

4. Appendices

Appendix A – Pre-RSA Presentation

Appendix B – RSA Materials

Appendix C – Road Counts

Appendix A – Pre-RSA Presentation

PROSPECT AVENUE ROAD SAFETY AUDIT

Park Road to New Park Avenue



OCTOBER 2024

INTRODUCTIONS



AGENDA

1. Welcome and Team Introductions
2. Study Purpose and Goals
3. Study Area
4. Review of Site-Specific Data and Issues
5. Next Steps for Tomorrow's Site Visit Audit

PURPOSE AND GOALS OF THE ROAD SAFETY AUDIT

Safety assessment of existing walking and biking routes

Improve transportation network for all users

Identify the issues that may discourage or prevent walking and bicycling

Identify next steps, evaluate feasibility of proposed improvements, and potential funding sources.

DELIVERABLES

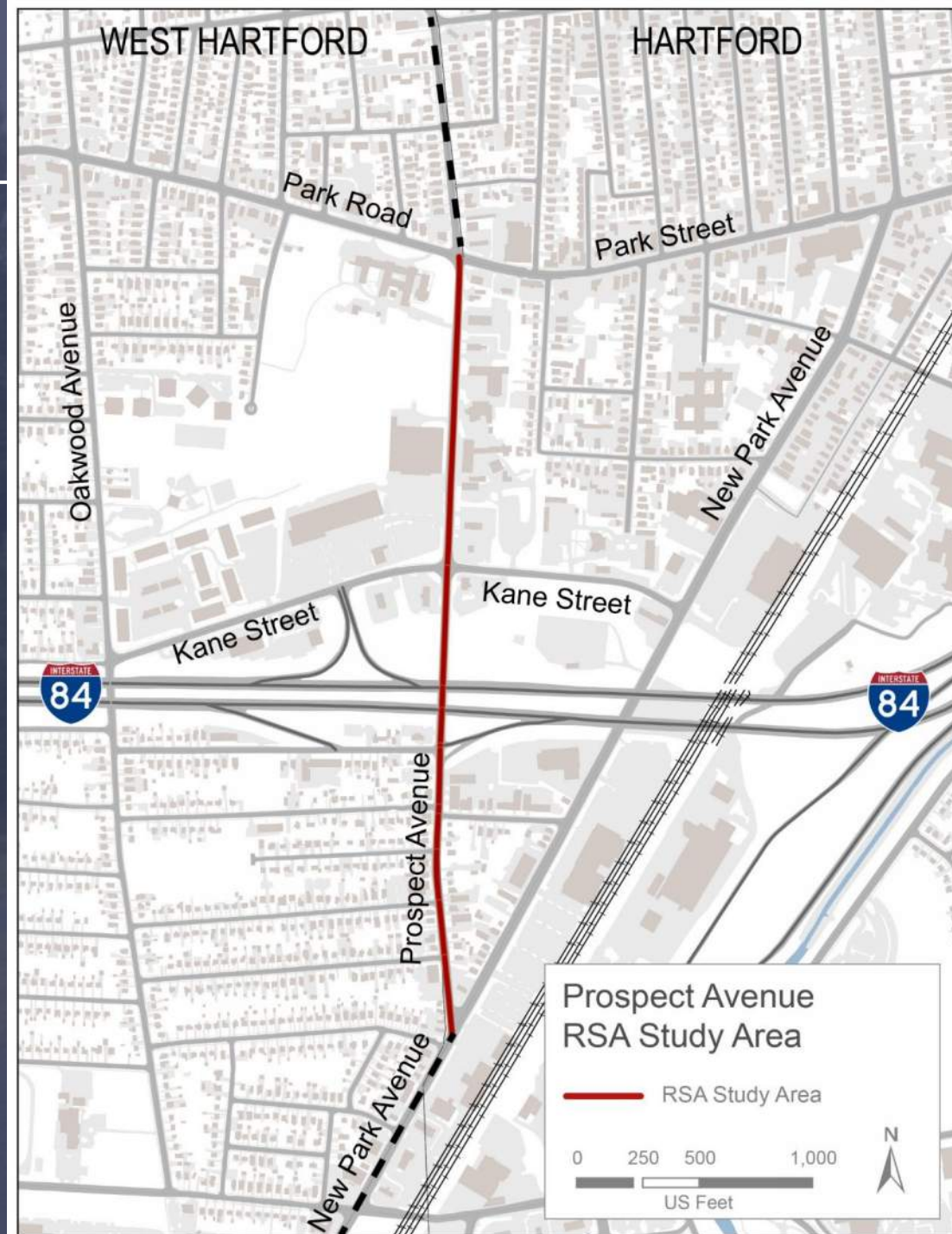
- Existing Conditions Data Collection
- Pre-Audit Meeting
- Field Audit
- Post Audit Meeting
- Road Safety Audit Report



STUDY AREA

- Prospect Av from Park Rd to New Park Av
- West Hartford / Hartford municipal line
- About 0.8 mile in length

Google Maps, July 2024



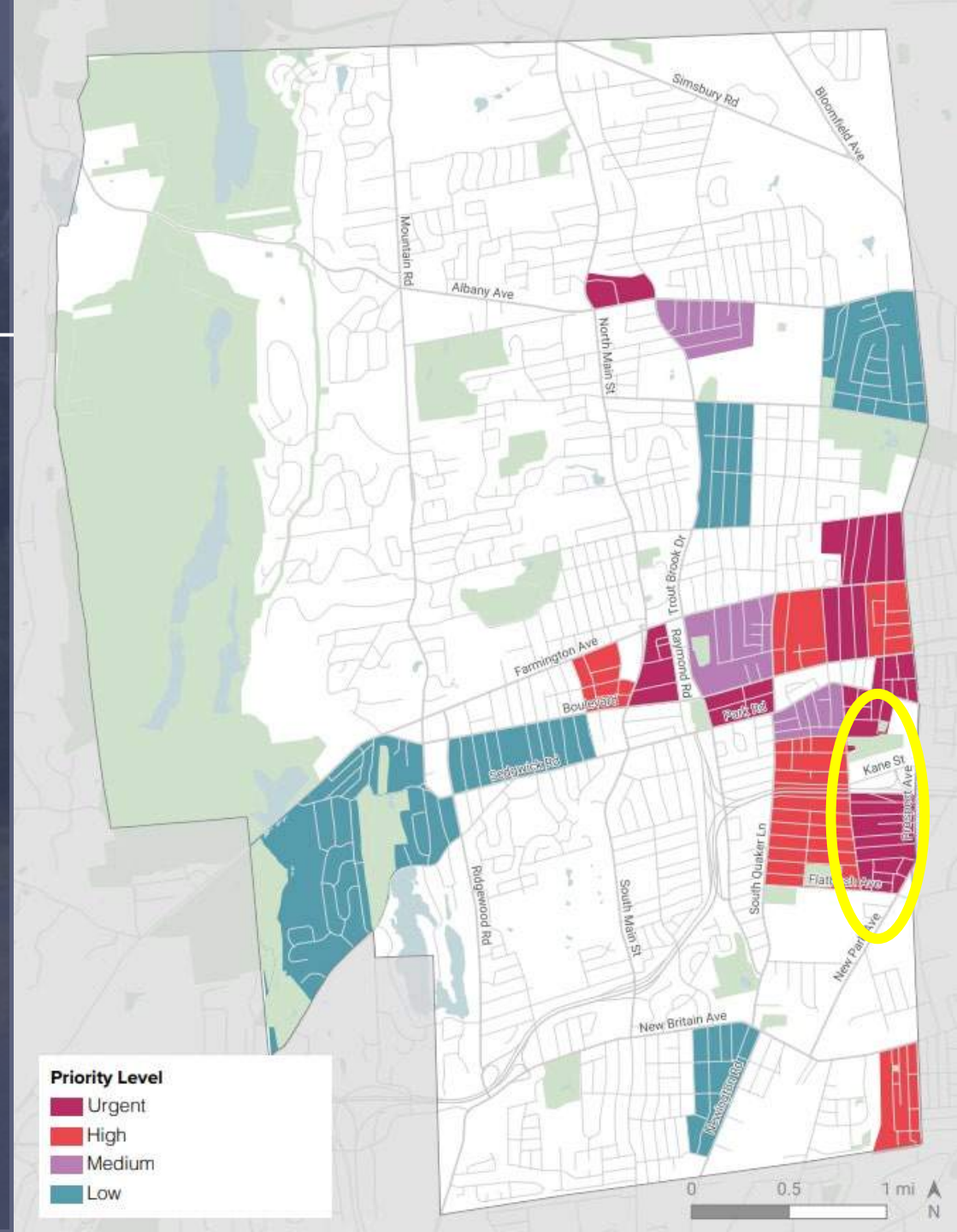
VISION ZERO FOCUS AREA STREETS

- Section of Prospect Av identified as “high priority”



VISION ZERO FOCUS AREA NEIGHBORHOODS

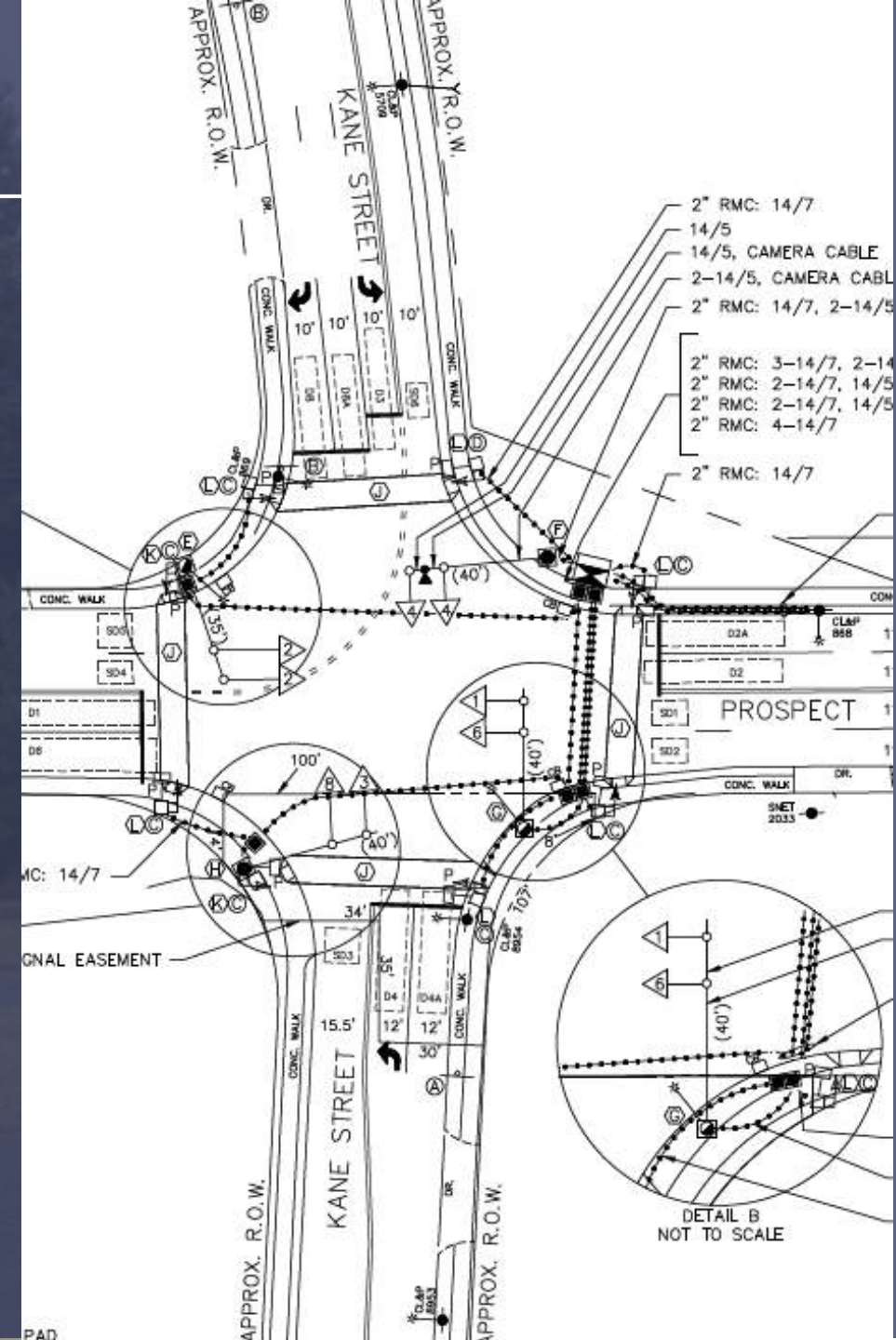
- Prospect Av identified as Transportation Equity Zone
- Adjacent neighborhood streets identified as VZ priority as well



UPCOMING WORK

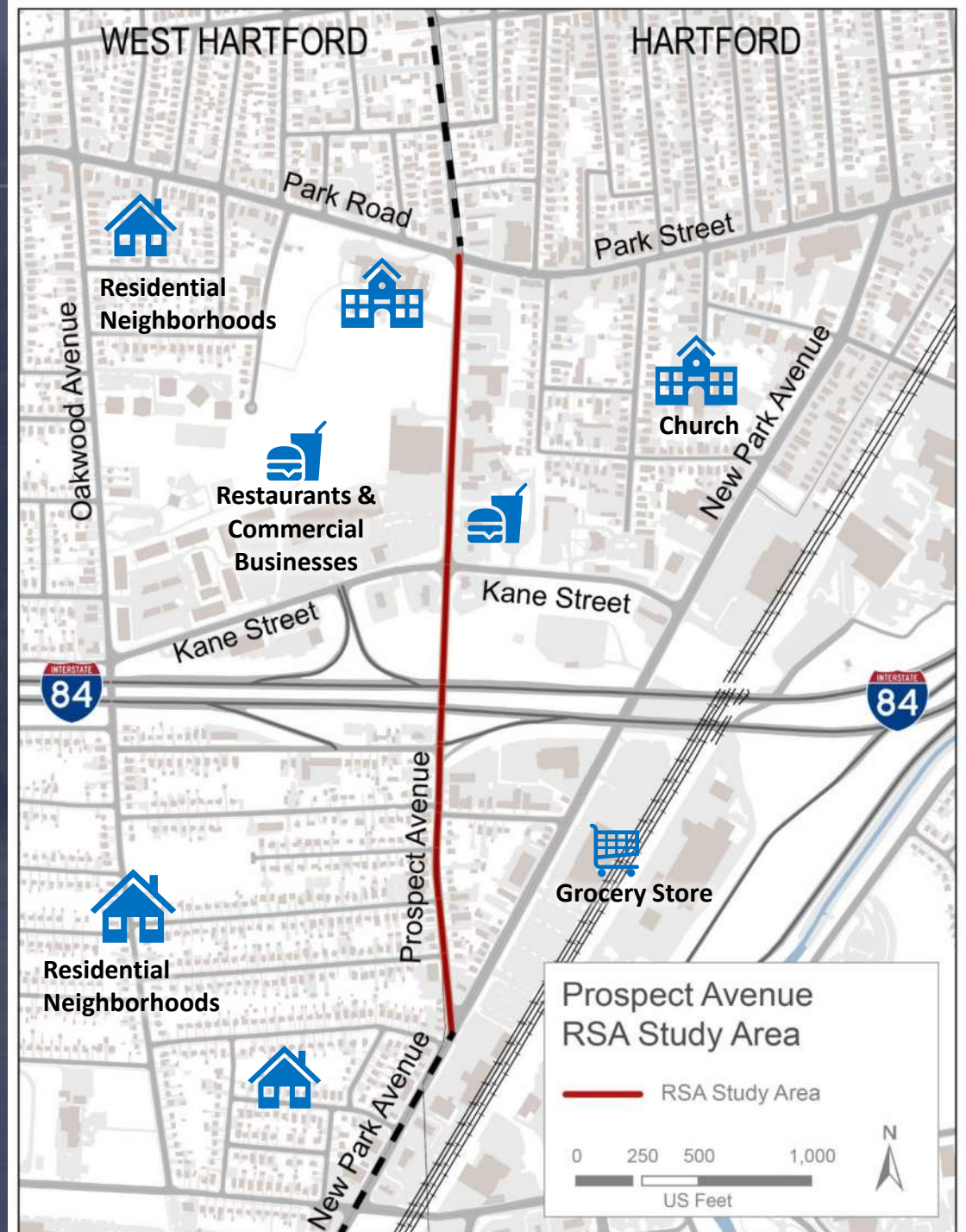
- Prospect Av resurfacing 2025

Google Maps, July 2024



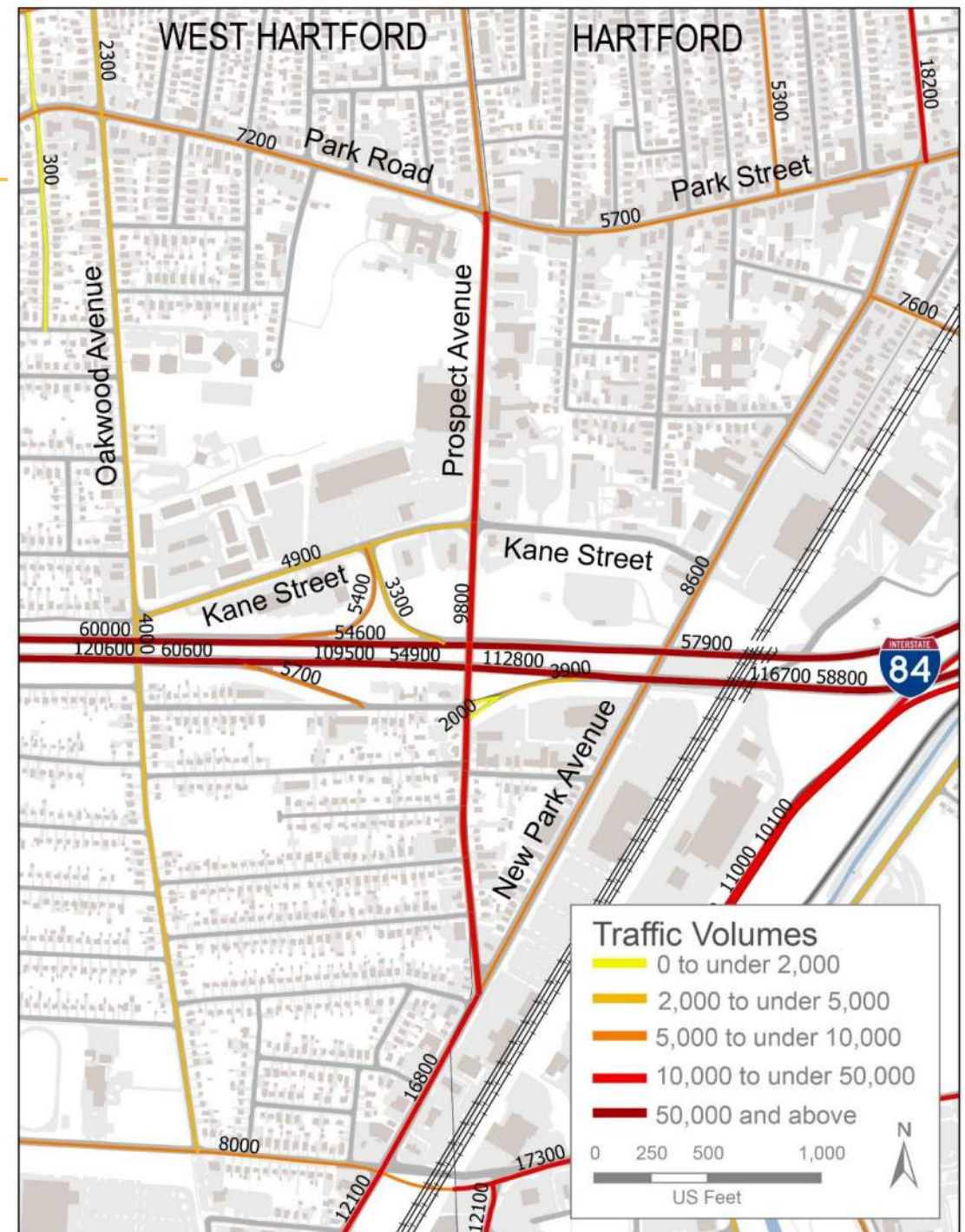
POINTS OF INTEREST

- Residential neighborhoods are North of Park Rd, west of Oakwood Av, south of I-84
- Heavy restaurant / commercial corridor north of I-84 on Prospect Av
- Prospect Av is border of Hartford and West Hartford



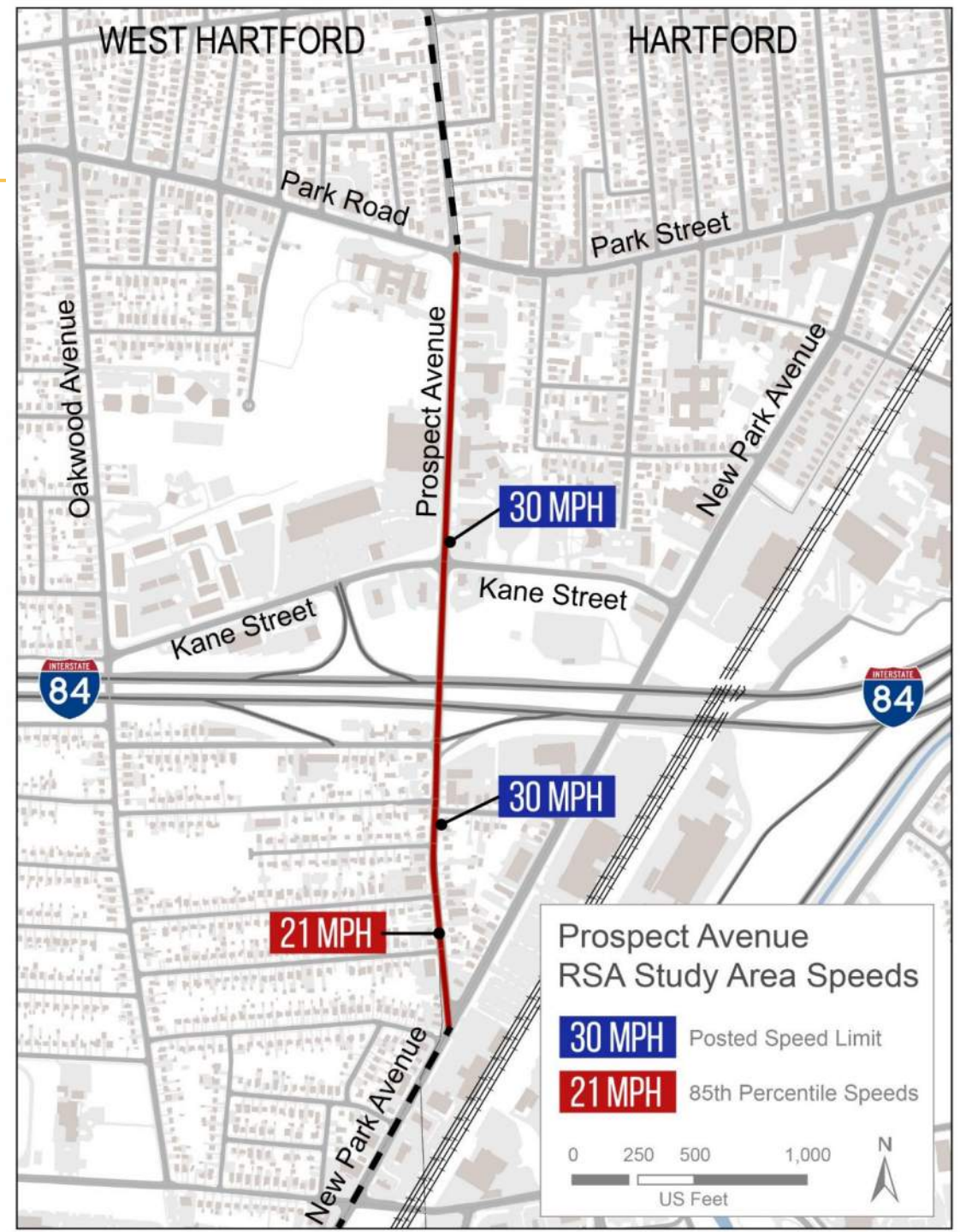
TRAFFIC VOLUMES

- Approximately 9,800 vehicles per day on Prospect Av (2021)
- Volumes are higher at the New Park Av and Prospect Av intersection
- I-84 ramps on Kane S, Caya Av and Prospect Av



TRAFFIC SPEED LIMITS

- Speed limit in study area is 30 MPH
- 85th percentile speeds of 21.1 MPH at the southern end of the study area near New Park Av



TRANSIT NETWORK

- CT**transit** local Route 33
– Park Rd
- CT**transit** local Route 31
– Park St – New Park Av
- CT**fastrak** Route 101,
102, 121, and 128
- Dial-a-Ride

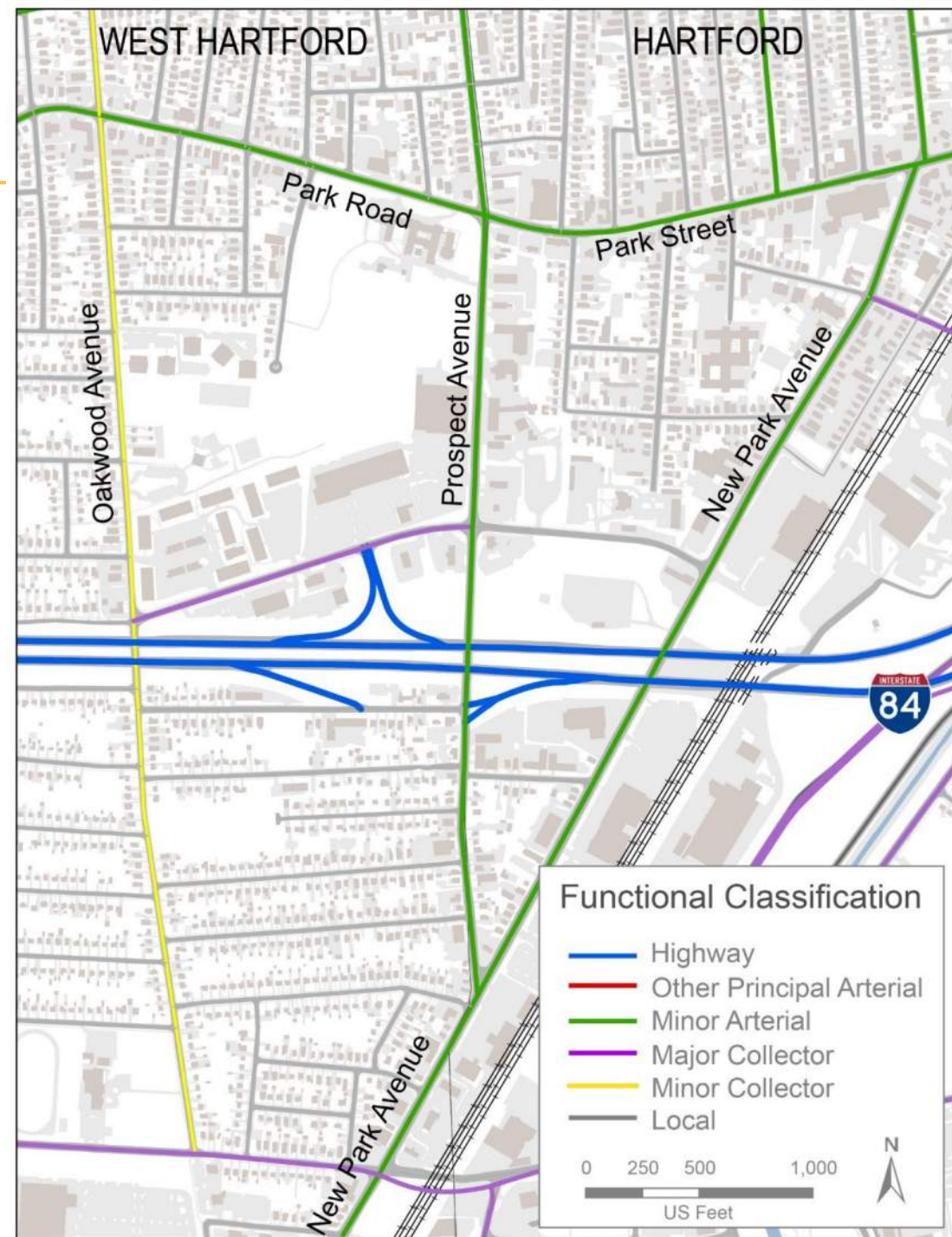


ROADWAY GEOMETRY

Prospect Ave Street Inventory						
From	New Park Ave		Caya Ave		Kane St	
To	Caya Ave		Kane St		Park Rd	
Distance	0.29 Mi		0.19 Mi		0.32 Mi	
Functional Classification	Minor Arterial		Minor Arterial		Minor Arterial	
Speed Limit	30 MPH		30 MPH		30 MPH	
Direction	NB	SB	NB	SB	NB	SB
Lanes	2	2	2	2	2	2
Lane Width	11'	11'	12'	12'	11'	11'
Sidewalk Type	Concrete	Concrete	Concrete	Concrete	Varies	Concrete
Sidewalk Width	5'	5'	4-5'	4-5'	5-6'	5'
Sidewalk Condition	Poor-Fair	Poor-Fair	Fair	Fair	Fair	Fair
ADA Ramp Present	No	Varies	Yes	Yes	Yes	Yes
ADA Ramp Compliant	No	Varies	Yes	Yes	Yes	Varies
Curb	Granite	Granite	Granite	Granite	Granite	Granite
Parking	Yes	Unclear	No	No	No	No
Shoulder	None	None	None	None	None	None
On CTDOT Bike Network	No		No		No	
Notes					Ambiguous curb/sidewalk/parking northbound	

FUNCTIONAL CLASSIFICATION

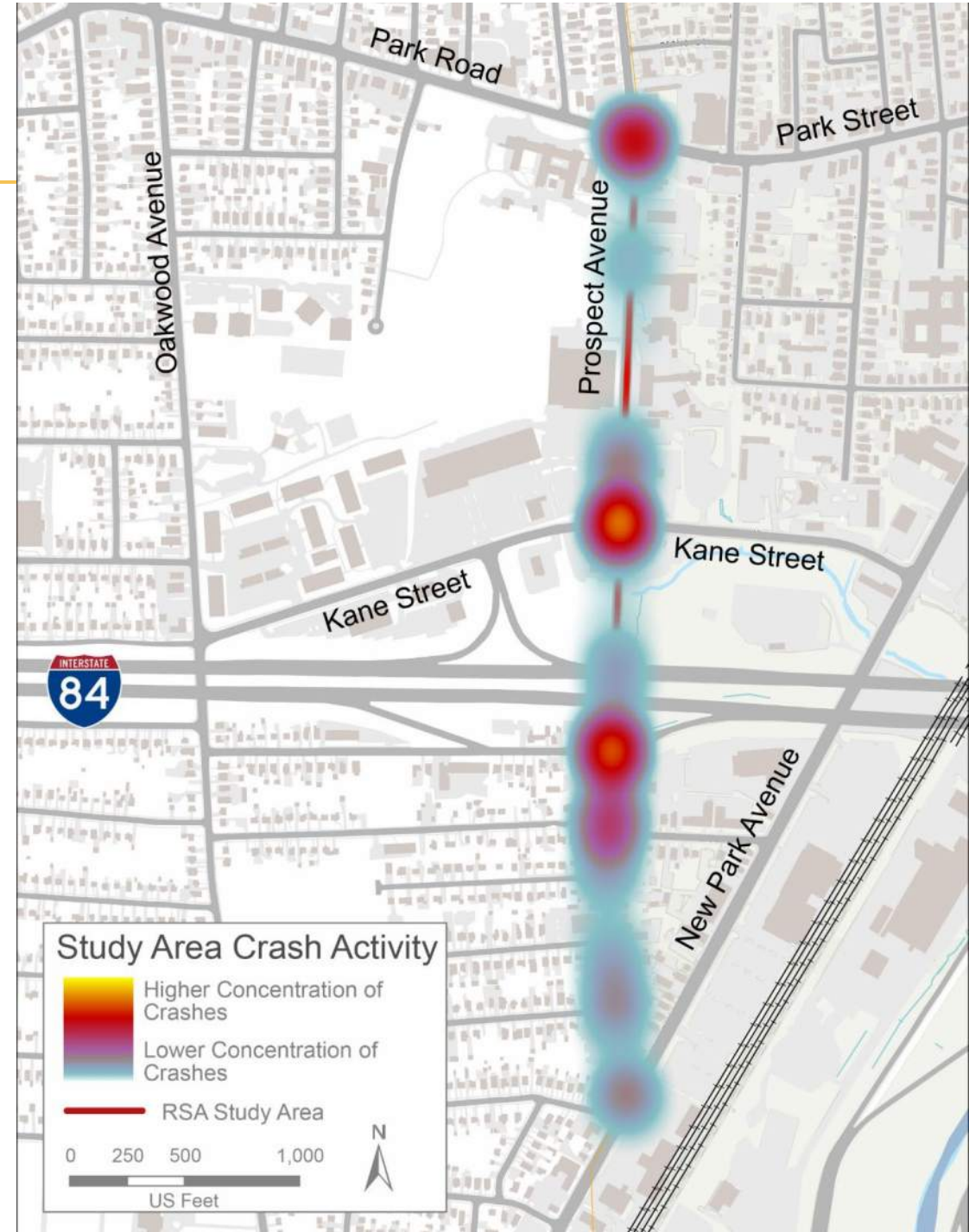
- Prospect Av: Minor Arterial
- Park Rd and New Park Av: Minor Arterials
- Oakwood Av: Minor Collector
- Kane St: Major Collector



CRASH ANALYSIS

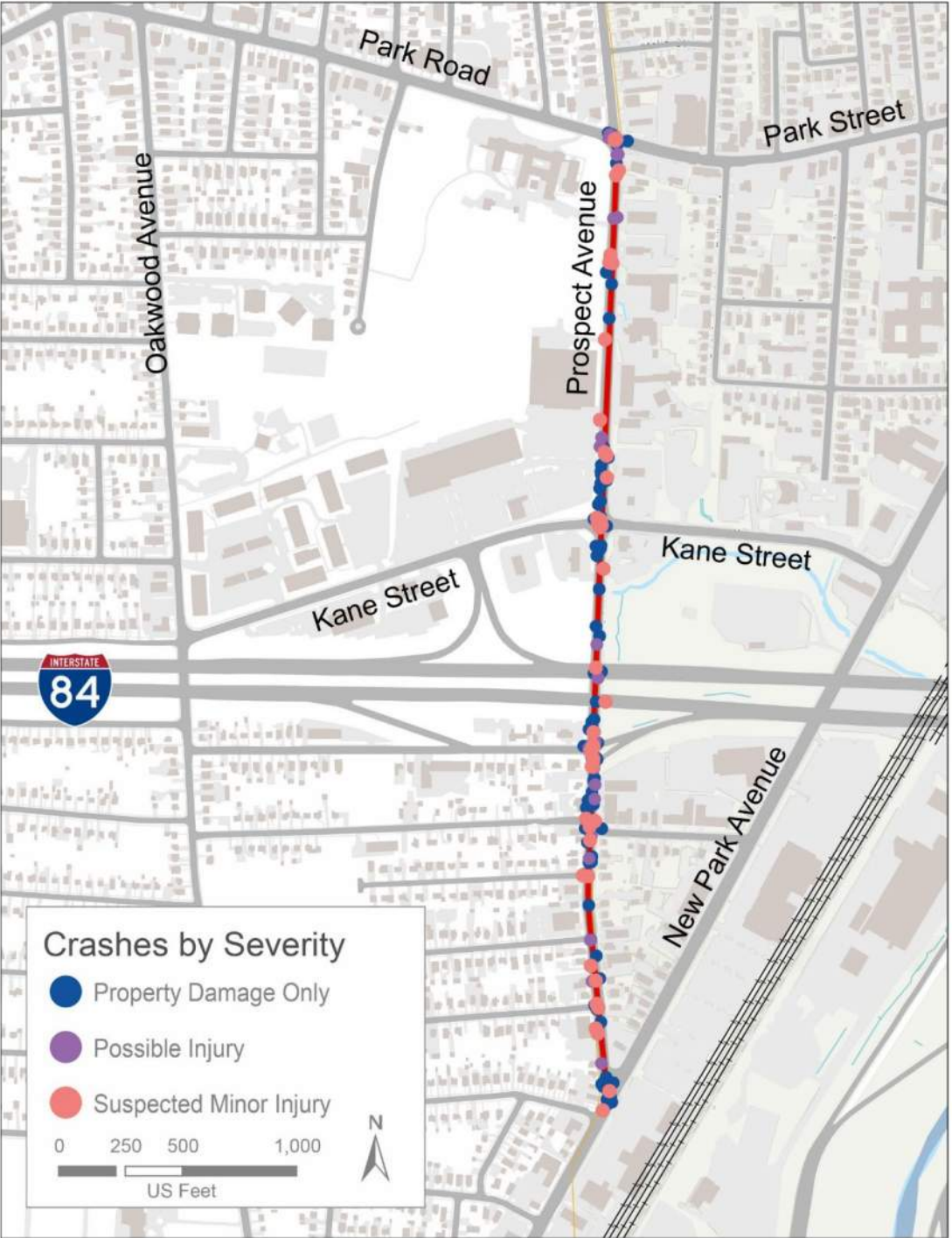
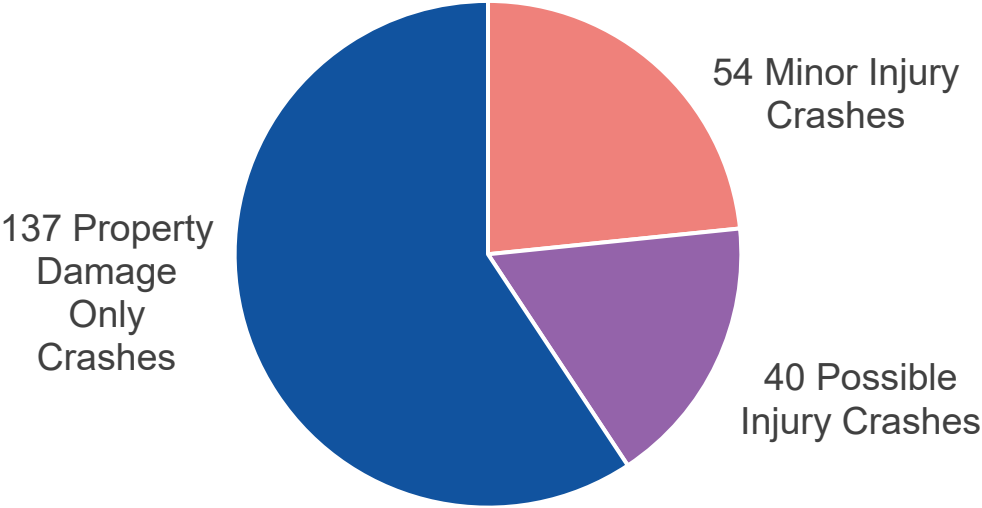
2019 – 2023 (5-Year Total): 231 Crashes

- Park Rd/St: 35 crashes (12 involving injury)
- Kane St: 38 crashes (12 involving injury)
- Caya Av: 42 crashes (13 involving injury)



CRASH SEVERITY (2019 – 2023)

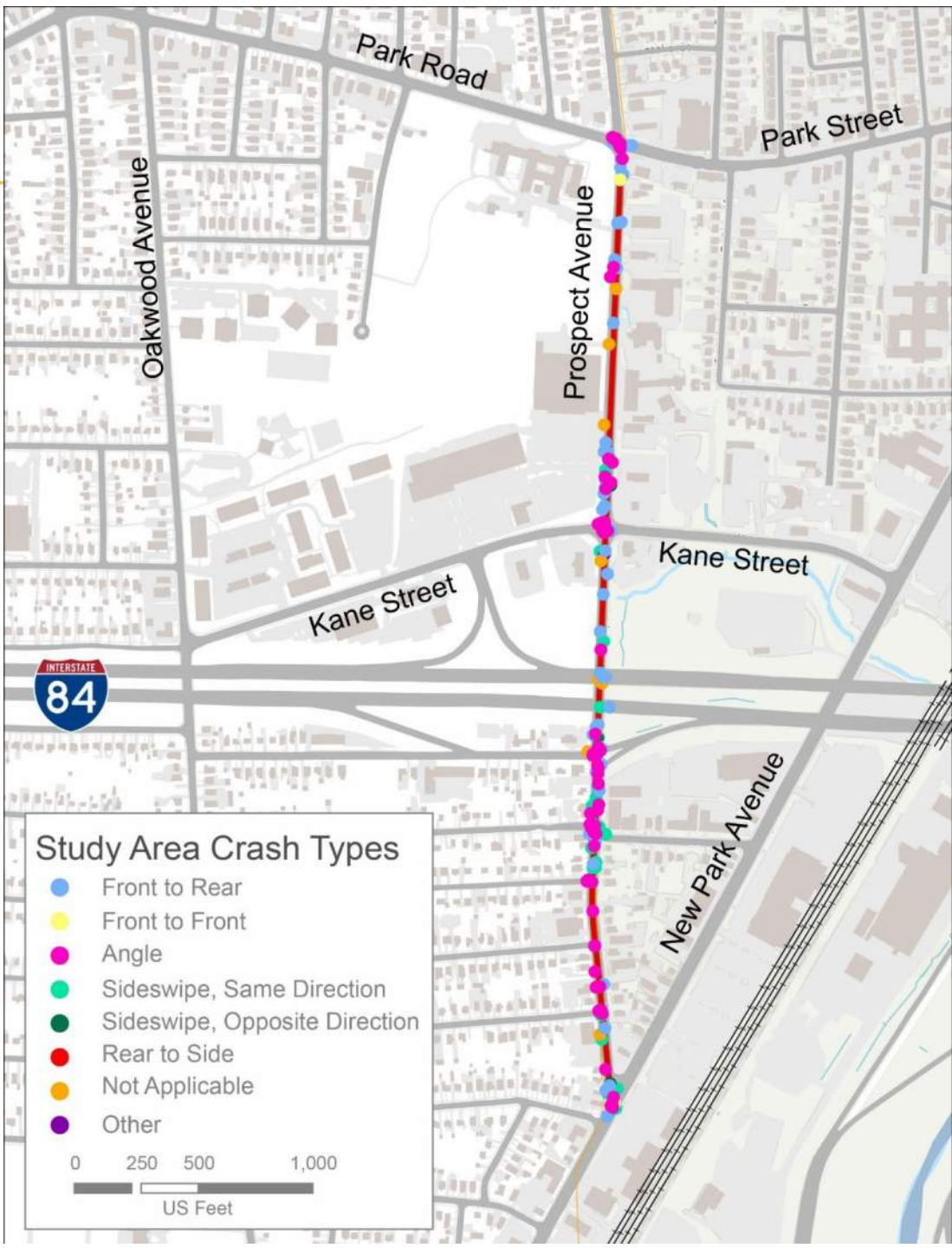
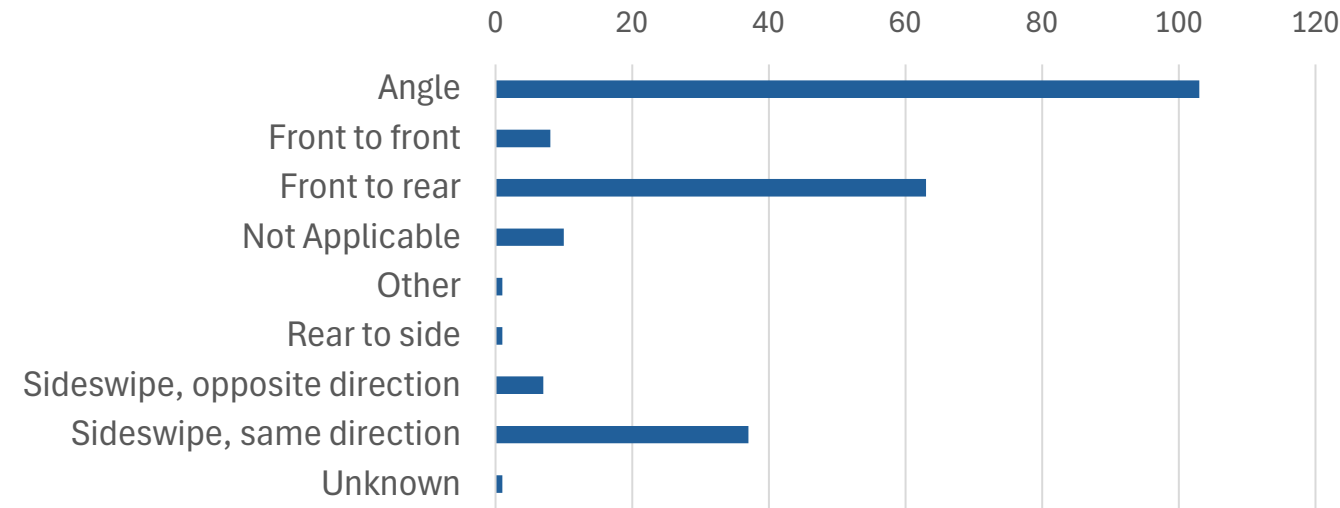
Year	No Apparent Injury	Possible Injury	Suspected Minor Injury	Total
2019	39	13	15	67
2020	19	10	8	37
2021	30	4	12	46
2022	22	4	8	34
2023	27	9	11	47
Total	137	40	54	231



CRASH TYPES (2019 – 2023)

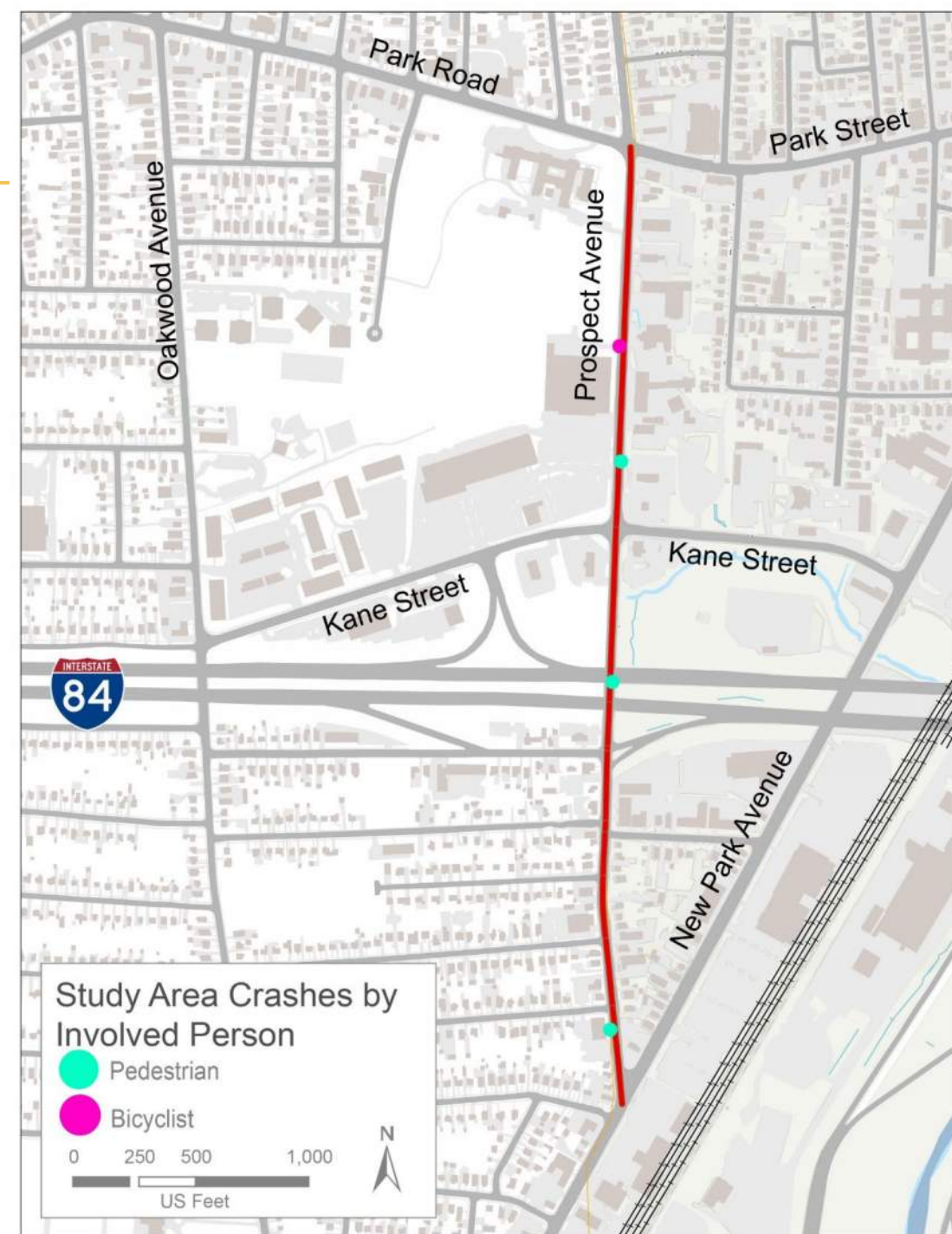
Manner of Impact

	No Apparent Injury	Possible Injury	Suspected Minor Injury	Total
Angle	54	23	26	103
Front to front	5	1	2	8
Front to rear	34	13	16	63
Not Applicable	5	1	4	10
Other	1			1
Rear to side	1		1	1
Sideswipe, opposite direction	5		2	7
Sideswipe, same direction	32	2	3	37
Unknown	1			1
Total	137	40	54	231



CRASHES BY INVOLVED PERSON

- Three (3) crashes involving a pedestrian
 - Two (2) Minor Injury
 - One (1) Possible Injury
- One (1) crash involving a bicyclist
 - Minor injury



SAMPLE IMPROVEMENTS TO IMPROVE SAFETY



TYPES OF COUNTERMEASURES

- Pedestrian countermeasures
- Bicycle countermeasures
- Speed reduction measures (traffic calming)
 - Vertical elements
 - Horizontal elements
 - Cross sectional and other elements
- Intersection treatments and traffic volume reduction measures

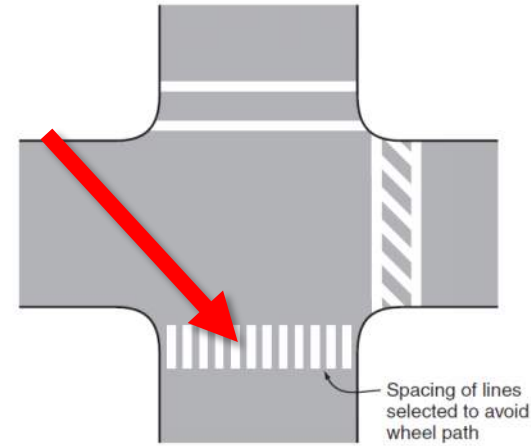
Some countermeasures may not be appropriate on certain facilities

PEDESTRIAN COUNTER MEASURES



Pedestrian Refuge Island

Figure 3B-19. Examples of Crosswalk Markings



Crosswalks



RRFB



Raised Crosswalks and Intersections



Crosswalk Lighting



Curb Extensions

BICYCLIST COUNTER MEASURES



Sharrows

West Hartford's Bicycle Plan and Facility Selection & Design Guide (2024) identifies standard bike lanes as acceptable and buffered bike lanes as preferred facility types



Bike Lanes



Buffered Bike Lanes

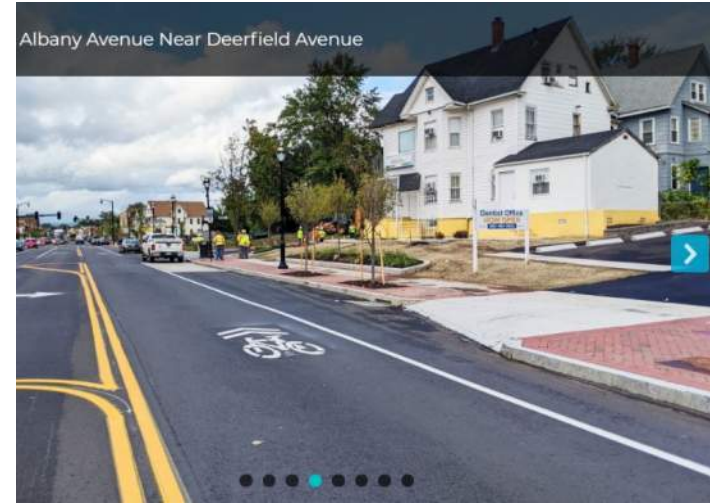


Protected Bicycle Infrastructure

SPEED REDUCTION – CROSS SECTION AND OTHER



Mid-Block Median Island



Streetscape and Street Trees



Road Diet



Dynamic Speed Signs

INTERSECTION TREATMENTS



Roundabout



Half Closure



Through Traffic Restriction



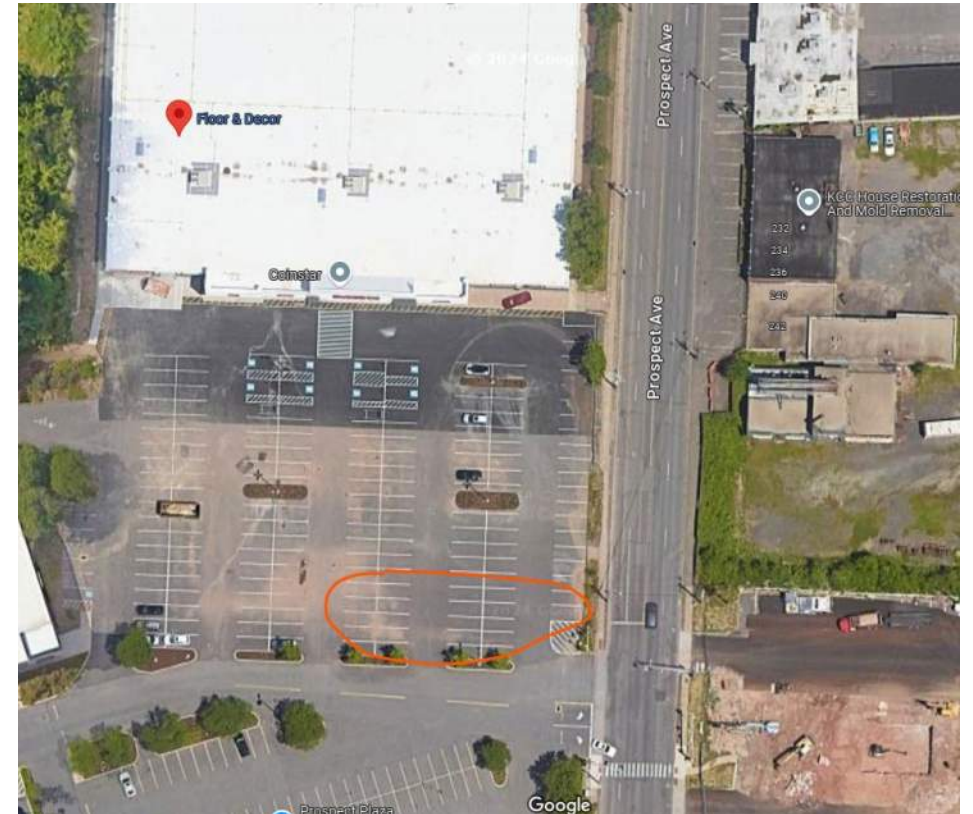
Curb Extensions / Sight Line Improvements

A street scene in a city. In the foreground, a road with a crosswalk leads towards a modern, multi-story building with a mix of grey and reddish-brown panels. To the right of the road is a grassy area enclosed by a black metal fence. A utility pole with traffic lights and street signs for 'PARK RD' and 'PROSPECT AVE' stands on the right. In the background, there are more buildings and trees under a clear sky.

DISCUSSION ON ISSUES AND OPPORTUNITIES

TOMORROW'S WALK AUDIT

- Review safety protocols, reflective vests, etc.
- Walk corridor and assess existing conditions and identify areas for improvement
- Post-audit discussion immediately following
- Meeting location: 46 Kane St (Floor & Décor), park in spaces closest to Prospect Av signal





THANK YOU!

Appendix B – RSA Materials



Prospect Avenue Road Safety Audit (RSA)

Site Walk / Visit

West Hartford, CT

Thursday, October 24th, 2024, 10 AM

AGENDA

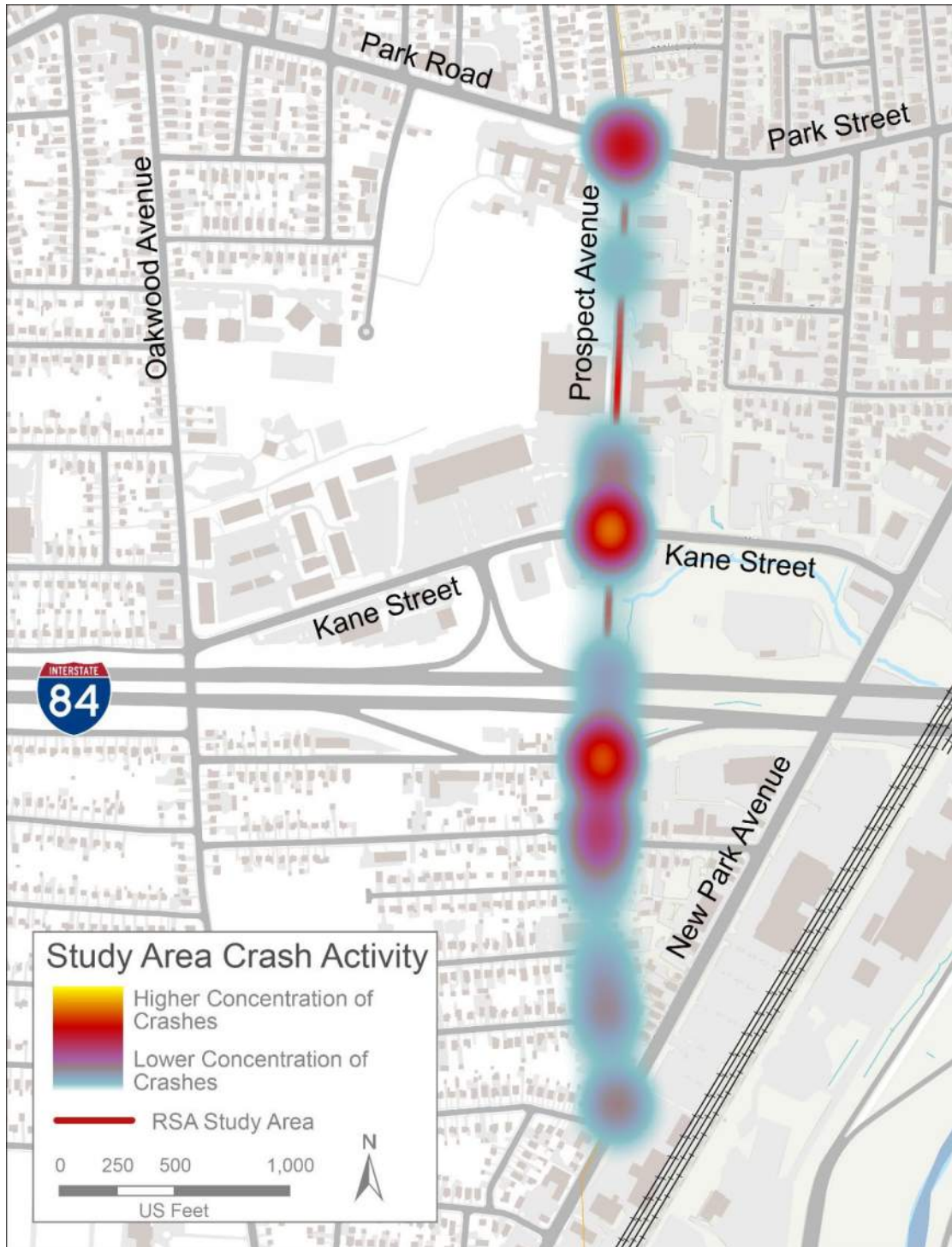
- 1. Welcome and Introductions**
- 2. Route Review**
- 3. Safety Reminders**
- 4. Site Walk**
 - Distribute and discuss field packets
 - Suggestions for adding feedback
 - Identify issues and improvement opportunities (all participants)
- 5. Post-Audit Recap**
 - Discuss observations and potential improvements
 - Next steps

Participant Expectations

All participants should plan to be actively involved during the entire RSA process. Participants are encouraged to share their ideas, concerns, and comments with the study team at the pre-audit meeting and during the site visit. In addition, after the RSA site visit, participants will be asked to review and comment on the draft report to assure it is reflective of the RSA completed by the multidisciplinary team. Stakeholders' opinions are key elements to the success of the RSA.



Overall Study Area
Prospect Avenue: Park Road and New Park Avenue





RSA Field Sheet

Location 1: Intersection of Prospect Avenue and Park Road

For each noteworthy feature that you observe along the walking route, write a number at the location on the map below. Write a brief description of your observation for that number under the Notes section. See the attached RSA Field Considerations list for suggested items to observe.



Image Credit: Google Earth Pro, accessed on October 22nd, 2024

Notes:

- 1) _____
- 2) _____
- 3) _____
- 4) _____
- 5) _____
- 6) _____
- 7) _____
- 8) _____
- 9) _____
- 10) _____
- 11) _____
- 12) _____

RSA Field Sheet

Location 2: Prospect Avenue and Prospect Plaza Entrance

For each noteworthy feature that you observe along the walking route, write a number at the location on the map below. Write a brief description of your observation for that number under the Notes section. See the attached RSA Field Considerations list for suggested items to observe.

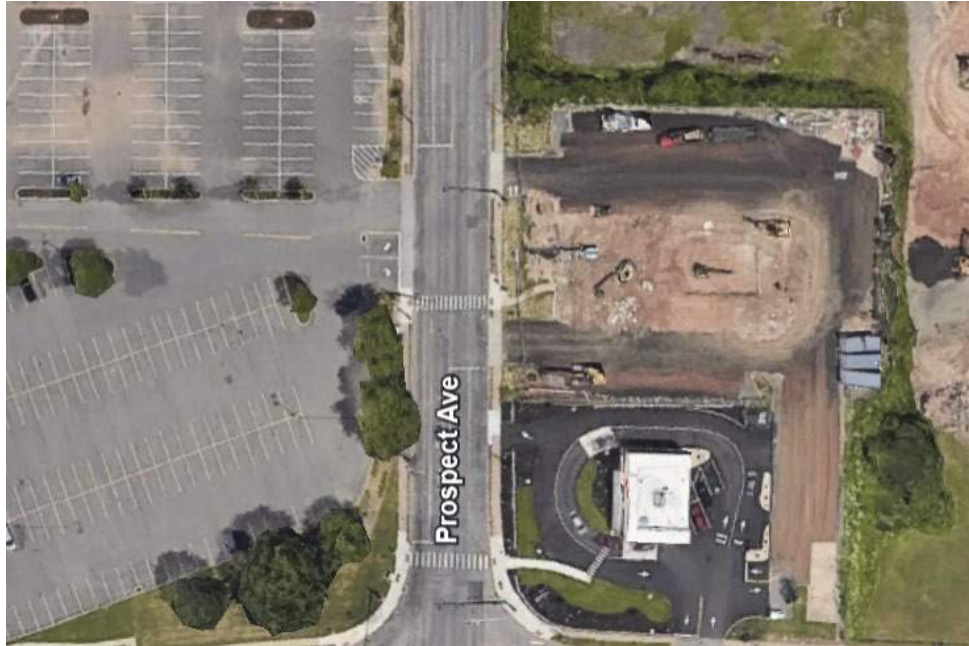


Image Credit: Google Earth Pro, accessed on October 22nd, 2024

Notes:

- 1) _____
- 2) _____
- 3) _____
- 4) _____
- 5) _____
- 6) _____
- 7) _____
- 8) _____
- 9) _____
- 10) _____
- 11) _____
- 12) _____



RSA Field Sheet

Location 3: Prospect Avenue and Kane Street intersection

For each noteworthy feature that you observe along the walking route, write a number at the location on the map below. Write a brief description of your observation for that number under the Notes section. See the attached RSA Field Considerations list for suggested items to observe.

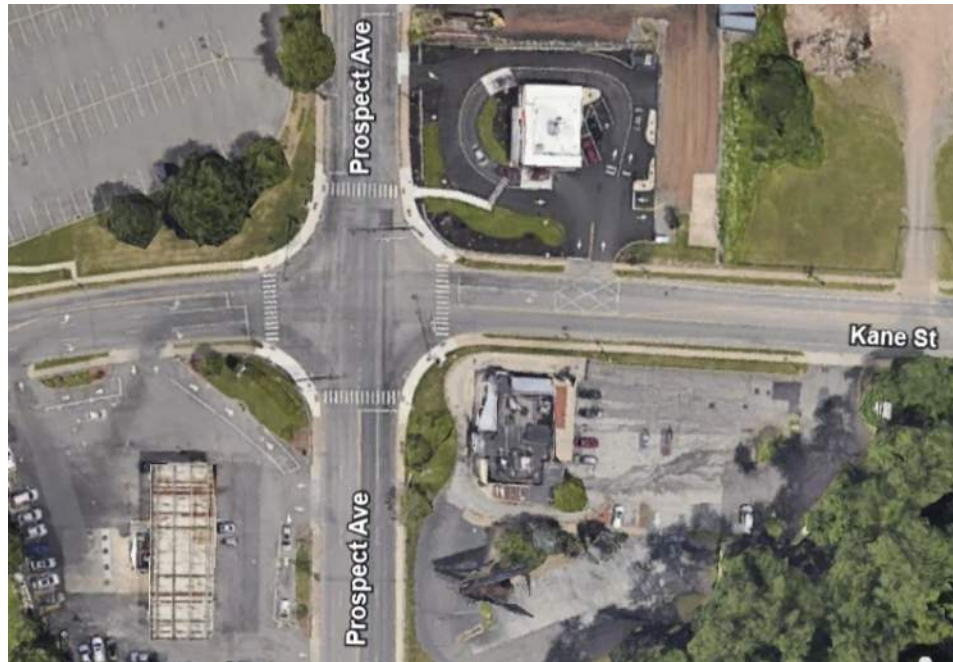


Image Credit: Google Earth Pro, accessed on October 22nd, 2024

Notes:

- 1) _____
- 2) _____
- 3) _____
- 4) _____
- 5) _____
- 6) _____
- 7) _____
- 8) _____
- 9) _____
- 10) _____
- 11) _____
- 12) _____



RSA Field Sheet

Location 4: Prospect Avenue and Caya Avenue

For each noteworthy feature that you observe along the walking route, write a number at the location on the map below. Write a brief description of your observation for that number under the Notes section. See the attached RSA Field Considerations list for suggested items to observe.



Image Credit: Google Earth Pro, accessed on October 22nd, 2024

Notes:

- 1) _____
- 2) _____
- 3) _____
- 4) _____
- 5) _____
- 6) _____
- 7) _____
- 8) _____
- 9) _____
- 10) _____
- 11) _____
- 12) _____



RSA Field Sheet

Location 5: Prospect Avenue and New Park Avenue

For each noteworthy feature that you observe along the walking route, write a number at the location on the map below. Write a brief description of your observation for that number under the Notes section. See the attached RSA Field Considerations list for suggested items to observe.



Image Credit: Google Earth Pro, accessed on October 22nd, 2024

Notes:

- 1) _____
- 2) _____
- 3) _____
- 4) _____
- 5) _____
- 6) _____
- 7) _____
- 8) _____
- 9) _____
- 10) _____
- 11) _____
- 12) _____



RSA Field Considerations

Pedestrian Facilities

- Sidewalk - width, slope, condition, drainage, obstruction
- Bus shelter - wheelchair access, boarding area
- Shared use path - width, slope, detectable warning surface

Pedestrian Crossings

- Crosswalks - marked crosswalk, striping, width
- Curb ramps - width, slope, orientation, detectable warning surface, wheelchair accessible grade
- Pedestrian signals - push button height, reach distance
- Crossing time
- Signage
- Sight distance
- Pavement marking
- Refuge island - width, slope, detectable warning surface

Pedestrian Accommodations

- Illumination
- Amenities - benches, trash receptacles

Bicycle Accommodations

- Bicycle facility / design
- Separation from traffic
- Roadway speed limit
- Traffic volume
- Truck / heavy vehicle %
- On-street parking conflict
- Pedestrian conflict
- Visibility
- Bicycle signage / marking
- Shared lane width
- Shoulder condition / width
- Pavement condition
- Debris

Road Facilities

- Access point
- Drainage
- Taper / lane shift
- Roadside clear zone / slope
- Guide rail / barrier
- Capacity issue
- Curbing

Road Surface Condition

- Pavement - roughness or rutting, potholes, loose material
- Edge drop-off
- Drainage

Intersections

- Geometry
- Sight distance
- Traffic control device
- Turning vehicle storage
- Through vehicle bypass width

Signals

- Visibility
- Sight distance
- Operation
- Equipment placement
- Lane capacity

Signage

- MUTCD complaint
- Visibility / placement
- Retro-reflectivity
- Clear / consistent messaging

Pavement Markings

- MUTCD compliant
- Visibility
- Condition
- Snow storage
- Edgeline

Driver Behavior

- Speed limit compliance
- Safe passing
- Distraction
- Unaware of pedestrians / cyclists
- Sight distance

Miscellaneous

- Landscaping / vegetation
- Seasonal events
- Weather impacts

Appendix C – Road Counts

For Project:

Project Notes:

Location/Name:

Report Generated:

Speed Intervals

Time Intervals

Traffic Report From

85th Percentile Speed

85th Percentile Vehicles

Prospect #69

69 Prospect

Southbound

10/23/2024

9:32:55 AM

1 MPH

Instant

10/17/2024

12:00:00 PM

through

10/23/2024

7:59:59 AM

37 MPH

27038

Total Vehicles

AADT:

31810

5453

Volumes -

weekly counts

Time	5 Day	7 Day
Average Daily	4270	4544
AM Peak	11:00 AM361	376
PM Peak	4:00 PM471	447

Speed

Speed Limit:

85th Percentile Speed:

50th Percentile Speed:

10 MPH Pace Interval:

Average Speed:

30

37

32

27.0 MPH

to

37.0 MPH

32.48

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Count over limit	3577	3641	309	2314	4155	3766	3357
% over limit	65.4	65.3	65.5	63.6	67.1	66.0	70.6
Avg Speeder	35.0	35.2	35.7	35.1	35.2	35.2	35.4
Avg Speed	32.2	32.4	32.5	32.2	32.5	32.5	33.0

Class Counts

	Number	%
VEH_SM	8	0
VEH_MED	30605	96.2
VEH_LG	1197	3.8
[VEH_SM=motorcycle,	VEH_MED = sedan,	VEH_LG = truck]

For Project:

Project Notes:

Location/Name:

Report Generated:

Speed Intervals

Time Intervals

Traffic Report From

85th Percentile Speed

85th Percentile Vehicles

Prospect #69

69 Prospect

Northbound

10/23/2024

9:32:56 AM

1 MPH

Instant

10/17/2024

12:00:00 PM

through

10/23/2024

7:59:59 AM

35 MPH

24455

Total Vehicles

AADT:

28771

4932

Volumes -

weekly counts

	Time	5 Day	7 Day
Average Daily		3859	4110
AM Peak	8:00 AM	320	316
PM Peak	2:00 PM	366	367

Speed

Speed Limit:

85th Percentile Speed:

50th Percentile Speed:

10 MPH Pace Interval:

Average Speed:

30

35

30

25.0 MPH

to

35.0 MPH

30.26

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Count over limit	2392	2390	244	1386	2617	2548	2380
% over limit	48.7	47.3	45.8	43.8	46.4	49.1	55.5
Avg Speeder	34.2	34.1	34.9	33.9	34.2	34.3	34.5
Avg Speed	30.1	30.1	29.7	29.8	30.1	30.3	31.1

Class Counts

	Number	%
VEH_SM	4	0
VEH_MED	27837	96.8
VEH_LG	930	3.2
[VEH_SM=motorcycle,	VEH_MED = sedan,	VEH_LG = truck]

For Project:

Project Notes:

Location/Name:

Report Generated:

Speed Intervals

Time Intervals

Traffic Report From

85th Percentile Speed

85th Percentile Vehicles

Prospect Ave (#254)

254 Prospect Ave

Southbound

10/23/2024

9:39:25 AM

1 MPH

Instant

10/17/2024

12:00:00 PM

through

10/23/2024

7:59:59 AM

42 MPH

34208

Total Vehicles

AADT:

40245

6899

Volumes -

weekly counts

Time	5 Day	7 Day
Average Daily	5399	5749
AM Peak	8:00 AM466	431
PM Peak	5:00 PM568	534

Speed

Speed Limit:

85th Percentile Speed:

50th Percentile Speed:

10 MPH Pace Interval:

Average Speed:

30

42

37

31.0 MPH

to

41.0 MPH

36.87

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Count over limit	5994	6299	607	4050	7275	6556	5607
% over limit	89.0	89.9	91.6	88.6	90.7	91.4	92.3
Avg Speeder	37.7	37.9	38.4	37.7	37.9	37.9	38.0
Avg Speed	36.6	36.9	37.5	36.5	36.9	37.0	37.2

Class Counts

	Number	%
VEH_SM	6	0
VEH_MED	39045	97
VEH_LG	1194	3
[VEH_SM=motorcycle,	VEH_MED = sedan,	VEH_LG = truck]

For Project:

Project Notes:

Location/Name:

Report Generated:

Speed Intervals

Time Intervals

Traffic Report From

85th Percentile Speed

85th Percentile Vehicles

Prospect Ave (#254)

254 Prospect Ave

Northbound

10/23/2024

9:39:25 AM

1 MPH

Instant

10/17/2024

12:00:00 PM

through

10/23/2024

7:59:59 AM

41 MPH

28818

Total Vehicles

AADT:

33904

5812

Volumes -

weekly counts

Time	5 Day	7 Day
Average Daily	4501	4843
AM Peak	11:00 AM352	363
PM Peak	5:00 PM462	438

Speed

Speed Limit:

85th Percentile Speed:

50th Percentile Speed:

10 MPH Pace Interval:

Average Speed:

30

41

36

31.0 MPH

to

41.0 MPH

35.92

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Count over limit	4862	5058	414	3223	5715	5254	4620
% over limit	85.8	87.0	85.7	83.0	85.8	86.1	87.3
Avg Speeder	37.2	37.3	38.1	36.8	37.2	37.4	37.5
Avg Speed	35.9	36.1	36.6	35.2	35.9	36.0	36.3

Class Counts

	Number	%
VEH_SM	0	0
VEH_MED	33020	97.4
VEH_LG	884	2.6
[VEH_SM=motorcycle,	VEH_MED = sedan,	VEH_LG = truck]