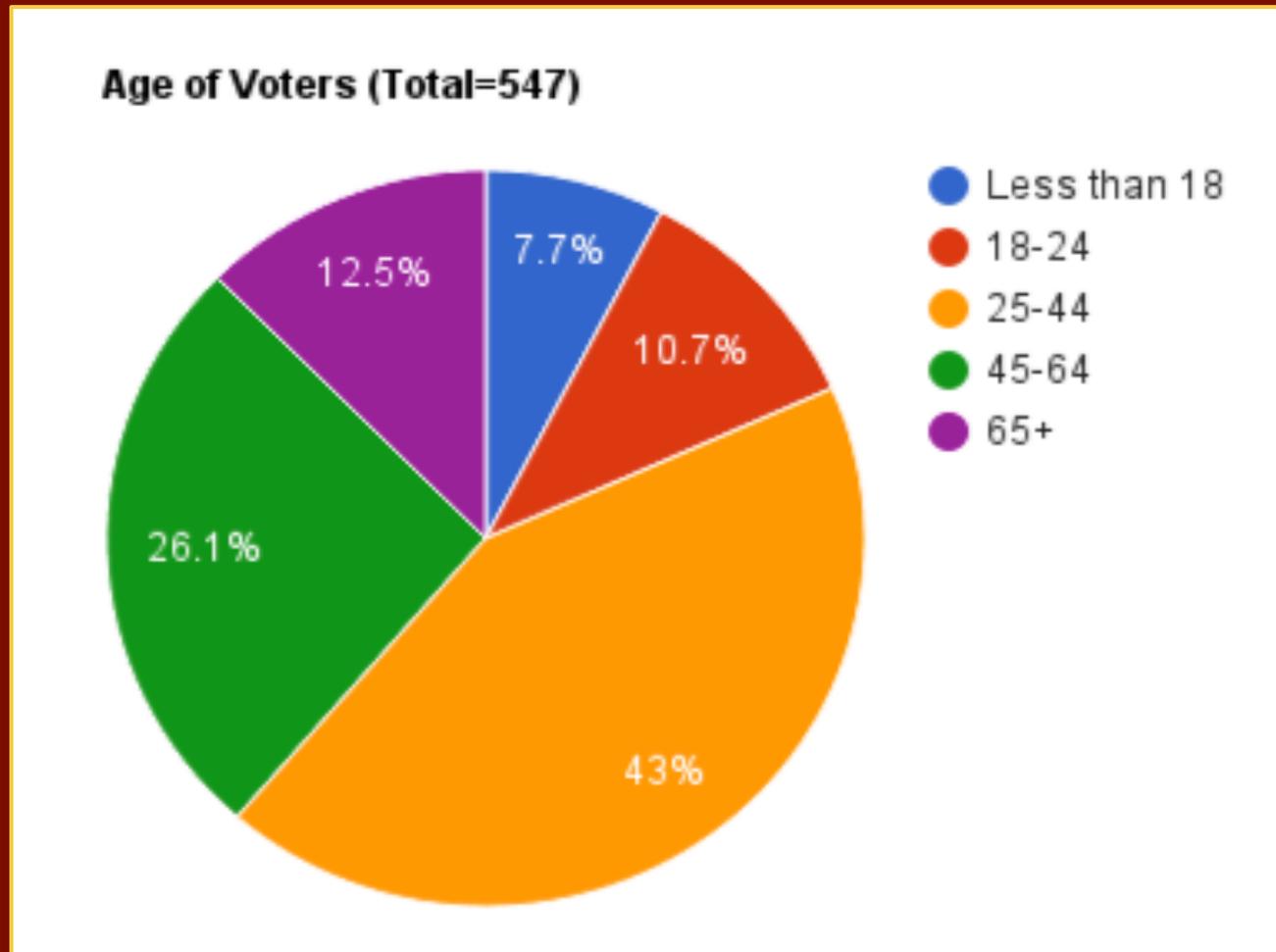
500+ Walk-ins, plus

300+ votes online.

Choose your 5 favorite designs!



What are the ages of the voters?



Voter Opinions...."What matters..."

River and Water Access, More Green spaces	119
Improved Transportation System <i>(i.e. walking, biking, transit and relocate parking)</i>	113
Expanded Downtown Housing	67
Renewable Energy	21
Environmental Impacts top priority	21
Other <i>(access, few cars, storm water, no hi-rises)</i>	500+
TOTAL	841+

Next Steps--Working Together for Change

Partners—Conducting mtgs.

Sponsors—Con't engagement

Holistic and integrated approaches

Key: Cooperation and collaboration

Next on Schedule



DECEMBER

5 Team Finalists Submit on 12/16

JANUARY 7

Public Presentation – Saturday 1/7

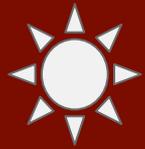
Pavilion Auditorium – 2:30 p.m.

Online Public Voting

Press Conference -- 1/18/17 at 11:30 a.m.

\$10,000 Award Winner Announced

Post Design Competition...



Turning shared vision into Action!

Montpelier Master Plan & future policies

Road show--development community

State cooperation -- embrace new ideas

Working together -- to advance projects

Sharing results, tech transfer, inspiring others

Thank you!



Debra Sachs, Co-CEO

Dan Jones, Co-CEO, Project Manager dan@netzerovt.org

15 State Street, Third Floor

Montpelier, VT 05402

802-238-9807 | deb@netzerovt.org

www.netzerovt.org