

# **KEENE DOWNTOWN INFRASTRUCTURE IMPROVEMENT & RECONSTRUCTION PROJECT**

## **STEERING COMMITTEE PRESENTATION**

# I. **OUTREACH AND ENGAGEMENT**

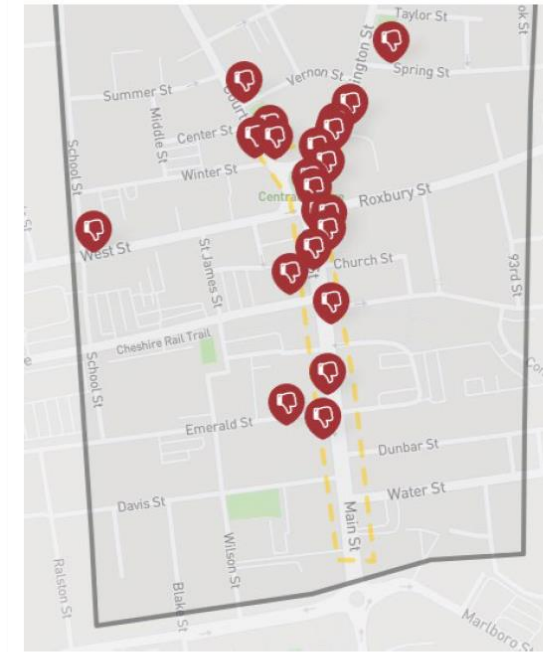
## STEERING COMMITTEE PRESENTATION

# KEENE DOWNTOWN IMPROVEMENTS OUTREACH SUMMARY

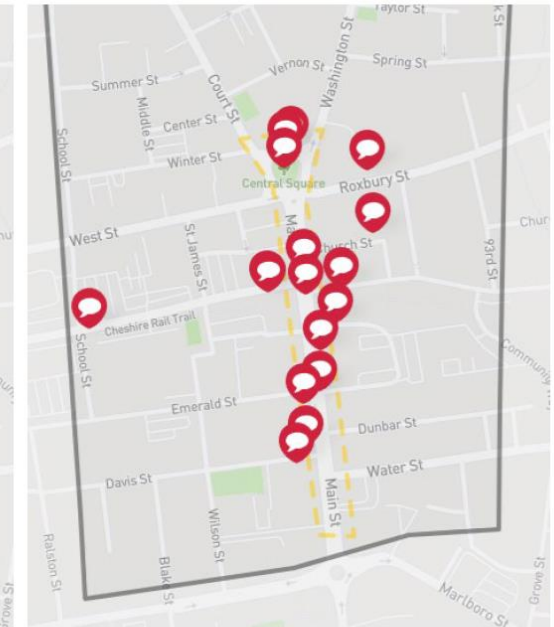
1. In-person workshop, June 2022
  - (~50 Participants)
2. Online workshop, June-July 2022
  - (~100 participants, 800 website visitors)
3. Stakeholder Roundtables July-August 2022
  1. Technical Review Committee – June-August (6 meetings)
  2. Downtown Business Group #1 – 7/15/2022
  3. Downtown Business Group #2 – 8/2/2022
  4. Art's Alive Group – 8/5/2022
  5. Bicycle Pedestrian Path Advisory Committee – 8/10/2022
  6. Keene Rotary Club – 8/11/2022
4. Web Page
  - Interactive Map
  - Project Goals
  - Invited Comments

## Online mapping results

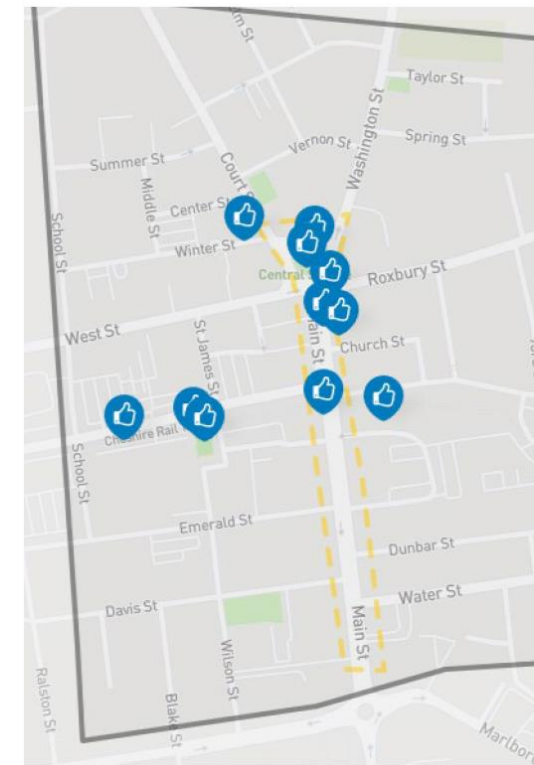
Things I Don't Like



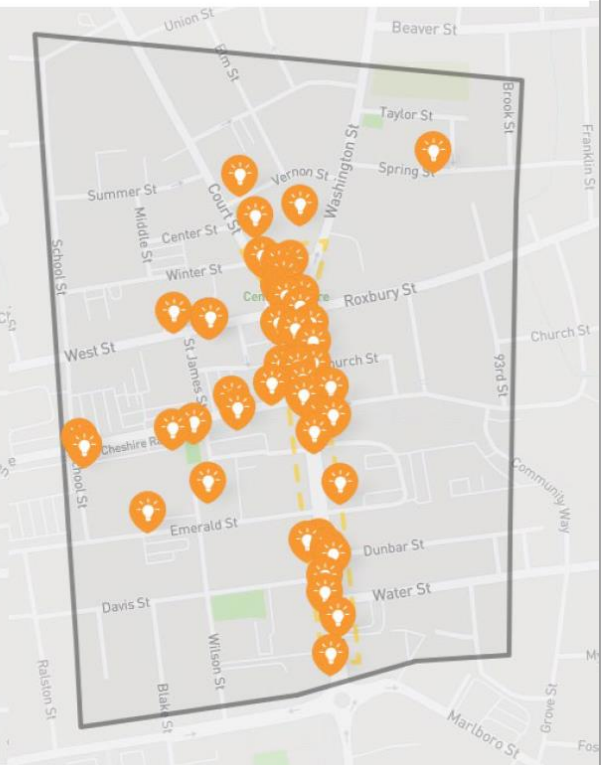
Make a Comment



Something I Like



Ideas and Suggestions





# KEENE DOWNTOWN IMPROVEMENTS OUTREACH RESULTS | MAJOR TAKEAWAYS

## FLEXIBLE STREET SPACE

Street space designed to be easily closed for outdoor Community events.



## TRAFFIC CALMING

There are many ways to 'calm' traffic, but the overall goal is to encourage people to drive more slowly. This could include things like speed bumps, speed signs, raised crosswalks, and/or using medians or curb extensions to narrow driving lanes.



## PROTECTED BIKE LANE

A protected bike lane includes space for a 'buffer' between space for bikes and space for cars. The buffer can include vertical elements, such as a curb or posts.



## HIGH-VISIBILITY CROSSWALK

Wide white bars enhance visibility for people crossing the street.



## PARALLEL PARKING

Parallel parking takes up less space on the street for car storage, making room for other things such as street furniture, sidewalk, bike facilities, etc.



← HIGHER PRIORITY

LOWER PRIORITY →

## OUTDOOR DINING OR ACTIVITY

Flexible space on the curb or in the street that can be used for chairs and tables, or even pop-up sales or seating areas.



## STREET FURNITURE

This includes things like benches and litter bins, but also bicycle parking and lighting.



## BIOSWALE/GREEN INFRASTRUCTURE

Plantings that not only increase greenery on the street but also aid in stormwater management.



## BICYCLE RACKS AND STORAGE

Bicycle parking on the sidewalk, temporary "bicycle corrals" on-street in parking spaces, and secure bicycle parking options.



## WAYFINDING

Wayfinding is signage that helps people find important locations, such as clusters of businesses, parking, local trails, and City Hall. There should be signs for both people driving or biking and people walking.





# KEENE DOWNTOWN IMPROVEMENTS OUTREACH RESULTS | MAJOR TAKEAWAYS

1. Placemaking and wayfinding is lacking in Downtown
2. Downtown does not always feel comfortable for people walking/rolling and biking
3. Expand low-impact development/green infrastructure
4. Car facilities are needed, but need to reduce and streamline
5. Infrastructure upgrades are needed
6. Expand opportunities for Downtown activities
7. Incorporate art and history into the new design



Create opportunities for outdoor performances

Address extensive flooding issues

Support small businesses with transforming outdoor space



# KEENE DOWNTOWN IMPROVEMENTS OUTREACH RESULTS | GOALS

Utility Infrastructure Improvements

Define/Expand Downtown District

Support a More Sustainable Built Environment  
and Transportation Choices

Strengthen Image and Character, Including Arts  
and History

Expand Flexible Open Space

Improve Multimodal Transportation Access

Provide Adequate Parking

Upgrade Walking Environment

*\*Recommended changes to goals are highlighted in red*



Artists are  
an essential  
building block  
for Robust  
Local economy

People YES  
Cars NO  
reference the  
data/studies





# I. OUTREACH AND ENGAGEMENT TAKEAWAYS

Utility Infrastructure Improvements

Define/Expand Downtown District

Support a More Sustainable Built Environment and  
Transportation Choices

Strengthen Image and Character, Including Arts and  
History

Expand Flexible Open Space

Improve Multimodal Transportation Access

Provide Adequate Parking

Upgrade Walking Environment

## STEERING COMMITTEE ACTION

1. Affirm or revise goals.
2. Add to ongoing outreach and engagement efforts.

# II. **PROJECT EXISTING CONDITIONS**

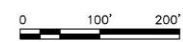
STEERING COMMITTEE PRESENTATION



# KEENE DOWNTOWN IMPROVEMENTS EXISTING CONDITIONS | UTILITIES

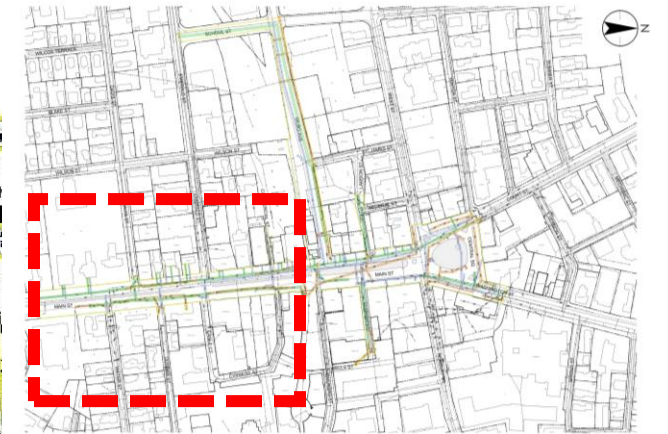
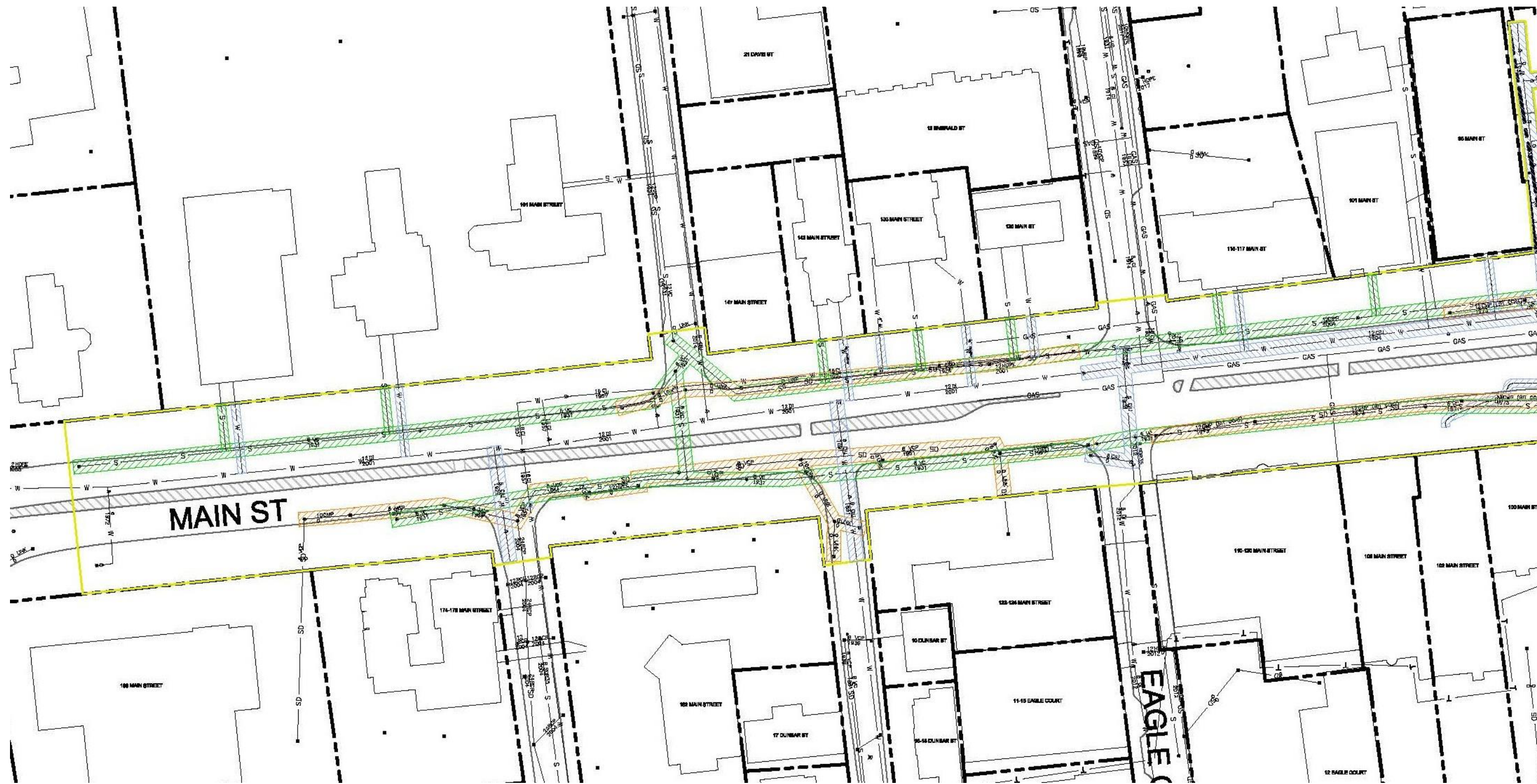





- APPROX. WATER LINE TRENCH
- APPROX. SEWER LINE TRENCH
- APPROX. DRAIN LINE TRENCH





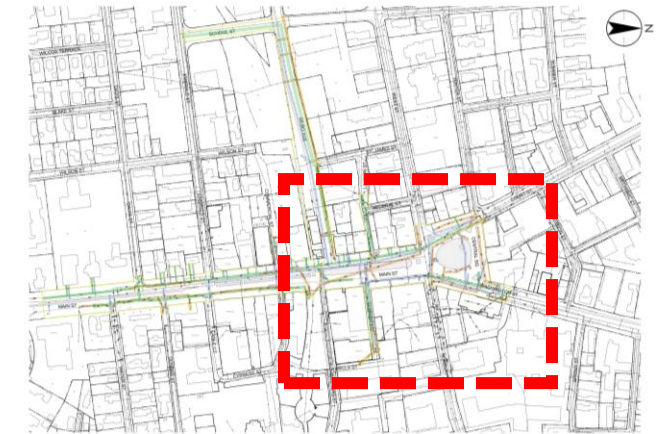
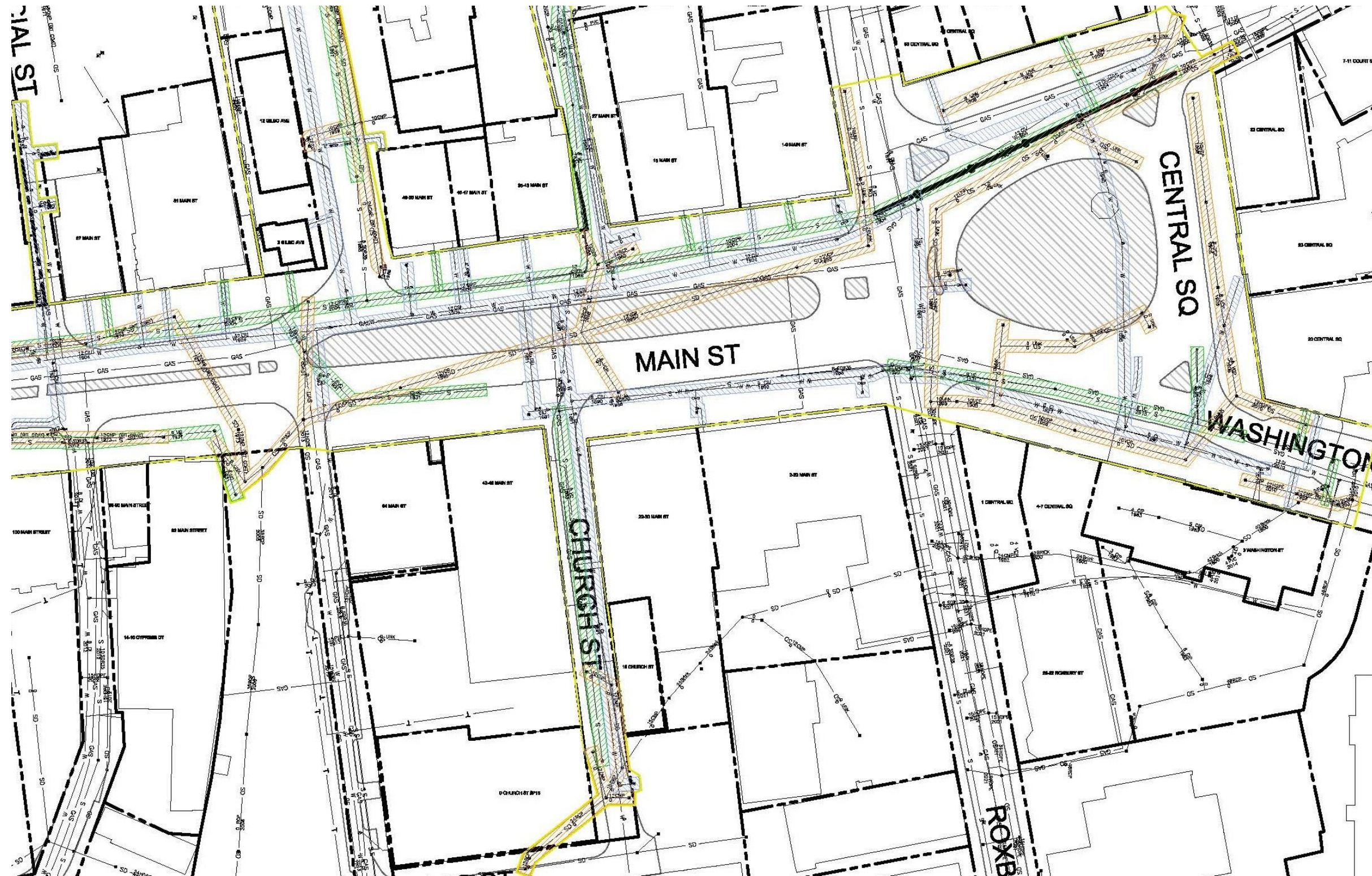
# KEENE DOWNTOWN IMPROVEMENTS EXISTING CONDITIONS | UTILITIES





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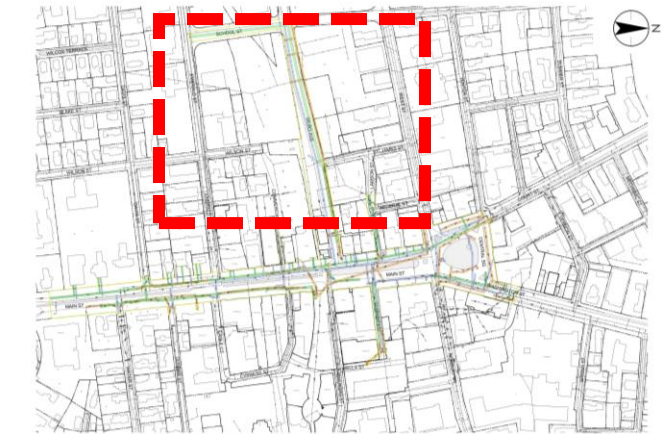
# KEENE DOWNTOWN IMPROVEMENTS EXISTING CONDITIONS | UTILITIES






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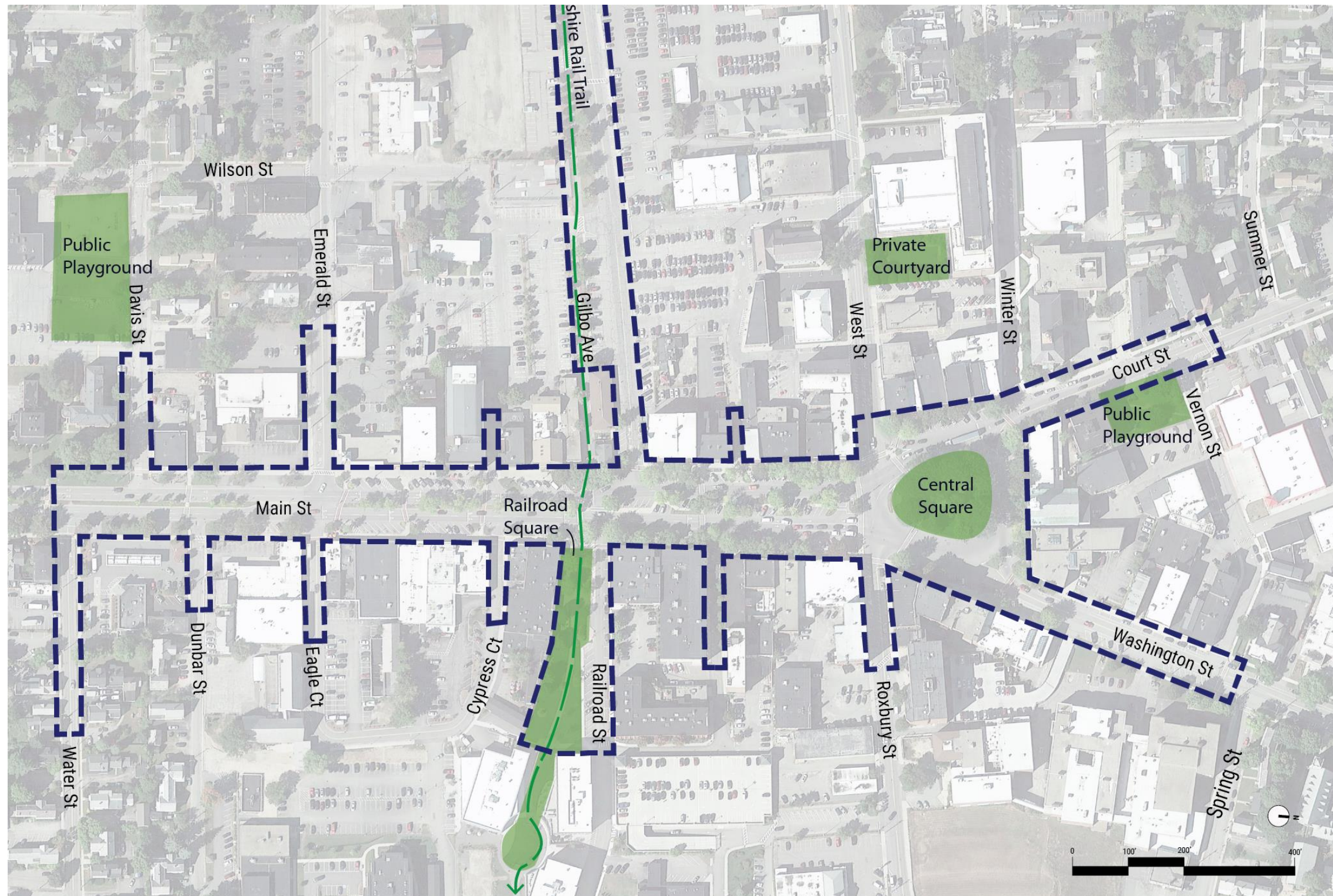
# KEENE DOWNTOWN IMPROVEMENTS EXISTING CONDITIONS | UTILITIES



-  APPROX. WATER LINE TRENCH
-  APPROX. SEWER LINE TRENCH
-  APPROX. DRAIN LINE TRENCH



# KEENE DOWNTOWN IMPROVEMENTS EXISTING CONDITIONS | OPEN SPACE



## Key Takeaways:

- Railroad Square and Central Square are publicly accessible open spaces right on Main St
- Downtown would benefit from expanded / additional open space, especially during city-wide events and festivals
- Create new open spaces along the Gilbo Ave opportunity corridor

 GREEN SPACE



# KEENE DOWNTOWN IMPROVEMENTS EXISTING CONDITIONS | PARKING INVENTORY



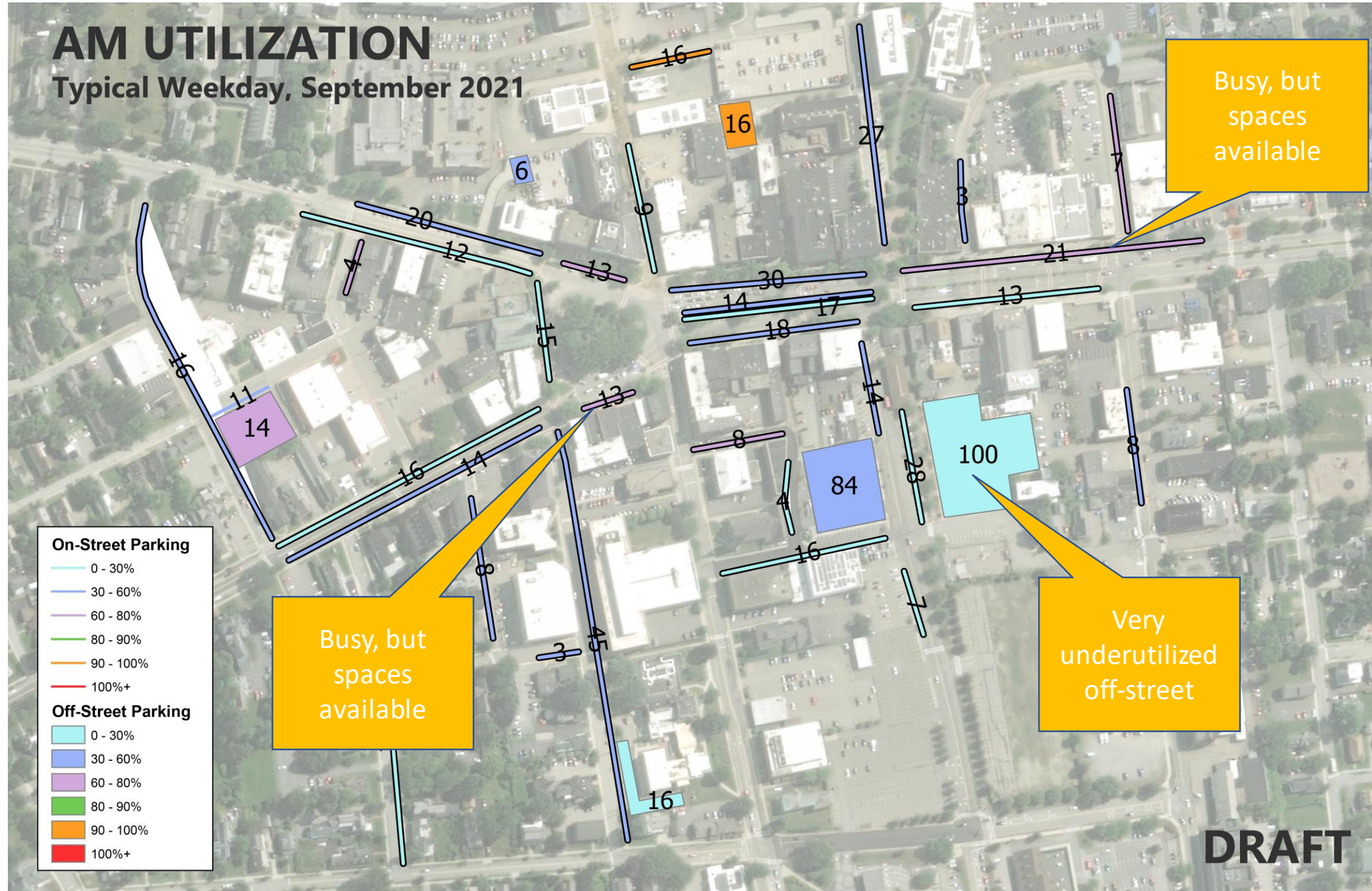
## Key Takeaways:

- ~700 total publicly available spaces
- On-Street: \$0.85/hour
- Off-Street: \$0.35/hour
- Significant space on Main Street devoted to parking
- Many additional large lots in/near downtown (not inventoried)
- Additional “unregulated” spaces on side streets not inventoried



# KEENE DOWNTOWN IMPROVEMENTS

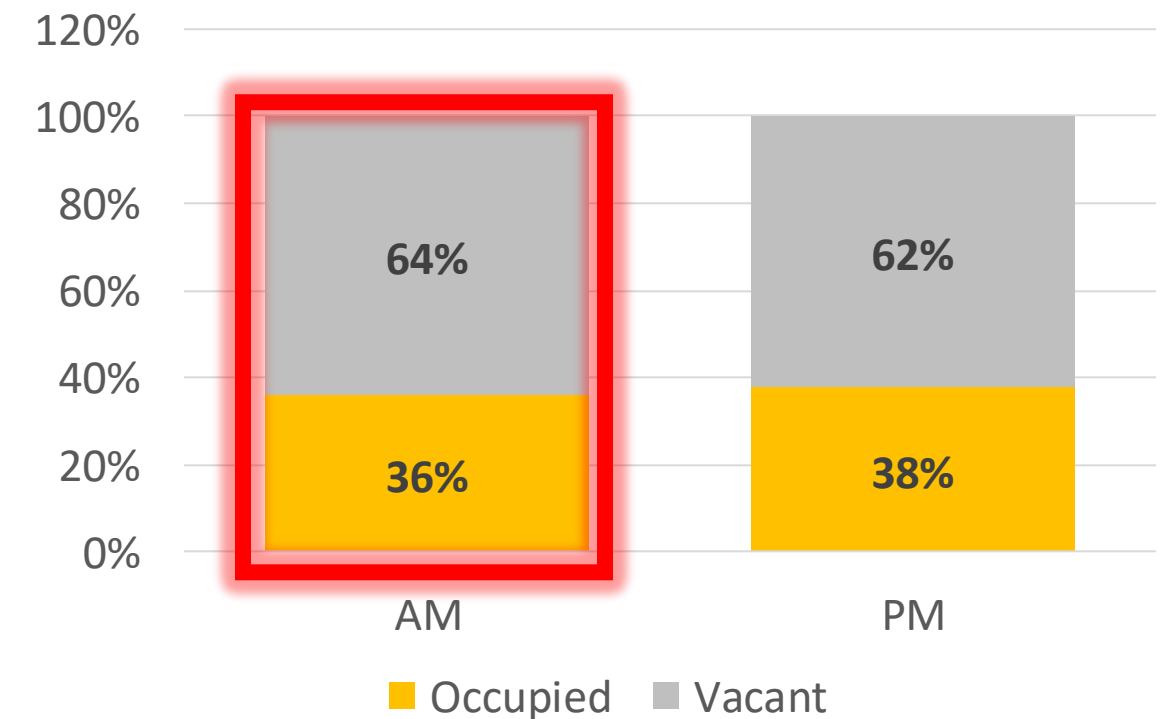
## EXISTING CONDITIONS | PARKING UTILIZATION (MID-MORNING, SEPTEMBER 2021)



### Key Takeaways:

- 80-90% is “optimal” parking utilization
- Downtown parking is relatively underutilized in the morning, with over 450 spaces unoccupied
- South Main Street and Central Sq are busiest areas

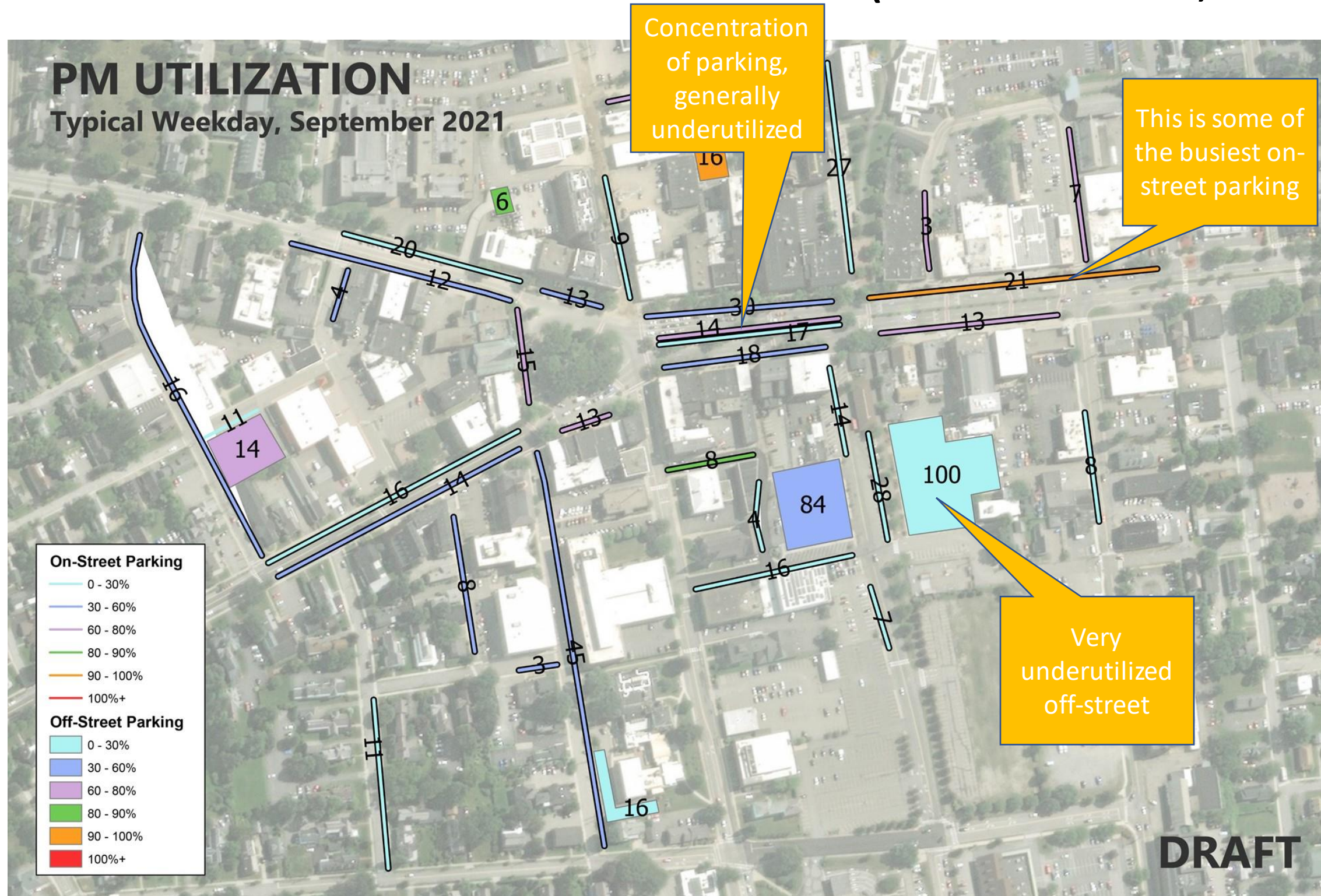
Parking Utilization - Typical Weekday, September 2021





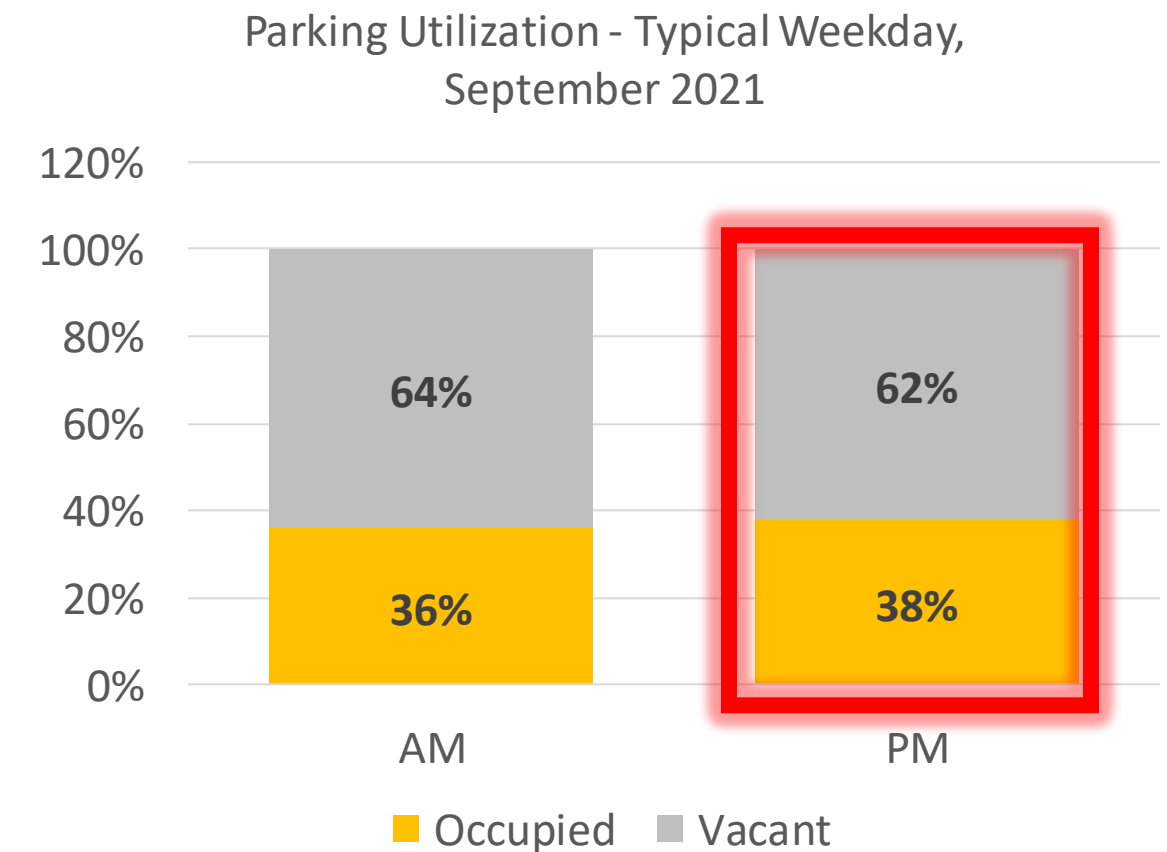
# KEENE DOWNTOWN IMPROVEMENTS

## EXISTING CONDITIONS | PARKING UTILIZATION (MID-AFTERNOON, SEPTEMBER 2021)



### Key Takeaways:

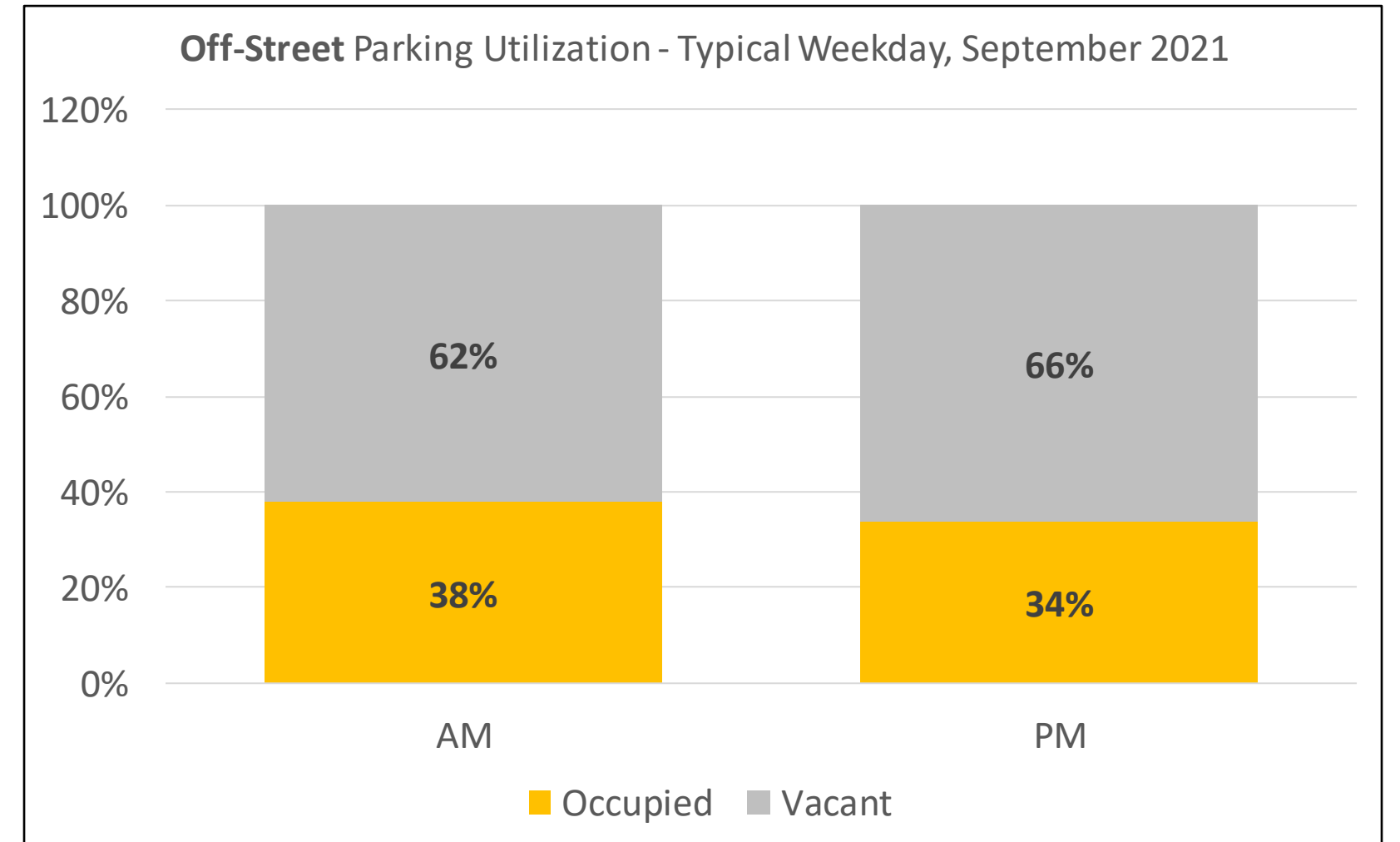
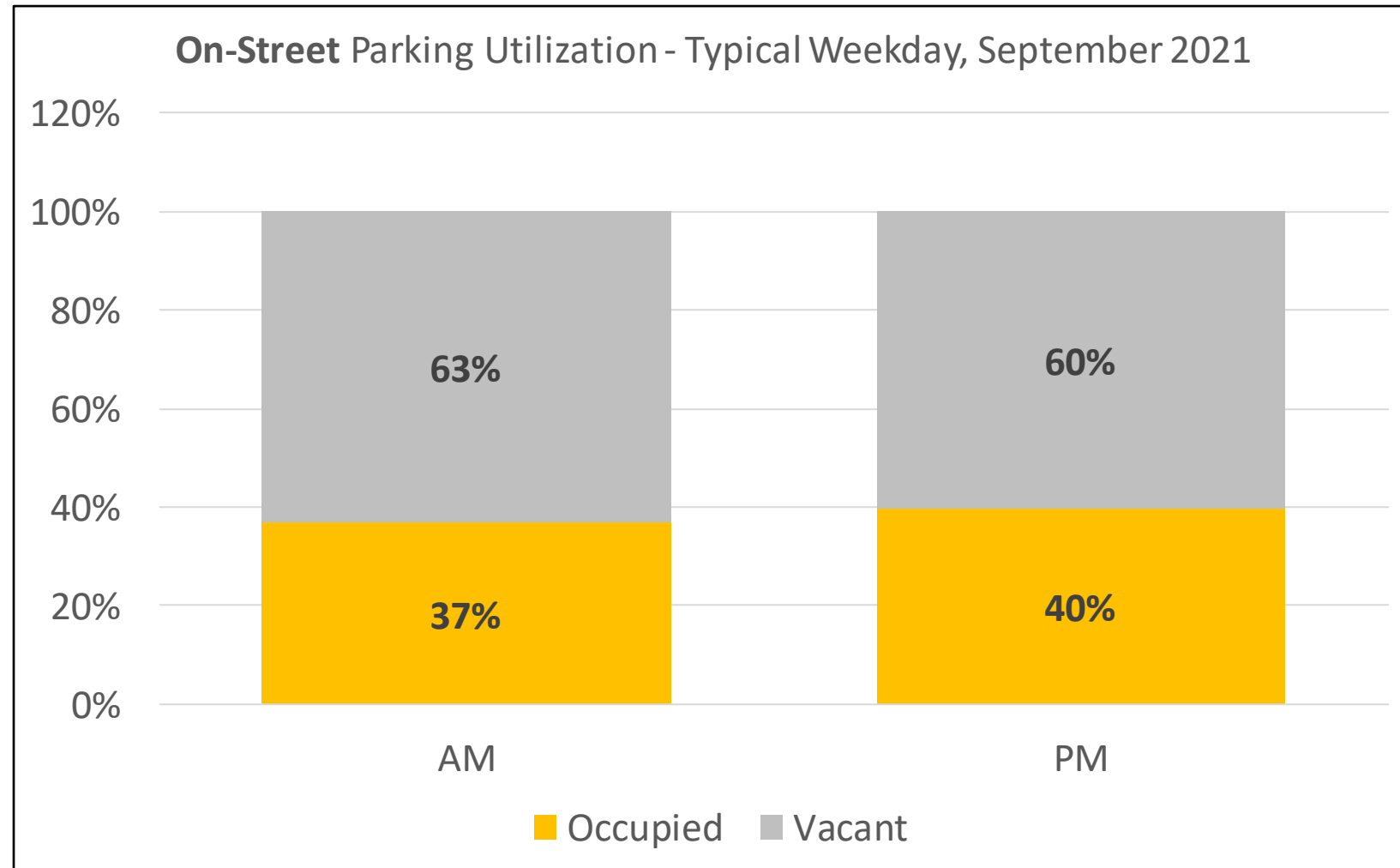
- Downtown parking remains relatively underutilized in the evening, with about 450 spaces unoccupied
- South Main Street and Central Sq are busiest areas





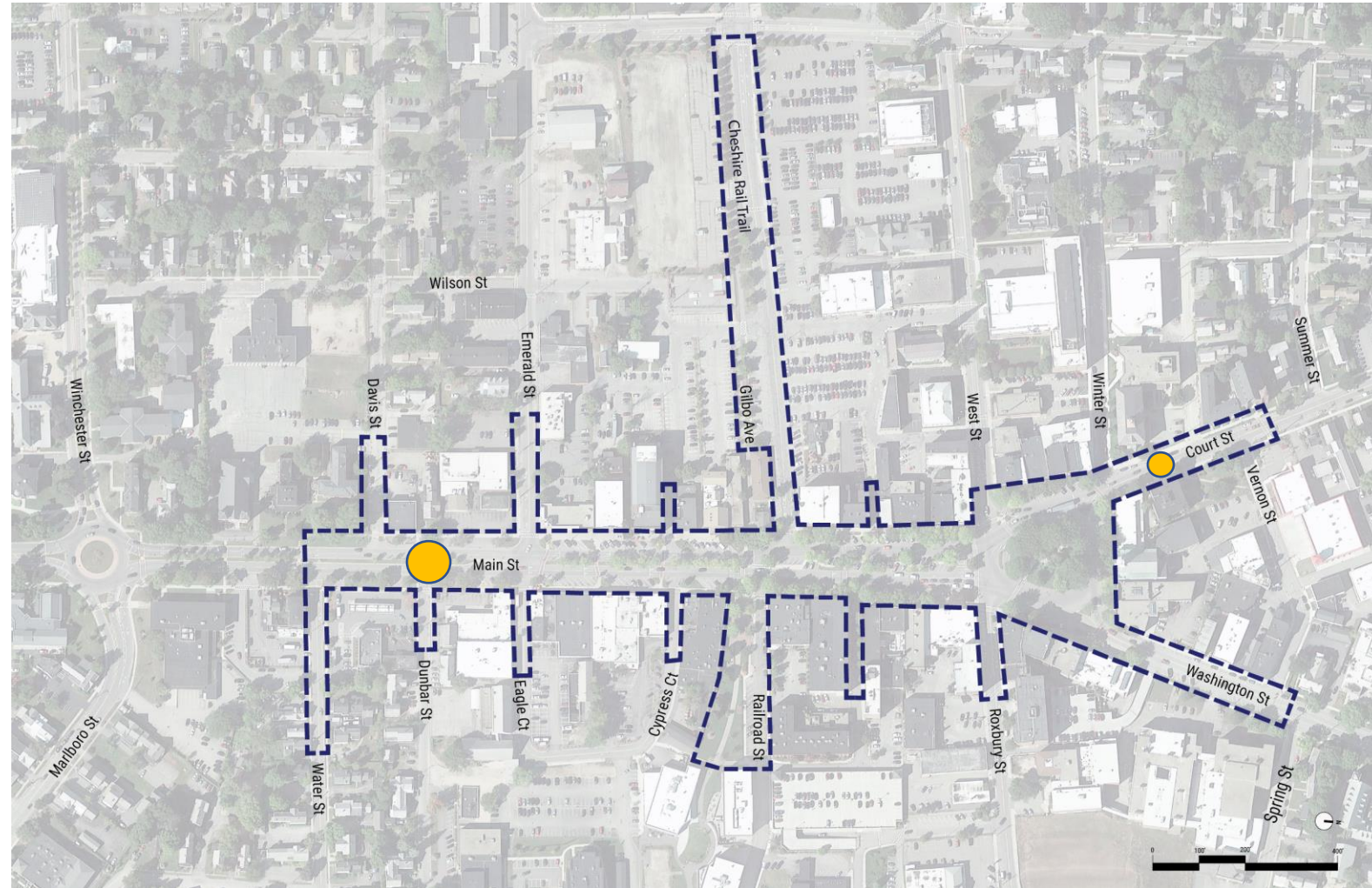
# KEENE DOWNTOWN IMPROVEMENTS

## EXISTING CONDITIONS | PARKING





# KEENE DOWNTOWN IMPROVEMENTS EXISTING CONDITIONS | TRAFFIC DATA



## Key Takeaways:

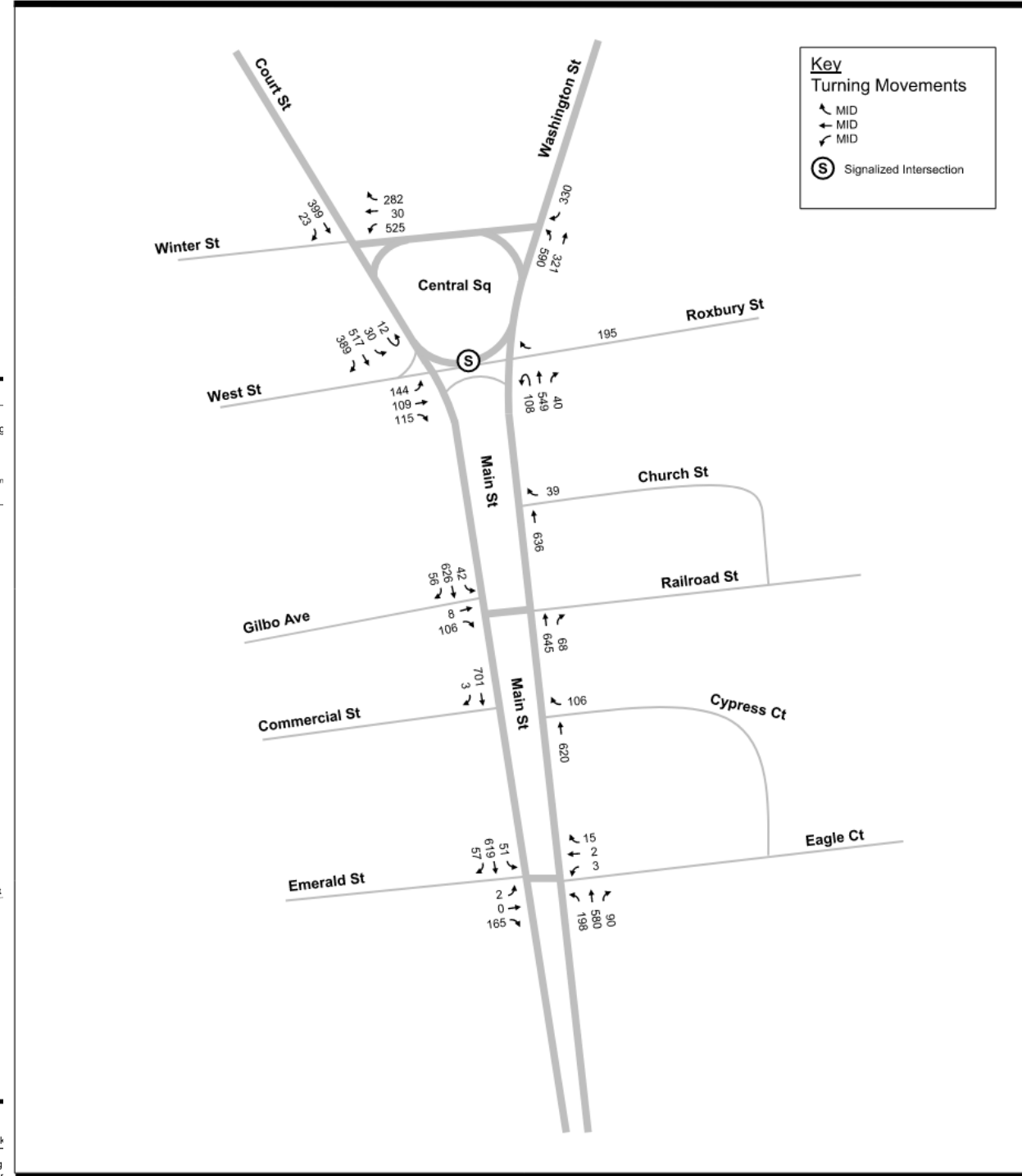
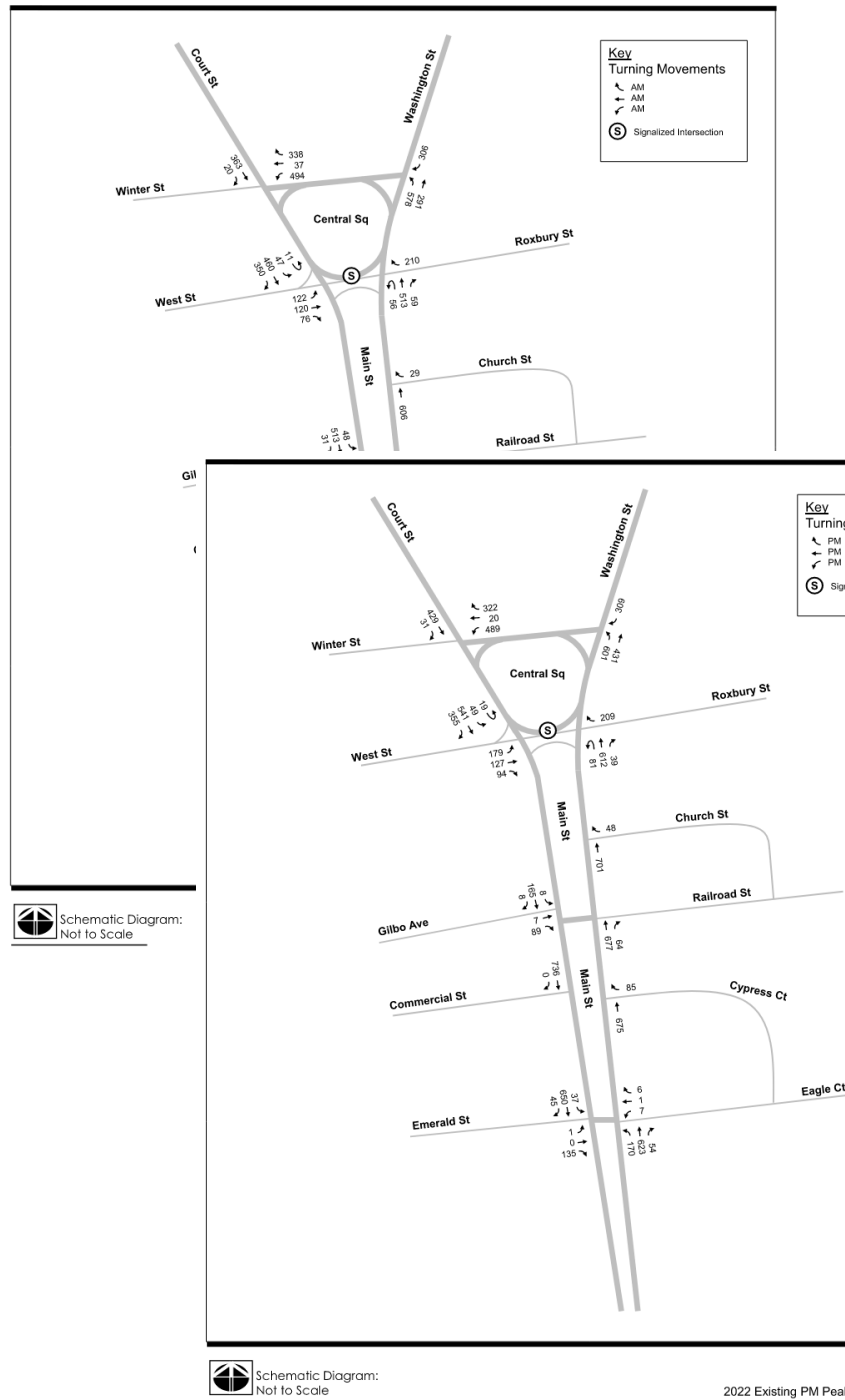
- Block sizes downtown are short, so paths between locations should be relatively direct
- Turning restrictions / median limit connectivity through downtown, which may cause additional traffic as people have to drive out of their way

	Posted Speed	Combined				Northbound or Eastbound				Southbound or Westbound			
		ADT	Avg	85%	+/- Posting	Daily Vol.	Avg	85%	+/- Posting	Daily Vol.	Avg	85%	+/- Posting
Main Street, South of Emerald St/Eagle Ct	25	19,704	25.2	29.0	4.0	10,084	24.2	28.0	3.0	9,620	26.1	30.0	5.0
Emerald Street, West of Main Street	25	4,300	22.1	27.0	2.0	2,684	22.5	27.0	2.0	1,616	21.6	27.0	2.0
Railroad Street, East of Main Street	25	1,191	18.3	23.0	-2.0	1,191	18.3	23.0	-2.0				
Gilbo Avenue, West of Main Street	25	1,757	15.3	19.0	-6.0	1,168	14.7	18.0	-7.0	589	16.4	21.0	-4.0
West Street, West of Main Street	25	5,253	23.2	27.0	2.0	1,871	24.1	28.0	3.0	3,382	22.7	26.0	1.0
Roxbury Street, East of Main Street	25	4,556	21.0	27.0	2.0	2,223	22.6	27.0	2.0	2,333	19.5	26.0	1.0
Court Street, North of Central Square	25	8,568	19.3	25.0	0.0	3,611	20.8	25.0	0.0	4,957	18.2	25.0	0.0



# KEENE DOWNTOWN IMPROVEMENTS

## EXISTING CONDITIONS | TRAFFIC DATA – VEHICLE TURNING MOVEMENTS



### Key Takeaways:

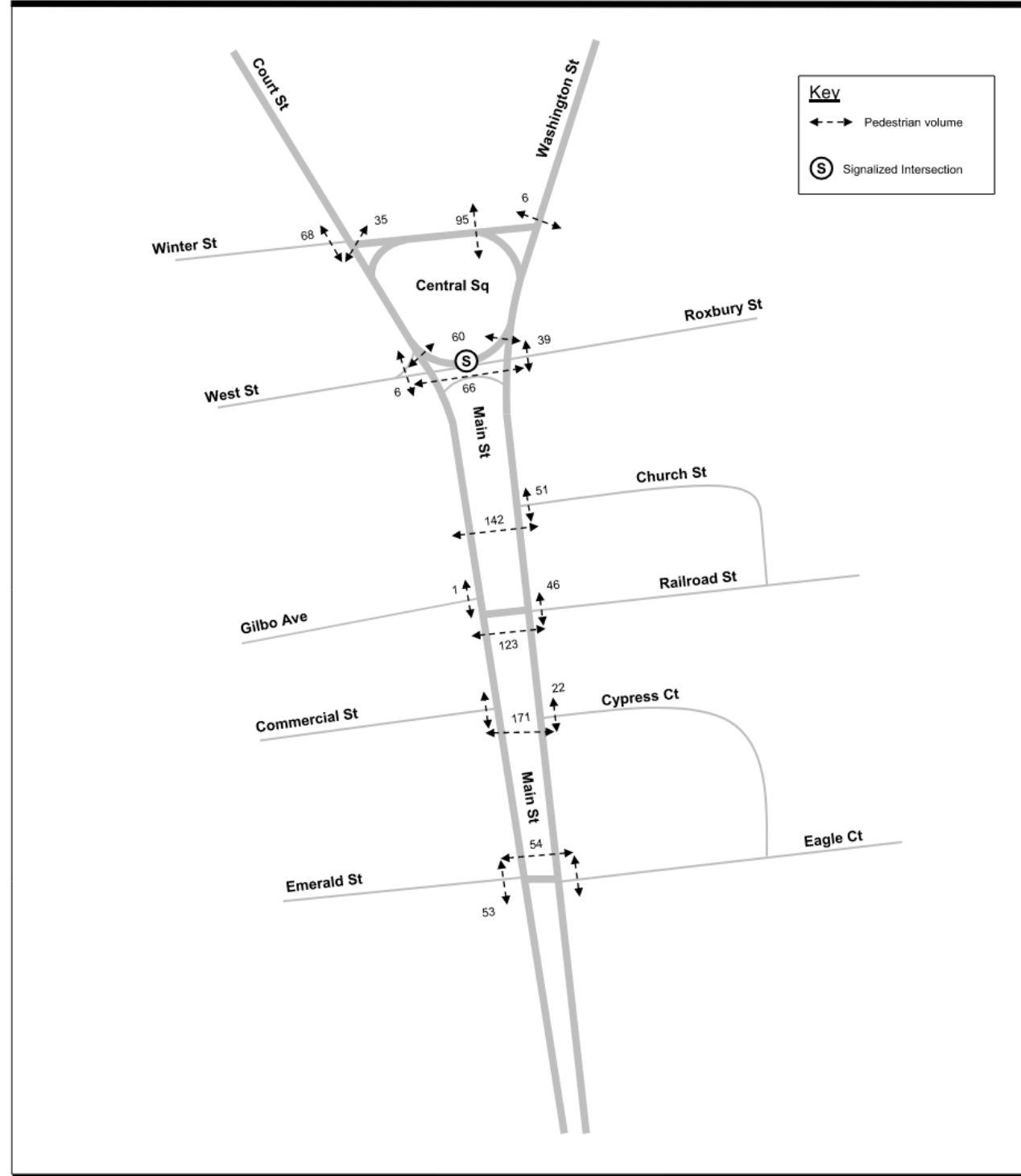
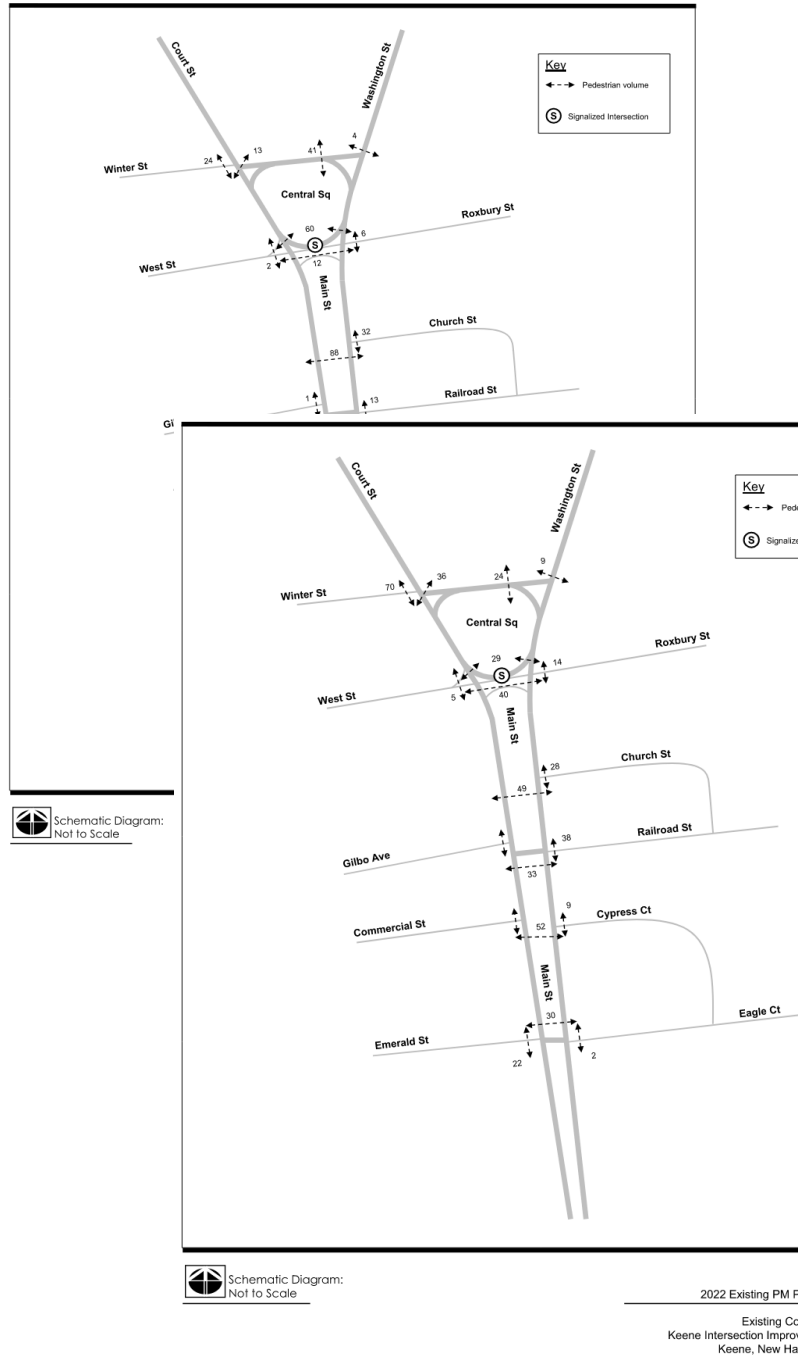
- Critical Intersections
  - Main/West/Roxbury
  - Gilbo/Railroad
  - Eagle/Emerald
- Critical Movements
  - Main LT to West
  - Emerald RT to Main
  - Gilbo to Main/Railroad





# KEENE DOWNTOWN IMPROVEMENTS

## EXISTING CONDITIONS | TRAFFIC DATA – PEDESTRIAN CROSSINGS



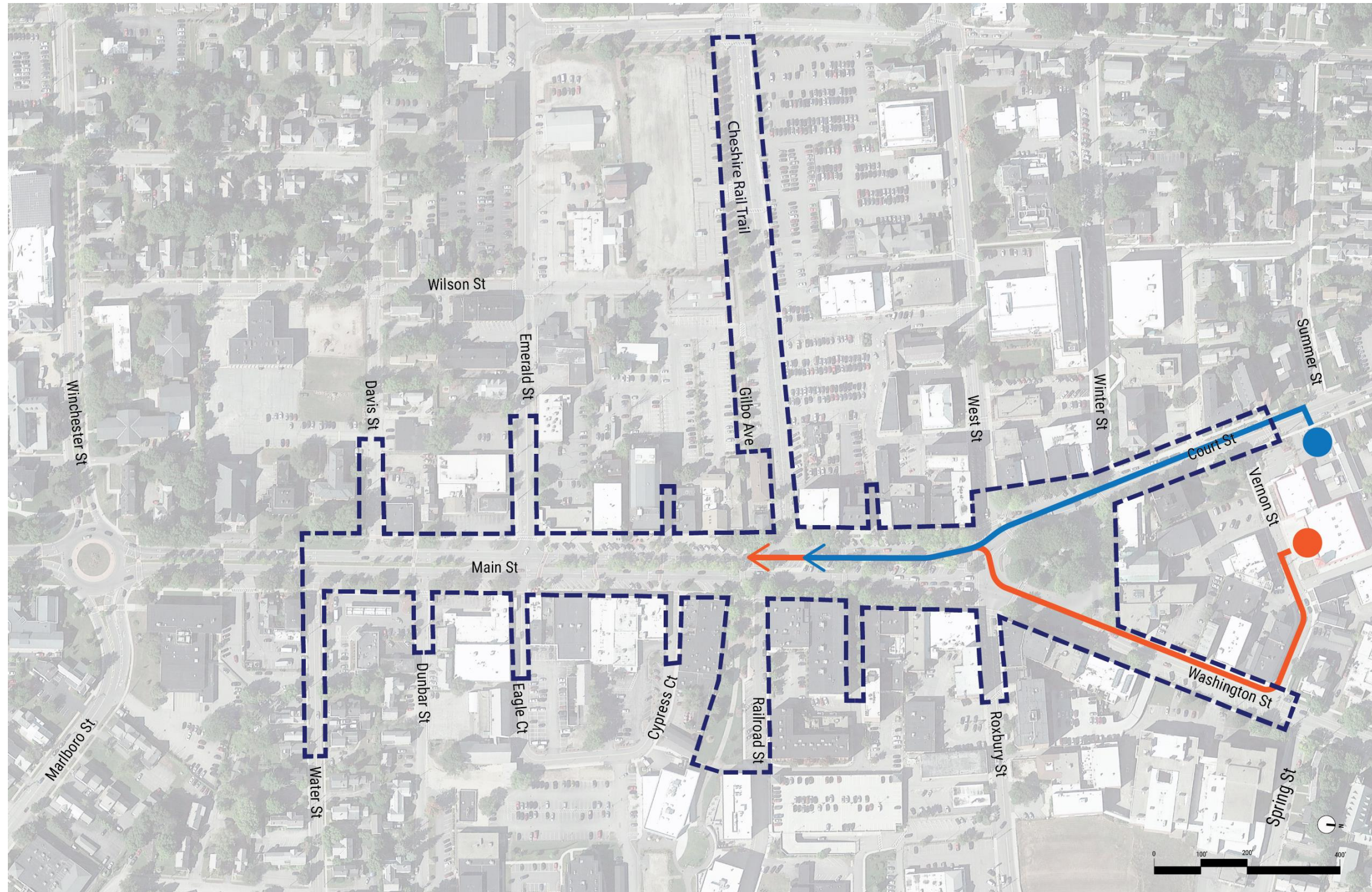
### Key Takeaways:

- Peak Mid-Day Crossings
  - 171 at Commercial/Cyprus
  - 142 at Church/Lamson
  - 123 at Gilbo/Railroad





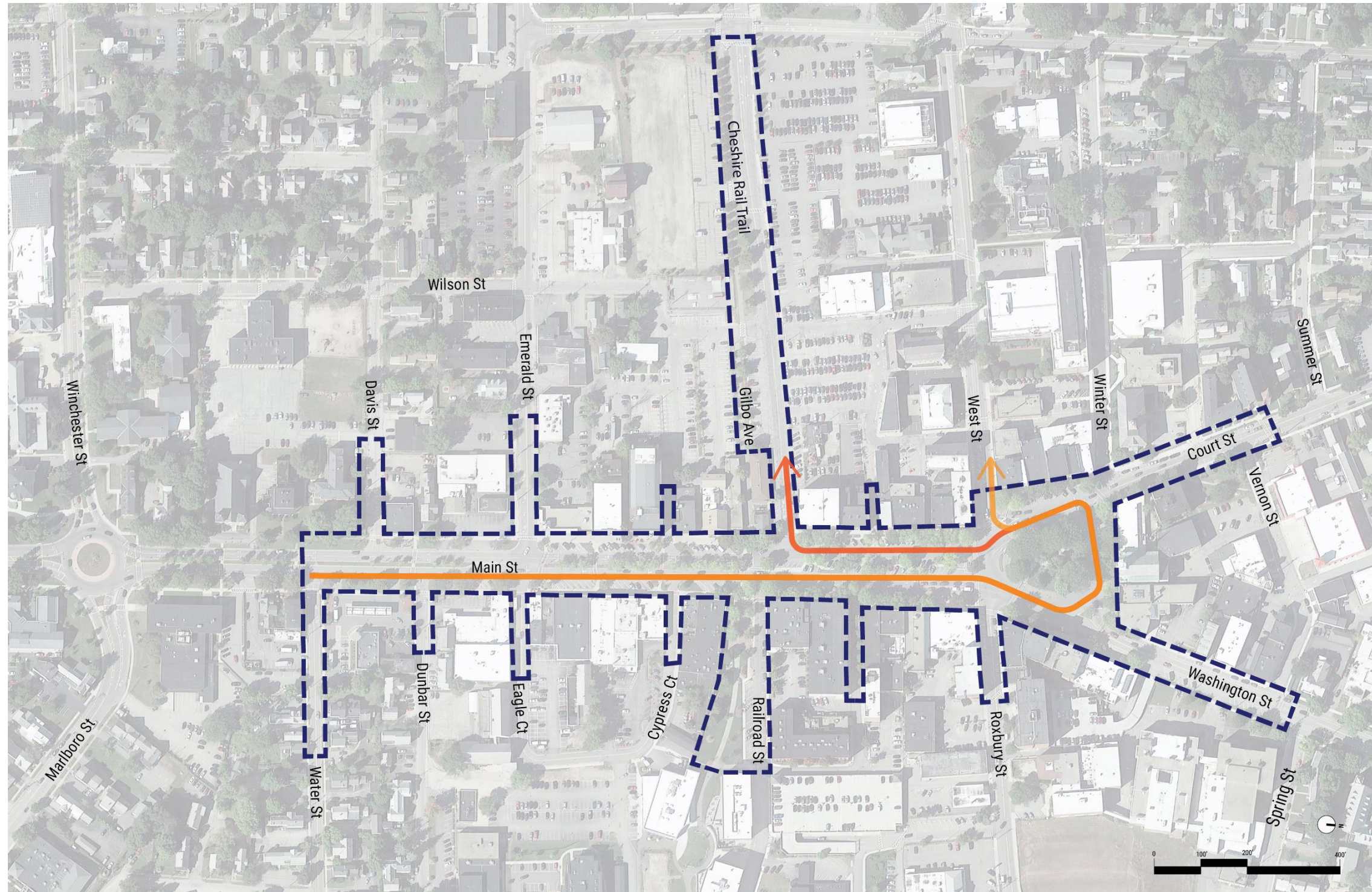
# KEENE DOWNTOWN IMPROVEMENTS EXISTING CONDITIONS | FIRE/AMBULANCE ACCESS





- KEENE FIRE DEPARTMENT
- DILUZIO AMBULANCE



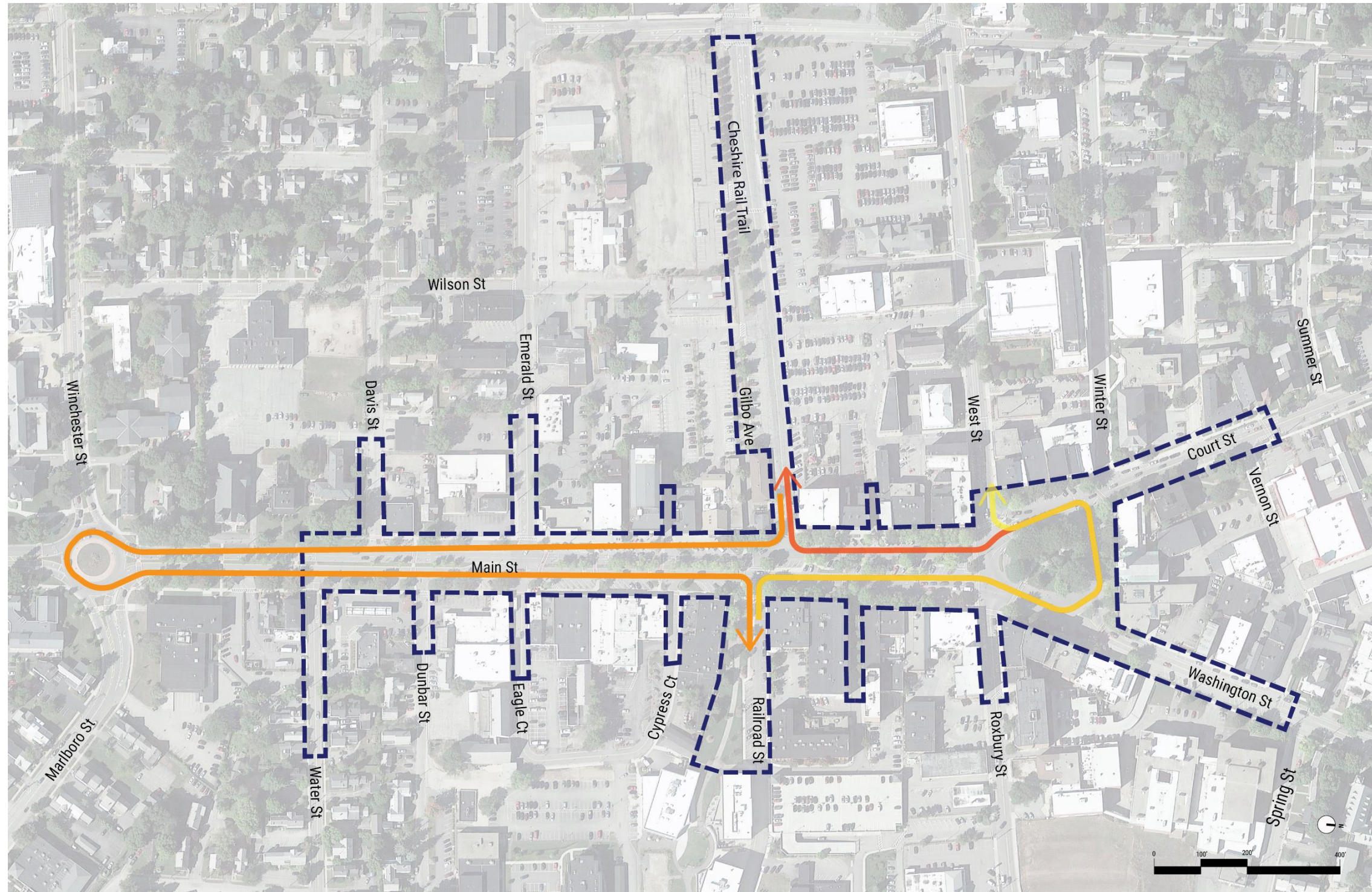
# KEENE DOWNTOWN IMPROVEMENTS EXISTING CONDITIONS | CIRCULATION PATTERNS



-  MAIN ST TO GILBO AVE
-  MAIN ST TO WEST ST



# KEENE DOWNTOWN IMPROVEMENTS EXISTING CONDITIONS | CIRCULATION PATTERNS

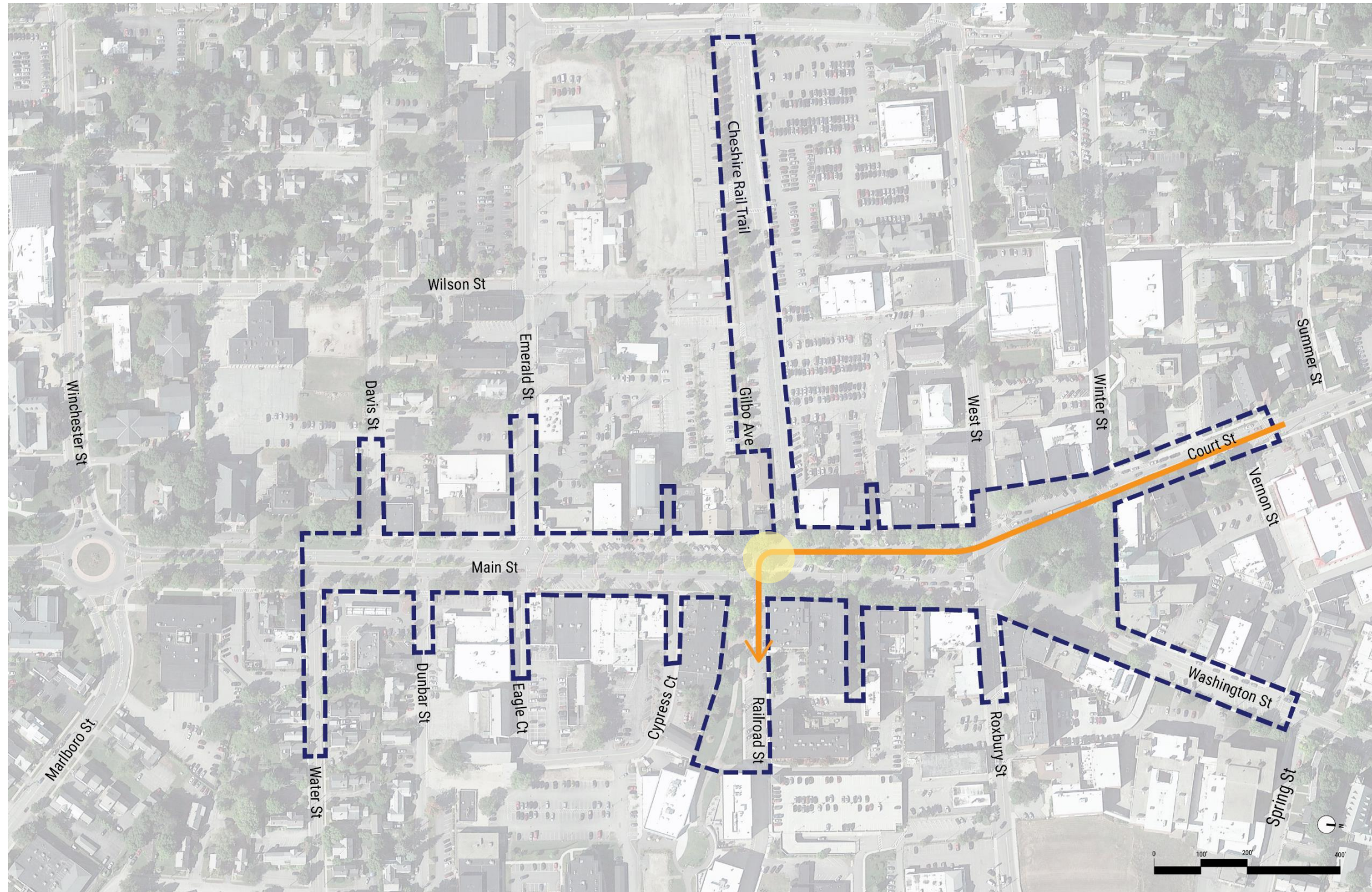


- MAIN ST TO GILBO AVE
- GILBO AVE TO RAILROAD ST
- RAILROAD ST TO WEST AVE





# KEENE DOWNTOWN IMPROVEMENTS EXISTING CONDITIONS | CIRCULATION PATTERNS



COURT ST TO RAILROAD ST



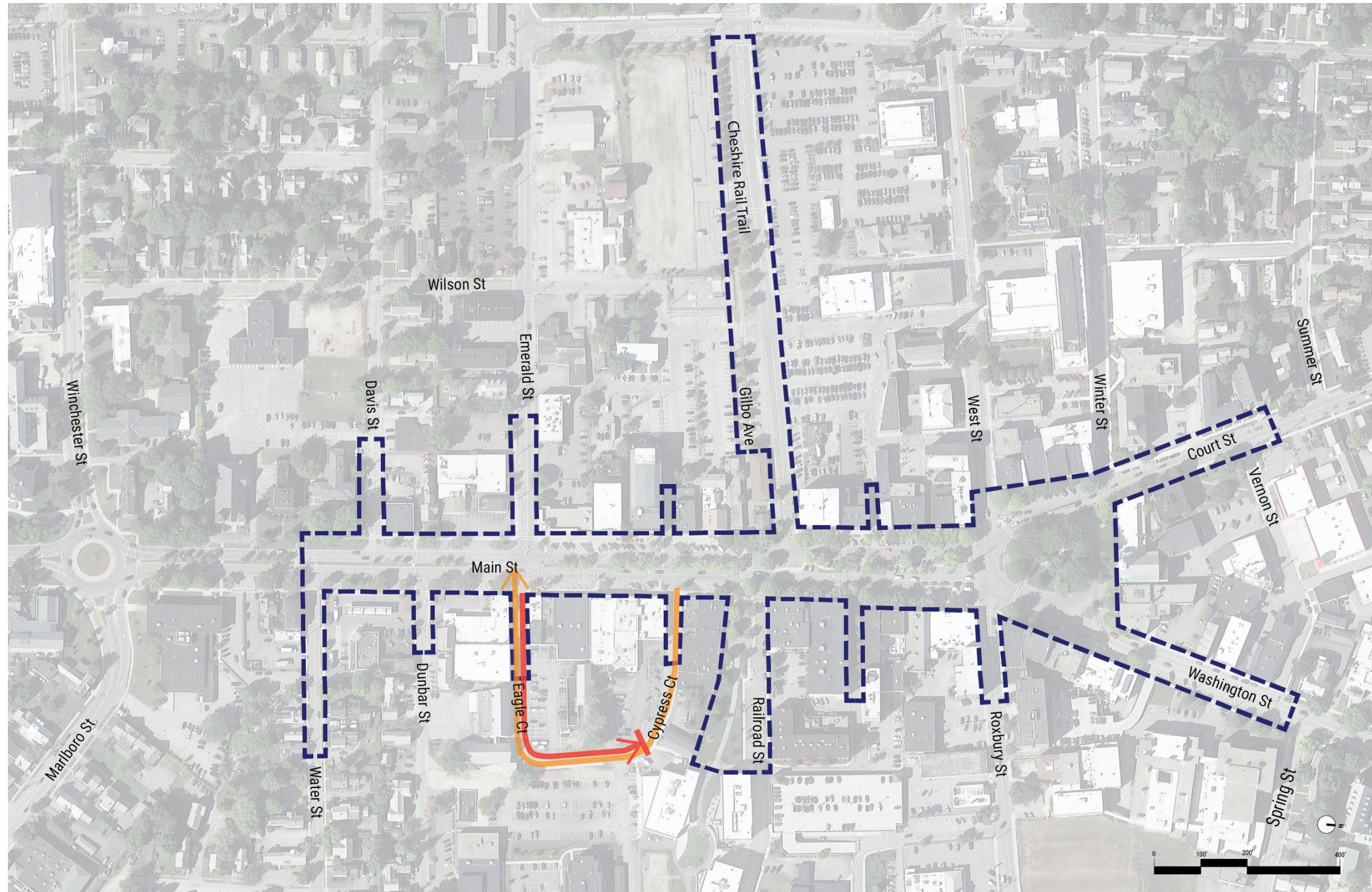
GILBO AVE TO RAILROAD ST





Sign on Main St at the corner of Gilbo and Railroad



# KEENE DOWNTOWN IMPROVEMENTS EXISTING CONDITIONS | CIRCULATION PATTERNS

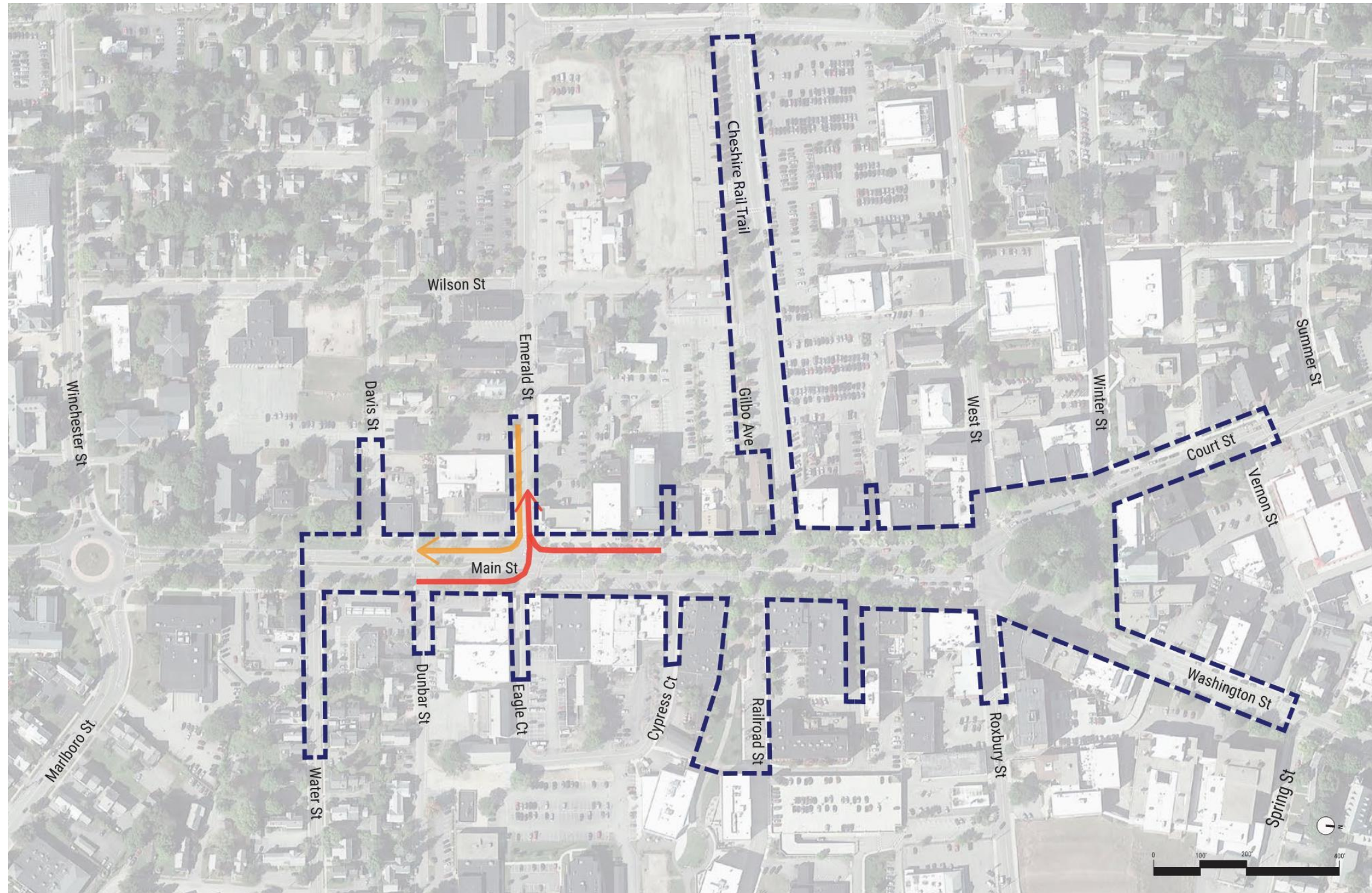




-  EAGLE CT (TWO WAY)
-  CYPRESS CT (ONE WAY)





# KEENE DOWNTOWN IMPROVEMENTS EXISTING CONDITIONS | CIRCULATION PATTERNS



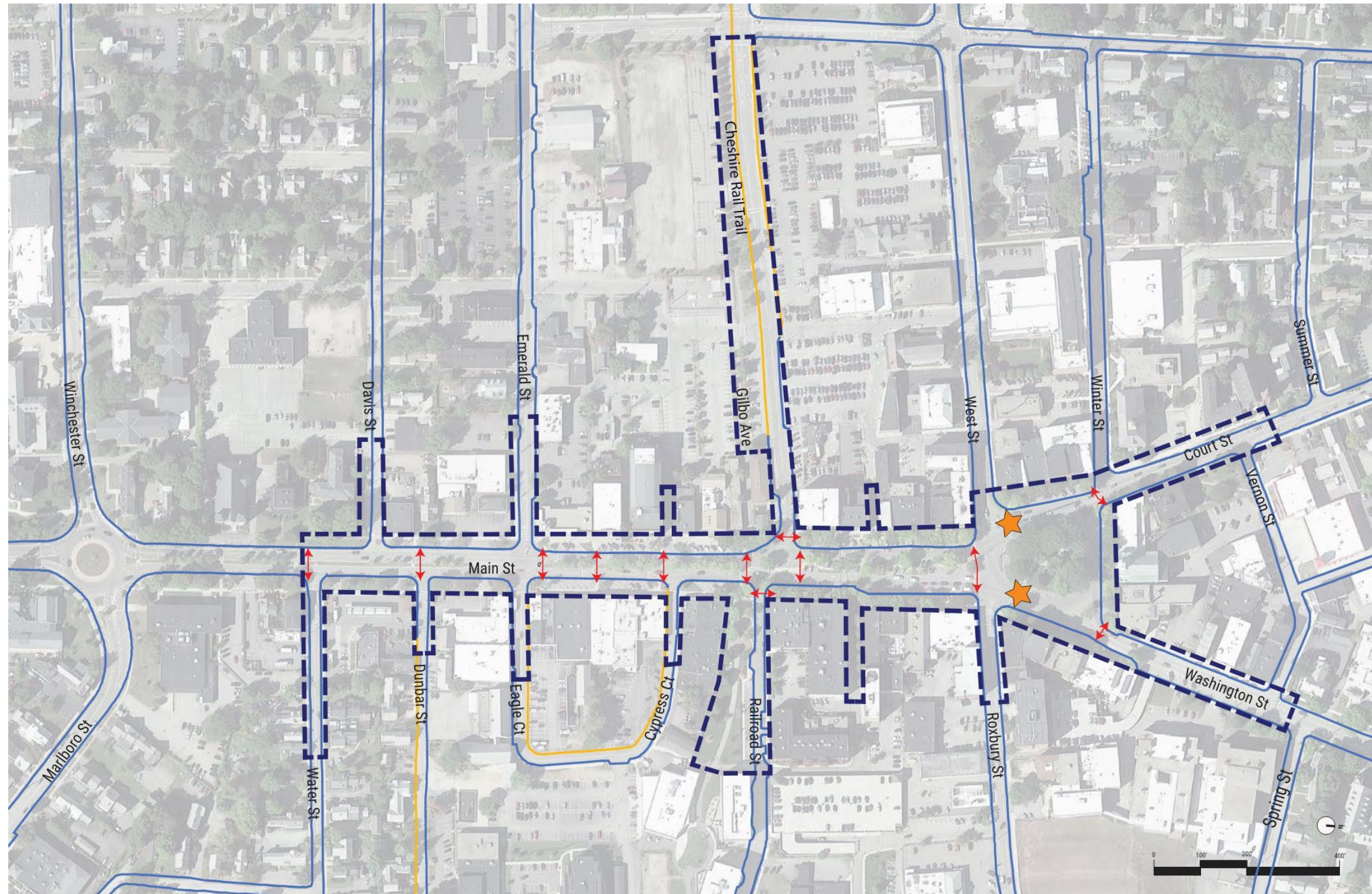
-  MAIN ST TO EMERALD ST
-  EMERALD ST TO MAIN ST





# KEENE DOWNTOWN IMPROVEMENTS

## EXISTING CONDITIONS | SIDEWALKS



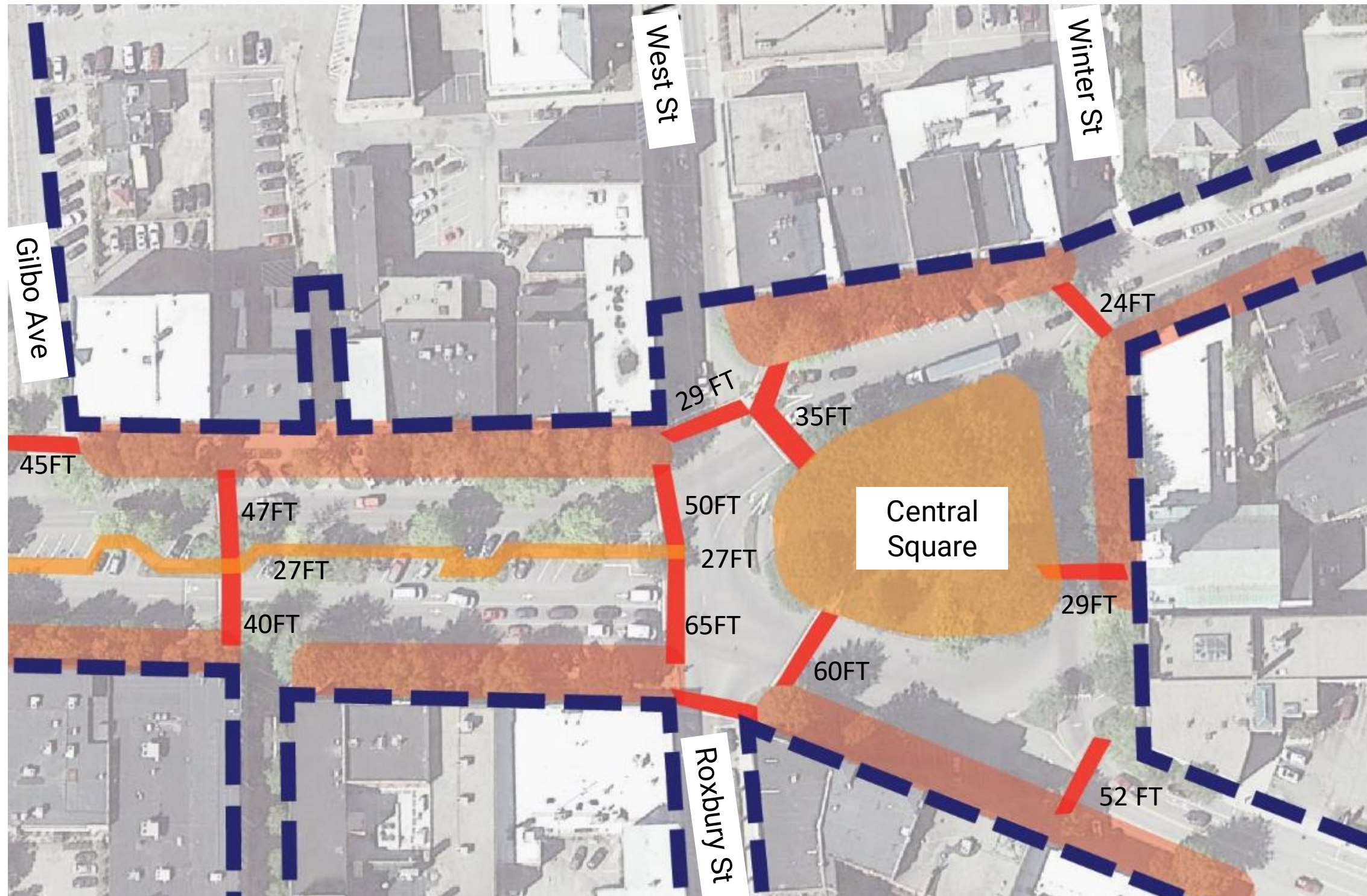
- SIDEWALK
- SIDEWALK GAP
- PEDESTRIAN CROSSING
- SIGNIFICANT CROSSWALK





# KEENE DOWNTOWN IMPROVEMENTS

## EXISTING CONDITIONS | CROSSWALK LENGTHS



- CROSSWALKS
- MEDIANS
- SIDEWALKS

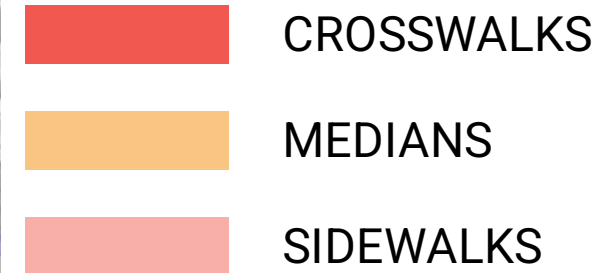
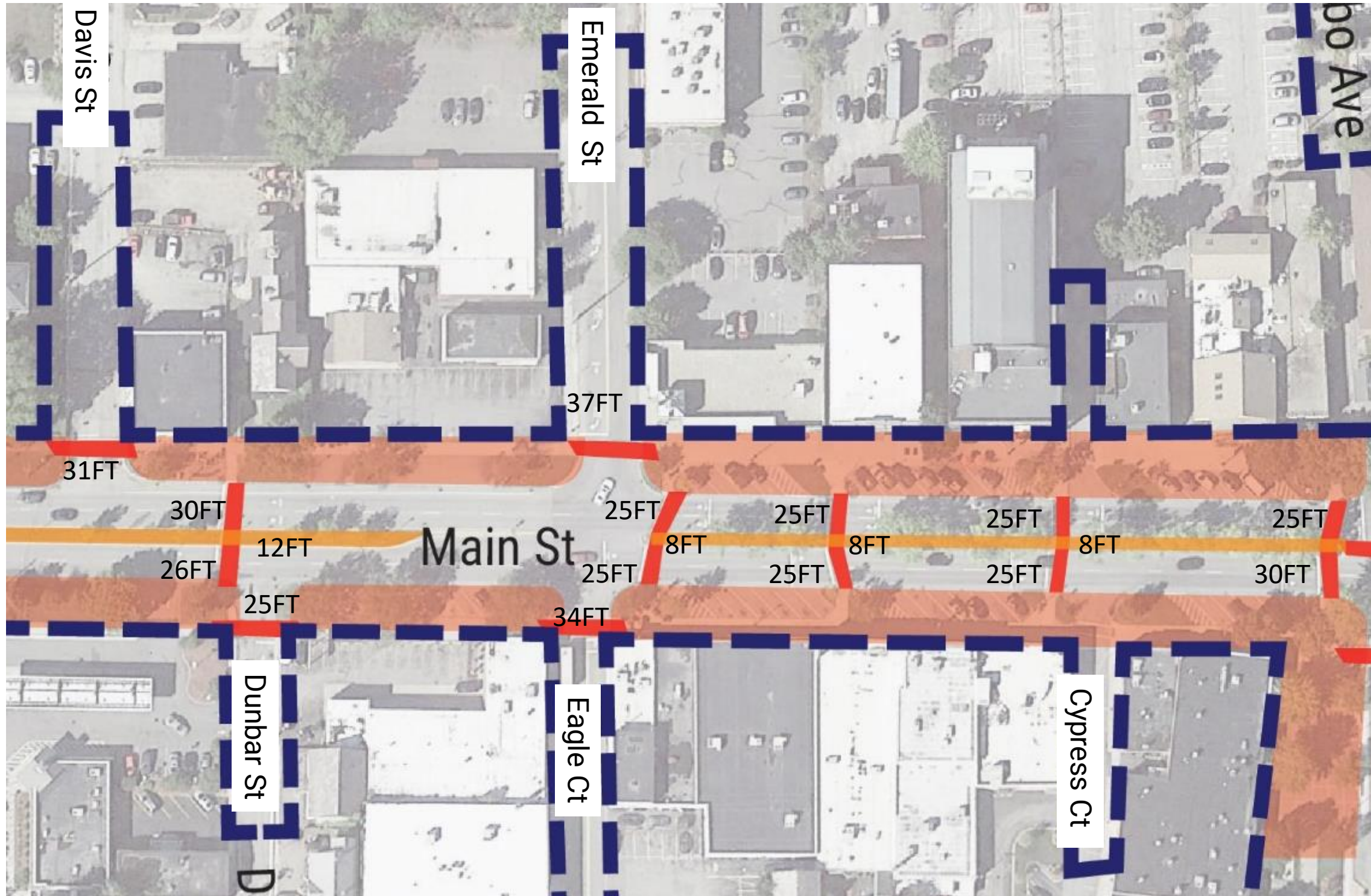
### Key Takeaways:

- Crossing distances can be as high as 140 ft, which can take 8+ minutes to cross (at Central Sq)
- Crossings require people to cross multiple travel lanes, including 'double-threat' of 2 lanes in one direction
- Median offers refuge for long crossings



# KEENE DOWNTOWN IMPROVEMENTS

## EXISTING CONDITIONS | CROSSWALK LENGTHS



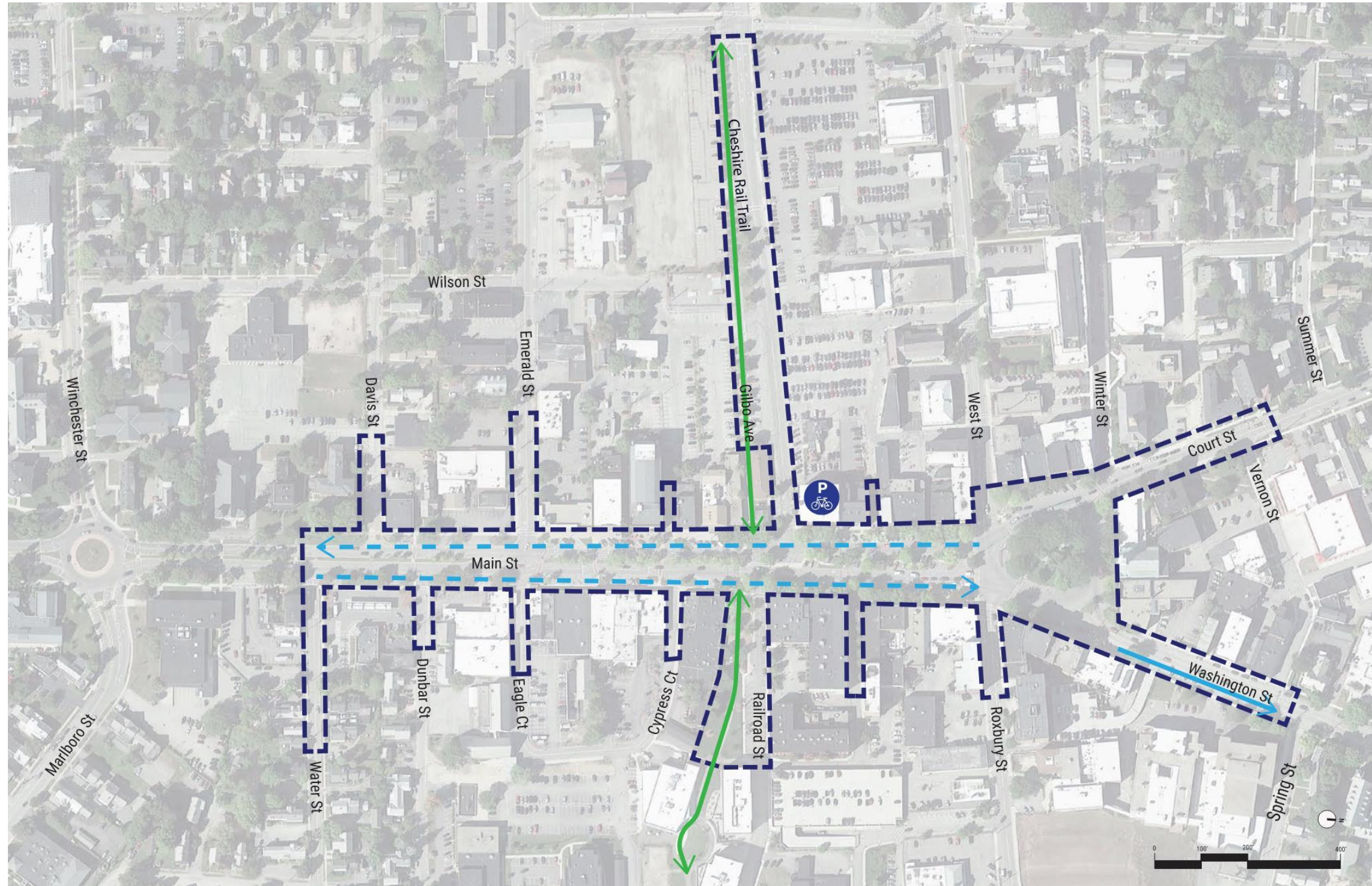
### Key Takeaways:





- Crossing distances to the south are shorter but can still take over 3 minutes to complete
- Crossings still require people to cross multiple travel lanes, including 'double-threat' of 2 lanes in one direction
- Median offers refuge for long crossings



# KEENE DOWNTOWN IMPROVEMENTS

## EXISTING CONDITIONS | BIKE FACILITIES



-  DEDICATED BIKE LANE
-  SHARED LANE MARKINGS
-  RAIL TRAIL
-  BIKE PARKING (4 SPOTS)

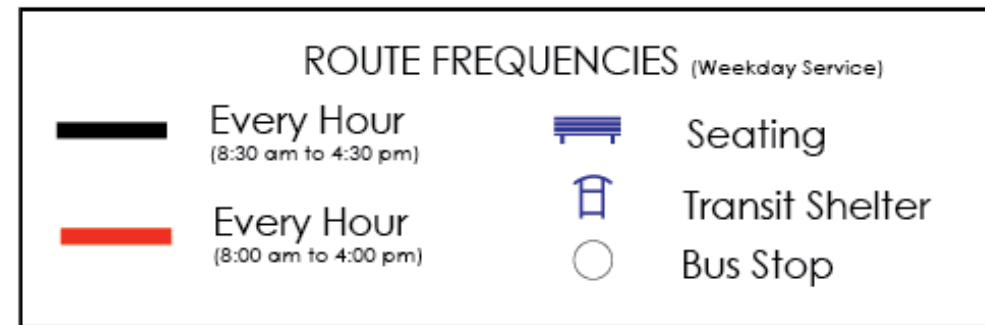
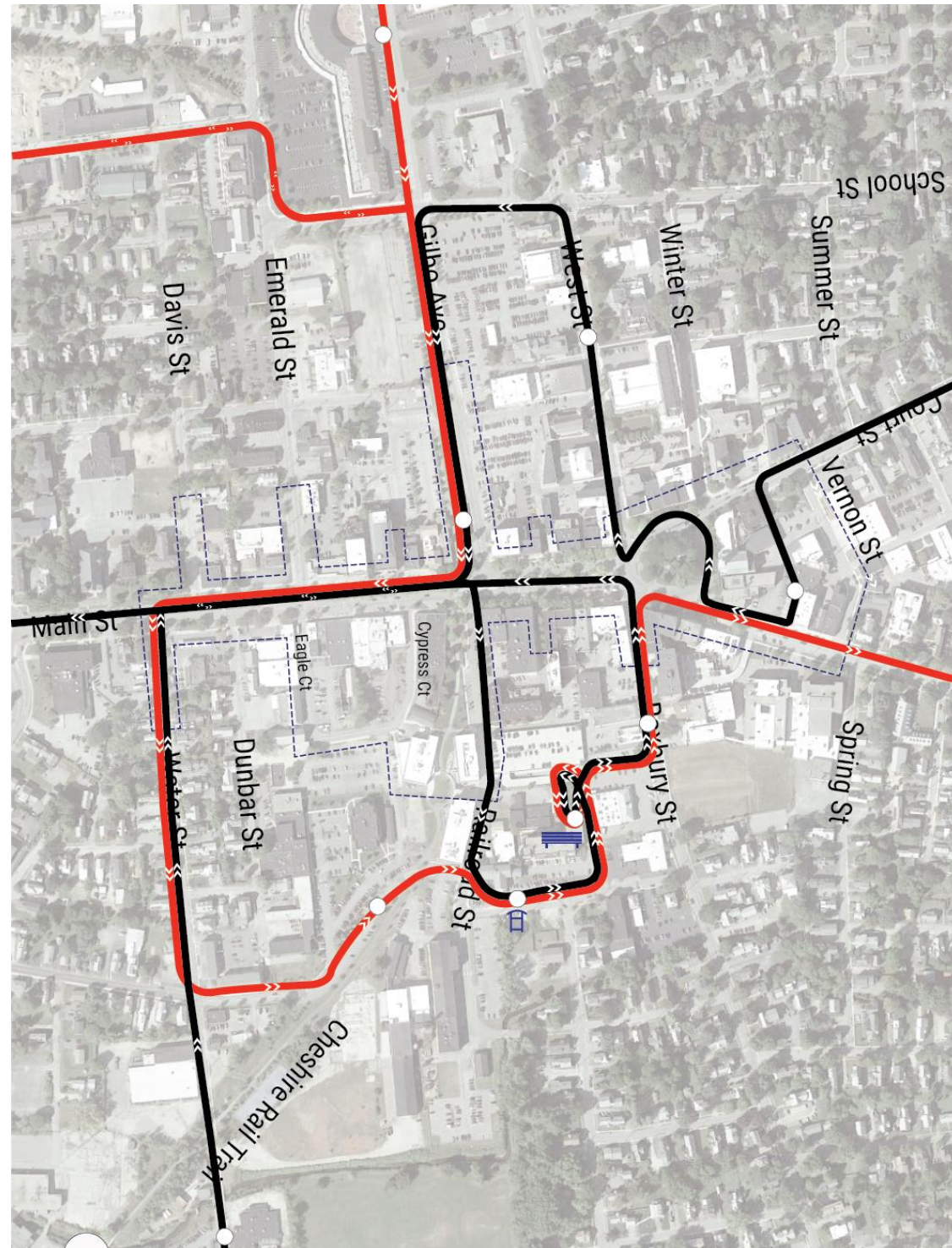
### Key Takeaways:

- Rail trail is a great asset for bike access
- Main Street is a gap in the bike network
- There is no protected way for someone on a bike to get from Rail Trail to businesses on Main Street



# KEENE DOWNTOWN IMPROVEMENTS

## EXISTING CONDITIONS | TRANSIT FACILITIES



### Key Takeaways:

- Bus service comes every 30 min on the southern part of Main Street
- There are no bus stops on Main Street itself
- There are limited amenities for people who take the bus (shelters, etc.)



# KEENE DOWNTOWN IMPROVEMENTS EXISTING CONDITIONS | STOREFRONT ACCESS



## CHALLENGES

ENTRANCE AT EXISTING GRADE

BARRIERS OUTSIDE OF PUBLIC ROW

BARRIERS WITHIN PUBLIC ROW



## KEY TAKEAWAYS

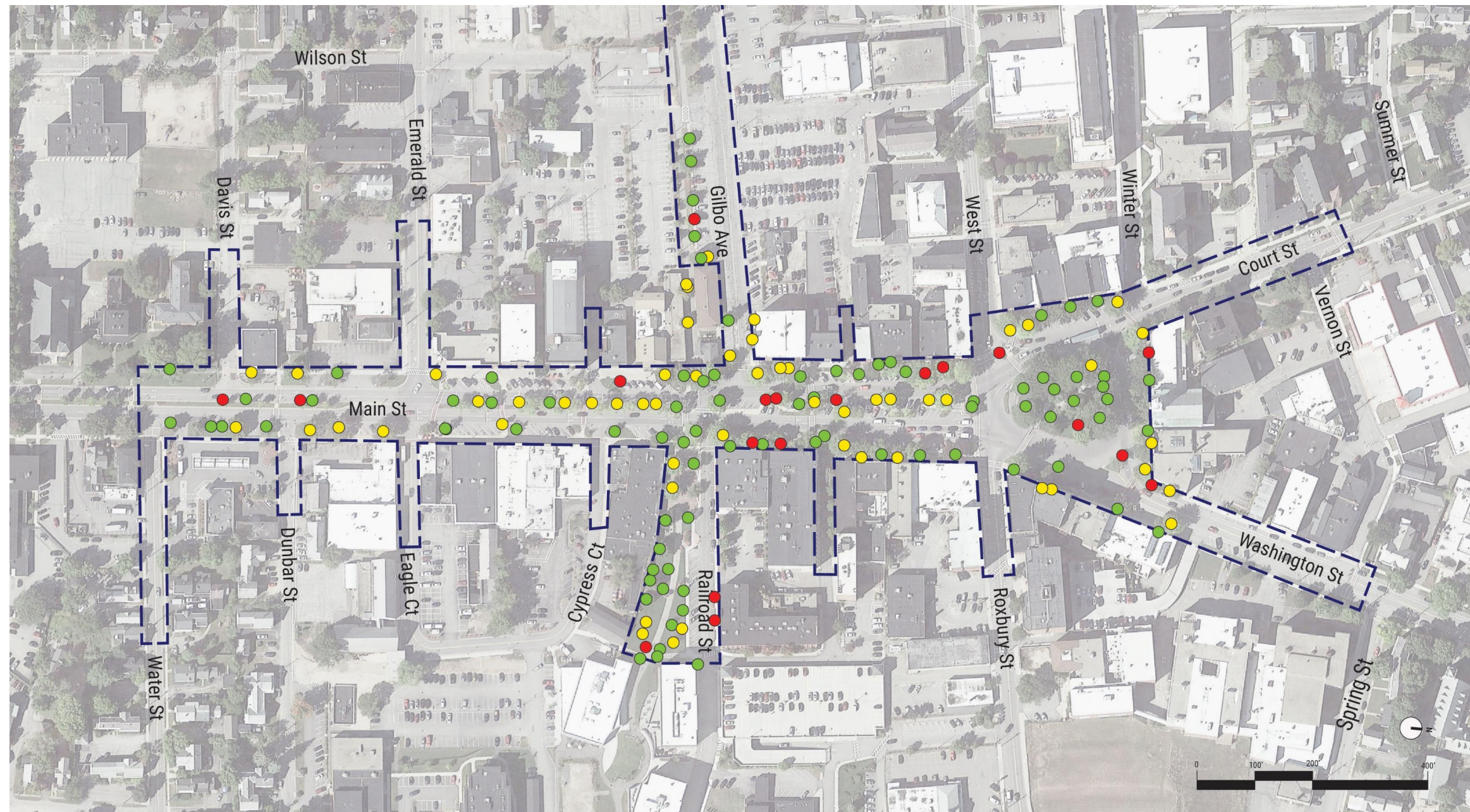
85 entrances within project area  
- business storefront entrances  
- upper floor access

56 locations barrier-free (63%)  
-some with ramps in sidewalk  
-some with steep slopes

29 locations with barriers  
-steps pocketed within building façade  
-steps encroaching into sidewalk



# KEENE DOWNTOWN IMPROVEMENTS EXISTING CONDITIONS | TREE STUDY



## TREES BY CONDITION CLASS

- GOOD CONDITION
- FAIR CONDITION
- POOR CONDITION

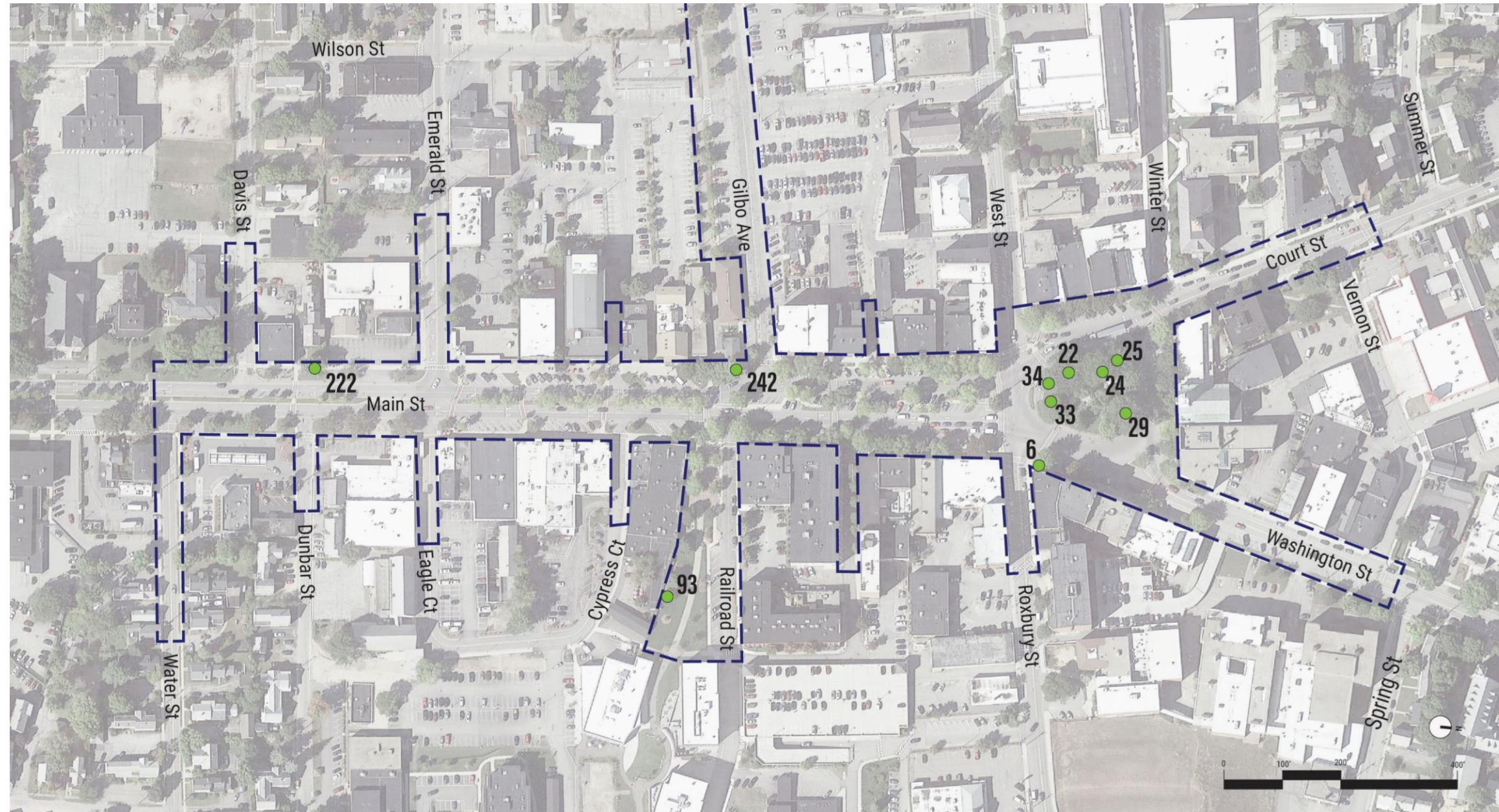


## TREE SPECIES IDENTIFIED

Genus	Species	Common Name	Count	% Distribution Total
<b>Acer</b>	<i>negundo</i>	Maple-Boxelder	1	1%
	<i>platanoides</i>	Maple-Norway	4	3%
	<i>rubrum</i>	Maple-Red	9	6%
	<i>saccharum</i>	Maple-Sugar	3	2%
	<i>x freemanii</i>	Maple-Freeman's	5	3%
<b>Acer Total</b>			<b>22</b>	<b>14%</b>
<b>Celtis</b>	<i>occidentalis</i>	Hackberry	1	1%
<b>Cercis</b>	<i>canadensis</i>	Redbud-Eastern	3	2%
<b>Chamaecyparis</b>	<i>nootkatensis</i>	Falsecypress-Nootka	1	1%
<b>Cladrastis</b>	<i>kentukea</i>	Yellowwood	1	1%
<b>Crataegus</b>	sp.	Hawthorn	1	1%
<b>Fraxinus</b>	<i>pennsylvanica</i>	Ash-Green	18	12%
<b>Ginkgo</b>	<i>biloba</i>	Ginkgo	5	3%
<b>Gleditsia</b>	<i>triacanthos</i>	Honeylocust-Common	8	5%
<b>Koelreuteria</b>	<i>paniculata</i>	Goldenraintree-Paniced	1	1%
<b>Malus</b>	sp.	Crabapple	7	4%
<b>Prunus</b>	<i>serrulata</i>	Cherry-Flowering	1	1%
<b>Pyrus</b>	<i>calleryana</i>	Pear-Callery	19	12%
<b>Quercus</b>	<i>palustris</i>	Oak-Pin	24	15%
	<i>rubra</i>	Oak-Northern Red	9	6%
<b>Quercus Total</b>			<b>33</b>	<b>21%</b>
<b>Stewartia</b>	<i>pseudocamellia</i>	Stewartia-Japanese	1	1%
<b>Syringa</b>	<i>reticulata</i>	Lilac-Japanese Tree	2	1%
<b>Tilia</b>	<i>cordata</i>	Linden-Littleleaf	13	8%
<b>Ulmus</b>	<i>americana</i>	Elm-American	4	3%
<b>Zelkova</b>	<i>serrata</i>	Zelkova-Japanese	15	10%
<b>Grand Total</b>			<b>156</b>	<b>100%</b>



# KEENE DOWNTOWN IMPROVEMENTS EXISTING CONDITIONS I TREE STUDY



## TREES BY HIGH ASSET VALUE

● HIGH ASSET VALUE TREE

## KEY TAKEAWAYS

156 trees inventoried and evaluated by Bartlett Tree Experts July 2022

Majority of trees are Mature / Semi-Mature in age, only 26% are young trees and 1% are over-mature

12% of trees are in poor condition and recommended for evaluation of removal

Top 10 trees of highest value are mostly located at Central Square

Recommendations for root collar excavation, pruning, and pest management are recommended

*(refer to Tree Inventory and Management Report for detailed information)*

TOP TEN TREES - HIGHEST ESTIMATED TREE ASSET VALUE

Tree ID	Common Name	Genus	Species	DBH	Tree Asset Value
29	Oak-Northern Red	<i>Quercus</i>	<i>rubra</i>	55	\$45,515.00
22	Oak-Pin	<i>Quercus</i>	<i>palustris</i>	42	\$41,072.00
24	Oak-Northern Red	<i>Quercus</i>	<i>rubra</i>	38	\$39,573.00
25	Oak-Northern Red	<i>Quercus</i>	<i>rubra</i>	30	\$18,792.00
6	Oak-Pin	<i>Quercus</i>	<i>palustris</i>	25	\$16,347.00
222	Oak-Northern Red	<i>Quercus</i>	<i>rubra</i>	27	\$15,222.00
242	Oak-Pin	<i>Quercus</i>	<i>palustris</i>	23	\$13,836.00
34	Honeylocust-Common	<i>Gleditsia</i>	<i>triacanthos</i>	26	\$13,521.00
93	Linden-Littleleaf	<i>Tilia</i>	<i>cordata</i>	24	\$13,293.00
33	Honeylocust-Common	<i>Gleditsia</i>	<i>triacanthos</i>	25	\$12,501.00



## II. PROJECT EXISTING CONDITIONS TAKEAWAYS

Utility Infrastructure Improvements

Traffic, Parking, Mobility

Tree Inventory and Study

Universal Access

### STEERING COMMITTEE ACTION

1. Any issues or concerns not identified?



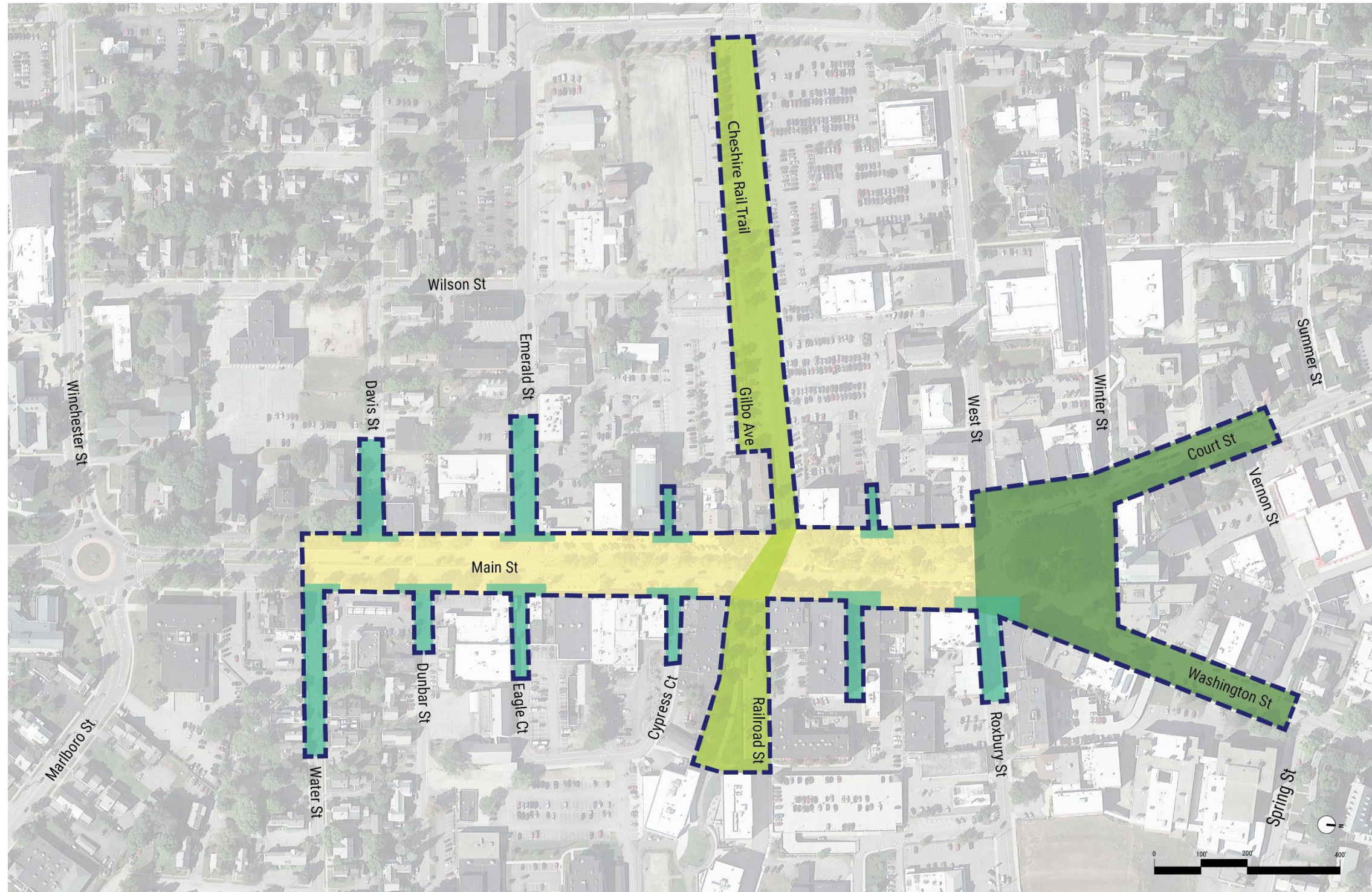
# **III. ALTERNATIVE DESIGN REVIEW**

## **STEERING COMMITTEE PRESENTATION**

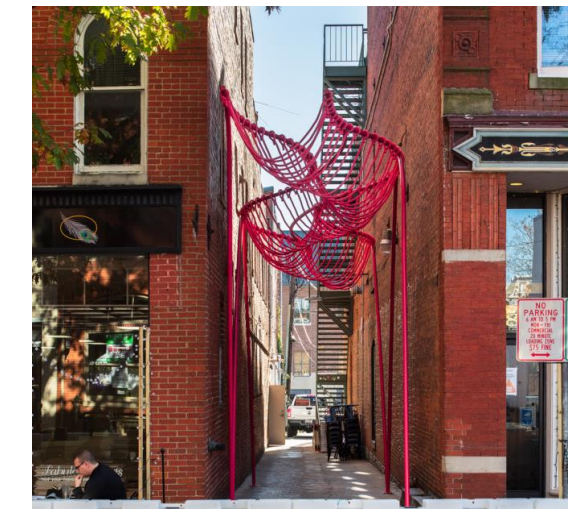


# KEENE DOWNTOWN IMPROVEMENTS

## OPEN SPACE TYPOLOGIES

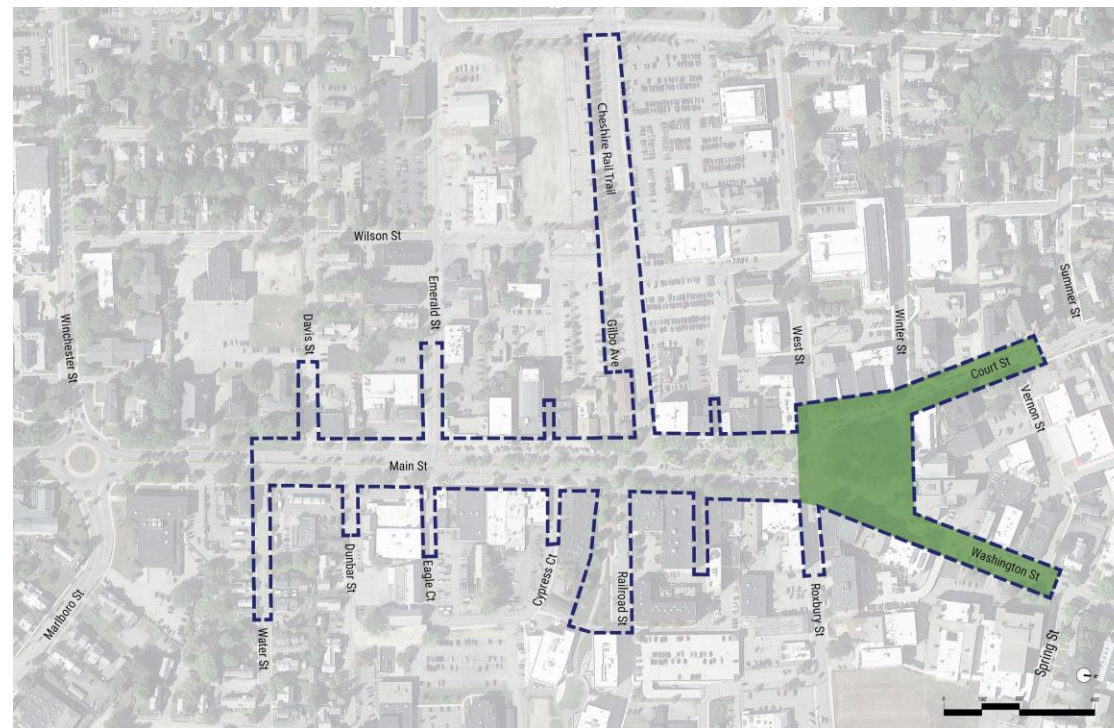


- TYOLOGY 1 | CENTRAL SQUARE**
- TYOLOGY 2 | MAIN STREET**
- TYOLOGY 3 | RAILROAD SQUARE**
- TYOLOGY 4 | COMMUNITY CONNECTIONS**



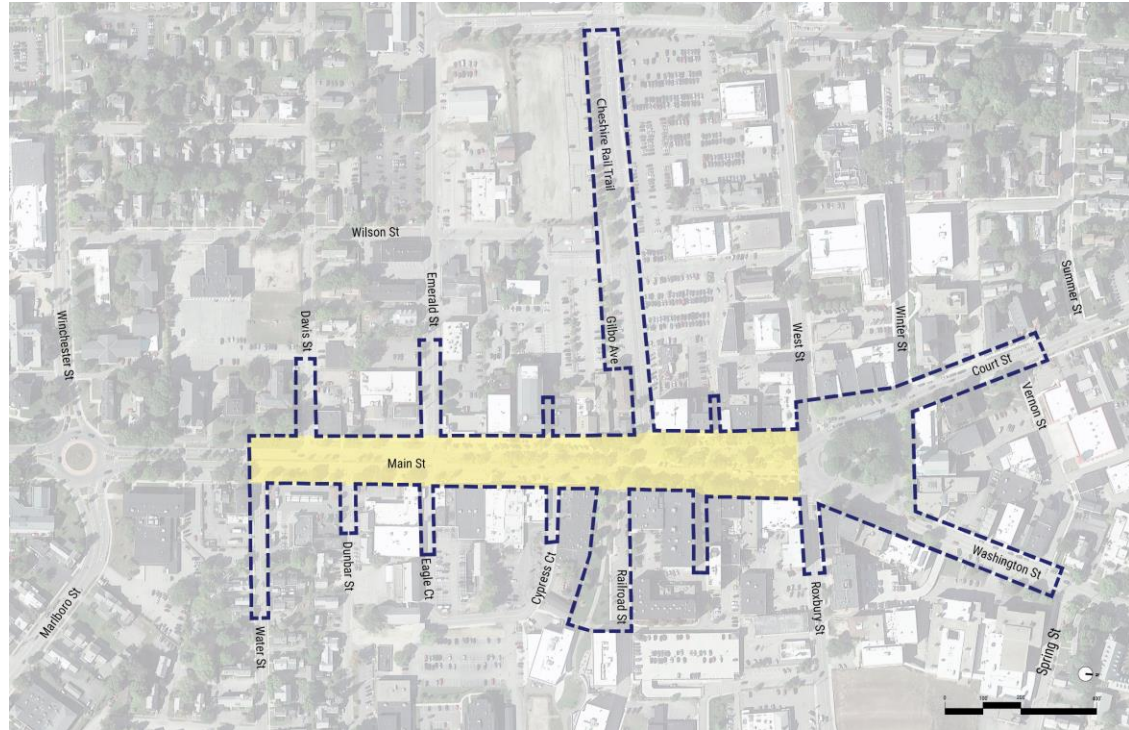
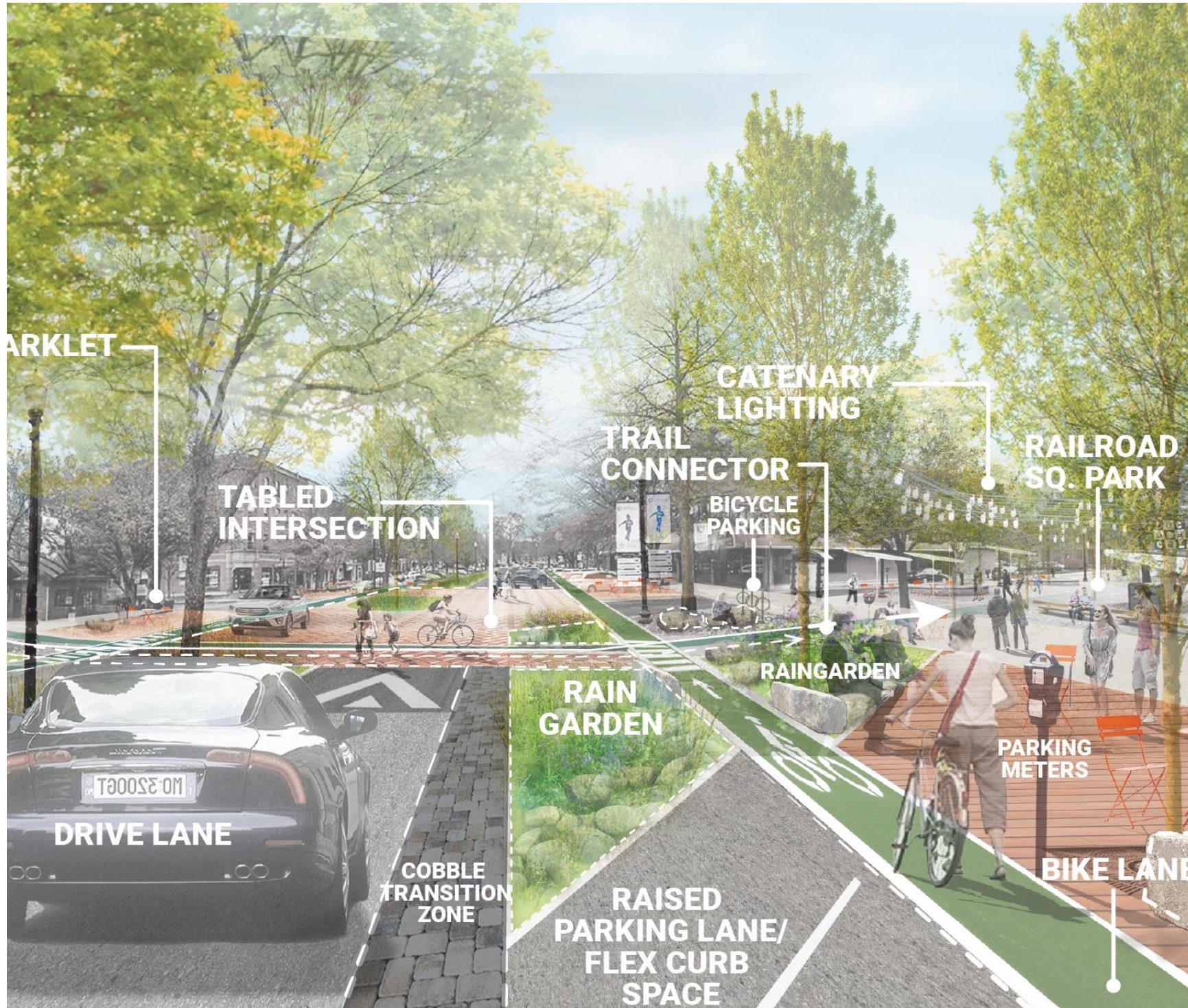


# KEENE DOWNTOWN IMPROVEMENTS OPEN SPACE TYPOLOGY 1 | CENTRAL SQ.



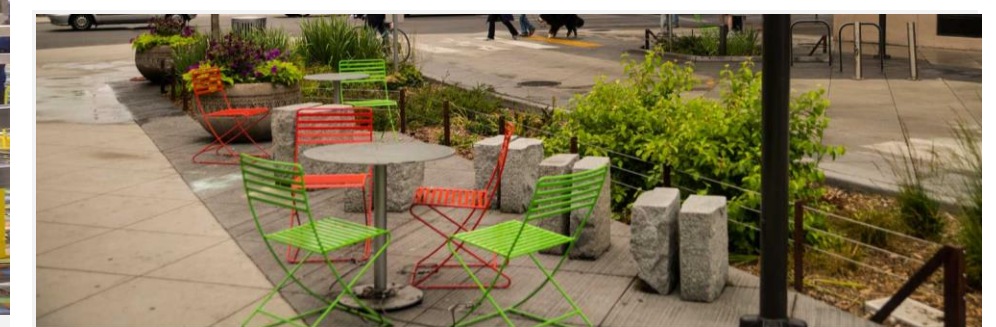
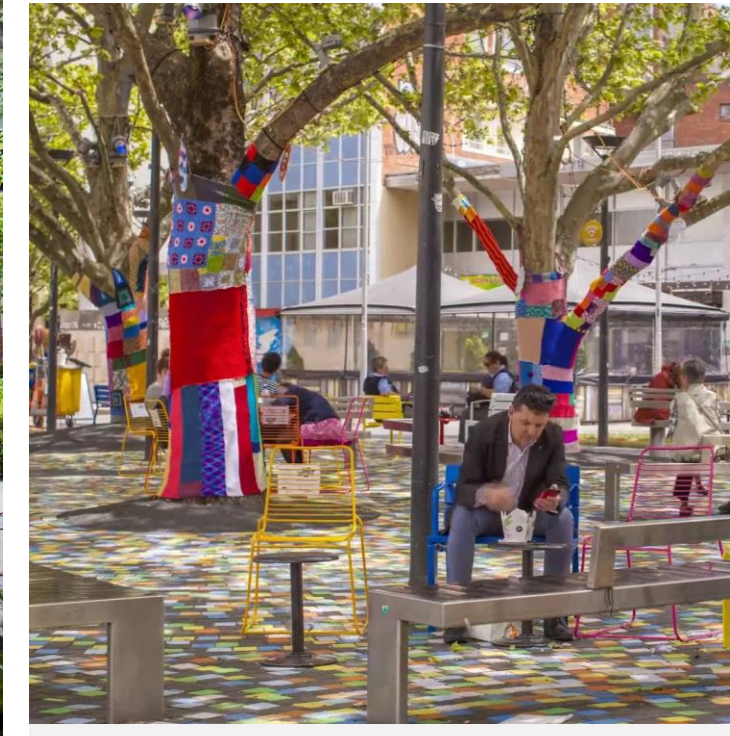
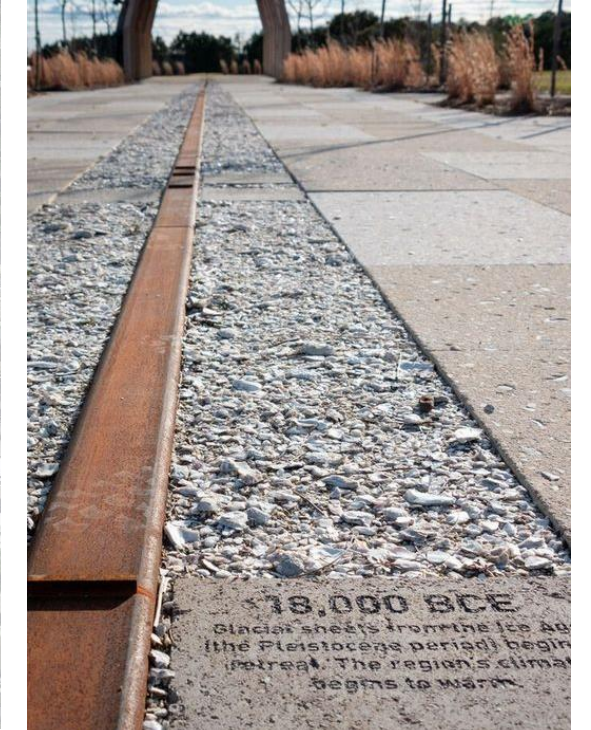
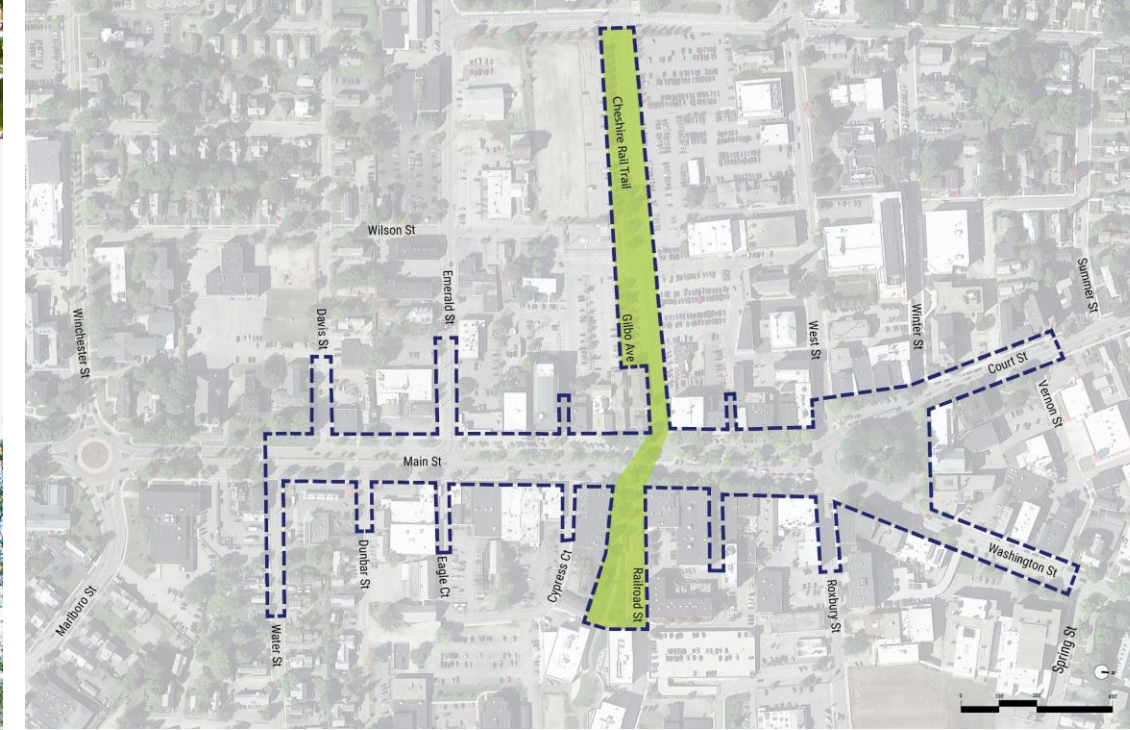


# KEENE DOWNTOWN IMPROVEMENTS OPEN SPACE TYPOLOGY 2 | MAIN ST.





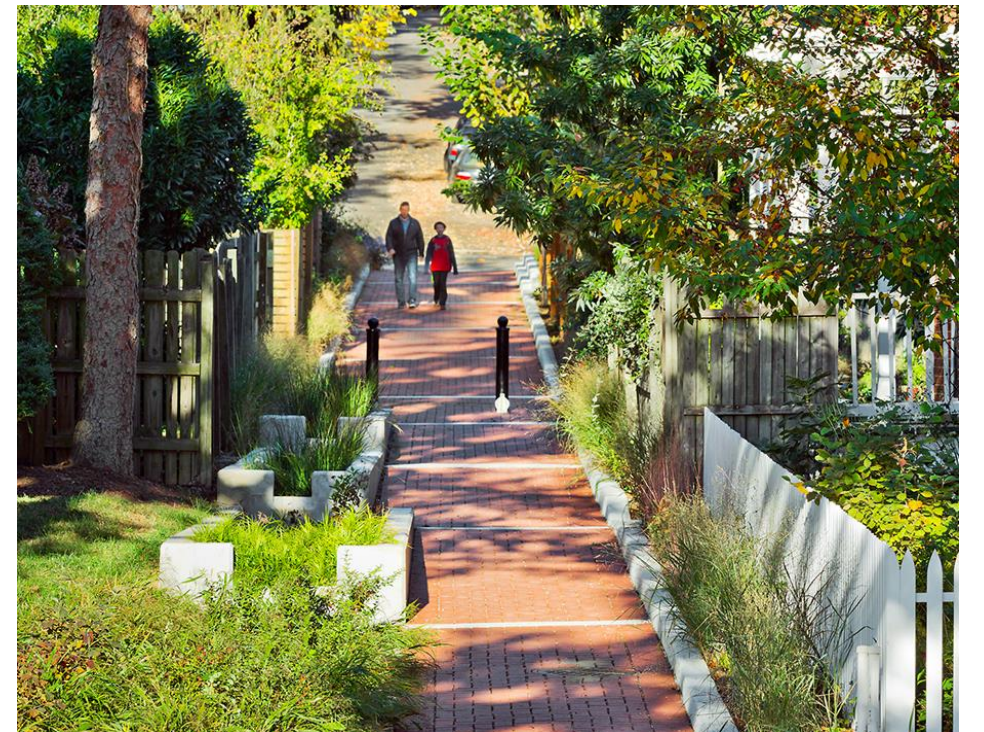
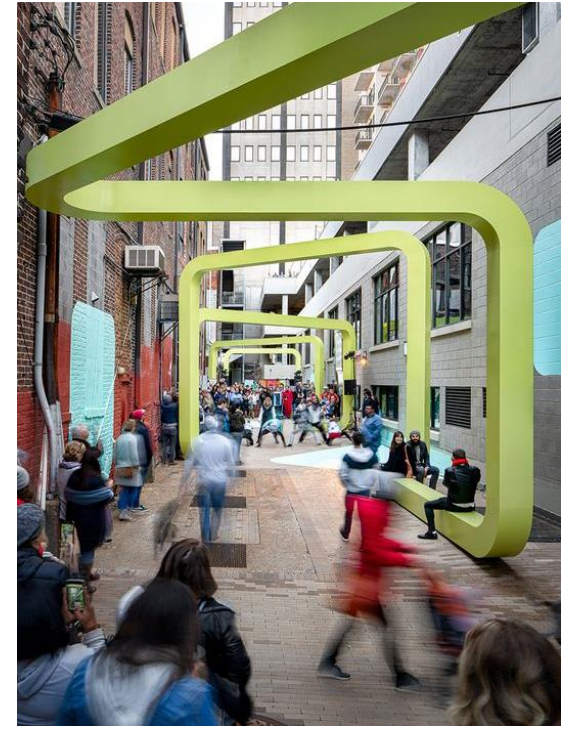
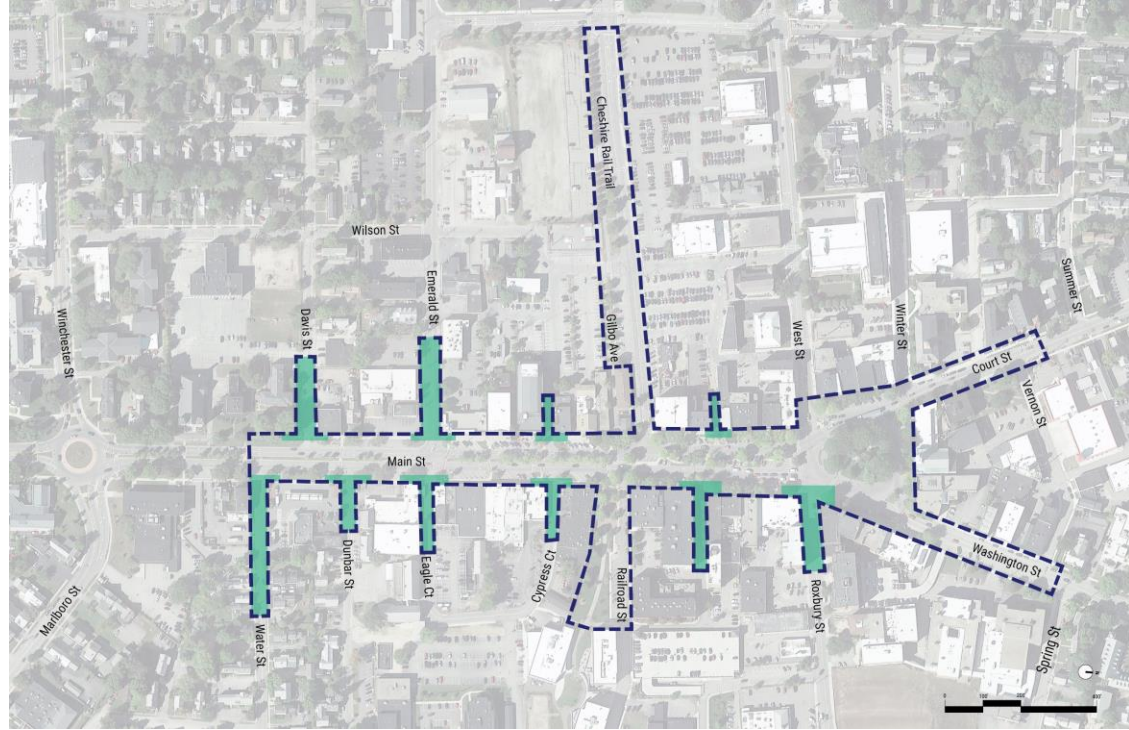
# KEENE DOWNTOWN IMPROVEMENTS OPEN SPACE TYPOLOGY 3 | RAILROAD SQ.





# KEENE DOWNTOWN IMPROVEMENTS

## OPEN SPACE TYPOLOGY 4 | COMMUNITY CONNECTIONS





## III. ALTERNATIVE DESIGN REVIEW TAKEAWAYS

Typology 1 – Central Square

Typology 2 – Main Street

Typology 3 – Railroad Square/Gilbo Avenue

Typology 4 – Parking Connections

### STEERING COMMITTEE ACTION

1. Are there any design considerations not identified?



# STEERING COMMITTEE UPCOMING MEETINGS/NEXT STEPS

## September 20 Steering Committee Meeting

- review design analysis and alternatives
- review preliminary project report
- recommend package to Public Workshop #2

## October 18 Steering Committee Meeting

- review results of Public Workshop #2
- review Stakeholder outreach and engagement
- recommend further study or package to City Council