

# Design 5 Corners

## Project Report

Submitted to the Village of Essex Junction, VT May, 2015

Julie Campoli, Terra Firma Urban Design

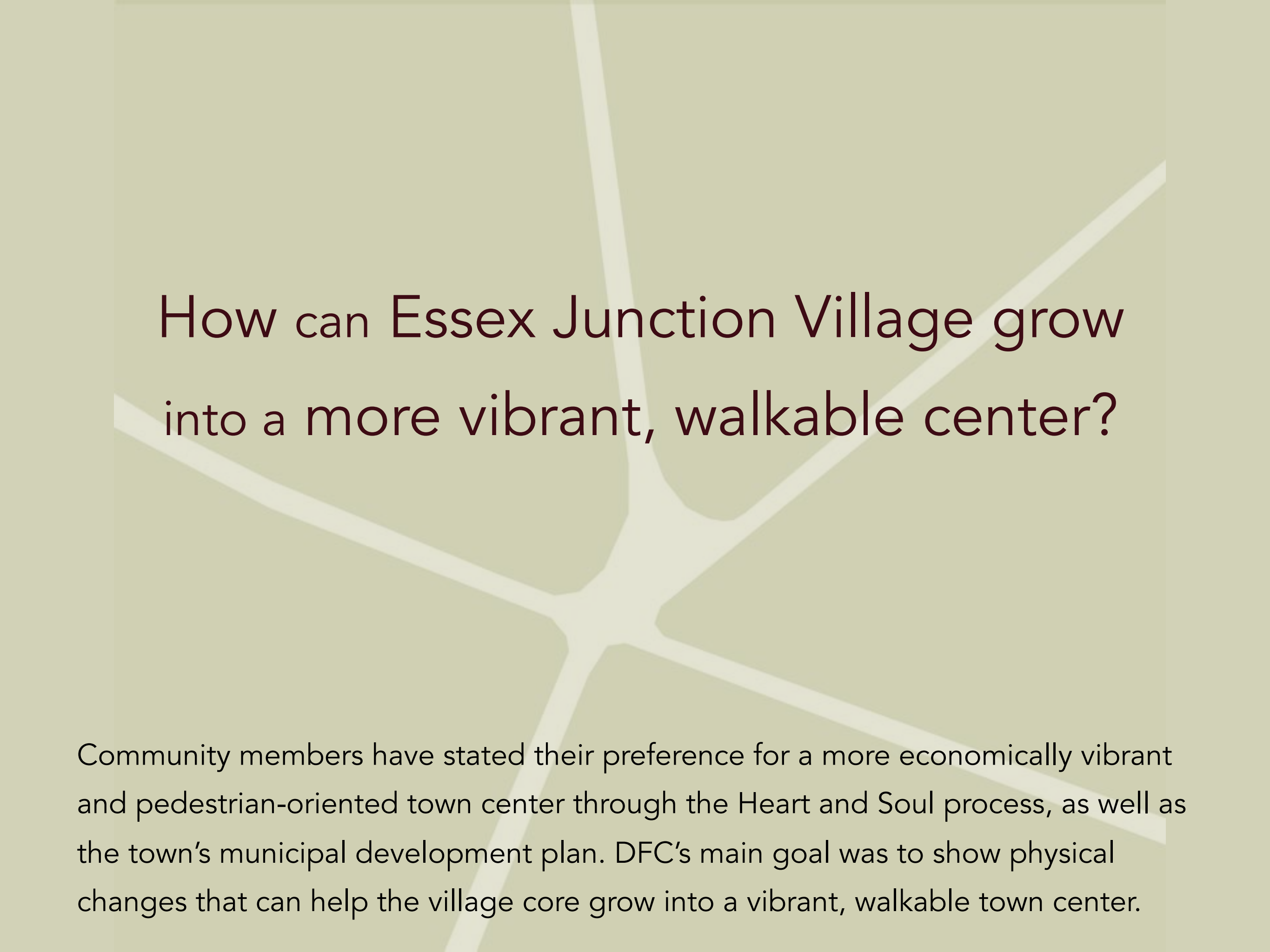
[www.juliecampoli.com](http://www.juliecampoli.com)



## What is thoughtful growth?

“Thoughtful growth” is a value held by many Essex Junction residents and expressed through the community’s recent Heart and Soul process, yet it had never been illustrated. Design Five Corners (DFC) set out to articulate an urban form that Village residents might agree constitutes “thoughtful growth.”



The background of the slide features a stylized, light-colored graphic of a road intersection with four main paths meeting at a central point, set against a muted olive-green background.

# How can Essex Junction Village grow into a more vibrant, walkable center?

Community members have stated their preference for a more economically vibrant and pedestrian-oriented town center through the Heart and Soul process, as well as the town's municipal development plan. DFC's main goal was to show physical changes that can help the village core grow into a vibrant, walkable town center.



# Historic patterns

To create a plan that would fit the spirit of the place, the first step was to understand the historic context from which Essex Junction's built environment evolved.

## The Junction railway intersection

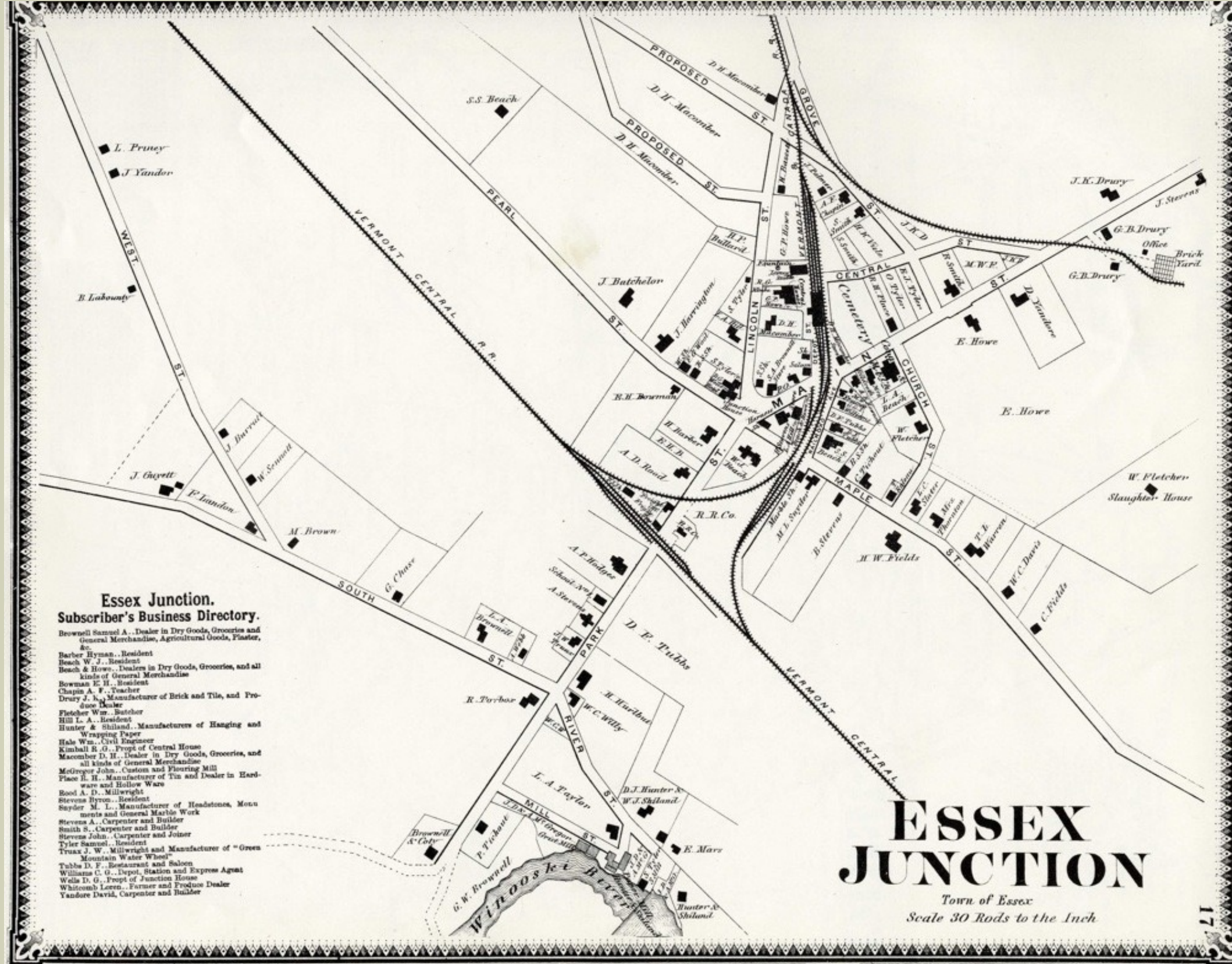
Settlements typically form around transportation access points, often at intersections. In the early years, a railway intersection, or "the Junction" was key to the town's formation and growth, as well as its layout.





# Overlapping networks

The basic structure of the village are the overlapping networks of **rail** and streets. **Local streets** took shape around the railroad depot and **through roads** connected to surrounding towns.

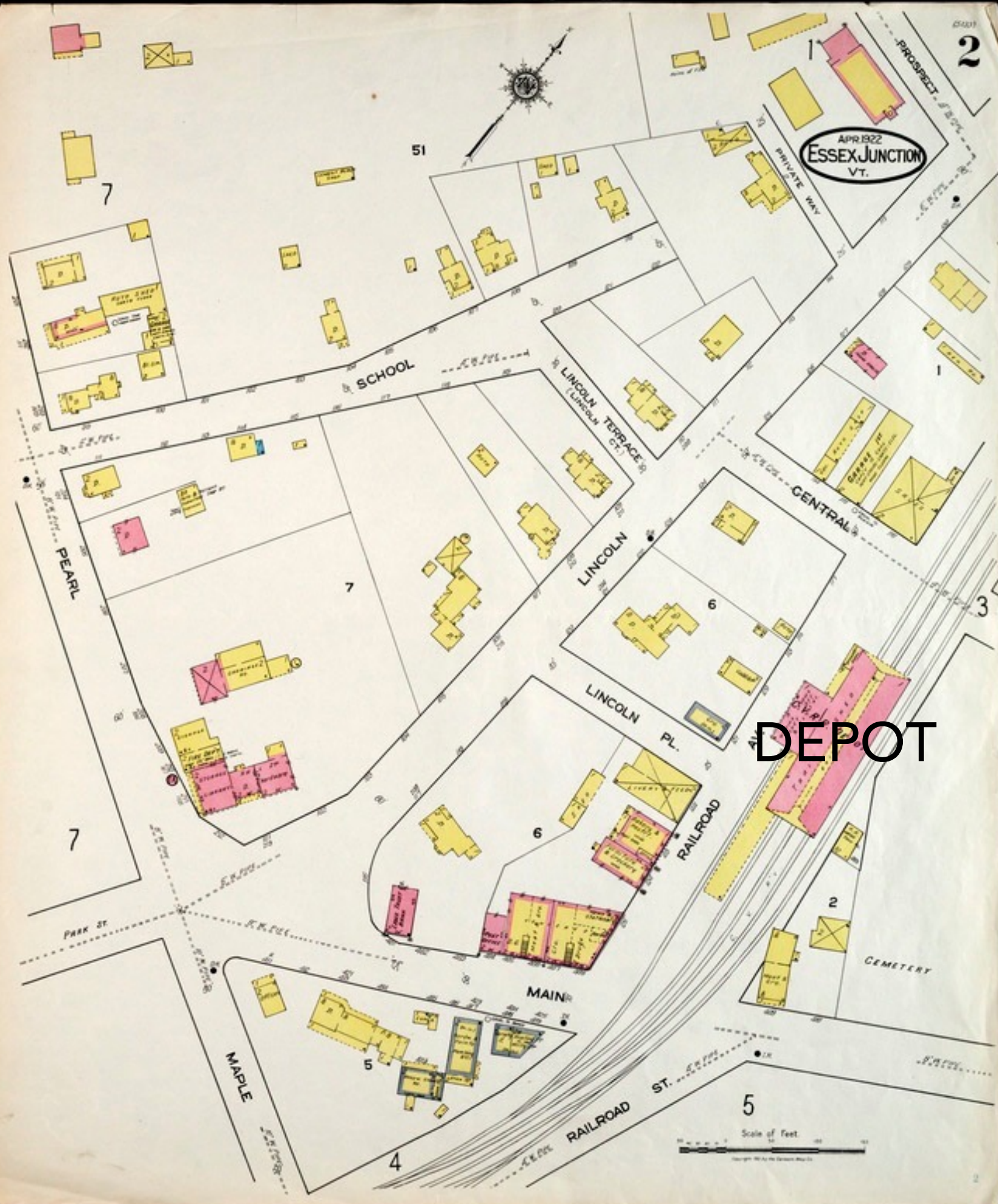


Through the 19th and early 20th centuries, the railroad was the dominant transportation mode- more people and goods came in and out through the rails than by highway.



# Density

The tight network of streets formed small blocks, which were subdivided into small parcels. Buildings were set directly on the street, creating short distances between destinations. Most buildings were located within a half mile from the railroad depot. Industries were built adjacent to the tracks for better access to train lines.







A rail-focused transportation system was responsible for the connected street network, human scale architecture, and relatively dense village core. This photo from the 1930s illustrates the compact form of village center surrounded by farm land that characterized Chittenden County towns during the pre-war era.



# Slow travel



During this era of slow travel, Five Corners was a humane and attractive public space. As cars became more common and Vermont shifted to a highway-based transportation system, Five Corners lost its intimate scale. Streets were widened to larger roads that could be maneuvered in a car and at higher speeds. Essex Junction's main intersection was no longer the rail but Five Corners.





In the process, it was transformed from a place to be to something traveled through at a higher speed.





More traffic, led to more accommodations for the car (turning lanes, more pavement, larger-sized signs and traffic signals). The greater volumes of noisy, idling and moving traffic, degraded the experience of crossing the intersection, and made the village center a less appealing place, especially for people on foot.





The older, smaller scale of the rail era was overwhelmed by the larger spaces required to store automobiles. Parking lots expanded into village properties that once held buildings or green space.



## Existing Patterns



# Buildings

## Mind the gaps

One characteristic of a walkable place are streets with clear edges formed by closely-aligned buildings. A map showing only buildings will reveal where streets are located. The existing pattern of Essex Junction, shows a strong alignment of buildings in the upper right, where the commercial blocks of Railroad and Main Streets form edges. Park St. is somewhat visible, but along Maple, and closer to Five Corners, with few buildings hugging the intersection, it's difficult to see where the streets go.





# Parking and Streets

Parking lots occupy much of land  
around Five Corners



# Parking and Streets

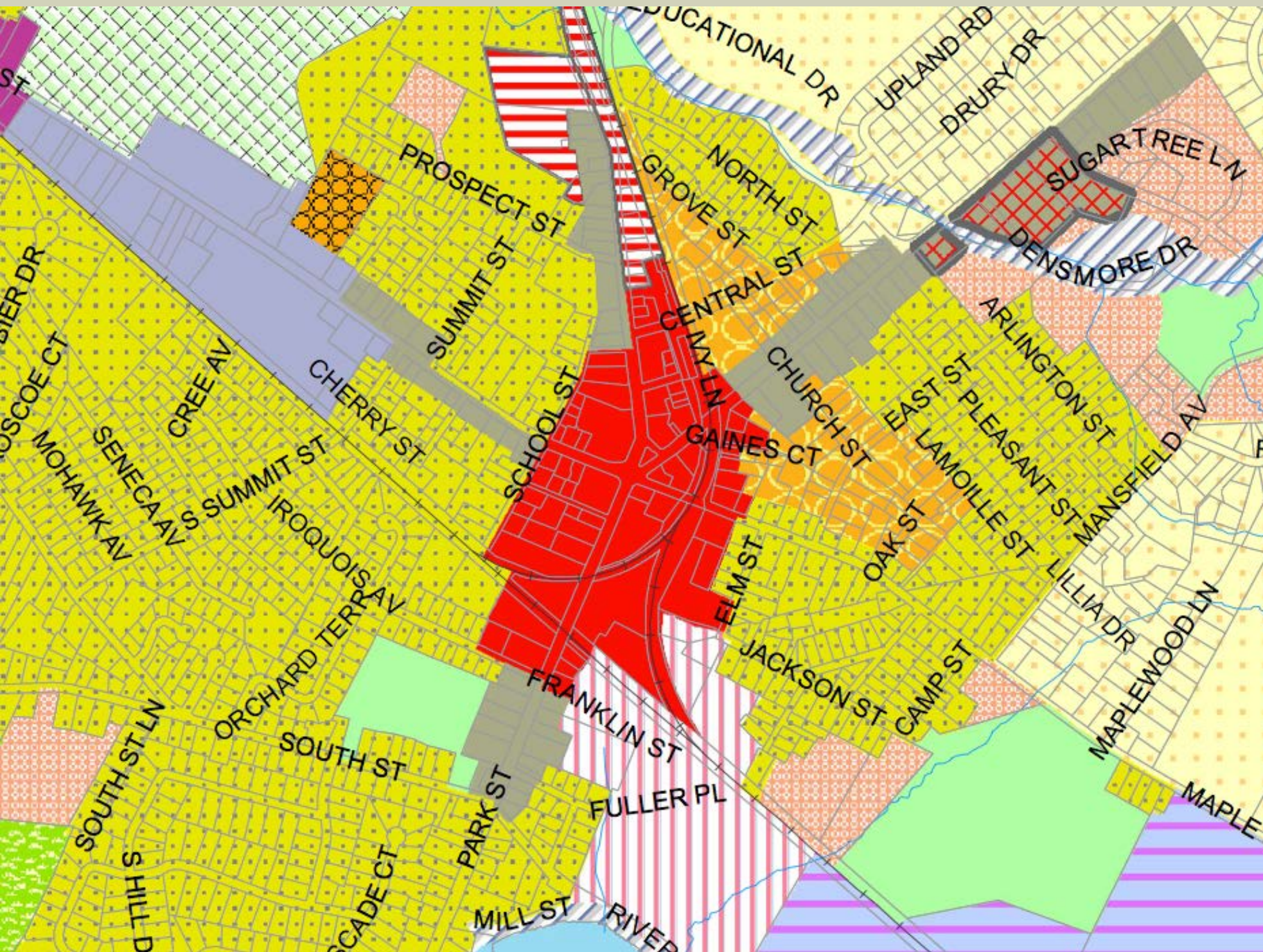
Total space dedicated to vehicles

Combine the areas consumed by parking and streets (black) and there is little land left (white) for economic and social activities. For the village to become more vibrant, this ratio of car-dedicated space to people-oriented space needs to shift.



# What does Essex Junction have going for it?

## Close-in neighborhoods



Plenty of attributes will ensure the success of a walkable village center. First, it has many high quality neighborhoods with thousands of people living within easy walking distance of the village center.



# Important destinations within walking distance

elementary schools

middle school

high school

library

town offices

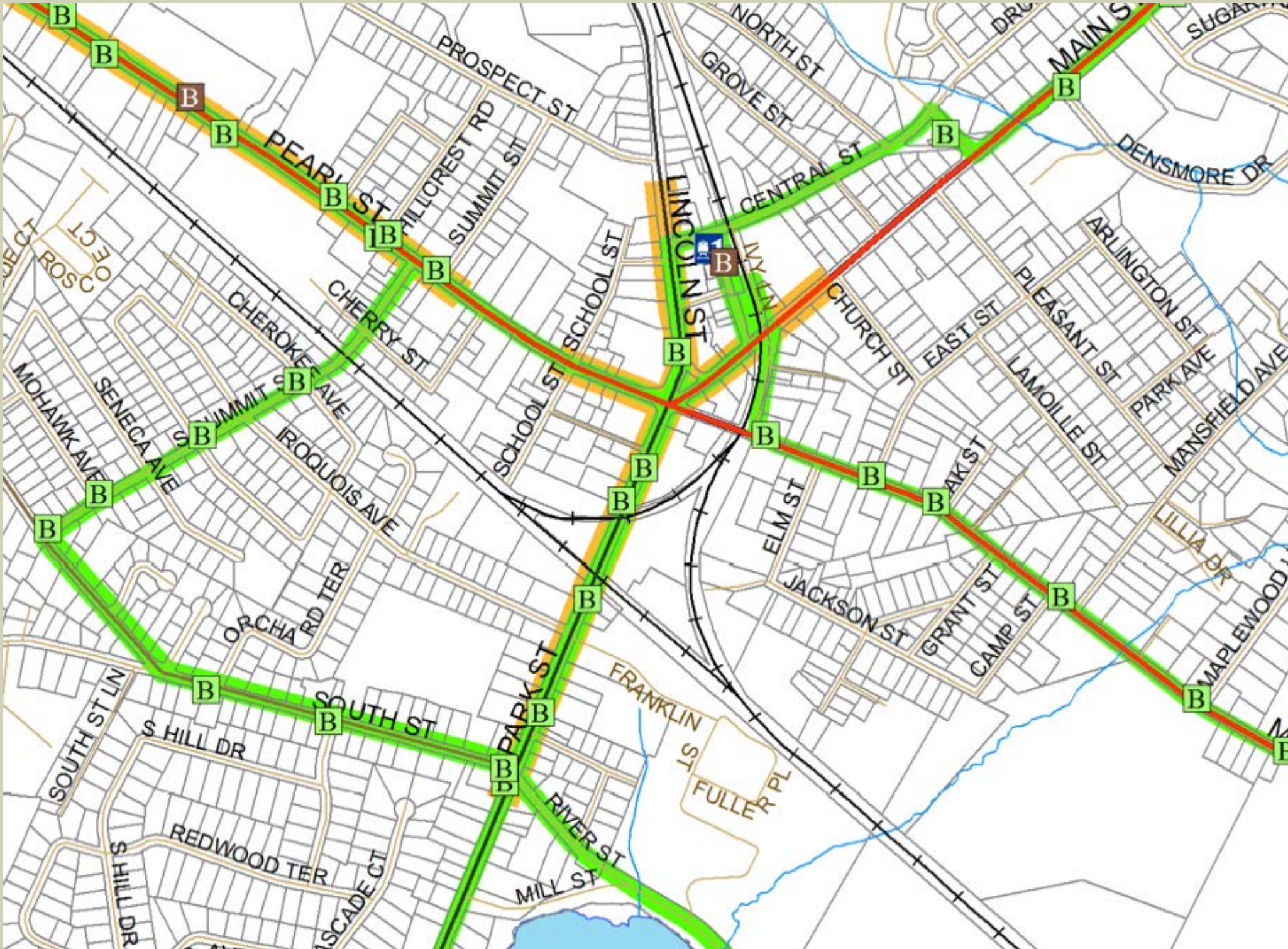
senior center

significant tracts of open land

Schools, cultural destinations and open space add to the diversity of places to go on foot. Residents have much of what they need nearby. The challenge is to make the journey to these places safer and more pleasant.



# Many homes within easy reach of transit



Essex Junction has an extensive network of bus lines that thread through its neighborhoods, with bus stops close to where people live.



# Passenger rail service



Essex Junction is one of a handful of passenger rail stops in Vermont. Amtrak ridership is growing, with a link to Montreal in the works, but with few amenities near the existing station, passengers rarely linger. A walkable, lively village center could make Essex Junction a destination for those travelers, rather than a departure and arrival point.



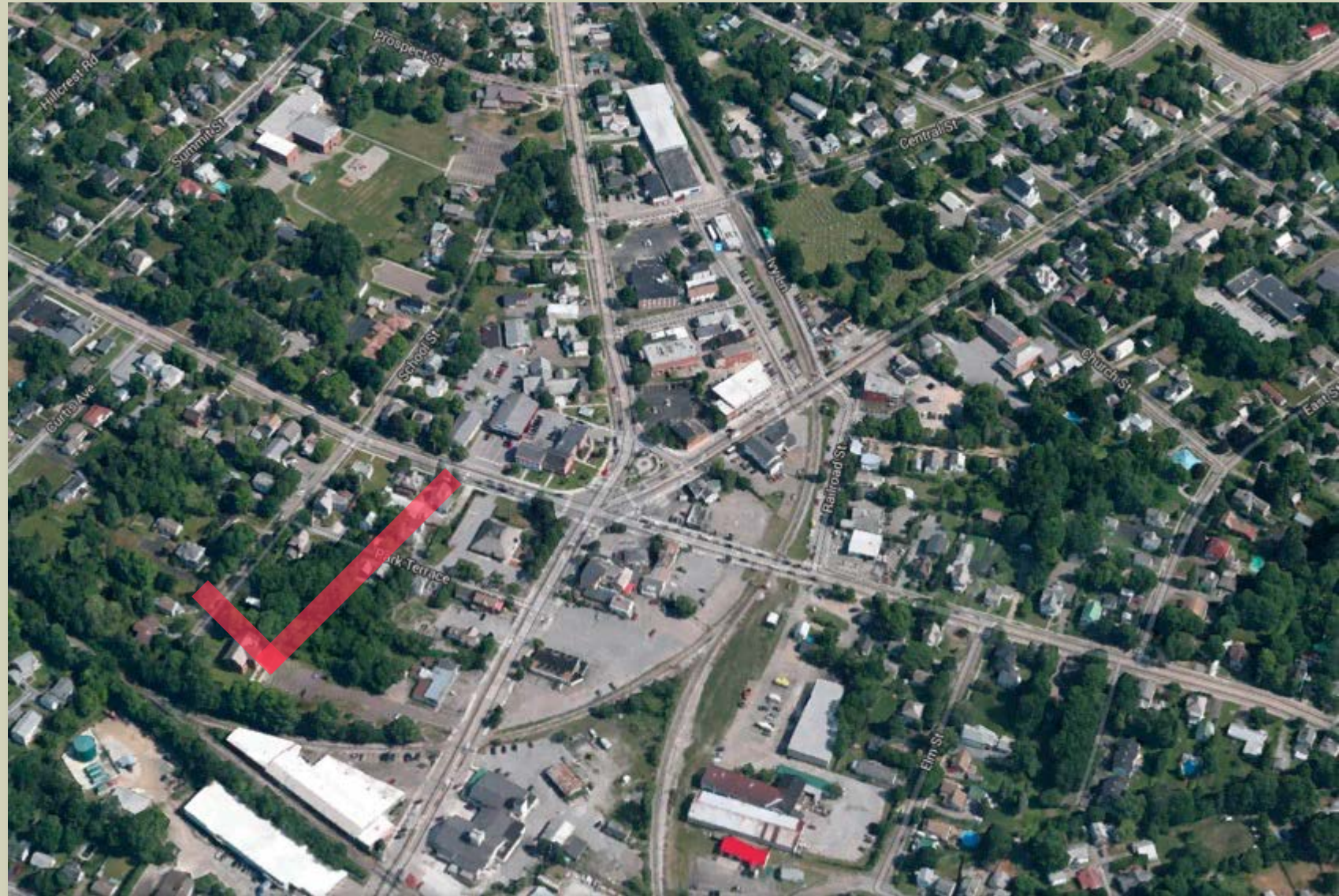
# Public investment in the infrastructure of walking



The town has installed sidewalks, street trees, benches and human scale lighting. This type of infrastructure is an important first step.



# What are good bones?



These attributes, together with Essex Junction's historic urban form of connected streets, small lots are its "good bones." They create the physical framework for sustainable growth.



# What's missing? Other destinations in a great walking environment



The next step for Essex Junction is to put some flesh on those bones- by adding more destinations (shops, offices, upstairs apartments) and connecting them with streetscapes that makes pedestrians feel protected and comfortable.



# Train Hop



DFC engaged Essex Junction residents to inform the design process. It began at the Train Hop in December, where we set up a display and photo stand. People let us know what they would like to see in a future village center.



What would make you more likely to walk to/around Five Corners? 1st choice- gold star, 2nd choice- silver star, 3rd choice- red star

Less wait time for pedestrian signals	
More crosswalks	
More street trees	
Greater distance from moving cars	
Calm traffic	
Wider, smoother sidewalks	
More public spaces and seating	
Better lighting / sense of security	
More shopping, eating and gathering places	
Something else?	(list it below) traffic rotary @ 5 corners
Something else?	(list it below) Safer Crosswalks - cars don't STOP!
	Bike Path along river rd / Winneke River
Something else?	(list it below) Art Supplies Store

From a long-term development perspective, Essex Junction's compactness is one of its greatest assets, so we focused on Five Corners as a place to walk to and travel through on foot. Train hoppers let us know what keeps them from walking today and which improvements would enable them to walk more often.



# What would make you more likely to walk to Five Corners?

More shopping, eating and gathering places

Calmer traffic

According to public responses, the biggest barriers to walking in the Five Corners areas are a lack of destinations to walk to, and the oppressive environment created by car and truck traffic.





Residents who visited the Train Hop, the library, the senior center, and the town offices, had the opportunity to show their top destinations and favored routes through the village. This map gives a sense of where sidewalk and crosswalk improvements might be prioritized.



# What is needed in Five Corners?

Restaurants

Bakery

Coffee shops

Train hoppers and others envisioned a wide array of services in the village, but most would like to see more gathering places such as restaurants, bakeries and coffee shops.



The screenshot shows the Facebook page for 'Design Five Corners Community'. The top navigation bar includes 'Page', 'Messages', 'Notifications', 'Insights', 'Posts', 'Settings', and 'Help'. The cover photo is a street scene with traffic lights and signs. The page name 'Design Five Corners Community' is prominently displayed. The left sidebar shows '271 likes', a 'Promote Your Page' button, an 'ABOUT' section with a link to a website, and a 'PHOTOS' section with three images. The main content area shows a status update from Darby Mayville about a volunteer opportunity for the Essex Junction Bike/Walk Advisory Committee. The right sidebar shows a 'Promote' dropdown, 'THIS WEEK' stats (1 Page Like, 339 Post Reach), 'UNREAD' notifications (0), and 'Recent' posts from 2015 and 2014.

The DFC Facebook Page has been the main source of communication with community members. With almost 300 followers, it has provided a forum for sharing project information, events, articles, ideas and comments.



## The View from the Sidewalk

Look closely at the following photographs taken along the streets around Five Corners. How comfortable would you feel walking on each segment of sidewalk? Rate each image on a scale of 1 (not at all appealing) to 5 (very appealing).

Feel free to move back and alter a rating after you've seen all the images.

## Image #1



1. Rate the view above on a scale of 1 (not at all appealing) to 5 (very appealing).

Image #1

1

☐

2

☐

3

☐

4

☐

5

☐

An online survey asking residents to examine and rate village streetscapes helped us gauge what people liked and didn't like about existing conditions. With 280 responses, the survey results demonstrated clear preferences for a certain type of streetscape.



# Very unappealing



The vast majority of respondents didn't like streetscapes that had an excessive amount of paving—large parking areas and travel lanes close to the sidewalk, buildings located in the distance, and a lack of sheltering elements like trees.



# Very appealing



Generally, they disliked streets that were designed for driving and preferred places that were designed for walking, with a more intimate scale— buildings lining the sidewalk, generous display windows, frequent doorways, and high quality architecture.



# Public Comments Summary

too much asphalt, need more green

smaller scale, historically sensitive bldgs

don't want to see parking lots

wider sidewalks, more buffer

retail entrances close to the street

more gathering places

Survey respondents confirmed their preferences for a more pedestrian-oriented streetscape in their written comments.



# Design Workshop



In late January, a half-day design workshop gave residents an opportunity to dig into the issues at a deeper level. The afternoon included presentations and hands-on exercises covering the physical form of Five Corners, the relationship between density and design, and how communities across the country have improved their downtowns.





Most significantly, the workshop gave residents a chance to talk about how future growth could take shape.





Working in groups they built block models, arranging infill buildings on undeveloped or underused parcels. They came up with some great ideas for how development could enhance life in the village center.



# Favored Design Elements

Central green and pocket parks

Buildings lining the streets

Pedestrianized Main Street

Multi-story mixed use

Street trees

The common threads among the groups were more green, more activity, and more public space.



# Architectural Preferences



A second online survey asked people to rate photographs of recently built multi-story buildings in other communities, to get a sense of what types of architectural styles Essex Junction residents envisioned for their downtown.



# Architectural Preferences



Most of the higher rated images displayed a look of permanence, with articulated facades and a generous amount of transparency (many windows and doors)



# Maximize space in the village core



Throughout the engagement process, public opinion synched up with stated goals of Essex Junction's Municipal Development Plan and other official documents—to make better use of space in the village core, maximizing these town center locations to create more services, economic activity and benefits.



# Reclaim some space for people



And to create a place people want to be in, rather than get through in a car.



1. Divert and calm traffic
2. Fill in the gaps
3. Connect with public space

Transforming Five Corners into a walkable destination requires three related strategies; rerouting traffic away from the intersection and reclaiming pavement for pedestrians, filling in the underused parcels with buildings, and expanding the amount of public space beyond the narrow confines of the sidewalk.



# Infill



There is plenty of room for growth in the village, given the sparse building pattern and large amount of underused land.

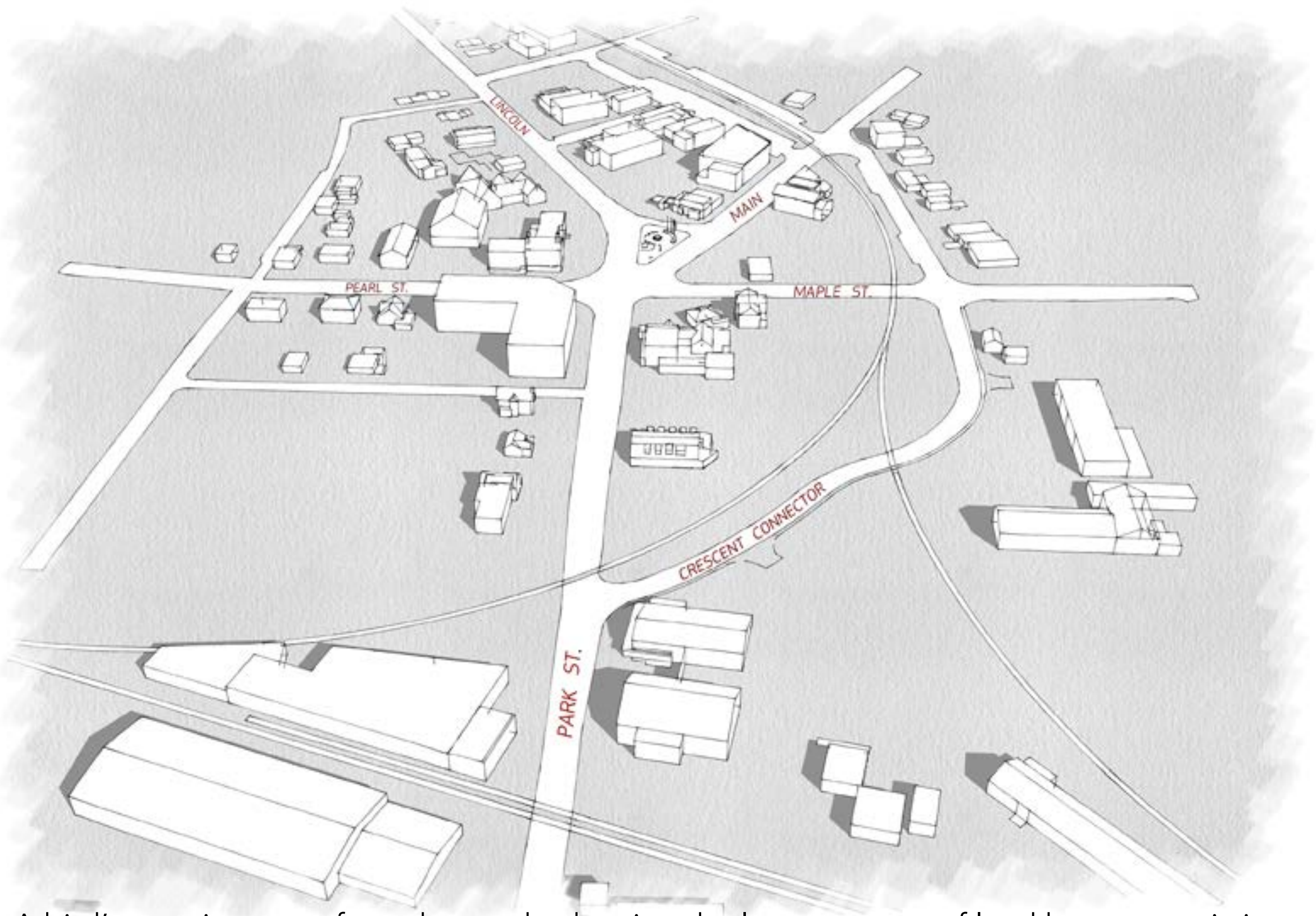


# Infill



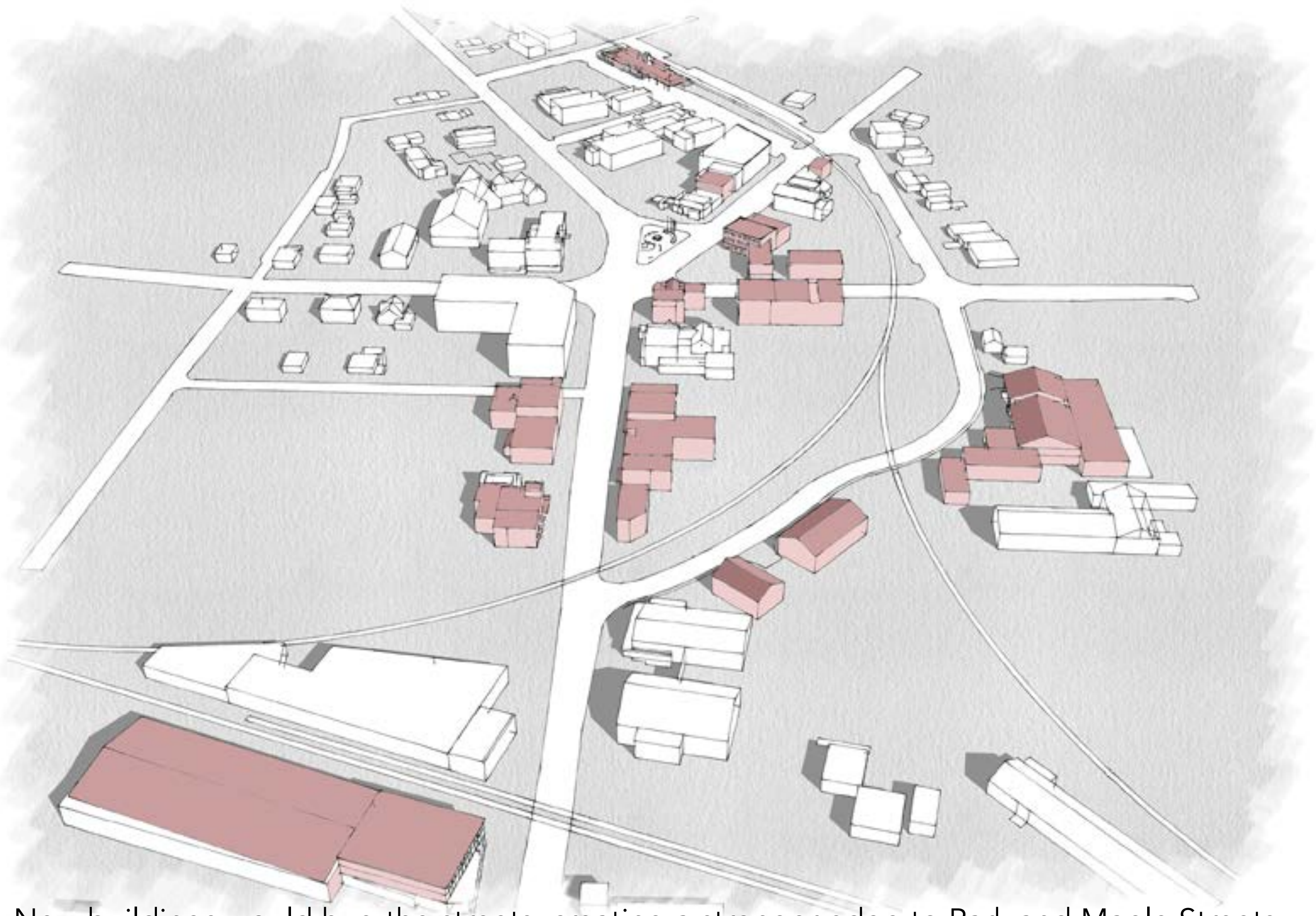
New buildings (shown in black) can fill the gaps along Park, Maple and Main, as well as newly accessible land along the Crescent Connector. This schematic also shows how underused parcels could be redeveloped to a higher density to create more value.





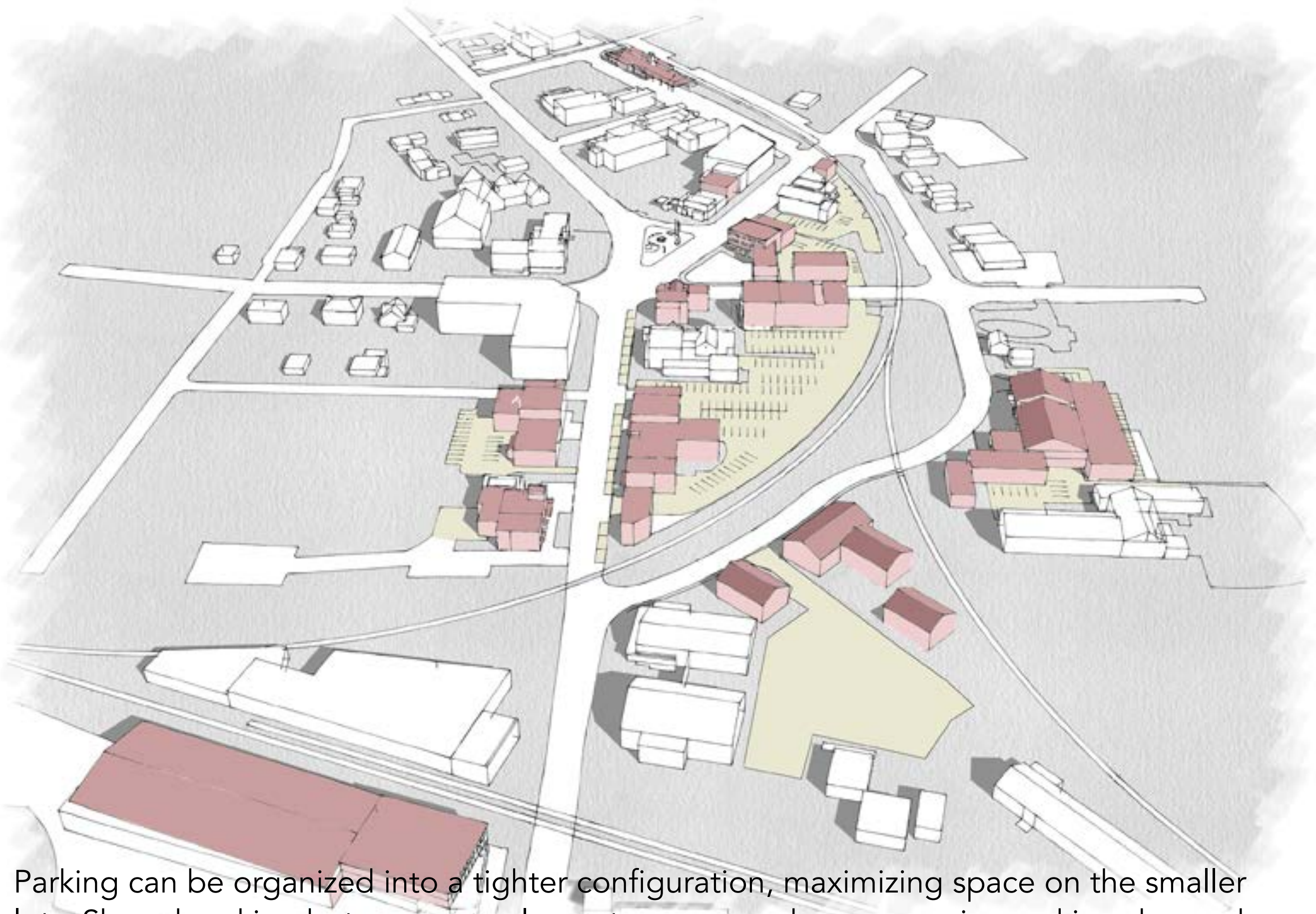
A bird's eye view seen from the south, showing the large amount of land between existing buildings and opportunities for infill.





New buildings would hug the streets, creating a stronger edge to Park and Maple Streets





Parking can be organized into a tighter configuration, maximizing space on the smaller lots. Shared parking between complementary uses and an aggressive parking demand management strategy can help limit the number of spaces needed.

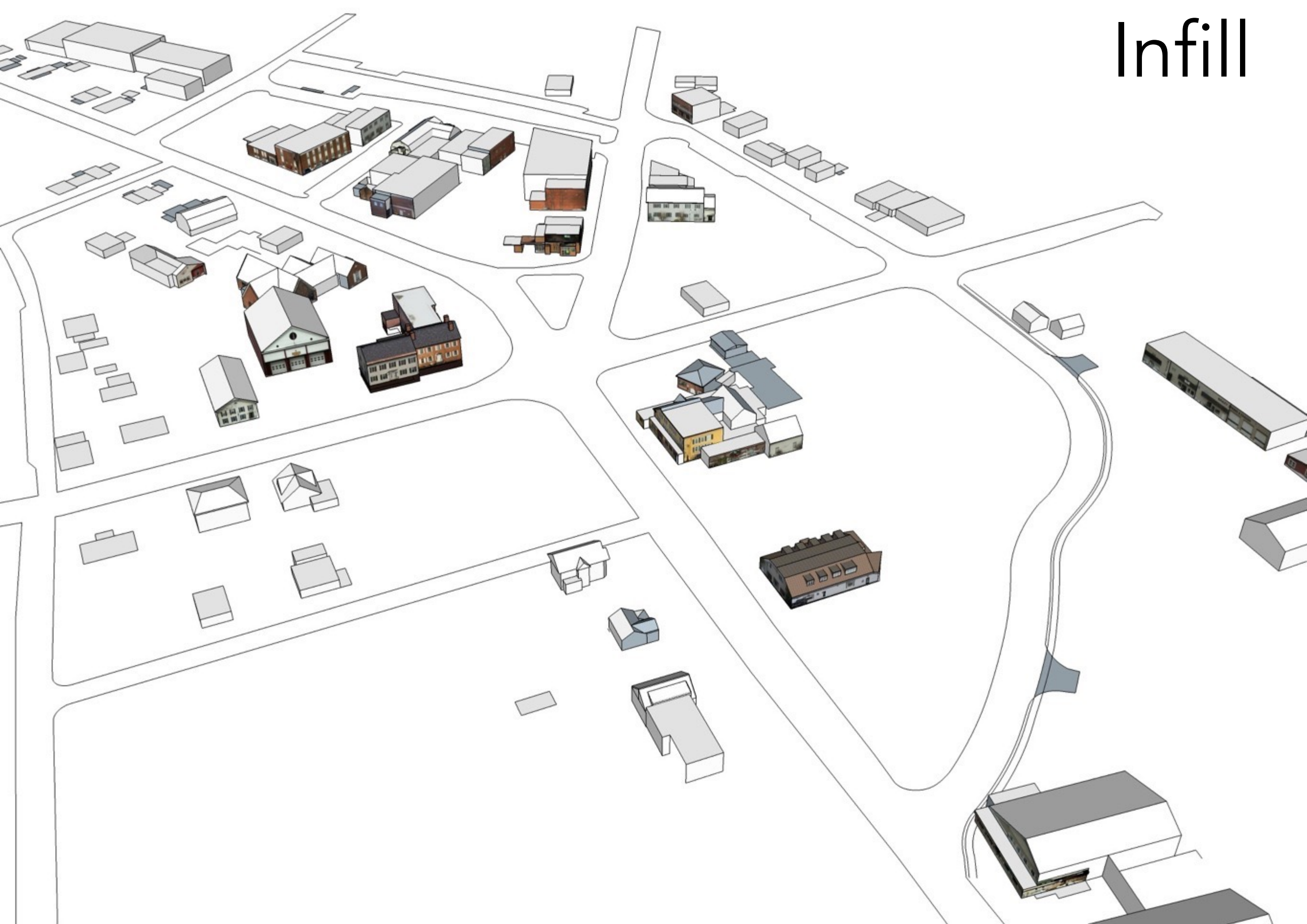




In past years, the Village has made a significant public investment in pedestrian infrastructure. Crosswalks, sidewalks, trees and benches have helped, but village streets need a more consistent building edge to entice more pedestrians.



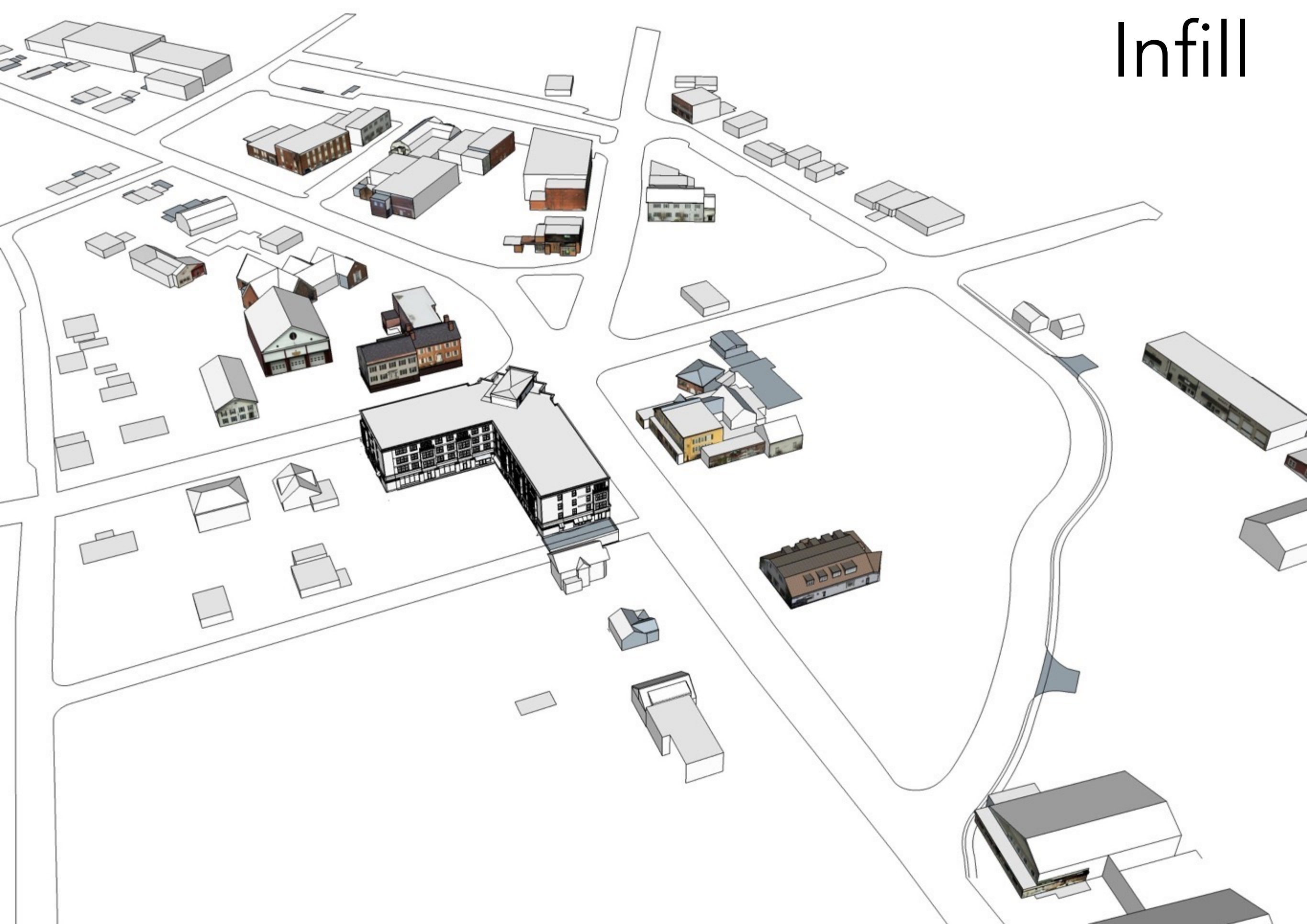
# Infill



Another series of aerial views shows the building pattern as of today



# Infill



With the addition of the corner building currently under construction



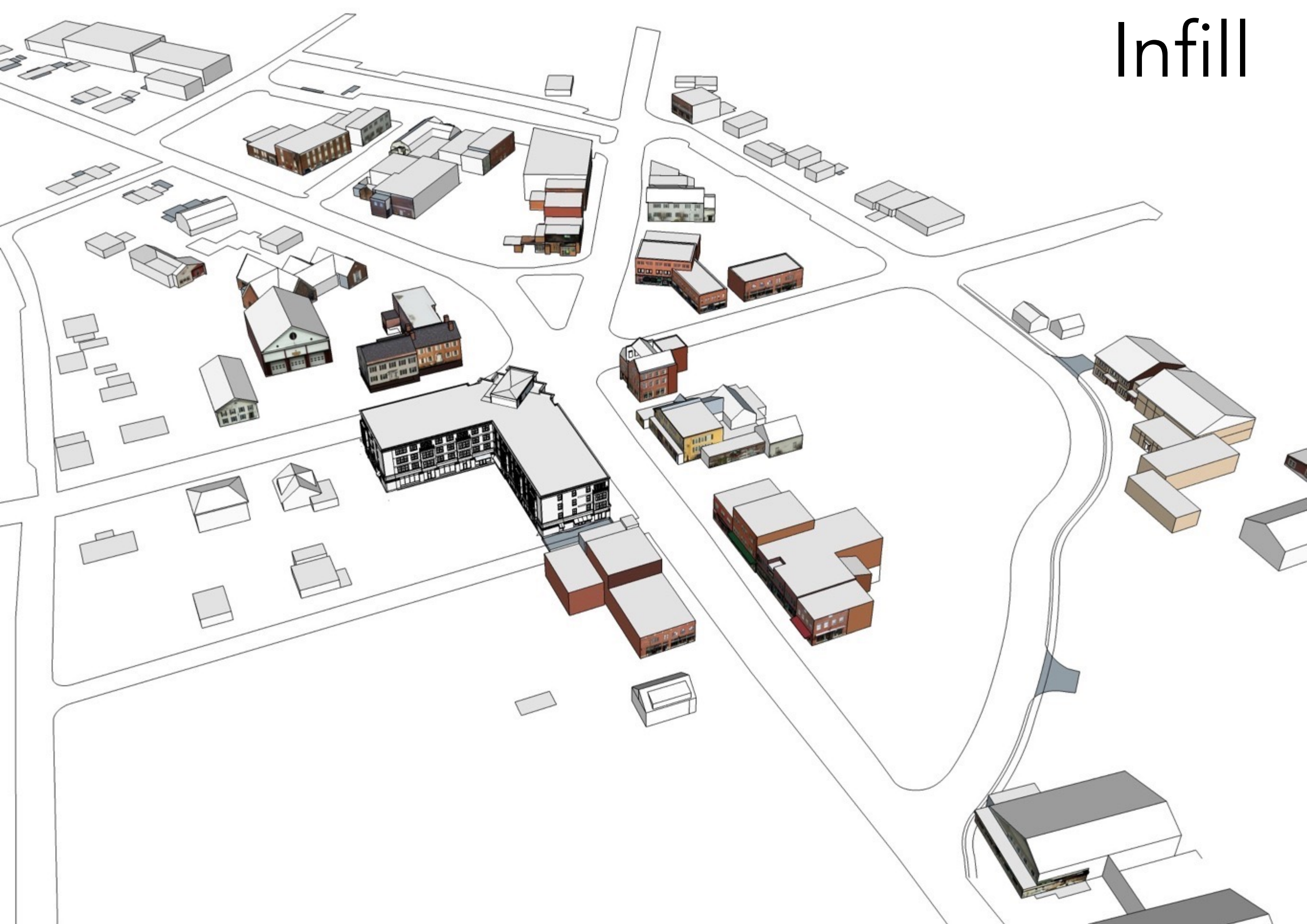
# Infill



And how a denser village can evolve incrementally, first with a few key buildings



# Infill



And more filling in over time



# Infill



Until the streets are lined with shops and other services, creating a consistent edge and an enhanced pedestrian experience.





The contrast between Park Street today, with its sidewalk sandwiched between moving cars and many stretches of empty space bleeding into parking lots...





...and what it might look like after the infill buildings are in place, is striking.





Full buildout shown with public green space and shared parking behind buildings



# Public Space



For decades, Five Corners has functioned as a traffic intersection rather than a town center.





An expansive right-of-way was given over to the circulation of vehicles. Very little of that public space is available for people who are not in cars.



# Public Space

## Street network

Construction of the Crescent Connector will create an exciting opportunity to reclaim some of that right-of-way for people to enjoy. A significant portion of through traffic, especially trucks will be diverted away from the Five Corners intersection reducing noise and congestion in the heart of the village.





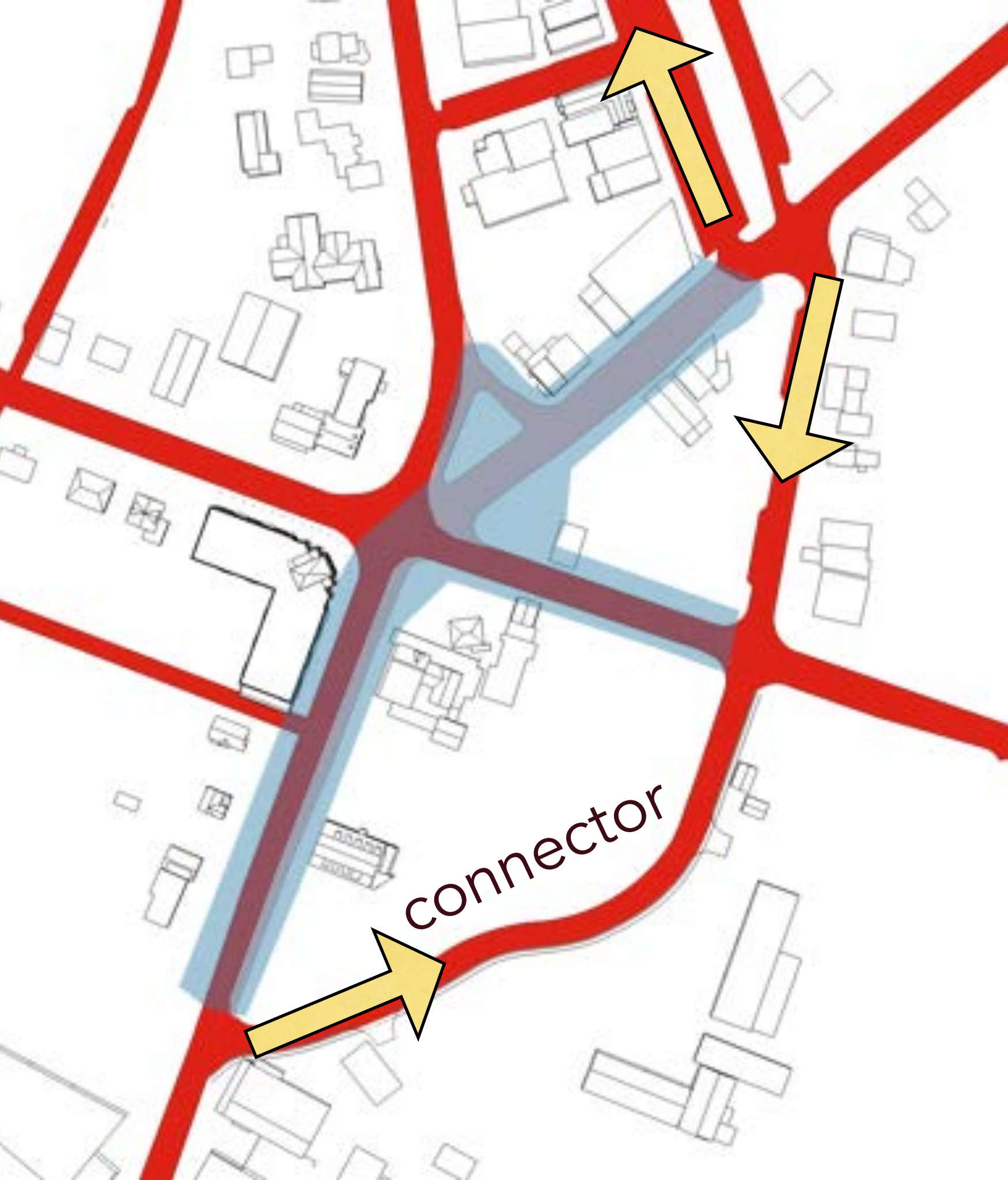
# Public Space

## Connector

This relieves pressure on Main Street, making it possible to pedestrianize the main commercial block and providing two significant benefits; a more efficient four-way intersection with shorter wait times for vehicles, and more public space.







Diverting traffic to the Connector creates a zone of opportunity for greener, quieter public space around Five Corners as well as along Main and Park.





Redevelopment of key properties would make it possible to combine a pedestrianized Main Street with a new village green.





The green seen from the northwest, above Brownell Library

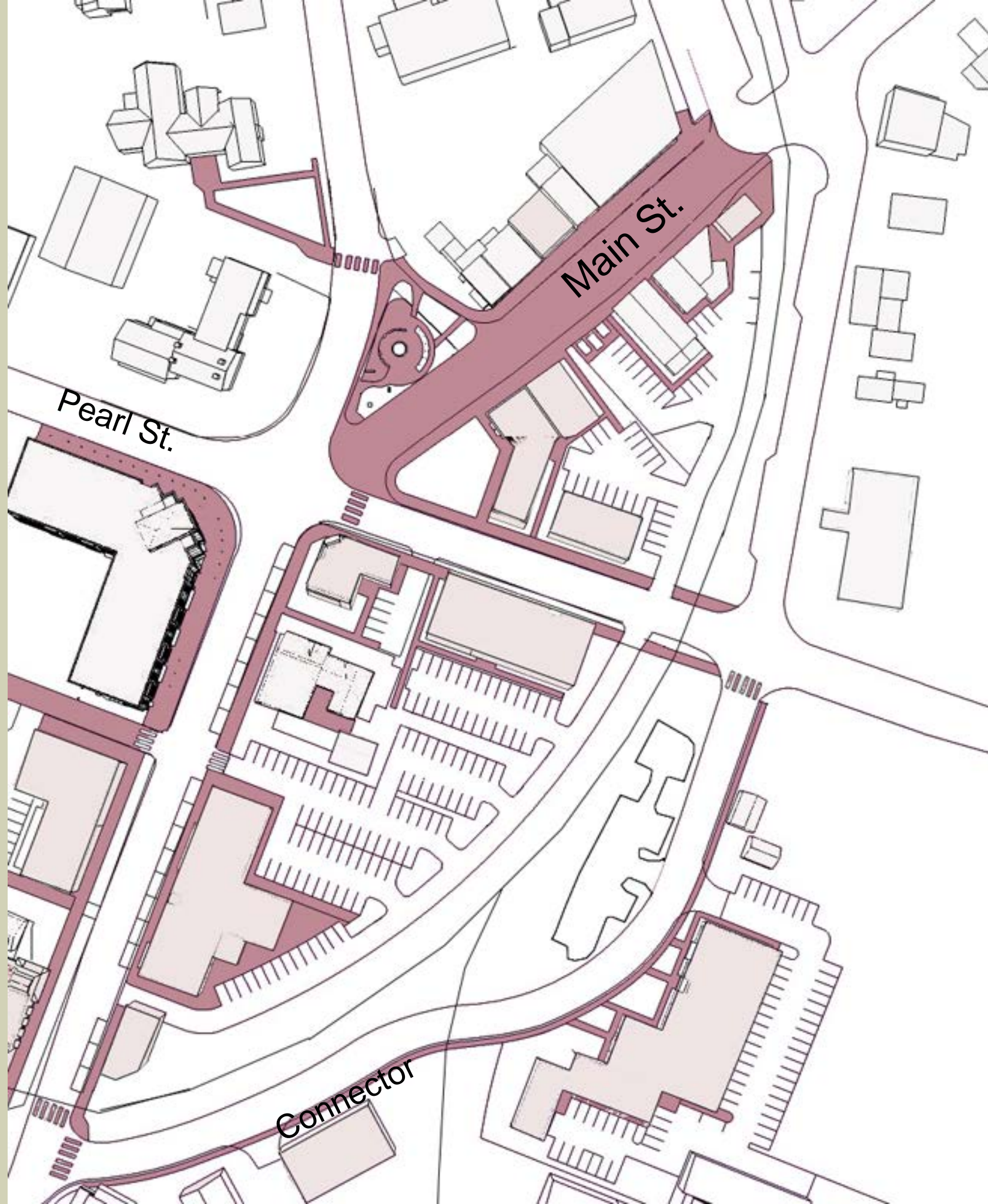




## New green

This central green would serve as a focal point for those traveling west on Pearl and south on Lincoln.





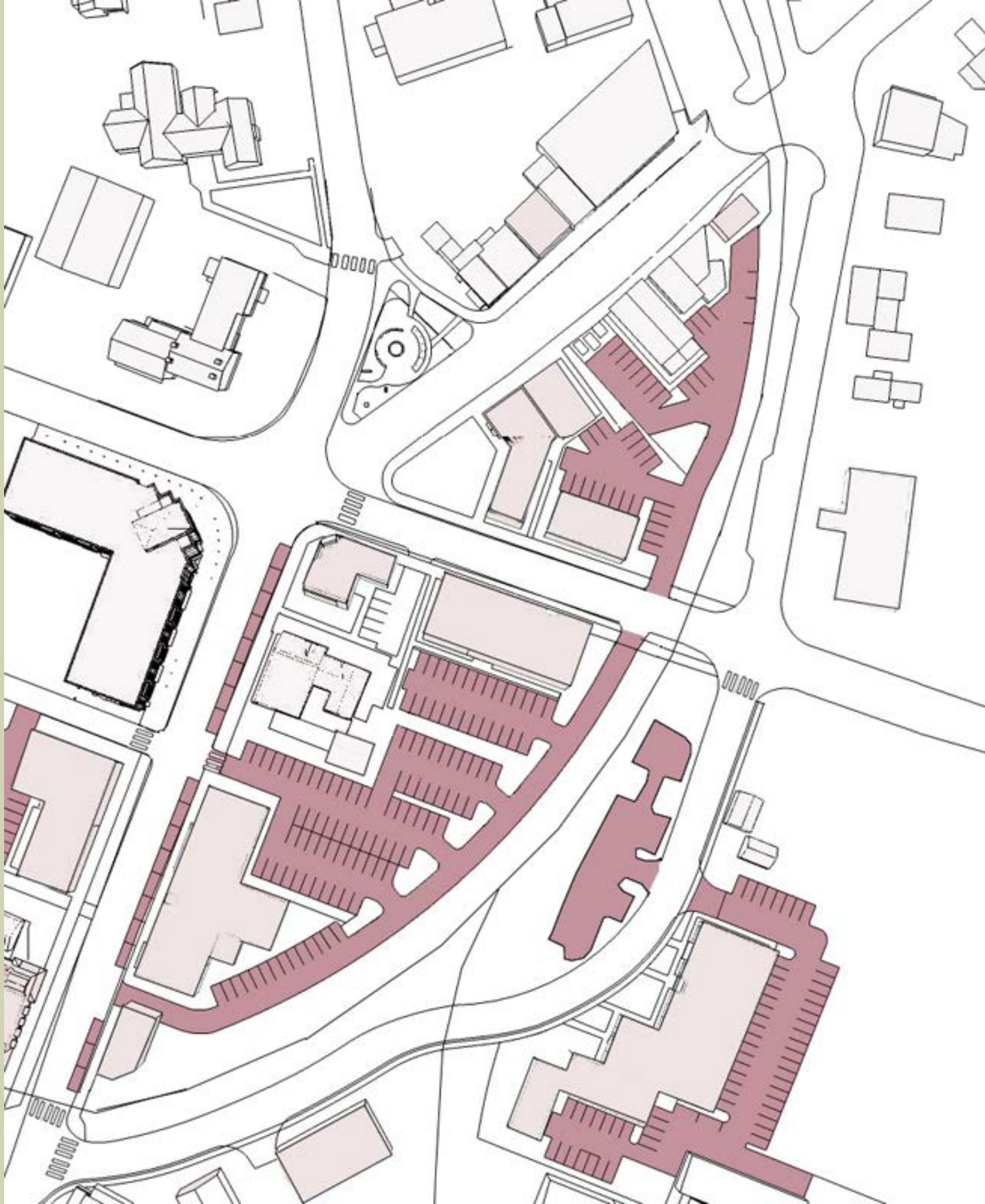
## Pedestrian links

Sidewalks and crosswalks would connect all buildings and public spaces and lead to the many shared parking areas.



# Parking areas

With fewer vehicles moving along Park St., it will be possible to convert the northbound right turn lane into on-street parking. These spaces will supplement many located in rear lots accessed from Park, Maple and the Connector. This new parking lot layout features green medians to collect and filter storm water.







Existing conditions- most of the public right-of-way is paved and used by vehicles moving through the five-way intersection.





Crescent Connector

Wider sidewalks create more room for pedestrians. New buildings fill the underused parcels, resulting in spaces that are more enclosed and comfortable for walking.



Rain gardens along the existing curb line could absorb storm water as well as support shade trees. Closing the street to vehicular traffic but leaving it free of obstructions retains the historic feel of Main.







And allows the space to be used in many different ways





such as outdoor cafes, and the everyday enjoyment of Main Street shoppers and visitors





or for community events such as the farmer's market, Memorial Day parade activities, and Train Hop.





Temporary  
installations



A pedestrianized Main Street could be the setting of many activities before any permanent changes are made. Experimenting with inexpensive, temporary installation will help the community decide how the space can be used in the long term.





Two parcels occupying prime village space could be developed to create more value for their owners.





Combining them into one larger parcel would create a viable building site that could host a commercial block building, similar to the Brownell Block. This would anchor the southern end of Main Street and still allow room for green space in front and parking in the rear.





Shops and eateries along the ground floor could spill out onto the sidewalk activating the edge of the village green. This view illustrates how the green might look on a summer's day with the farmer's market operating along Main Street.



The recently planted street trees along Park and Maple form the beginning of a green canopy. Additional trees spaced at regular intervals along the sidewalks will help clean the air, absorb noise and create a visual connection to the central green.







Another view of the connected green spaces looking north along Park St.





The view looking south along Park Street today





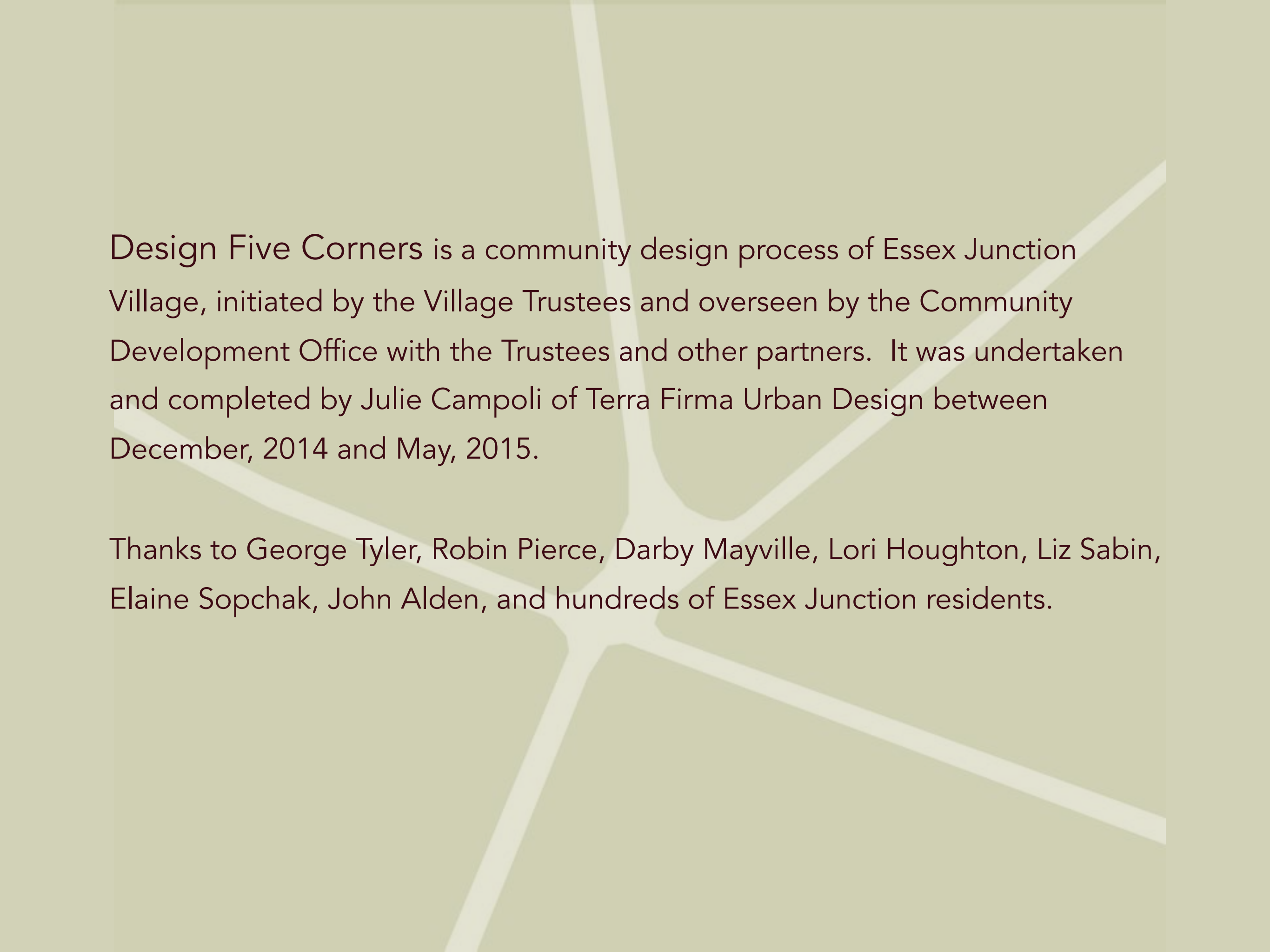
And after redevelopment over time, with outdoor gathering places, a wide array of retail services, offices, and upstairs apartments. Greater density, but at a human scale and built for human comfort.





With carefully sited and designed higher density buildings and public spaces, the future village center can be a place that invites investment and creates value for generations to come.





Design Five Corners is a community design process of Essex Junction Village, initiated by the Village Trustees and overseen by the Community Development Office with the Trustees and other partners. It was undertaken and completed by Julie Campoli of Terra Firma Urban Design between December, 2014 and May, 2015.

Thanks to George Tyler, Robin Pierce, Darby Mayville, Lori Houghton, Liz Sabin, Elaine Sopchak, John Alden, and hundreds of Essex Junction residents.