CITY OF RENSSELAER

WATERFRONT CONNECTIVITY STUDY

APPENDICES

March 2023

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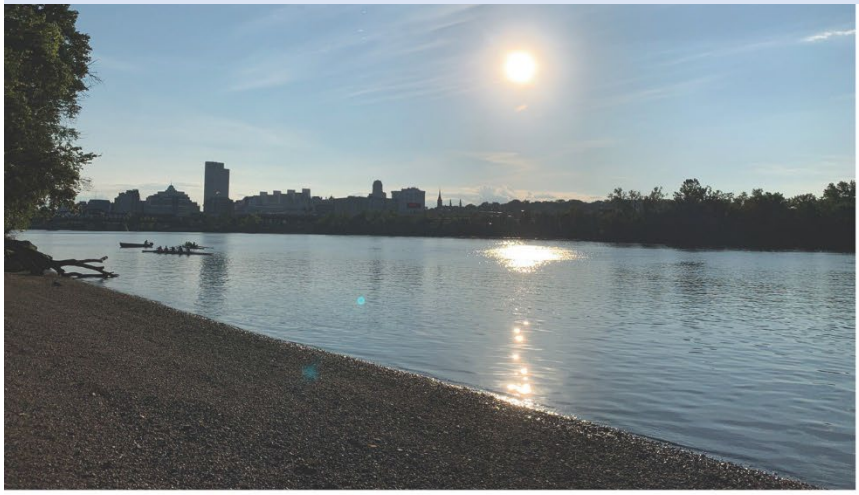
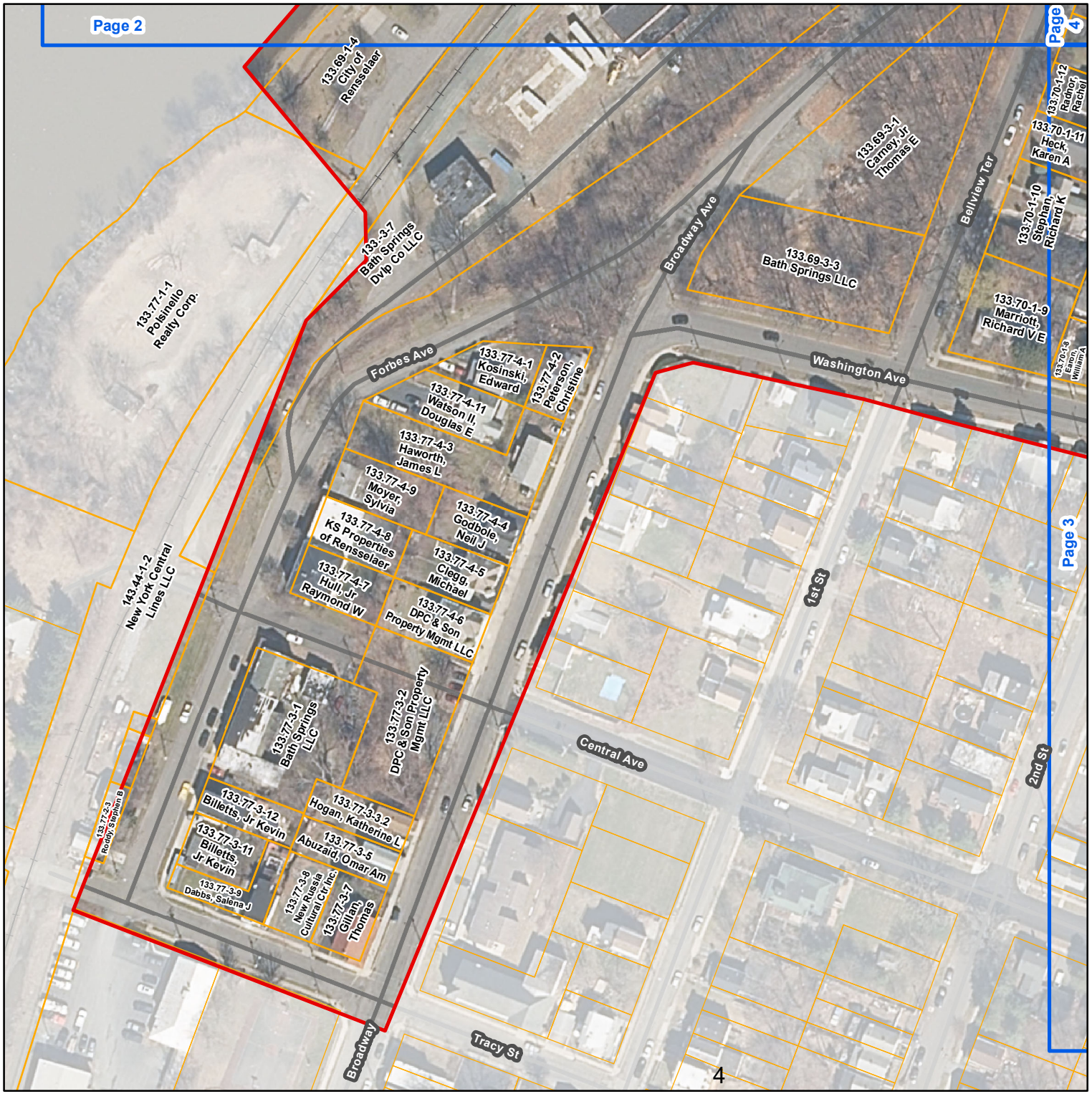


APPENDIX A: PROPERTY OWNERSHIP MAPS



CITY OF RENSSELAER
Waterfront Connectivity Study

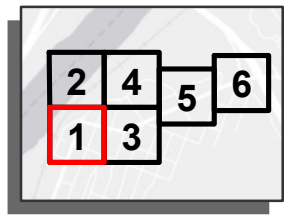
DRAFT

Property Ownership
April 2022

LEGEND

- Study Area
- City/Town Boundary
- County Boundary
- Local Roads
- 2021 Tax Parcels

Page 1



0 50 100 Feet

N

Engineering and Land Surveying, P.C.
1533 Crescent Road - Clifton Park, NY 12065

CITY OF RENSSELAER
Waterfront Connectivity Study

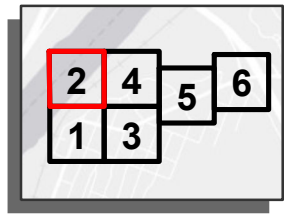
DRAFT

Property Ownership
April 2022

LEGEND

- Study Area
- City/Town Boundary
- County Boundary
- Local Roads
- 2021 Tax Parcels

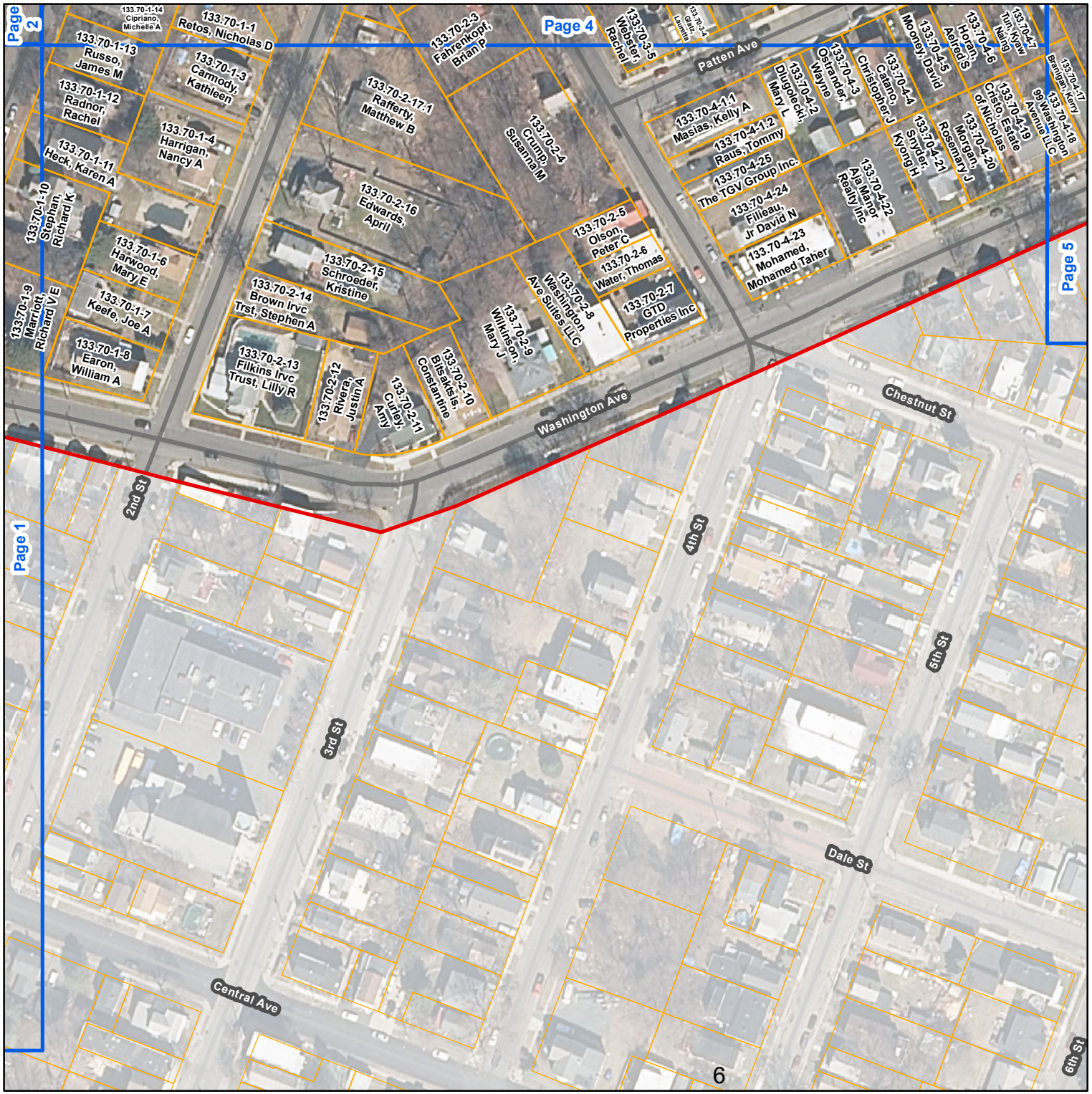
Page 2



0 50 100 Feet

N

Engineering and
Land Surveying, P.C.
1533 Crescent Road - Clifton Park, NY 12065



CITY OF RENSSELAER

Waterfront Connectivity Study

Property Ownership

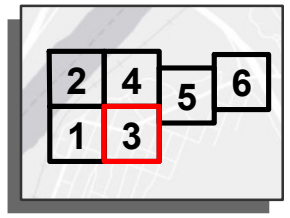
DRAFT

April 2022

LEGEND

- Study Area
- City/Town Boundary
- County Boundary
- Local Roads
- 2021 Tax Parcels

Page 3



0 50 100 Feet

N

Engineering and Land Surveying, P.C.

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CITY OF RENSSELAER
Waterfront Connectivity Study

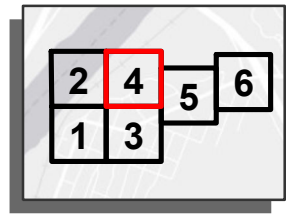
Property Ownership
April 2022

DRAFT

LEGEND

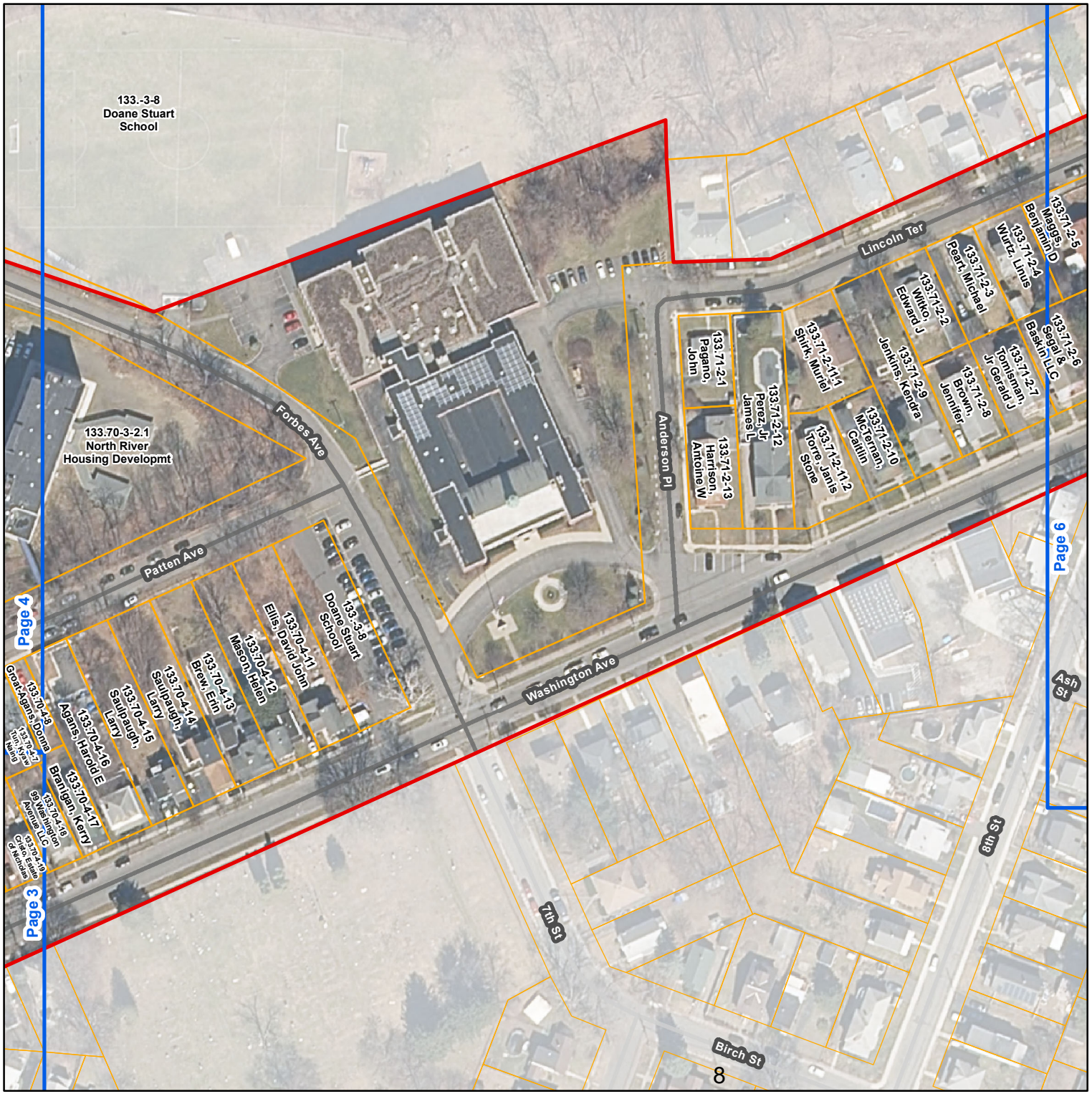
- Study Area
- City/Town Boundary
- County Boundary
- Local Roads
- 2021 Tax Parcels

Page 4



N

Engineering and
Land Surveying, P.C.
1533 Crescent Road - Clifton Park, NY 12065



CITY OF RENSSELAER
Waterfront Connectivity Study

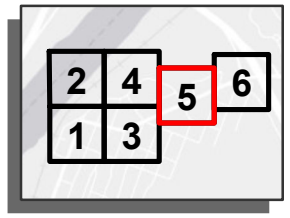
Property Ownership
April 2022

DRAFT

LEGEND

- Study Area
- City/Town Boundary
- County Boundary
- Local Roads
- 2021 Tax Parcels

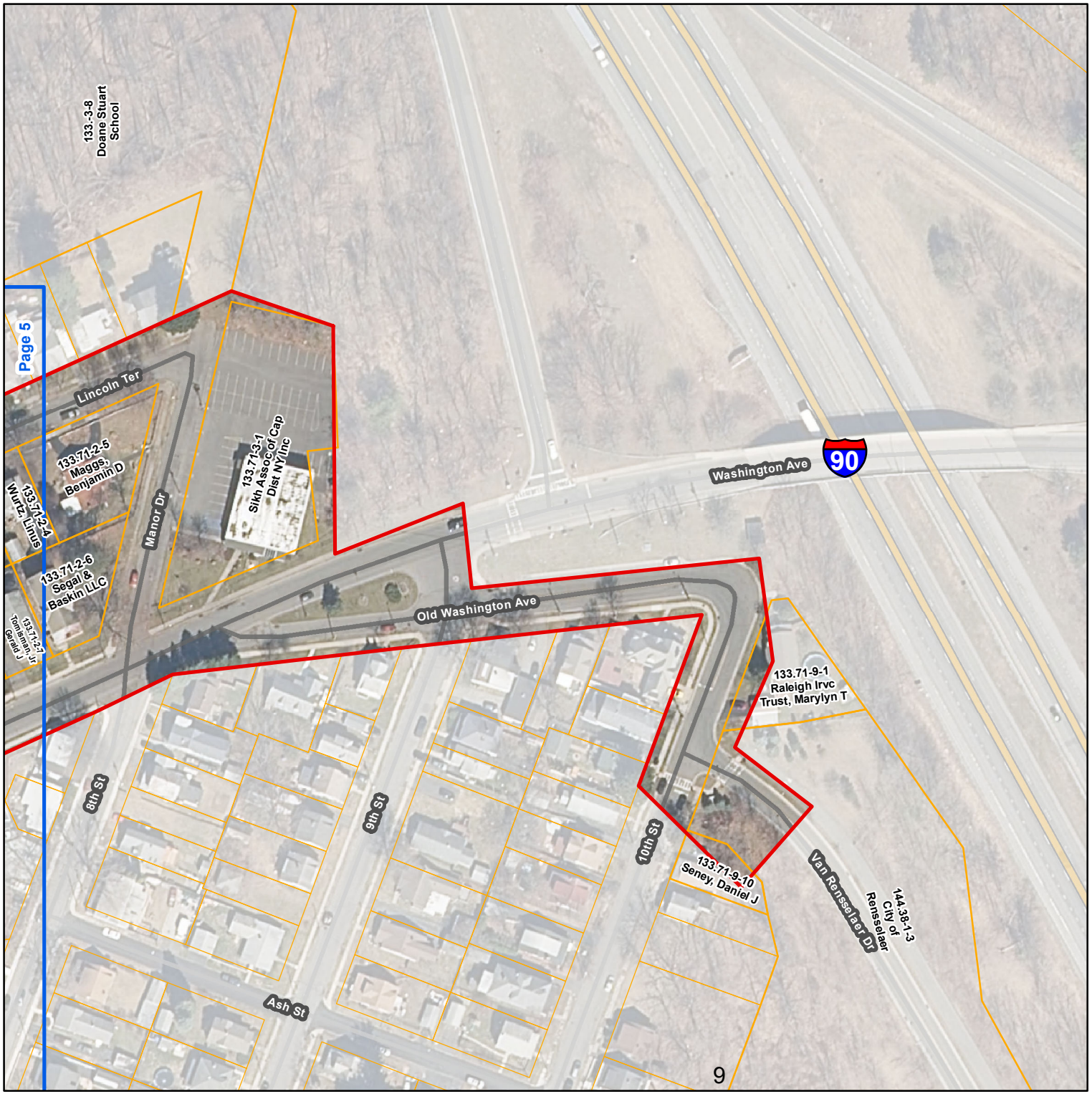
Page 5



0 50 100 Feet

N

Engineering and Land Surveying, P.C.
1533 Crescent Road - Clifton Park, NY 12065



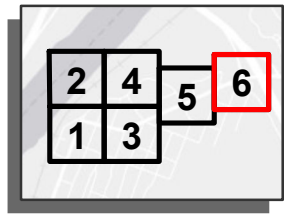
CITY OF RENSSELAER
Waterfront Connectivity Study

Property Ownership
April 2022

DRAFT

LEGEND
- Study Area
- City/Town Boundary
- County Boundary
- Interstates
- Local Roads
- 2021 Tax Parcels

Page 6



0 50 100 Feet

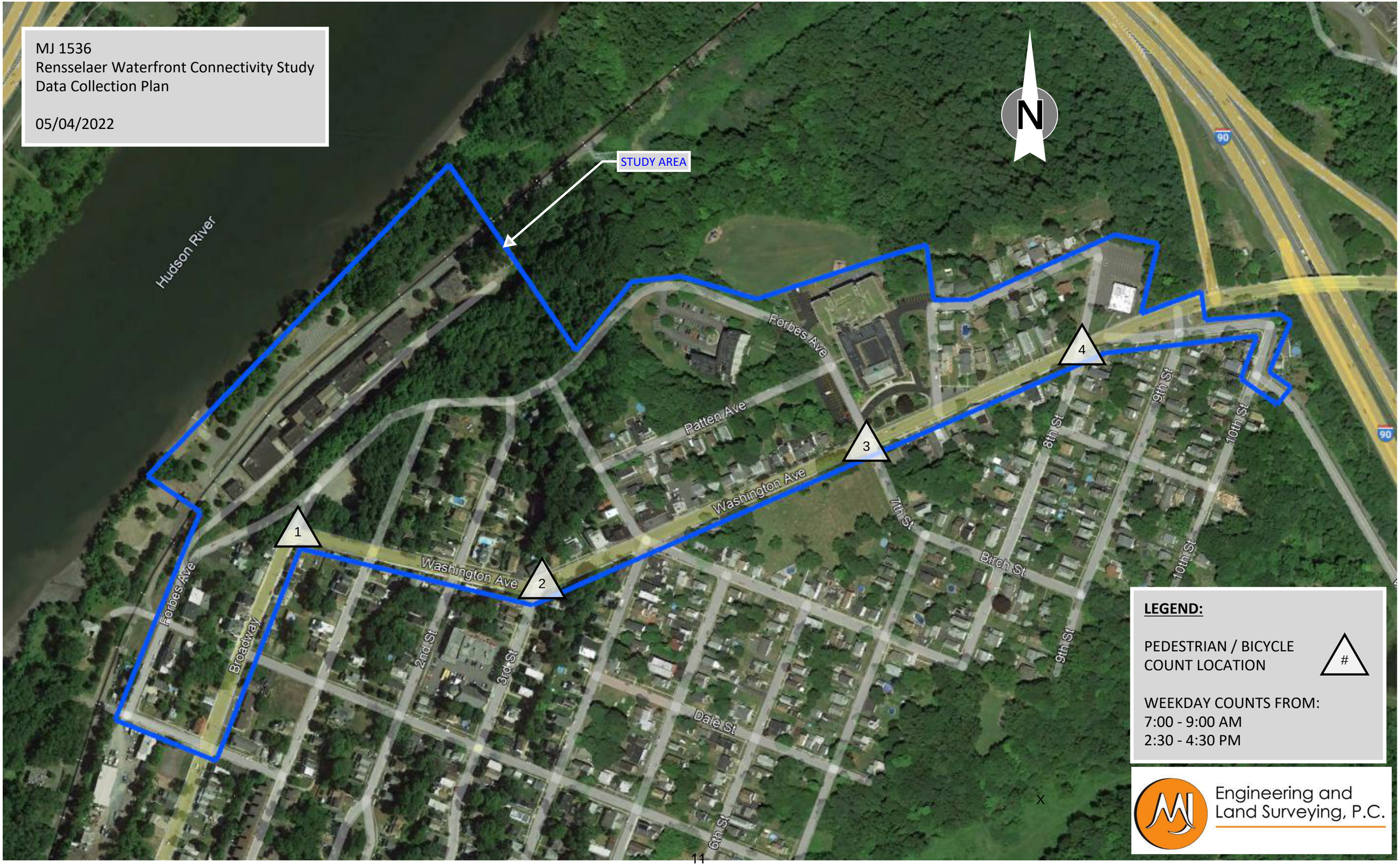
N

Engineering and Land Surveying, P.C.
1533 Crescent Road - Clifton Park, NY 12065

APPENDIX B: PEDESTRIAN COUNT DATA COLLECTION

MJ 1536
Rensselaer Waterfront Connectivity Study
Data Collection Plan

05/04/2022



LEGEND:

PEDESTRIAN / BICYCLE COUNT LOCATION — #

WEEKDAY COUNTS FROM:
7:00 - 9:00 AM
2:30 - 4:30 PM

Engineering and Land Surveying, P.C.

WASHINGTON

	PED	BIKE	PED	BIKE
0-15			60-75	
15-30			75-90	
30-45			90-105	1
45-60	1		105-120	

UPHILL →

	PED	BIKE	PED	BIKE
0-15			60-75	1
15-30			75-90	
30-45	1		90-105	
45-60	1		105-120	

← DOWNHILL

	PED	BIKE	PED	BIKE
0-15			60-75	
15-30			75-90	
30-45			90-105	
45-60			105-120	

↓

	PED	BIKE	PED	BIKE
0-15			60-75	1
15-30			75-90	
30-45			90-105	
45-60			105-120	

↓

AWAY

	PED	BIKE	PED	BIKE
0-15			60-75	
15-30			75-90	
30-45			90-105	
45-60			105-120	

↑

	PED	BIKE	PED	BIKE
0-15	1111		60-75	
15-30			75-90	
30-45	11		90-105	
45-60			105-120	

→

	PED	BIKE	PED	BIKE
0-15			60-75	
15-30			75-90	
30-45			90-105	
45-60			105-120	

←

	PED	BIKE	PED	BIKE
0-15			60-75	
15-30			75-90	
30-45			90-105	
45-60			105-120	

JOB: RENSS LINKAGE
DATE: 5/31 TIME OF DAY: 7-9AM
RECORDER: KEVIN VICS
INTERSECTION: WASH/BWAY

M.J. Engineering and Land Surveying, P.C.

PEDESTRIAN MOVEMENTS

	PED	BIKE	PED	BIKE
0-15			60-75	
15-30			75-90	
30-45			90-105	
45-60			105-120	

→

	PED	BIKE	PED	BIKE
0-15			60-75	
15-30			75-90	
30-45			90-105	
45-60			105-120	

←

Even

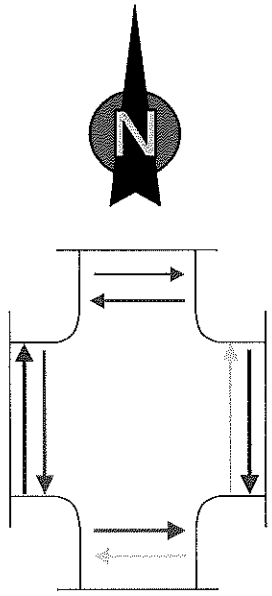
	PED	BIKE	PED	BIKE
0-15	0	0	60-75	0
15-30	0	0	75-90	0
30-45	III	0	90-105	0
45-60	I	0	105-120	0

↓

Odd

	PED	BIKE	PED	BIKE
0-15	0	0	60-75	0
15-30	0	0	75-90	0
30-45	I	0	90-105	0
45-60	II	0	105-120	0

↓



	PED	BIKE	PED	BIKE
0-15	0	0	60-75	0
15-30	I	0	75-90	0
30-45	III	0	90-105	0
45-60	0	0	105-120	0

↑

	PED	BIKE	PED	BIKE
0-15	0	0	60-75	0
15-30	0	0	75-90	0
30-45	0	0	90-105	0
45-60	0	0	105-120	0

↑

Third

	PED	BIKE	PED	BIKE
0-15	0	0	60-75	0
15-30	II	0	75-90	0
30-45	IIII	0	90-105	0
45-60	0	0	105-120	0

→

	PED	BIKE	PED	BIKE
0-15	0	0	60-75	0
15-30	0	0	75-90	0
30-45	III	0	90-105	0
45-60	0	0	105-120	II

←

JOB:

DATE: 5/31/22 TIME OF DAY: 7-9

RECORDER: Andrew Kretzschmar

INTERSECTION: Washington & Third

M.J. Engineering and Land Surveying, P.C.

PEDESTRIAN MOVEMENTS

7-7:15 (1)

7:15-7:30 (2)

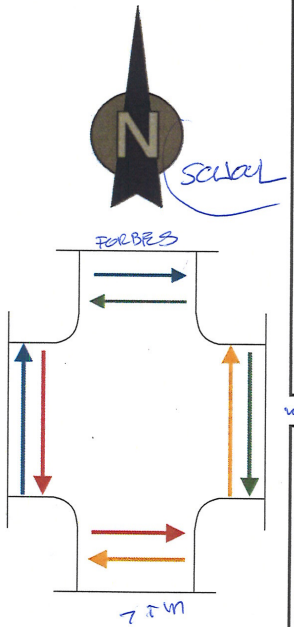
7:30-7:45 (3)

7:45-8:00 (4)

	PED		BIKE		PED		BIKE
0-15				60-75	//// //// ///		
15-30	//// ///			75-90	//// /		
30-45	////			90-105	//		
45-60	//// /			105-120			

	PED		BIKE		PED		BIKE
0-15				60-75	/		
15-30				75-90	/		
30-45	///			90-105	/		
45-60	/			105-120	/		

FORBES



	PED		BIKE		PED		BIKE
0-15				60-75			
15-30				75-90			
30-45				90-105			
45-60				105-120			

WASHINGTON

	PED		BIKE		PED		BIKE
0-15				60-75			
15-30				75-90			
30-45				90-105			
45-60				105-120			

WASHINGTON

	PED		BIKE		PED		BIKE
0-15				60-75			
15-30				75-90			
30-45				90-105			
45-60				105-120			

7TH ST

	PED		BIKE		PED		BIKE
0-15				60-75	/		
15-30				75-90			
30-45				90-105			
45-60	////			105-120			

	PED		BIKE		PED		BIKE
0-15				60-75	/		
15-30				75-90			
30-45	///			90-105			
45-60				105-120			

JOB: 1536

DATE: 05-31-22 TIME OF DAY: 7:00-9:00 AM

RECORDER: N. GIBSON

INTERSECTION: #3 WASH. / 7TH ST / FORBES

M.J. Engineering and Land Surveying, P.C.
1533 Crescent Road, Clifton Park, NY 12065
Phone: 518.371.0799 / Fax: 518.371.0822
www.mjels.com

PEDESTRIAN MOVEMENTS

	PED	BIKE		PED	BIKE
0-15			60-75		
15-30			75-90	1	
30-45			90-105		
45-60	11		105-120		

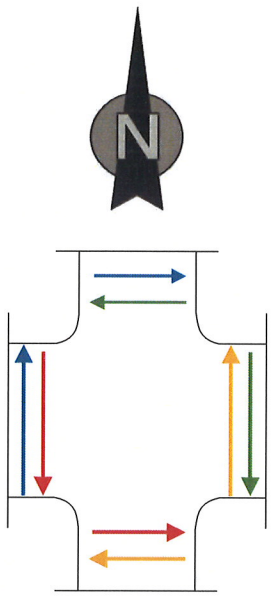
→

	PED	BIKE		PED	BIKE
0-15			60-75	1	
15-30			75-90	1	
30-45	11		90-105		
45-60			105-120		

←

	PED	BIKE		PED	BIKE
0-15			60-75	11	
15-30			75-90		
30-45	1		90-105		
45-60			105-120		

↓



	PED	BIKE		PED	BIKE
0-15			60-75		
15-30			75-90		
30-45			90-105		
45-60			105-120		

↓

	PED	BIKE		PED	BIKE
0-15			60-75		
15-30			75-90	\	
30-45			90-105		
45-60	11		105-120	/	

↑

	PED	BIKE		PED	BIKE
0-15			60-75		
15-30			75-90		
30-45			90-105		
45-60			105-120		

↑

	PED	BIKE		PED	BIKE
0-15			60-75	11	
15-30	11		75-90		
30-45			90-105		
45-60	1111		105-120		

→

	PED	BIKE		PED	BIKE
0-15			60-75		
15-30	1		75-90		
30-45			90-105		
45-60			105-120		

←

JOB:

DATE: 5/31 TIME OF DAY: 7-9 A.M.

RECORDER: Jesse O'Dell

INTERSECTION: #4 8th/Washington

M.J. Engineering and Land Surveying, P.C.
1533 Crescent Road, Clifton Park, NY 12065
Phone: 518.371.0799 / Fax: 518.371.0822
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PEDESTRIAN MOVEMENTS

WASH

	PED	BIKE	PED	BIKE
0-15		1	60-75 1	
15-30			75-90	
30-45		1	90-105	
45-60	1		105-120	

UP →

	PED	BIKE	PED	BIKE
0-15			60-75	
15-30	1		75-90	
30-45	1		90-105 1	
45-60	1		105-120	

← DOWN

	PED	BIKE	PED	BIKE
0-15			60-75	
15-30			75-90	
30-45			90-105	
45-60			105-120	

↓

N

	PED	BIKE	PED	BIKE
0-15			60-75	
15-30 1			75-90	
30-45 111			90-105 1	11
45-60 1		1	105-120	

BWAY

	PED	BIKE	PED	BIKE
0-15			60-75	
15-30			75-90	
30-45			90-105	
45-60			105-120	

↑

	PED	BIKE	PED	BIKE
0-15 ZZ		1	60-75 1	
15-30			75-90 111	
30-45 11			90-105 111	
45-60 1			105-120	11

→

	PED	BIKE	PED	BIKE
0-15			60-75	
15-30			75-90	
30-45			90-105	
45-60			105-120	

←

	PED	BIKE	PED	BIKE
0-15			60-75	
15-30			75-90	
30-45			90-105	
45-60			105-120	

JOB: RENSS LINKAGE
DATE: 5/31 TIME OF DAY: 930-430
RECORDER: ketura-VID
INTERSECTION: WASH/BWAY

M.J. Engineering and Land Surveying, P.C.

PEDESTRIAN MOVEMENTS

	PED	BIKE	PED	BIKE
0-15			60-75	
15-30			75-90	
30-45			90-105	
45-60			105-120	

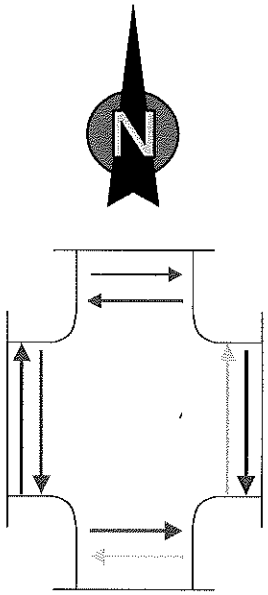
→

	PED	BIKE	PED	BIKE
0-15			60-75	
15-30			75-90	
30-45			90-105	
45-60			105-120	

←

	PED	BIKE	PED	BIKE
0-15	0	0	60-75	0
15-30	0	0	75-90	0
30-45	0	0	90-105	1
45-60	0	0	105-120	

↓



	PED	BIKE	PED	BIKE
0-15	0	0	60-75	0
15-30	0	0	75-90	1
30-45	0	0	90-105	3
45-60	0	0	105-120	

↓

	PED	BIKE	PED	BIKE
0-15	1	0	60-75	0
15-30	0	0	75-90	0
30-45	1	0	90-105	0
45-60	1	0	105-120	

↑

	PED	BIKE	PED	BIKE
0-15	0	0	60-75	0
15-30	0	0	75-90	0
30-45	0	0	90-105	1
45-60	0	0	105-120	1

↑

	PED	BIKE	PED	BIKE
0-15	2	1	60-75	0
15-30	0	0	75-90	0
30-45	1	0	90-105	0
45-60	0	0	105-120	

→

	PED	BIKE	PED	BIKE
0-15	2	1	60-75	0
15-30	0	0	75-90	2
30-45	0	0	90-105	1
45-60	0	0	105-120	1

←

	PED	BIKE	PED	BIKE
0-15	0	0	60-75	3
15-30	2	0	75-90	4
30-45	1	0	90-105	4
45-60	2	0	105-120	1

JOB:

DATE: 9/3/22 TIME OF DAY: 2:30 - 4:30

RECORDER: Andrew Ewald Schreiber

INTERSECTION: West Third

M.J. Engineering and Land Surveying, P.C.

PEDESTRIAN MOVEMENTS

2:30 - 2:45

245 - 300

300 - 315

315 - 330

	PED		BIKE		PED		BIKE
0-15				60-75			
15-30				75-90			
30-45				90-105			
45-60				105-120			

330 - 345

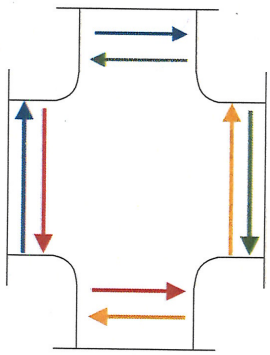
345 - 400

400 415

415 - 430

	PED		BIKE		PED		BIKE
0-15				60-75			
15-30				75-90			
30-45				90-105			
45-60				105-120			

FORBES



	PED		BIKE		PED		BIKE
0-15				60-75			
15-30				75-90			
30-45				90-105			
45-60				105-120			

WASHINGTON

	PED		BIKE		PED		BIKE
0-15				60-75			
15-30				75-90			
30-45				90-105			
45-60				105-120			

WASHINGTON

	PED		BIKE		PED		BIKE
0-15				60-75			
15-30				75-90			
30-45				90-105			
45-60				105-120			

7TH

	PED		BIKE		PED		BIKE
0-15				60-75			
15-30				75-90			
30-45				90-105			
45-60				105-120			

	PED		BIKE		PED		BIKE
0-15				60-75			
15-30				75-90			
30-45				90-105			
45-60				105-120			

JOB: 1536

DATE: 05-31-22 TIME OF DAY: 2:30 - 4:30

RECORDER: N. GIBSON

INTERSECTION: # 3 - WASHINGTON / 7TH ST. / FORBES

M.J. Engineering and Land Surveying, P.C.

5553 Crescent Road, Clifton Park, NY 12065
Phone: 518.371.0799 / Fax: 518.371.0822
www.mjeli.com

PEDESTRIAN MOVEMENTS

	PED	BIKE		PED	BIKE
0-15			60-75		
15-30			75-90		
30-45			90-105		
45-60			105-120		

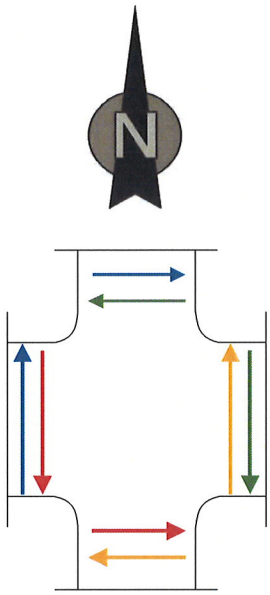
→

	PED	BIKE		PED	BIKE
0-15	11		60-75		
15-30			75-90		
30-45			90-105		
45-60	11		105-120		

←

	PED	BIKE		PED	BIKE
0-15			60-75		
15-30			75-90		
30-45			90-105		
45-60			105-120		

↓



	PED	BIKE		PED	BIKE
0-15			60-75		
15-30			75-90		
30-45			90-105		
45-60			105-120		1

↓

	PED	BIKE		PED	BIKE
0-15			60-75		
15-30			75-90		
30-45			90-105		
45-60	1		105-120		

↑

	PED	BIKE		PED	BIKE
0-15			60-75		
15-30			75-90		
30-45			90-105		
45-60			105-120		

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	PED	BIKE		PED	BIKE
0-15		1	60-75		
15-30			75-90		
30-45		111	90-105		
45-60	11		105-120		

→

	PED	BIKE		PED	BIKE
0-15	1111		60-75	1111	
15-30	1111		75-90		
30-45	1111 11	11	90-105	11	
45-60	1		105-120		1

←

JOB:

DATE: 5/31/22 TIME OF DAY: 2:30 - 4:30

RECORDER: Jesse O'Dell

INTERSECTION: #4 8th / Washington

M.J. Engineering and Land Surveying, P.C.
1533 Crescent Road, Clifton Park, NY 12065
Phone: 518.371.0799 / Fax: 518.371.0822
www.mjeng.com

PEDESTRIAN MOVEMENTS

APPENDIX C: CDTA RIDERSHIP DATA

CITY OF RENSSELAER
Waterfront Connectivity Study

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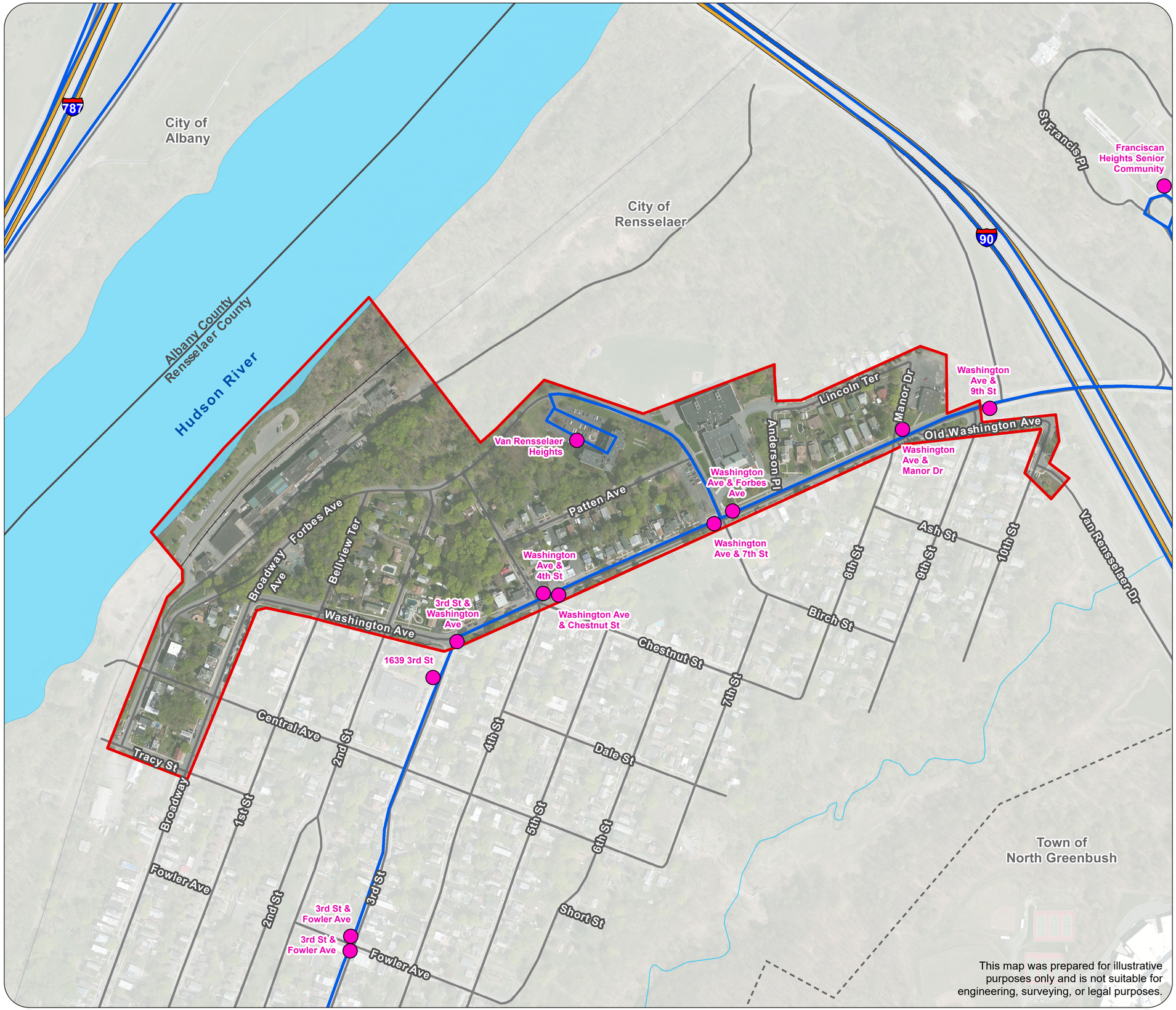
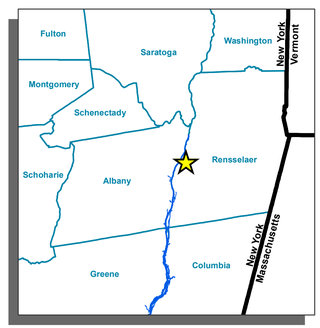
Transportation
April 2022



This map was prepared for illustrative purposes only and is not suitable for engineering, surveying, or legal purposes.

LEGEND

- Study Area
- City/Town Boundary
- County Boundary
- Railroad
- Interstates
- Local Roads
- River/Stream
- Hudson River
- CDTA Bus Route
- Active CDTA Bus Stop



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Sources:
Esri, NYS ITS, City of Rensselaer, Rensselaer County

0 200 400 Feet

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1533 Crescent Road - Clifton Park, NY 12065

CDTA Ridership in Rensselaer Waterfront Study Area
Date Range: 9/1/2019-1/31/2020 vs. 9/1/2021-1/31/2022
Data Source: INIT MOBILEStatistics

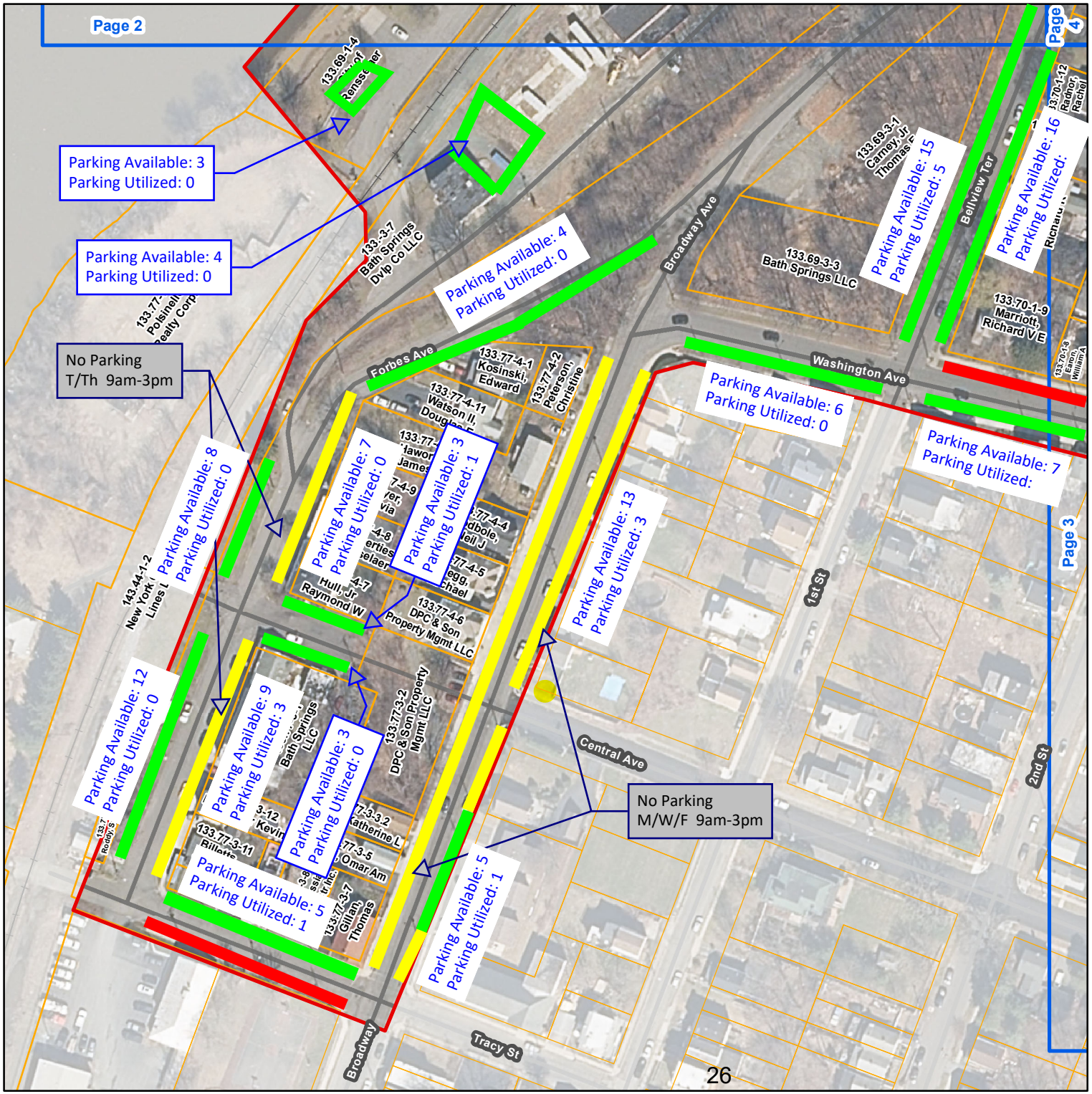
Stop	Route No.	Direction	Stop no	2019-1
				Daily boardings
Washington Ave & 7th St	214	EB	10746	4.1
Washington Ave & 9th St	214	EB	10751	2.9
Washington Ave & Manor Dr	214	WB	10782	4.1
Washington Ave & Forbes Ave	214	WB	10783	11.5
Washington Ave & 4th St	214	WB	10785	0.8
3rd St & Washington Ave	214	EB	11406	5.4
Washington Ave & Chestnut St	214	EB	11407	2.9

20 (pre-shutdown)		2021-2022			Change (Count)		
Daily alightings	Total activity	Daily boardings	Daily alightings	Total activity	Daily boardings	Daily alightings	Total activity
2.8	6.9	4.1	4.5	8.6	0	-2	-2
7.8	10.7	1.3	3.4	4.7	2	4	6
2.5	6.6	4.1	2.4	6.5	0	0	0
9.9	21.4	4.8	5.0	9.9	7	5	12
3.0	3.8	8.2	6.0	14.2	-7	-3	-10
7.0	12.4	2.9	4.2	7.1	3	3	5
0.9	3.9	7.0	7.3	14.3	-4	-6	-10

Change (%)			Notes
Daily boardings	Daily alightings	Total activity	
0%	58%	24%	
-56%	-56%	-56%	
0%	-1%	-1%	
-58%	-49%	-54%	
903%	99%	269%	
-47%	-39%	-43%	
140%	675%	270%	

APPENDIX D: PARKING UTILIZATION RATE

Parking Inventory										
Street	Segment	Available Spaces*	8/11/22 12PM		8/12/22 8AM		8/15/22 10PM		8/15/22 10PM	
			Utilized Spaces	% Util.	Utilized Spaces	% Util.	Utilized Spaces	% Util.	Utilized Spaces	% Util.
Tracy St	Broadway to Forbes Ave	5	1	20%	1	20%	1	20%	1	20%
Broadway	Tracy St to Washington Ave	38	7	18%	2	5%	7	18%	5	13%
Washington Ave	Broadway to Bellview Tr	6	1	17%	1	17%	0	0%	0	0%
Washington Ave	Bellview Tr to Second St	7	0	0%	0	0%	2	29%	2	29%
Washington Ave	Second St to Fourth St	31	1	3%	1	3%	2	6%	2	6%
Washington Ave	Fourth St to Forbes Ave	32	0	0%	0	0%	5	16%	5	16%
Washington Ave	Forbes Ave to Manor Dr	24	2	8%	0	0%	0	0%	1	4%
Forbes Ave	Tracy St to Washington Ave	24	2	8%	0	0%	7	29%	9	38%
Central Ave Ext.	Forbes Ave to Broadway	6	1	17%	1	17%	2	33%	2	33%
Bellview Tr	Washington Ave to Forbes Ave	31	8	26%	7	23%	6	19%	4	13%
2nd St	Washington Ave to Forbes Ave	27	7	26%	5	19%	8	30%	9	33%
4th St	Washington Ave to Forbes Ave	34	10	29%	14	41%	13	38%	27	79%
Patten Ave	Fourth St to Forbes Ave	45	11	24%	18	40%	13	29%	17	38%
Anderson Pl	Washington Ave to Lincoln Tr	7	1	14%	1	14%	3	43%	2	29%
Lincoln Tr	Anderson Pl to Manor Dr	24	4	17%	11	46%	13	54%	9	38%
Manor Dr	Lincoln Tr to Washington Ave	5	0	0%	1	20%	2	40%	2	40%
Old Washington Ave	Washington Ave to Tenth St	11	2	18%	2	18%	11	100%	5	45%
Tenth St	Old Washington Ave t0 Van Rensselaer Dr	2	1	50%	2	100%	2	100%	2	100%



CITY OF RENSSELAER
Waterfront Connectivity Study

Property Ownership
April 2022

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LEGEND

- NO PARKING / NO STANDING
- PARKING PERMITTED (EXCLUDING DRIVEWAYS)
- PARKING PERMITTED (TIME CONSTRAINTS)

Thursday,
8/11/2022
12:00 PM

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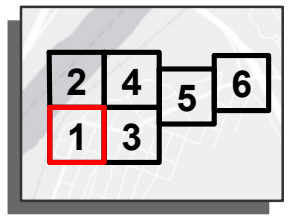

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April 2022

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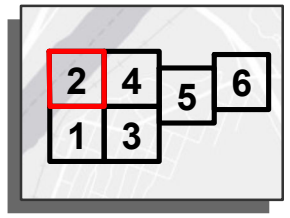

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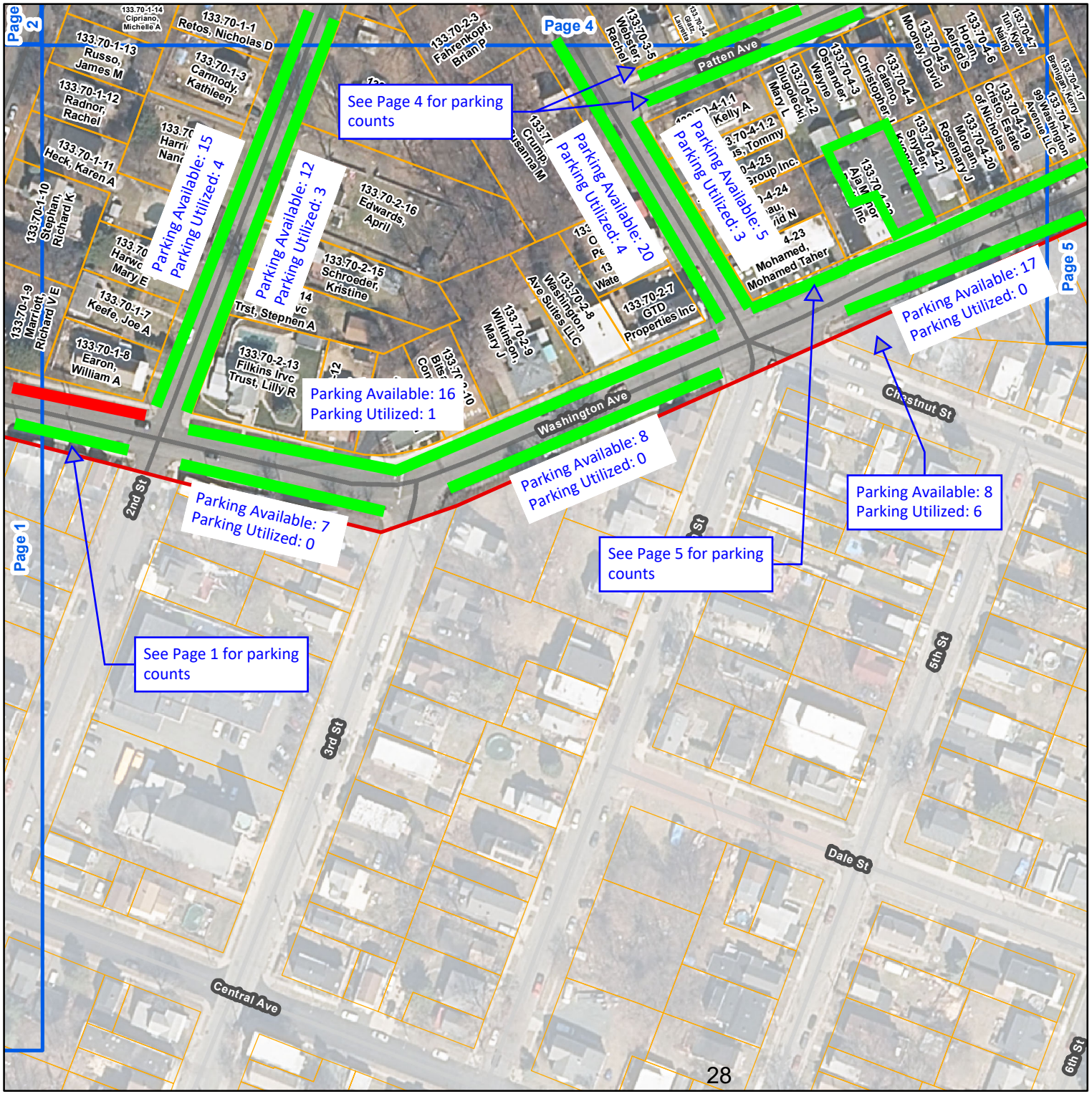

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April 2022

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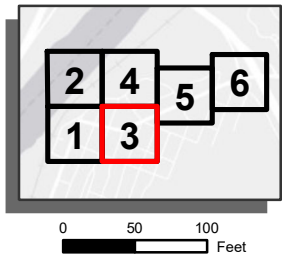

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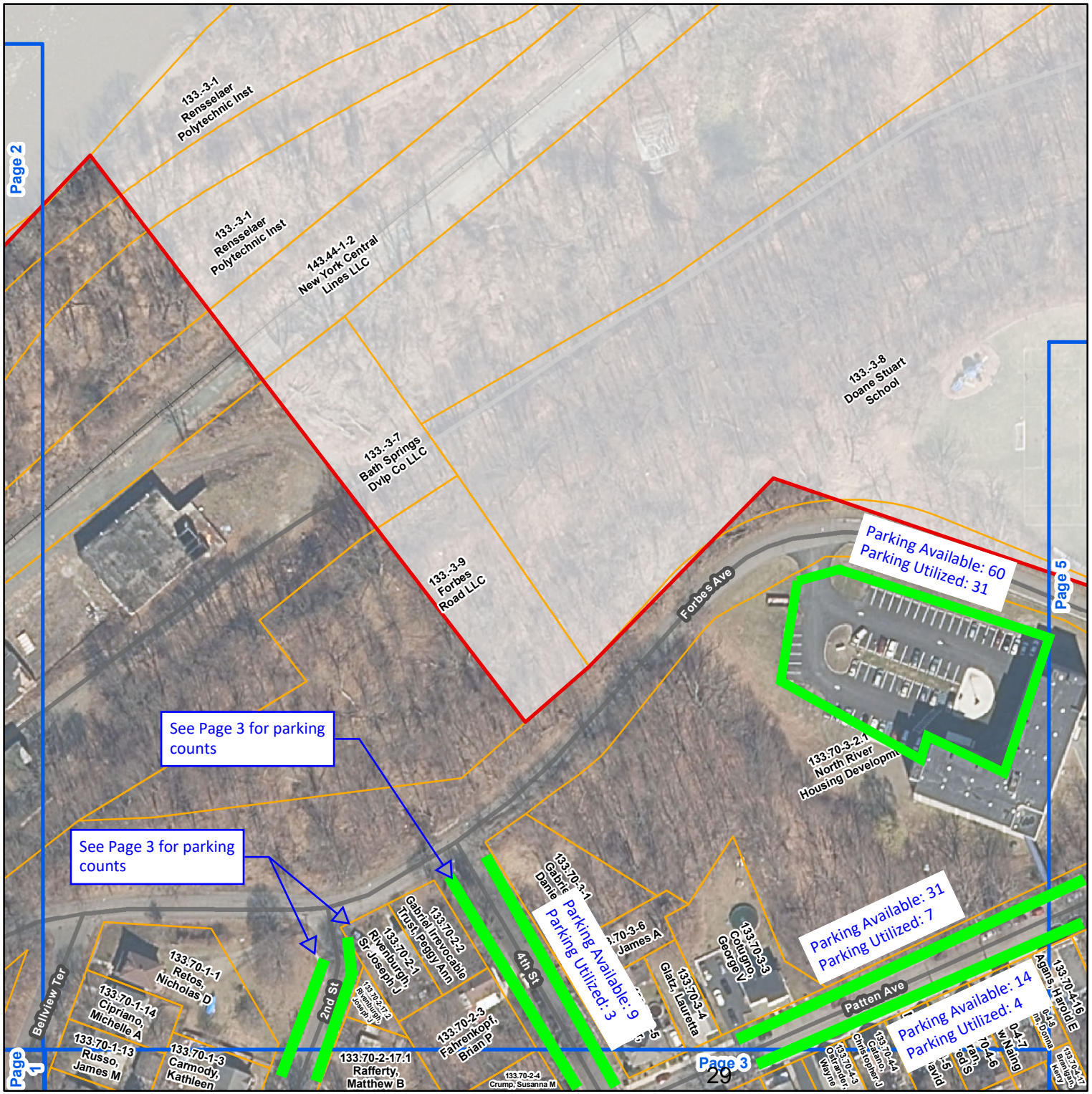

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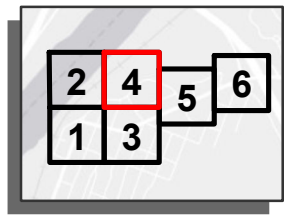

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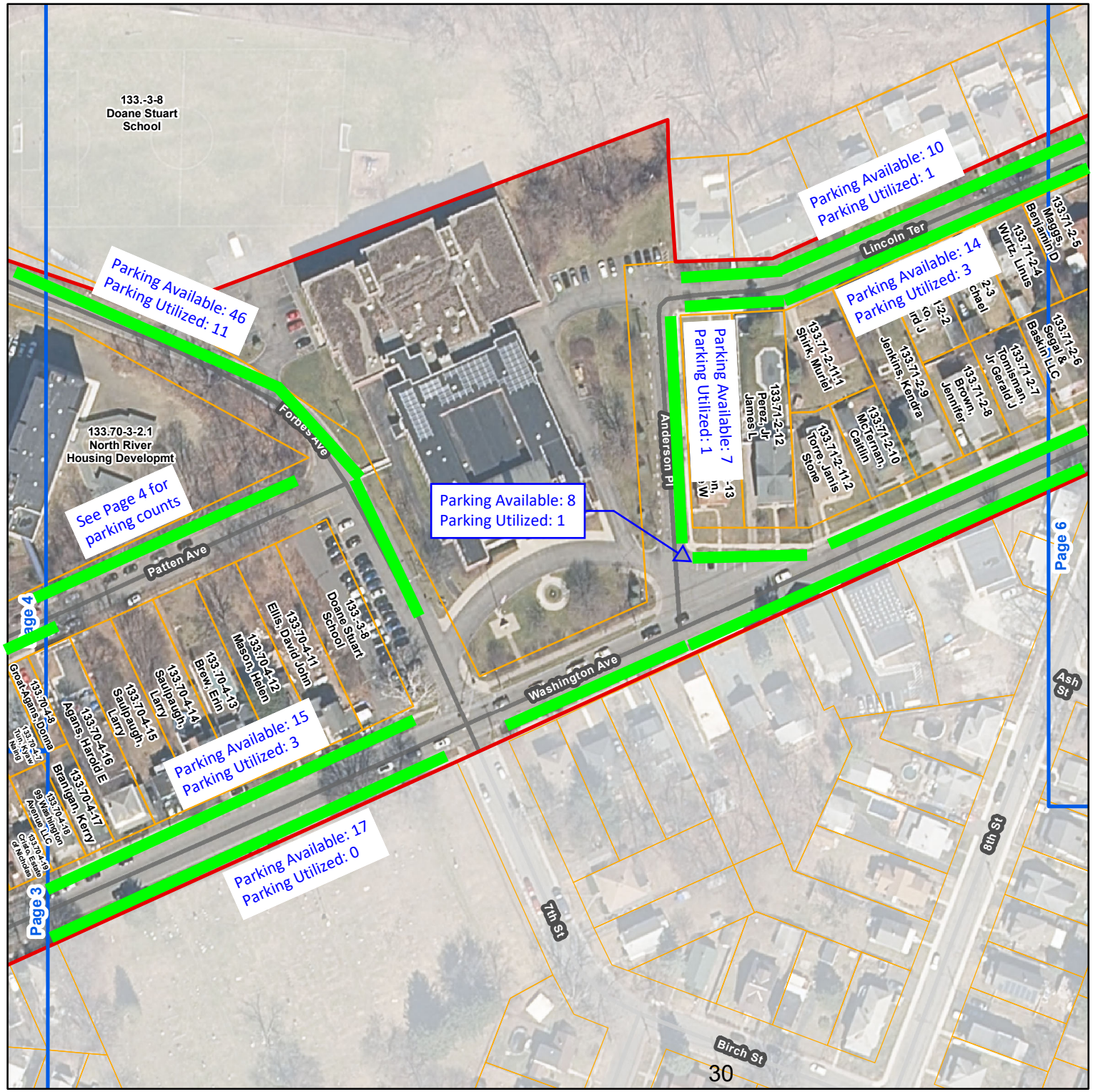

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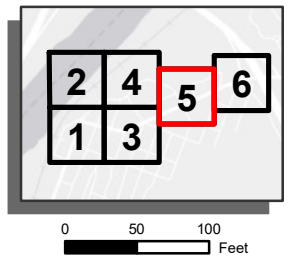

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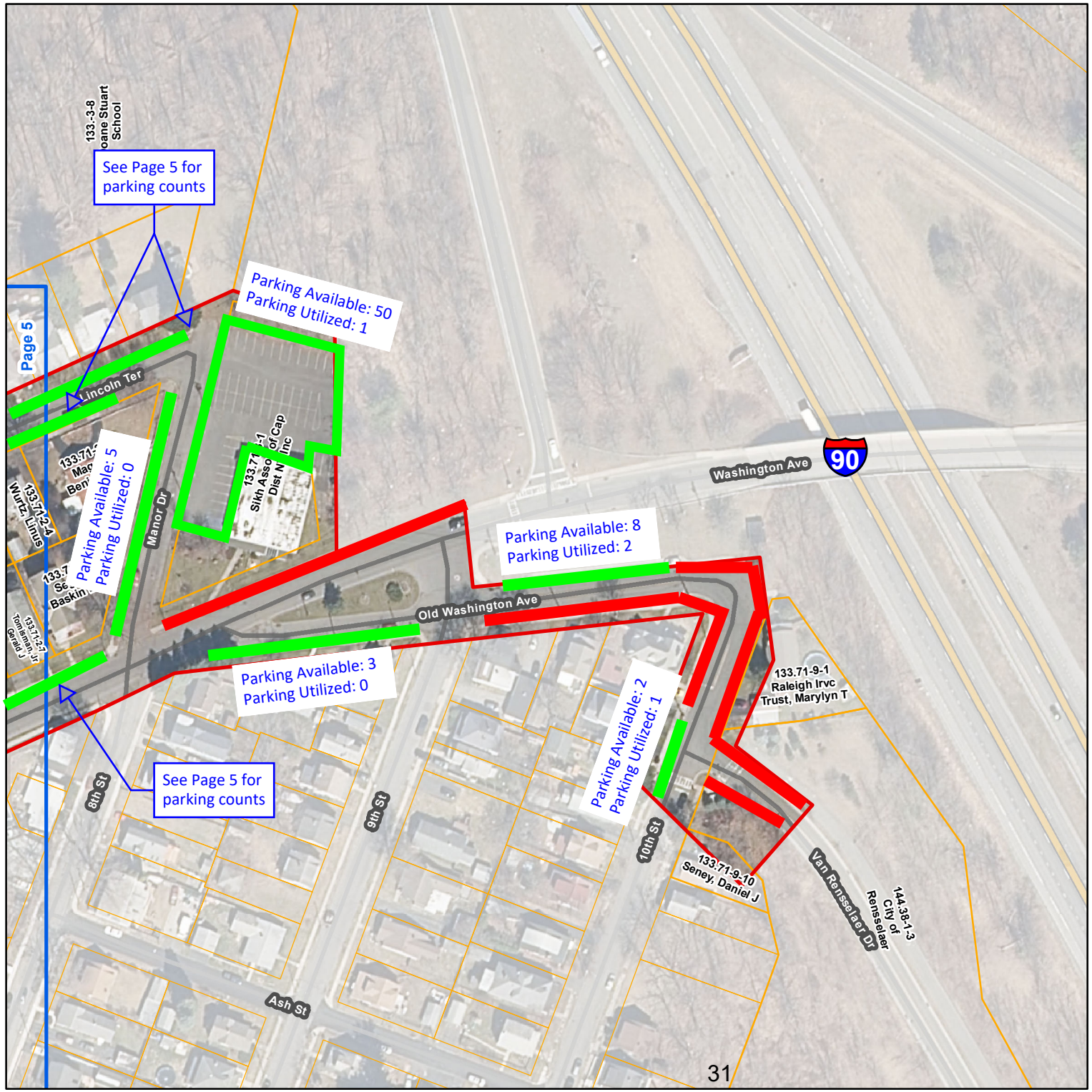

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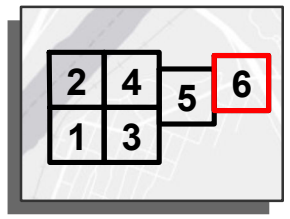

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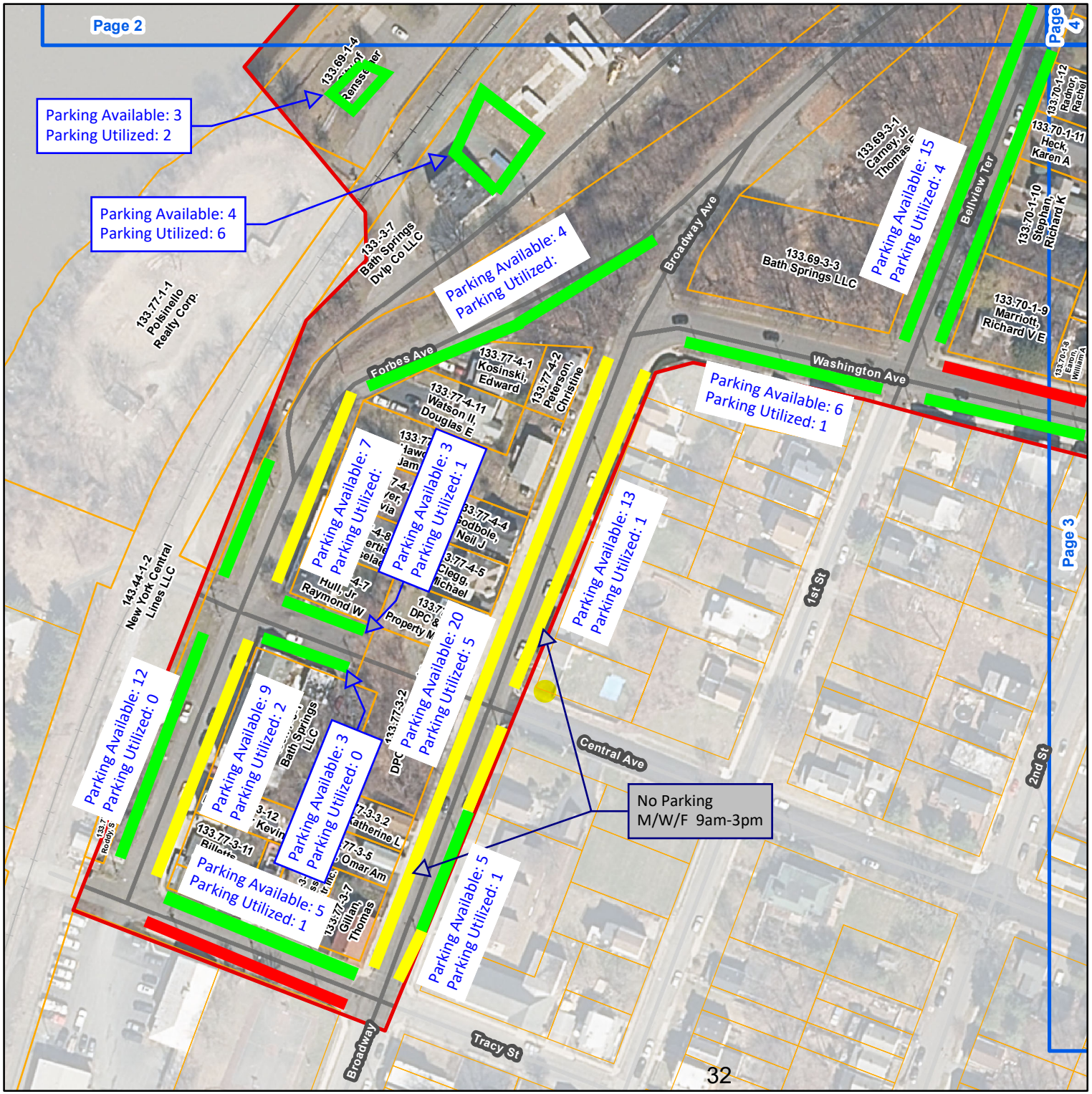

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Property Ownership
April 2022

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8/11/2022
8:00 AM

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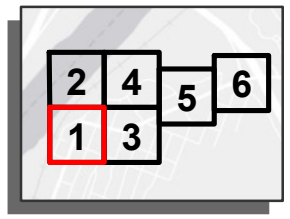

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Property Ownership
April 2022

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Friday,
8/11/2022
8:00 AM

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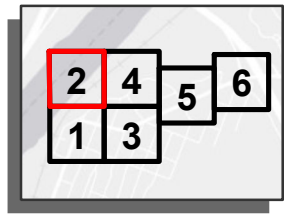

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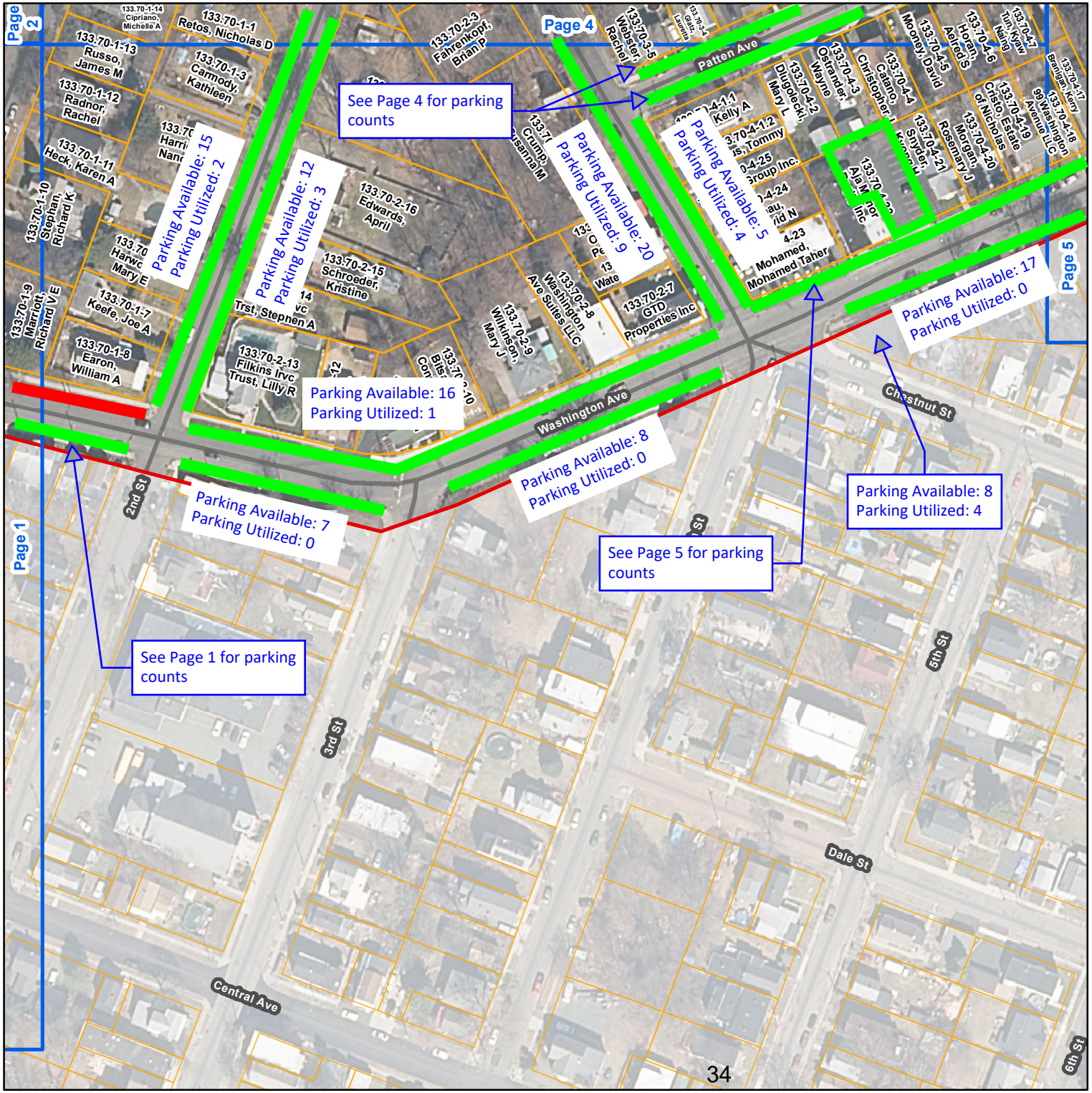

CITY OF RENSSELAER

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April 2022

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Friday, 8/11/2022 8:00 AM

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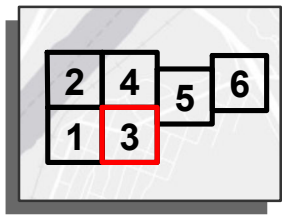

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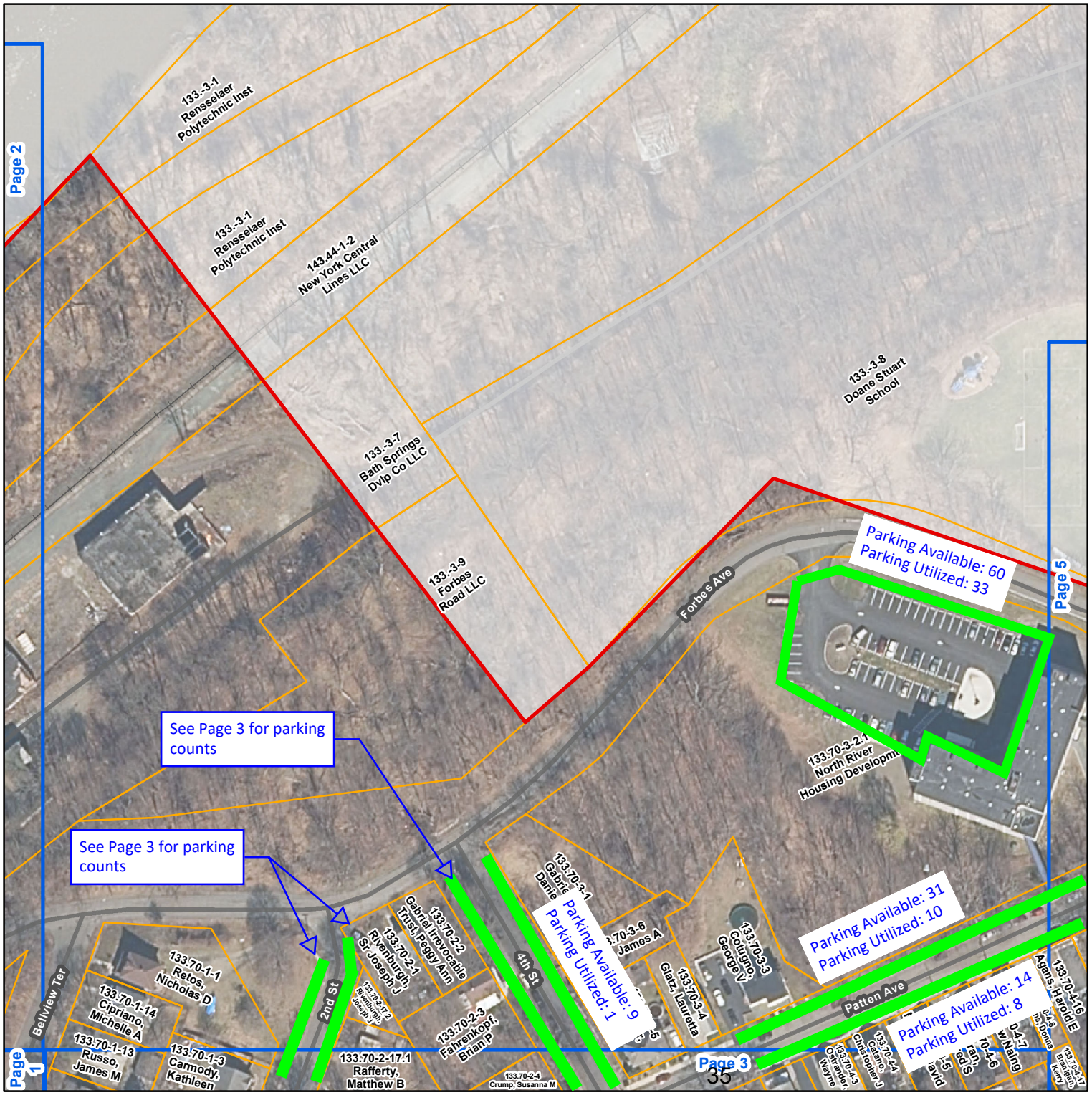

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CITY OF RENSSELAER
Waterfront Connectivity Study

Property Ownership
April 2022

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LEGEND

- NO PARKING / NO STANDING
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Friday,
8/11/2022
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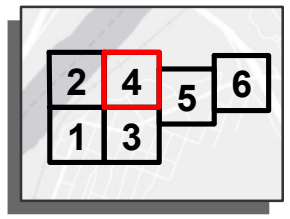

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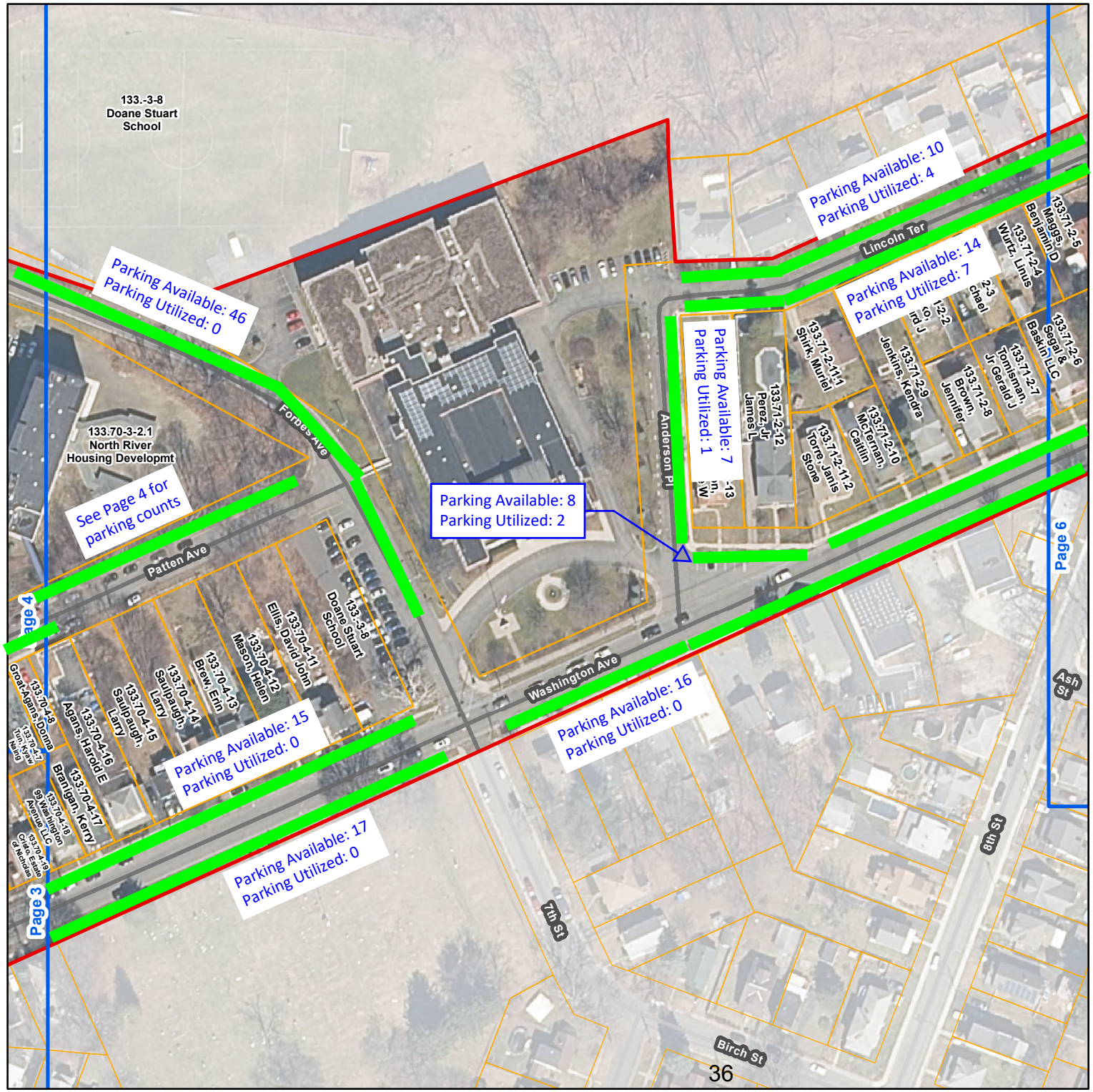

CITY OF RENSSELAER
Waterfront Connectivity Study

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Property Ownership
April 2022

LEGEND

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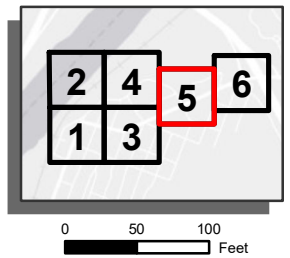

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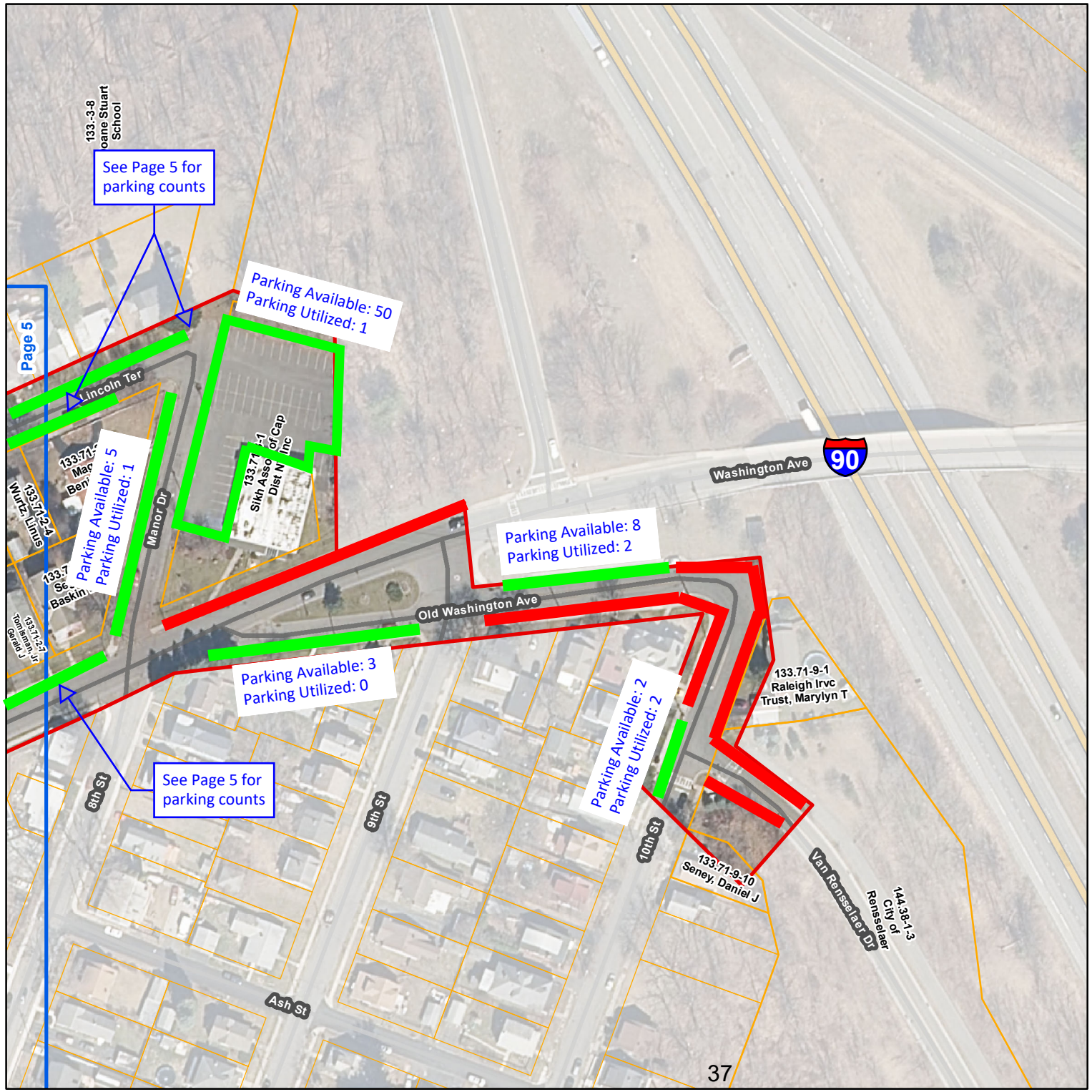

CITY OF RENSSELAER

Waterfront Connectivity Study

Property Ownership

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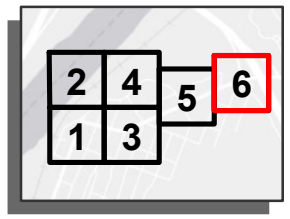

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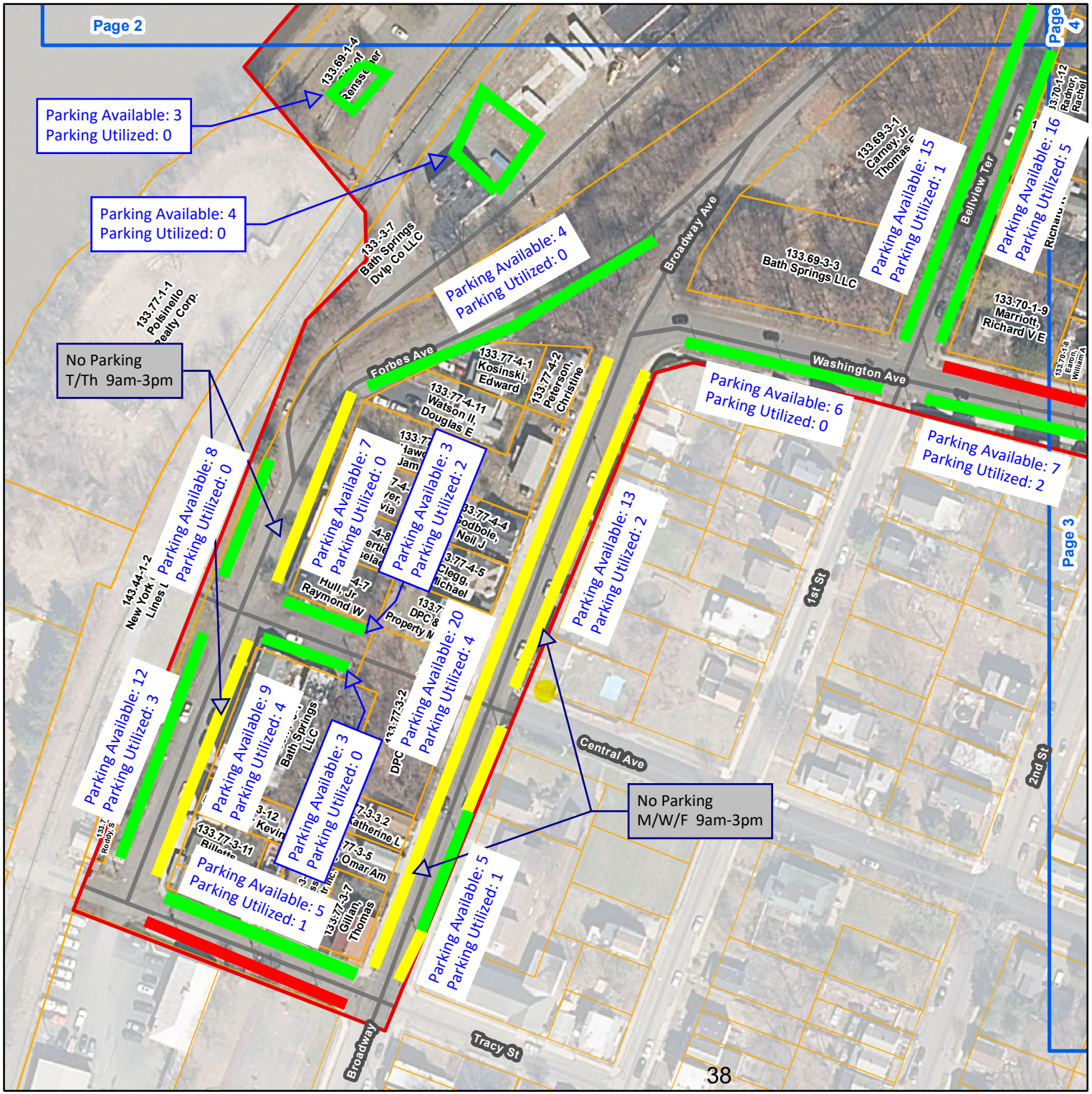

CITY OF RENSSELAER
Waterfront Connectivity Study

Property Ownership
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- PARKING PERMITTED (TIME CONSTRAINTS)

Monday,
8/15/2022
10:00 PM

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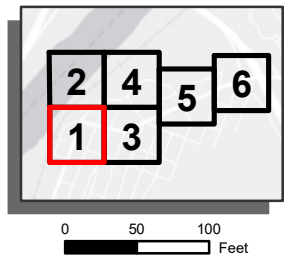

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D R A F T

Property Ownership
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8/15/2022
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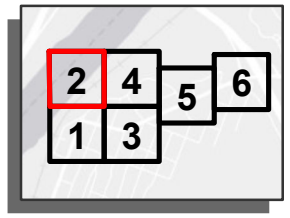

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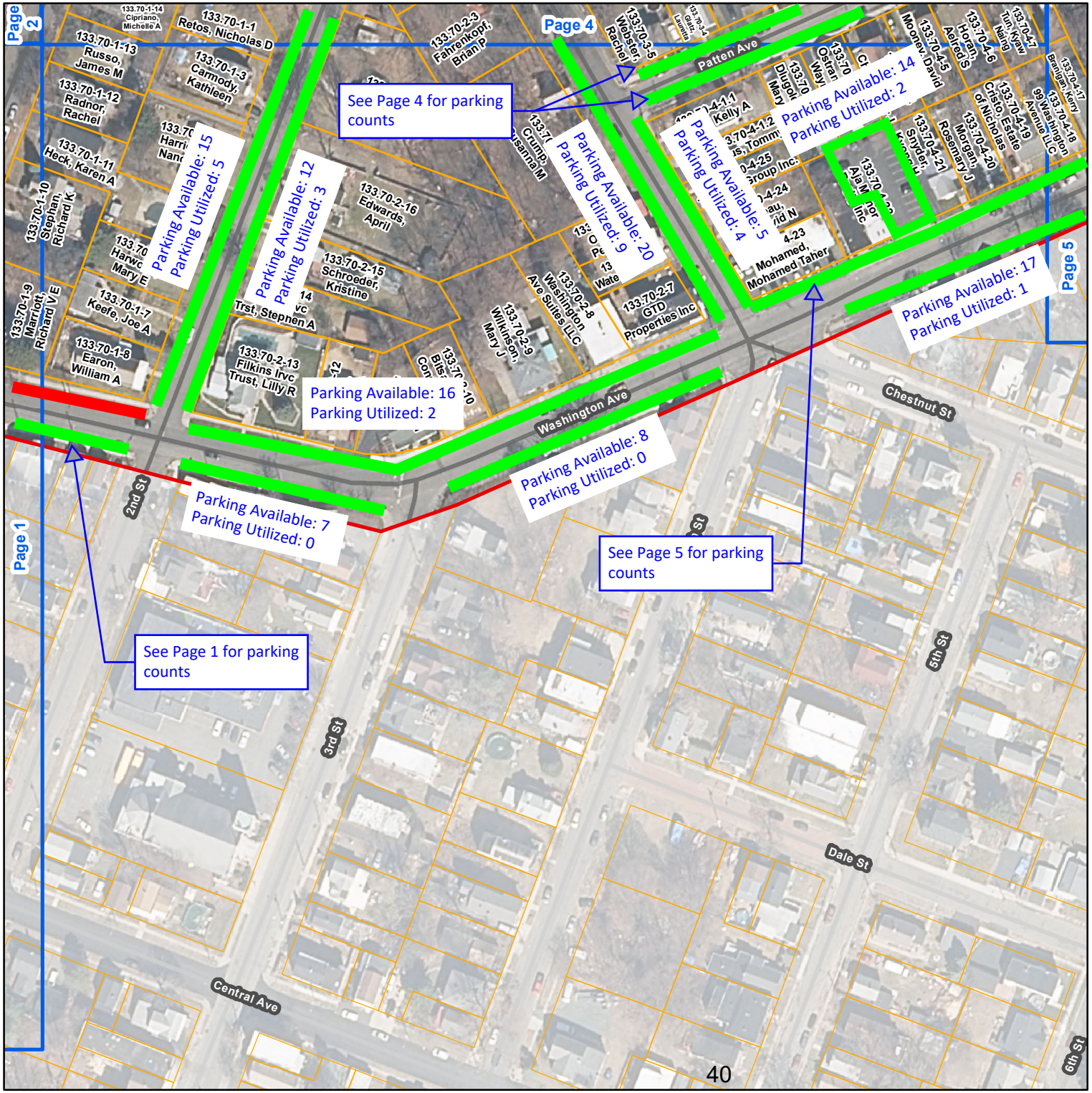

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Property Ownership
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- PARKING PERMITTED (TIME CONSTRAINTS)

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10:00 PM

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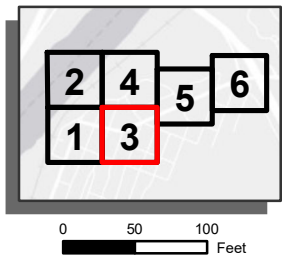

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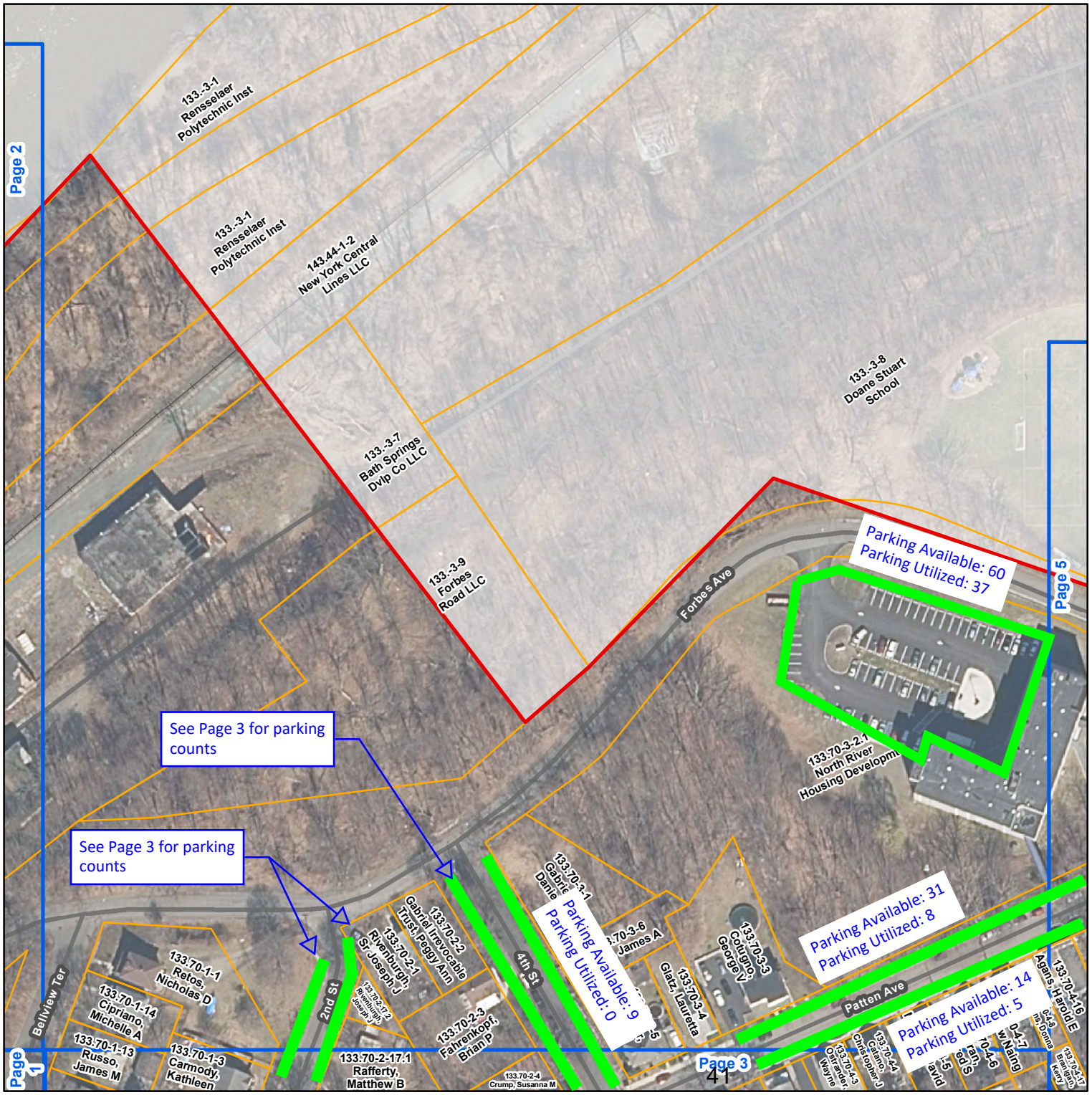
Engineering and Land Surveying, P.C.
1533 Crescent Road - Clifton Park, NY 12065



CITY OF RENSSELAER
Waterfront Connectivity Study

Property Ownership
April 2022

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LEGEND

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- PARKING PERMITTED (EXCLUDING DRIVEWAYS)
- PARKING PERMITTED (TIME CONSTRAINTS)

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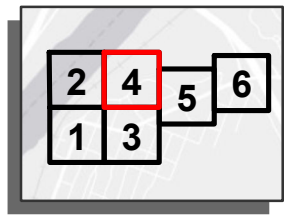

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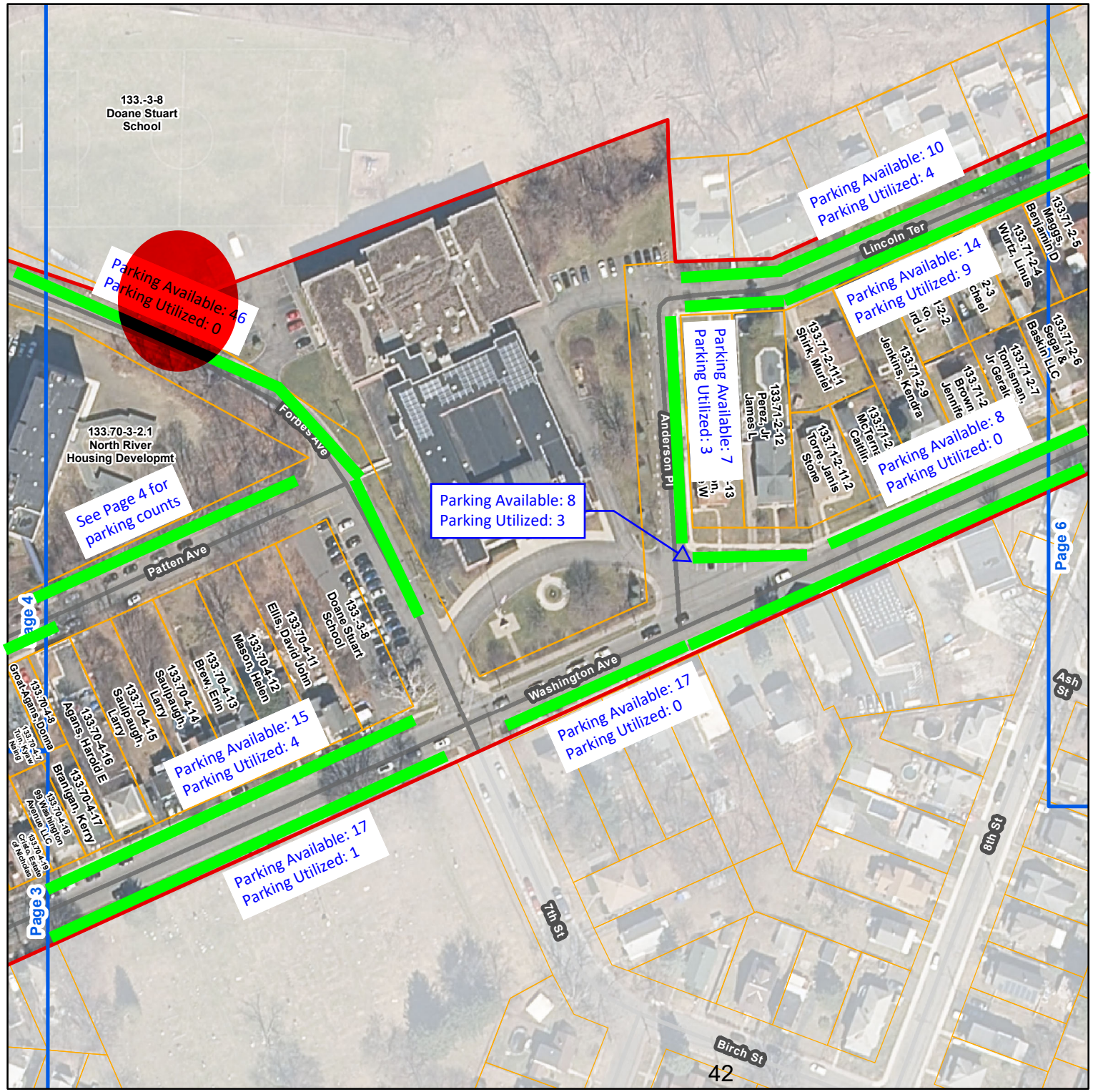

CITY OF RENSSELAER
Waterfront Connectivity Study

Property Ownership
April 2022

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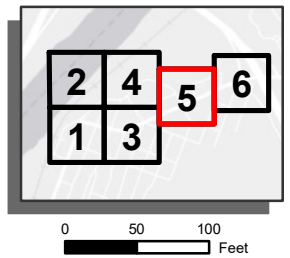

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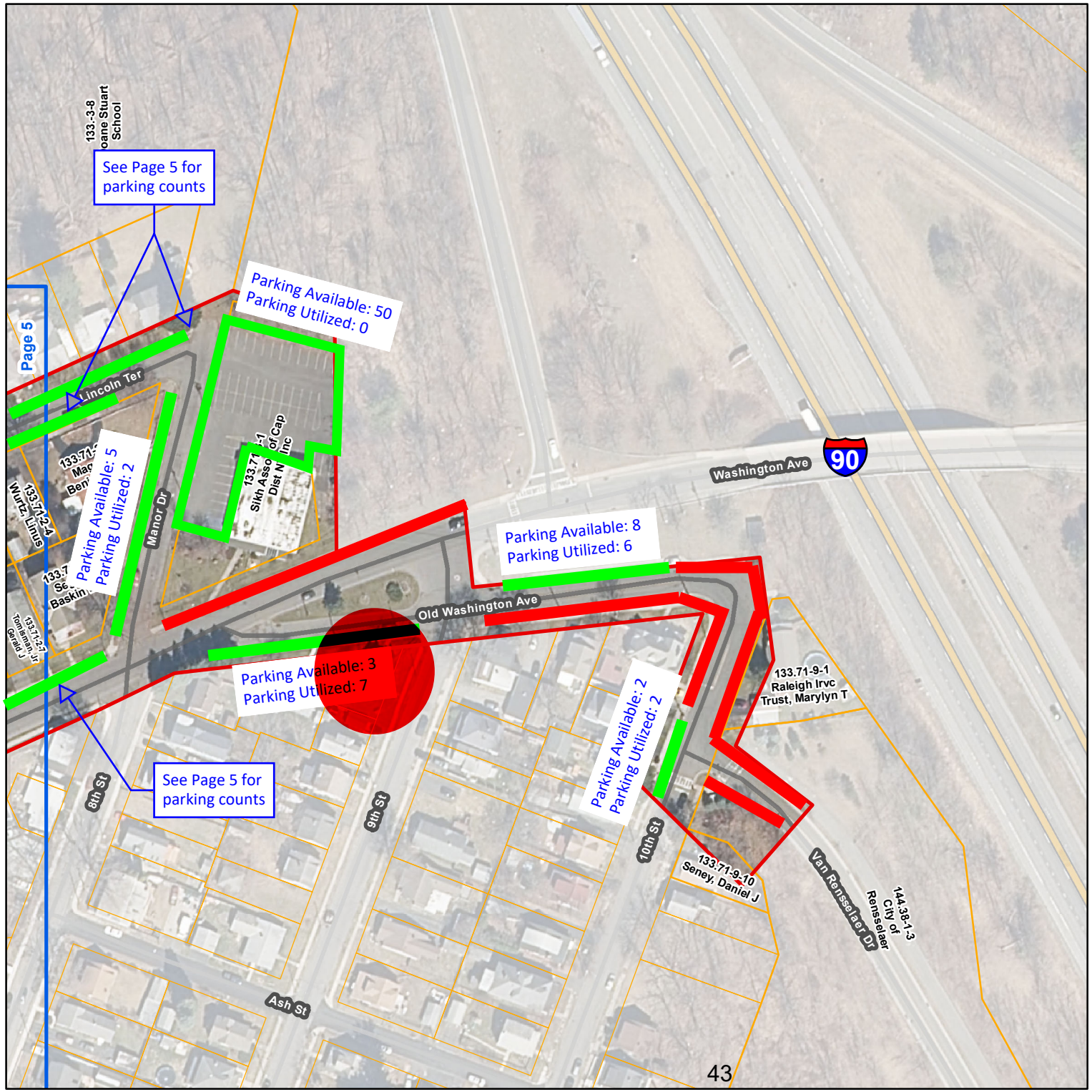

CITY OF RENSSELAER
Waterfront Connectivity Study

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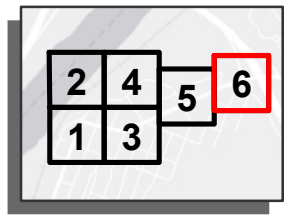

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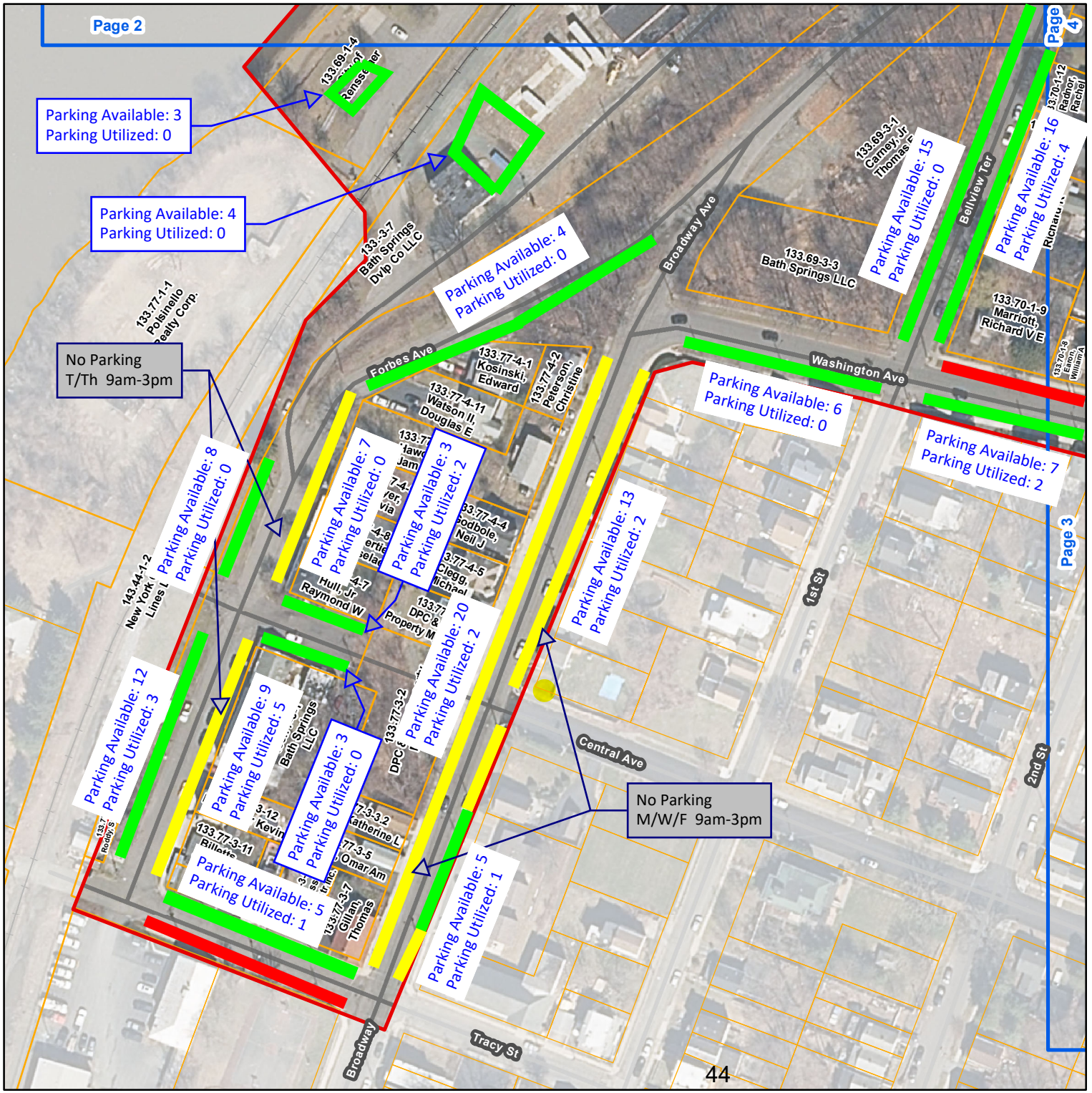

CITY OF RENSSELAER
Waterfront Connectivity Study

Property Ownership
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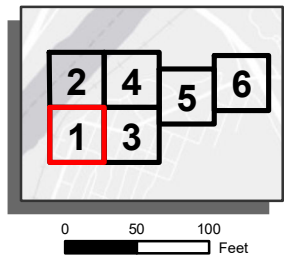

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CITY OF RENSSELAER

Waterfront Connectivity Study

Property Ownership

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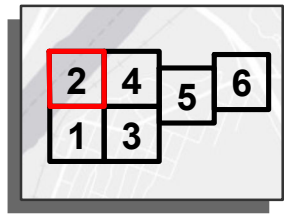

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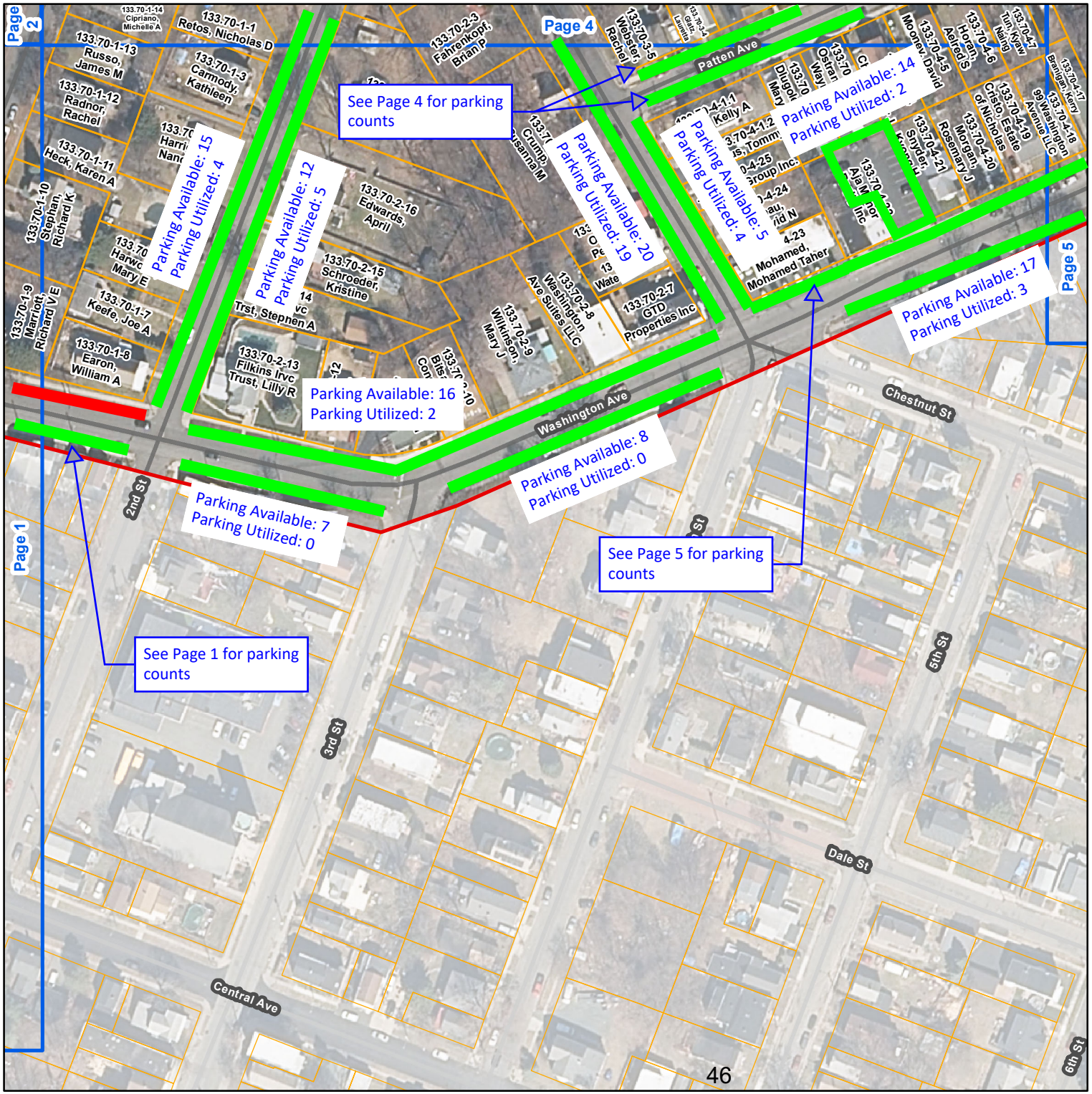

CITY OF RENSSELAER

Waterfront Connectivity Study

Property Ownership

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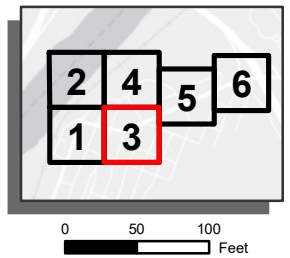

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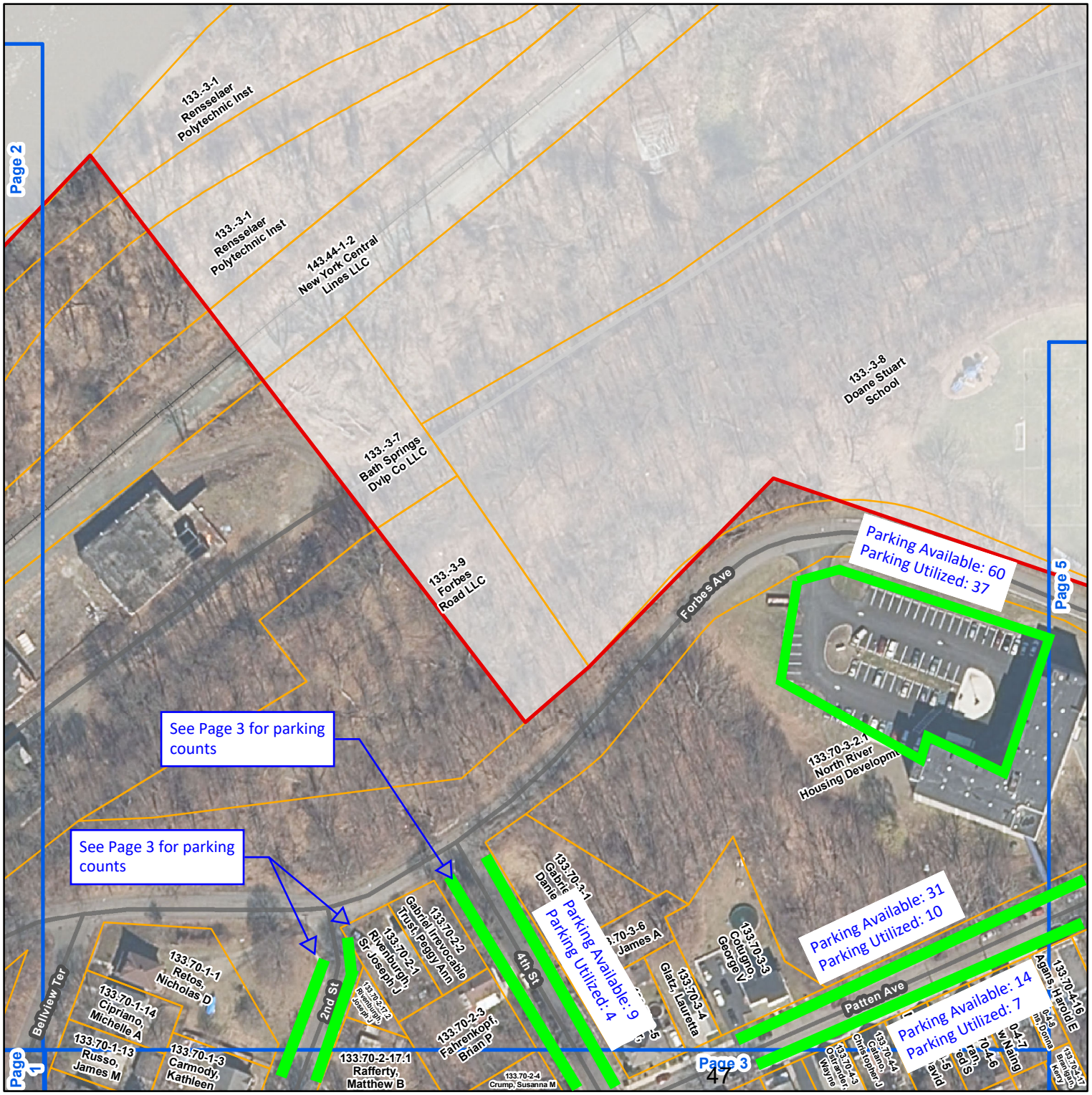

CITY OF RENSSELAER
Waterfront Connectivity Study

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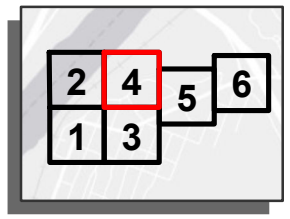

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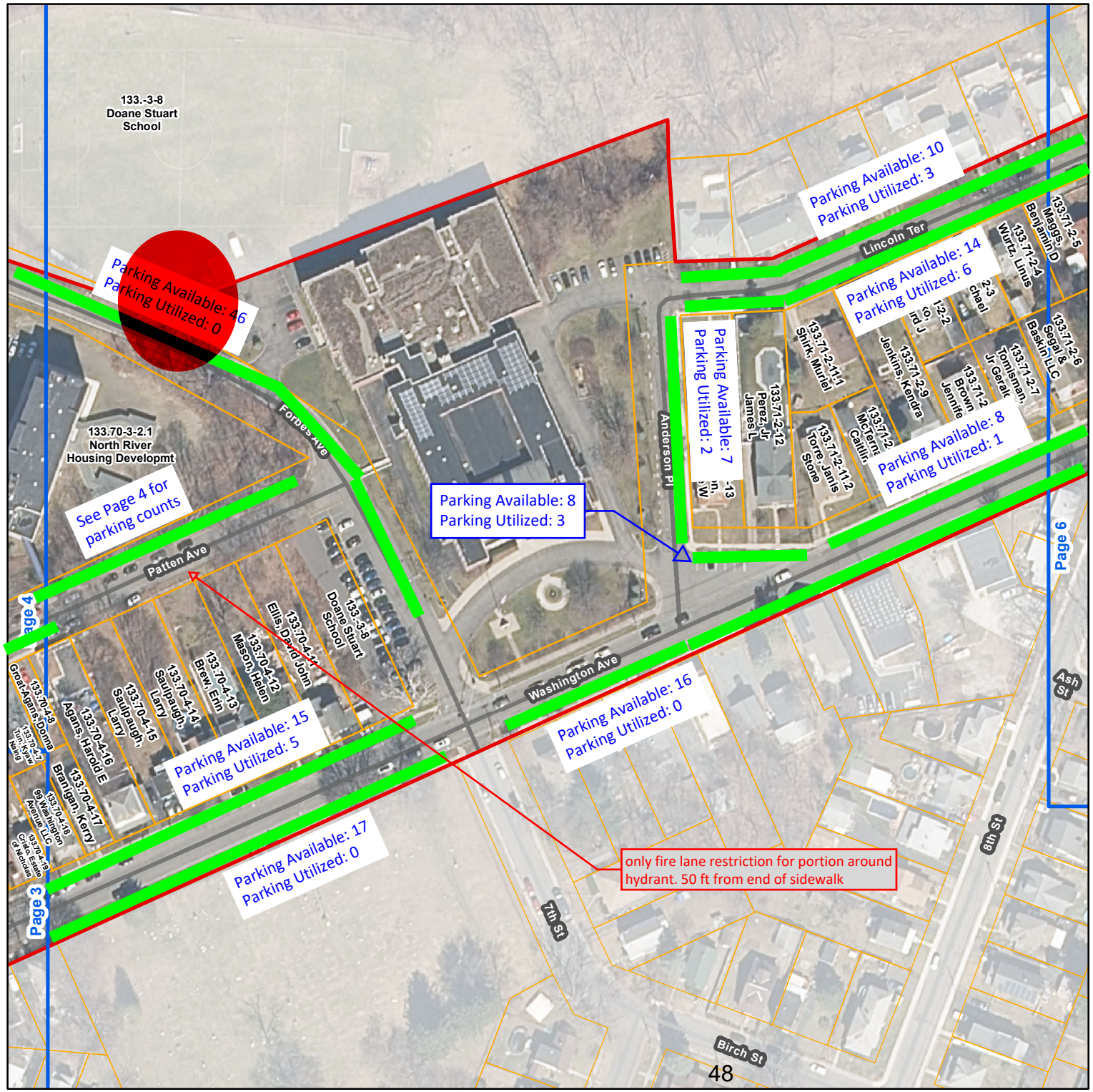

CITY OF RENSSELAER
Waterfront Connectivity Study

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Property Ownership
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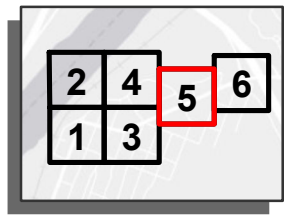

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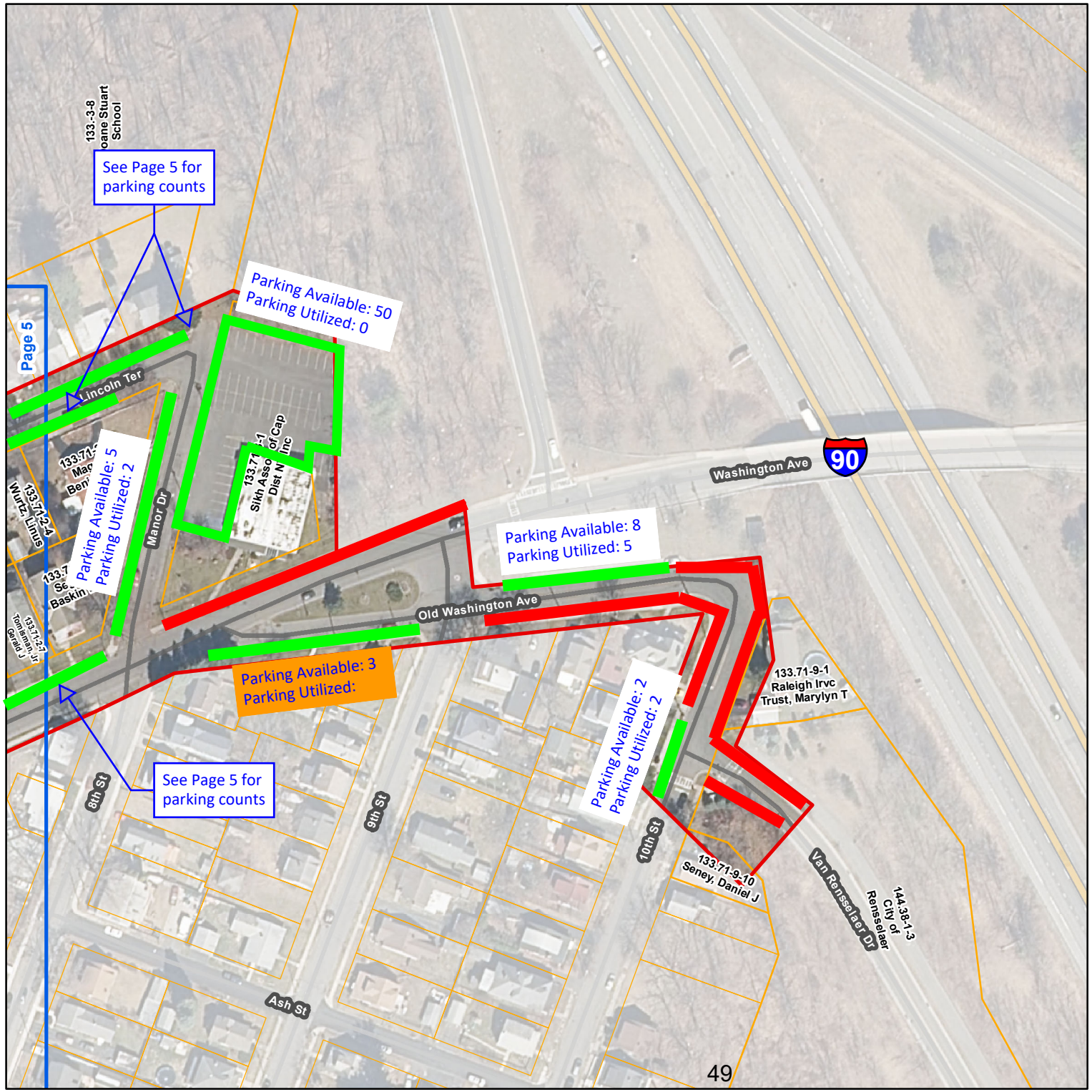

CITY OF RENSSELAER

Waterfront Connectivity Study

Property Ownership

April 2022

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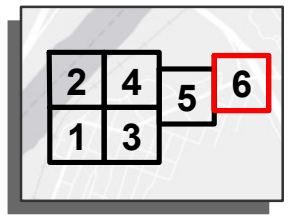

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1533 Crescent Road - Clifton Park, NY 12065

APPENDIX E: CRASH ANALYSIS

APPENDIX E – CRASH HISTORY

Crash data was examined for the most recent five-year period available, from November 1st, 2016 through October 31st, 2021. Data on these crashes was retrieved using NYSDOT ALIS (Accident Location Information System). Crash data was examined on all road segments within the study area boundary.

During this five-year period, 83 crashes were recorded in the study area. Of the 83 total crashes, 64 occurred on Washington Ave.

The most common accident type was collision between two motor vehicles, accounting for 71 crashes. There was one reported crash with a bicyclist, and no reported crashes with pedestrians. Collisions with various fixed objects, including curbing, accounted for nine of the crashes. Table 1 below summarizes collisions by type.

Table 1

Collision Type	Number of Crashes
Collision with Light Support / Utility Pole	3
Collision with Animal	1
Collision with Bicyclist	1
Collision with Building / Wall	1
Collision with Curbing	3
Collision with Fire Hydrant	1
Collision with Motor Vehicle	71
Collision with Sign Post	1
Overturned	1
Total	**83**

In the five-year period examined, no fatal crashes occurred. Four crashes involved injuries. The remaining 79 crashes involved only property damage or damage below the reportable threshold. The four injury involved crashes all occurred at intersections: one (1) at Broadway and Tracy Street, one (1) at Washington Avenue and Bellview Terrace, one (1) at Washington Avenue, Fourth Street, and Chestnut Street, and one (1) at Washington Avenue and Tenth Street (at the east boundary of the study area).

Table 2

Collision Severity	Number of Crashes
Non-Reportable	28
Property Damage	51
Property Damage and Injury	4
Total	**83**

Table 3 below summarizes collisions between motor vehicles by type. The most common type was rear end collisions (23 crashes), followed by overtaking collisions (19 crashes). Collisions caused by right- or left-turning vehicles were relatively rare. Of the 19 overtaking crashes, 13 occurred in a one-block segment of Washington Ave between Fourth Street and Seventh Street / Forbes Avenue. Contributing

factors may include the high driveway density and lack of pavement striping. The prevalence of rear-end and overtaking collisions suggests that improved signage and striping may be needed to give drivers a better idea of where and when other vehicles may be slowing, stopping, or turning. Traffic calming measures that moderate vehicle speed may also reduce the frequency and severity of rear-end collisions.

Table 3	
Collision Types (Motor Vehicles)	Number of Crashes
Left Turn (Against Other Car)	5
Other	15
Overtaking	19
Rear End	23
Right Angle	11
Right Turn (With Other Car)	1
Sideswipe	6
Unknown	3
Total	**83**

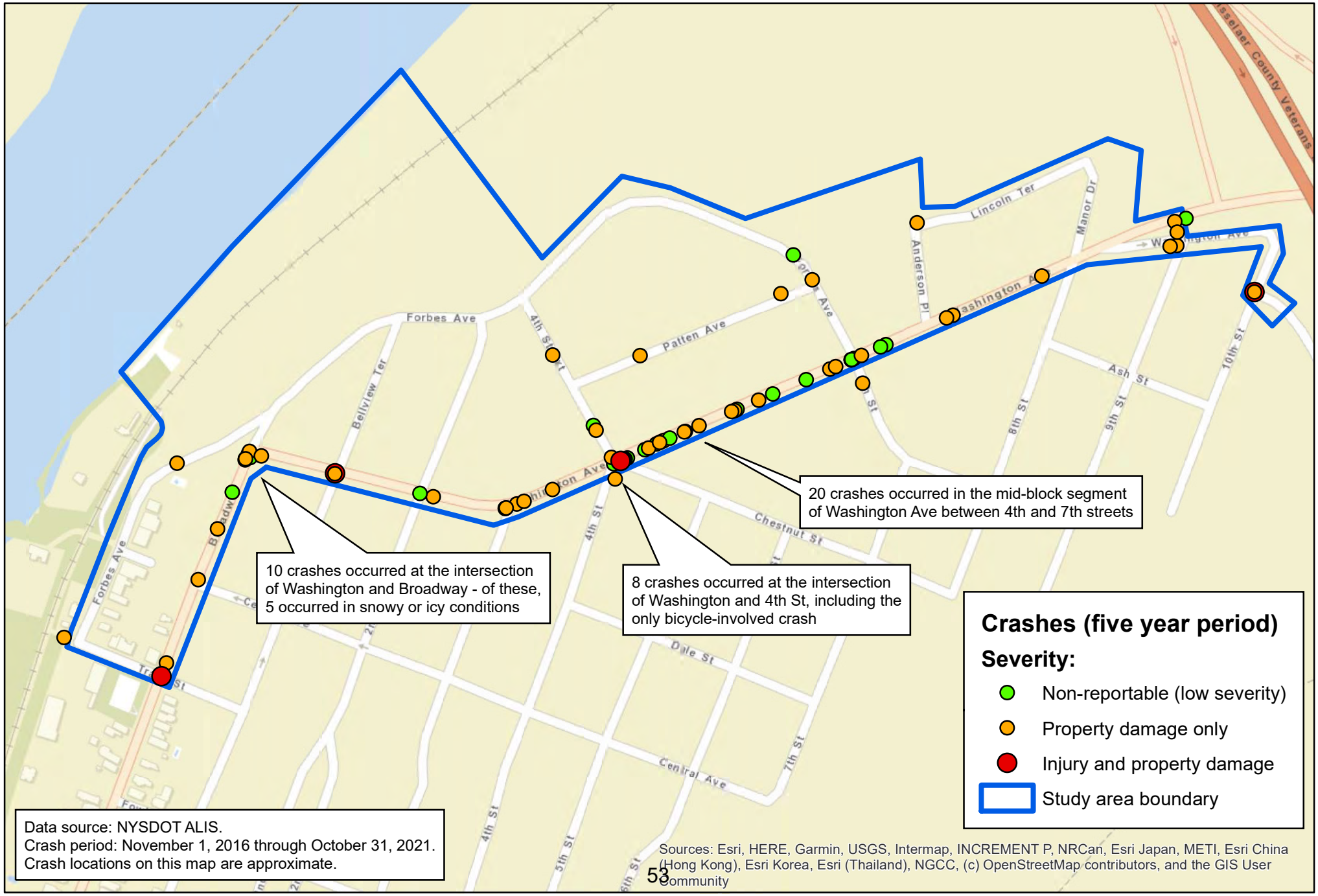
Most of the reported crashes occurred in clear conditions. There were 16 crashes that occurred in adverse conditions (rain or snow). Table 4 below summarizes crashes by weather conditions.

Table 4	
Weather Condition	Number of Crashes
Clear	50
Cloudy	16
Rain	6
Snow	10
Unknown	1
Total	**83**

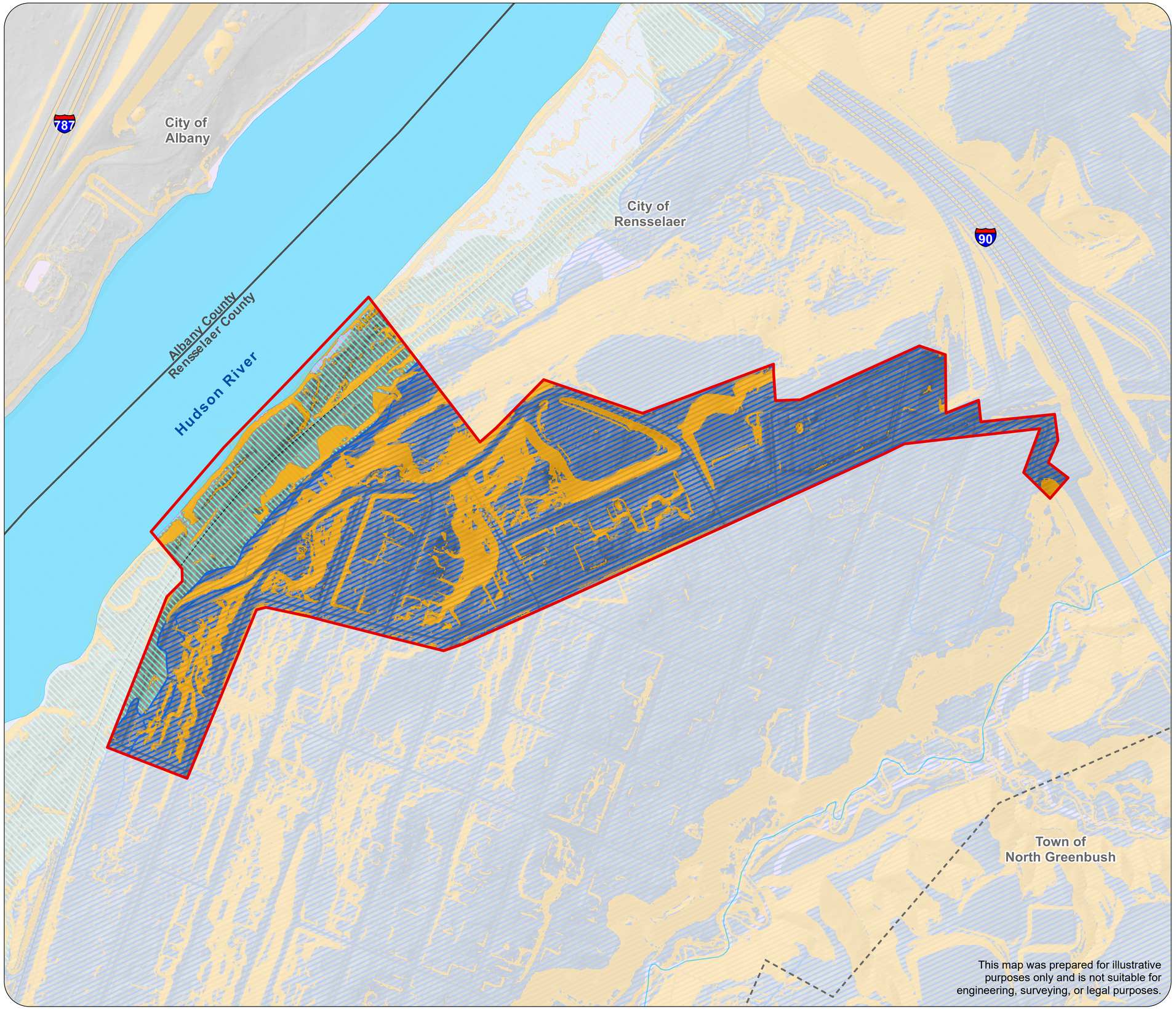
The intersection with the most crashes was Washington Avenue and Broadway, with 10 crashes in the period examined. The five-legged intersection of Washington Avenue, Fourth Street, and Chestnut Street had 8 crashes, including the only bicycle-involved crash. The bicycle crash did not have a reported injury. The road segment with the most crashes was Washington Avenue, between Fourth Street and Seventh Street. This one-block segment had 20 total crashes, not including those at the intersections.

Rensselaer Waterfront Connections - Crash History

City of Rensselaer, NY



APPENDIX F: ENVIRONMENTAL RESOURCES



CITY OF RENSSELAER

Waterfront Connectivity Study

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Environmental Constraints

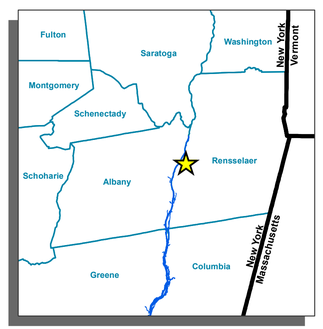
April 2022

LEGEND

- Study Area
- City/Town Boundary
- County Boundary
- Railroad
- Interstates
- Local Roads
- River/Stream
- Hudson River
- Steep Slopes >15%
- Known Wetlands

FEMA Flood Hazard Areas

- 1% (100-Year) Flood Zone
- 0.2% (500-Year) Flood Zone



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Sources:
Esri, NYS ITS, City of Rensselaer, Rensselaer County

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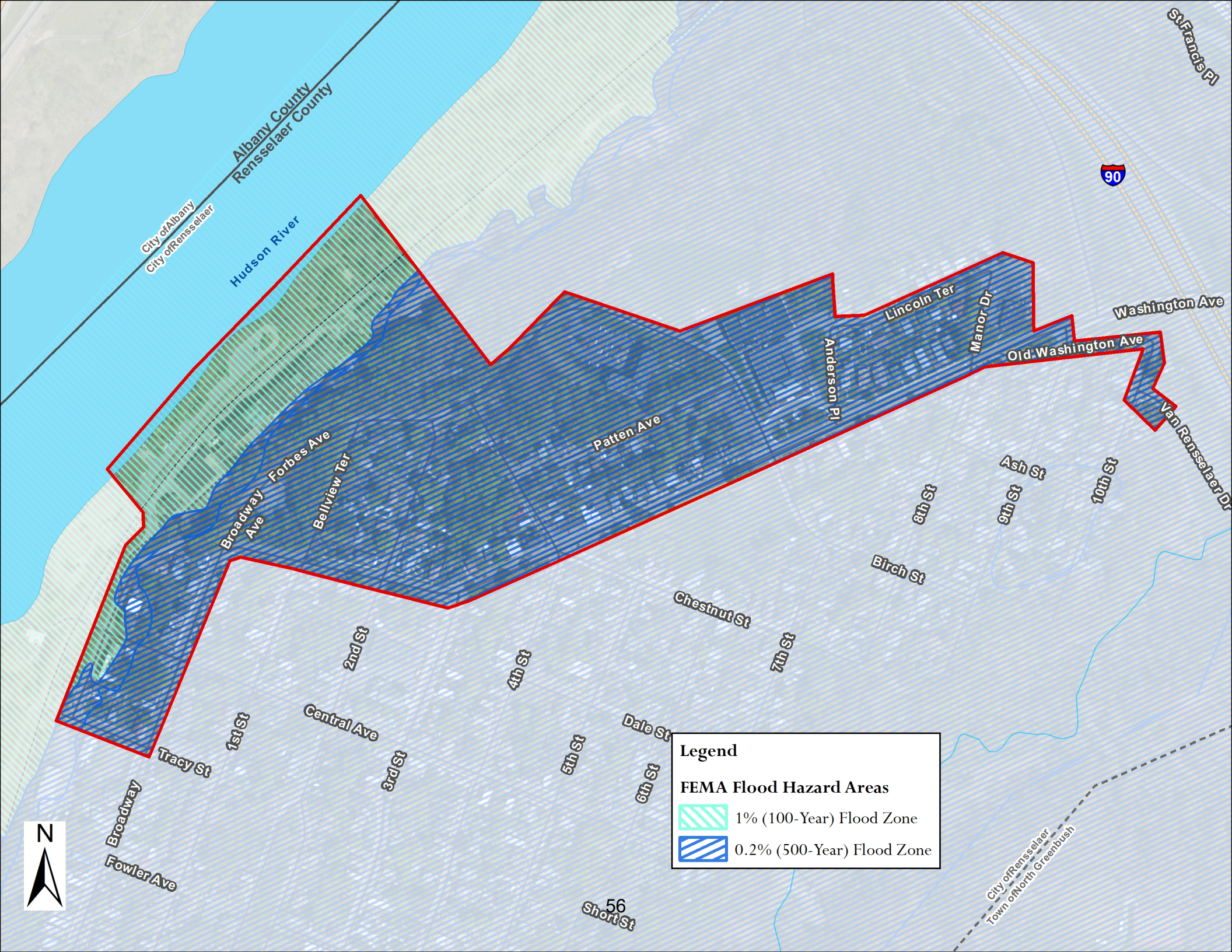
Engineering and Land Surveying, P.C.
1533 Crescent Road - Clifton Park, NY 12065


Albany County
Rensselaer County
City of Albany
City of Rensselaer
Hudson River
St Francis Pl
90
Washington Ave
Old Washington Ave
Lincoln Ter
Manor Dr
Anderson Pl
Patten Ave
Forbes Ave
Bellview Ter
Broadway
Ave
Van Rensselaer Dr
Ash St
8th St
9th St
10th St
Birch St
Chestnut St
7th St
2nd St
4th St
Central Ave
1st St
Tracy St
3rd St
5th St
Dale St
6th St
Broadway
Fowler Ave
Short St
City of Rensselaer
Town of North Greenbush
N
Legend
FEMA Flood Hazard Areas
1% (100-Year) Flood Zone
0.2% (500-Year) Flood Zone

CITY OF RENSSELAER
Waterfront Connectivity Study

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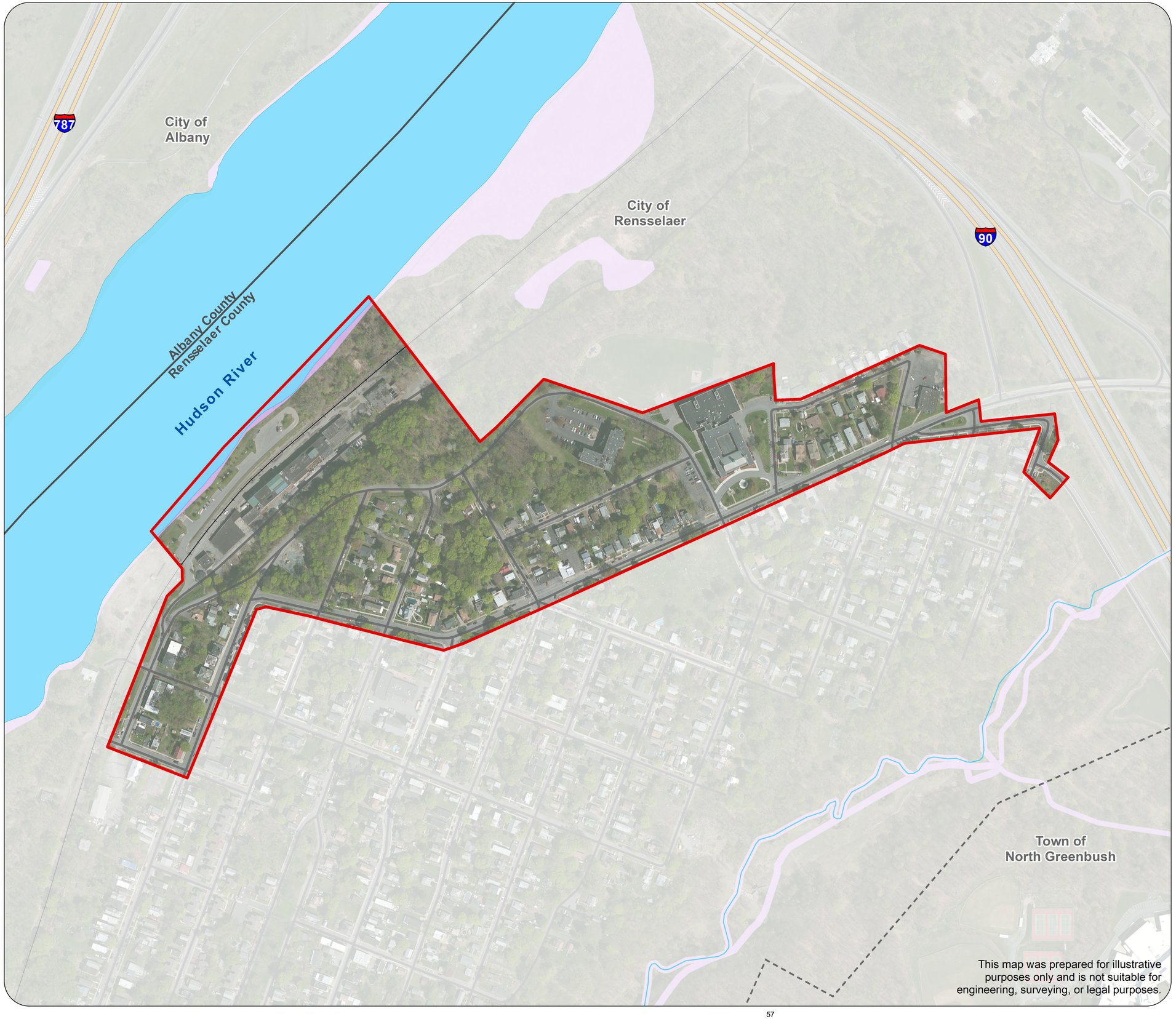
Wetlands
April 2022



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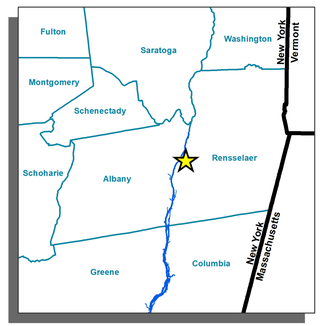
- Study Area
- City/Town Boundary
- County Boundary
- Railroad
- Interstates
- Local Roads
- River/Stream
- Hudson River
- Known Wetlands



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Sources:
Esri, NYS ITS, City of Rensselaer, Rensselaer County

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Engineering and Land Surveying, P.C.
1533 Crescent Road - Clifton Park, NY 12065

CITY OF RENSSELAER

Waterfront Connectivity Study

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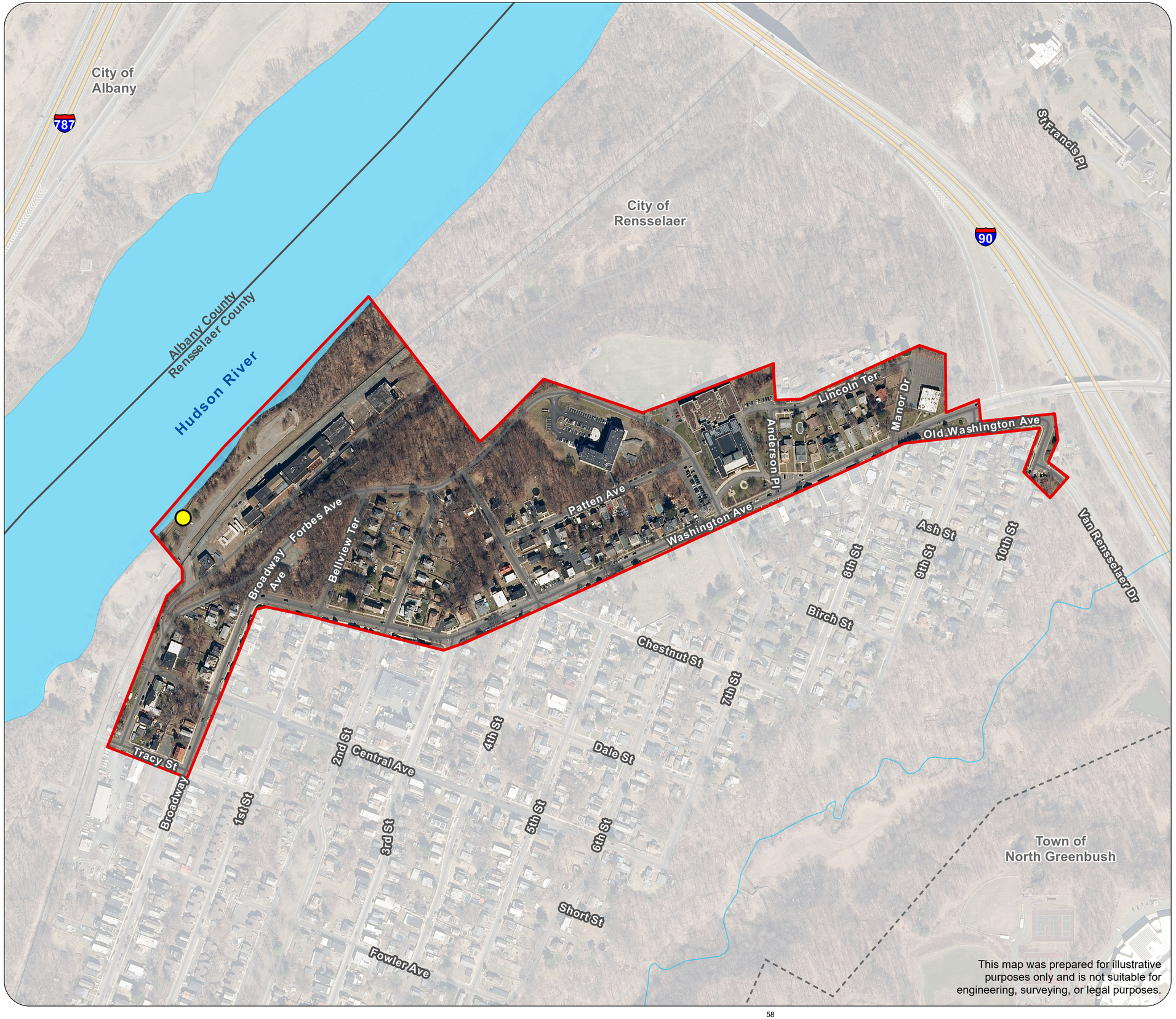
Parks and Recreation Land

April 2022



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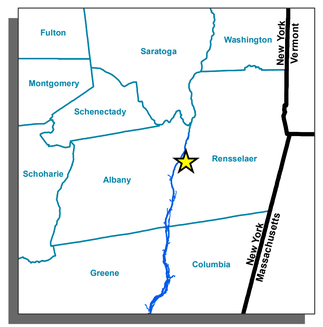
- City/Town Boundary
- County Boundary
- Railroad
- Interstates
- Local Roads
- River/Stream
- Hudson River
- Hilton Park and Boat Ramp



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Sources:
Esri, NYS ITS, City of Rensselaer, Rensselaer County

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Feet

Engineering and Land Surveying, P.C.
1533 Crescent Road - Clifton Park, NY 12065

APPENDIX G: PUBLIC OUTREACH

Public Meeting #1
Thursday, June 16, 2022
6:00 – 7:30pm

Rensselaer Jr./Sr. High School - 25 Van Rensselaer Dr, Rensselaer, NY
With Zoom Option Available

Agenda

1. Welcome and Introductions
2. Project and Schedule Overview
3. Highlights of Existing Conditions
4. Breakout Sessions
5. Next Steps

For more information visit:
https://www.rensselaerriverfrontconnections.com/

WATERFRONT CONNECTIVITY STUDY MEETING SUMMARY

Purpose: **Public Meeting #1 (Virtual and In-person)**
Date and Time: **Thursday, June 16, 2022, 6:00 pm**
Location: **Rensselaer Jr. / Sr. High School and Via Zoom**

AGENDA ITEM	DISCUSSION
	As part of the public engagement component of the City of Rensselaer Water Connectivity Study, a Public Meeting was held on Thursday, June 16, 2022, at 6:00 PM. The purpose of the public workshop was to introduce the program and schedule, provide an overview of existing conditions, and learn about the needs and opportunities of the community. The interactive workshop included a presentation with a community brainstorming session, as well as a live question and answer session. The public workshop was hybrid format, held in person and virtually via Zoom. Registration for Zoom was required and could be accessed through the project website www.rensselaerriverfrontconnections.com. Over 30 members of the public attended to participate. The event was publicized through a variety of platforms including the City website, project website, project email distribution, social media, and direct mailer flyers. Members of the City of Rensselaer, CDTC, and the consultant team participated as presenters during the event.
Welcome & Introductions	Jaclyn Hakes (MJ) introduced the consultant team including Sarah Starke Hesse (MJ) (via Zoom), Nora Culhane Friedel (MJ), Jesse McCaughey (MJ), and Jacob Landis (MJ). Jaclyn Hakes (MJ) introduced Ketura Vics from the City of Rensselaer Planning Department and Andrew Tracy from CDTC, then Jaclyn Hakes (MJ) presented an overview of the agenda for the meeting which included the following: • Welcome and Introductions • Project and Schedule Overview • Highlights of Existing Conditions • Group Breakout Session • Next Steps

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Welcome & Introductions Continued	Jaclyn Hakes (MJ) gave an overview of the meeting format, including directions on how to participate in person and through Zoom The following attendees were introduced: • Project Sponsors: City of Rensselaer, Capital District Transportation Committee (CDTC) • Grant Program: Community and Transportation Linkage Program (CDTC) • Consultant: MJ Engineering & Land Surveying, P.C. • Study Advisory Committee: Salena Dabbs (Planning Commission), Andrew Kretzschmar (Alderperson), Fred Mastroianni (Engineer), Joe Kardash (RCSD Superintendent), Paul Bednaryczyk (RCFD Firefighter/ Civil Engineer), David Wells (Doane Stewart) Jaclyn Hakes (MJ) introduced Andrew Tracy from CDTC to talk about the Capital District Transportation Committee. • CDTC is the designated Metropolitan Planning Organization (MPO) for Albany, Saratoga, Schenectady, and Rensselaer Counties • The study funded by the City of Rensselaer and CDTC through the CDTC 2021-2022 Community and Transportation Linkage Planning Program • Visit at cdtcmpo.org Andrew Tracy (CDTC) introduces Ketura Vics (Rensselaer Planning) to talk about the study. • How can people access the waterfront in the City, especially around Forbes Avenue? • What are the issues? How might they be resolved? How can we foster connections between major arterials?
	Jaclyn Hakes (MJ) presented an overview of the Waterfront Connectivity Study. The following is a summary of topics discussed during the overview presentation. Objectives • Washington and Forbes Ave access improvements

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Project and Schedule Overview	• Enhance the Rensselaer Waterfront and the Hilton Center Brownfield Redevelopment Area
	• Connecting the City to:
	  ○ Rensselaer Riverwalk
	  ○ Kiliaen's Landing
	  ○ Hollow Trail
	• Connect, promote, improve, create economic development
	• Improving safety
	• Creating a connected and integrated multi-modal transportation network for users of all ages and abilities, including pedestrians, bicyclists, motorists, transit users, freight, emergency vehicles, children, elderly, and people with disabilities.
	• At the end, have a foundation for the City to move forward with and implement ideas that stem from this project
	
	Study Area
	• The study area was defined to include the City of Rensselaer Hilton Center Brownfield Redevelopment Area and potential connections to the Rensselaer Riverwalk/RPI Trail.
	• The study area also extends to the east towards the Hollow Trail and Rensselaer Junior/Senior High School.
	• It is a compact study area
	
	Key focus Locations
	• Forbes Avenue and Washington Avenue
	• 4 Intersections of interest in which information is already getting gathered:
	  ○ Broadway & Washington
	  ○ Washington & 3rd
	  ○ Washington, Forbes, and 7th
	  ○ Washington, Manor, and 8th
	
	Project Schedule & Scope
	• Winter/ Spring 2022
	  ○ Task 1: Project Initiation/ Coordination
	• Spring 2022
	  ○ Task 2: Existing Conditions Assessment
	• Summer 2022
	  ○ Task 4: Draft Waterfront Connectivity Study
	• Summer/ Fall 2022
	  ○ Task 5: Final Public Workshop

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	• Fall 2022 ○ Task 6: Final Waterfront Connectivity Study • *Note* Task3: Public Input – Occurs throughout the process • Use the study as a basis for grants and buildout Project Website • Rensselaerriverfrontconnections.com • Available for the duration of the project!

Highlights of Existing Conditions
 	
Highlights of Existing Conditions Continued
	Jaclyn Hakes (MJ) turned it to Nora Culhane Friedel (MJ) to discuss Highlights of Existing Conditions.
	
	Background
	• Study Area Zoning and Land Use
	• Transportation Elements
	• Previous Plans/ Relevant Documents
	Zoning
	Nora Culhane Friedel (MJ) explained the accommodating map, which is available on the website. Zoning in the study area falls within 4 distinct districts including:
	• Downtown Mixed-Use (MU-1)
	  ○ mix of higher-density residential and commercial uses
	• Waterfront Mixed-Use (MU-2)
	  ○ mix of residential, commercial, and public uses (shall include public access directly adjacent to the water in the form of a 25-foot easement)
	• Open Space and Conservation (OS)
	  ○ preserve historic, scenic, recreational and environmental value of open spaces
	• Residential District #2 (R-2)
	  ○ mix of housing options including single-family and two-family homes in structures originally intended for two or more families
	Land Use
	Land use and Zoning are a direct reflection of the community character that exists today. Nora Culhane Friedel (MJ) took the group through a map highlighting the following land uses:
	• Commercial
	• Community Services
	• Industrial
	• Mixed-Uses
	• Residential – High Density
	• Residential – Medium Density
	• Residential – Low Density
	• Transportation

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	• Vacant Land
	Notes that there is a large industrial use near the waterfront.
	
	Pedestrian Accommodations Map
	• Sidewalks and Crosswalks
	  ○ Concrete sidewalks are available along majority of roadways
	  ○ Striped pedestrian crosswalks have been installed at various locations
	• Hilton Park and Boat Ramp has several pedestrian amenities, such as picnic tables, benches, and trash receptacles, as well as decorative pedestrian lighting throughout the area
	
	Nora Culhane Friedel (MJ) outlined on a map Mid-Block Crosswalks and Crosswalk with Traffic Control.
	
	Crash History Map
	• Most recent five years of available data November 1, 2016 to October 31, 2021
	• During this five-year period, 83 crashes were recorded in the study area, with 64 (77%) occurring on Washington Avenue
	
	Appears that most incidents are along Washington Avenue. Data is from where police reports were taken, not necessarily where they occur.
	
	Relevant Planning Documents
	Can be made available for anyone interested upon request
	• CDTC's Public Participation Plan
	• CDTC's Capital District Trails Plan (2018)
	• Rensselaer County Trail Plan, Livingston Avenue Bridge to Troy-Menands Bridge
	• Forbes Avenue Transportation Study
	• City of Rensselaer Comprehensive Plan
	• City of Rensselaer Complete Streets Policy
	• Kiliaen's Landing GEIS
	• On-going CDTC Transportation Improvement Program projects - Riverfront Multi-Use Trail and Bicycle and Pedestrian Safety and Access Improvements
	• City of Rensselaer plans regarding the extension of the Hollow Trail
	• Proposed nearby development and redevelopment plans - the Hilton Center Brownfield Redevelopment Area
	• CDTA's bus routes and the CDPHP Cycle! bikeshare system

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	• Other completed and planned changes in the City's transportation and built infrastructure

Group Breakout Session
 	
Group Breakout Session Continued
	Jaclyn Hakes (MJ) posed 3 questions about the Waterfront Connectivity Study Area to participants. The following questions received answers from residents and interested members of the public. The answers were recorded via note-takers and can be seen below.
	
	How do you travel to and through the study area and/ or access the waterfront: walk, bike, drive?
	• Bicycle
	• Scooter/ skateboards
	• Vehicle
	• Walk
	  ○ Go by Doane Stewart to get to the riverfront
	  ○ Access the waterfront via unkept stone stairways that have pipe railing and cobblestones which can be dangerous in the winter or during rain.
	  ○ Many people walk down Forbes Avenue and are likely residents rather than out-of-towners looking to use the boat launch
	• All-Terrain Vehicles
	
	What challenges do you experience traveling in the study area, Forbes Avenue and accessing the Waterfront?
	• If someone is using a trailer for their boat, the entrance from the north has an extremely tight turn. Tracy Street is a better approach for vehicles with trailers.
	• Tracy Street – Freight trucking blocks traffic in the morning and evening (7:30-7:45 am). Residents and buses impacted significantly.
	• Broadway & Washington Ave
	  ○ Has many children who do not pay attention to the traffic on the street.
	  ○ 5 point intersection is not safe! People do not yield despite signage. Walking is "treacherous" for crossing either side.
	• 3rd & Washington is an unsafe intersection with no traffic signs or crosswalks
	  ○ Lack of visibility due to fences and overgrown vegetation.
	• ATV's are prevalent on the street and measures should be taken to limit their use on the street.
	• Many have no idea that there is even a boat launch there.
	  ○ Lack of adequate signage, missing stairs to boat launch, difficult to find if you are not a resident

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Group Breakout Session Continued	• There is the Old Hilton Center which is off-putting and not welcoming.
	• Casey's Restaurant is dangerous with cars constantly pulling in and out.
	• Lack of sidewalks or good condition sidewalks.
	• Residents without driveways park on the road making the streetscape more condensed and increases hazards and danger to all who use it.
	• Litter and lack of receptacles.
	• Concerns around sea level rise and the impact it has on the waterfront in Rensselaer.
	• Grade issues in the area that impact all means of transportation
	  ○ Makes Forbes Ave the place to go for using bikes in the area
	  ○ Issue of low visibility makes the area dangerous for bikers and pedestrians
	
	What would you like to see changed from connections, travel, and accessibility perspective?
	• Forbes Avenue
	  ○ Addition and redevelopment of sidewalks
	  ○ Ideally protected bike lanes / realistically wider shoulders would be useful for bike safety
	  ○ Suggestion: A central connection to Forbes Avenue for residents and visitors to use
	• Wayfinding: better signage and info (for boat launch, trailer access, general directions)
	• Reconstruction of the cobblestone path from the foot of Washington Avenue to Forbes (may have no railing currently!)
	  ○ Must be fixed because of how dangerous and unkempt it is
	• Washington Avenue
	  ○ Biking is extremely dangerous. Often cars are parked on both sides of the road with two lanes of traffic.
	• Additional safety measures ("Blue Light" emergency system specifically brought up)
	• Adequate lighting throughout the study area is needed, especially by the boat launch area.
	• Broadway & Washington needs to have intersection safety addressed
	• 3rd & Washington needs a traffic control device.
	• Kayak and Canoe launch
	• Maintenance of the fence along the shore for safety (there is about a 10-foot drop along this segment of the shore)
	• Access for All: All modes and all users should be able to use the waterfront.
	• Young people should be involved in the planning process and have their ideas considered and/or implemented.

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	• Share the road education and enforcement will be needed with the addition of any new roadway infrastructure or safety installments.
	  ○ Community has a responsibility to help with this education and teach children, family, and friends about new traffic safety precautions.
	• Maintenance and inventory of natural habitat and natural resources.
	• Trees in the streetscape help mitigate industrial uses and bring green to an urban environment
	  ○ Should only be types that can thrive within an urban setting without disrupting infrastructure like roads and sidewalks
	  ○ Power lines necessitate tree trimming/ maintenance which can benefit the viewsheds of the River and Albany which are assets to some residents.

Next Steps	Jaclyn Hakes (MJ) makes closing remarks and discusses the Next Steps of the Waterfront Connectivity Study. • Finalize Existing Conditions • Public Workshop #2 – Fall • Outstanding Data Collection • Bike/Pedestrian Counts Thank you to the City of Rensselaer, CDTA, Superintendent Kardash, and the members of the public who took their time to attend this public meeting.

This meeting summary conveys our understanding of the items discussed and agreements reached at this meeting. Please forward any additions, corrections and/or questions to my attention.

Submitted by:
Jacob Landis, MJ Engineering and Land Surveying, PC

cc: Consultant Team, Project File, City, CDTC, Project Website

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Public Meeting #2
Thursday, December 8, 2022
6:00 – 7:30pm

Rensselaer Jr./Sr. High School - 25 Van Rensselaer Dr, Rensselaer, NY
With Zoom Option Available

Agenda

1. Welcome and Introductions
2. Project and Schedule Overview
3. Discussion of Draft Corridor Recommendations
    a. Forbes Avenue
    b. Broadway
    c. Washington Avenue
    d. Other Local Connections
4. Next Steps

For more information visit:
https://www.rensselaerriverfrontconnections.com/

Poll Questions

Please go to pollev.com/mjplanning518
OR
Text 37607 with the message MJPlanning518
OR
Scan the QR code below

WATERFRONT CONNECTIVITY STUDY MEETING SUMMARY

Purpose: **Public Meeting #2 (Virtual and In-person)**
Date and Time: **Thursday, December 8, 2022, 6:00 pm**
Location: **Rensselaer Jr. / Sr. High School and Via Zoom**

AGENDA ITEM	DISCUSSION
	As part of the public engagement component of the City of Rensselaer Water Connectivity Study, a Public Meeting was held on Thursday, December 8, 2022, at 6:00 PM. The purpose of the public workshop was to introduce the concepts and get initial feedback form the public. The interactive workshop included a presentation with a community feedback, as well as a live question and answer session. The public workshop was hybrid format, held in person and virtually via Zoom. Registration for Zoom was required and could be accessed through the project website www.rensselaerriverfrontconnections.com. Over 20 members of the public attended to participate. The event was publicized through a variety of platforms including the City website, project website, project email distribution, social media, and direct mailer flyers. Members of the City of Rensselaer, CDTC, and the consultant team participated as presenters during the event.
Welcome & Introductions	Jaclyn Hakes (MJ) introduced the consultant team including Sarah Starke Hesse (MJ) (via Zoom), Chad Schneider (MJ), and Andris Blumbergs (MJ). Jaclyn Hakes (MJ) introduced Ketura Vics from the City of Rensselaer Planning Department. Ketura Vics described the reason for the project and its partnerships with CDTC and MJ. The following were introduced: • Project Sponsors: City of Rensselaer, Capital District Transportation Committee (CDTC) • Grant Program: Community and Transportation Linkage Program (CDTC) • Consultant: MJ Engineering & Land Surveying, P.C. • Study Advisory Committee: Salena Dabbs (Planning Commission), Andrew Kretzschmar (Alderperson), Fred Mastroianni (Engineer), Joe

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	Kardash (RCSD Superintendent), Paul Bednaryczyk (RCFD Firefighter/ Civil Engineer), David Wells (Doane Stewart)
	
	Ketura Vics introduced Sandy Misiewicz, Executive Director of CDTC who described the Community and Transportation Linkage Planning Program. Jaclyn Hakes (MJ) then presented an overview of the agenda for the meeting which included the following:
	
	• Welcome and Introductions
	• Project and Schedule Overview
	• Discussion of Draft Corridor
	  ○ Recommendations
	  ▪ Forbes Avenue
	  ▪ Broadway
	  ▪ Washington Avenue
	  ▪ Other Local Connections
	• Next Steps

Project and Schedule Overview	Jaclyn Hakes (MJ) presented an overview of the Waterfront Connectivity Study. The following is a summary of topics discussed during the overview presentation. Jaclyn Hakes (MJ) presented a map of the Study Area and described it to the participants. • The Study Area was defined to include the City of Rensselaer Hilton Center Brownfield Redevelopment Area and potential connections to the Rensselaer Riverwalk/ RPI Trail. • The Study Area also extends to the east towards the Hollow Trail and Rensselaer Junior/ Senior Highschool. Project Overview: Objectives • Washington and Forbes Ave access improvements • Connect, promote, improve, create economic development • Improving safety • Creating a connected and integrated multi-modal transportation network for users of all ages and abilities including pedestrians, bicyclists, motorists, transit users, freight, emergency vehicles, children, elderly, and people with disabilities Project Schedule & Scope • Winter/ Spring 2022 ○ Task 1: Project Initiation/ Coordination • Spring 2022

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Project and Schedule Overview Continued	○ Task 2: Existing Conditions Assessment • Summer 2022 ○ Task 4: Draft Waterfront Connectivity Study • Summer/ Fall 2022 ○ Task 5: Final Public Workshop • Fall 2022 ○ Task 6: Final Waterfront Connectivity Study • *Note* Task 3: Public Input – Occurs throughout the process • Use the study as a basis for grants and buildout Project Website • Rensselaerriverfrontconnections.com • Available for the duration of the project! Public Input To Date: Public Meeting #1 – Hybrid • Thursday, June 16, 2022, 6:00 pm • Rensselaer Jr./ Senior High School and via Zoom • Over 20 people attended • Common themes: ○ Sidewalks – don't exist, are in disrepair and/or cars park on them ○ Topography is an issue, but residents know how to traverse ○ Boat launch access can be a challenge ○ Limited wayfinding signage throughout ○ Accessibility/ Connections throughout neighborhoods Public Input to Date: Community Survey • June 16, 2022 to August 1, 2022 • Publicized through survey cards, email blasts, project and city websites and Facebook • 84 Responses ○ 75% from 12144 zip code ○ 27% 45 to 54 years old ○ 19% 35 to 44 years old ○ 19% 55 to 64 years old ○ 14% 25 to 34 years old • Survey Common Themes: Challenges ○ Difficult to move around the study area and beyond ○ Lack of pedestrian infrastructure including sidewalks, bike lanes, or lighting (feels unsafe at times) ○ Drivers do not yield to pedestrians ○ Landscaping is not attractive ○ Driver speeding is a problem ○ Drivers do not stop behind crosswalks

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	• Survey Common Themes: Positive Feedback
	  ○ Bus service is reliable
	  ○ Frequency of buses
	  ○ Water drains quickly after rainstorms

Discussion of Draft Corridor	Jaclyn Hakes (MJ) began the discussion of Draft Corridor recommendations at: Forbes Ave Corridor, Broadway, Washington Ave Corridor, Key Intersections, and Connections. Jaclyn Hakes (MJ) turned it to Andris Blumbergs (MJ) to discuss the Draft Corridor: Forbes Avenue Exiting Conditions: • 11 ft two-way drive lanes • Lack of pedestrian infrastructure • Steep existing slope • Access to the waterfront is difficult to impossible when traveling south Forbes Avenue Corridor Proposed Alternatives: Alternative 1 • One-way drive lane with a separated multi-use path • 22 ft overall width • 10 ft multi-use path • Pedestrian lighting • Pedestrian rail Alternative 2 • Two-way drive lanes separating sidewalk • 26 ft overall width • 5 ft sidewalk • Pedestrian lighting • Guard rail Andris Blumbergs (MJ) asked attendees to join a participant poll and vote on which alternative they preferred. • Alternative 1: 60% of attendees • Alternative2: 40% of attendees Proposed Intersection Alternatives: Alternative 1: Washington Ave Extension • Realign and reconstruct the intersection of Washing Ave and Forbes Ave • Keep 2-way traffic Alternative 2: Forbes Realignment “Y” • Realign and Reconstruct Intersection of Washington Ave and Forbes Ave • 1-way to be implemented with a separated “Y” at the end of Forbes Ave

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Discussion of Draft Corridor Continued	Andris Blumbergs (MJ) asked attendees to join a participant poll and vote on which alternative they preferred. • Alternative 1: 100% of attendees • Alternative2: 0% of attendees Broadway Corridor Recommendations: Broadway Existing Conditions: • Two-way drive lanes with no pavement markings • Parking on both sides (varying width) • Planting strips (varying width) Broadway Proposed Improvements • Additional Signage throughout (stop signs, no parking) • Add crosswalks • ADA compliance improvements Andris Blumbergs (MJ) asked attendees to join a participant poll and vote on if they would like to see additional improvements on Broadway. • No, you've covered them: 100% of attendees • Yes, I have additional ideas: 0% of attendees Washington Avenue Concept Existing Conditions • 16 ft width for drive lanes • 8 ft parking on both sides • Planting strips (varying width) Proposed Concept • 24 ft width for drive lanes • 8 ft parking on one side • Additional landscaping Washington Avenue 5-Way Intersection Existing Conditions • Difficult to navigate via car or as a pedestrian • Missing crosswalks and sidewalks • Multiple conflict points Proposed Concept • Intersection of Washington Ave, Chestnut Ave, and Fourth Street • Explore additional options for pedestrian connections • Bump out/ curb extensions • ADA compliance improvements Andris Blumbergs (MJ) asked attendees to join a participant poll and vote on if they would like to see additional improvements on Washington Ave.

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	• No, you've covered them: 40% of attendees • Yes, I have additional ideas: 60% of attendees Discussion of Draft Corridor Recommendations Other Local Connections Existing Conditions • Inconsistent pedestrian infrastructure (sidewalks, crosswalks, lighting) • Missing signage • Inconsistent/ lack of parking delineation • Narrow drive lanes Other Local Connections • Create consistent pedestrian infrastructure (sidewalks, crosswalks, lighting) • Add signage (Stop, One-way, Do Not Enter) • Define parking/ no parking zones Andris Blumbergs (MJ) concluded his part of the presentation and turned it over to Jaclyn Hakes (MJ) for General Discussion.

Group Discussion	Jaclyn Hakes (MJ) posed 3 questions about the Waterfront Connectivity Study Area to participants. The following questions received answers from residents and interested members of the public. The answers were recorded via note-takers and can be seen below.
	
	Are there other improvements you would like to see considered?
	• Participant notes that on Forbes, the vehicle traffic in both directions seems significantly safer, as opposed to the one-way.
	  ○ The firehouse is nearby and concerns about emergency access will be addressed by the Fire Chief, who is on the Study Committee.
	• Participant was concerned about the view of Albany, asking residents to change their property, and introducing new streetscape features.
	  ○ The viewsheds in the Study Area will not be impacted by the proposed improvements. All improvements will occur with the proper permissions and approvals. Any conceptual or proposed improvements will appropriately fit into the existing street after extensive reviews and permit processes.
	• Participant was concerned about the 5-Way Intersection on Washington Ave.
	  ○ There is a lot of further work that needs to be balanced. The idea of introducing sidewalks in feasible locations, introducing crosswalks and bump-outs, will help create a safer environment for pedestrians and motorists alike.
	• Participant notes the lack of speed limit signs and additional signage or lights.

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Group Discussion Continued	*What improvements are you most excited about?*
	General Thoughts and Ideas?
	• Participant asked: Who is paying for it, what is the cost?
	  ○ The cost has not yet been identified. This is a study phase to identify feasible improvements and to provide the city with adequate information on improvements.
	  ○ This study will allow the city to become eligible and more competitive to receive funding to bring the concepts discussed to reality.
	  ○ This is a concept study. Next steps would include securing funding, engineering, constructions etc.
	• Participant asked: Will the historic character of the neighborhood be impacted?
	  ○ The improvements will not impact the existing properties and buildings as they stand. The project team is aware of the character and nature of the neighborhood and will work to find a way to create recommendations that account for the concerns of those living in the neighborhood.
	  ○ Only development that is happening on the waterfront is the adaptive reuse Hilton Center and trails. There are no proposed development (apartments, houses, etc) in that area.
	• Participant was concerned that adding improved side streets will mean people drive faster.
	• Jaclyn Hakes (MJ) reminded the participants that the improvements will not all come at once. There are short, mid-term, and long-term projects.

Next Steps	Jaclyn Hakes (MJ) makes closing remarks and discusses the Next Steps of the Waterfront Connectivity Study. • Finalize Concepts based on input • Prepare Draft Study • A recording of this meeting will be available on the project website • Please leave any additional comments here: rensselaerriverfrontconnections.com Thank you to the City of Rensselaer, CDTA, Superintendent Kardash, and the members of the public who took the time to attend this public meeting.

This meeting summary conveys our understanding of the items discussed and agreements reached at this meeting. Please forward any additions, corrections and/or questions to my attention.

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Submitted by:
Jacob Landis, MJ Engineering and Land Surveying, PC

cc: Consultant Team, Project File, City, CDTC, Project Website

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DRAFT Waterfront Survey Summary
September 2022

Survey Overview

As part of the public engagement component of the City of Rensselaer Waterfront Connectivity Study, an online survey was developed. The purpose of the survey was to identify the community's vision and priorities for the waterfront area of the city. The information gathered from the survey and other public engagement events will help shape the vision and goals for the project area.

Survey Card

A twenty-three (23) question survey was created and distributed using the Survey Monkey platform. The survey opened Wednesday, June 16th, 2022, and remained open until Monday, August 1, 2022. There were 84 responses received.

The survey was available on the project website at www.rensselaerriverfrontconnections.com and was advertised on the city website. An information flyer which included a link to the online survey was prepared and distributed through social media and email. In addition, survey cards were prepared which included a Quick Response (QR) code for direct access to the survey on a smartphone or tablet.

Data Limitations

The survey is one of multiple public engagement activities intended to gather input from the community. The survey responses are self-selecting and are not statistically valid. The survey alone cannot be used to find the "answer" or "solution" but can in part help identify common themes and trends.

Survey Topic Areas

The survey questions were organized around four topic areas: Demographic Information, Use, Experience, and Suggestions for the Future.

Participant Information

Participant information questions sought to establish the demographics of the people taking the survey. Questions about demographic data and residency information were included in this section. Getting a broad range of survey participants from the local area is important to address the needs of different

demographics. Understanding the age of the survey participants can help inform how to best address their needs. Furthermore, knowing that responses are representative of a variety of community members can assist in inclusive decision-making.

Use

Questions pertaining to the Use sought to understand which resources survey participants are interacting with, what activities they are taking part in, and how they access those resources. Understanding how community members are interacting with the existing waterfront resources is important to identify where there may be opportunities for new or expanded resources.

Experience

This section asked survey participants questions about their perceived challenges and opportunities for the study area and its waterfront resources. Questions about the feeling of safety around the study area were concentrated in this section.

Suggestions for the Future

This section provided a place for survey participants to include any additional thoughts. There was also the opportunity for respondents to leave their email address to receive project updates.

Survey Highlights

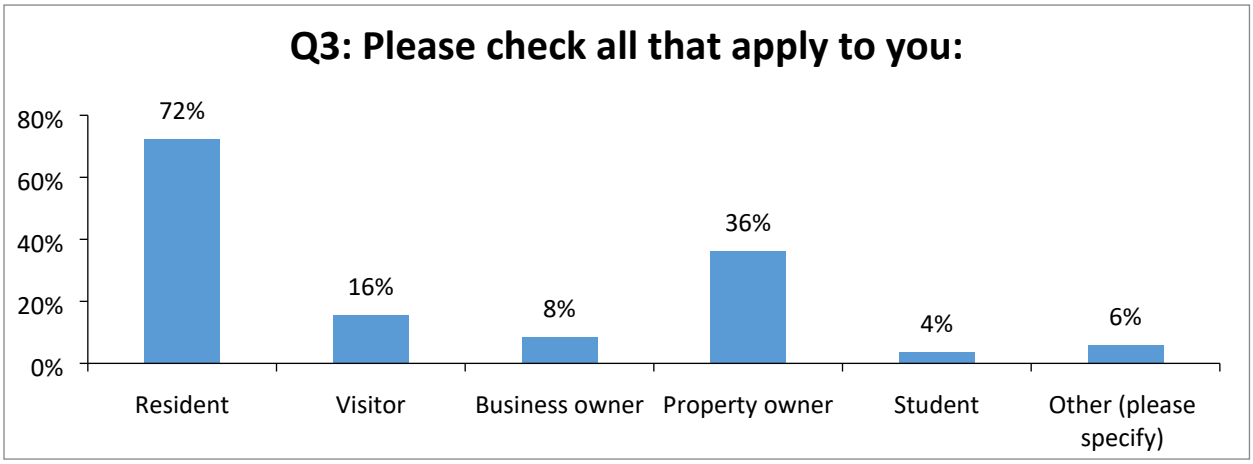
The following is a brief highlight of each question of the survey. For the full survey results see the attached survey questions and responses.

Participant Information

Question 1 (Q1) asked participants to enter their zip code. This is a key consideration to see local responses as well as visitors who may be coming to use a facility like the boat launch. The study area is located entirely in the 12144 zip code. Of the 72 responses received, 75% (54) were from the 12144 zip code. The remaining responses were divided among others from around the capital district.

Question 2 (Q2) of the survey determined the age ranges in which the respondents fell. Largest age cohort was 45 to 54 years old (26.5%). There were also a large group of respondents who reported as being 35 to 44 years old (19.2%) and 55 to 64 years old (18.7%). Having participants of varying age ranges providing input can ensure the study reflects the local demographic.

Question 3 (Q3) asked participants to identify all the categories they identify with, including Resident, Visitor, Business owner, Property owner, Student and Other with a place to write in. A significant portion (72.3% or 60 people) selected Resident. The next most selected was Property owner with 36.1% or 30 people followed by Visitor with 15.7% or 13 people. This shows a good mix of folks taking the survey.



Question 4 (Q4) asked participants if they live within the area outlined in RED on a map showing the study area. The responses received showed 69% selected No and 31% selected Yes. This helps identify the outreach was able to capture both people living in and outside the immediate study area.

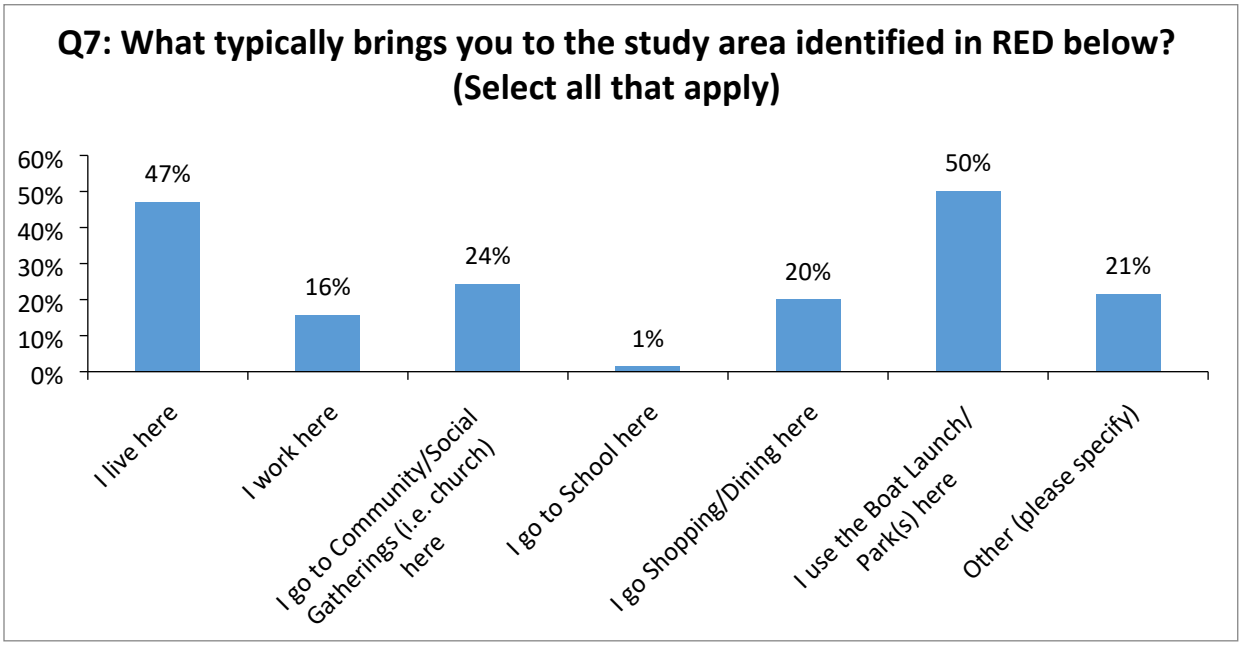
Question 5 (Q5) asked participants if they own property within the area outlined in RED on a map showing the study area. The responses received showed 71% selected No and 29% selected Yes.

Question 6 (Q6) asked participants to identify if they have a disability that limits their ability to walk, drive, etc. The responses received indicated that 86% selected no they do not and 14% selected yes.

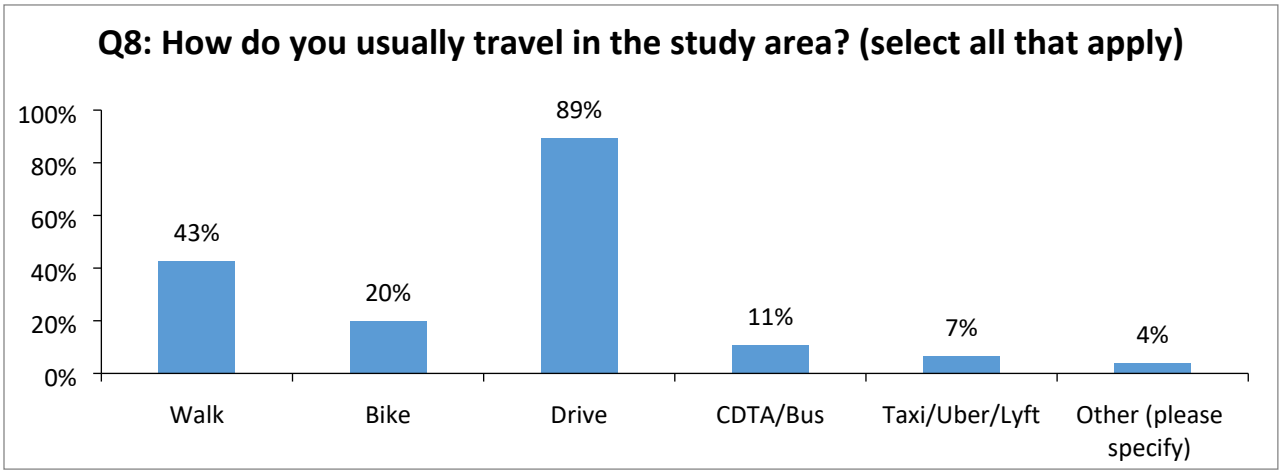
Use

Question 7 (Q7) asked participants what typically brings them to the study area and responders had the option to select all that apply with an option for other to write in a response. I use the Boat Launch/Park(s)

is the highest response, by 50% (35) of responders exceeding I live here, selected by 47% (33). The participants who selected other and wrote in a response, indicated they commute through the area either on foot, bike or car.

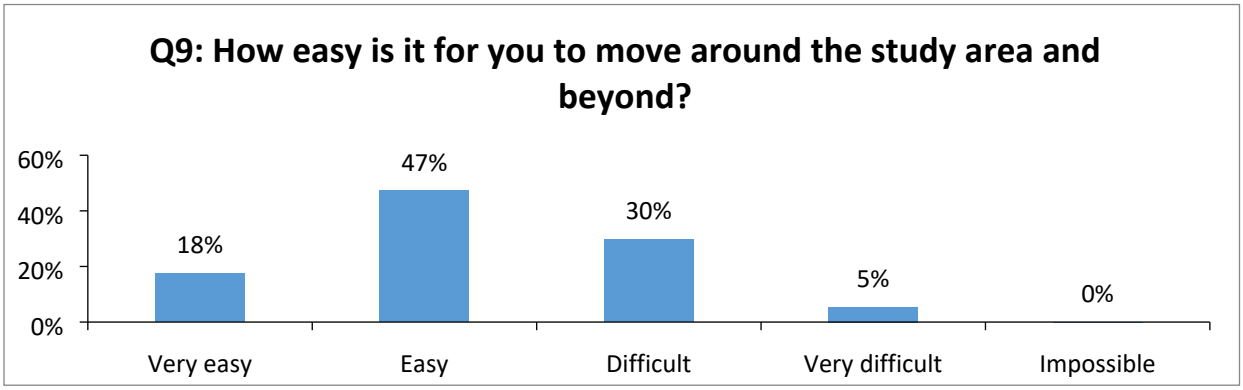


Question 8 (Q8) is similar in structure to **Q7** as it asks respondents to identify all of the ways folks travel within the study area. The large majority selected drive 89% followed by walk with 43% and bike with 20%.



Question 9 (Q9) of the survey asked respondents how easy it is for them to move around the study area and beyond. With options including Very easy, Easy, Difficult, Very difficult, and/or Impossible. A large portion of the responses revived selected Easy (47%) or Very easy (18%). The remaining selected difficult 30% or Very difficult (5%) with no one selecting impossible. Looking at responses from folks who selected

"Drive" in Q8 show they are much more likely to select very easy or easy. Folks who selected anything other that "Drive" in Q8 lean more to Difficult or very difficult.



Question 10 (Q10) was a follow up question to **Question 9** and asked survey participants if they selected difficult, to let us know why. As an open-ended question that received 24 responses some themes that emerged are the lack of infrastructure including sidewalks, bike lanes, or lighting.

Experience

Question 11 (Q11) was an in-depth matrix rating type question asking participants when traversing the study area, how do they feel about a multitude of topics. Topics included everything from curb ramps are textured for the visually impaired, ADA accessibility, water drains quickly after rain storms, to buses come often enough. All the topics had rankings from Strongly Agree to Strongly Disagree. Challenges that emerged through responses received, show majority of responders disagree or strongly disagree about the following:

- Drivers yield to pedestrians
- Landscaping is attractive
- Driver speeding is not a problem
- Drivers stop behind crosswalks

Responses also identified a theme in items that do not need attention and are working as they should, including:

- Bus service is reliable
- Buses come often enough
- Water drains quickly after rainstorms

Question 12 (Q12) asked participants if they feel safe walking on Forbes Ave. The responders had 3 options to choose from including; not applicable (N/A), yes, and no with a write in on why they chose no. The highest selected response (49%) was no and wrote in a response. Themes that emerged from write

in responses show the road is not wide enough, car speed is a concern, and no guardrails or pedestrian lighting. Only 17% of responders selected yes, they feel safe walking on Forbes Ave.

Question 13 (Q13) asked survey respondents if they feel safe riding a bike on Forbes Ave. Like the previous question the responders had 3 options to choose from including; not applicable, yes, and no with a write in on why they chose no. The responses received showed (44%) chose no and wrote in a response. The same themes from **Q12** came through, the road is not wide enough, and no guardrails or pedestrian lighting. A bigger portion (40%) selected N/A further showing less people bike in the study area.

Question 14 (Q14) asked participants if they feel safe walking on Washington Ave. Here the majority (62%) selected yes, and only 19% selected no and wrote in a response. The write in responses showed that folks do walk on Washington Ave but, there could be improvements in crosswalks, and cleanliness of the sidewalks. The remaining 19% selected N/A.

Question 15 (Q15) asked survey respondents if they feel safe riding a bike on Washington Ave. Like the previous question the responders had 3 options to choose from including; not applicable, yes, and no with a write in on why they chose no. The responses received showed most (38%) chose no and wrote in a response. The same themes from Q12 came through, the road is not wide enough for folks to feel safe riding a bike. A portion (33%) selected N/A further showing less people bike in the study area and the remaining 29% selected yes, they feel safe.

Question 16 (Q16) asked participants how important it is to accommodate all types of transportation, including all modes driving, walking, bicycling, and buses. Here all modes scored high for importance of being accommodated. Walking scored highest, 94% selected very important followed by driving 78%, and bicycling 77% and lastly buses 73% selecting very important.

Question 17 (Q17) asked participants to select their top two (2) bicycle facilities they would like to see. The two most selected were on-street bicycle lanes (60%) followed by bicycle parking racks (58%).

Question 18 (Q18) was a follow up question to **Q17** asking respondents where they would you like to see the facilities selected. The answer options included, Forbes Ave, Washington Ave, Broadway, Bellview Ter, Patten Ave, Tracy St, and Other with a place to write in. The top three streets selected were Washington Ave (87%), Broadway (74%), and Forbes Ave (56%).

Question 19 (Q19) asked participants to select their top three (3) streetscape elements they would like to see. The top three that emerged were street lighting (69%), more sidewalks (68%), and more or better pedestrian crossings (66%). Lowest scoring were street trees with 34% selecting.

Question 20 (Q20) was a follow up question to **Q19** asking responders where they would you like to see the streetscape elements selected. The answer options included, Forbes Ave, Washington Ave, Broadway,

Bellview Ter, Patten Ave, Tracy St, and Other with a place to write in. The top three streets were Washington Ave (85%), Broadway (76%), and Forbes Ave (63%). These answers line up with **Q18** responses!

Question 21 (Q21) asked participants to select their top three (3) transit amenities they would like to see. The top three amenities identified were benches at bus stops (70%), shelters at bus stops (66%), and finally lighting at bus stops (57%)

Suggestions for the Future

Question 22 (Q22) asked participants to share any additional ideas and/or comments they may have. Themes that emerged are specific concerns about parking availability and consider connectivity to other neighborhoods in the area.

Question 23 (Q23) was optional and allowed participants to leave their email to receive project updates.

Q1 Please enter your zip code.

Answered: 72 Skipped: 12

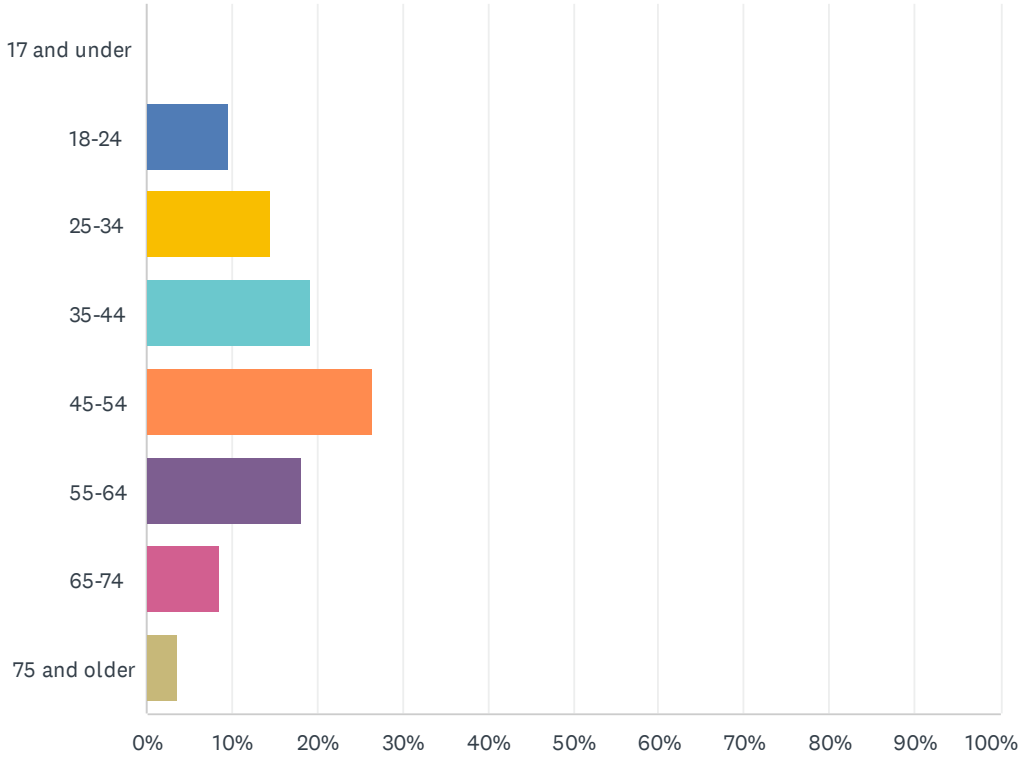
#	RESPONSES	DATE
1	12208	8/1/2022 1:56 PM
2	12061	8/1/2022 12:33 PM
3	12208	7/29/2022 11:07 AM
4	12144	7/25/2022 8:53 AM
5	12144	7/25/2022 8:44 AM
6	12144	7/23/2022 4:11 PM
7	12144	7/23/2022 3:53 PM
8	12144	7/22/2022 10:26 AM
9	12084	7/21/2022 10:56 PM
10	30144	7/19/2022 3:24 PM
11	12180	7/19/2022 3:18 PM
12	12144	7/19/2022 2:49 PM
13	12144	7/19/2022 2:42 PM
14	12144	7/19/2022 10:54 AM
15	12144	7/19/2022 10:54 AM
16	12144	7/19/2022 10:47 AM
17	12061	7/14/2022 2:33 PM
18	12144	7/14/2022 12:49 PM
19	12063	7/13/2022 10:25 PM
20	12198	7/13/2022 9:43 PM
21	12144	7/13/2022 5:13 PM
22	12061	7/13/2022 3:55 PM
23	12144	7/13/2022 2:50 PM
24	12144	7/13/2022 2:39 PM
25	12144	7/13/2022 2:17 PM
26	12303	7/13/2022 1:59 PM
27	12144	7/13/2022 1:57 PM
28	12144	7/13/2022 1:30 PM
29	12144	7/13/2022 1:21 PM
30	12211	7/13/2022 11:35 AM
31	12144	7/12/2022 8:36 PM
32	12144	7/10/2022 8:03 PM
33	12155	7/10/2022 10:57 AM

34	12144	7/9/2022 3:21 PM
35	12144	7/9/2022 10:17 AM
36	12144	7/8/2022 9:23 PM
37	12144	7/8/2022 3:47 PM
38	12144	7/8/2022 1:14 PM
39	12244	7/8/2022 11:42 AM
40	12144	7/8/2022 11:03 AM
41	12144	7/8/2022 7:48 AM
42	12144	7/6/2022 12:13 PM
43	12144	7/6/2022 10:54 AM
44	12144	7/6/2022 10:39 AM
45	12061	7/5/2022 11:20 AM
46	12203	7/3/2022 4:57 PM
47	12144	7/2/2022 7:40 AM
48	12144	7/1/2022 8:53 PM
49	12144	7/1/2022 10:50 AM
50	12144	7/1/2022 10:11 AM
51	12144	7/1/2022 7:50 AM
52	12144	7/1/2022 7:13 AM
53	12144	7/1/2022 12:07 AM
54	12144	6/30/2022 9:20 PM
55	12144	6/30/2022 8:14 PM
56	12866	6/30/2022 5:05 PM
57	12144	6/30/2022 2:29 PM
58	12144	6/30/2022 1:59 PM
59	12075	6/30/2022 1:58 PM
60	12144	6/30/2022 1:51 PM
61	12144	6/30/2022 1:49 PM
62	12144	6/27/2022 2:03 PM
63	12144	6/18/2022 4:43 PM
64	12144	6/18/2022 4:16 PM
65	12144	6/17/2022 4:59 PM
66	12144	6/17/2022 11:47 AM
67	12144	6/17/2022 11:41 AM
68	12144	6/17/2022 10:19 AM
69	12144	6/17/2022 9:06 AM
70	12144	6/17/2022 8:57 AM
71	12144	6/16/2022 7:36 PM

72	12144	6/16/2022 6:06 PM

Q2 Please indicate your age.

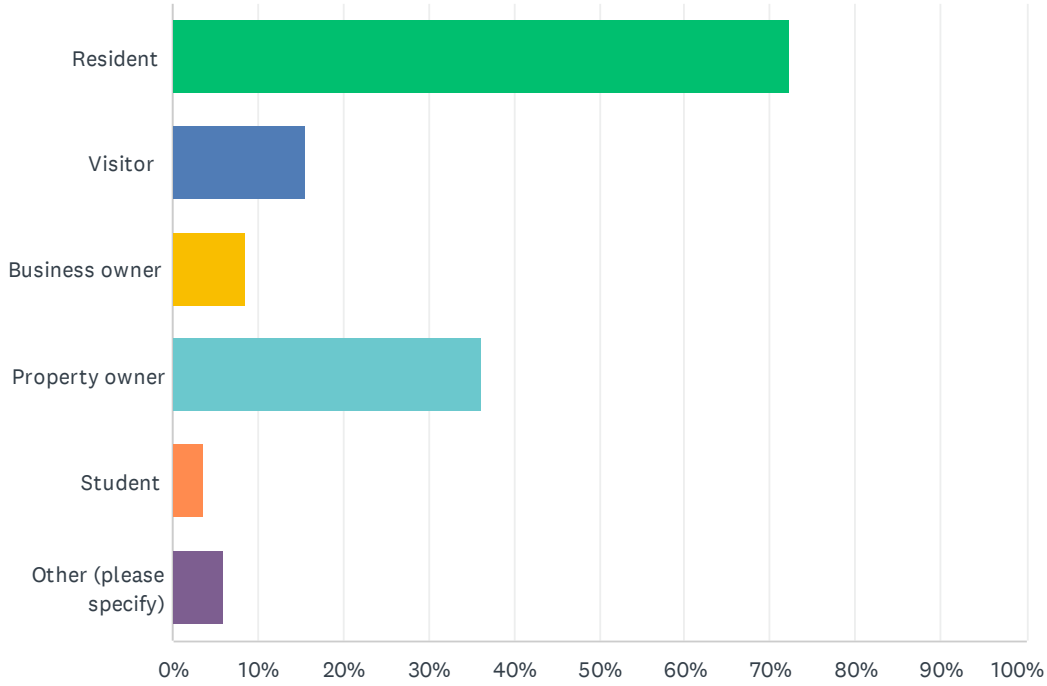
Answered: 83 Skipped: 1



ANSWER CHOICES	RESPONSES	
17 and under	0.00%	0
18-24	9.64%	8
25-34	14.46%	12
35-44	19.28%	16
45-54	26.51%	22
55-64	18.07%	15
65-74	8.43%	7
75 and older	3.61%	3
TOTAL		83

Q3 Please check all that apply to you:

Answered: 83 Skipped: 1

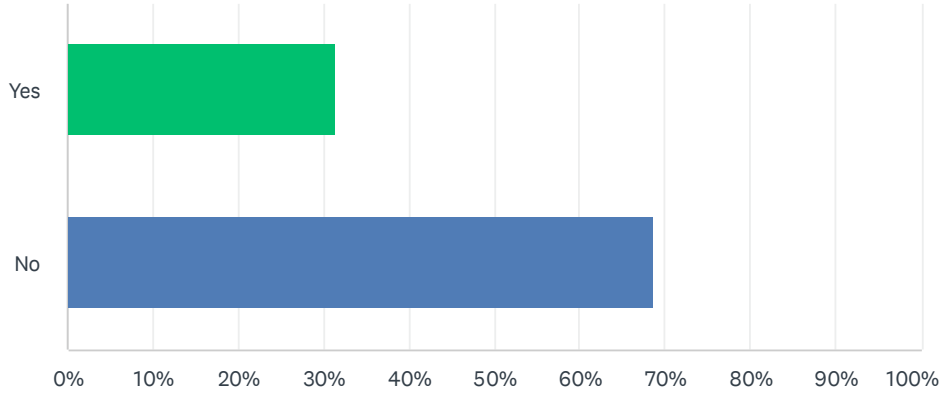


ANSWER CHOICES	RESPONSES	
Resident	72.29%	60
Visitor	15.66%	13
Business owner	8.43%	7
Property owner	36.14%	30
Student	3.61%	3
Other (please specify)	6.02%	5
Total Respondents: 83		

#	OTHER (PLEASE SPECIFY)	DATE
1	neighboring area	7/19/2022 2:42 PM
2	Former resident	7/3/2022 4:57 PM
3	Work in the city, on a waterfront property.	6/30/2022 2:53 PM
4	employed in the city	6/30/2022 1:58 PM
5	Government	6/27/2022 2:03 PM

Q4 Do you live within the area outlined in RED on the map below?

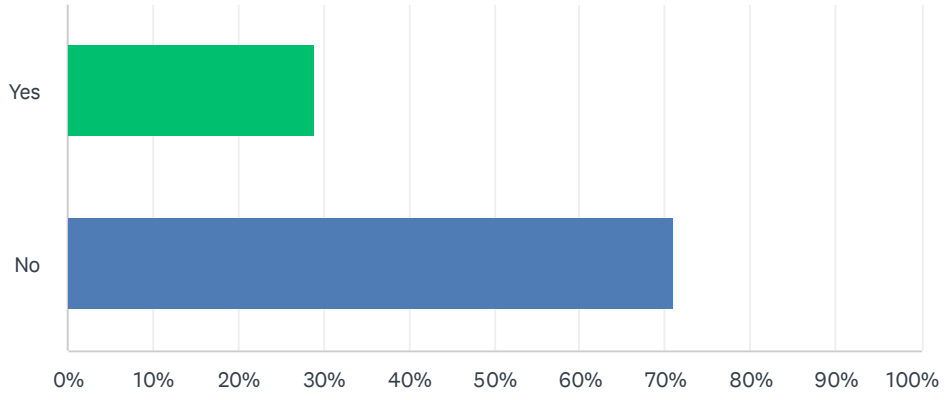
Answered: 80 Skipped: 4



ANSWER CHOICES	RESPONSES	
Yes	31.25%	25
No	68.75%	55
TOTAL		80

Q5 Do you own property within the area outlined in RED on the map above?

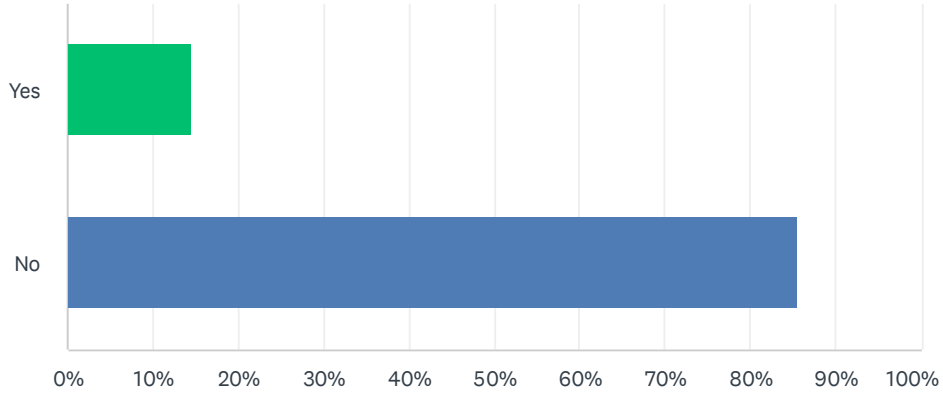
Answered: 83 Skipped: 1



ANSWER CHOICES	RESPONSES	
Yes	28.92%	24
No	71.08%	59
TOTAL		83

Q6 Do you have a disability that limits your ability to walk, drive, etc.?

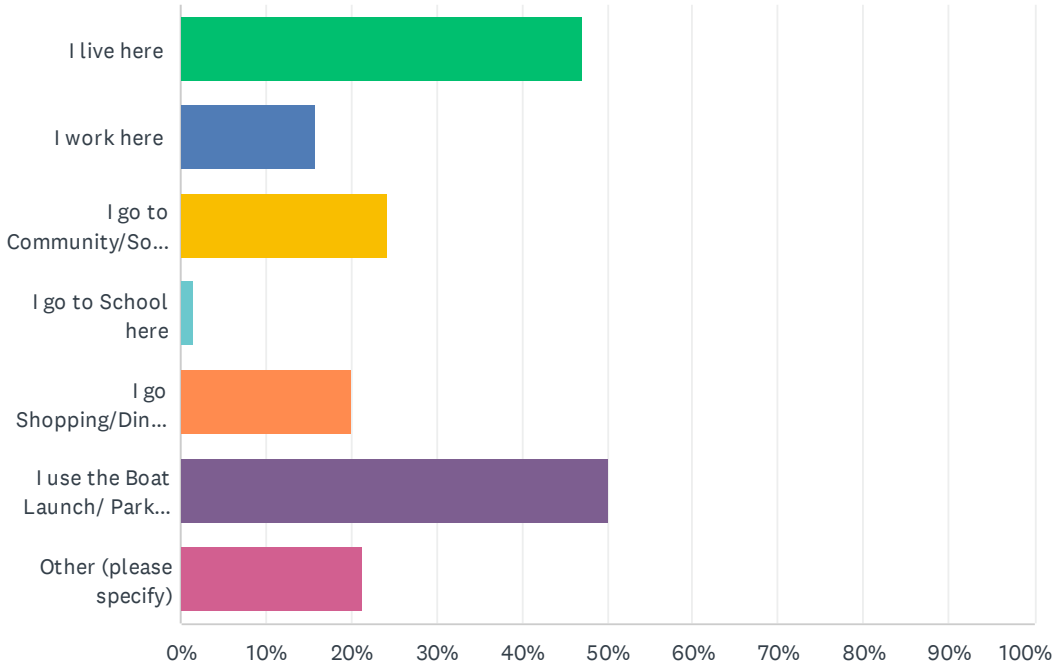
Answered: 83 Skipped: 1



ANSWER CHOICES	RESPONSES	
Yes	14.46%	12
No	85.54%	71
TOTAL		83

Q7 What typically brings you to the study area identified in RED below? (Select all that apply)

Answered: 70 Skipped: 14



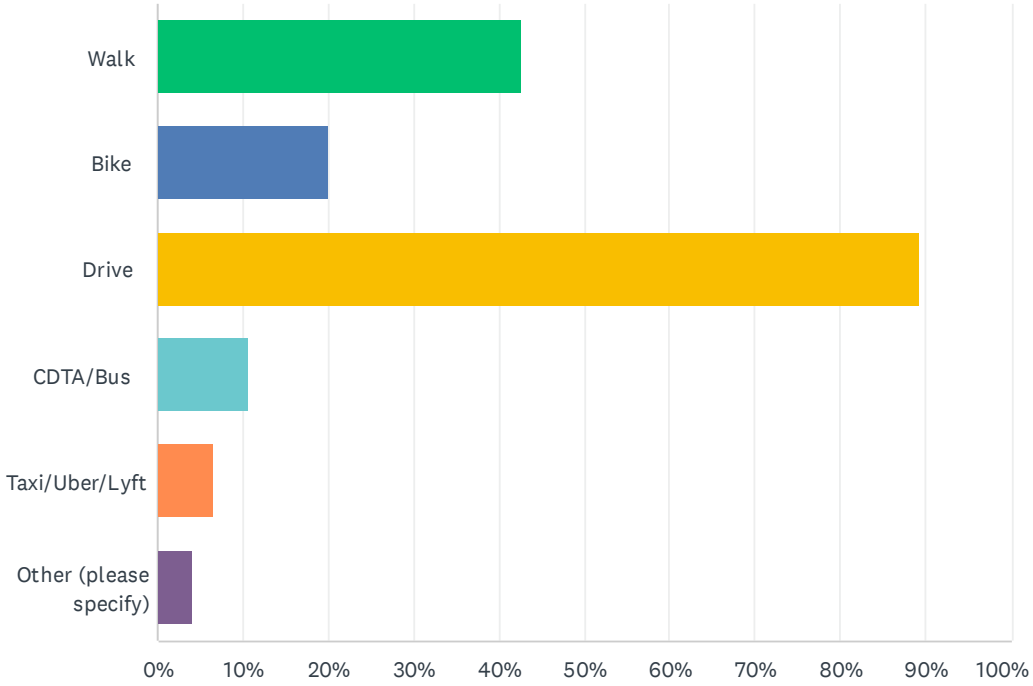
ANSWER CHOICES	RESPONSES	
I live here	47.14%	33
I work here	15.71%	11
I go to Community/Social Gatherings (i.e. church) here	24.29%	17
I go to School here	1.43%	1
I go Shopping/Dining here	20.00%	14
I use the Boat Launch/ Park(s) here	50.00%	35
Other (please specify)	21.43%	15
Total Respondents: 70		

#	OTHER (PLEASE SPECIFY)	DATE
1	recreation	7/19/2022 2:44 PM
2	Neighboring town	7/13/2022 9:44 PM
3	bike or dive thru	7/13/2022 2:41 PM
4	I do not travel here unless passing through due to lack of things to do	7/13/2022 2:21 PM
5	I drive through	7/13/2022 1:22 PM
6	Friends live in the area	7/10/2022 8:04 PM

7	I occasionally take a walk there.	7/6/2022 10:41 AM
8	Occasional train station commuter	7/3/2022 5:06 PM
9	Nothing	7/1/2022 10:51 AM
10	life long resident, I care about the city and residents	7/1/2022 10:13 AM
11	Dog walking. Bike riding	6/30/2022 9:22 PM
12	My family lives in Rensselaer County nearby	6/30/2022 5:06 PM
13	Walking	6/22/2022 11:34 AM
14	City resident, I drive through area often	6/17/2022 5:01 PM
15	I regularly go on walks/drives through here	6/17/2022 10:30 AM

Q8 How do you usually travel in the study area? (select all that apply)

Answered: 75 Skipped: 9

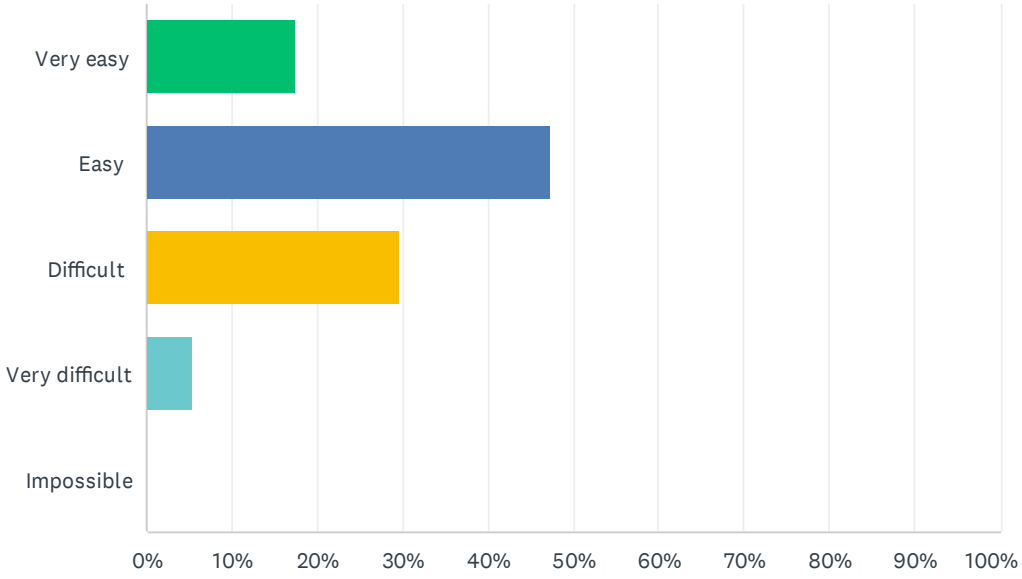


ANSWER CHOICES	RESPONSES	
Walk	42.67%	32
Bike	20.00%	15
Drive	89.33%	67
CDTA/Bus	10.67%	8
Taxi/Uber/Lyft	6.67%	5
Other (please specify)	4.00%	3
Total Respondents: 75		

#	OTHER (PLEASE SPECIFY)	DATE
1	Would prefer to bike, but paint is not protection.	7/22/2022 10:29 AM
2	Wheelchair	7/1/2022 8:55 PM
3	I don’t	7/1/2022 10:51 AM

Q9 How easy is it for you to move around the study area and beyond?

Answered: 74 Skipped: 10



ANSWER CHOICES	RESPONSES	
Very easy	17.57%	13
Easy	47.30%	35
Difficult	29.73%	22
Very difficult	5.41%	4
Impossible	0.00%	0
TOTAL		74

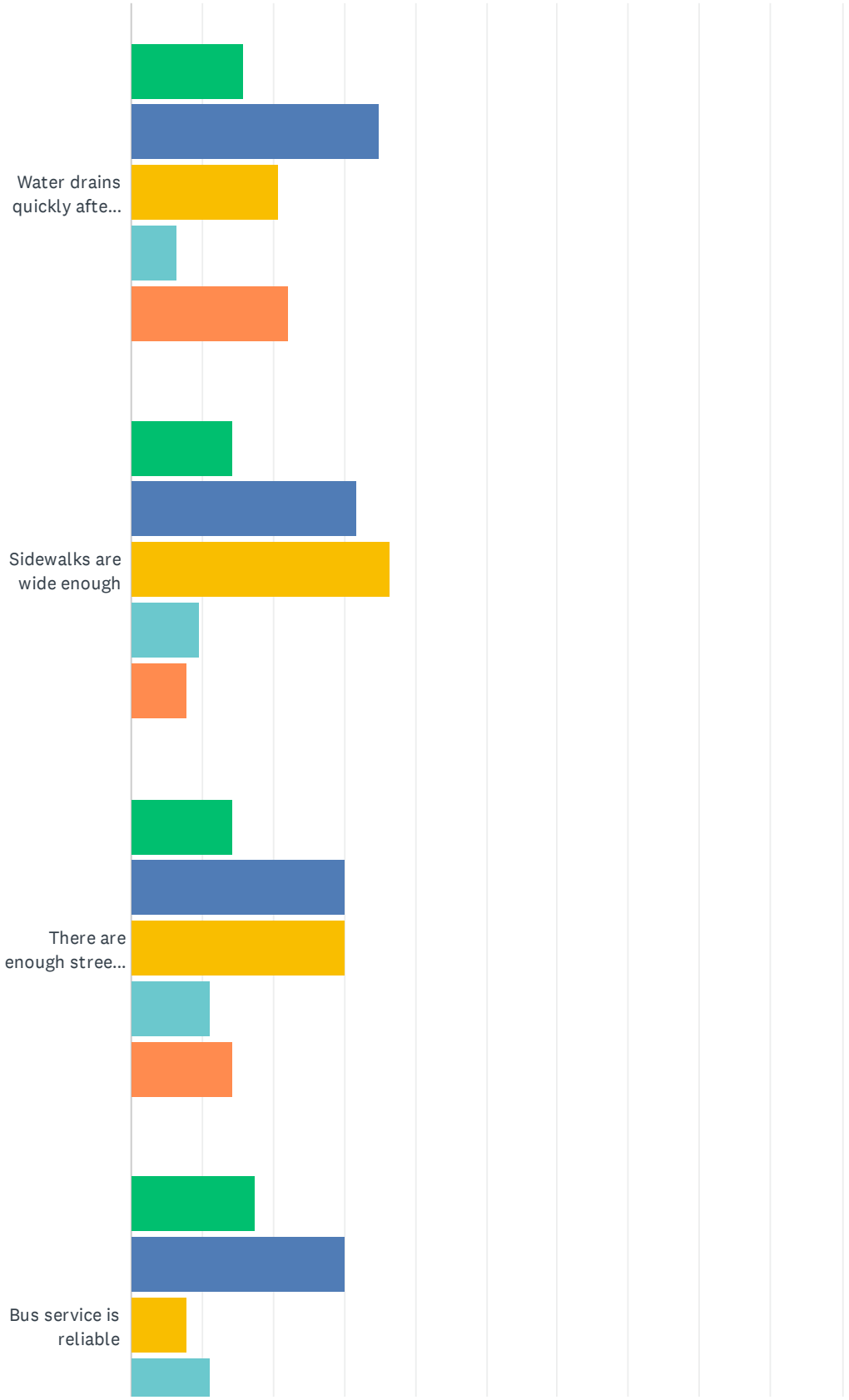
Q10 If difficult please let us know why.

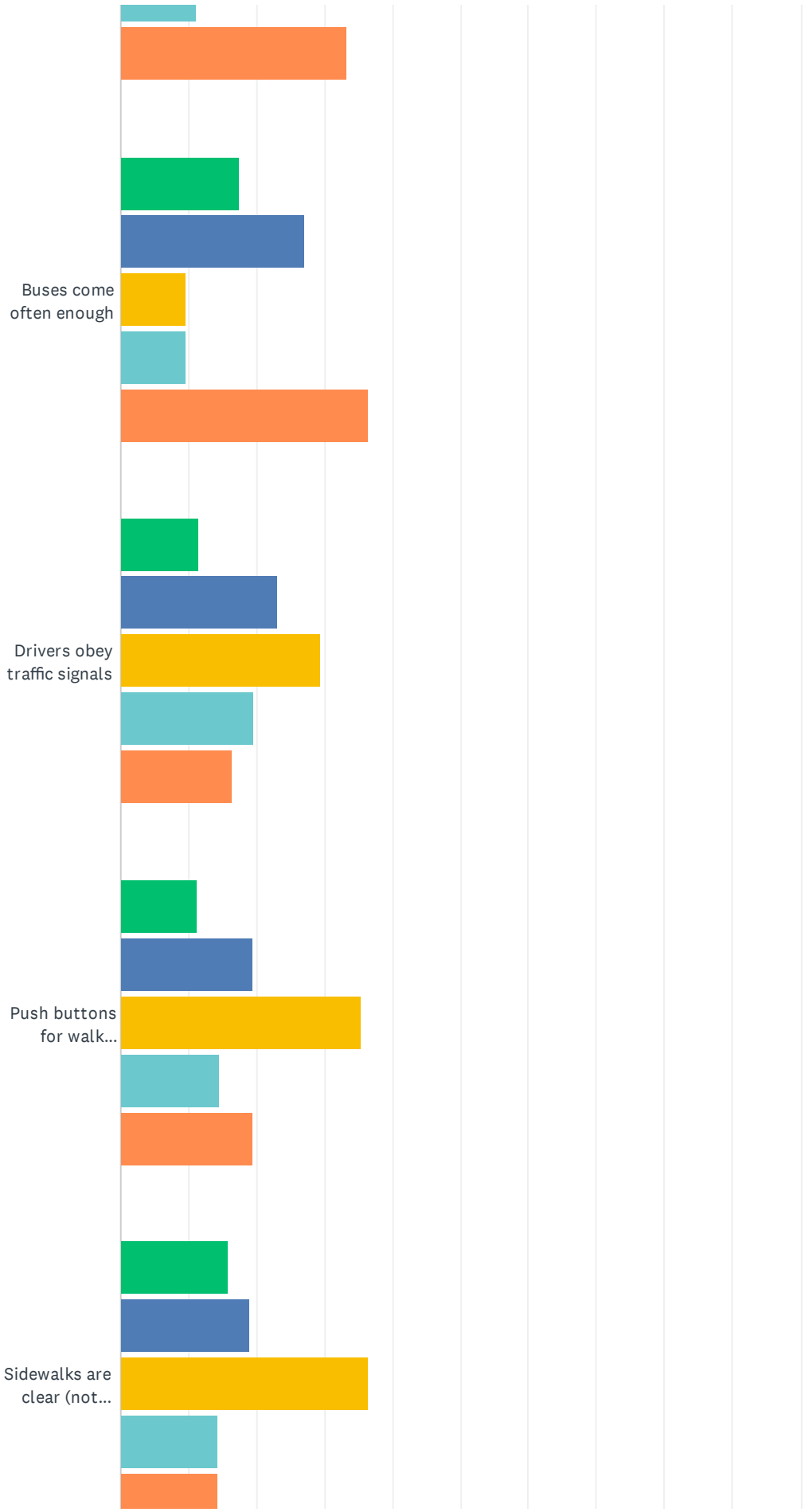
Answered: 24 Skipped: 60

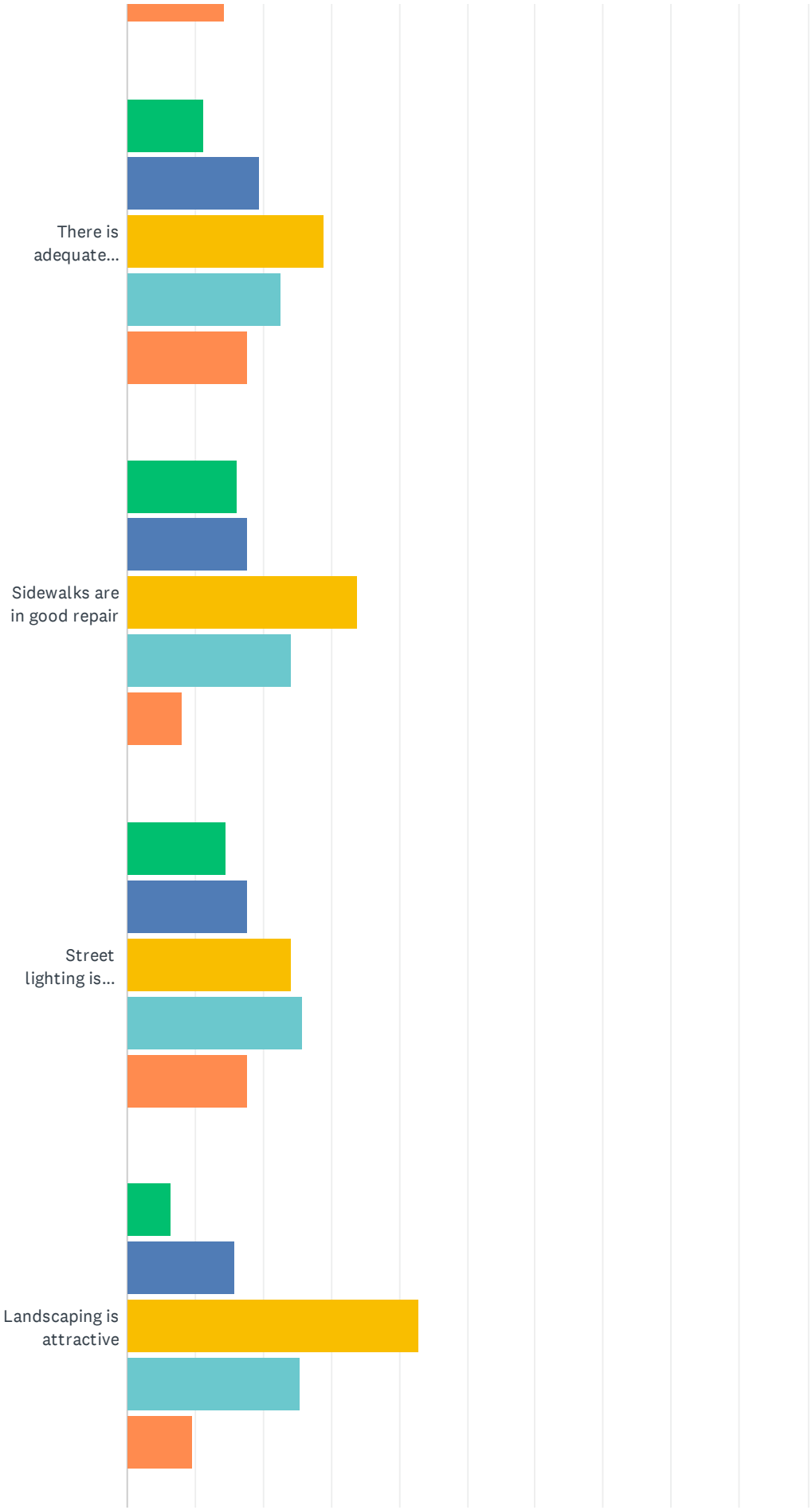
#	RESPONSES	DATE
1	Not enough bike infrastructure	7/29/2022 11:08 AM
2	Forbes ave and Washington ave are narrow. . There are no lights on either road. The cars on Washington ave make t difficult for cars to drive on eiter side at same time. forbes ave is not wide enough and i am afraid to walk down at any time because of the cars are so close and there is not a rail next to the edge.	7/25/2022 8:58 AM
3	Roads are narrow. there is not adequate lighting.	7/25/2022 8:46 AM
4	There is a lighting issues, lack of crosswalks, congestion where parking is on both sides and narrow road leading to boat launch area.	7/23/2022 4:12 PM
5	Not enough parking on city the streets. No some sections of bad sidewalks (across from caseys, end on Washington, side streets). small road going to boat launch	7/23/2022 3:55 PM
6	The intersection of Broadway and washington needs better traffic control. Especially in summer, overgrowth creates a blind turn at this intersection.	7/22/2022 10:29 AM
7	It difficult cause there is a lot of water front here	7/21/2022 10:58 PM
8	Mobility issues mean i use canes	7/19/2022 2:50 PM
9	no choice between easy & difficult	7/13/2022 2:41 PM
10	wayfinding could be better. defined bike lanes would be helpful	7/13/2022 2:21 PM
11	The streets are very narrow in the study. Cars are coming in opposite directions don't have enough room to get by each other at the same time. As you drive down the road you have to pull over and stop to let the other vehicle pass you.	7/8/2022 6:31 PM
12	Some of the area sidewalks are in complete disrepair or nonexistent. No marked cross walks. No easy pedestrian access to boat launch	7/8/2022 7:50 AM
13	Uneven roads/sidewalks Sidewalks blocked No access	7/1/2022 8:55 PM
14	it would be great to have a walk way through the city	7/1/2022 10:13 AM
15	Hills, lack of bicycle and pedestrian space, lack of connections	7/1/2022 12:08 AM
16	Broken sidewalks. Areas with no sidewalks. Poor lighting	6/30/2022 9:22 PM
17	Not great access for walking or biking.	6/30/2022 5:06 PM
18	Most of it is wooded, dark n small roads	6/30/2022 2:33 PM
19	Washington Ave near Casey's is very difficult. Road needs parking on it. Bottom of Washington Ave is a nightmare with Broadway and Forbes intersection. FORBES AVE IS AWFUL	6/30/2022 1:52 PM
20	school zone speed trap and two sided parking	6/30/2022 1:50 PM
21	In some areas the sidewalks are terrible or nearly nonexistent	6/27/2022 2:05 PM
22	Difficult to navigate and know how to get to the boat launch or the waterfront area.	6/18/2022 7:21 PM
23	Cannot walk for a long period of time	6/17/2022 11:45 AM
24	Most areas are not very pedestrian friendly with no designated area to walk. Guardrails or other barriers are not present in hazardous areas, such as Forbes Ave. It can be very difficult for pedestrians to cross from the corner store on Washington Ave to the other side of the street, and cars occasionally have trouble leaving the area, especially as there is a CDTA bus stop located right there.	6/17/2022 10:30 AM

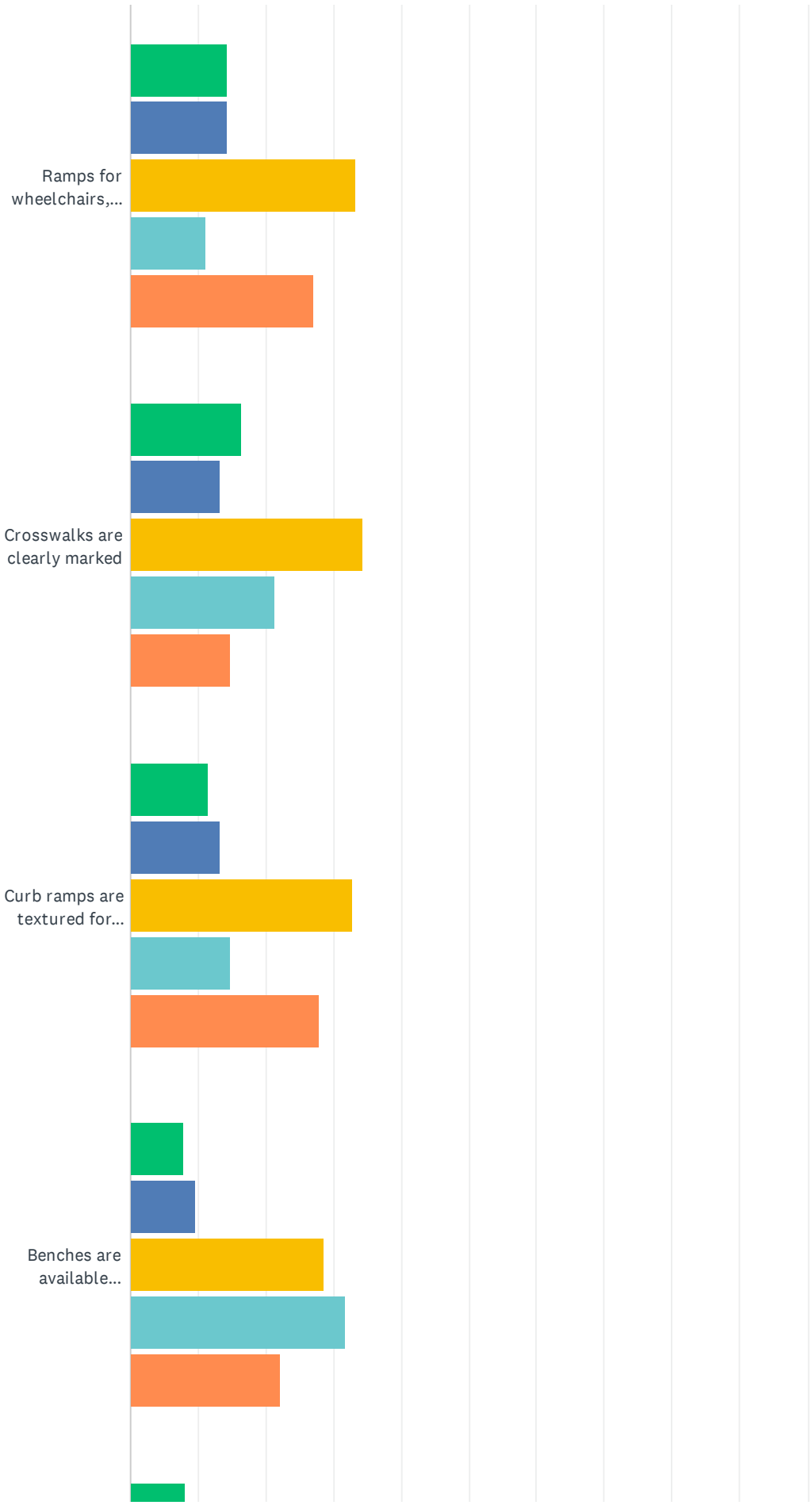
Q11 When traversing the study area, how do you feel about the following:

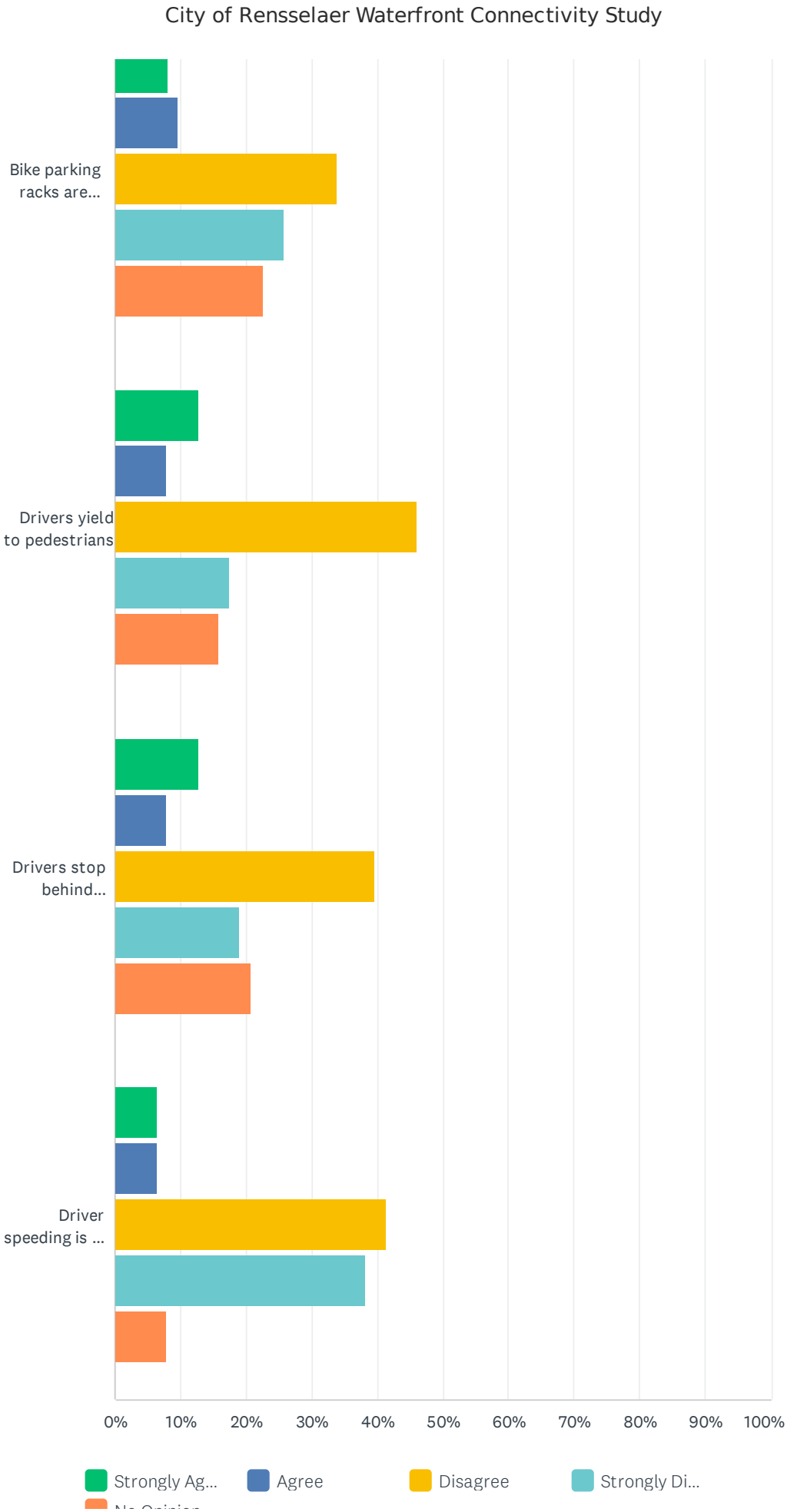
Answered: 63 Skipped: 21




Buses come often enough
Drivers obey traffic signals
Push buttons for walk...
Sidewalks are clear (not...


There is adequate...
Sidewalks are in good repair
Street lighting is...
Landscaping is attractive


Ramps for wheelchairs,...
Crosswalks are clearly marked
Curb ramps are textured for...
Benches are available...

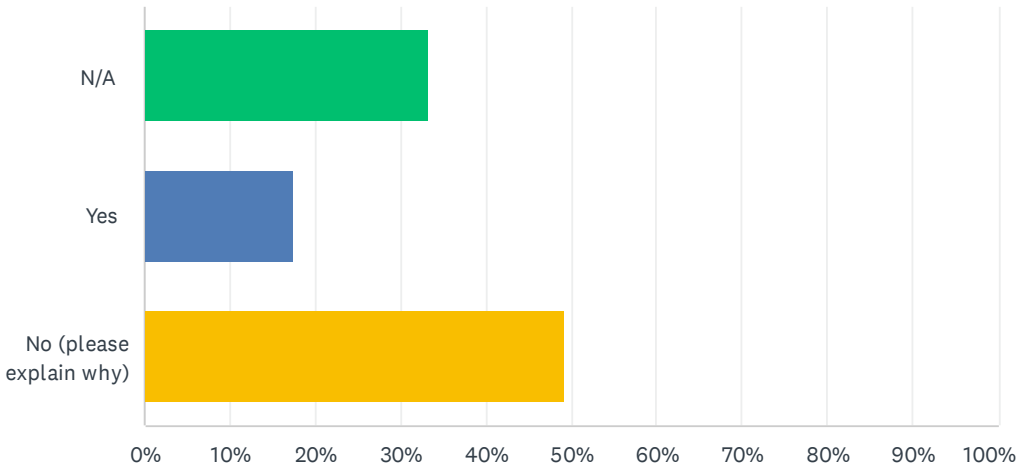

City of Rensselaer Waterfront Connectivity Study
Bike parking racks are...
Drivers yield to pedestrians
Drivers stop behind...
Driver speeding is ...
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
Strongly Ag...
Agree
Disagree
Strongly Di...

No Opinion...

	STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE	NO OPINION/NOT SURE	TOTAL	WEIGHTED AVERAGE
Water drains quickly after rain storms	15.87% 10	34.92% 22	20.63% 13	6.35% 4	22.22% 14	63	1.73
Sidewalks are wide enough	14.29% 9	31.75% 20	36.51% 23	9.52% 6	7.94% 5	63	2.25
There are enough street trees	14.29% 9	30.16% 19	30.16% 19	11.11% 7	14.29% 9	63	2.10
Bus service is reliable	17.46% 11	30.16% 19	7.94% 5	11.11% 7	33.33% 21	63	1.46
Buses come often enough	17.46% 11	26.98% 17	9.52% 6	9.52% 6	36.51% 23	63	1.38
Drivers obey traffic signals	11.48% 7	22.95% 14	29.51% 18	19.67% 12	16.39% 10	61	2.25
Push buttons for walk signals are available and work as they should	11.29% 7	19.35% 12	35.48% 22	14.52% 9	19.35% 12	62	2.15
Sidewalks are clear (not blocked by poles, signs, shrubs, etc.)	15.87% 10	19.05% 12	36.51% 23	14.29% 9	14.29% 9	63	2.21
There is adequate on-street parking	11.29% 7	19.35% 12	29.03% 18	22.58% 14	17.74% 11	62	2.27
Sidewalks are in good repair	16.13% 10	17.74% 11	33.87% 21	24.19% 15	8.06% 5	62	2.50
Street lighting is sufficient	14.52% 9	17.74% 11	24.19% 15	25.81% 16	17.74% 11	62	2.26
Landscaping is attractive	6.35% 4	15.87% 10	42.86% 27	25.40% 16	9.52% 6	63	2.68
Ramps for wheelchairs, strollers, etc. are available	14.29% 9	14.29% 9	33.33% 21	11.11% 7	26.98% 17	63	1.87
Crosswalks are clearly marked	16.39% 10	13.11% 8	34.43% 21	21.31% 13	14.75% 9	61	2.31
Curb ramps are textured for the visually impaired	11.48% 7	13.11% 8	32.79% 20	14.75% 9	27.87% 17	61	1.95
Benches are available throughout	7.94% 5	9.52% 6	28.57% 18	31.75% 20	22.22% 14	63	2.40
Bike parking racks are available	8.06% 5	9.68% 6	33.87% 21	25.81% 16	22.58% 14	62	2.32
Drivers yield to pedestrians	12.70% 8	7.94% 5	46.03% 29	17.46% 11	15.87% 10	63	2.37
Drivers stop behind crosswalks	12.70% 8	7.94% 5	39.68% 25	19.05% 12	20.63% 13	63	2.24
Driver speeding is not a problem	6.35% 4	6.35% 4	41.27% 26	38.10% 24	7.94% 5	63	2.95

Q12 Do you feel safe walking on Forbes Ave?

Answered: 63 Skipped: 21



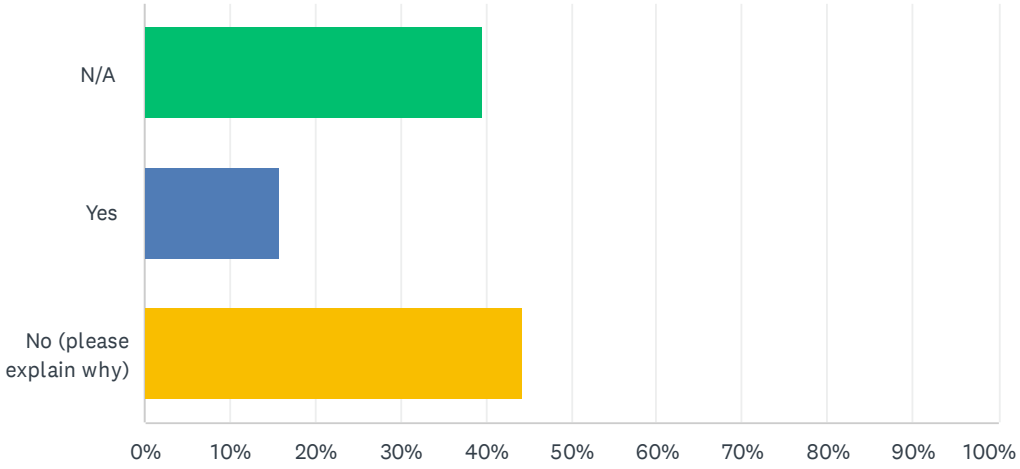
ANSWER CHOICES	RESPONSES	
N/A	33.33%	21
Yes	17.46%	11
No (please explain why)	49.21%	31
TOTAL		63

#	NO (PLEASE EXPLAIN WHY)	DATE
1	The road is in terrible condition and not wide enough. There is not enough lighting or a sidwalk.	7/25/2022 9:08 AM
2	No lighting. Narrow road with no guardrail.	7/25/2022 8:48 AM
3	I do not like to walk along Forbes Ave because the road is not wide enough and cars fly up/down. The lighting is non existent.	7/23/2022 4:16 PM
4	NOT WIDE ENOUGH. no sidewalks or lighting.	7/23/2022 4:00 PM
5	Drivers do not share the road	7/22/2022 10:38 AM
6	It's a dump. There's no pride in ownership, the people who live here are uneducated low income people that don't care about the city being nicer.	7/19/2022 10:52 AM
7	The residents of this place do not follow stop signs and speed limits.	7/14/2022 12:54 PM
8	It’s poorly lit. And there are no sidewalks	7/13/2022 2:04 PM
9	Not enough visibility	7/10/2022 11:01 AM
10	No sidewalks	7/8/2022 11:46 AM
11	Speeding	7/8/2022 11:08 AM
12	Not well lighted. You HAVE to walk in the street. Over grown.	7/8/2022 8:01 AM
13	No light at night	7/6/2022 10:58 AM
14	Traffic moves too fast. I was once followed by a group of teens who were yelling awful comments at me.	7/5/2022 11:29 AM

15	Have you seen4th avenue	7/1/2022 10:58 AM
16	the city isn't taken care of like it used to be	7/1/2022 10:21 AM
17	Last time I was there the road was on tough shape	7/1/2022 9:53 AM
18	Difficult for drivers to see people walking, difficult to navigate	7/1/2022 12:18 AM
19	Poor lighting. Narrow road. No sidewalks	6/30/2022 9:27 PM
20	No sidewalks, blind turns, no lighting, overgrown brush, large drop into woods	6/30/2022 8:26 PM
21	Not attractive place to want to walk around, narrow road and no sidewalks	6/30/2022 5:11 PM
22	No sidewalks dark n road only wide enough for 1vehicle at a time	6/30/2022 2:40 PM
23	Heavy growth, no sidewalks, poor lighting.	6/30/2022 2:28 PM
24	Road is NOT WIDE ENOUGH. There are no lights or sidewalks. No guard rails so I might fall down hill.	6/30/2022 1:56 PM
25	Dark, poorly lite, no sidewalks	6/27/2022 2:18 PM
26	Narrow, dark and no sidewalks	6/18/2022 7:32 PM
27	Cars speeed narrow road. Drivers on phones	6/18/2022 4:48 PM
28	Dark. Traffic no sidewalk	6/18/2022 4:21 PM
29	Not pedestrian friendly	6/17/2022 5:07 PM
30	Dark, secluded, narrow	6/17/2022 10:39 AM
31	Tight road so drives can’t drive on both sides simultaneously. Dark. Fast drivers	6/17/2022 9:03 AM

Q13 Do you feel safe riding a bike on Forbes Ave?

Answered: 63 Skipped: 21



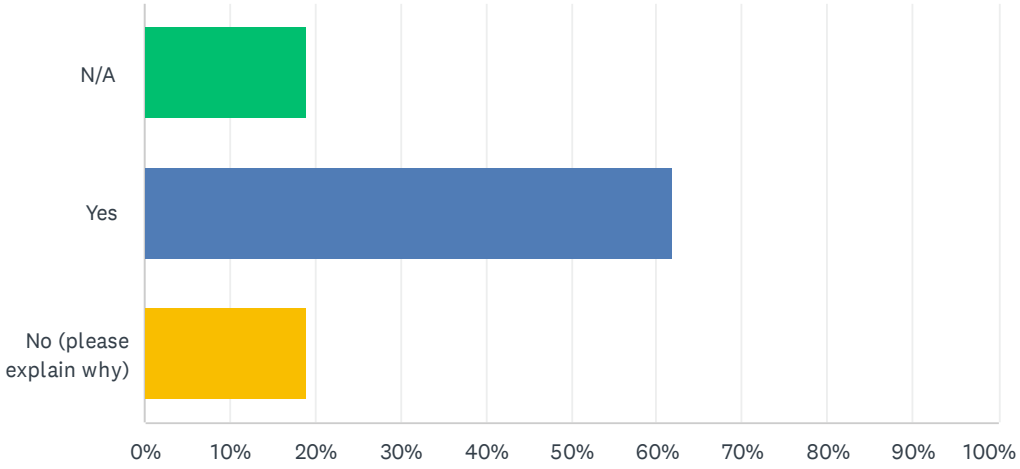
ANSWER CHOICES	RESPONSES	
N/A	39.68%	25
Yes	15.87%	10
No (please explain why)	44.44%	28
TOTAL		63

#	NO (PLEASE EXPLAIN WHY)	DATE
1	The road is in terrible condition and not wide enough. There is not enough lighting or a sidewalk.	7/25/2022 9:08 AM
2	No lighting. Narrow road with no guardrail.	7/25/2022 8:48 AM
3	no where to ride bike.	7/23/2022 4:16 PM
4	NOT WIDE ENOUGH. no sidewalks/protected bike lane or lighting.	7/23/2022 4:00 PM
5	Drivers do not share the road	7/22/2022 10:38 AM
6	Same as above	7/14/2022 12:54 PM
7	no bike lane	7/13/2022 2:26 PM
8	Same as above	7/13/2022 2:04 PM
9	Not safe	7/12/2022 8:40 PM
10	Speeding	7/8/2022 11:08 AM
11	See above	7/8/2022 8:01 AM
12	No light at night	7/6/2022 10:58 AM
13	No continuous bike network means drivers are not sure where bikes are going.	7/3/2022 5:06 PM
14	It’s a mess	7/1/2022 10:58 AM
15	the city isn't taken care of like it used to be	7/1/2022 10:21 AM

16	Same as walking	7/1/2022 12:18 AM
17	Narrow. Speeding cars.	6/30/2022 9:27 PM
18	Speeding cars, road not wide enough, there should be a paved bike lane / sidewalk	6/30/2022 8:26 PM
19	Too busy on road	6/30/2022 5:11 PM
20	Same answer as #12	6/30/2022 2:40 PM
21	Heavy growth, no sidewalks, poor lighting	6/30/2022 2:28 PM
22	guard rails so I might fall down hill.	6/30/2022 1:56 PM
23	Dark and no sidewalks and cars travel fast especially with the curves	6/27/2022 2:18 PM
24	Narrow and dark	6/18/2022 7:32 PM
25	Holes in road. Speeding cars. Rough roads. Narrow roads rocks	6/18/2022 4:48 PM
26	Narrow roads. No lights	6/18/2022 4:21 PM
27	Not pedestrian friendly	6/17/2022 5:07 PM
28	Road in terrible condition and drivers are crazy	6/17/2022 9:03 AM

Q14 Do you feel safe walking on Washington Ave?

Answered: 63 Skipped: 21

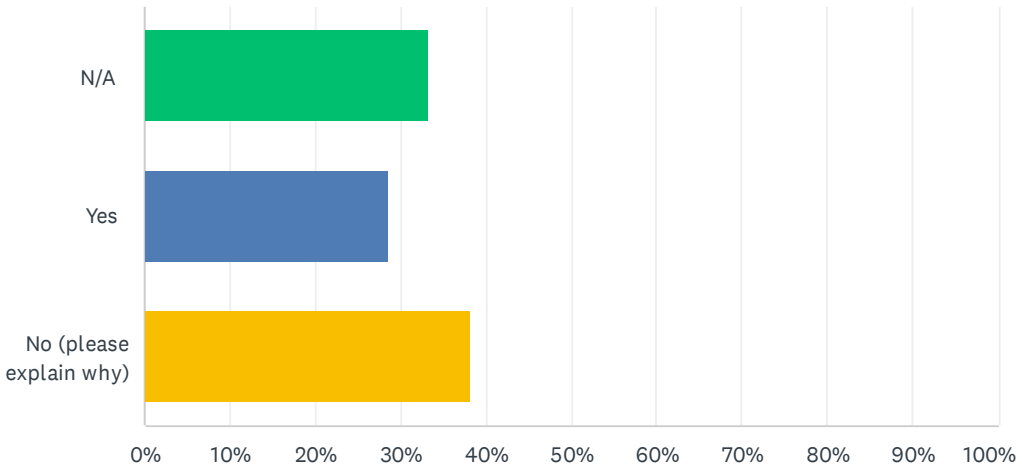


ANSWER CHOICES	RESPONSES	
N/A	19.05%	12
Yes	61.90%	39
No (please explain why)	19.05%	12
TOTAL		63

#	NO (PLEASE EXPLAIN WHY)	DATE
1	yes and no. mostly yes but there are no sidewalks painted. certain business owners get to blacktop over sidewalks.	7/23/2022 4:00 PM
2	not pedestrian friendly	7/19/2022 2:47 PM
3	Criminals hanging out outside all the time. No efforts to clean up the city, repair pot holes, repave streets, water flowers, fix veterans banners, mow and weed whack. There are bigger priorities to fix than worrying about the waterfront.	7/19/2022 10:52 AM
4	Drivers speed down the hill	7/8/2022 11:08 AM
5	The sidewalks between bellview terr and Broadway are in disrepair and vegetation is overgrown	7/8/2022 8:01 AM
6	the city isn't taken care of like it used to be	7/1/2022 10:21 AM
7	No cross signals.	6/30/2022 9:27 PM
8	Not attractive area for walking	6/30/2022 5:11 PM
9	Cars drive too fast. Hill too steep. Top of hill at store has 4 intersections traffic gets congested esp w 3 parking areas for businesses on same intersection	6/30/2022 2:40 PM
10	Heavy growth, no sidewalks, poor lighting	6/30/2022 2:28 PM
11	There are no crosswalks.	6/30/2022 1:56 PM
12	Only one side has decent sidewalks and there are no street crossing lines or stop lines	6/27/2022 2:18 PM

Q15 Do you feel safe riding a bike on Washington Ave?

Answered: 63 Skipped: 21



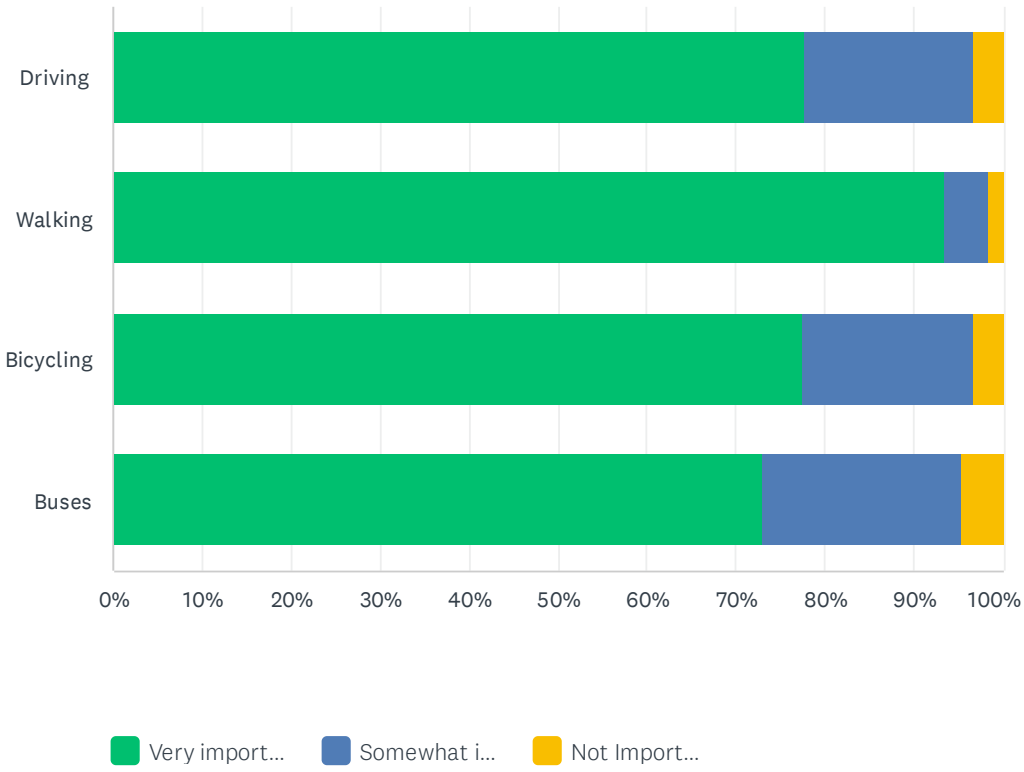
ANSWER CHOICES	RESPONSES	
N/A	33.33%	21
Yes	28.57%	18
No (please explain why)	38.10%	24
TOTAL		63

#	NO (PLEASE EXPLAIN WHY)	DATE
1	yes and no. mostly yes but there are no sidewalks painted. certain business owners get to blacktop over sidewalks. I do not want to ride bike in road. even if you paint those bike lanes in the road it is still not a protected bike lane so it is a waste	7/23/2022 4:00 PM
2	Drivers do not share the road, road is too narrow to safely pass a cyclist, and the incline prevents cyclists from pacing with traffic, while automobile must substantially increase power to climb the hill. This creates a very unsafe condition.	7/22/2022 10:38 AM
3	not bike friendly, fast vehicles	7/19/2022 2:47 PM
4	irresponsible drivers	7/19/2022 10:57 AM
5	no designated bike lane	7/13/2022 2:26 PM
6	Not safe	7/12/2022 8:40 PM
7	Drivers speed constantly	7/8/2022 11:08 AM
8	Heavy traffic, shouldn't ride on sidewalk	7/6/2022 10:58 AM
9	Drivers do not share the road.	7/5/2022 11:29 AM
10	No continuous bike network means drivers are not sure where bikes are going.	7/3/2022 5:06 PM
11	The large sidewalk on the Northside has the entrance and exit ramps! The narrower sidewalk is on the right where you don't have to worry about traffic.	7/1/2022 10:58 AM
12	the city isn't taken care of like it used to be	7/1/2022 10:21 AM

13	Drivers go too fast and pass too close with shared lanes	7/1/2022 12:18 AM
14	Narrow roads. Speeding cars. No bike lanes.	6/30/2022 9:27 PM
15	Too much traffic in both directions, cars parked on both sides of road and pulling out of parking lots	6/30/2022 8:26 PM
16	Too busy and fast moving cars	6/30/2022 5:11 PM
17	Same as #14	6/30/2022 2:40 PM
18	Heavy growth, poor sidewalks, poor lighting, Broadway to 4th St.	6/30/2022 2:28 PM
19	See above	6/27/2022 2:18 PM
20	A lot of traffic and speeding	6/18/2022 7:32 PM
21	Sometimes. Depending on traffic	6/18/2022 4:48 PM
22	No bike lane	6/18/2022 4:21 PM
23	No dedicated bike lanes	6/17/2022 5:07 PM
24	no bike path; parking both sides is select areas; speed	6/16/2022 7:44 PM

Q16 How important is it to accommodate all types of transportation?

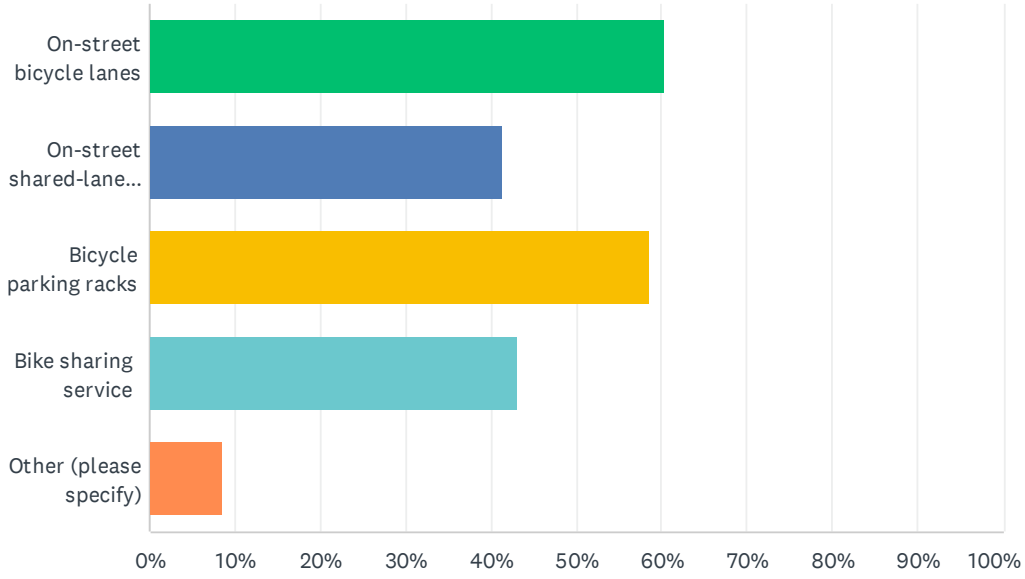
Answered: 64 Skipped: 20



	VERY IMPORTANT	SOMEWHAT IMPORTANT	NOT IMPORTANT	TOTAL	WEIGHTED AVERAGE
Driving	77.78% 49	19.05% 12	3.17% 2	63	2.75
Walking	93.55% 58	4.84% 3	1.61% 1	62	2.92
Bicycling	77.42% 48	19.35% 12	3.23% 2	62	2.74
Buses	73.02% 46	22.22% 14	4.76% 3	63	2.68

Q17 What bicycle facilities would you like to see, if any? (select 2)

Answered: 58 Skipped: 26

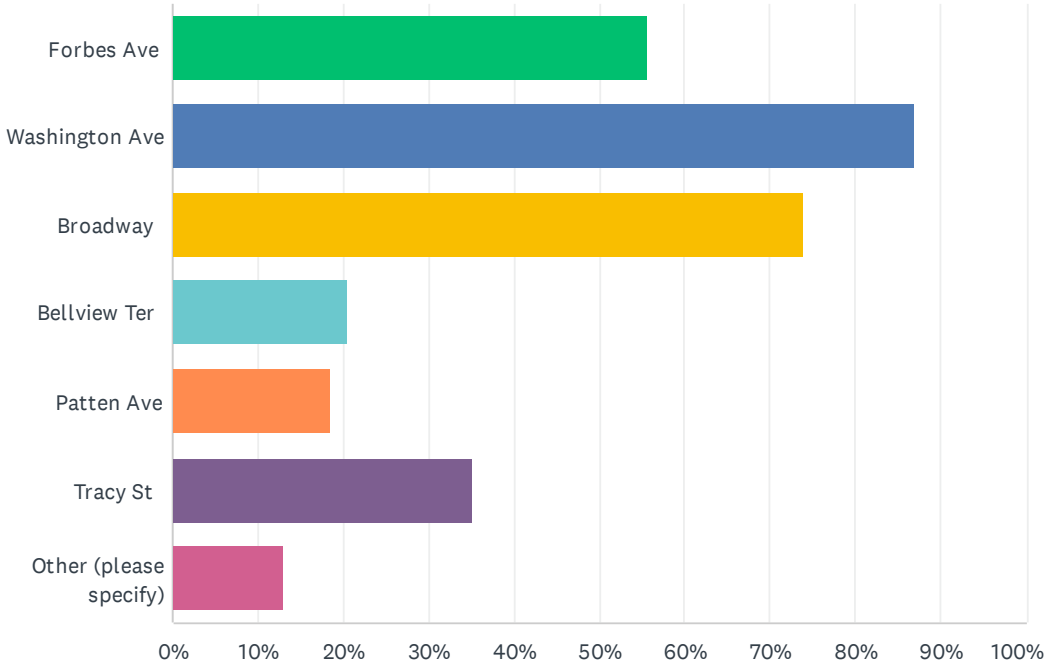


ANSWER CHOICES	RESPONSES	
On-street bicycle lanes	60.34%	35
On-street shared-lane markings (sharrows)	41.38%	24
Bicycle parking racks	58.62%	34
Bike sharing service	43.10%	25
Other (please specify)	8.62%	5
Total Respondents: 58		

#	OTHER (PLEASE SPECIFY)	DATE
1	No sharrows!! They do not encourage enough awareness of cyclists and can lead to more confusion and conflict between road users.	7/29/2022 11:11 AM
2	Bike path	7/10/2022 11:01 AM
3	Bike path	7/9/2022 1:44 PM
4	bike and walking route	7/1/2022 10:21 AM
5	Trails and protected bike lanes	7/1/2022 12:18 AM

Q18 Where would you like to see the facilities you selected?

Answered: 54 Skipped: 30



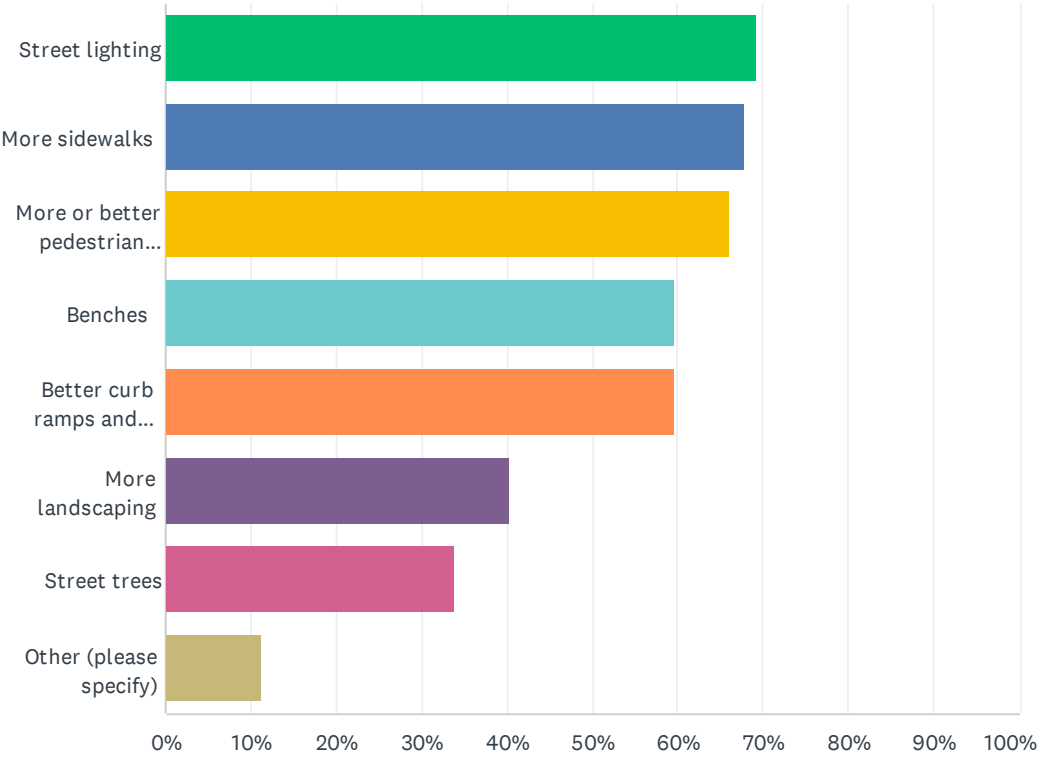
ANSWER CHOICES	RESPONSES	
Forbes Ave	55.56%	30
Washington Ave	87.04%	47
Broadway	74.07%	40
Bellview Ter	20.37%	11
Patten Ave	18.52%	10
Tracy St	35.19%	19
Other (please specify)	12.96%	7
Total Respondents: 54		

#	OTHER (PLEASE SPECIFY)	DATE
1	3rd Avenue from broadway to High Street.	7/22/2022 10:38 AM
2	By the river	7/9/2022 1:44 PM
3	3rd st needs speeding attention, no one is stopping speeding there	7/8/2022 11:08 AM
4	A continuous network of cycleways would make this a desirable green city for residents and businesses.	7/3/2022 5:06 PM
5	anywhere throughout the city	7/1/2022 10:21 AM
6	Second street	6/30/2022 9:27 PM

7	I	6/17/2022 5:07 PM

Q19 What streetscape elements would you like to see, if any? (select 3)

Answered: 62 Skipped: 22



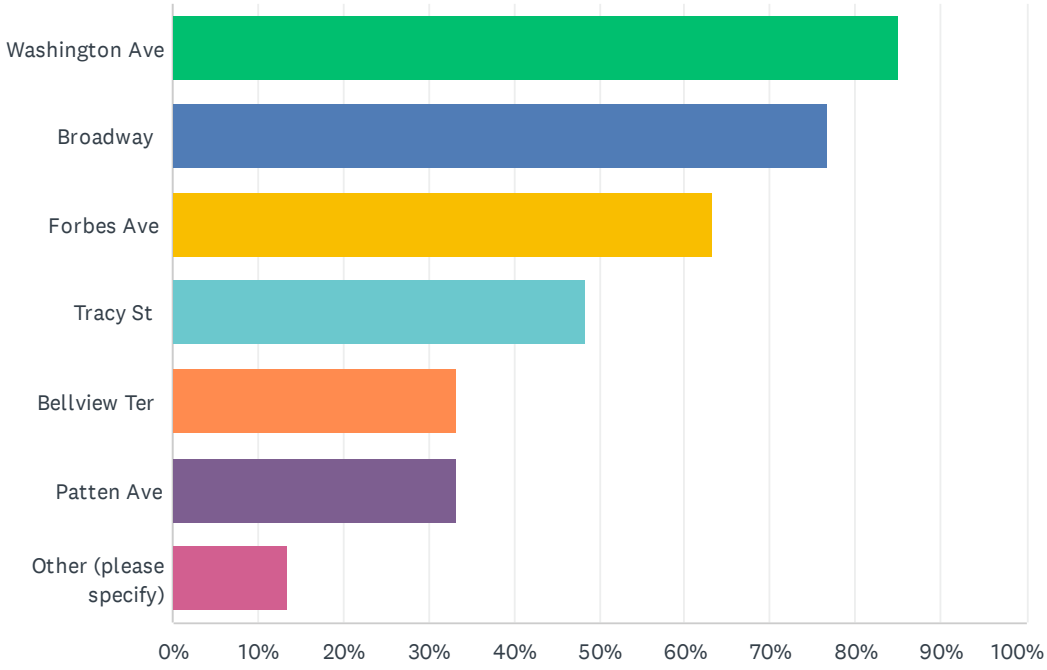
ANSWER CHOICES	RESPONSES	
Street lighting	69.35%	43
More sidewalks	67.74%	42
More or better pedestrian crossings	66.13%	41
Benches	59.68%	37
Better curb ramps and accessibility improvements	59.68%	37
More landscaping	40.32%	25
Street trees	33.87%	21
Other (please specify)	11.29%	7
Total Respondents: 62		

#	OTHER (PLEASE SPECIFY)	DATE
1	Anything to slow traffic on East Street. A better place than the corner of East and Herrick for CDTA drivers to take their breaks. Busses often block the intersection and north bound lane of East Street.	7/22/2022 10:38 AM
2	the city should take more pride in all the trash dumped throughout the city	7/19/2022 10:57 AM
3	Signage is terrible	7/13/2022 2:04 PM

4	TRASHCANS	7/8/2022 11:08 AM
5	Bike lanes	6/30/2022 9:27 PM
6	Wider roads, better traffic flow	6/30/2022 2:40 PM
7	Well defined pedestrian areas especially crosswalks	6/27/2022 2:18 PM

Q20 Where would you like to see the streetscape elements you selected?

Answered: 60 Skipped: 24



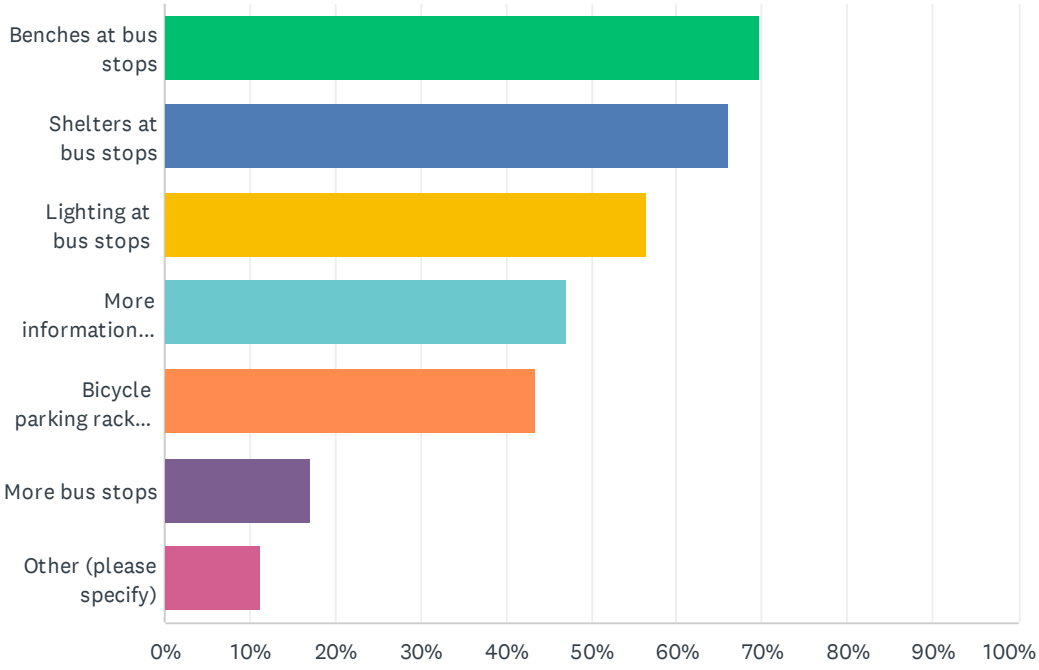
ANSWER CHOICES	RESPONSES	
Washington Ave	85.00%	51
Broadway	76.67%	46
Forbes Ave	63.33%	38
Tracy St	48.33%	29
Bellview Ter	33.33%	20
Patten Ave	33.33%	20
Other (please specify)	13.33%	8
Total Respondents: 60		

#	OTHER (PLEASE SPECIFY)	DATE
1	East Street	7/22/2022 10:38 AM
2	Patten ave has enough drunks. Don’t give them more benches	7/14/2022 12:54 PM
3	Columbia street	7/13/2022 2:04 PM
4	By the river	7/9/2022 1:44 PM
5	3rd st	7/8/2022 11:08 AM
6	2nd Street	7/6/2022 10:58 AM
7	anywhere throughout the city	7/1/2022 10:21 AM

8	The Tracy street end of Forbes ave	6/27/2022 2:18 PM

Q21 What transit amenities would you like to see, if any? (select 3)

Answered: 53 Skipped: 31



ANSWER CHOICES	RESPONSES	
Benches at bus stops	69.81%	37
Shelters at bus stops	66.04%	35
Lighting at bus stops	56.60%	30
More information about bus routes and schedules	47.17%	25
Bicycle parking racks at bus stops	43.40%	23
More bus stops	16.98%	9
Other (please specify)	11.32%	6
Total Respondents: 53		

#	OTHER (PLEASE SPECIFY)	DATE
1	Information about accessibility at major stops	7/19/2022 2:53 PM
2	Trashcans	7/8/2022 11:08 AM
3	Schedules that offer increased coverage.	7/5/2022 11:29 AM
4	Love CDTA, but the bus routes and times are difficult to understand here	7/1/2022 12:18 AM
5	Cut-ina for bus stops so traffic can go past on Washington Ave	6/30/2022 8:26 PM
6	street cutout at bus stop for buses to park	6/16/2022 7:44 PM

Q22 Please share any additional ideas and/or comments you have!

Answered: 25 Skipped: 59

#	RESPONSES	DATE
1	More bike infrastructure please! A connection to the Empire State Trail, or making new bike infrastructure the EST, would be crucial	7/29/2022 11:12 AM
2	I would like to see the kids have a great way to get to school and stay out of trouble. they do not have a fun safe way to walk to school. they should have never stopped bussing all kids when they said they would bus every kid when they built that school. More activities for the kids that will keep them out of trouble. Forbes Ave needs to be safer for thr kids to walk or ride their bike and scooters. The same for Washington ave and Broadway. Hopefully if you can get ths done for this area it can expand to the whole city. great job everyone. . -Maggie	7/25/2022 9:15 AM
3	If you could somehow add a walking area and/or bike lane on Forbes ave that is protected from cars i would feel safe letting my 12 year old walk that road with his friends to the park and back. with all the trees hanging over the road it creates a dark damp area. There needs to be lighting and the road NEEDS to be striped so cars do not drice crazy	7/25/2022 8:51 AM
4	Signs in the area need to be improved. the last year signs have become better i.e. they have been repositioned/straightened but some need to be replaced and others need to be added. If you don't live in the city then you would not know how to get to the boat launch.	7/23/2022 4:19 PM
5	there needs to be more parking along Washington Ave. the road is not wide enough for double sided on street parking. you have grassy sides on each road that are HUGE...maker them parking like near riverfront. there needs to be sidewalks along Forbes with railing and lights (not lights on the telephone polls but fancy lighting like on Broadway near riverfront.	7/23/2022 4:03 PM
6	Police need to be more present and aware of stop signs and people speeding. They don’t seem to care.	7/14/2022 12:55 PM
7	This is a great idea please get it right.	7/13/2022 9:49 PM
8	The boat launch needs to be refigured, it lays on the ground at low tide. Can't get back to shore for hours later, until the tide comes in some	7/13/2022 2:55 PM
9	I love how thorough the questions are. It feels like all areas are being considered, even ones I didn’t think about.	7/13/2022 1:25 PM
10	It would be great to have a bike/pedestrian path the runs along the river- it is very difficult to get to the path in Albany or to the path in east Greenbush	7/9/2022 1:46 PM
11	3rd st by Washington has an obscene amount of speeding and the parking lot on the corner of Washington and 3rd appears to be a source of either drug deals or prostitution. There is constant activity in it late at night that the police is not addressing.	7/8/2022 11:10 AM
12	Consider the use of large trucks, such as fire apparatus, to be able to safely and efficiently maneuver in these areas with added changes. Revamp the entrance to the boat launch from Forbes Ave to allow better in and out traffic flow. Add a guardrail or other safety measures along the wooded side of Forbes Ave for vehicle safety. Consider underground water infrastructure replacement/addition to bring better fire protection to the area in red	7/8/2022 8:06 AM
13	Neighborhoods/businesses/groups adopt streets to pick up trash, etc?	7/5/2022 11:29 AM
14	Cycle/ Active transport connections between Renssealear, Troy, Albany and the Empire State network is/could be a HUGE draw for residents and business owners.	7/3/2022 5:08 PM
15	Spend money wisely. Trees on Washington Ave all died from the last upgrade. Good sidewalks and paved streets are important. Crossing signals are a waste of money no one uses them and there is not enough traffic. Improve the safety near handy Andy’s and Nelson’s on Washington Ave.!!!	7/1/2022 11:02 AM
16	On Washington ave cut into city areas and add off street parking. Cut in so you’re not	6/30/2022 9:28 PM

	narrowing road	
17	The wasted forrest land behind Forbes Ave/Doanne Stuart needs to be leveled. Roadways widened & sidewalks added along with a YOUTH SPORTS RECREATIONAL FACILITY FOR THESE KIDS IN THE CITY!!	6/30/2022 2:42 PM
18	Designer Street trash cans	6/30/2022 2:29 PM
19	The even side of Washington Ave near cemetery. The grass area should be taken in so cars can park there and the side walks should be lower which would make it easier for people to get in and out of cars. You could build a wall between sidewalk and cemetery in order to lower the sidewalk and create appropriate curb area	6/30/2022 1:58 PM
20	Groves ave needs to be completely done over if that is going to be used for waterfront access. There is little to no sidewalks, lighting is terrible, there are no road markings or cross walks. It is basically a country road in a city.	6/27/2022 2:22 PM
21	I would like to see some paths between the train bridge and boat launch and better amenities for those fishing at the boat launch. However I worry about the people we will attract to Rensselaer if the train bridge is redone and becomes pedestrian friendly.	6/22/2022 11:39 AM
22	Improved parking design for Washington Ave and ADA compliant infrastructure	6/17/2022 5:09 PM
23	Anything to improve the city.	6/17/2022 11:51 AM
24	There are children that walk to the corner store on Washington Ave (Handy Andy's), so having a safe way for them to cross the street to leave that area and sufficient lighting is important, as men and other adults often linger alone or in groups outside the store. Some may be waiting for a bus, so a bench for them to sit on would give them somewhere to go other than their intimidating spot in the shadows of the store	6/17/2022 10:42 AM
25	**Consider needs of senior citizens in study area **Ask for suggestions from RSHS students/Doane Stuart **Plan one (1) community event in 2022 to promote warterfront connection	6/16/2022 7:48 PM

Q23 To receive project updates please provide your email below. (optional)

Answered: 26 Skipped: 58

ANSWER CHOICES	RESPONSES	
Name	0.00%	0
Company	0.00%	0
Address	0.00%	0
Address 2	0.00%	0
City/Town	0.00%	0
State/Province	0.00%	0
ZIP/Postal Code	0.00%	0
Country	0.00%	0
Email Address	100.00%	26
Phone Number	0.00%	0

#	NAME	DATE
	There are no responses.	

#	COMPANY	DATE
	There are no responses.	

#	ADDRESS	DATE
	There are no responses.	

#	ADDRESS 2	DATE
	There are no responses.	

#	CITY/TOWN	DATE
	There are no responses.	

#	STATE/PROVINCE	DATE
	There are no responses.	

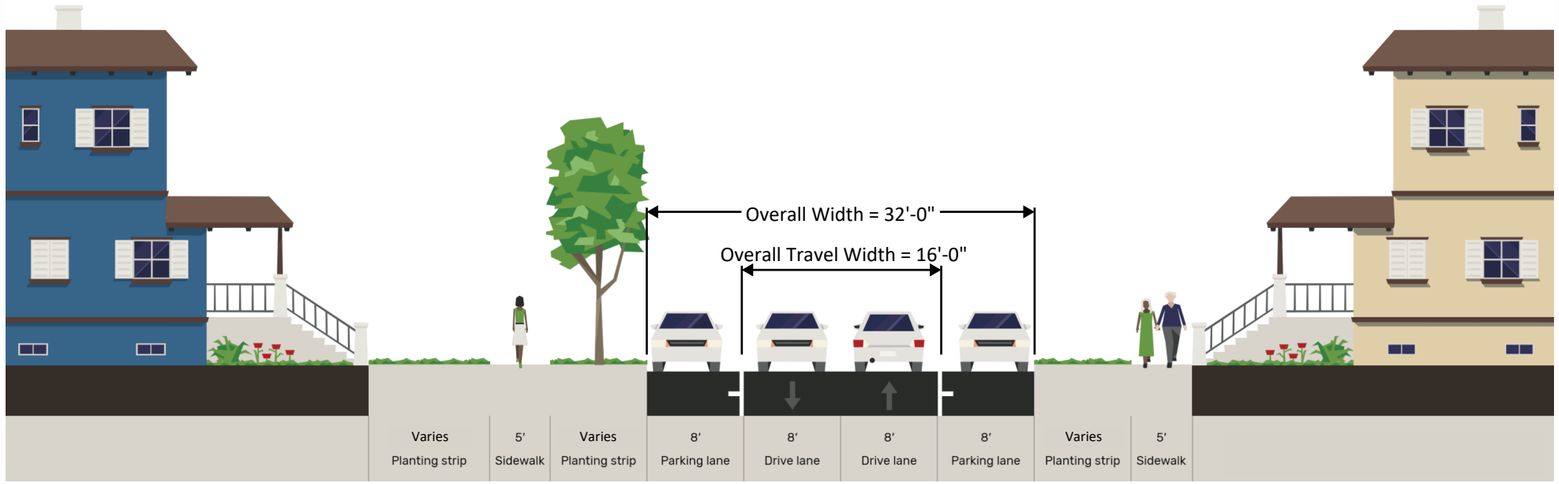
#	ZIP/POSTAL CODE	DATE
	There are no responses.	

#	COUNTRY	DATE
	There are no responses.	

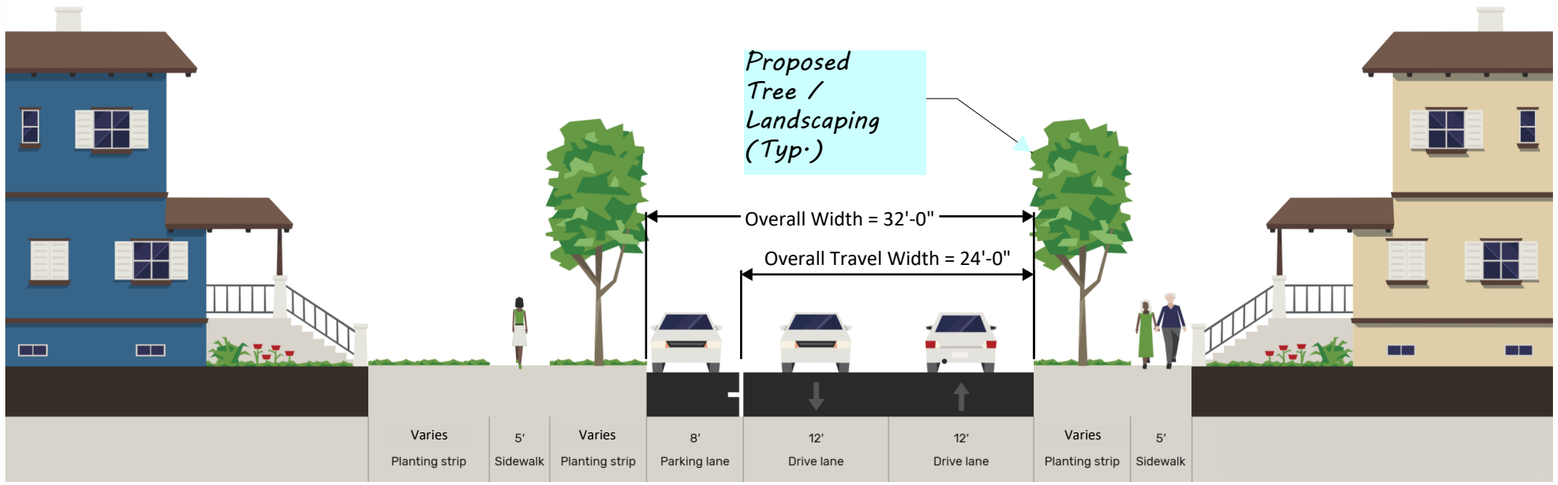
#	EMAIL ADDRESS	DATE
1	maggiebu28@nycap.rr.com	7/25/2022 9:15 AM
2	ezequielgauge63@gmail.com	7/21/2022 11:02 PM
3	vscholz@nycap.rr.com	7/21/2022 9:29 PM
4	ghostlightmater@yahoo.com	7/19/2022 3:26 PM
5	saverensselaer@gmail.com	7/19/2022 10:59 AM

6	dpwilson@nycap.rr.com	7/13/2022 9:49 PM
7	msrusso73@gmail.com	7/13/2022 5:17 PM
8	jaymepmurphy@gmail.com	7/13/2022 2:55 PM
9	waynesmo@yahoo.com	7/12/2022 8:40 PM
10	loreebrown30@gmail.com	7/12/2022 1:23 PM
11	elnwheeler@hotmail.com	7/9/2022 8:09 PM
12	rcooney2@nycap.rr.com	7/9/2022 1:46 PM
13	sstephan@nycap.rr.com	7/8/2022 11:47 AM
14	bmackrel@gmail.com	7/3/2022 5:08 PM
15	kdalessandro@nycap.rr.com	7/1/2022 7:15 AM
16	dellis12144@gmail.com	6/30/2022 8:26 PM
17	playa719.828@gmail.com	6/30/2022 2:42 PM
18	stall_brian@yahoo.com	6/27/2022 2:22 PM
19	ph2976@yahoo.com	6/22/2022 11:39 AM
20	kevinmk726@msn.com	6/18/2022 4:48 PM
21	krisinrenss@hotmail.com	6/18/2022 4:21 PM
22	chasghall31@yahoo.com	6/17/2022 5:09 PM
23	patschroeder@nycap.rr.com	6/17/2022 11:51 AM
24	izzy9250@gmail.com	6/17/2022 10:42 AM
25	isitjustme@gmail.com	6/17/2022 9:12 AM
26	raymondstevens@nycap.rrr.com	6/16/2022 7:48 PM
#	**PHONE NUMBER**	**DATE**
	There are no responses.	

APPENDIX H: ALTERNATIVE CONCEPTS

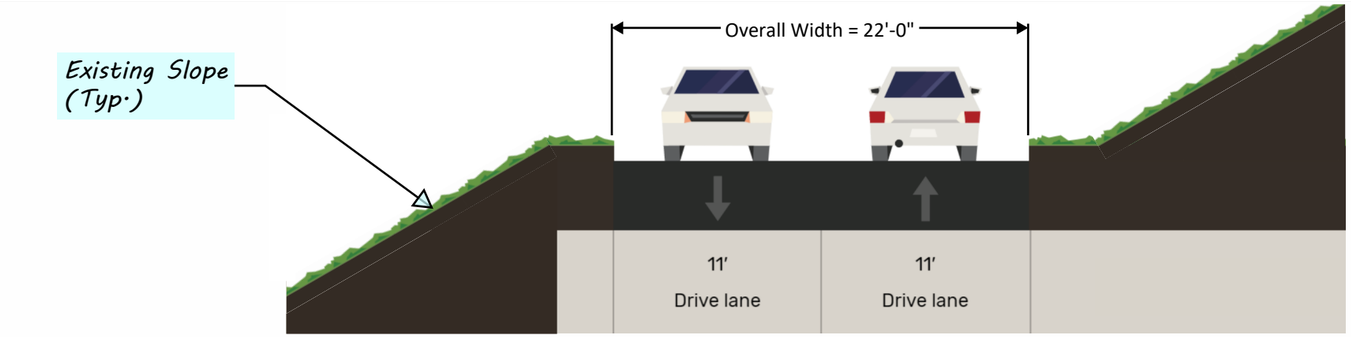


EXISTING TYPICAL SECTION
WASHINGTON AVENUE

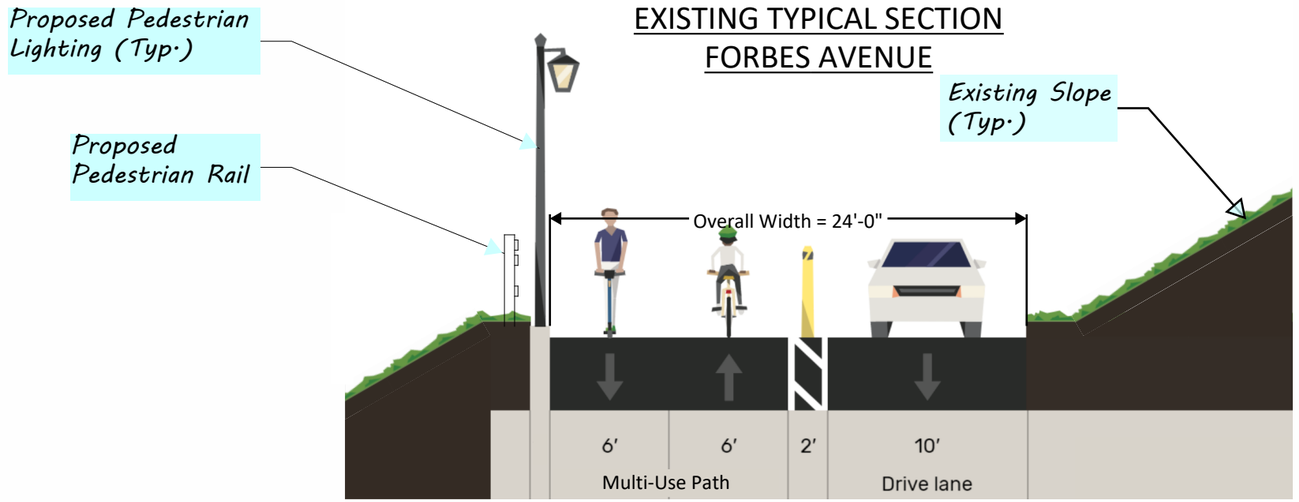


PROPOSED TYPICAL SECTION
WASHINGTON AVENUE

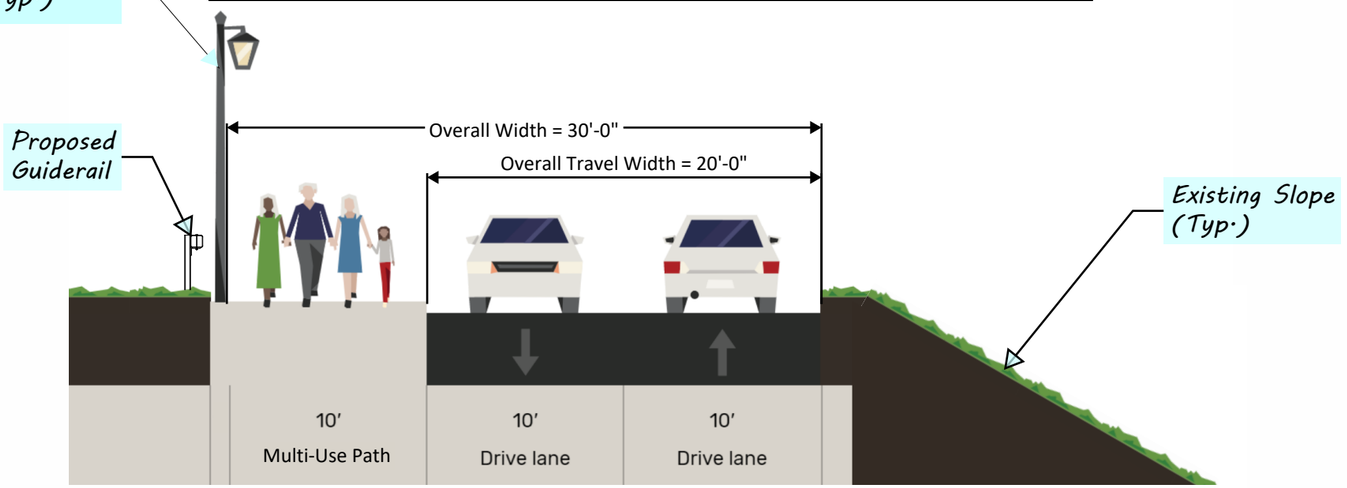
THE RECOMMENDATIONS IN THIS STUDY ARE CONCEPTUAL IN NATURE AND DO NOT COMMIT THE CITY OF RENSSELAER OR CDTC TO THE PROPOSED PROJECT(S). THE CONCEPTS PRESENTED IN THIS ILLUSTRATION MAY NEED TO BE INVESTIGATED IN MORE DETAIL BEFORE ANY FUNDING COMMITMENT IS MADE. UNDERTAKING ADDITIONAL ENGINEERING OR OTHER FOLLOW UP WORK WILL BE BASED UPON FUNDING AVAILIBILITY.



EXISTING TYPICAL SECTION
FORBES AVENUE



FORBES AVENUE PROPOSED TYPICAL SECTION
WASHINGTON AVENE EXTENSION TO VAN RENSSELAER HEIGHTS

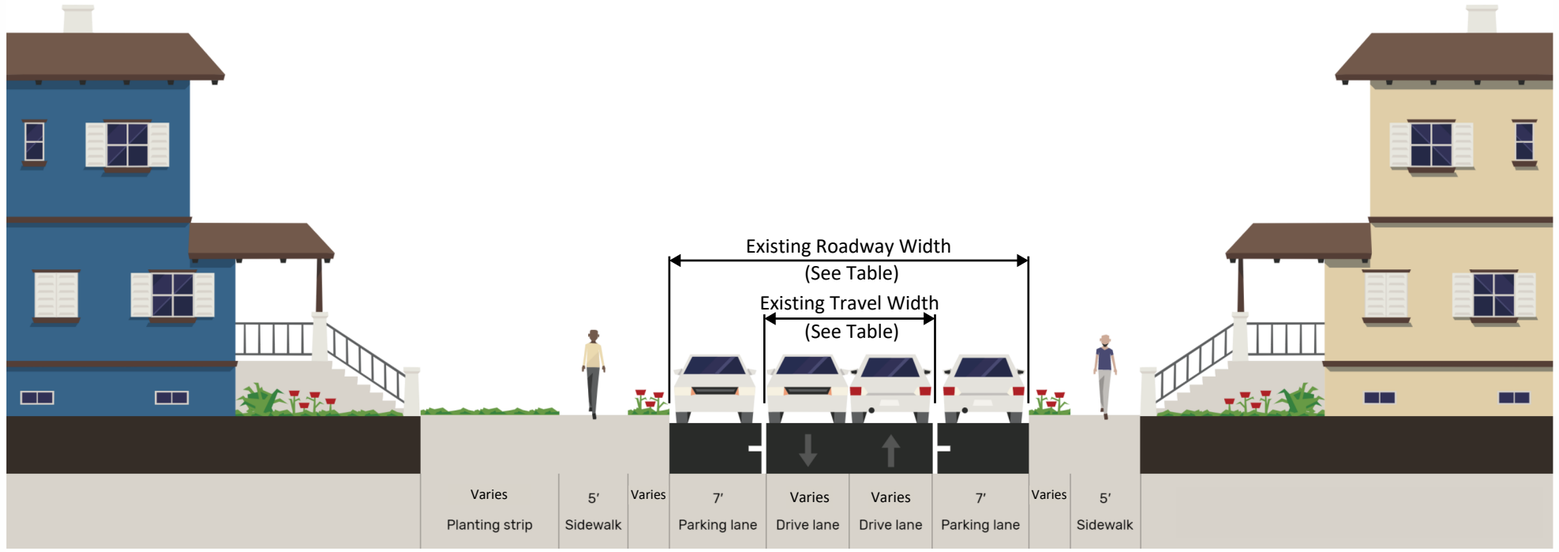


FORBES AVENUE PROPOSED TYPICAL SECTION
VAN RENSSELAER HEIGHTS TO WASHINGTON AVENUE

THE RECOMMENDATIONS IN THIS STUDY ARE CONCEPTUAL IN NATURE AND DO NOT COMMIT THE CITY OF RENSSELAER OR CDTC TO THE PROPOSED PROJECT(S). THE CONCEPTS PRESENTED IN THIS ILLUSTRATION MAY NEED TO BE INVESTIGATED IN MORE DETAIL BEFORE ANY FUNDING COMMITMENT IS MADE. UNDERTAKING ADDITIONAL ENGINEERING OR OTHER FOLLOW UP WORK WILL BE BASED UPON FUNDING AVAILIBILITY.

EXISTING AND PROPOSED TYPICAL SECTIONS

Engineering and Land Surveying, P.C.
CDTC Capital District Transportation Committee
City of Rensselaer

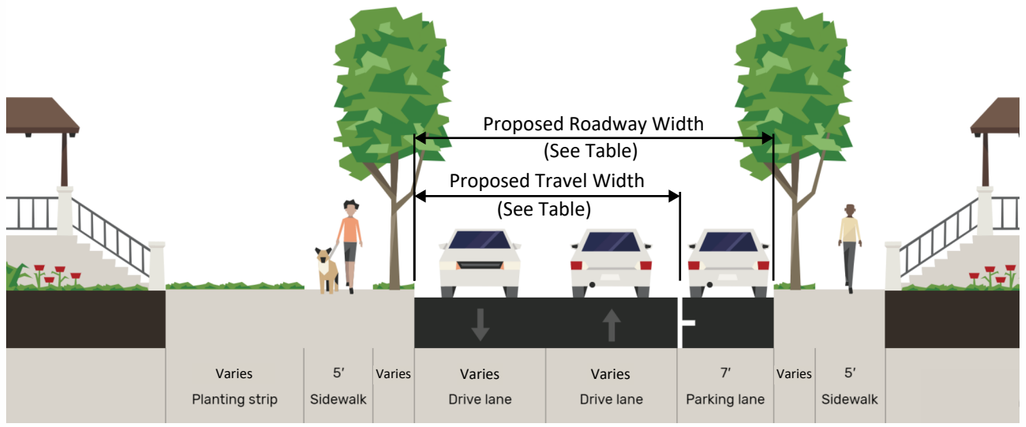


Street	Existing Widths (ft)			Proposed Widths (ft)		
	Roadway	Parking	Travel	Roadway	Parking	Travel
Tracy Street	26	7 (1)	9.5 (2)	26	7 (1)	9.5 (2)
Forbes (Tracy to Broadway)	30	7 (2)	7 (2)	30	7 (1)	11.5 (2)
Bellview Terrace	30	7 (2)	8 (2)	30	7 (1)	11.5 (2)
Second Street	25	7 (2)	5.5 (2)	25	7 (1)	9 (2)
Fourth Street	28	7 (2)	7 (2)	28	7 (2)	7 (2)
Fourth Street (1-way)	27	7 (2)	13 (1)	27	7 (2)	13 (1)
Patten Avenue	26 - 27	7 (2)	6 (2)	26-27	7 (1)	9.5 (2)
Anderson Place	21 - 22	7 (1)	7 (2)	21-22	7 (1)	7 (2)
Lincoln Avenue	26	7 (2)	6 (2)	26	7 (2)	6 (2)
Manor Drive	26	7 (2)	6 (2)	26	7 (1)	9.5 (2)
Tenth Street	28	7 (1)	10.5 (2)	28	7 (1)	10.5 (2)

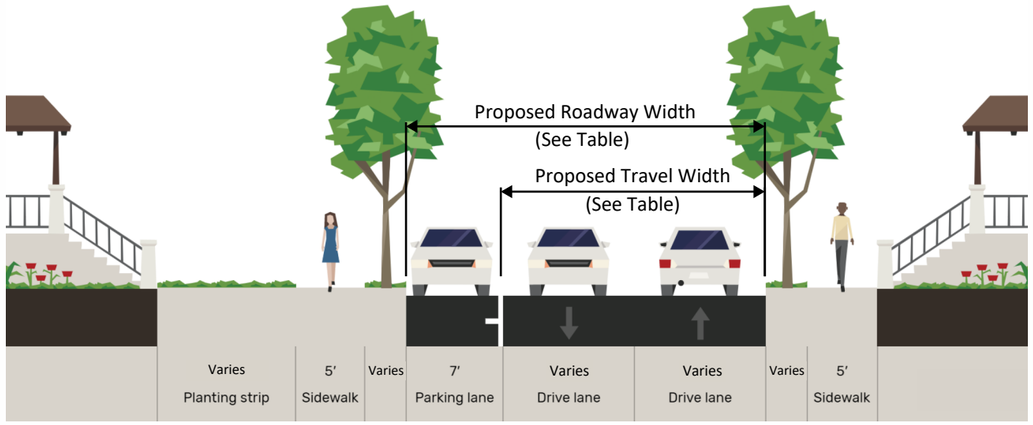
(#) denotes number of each lane available / proposed

EXISTING TYPICAL SECTION
SIDE ROADS

(SEE TABLE THIS DRAWING FOR SIDE ROADS INCLUDED IN THE STUDY AND ROADWAY WIDTHS)



PROPOSED TYPICAL SECTION - RIGHT SIDE PARKING
SIDE ROADS



PROPOSED TYPICAL SECTION - LEFT SIDE PARKING
SIDE ROADS

THE RECOMMENDATIONS IN THIS STUDY ARE CONCEPTUAL IN NATURE AND DO NOT COMMIT THE CITY OF RENSSELAER OR CDTC TO THE PROPOSED PROJECT(S). THE CONCEPTS PRESENTED IN THIS ILLUSTRATION MAY NEED TO BE INVESTIGATED IN MORE DETAIL BEFORE ANY FUNDING COMMITMENT IS MADE. UNDERTAKING ADDITIONAL ENGINEERING OR OTHER FOLLOW UP WORK WILL BE BASED UPON FUNDING AVAILIBILITY.

GRID NORTH

Study Area Boundary

CP-1

CP-2

CP-3

CP-4

CP-5

CP-6

CP-7

CP-8

CP-9

CP-10

HUDSON RIVER

I-90

LINCOLN TERRACE

MANOR DRIVE

ANDERSON PLACE

EIGHTH STREET

NINTH STREET

TENTH STREET

WASHINGTON AVENUE

FORBES AVENUE

PATTEN AVENUE

FOURTH STREET

CHESTNUT STREET

BELLVIEW TERRACE

THIRD STREET

SECOND STREET

FIRST STREET

BROADWAY

TRACY STREET

CITY OF RENSSELAER WATERFRONT CONNECTIVITY STUDY

SCALE: 1" = 300'

DWG. NO. KEY-01

PROPOSED CONCEPT KEYPLAN

Engineering and Land Surveying, P.C.

CDTC Capital District Transportation Committee

City of Rensselaer

GRID NORTH

Average Grade: 3·1%

LOWER FORBES AVENUE

FORBES AVENUE

FORBES AVENUE

FORBES AVENUE

Average Grade: 6·5%

Average Grade: 3·7%

BROADWAY

BELLVIEW TERRACE

FOURTH STREET (ONE WAY)

Average Grade: 10·5%

Average Grade: 8·7%

SECOND STREET

PATTEN AVENUE

FORBES AVENUE

WASHINGTON AVENUE

Average Grade: 8·1%

BROADWAY

TRACY STREET

FIRST STREET (ONE WAY)

CENTRAL AVENUE (ONE WAY)

SECOND STREET

WASHINGTON AVENUE

BROADWAY

THIRD STREET

Average Grade: 7·1%

FOURTH STREET

CHESTNUT STREER

LEGEND

- PARKING PERMITTED
- NO PARKING / STANDING
- AHB — APPROXIMATE HIGHWAY BOUNDARY
- STUDY AREA BOUNDARY

CITY OF RENSSELAER WATERFRONT CONNECTIVITY STUDY

SCALE: 1" = 120'

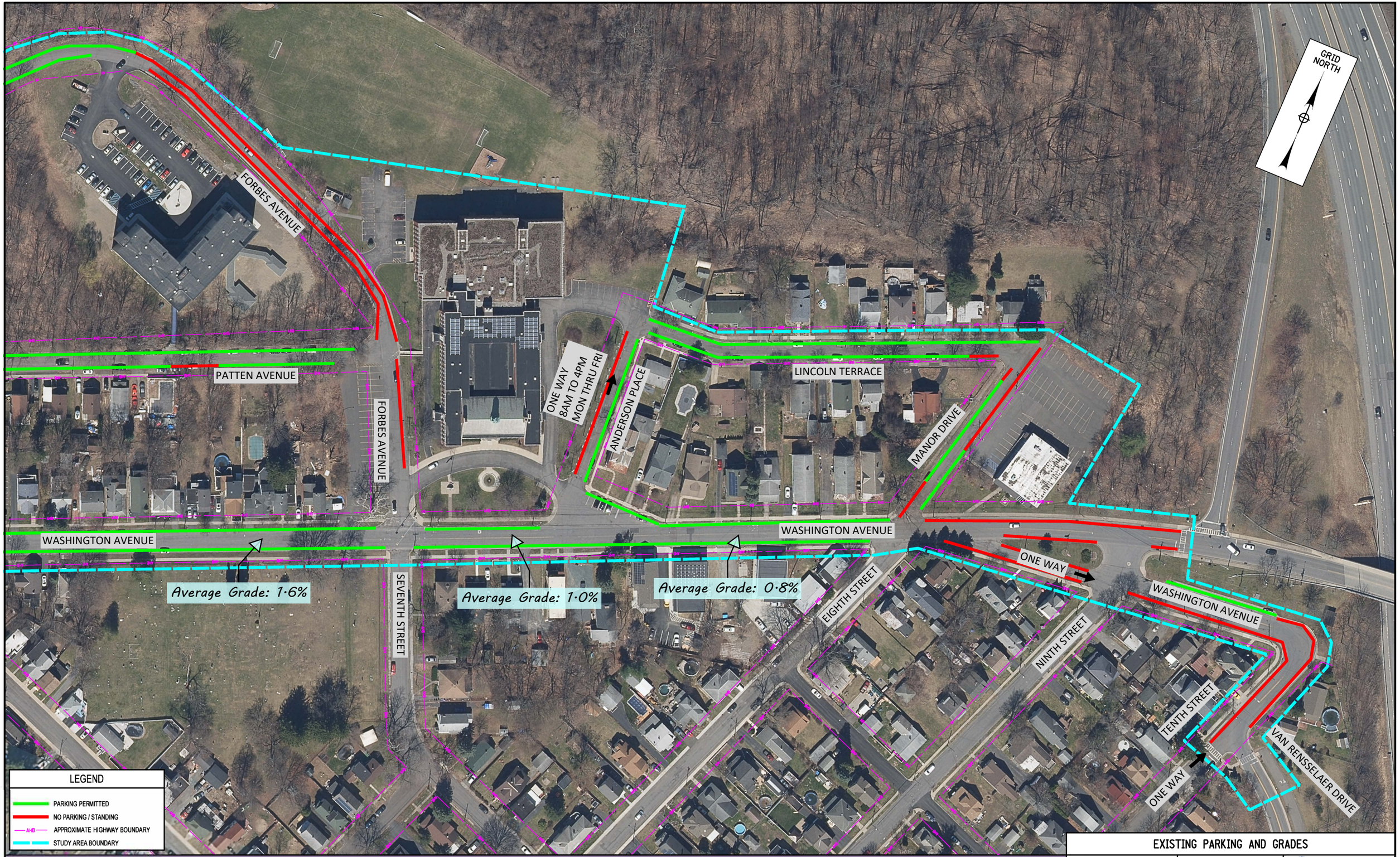
EXISTING CONDITIONS-01

EXISTING PARKING AND GRADES

Engineering and Land Surveying, P.C.

CDTC Capital District Transportation Committee

City of Rensselaer



EXISTING PARKING AND GRADES

Engineering and Land Surveying, P.C.
CDTC Capital District Transportation Committee
City of Rensselaer

MATCHLINE - SEE DWG. NO. CP-02

Hudson River

GRID NORTH

FORBES AVENUE

11'-6" TRAVEL LANE

11'-6" TRAVEL LANE

7'-0" PARKING LANE

BROADWAY

15'-0" TRAVEL LANE

15'-6" TRAVEL LANE

STOP

CENTRAL AVENUE (ONE WAY).

FIRST STREET (ONE WAY)

TRACY STREET

13'-0" TRAVEL LANE

13'-0" TRAVEL LANE

AHB

Non-ADA Compliant Curb Ramps Will be Replaced Where Sidewalk is to Remain

Existing Sidewalks Less Than 5'-0" Wide Will Need A Passing Space 5'-0" by 5'-0" A Maximum of 200' Apart

Tracy Street Park

LEGEND

- NEW PAVEMENT
- NEW CONCRETE SIDEWALK
- EXISTING DRIVEWAY
- AHB — APPROXIMATE HIGHWAY BOUNDARY
- STUDY AREA BOUNDARY
- TRAVEL DIRECTION

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PREFERRED CONCEPT LAYOUT - ALTERNATIVE 1

Engineering and Land Surveying, P.C.

CDTC Capital District Transportation Committee

City of Rensselaer

MATCHLINE - SEE DWG. NO. CP-03

GRID NORTH

Hudson River

Boat Launch

FORBES AVENUE

Multi-Use Path
10-12' Wide

12'-0" MULTI-USE PATH

10'-0" TRAVEL LANE

Convert Forbes Ave
to One-Way

FORBES AVENUE (ONE WAY)

11'-6" TRAVEL LANE

11'-6" TRAVEL LANE

BELLVIEW TERRACE

7'-0" PARKING LANE

Re-Align and Reconstruct
(Single Hatch) Intersection
of Washington Avenue and
Forbes Avenue

STOP

DO NOT ENTER

STOP

FORBES AVENUE

AHB

BHW

12'-0" TRAVEL LANE

12'-0" TRAVEL LANE

WASHINGTON AVENUE

8'-0" PARKING LANE

MATCHLINE - SEE DWG. NO. CP-04

Existing Sidewalks Less Than
5'-0" Wide Will Need A
Passing Space 5'-0" by 5'-0"
A Maximum of 200' Apart

Average Grade: 15.0%

Average Grade: 6.9%

Average Grade: 14.9%

FORBES AVENUE

STOP

STOP

STOP

16'-0" TRAVEL LANE

17'-0" TRAVEL LANE

BROADWAY

Non-ADA Compliant
Curb Ramps Will be
Replaced Where
Sidewalk is to Remain

FIRST STREET (ONE WAY)

11'-6" TRAVEL LANE

11'-6" TRAVEL LANE

LEGEND

- NEW PAVEMENT
- NEW CONCRETE SIDEWALK
- EXISTING DRIVEWAY
- PAVEMENT TO BE RECONSTRUCTED
- PAVEMENT TO BE REMOVED
- MULTI-USE PATH
- AHB — APPROXIMATE HIGHWAY BOUNDARY
- STUDY AREA BOUNDARY
- TRAVEL DIRECTION

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MATCHLINE - SEE DWG. NO. CP-01

PREFERRED CONCEPT LAYOUT - ALTERNATIVE 1

Engineering and Land Surveying, P.C.

CDTC Capital District Transportation Committee

City of Rensselaer

MATCHLINE - SEE DWG. NO. CP-02

Hudson River

GRID NORTH

FORBES AVENUE

11'-6" TRAVEL LANE

11'-6" TRAVEL LANE

7'-0" PARKING LANE

BROADWAY

15'-0" TRAVEL LANE

15'-0" TRAVEL LANE

STOP

CENTRAL AVENUE (ONE WAY).

FIRST STREET (ONE WAY)

TRACY STREET

13'-0" TRAVEL LANE

13'-0" TRAVEL LANE

STOP

Non-ADA Compliant Curb Ramps Will be Replaced Where Sidewalk is to Remain

Tracy Street Park

Existing Sidewalks Less Than 5'-0" Wide Will Need A Passing Space 5'-0" by 5'-0" A Maximum of 200' Apart

AHB

LEGEND

- NEW PAVEMENT
- NEW CONCRETE SIDEWALK
- EXISTING DRIVEWAY
- PAVEMENT TO BE RECONSTRUCTED
- PAVEMENT TO BE REMOVED
- AHB — APPROXIMATE HIGHWAY BOUNDARY
- STUDY AREA BOUNDARY
- TRAVEL DIRECTION

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PREFERRED CONCEPT LAYOUT - ALTERNATIVE 2

Engineering and Land Surveying, P.C.

CDTC Capital District Transportation Committee

City of Rensselaer

MATCHLINE - SEE DWG. NO. CP-03

GRID NORTH

Hudson River

Boat Launch

FORBES AVENUE

Multi-Use Path
13' Wide

Convert Forbes Ave
to One-Way

Re-Align and Reconstruct
(Single Hatch) Intersection
of Washington Avenue and
Forbes Avenue

Existing Sidewalks Less Than
5'-0" Wide Will Need A
Passing Space 5'-0" by 5'-0"
A Maximum of 200' Apart

Average Grade: 15.0%

Average Grade: 6.9%

13'-0" MULTI-USE PATH

11'-0" TRAVEL LANE

10'-0" TRAVEL LANE

FORBES AVENUE (ONE WAY)

DO NOT ENTER

STOP

BELLVIEW TERRACE

11'-6" TRAVEL LANE

11'-6" TRAVEL LANE

7'-0" PARKING LANE

WASHINGTON AVENUE

8'-0" PARKING LANE

12'-0" TRAVEL LANE

12'-0" TRAVEL LANE

16'-0" TRAVEL LANE

17'-0" TRAVEL LANE

BROADWAY

FIRST STREET (ONE WAY)

Non-ADA Compliant
Curb Ramps Will be
Replaced Where
Sidewalk is to Remain

LEGEND

- NEW PAVEMENT
- NEW CONCRETE SIDEWALK
- EXISTING DRIVEWAY
- PAVEMENT TO BE RECONSTRUCTED
- PAVEMENT TO BE REMOVED
- MULTI-USE PATH
- AHB — APPROXIMATE HIGHWAY BOUNDARY
- STUDY AREA BOUNDARY
- TRAVEL DIRECTION

THE RECOMMENDATIONS IN THIS STUDY ARE CONCEPTUAL IN NATURE AND DO NOT COMMIT THE CITY OF RENSSELAER OR CDTC TO THE PROPOSED PROJECT(S). THE CONCEPTS PRESENTED IN THIS ILLUSTRATION MAY NEED TO BE INVESTIGATED IN MORE DETAIL BEFORE ANY FUNDING COMMITMENT IS MADE. UNDERTAKING ADDITIONAL ENGINEERING OR OTHER FOLLOW UP WORK WILL BE BASED UPON FUNDING AVAILIBILITY.

MATCHLINE - SEE DWG. NO. CP-01

MATCHLINE - SEE DWG. NO. CP-04

PREFERRED CONCEPT LAYOUT - ALTERNATIVE 2

Engineering and Land Surveying, P.C.
CDTC Capital District Transportation Committee
City of Rensselaer

MATCHLINE - SEE DWG. NO. CP-10

GRID NORTH

Hudson River

AHB

12'-0" MULTI-USE PATH

10'-0" TRAVEL LANE

ONE WAY

ONE WAY

STOP

BELLVIEW TERRACE

7'-0" PARKING LANE

11'-6" TRAVEL LANE

11'-6" TRAVEL LANE

FORBES AVENUE

BHV

MATCHLINE - SEE DWG. NO. CP-08

LEGEND

- NEW PAVEMENT
- NEW CONCRETE SIDEWALK
- MULTI-USE PATH
- AHB — APPROXIMATE HIGHWAY BOUNDARY
- STUDY AREA BOUNDARY
- TRAVEL DIRECTION

THE RECOMMENDATIONS IN THIS STUDY ARE CONCEPTUAL IN NATURE AND DO NOT COMMIT THE CITY OF RENSSELAER OR CDTC TO THE PROPOSED PROJECT(S). THE CONCEPTS PRESENTED IN THIS ILLUSTRATION MAY NEED TO BE INVESTIGATED IN MORE DETAIL BEFORE ANY FUNDING COMMITMENT IS MADE. UNDERTAKING ADDITIONAL ENGINEERING OR OTHER FOLLOW UP WORK WILL BE BASED UPON FUNDING AVAILIBILITY.

Existing Sidewalks Less Than 5'-0" Wide Will Need A Passing Space 5'-0" by 5'-0" A Maximum of 200' Apart

MATCHLINE - SEE DWG. NO. CP-02

PREFERRED CONCEPT LAYOUT

Engineering and Land Surveying, P.C.
CDTC Capital District Transportation Committee
City of Rensselaer

GRID NORTH

MATCHLINE - SEE DWG. NO. CP-08

MATCHLINE - SEE DWG. NO. CP-05

MATCHLINE - SEE DWG. NO. CP-02

Non-ADA Compliant Curb Ramps Will be Replaced Where Sidewalk is to Remain

Curb Extensions

SECOND STREET

WASHINGTON AVENUE

THIRD STREET

FOURTH STREET

FIFTH STREET

DALE STREET

STOP

9'-0" TRAVEL LANE

9'-0" TRAVEL LANE

7'-0" PARKING LANE

8'-0" PARKING LANE

12'-0" TRAVEL LANE

12'-0" TRAVEL LANE

12'-0" TRAVEL LANE

12'-0" TRAVEL LANE

AHB

AHW

AHY

Existing Sidewalks Less Than 5'-0" Wide Will Need A Passing Space 5'-0" by 5'-0" A Maximum of 200' Apart

CEO's Rensselaer Family Resource Center

LEGEND

- NEW PAVEMENT
- NEW CONCRETE SIDEWALK
- EXISTING DRIVEWAY
- AHB — APPROXIMATE HIGHWAY BOUNDARY
- STUDY AREA BOUNDARY
- TRAVEL DIRECTION

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PREFERRED CONCEPT LAYOUT

CITY OF RENSSELAER WATERFRONT CONNECTIVITY STUDY

SCALE: 1" = 60'

DWG. NO. CP-04

Engineering and Land Surveying, P.C.

CDTC Capital District Transportation Committee

City of Rensselaer

GRID NORTH

MATCHLINE - SEE DWG. NO. CP-08

MATCHLINE - SEE DWG. NO. CP-09

MATCHLINE - SEE DWG. NO. CP-04

MATCHLINE - SEE DWG. NO. CP-06

PATTEN AVENUE

9'-0" TRAVEL LANE

9'-0" TRAVEL LANE

7'-0' PARKING LANE

FOURTH STREET

13'-5" TRAVELED WAY

7'-0" PARKING LANE

Non-ADA Compliant Curb Ramps Will be Replaced Where Sidewalk is to Remain

The Cakerino Bake Shop

Lucky Times Grocery & Deli

Casey's Restaurant

12'-0" TRAVEL LANE

12'-0" TRAVEL LANE

WASHINGTON AVENUE

8'-0" PARKING LANE

STOP

STOP

FOURTH STREET

Nelson's Steak Out

CHESTNUT STREET

Curb Extension

Existing Sidewalks Less Than 5'-0" Wide Will Need A Passing Space 5'-0" by 5'-0" A Maximum of 200' Apart

LEGEND

- NEW PAVEMENT
- NEW CONCRETE SIDEWALK
- EXISTING DRIVEWAY
- AHB — APPROXIMATE HIGHWAY BOUNDARY
- STUDY AREA BOUNDARY
- TRAVEL DIRECTION

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PREFERRED CONCEPT LAYOUT

Engineering and Land Surveying, P.C.

CDTC Capital District Transportation Committee

City of Rensselaer

GRID NORTH

MATCHLINE - SEE DWG. NO. CP-09

PATTEN AVENUE

FORBES AVENUE

10'-0" MULTI-USE PATH

Reconstruct Stairs

STOP

Doane Stewart School

Retaining Wall

Non-ADA Compliant Curb Ramps Will be Replaced Where Sidewalk is to Remain

ANDERSON PLACE

21'-0" TRAVELED WAY

LINCOLN TERRACE

7'-0" PARKING LANE

12'-0" TRAVELED WAY

7'-0" PARKING LANE

STOP

12'-0" TRAVEL LANE

12'-0" TRAVEL LANE

8'-0" PARKING LANE

WASHINGTON AVENUE

MATCHLINE - SEE DWG. NO. CP-05

MATCHLINE - SEE DWG. NO. CP-07

Improvements Installed Under PSAP Project

Existing Sidewalks Less Than 5'-0" Wide Will Need A Passing Space 5'-0" by 5'-0" A Maximum of 200' Apart

LEGEND

- NEW PAVEMENT
- NEW CONCRETE SIDEWALK
- EXISTING DRIVEWAY
- MULTI-USE PATH
- AHB — APPROXIMATE HIGHWAY BOUNDARY
- STUDY AREA BOUNDARY
- TRAVEL DIRECTION

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PREFERRED CONCEPT LAYOUT

Engineering and Land Surveying, P.C.
CDTC Capital District Transportation Committee
City of Rensselaer

MATCHLINE - SEE DWG. NO. CP-06

Non-ADA Compliant Curb Ramps Will be Replaced Where Sidewalk is to Remain

Capital Gurudwara

I-90

I-90 EXIT RAMP

GRID NORTH

LINCOLN TERRACE
12'-0" TRAVELED WAY
7'-0" PARKING LANE

MANOR DRIVE
9'-6" TRAVEL LANE
9'-6" TRAVEL LANE

WASHINGTON AVENUE
WASHINGTON AVENUE
WASHINGTON AVENUE
8'-0" PARKING LANE
12'-0" TRAVEL LANE
12'-0" TRAVEL LANE
15'-0" TRAVEL LANE
15'-0" TRAVEL LANE
14'-0" TRAVEL LANE
14'-0" TRAVEL LANE

STOP
STOP
STOP
STOP

EIGHTH STREET
NINTH STREET
TENTH STREET (ONE WAY)
VAN RENSSELAER DRIVE

AHB
AH

LEGEND
- NEW PAVEMENT
- NEW CONCRETE SIDEWALK
- EXISTING DRIVEWAY
- AHB — APPROXIMATE HIGHWAY BOUNDARY
- STUDY AREA BOUNDARY
- TRAVEL DIRECTION

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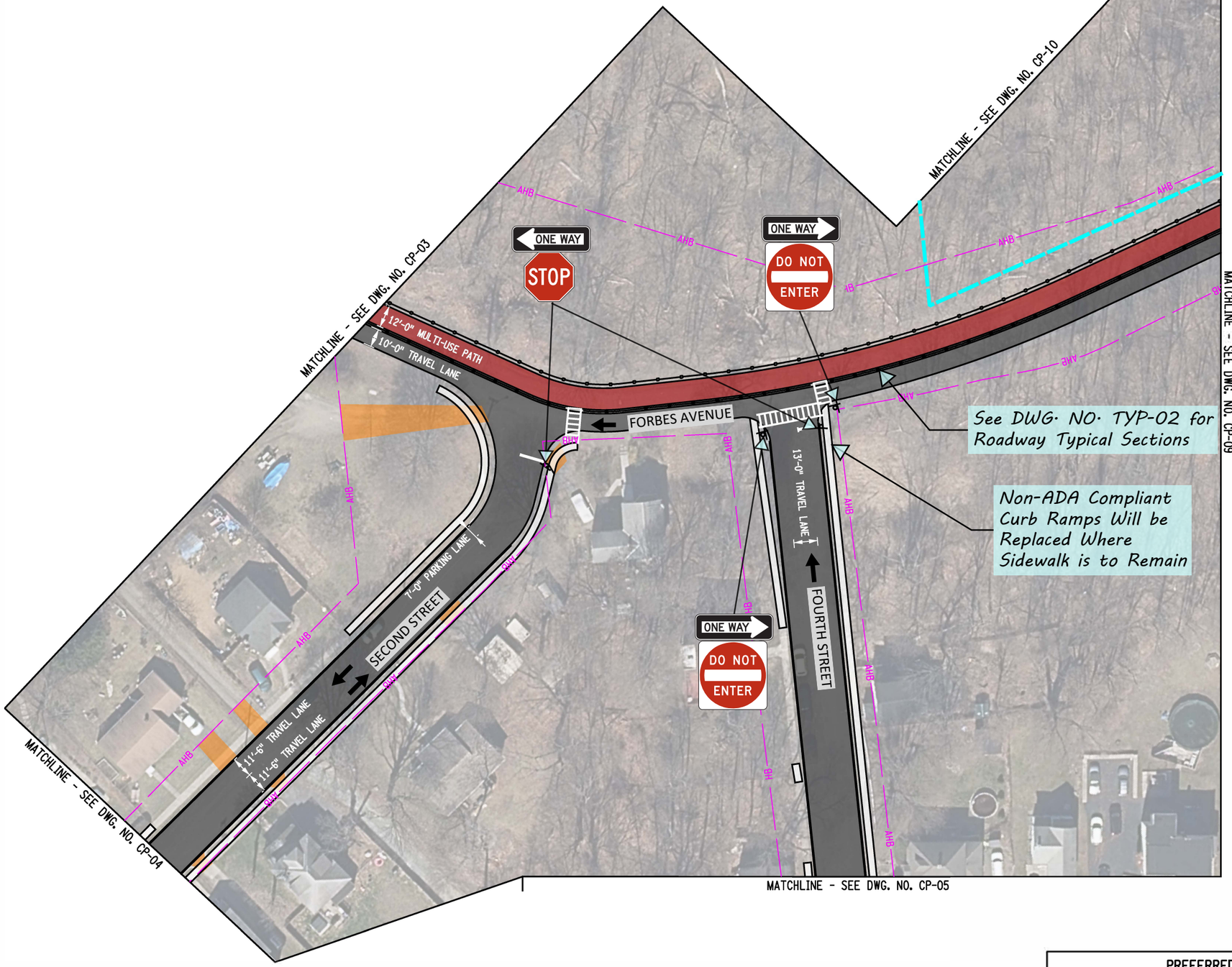
Existing Sidewalks Less Than 5'-0" Wide Will Need A Passing Space 5'-0" by 5'-0" A Maximum of 200' Apart

PREFERRED CONCEPT LAYOUT

Engineering and Land Surveying, P.C.
CDTC Capital District Transportation Committee
City of Rensselaer

GRID NORTH



Existing Sidewalks Less Than 5'-0" Wide Will Need A Passing Space 5'-0" by 5'-0" A Maximum of 200' Apart

LEGEND

- NEW PAVEMENT
- NEW CONCRETE SIDEWALK
- EXISTING DRIVEWAY
- MULTI-USE PATH
- AHB — APPROXIMATE HIGHWAY BOUNDARY
- STUDY AREA BOUNDARY
- TRAVEL DIRECTION

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GRID NORTH

12'-0" MULTI-USE PATH

10'-0" MULTI-USE PATH

FORBES AVENUE

10'-0" TRAVEL LANE

10'-0" TRAVEL LANE

Retaining Wall

Van Rensselaer Heights

The Doane Stuart School

Retaining Wall

See DWG. NO. TYP-02 for Roadway Typical Sections and Proposed Alternatives

Existing Sidewalks Less Than 5'-0" Wide Will Need A Passing Space 5'-0" by 5'-0" A Maximum of 200' Apart

LEGEND

- NEW PAVEMENT
- NEW CONCRETE SIDEWALK
- EXISTING DRIVEWAY
- MULTI-USE PATH
- APPROXIMATE HIGHWAY BOUNDARY
- STUDY AREA BOUNDARY
- TRAVEL DIRECTION

MATCHLINE - SEE DWG. NO. CP-08

MATCHLINE - SEE DWG. NO. CP-05

MATCHLINE - SEE DWG. NO. CP-06

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PREFERRED CONCEPT LAYOUT

Engineering and Land Surveying, P.C. | CDTC Capital District Transportation Committee | City of Rensselaer

PREFERRED CONCEPT LAYOUT

Engineering and Land Surveying, P.C.
CDTC Capital District Transportation Committee
City of Rensselaer

APPENDIX I: PLANNING LEVEL COST ESTIMATES

M.J. Engineering and
Land Surveying, P.C.

1533 Crescent Road, Clifton Park, NY 12065
Phone: 518.371.0799 / Fax: 518.371.0822
www.mjels.com

Project: Rensselaer Waterfront Connectivity Study

MJ No. 1536 PIN -

Date: March 2, 2023

Concept 2 - Sidewalks

CONCEPT Engineer's Estimate Summary

ITEM	DESCRIPTION	UNIT	TOTAL	UNIT PRICE	TOTAL PRICE
203.02	UNCLASSIFIED EXCAVATION AND DISPOSAL	CY	511.0	$ 50.00	$ 25,550.00
304.12	SUBBASE COURSE, TYPE 2	CY	310.0	$ 60.00	$ 18,600.00
608.0101	CONCRETE SIDEWALKS AND DRIVEWAYS	CY	163.0	$ 1,000.00	$ 163,000.00
610.1403	TOPSOIL - LAWNS	CY	109.1	$ 85.00	$ 9,272.35
610.1602	TURF ESTABLISHMENT - LAWNS	SY	981.8	$ 2.00	$ 1,963.56
619.01	BASIC WORK ZONE TRAFFIC CONTROL	LS	1.0	$ 10,000.00	$ 10,000.00
625.01	SURVEY OPERATIONS	LS	1.0	$ 10,000.00	$ 10,000.00
637.11	ENGINEER'S FIELD OFFICE - TYPE 1	MNTH	2.0	$ 3,000.00	$ 6,000.00
697.03	FIELD CHANGE PAYMENT (5%)	DC	$ 13,000.00	1.0	$ 13,000.00
699.040001	MOBILIZATION (4%)	LS	1.0	$ 9,800.00	$ 9,800.00

	Sub-Total:	$267,185.90
30%	**Contingency:**	$80,155.77
	Total:	**$347,341.67**
	Rounded:	**$350,000.00**

M.J. Engineering and
Land Surveying, P.C.

1533 Crescent Road, Clifton Park, NY 12065
Phone: 518.371.0799 / Fax: 518.371.0822
www.mjels.com

Project: Rensselaer Waterfront Connectivity Study
MJ No. 1536 PIN -
Date: March 2, 2023

Concept 3 - 4th Street Intersection

CONCEPT Engineer's Estimate Summary

ITEM	DESCRIPTION	UNIT	TOTAL	UNIT PRICE	TOTAL PRICE
203.02	UNCLASSIFIED EXCAVATION AND DISPOSAL	CY	150.0	$ 50.00	$ 7,500.00
203.03	EMBANKMENT IN PLACE	CY	60.0	$ 50.00	$ 3,000.00
304.12	SUBBASE COURSE, TYPE 2	CY	60.0	$ 60.00	$ 3,600.00
404.127201	12.5 F2 TOP COURSE WMA, 70 SERIES COMPACTION	TON	78.0	$ 150.00	$ 11,700.00
404.197901	19 F9 BINDER COURSE WMA, 70 SERIES COMPACTION	TON	16.0	$ 160.00	$ 2,560.00
404.377901	37.5 F9 BASE COURSE WMA, 70 SERIES COMPACTION	TON	25.0	$ 160.00	$ 4,000.00
407.0102	DILUTED TACK COAT	GAL	60.0	$ 5.00	$ 300.00
490.10	PRODUCTION COLD MILLING OF BITUMINOUS CONCRETE	SY	954.0	$ 4.00	$ 3,816.00
608.0101	CONCRETE SIDEWALKS AND DRIVEWAYS	CY	12.0	$ 1,000.00	$ 12,000.00
609.0212	STONE CURB NEAR VERTICAL FACE (NVF)	LF	235.0	$ 50.00	$ 11,750.00
619.01	BASIC WORK ZONE TRAFFIC CONTROL	LS	1.0	$ 40,000.00	$ 40,000.00
625.01	SURVEY OPERATIONS	LS	1.0	$ 20,000.00	$ 20,000.00
637.11	ENGINEER'S FIELD OFFICE - TYPE 1	MNTH	2.0	$ 3,000.00	$ 6,000.00
685.11	WHITE EPOXY REFLECTORIZED PAVEMENT STRIPES - 20 MILS	LF	1,905.0	$ 2.00	$ 3,810.00
685.12	YELLOW EPOXY REFLECTORIZED PAVEMENT STRIPES - 20 MILS	LF	75.0	$ 2.00	$ 150.00
	DRAINAGE & STORMWATER	LS	1.0	$ 25,000.00	$ 25,000.00
	LANDSCAPING	LS	1.0	$ 10,000.00	$ 10,000.00
	UTILITIES	LS	1.0	$ 5,000.00	$ 5,000.00
697.03	FIELD CHANGE PAYMENT	DC	$ 9,000.00	1.0	$ 9,000.00
698.04	ASPHALT PRICE ADJUSTMENT	DC	$ 2,500.00	1.0	$ 2,500.00
698.05	FUEL PRICE ADJUSTMENT	DC	$ 1,000.00	1.0	$ 1,000.00
699.040001	MOBILIZATION	LS	1.0	$ 5,300.00	$ 5,300.00

	Sub-Total:	$187,986.00
30%	**Contingency:**	$56,395.80
	Total:	**$244,381.80**
	Rounded:	**$245,000.00**

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Project: Rensselaer Waterfront Connectivity Study
MJ No. 1536 PIN -
Date: March 2, 2023

Concept 4 - Washington Corridor

CONCEPT Engineer's Estimate Summary

ITEM	DESCRIPTION	UNIT	TOTAL	UNIT PRICE	TOTAL PRICE
203.02	UNCLASSIFIED EXCAVATION AND DISPOSAL	CY	200.0	$ 50.00	$ 10,000.00
203.03	EMBANKMENT IN PLACE	CY	90.0	$ 50.00	$ 4,500.00
304.12	SUBBASE COURSE, TYPE 2	CY	80.0	$ 60.00	$ 4,800.00
404.127201	12.5 F2 TOP COURSE WMA, 70 SERIES COMPACTION	TON	1,200.0	$ 120.00	$ 144,000.00
404.197901	19 F9 BINDER COURSE WMA, 70 SERIES COMPACTION	TON	6.0	$ 160.00	$ 960.00
404.377901	37.5 F9 BASE COURSE WMA, 70 SERIES COMPACTION	TON	9.0	$ 160.00	$ 1,440.00
407.0102	DILUTED TACK COAT	GAL	610.0	$ 5.00	$ 3,050.00
490.10	PRODUCTION COLD MILLING OF BITUMINOUS CONCRETE	SY	11,029.0	$ 4.00	$ 44,116.00
608.0101	CONCRETE SIDEWALKS AND DRIVEWAYS	CY	36.0	$ 1,000.00	$ 36,000.00
609.0212	STONE CURB NEAR VERTICAL FACE (NVF)	LF	180.0	$ 50.00	$ 9,000.00
619.01	BASIC WORK ZONE TRAFFIC CONTROL	LS	1.0	$ 100,000.00	$ 100,000.00
625.01	SURVEY OPERATIONS	LS	1.0	$ 10,000.00	$ 10,000.00
637.11	ENGINEER'S FIELD OFFICE - TYPE 1	MNTH	2.0	$ 3,000.00	$ 6,000.00
685.11	WHITE EPOXY REFLECTORIZED PAVEMENT STRIPES - 20 MILS	LF	3,970.0	$ 2.00	$ 7,940.00
685.12	YELLOW EPOXY REFLECTORIZED PAVEMENT STRIPES - 20 MILS	LF	4,350.0	$ 2.00	$ 8,700.00
	DRAINAGE & STORMWATER	LS	1.0	$ 50,000.00	$ 50,000.00
	LANDSCAPING	LS	1.0	$ 25,000.00	$ 25,000.00
	UTILITIES	LS	1.0	$ 5,000.00	$ 5,000.00
697.03	FIELD CHANGE PAYMENT	DC	$ 24,000.00	1.0	$ 24,000.00
698.04	ASPHALT PRICE ADJUSTMENT	DC	$ 10,000.00	1.0	$ 10,000.00
698.05	FUEL PRICE ADJUSTMENT	DC	$ 5,000.00	1.0	$ 5,000.00
699.040001	MOBILIZATION	LS	1.0	$ 15,700.00	$ 15,700.00

	Sub-Total:	$525,206.00
30%	**Contingency:**	$157,561.80
	Total:	**$682,767.80**
	Rounded:	**$685,000.00**

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Project: Rensselaer Waterfront Connectivity Study
MJ No. 1536 PIN -
Date: March 2, 2023

Concept 5 - Forbes Corridor

CONCEPT Engineer's Estimate Summary

ITEM	DESCRIPTION	UNIT	TOTAL	UNIT PRICE	TOTAL PRICE
201.07	CLEARING AND GRUBBING	LS	1.0	$ 25,000.00	$ 25,000.00
203.02	UNCLASSIFIED EXCAVATION AND DISPOSAL	CY	720.0	$ 50.00	$ 36,000.00
203.03	EMBANKMENT IN PLACE	CY	710.0	$ 50.00	$ 35,500.00
304.12	SUBBASE COURSE, TYPE 2	CY	430.0	$ 60.00	$ 25,800.00
404.127201	12.5 F2 TOP COURSE WMA, 70 SERIES COMPACTION	TON	583.0	$ 120.00	$ 69,960.00
404.197901	19 F9 BINDER COURSE WMA, 70 SERIES COMPACTION	TON	64.0	$ 160.00	$ 10,240.00
404.377901	37.5 F9 BASE COURSE WMA, 70 SERIES COMPACTION	TON	103.0	$ 160.00	$ 16,480.00
407.0102	DILUTED TACK COAT	GAL	325.0	$ 5.00	$ 1,625.00
490.10	PRODUCTION COLD MILLING OF BITUMINOUS CONCRETE	SY	5,357.0	$ 4.00	$ 21,428.00
606.10	BOX BEAM GUIDE RAILING	LF	470.0	$ 60.00	$ 28,200.00
606.100002	BOX BEAM GUIDE RAILING (SHOP BENT OR SHOP MITERED)	LF	920.0	$ 50.00	$ 46,000.00
606.120101	BOX BEAM END PIECE	EACH	1.0	$ 400.00	$ 400.00
607.96000001	WOODEN PEDESTRIAN RAILING	LF	1,070.0	$ 60.00	$ 64,200.00
608.0101	CONCRETE SIDEWALKS AND DRIVEWAYS	CY	2.0	$ 1,000.00	$ 2,000.00
608.020102	ASPHALT SIDEWALKS, DRIVEWAYS AND BICYCLE PATHS,AND VEGETATION CONTROL STRIPS	TON	240.0	$ 160.00	$ 38,400.00
609.0212	STONE CURB NEAR VERTICAL FACE (NVF)	LF	1,000.0	$ 50.00	$ 50,000.00
619.01	BASIC WORK ZONE TRAFFIC CONTROL	LS	1.0	$ 80,000.00	$ 80,000.00
625.01	SURVEY OPERATIONS	LS	1.0	$ 25,000.00	$ 25,000.00
637.11	ENGINEER'S FIELD OFFICE - TYPE 1	MNTH	4.0	$ 3,000.00	$ 12,000.00
685.11	WHITE EPOXY REFLECTORIZED PAVEMENT STRIPES - 20 MILS	LF	2,715.0	$ 2.00	$ 5,430.00
	DRAINAGE & STORMWATER	LS	1.0	$ 100,000.00	$ 100,000.00
	LANDSCAPING	LS	1.0	$ 40,000.00	$ 40,000.00
	UTILITIES	LS	1.0	$ 10,000.00	$ 10,000.00
	RETAINING WALLS	LS	1.0	$ 225,000.00	$ 225,000.00
697.03	FIELD CHANGE PAYMENT	DC	$ 49,000.00	1.0	$ 49,000.00
698.04	ASPHALT PRICE ADJUSTMENT	DC	$ 5,000.00	1.0	$ 5,000.00
698.05	FUEL PRICE ADJUSTMENT	DC	$ 2,500.00	1.0	$ 2,500.00
699.040001	MOBILIZATION	LS	1.0	$ 23,800.00	$ 23,800.00

	Sub-Total:	$1,048,963.00
30%	**Contingency:**	$314,688.90
	Total:	**$1,363,651.90**
	Rounded:	**$1,365,000.00**

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Project: Rensselaer Waterfront Connectivity Study
MJ No. 1536 PIN -
Date: March 2, 2023

Concept 6 - Forbes Intersection

CONCEPT Engineer's Estimate Summary

ITEM	DESCRIPTION	UNIT	TOTAL	UNIT PRICE	TOTAL PRICE
201.07	CLEARING AND GRUBBING	LS	1.0	$ 50,000.00	$ 50,000.00
203.02	UNCLASSIFIED EXCAVATION AND DISPOSAL	CY	2,150.0	$ 50.00	$ 107,500.00
203.03	EMBANKMENT IN PLACE	CY	4,260.0	$ 50.00	$ 213,000.00
304.12	SUBBASE COURSE, TYPE 2	CY	800.0	$ 60.00	$ 48,000.00
404.127201	12.5 F2 TOP COURSE WMA, 70 SERIES COMPACTION	TON	149.0	$ 150.00	$ 22,350.00
404.197901	19 F9 BINDER COURSE WMA, 70 SERIES COMPACTION	TON	248.0	$ 160.00	$ 39,680.00
404.377901	37.5 F9 BASE COURSE WMA, 70 SERIES COMPACTION	TON	397.0	$ 160.00	$ 63,520.00
407.0102	DILUTED TACK COAT	GAL	205.0	$ 5.00	$ 1,025.00
606.10	BOX BEAM GUIDE RAILING	LF	145.0	$ 60.00	$ 8,700.00
606.100002	BOX BEAM GUIDE RAILING (SHOP BENT OR SHOP MITERED)	LF	180.0	$ 50.00	$ 9,000.00
606.120101	BOX BEAM END PIECE	EACH	1.0	$ 400.00	$ 400.00
607.96000001	WOODEN PEDESTRIAN RAILING	LF	395.0	$ 60.00	$ 23,700.00
608.0101	CONCRETE SIDEWALKS AND DRIVEWAYS	CY	24.0	$ 1,000.00	$ 24,000.00
608.020102	ASPHALT SIDEWALKS, DRIVEWAYS AND BICYCLE PATHS,AND VEGETATION CONTROL STRIPS	TON	123.0	$ 160.00	$ 19,680.00
609.0212	STONE CURB NEAR VERTICAL FACE (NVF)	LF	335.0	$ 50.00	$ 16,750.00
619.01	BASIC WORK ZONE TRAFFIC CONTROL	LS	1.0	$ 80,000.00	$ 80,000.00
625.01	SURVEY OPERATIONS	LS	1.0	$ 40,000.00	$ 40,000.00
637.11	ENGINEER'S FIELD OFFICE - TYPE 1	MNTH	5.0	$ 3,000.00	$ 15,000.00
685.11	WHITE EPOXY REFLECTORIZED PAVEMENT STRIPES - 20 MILS	LF	1,780.0	$ 2.00	$ 3,560.00
685.12	YELLOW EPOXY REFLECTORIZED PAVEMENT STRIPES - 20 MILS	LF	325.0	$ 2.00	$ 650.00
	DRAINAGE & STORMWATER	LS	1.0	$ 125,000.00	$ 125,000.00
	LANDSCAPING	LS	1.0	$ 50,000.00	$ 50,000.00
	UTILITIES	LS	1.0	$ 10,000.00	$ 10,000.00
697.03	FIELD CHANGE PAYMENT	DC	$ 49,000.00	1.0	$ 49,000.00
698.04	ASPHALT PRICE ADJUSTMENT	DC	$ 5,000.00	1.0	$ 5,000.00
698.05	FUEL PRICE ADJUSTMENT	DC	$ 2,500.00	1.0	$ 2,500.00
699.040001	MOBILIZATION	LS	1.0	$ 31,500.00	$ 31,500.00

	Sub-Total:	$1,059,515.00
30%	**Contingency:**	$317,854.50
	Total:	**$1,377,369.50**
	Rounded:	**$1,380,000.00**

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Project: Rensselaer Waterfront Connectivity Study
MJ No. 1536 PIN -
Date: March 2, 2023

Concept 7 - Roadway Resurfacing

CONCEPT Engineer's Estimate Summary

ITEM	DESCRIPTION	UNIT	TOTAL	UNIT PRICE	TOTAL PRICE
404.127201	12.5 F2 TOP COURSE WMA, 70 SERIES COMPACTION	TON	1,931.0	$ 120.00	$ 231,720.00
407.0102	DILUTED TACK COAT	GAL	980.0	$ 5.00	$ 4,900.00
490.10	PRODUCTION COLD MILLING OF BITUMINOUS CONCRETE	SY	17,749.0	$ 4.00	$ 70,996.00
619.01	BASIC WORK ZONE TRAFFIC CONTROL	LS	1.0	$ 60,000.00	$ 60,000.00
625.01	SURVEY OPERATIONS	LS	1.0	$ 10,000.00	$ 10,000.00
637.11	ENGINEER'S FIELD OFFICE - TYPE 1	MNTH	5.0	$ 3,000.00	$ 15,000.00
685.11	WHITE EPOXY REFLECTORIZED PAVEMENT STRIPES - 20 MILS	LF	6,130.0	$ 2.00	$ 12,260.00
	DRAINAGE & STORMWATER	LS	1.0	$ 15,000.00	$ 15,000.00
	UTILITIES	LS	1.0	$ 5,000.00	$ 5,000.00
697.03	FIELD CHANGE PAYMENT	DC	$ 22,000.00	1.0	$ 22,000.00
698.04	ASPHALT PRICE ADJUSTMENT	DC	$ 5,000.00	1.0	$ 5,000.00
698.05	FUEL PRICE ADJUSTMENT	DC	$ 2,500.00	1.0	$ 2,500.00
699.040001	MOBILIZATION	LS	1.0	$ 16,200.00	$ 16,200.00

	Sub-Total:	$470,576.00
30%	**Contingency:**	$141,172.80
	Total:	**$611,748.80**
	Rounded:	**$615,000.00**

APPENDIX J: ENVIRONMENTAL JUSTICE AND LIMITED ENGLISH PROFICIENCY

Environmental Justice

Introduction

Per federal requirements, the Capital District Transportation Committee (CDTC) undertakes an analysis of Environmental Justice in all Community and Transportation Linkage Planning Program (Linkage Program) initiatives to evaluate if transportation concepts and recommendations impact Environmental Justice populations. Impacts may be defined as those that are positive, potentially negative and neutral as described in CDTC's Environmental Justice Analysis document, dated March 2020. The goal of this analysis is to ensure that both the positive and negative impacts of transportation planning conducted by CDTC and its member agencies are fairly distributed and that defined Environmental Justice populations do not bear disproportionately high and adverse effects.

This goal has been set to:

• Ensure CDTC's compliance with Title VI of the Civil Rights Act of 1964, which states that "no person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance,"

• Assist the United State Department of Transportation's agencies in complying with Executive Order 12898 stating, "Each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations."

• Address FTA C 4702.1B TITLE VI REQUIREMENTS AND GUIDELINES FOR FEDERAL TRANSIT ADMINISTRATION RECIPIENTS, which includes requirements for MPOs that are some form of a recipient of FTA, which CDTC is not.

Data and Analysis

CDTC staff created demographic parameters using data from the 2013-2017 American Community Survey (ACS). Threshold values were assigned at the census tract level to identify geographic areas with significant populations of minority or low-income persons. Tracts with higher than the regional average percentage of low-income or minority residents are identified as Environmental Justice populations. Minority residents are defined as those who identify themselves as anything but white only, not Hispanic or Latino. Low-income residents are defined as those whose household income falls below the poverty line.

The transportation patterns by race/ethnicity, income, age, English ability, disability status, and sex in CDTC's planning area are depicted in table III-2 through III-7, using the commute to work as a proxy for all travel. The greatest difference between the defined minority and non-minority population is in the Drive Alone and Transit categories: The minority population is almost 20% less likely to drive alone, 11% more likely to take transit, and is also more likely to walk and carpool. The defined low-income

population and the non-low-income population follow the same trend, with the low-income population 20% less likely to drive alone, 10% more likely to commute via transit, and more likely to walk and carpool. Other categories showed a lesser difference.

Table 1: Commute Mode by Race/Ethnicity

By Race/Ethnicity	Drive Alone	Carpool	Transit	Other	Walk	Work at Home
All Workers (16+)	80.0%	7.6%	3.7%	1.2%	3.4%	4.1%
White Alone Not Hispanic or Latino	83.3%	6.9%	1.8%	1.0%	2.7%	4.2%
Minority	**63.8%**	11.0%	**12.9%**	2.0%	7.0%	3.3%

Table 2: Commute Mode by Income

By Income	Drive Alone	Carpool	Transit	Other	Walk	Work at Home
At/Above 100% Poverty Level	81.8%	7.4%	3.2%	1.1%	2.6%	3.9%
Below 100% Poverty Level	**61.3%**	11.3%	**13.2%**	2.4%	8.8%	3.0%

Table 3: Commute Mode By Age

By Age	Drive Alone	Carpool	Transit	Other	Walk	Work at Home
16-19 Years	**59.9%**	**16.2%**	4.3%	2.9%	**13.0%**	3.8%
20-64 Years	80.8%	7.4%	3.7%	1.1%	3.1%	3.9%
65+ years	80.7%	5.0%	2.9%	1.3%	2.5%	7.6%

Table 4: Commute Mode by English Ability

By English Ability	Drive Alone	Carpool	Transit	Other	Walk	Work at Home
Speak English Very Well	70.3%	11.7%	4.8%	1.8%	7.0%	4.4%
Speak English Less than Very Well	65.6%	14.3%	8.3%	1.2%	7.4%	3.2%

Table 5: Commute Mode by Disability

By Disability Status*	Drive Alone	Carpool	Transit	Other	Walk	Work at Home
Without any Disability	80.7%	7.4%	3.5%	1.1%	3.4%	4.0%
With a Disability	**71.1%**	11.2%	6.7%	2.4%	4.3%	4.3%

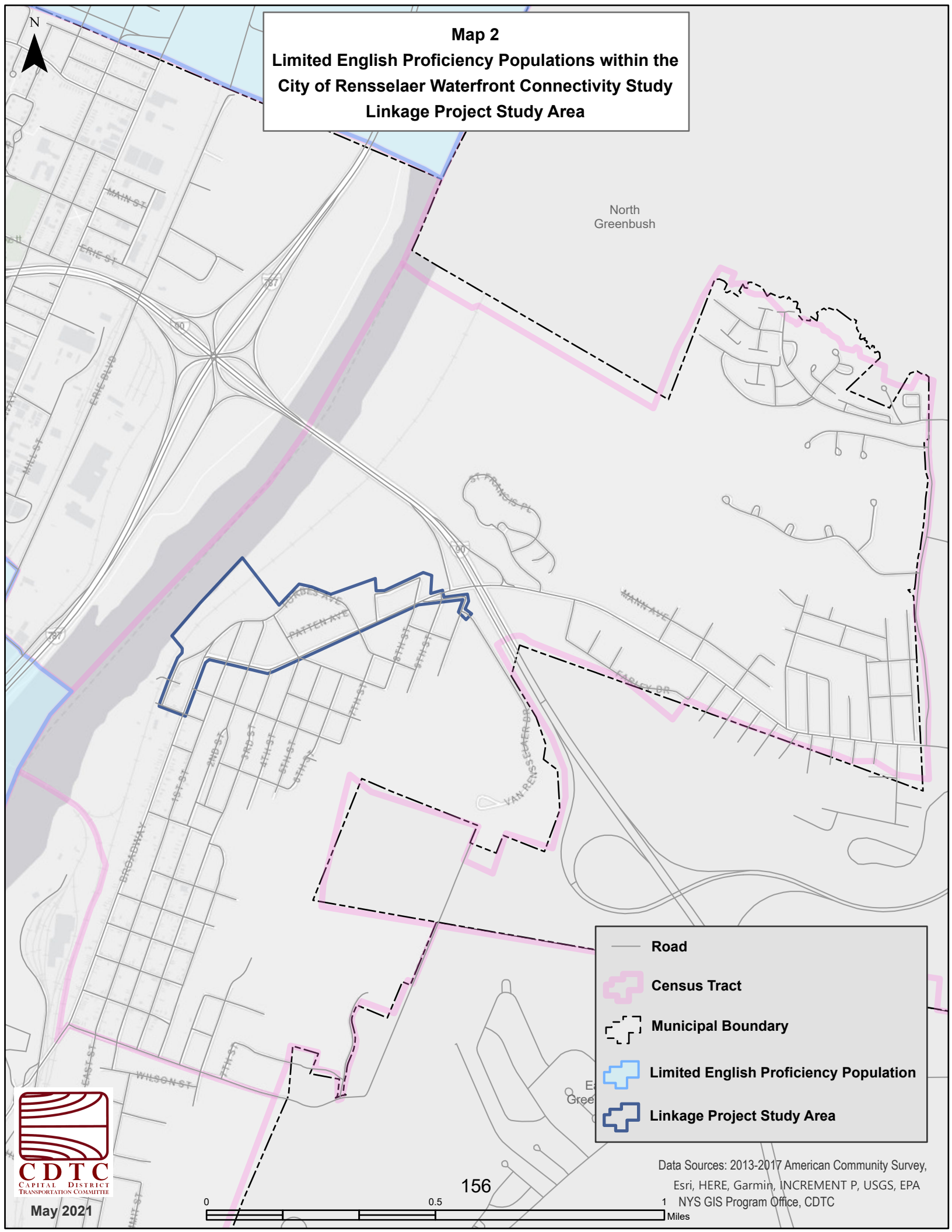
Table 6: Commute Mode by Sex

By Sex*	Drive Alone	Carpool	Transit	Other	Walk	Work at Home
Male	80.1%	7.5%	3.4%	1.5%	3.7%	3.9%
Female	80.2%	7.8%	3.9%	0.9%	3.1%	4.3%

Data is from the American Community Survey 2017 5-year estimates, tables S0802, B08105H, B08101, B08122, S0801, B08113, and S1811. Other includes taxi, motorcycle, and bicycle. *Data for sex and disability status include all people in Albany, Rensselaer, Saratoga, and Schenectady Counties.

Map 1 provides an overview of the Rensselaer Waterfront Connectivity study area. The Rensselaer Waterfront Connectivity study area is included in the Environmental Justice area based on the study area Census Tracts having a higher than regional rate of minority residents. The study area is entirely within Census Tract 516. This Census Tract is identified as containing a minority population of 22%, which is just above the regional rate of 21.5%. The Census Tract does not meet the threshold for Low Income populations, as it is below the regional rate.

The Capital Region Indicators website, maintained by the Capital District Regional Planning Commission (CDRPC), provides information by race and ethnicity (White, Black or African American, Asian, and Hispanic or Latino) that may be useful to further understand the population within a study area. Since this document is a regional analysis performed at the census tract level, small scale populations may be overlooked. It therefore may still be useful to scan the project area, particularly if the project area is small, as minority or low-income populations may form a significant portion of the study area residents but not be reflected in the larger census tract areas. In addition, the project should look for worksites and other generators where minority and/or low-income people are over-represented, as the data only captures the residential population. The Capital Region Indicators page for the study area Census Tract may be found here: https://www.capitalregionindicators.org/profile/36083051600


Map 2
Limited English Proficiency Populations within the City of Rensselaer Waterfront Connectivity Study Linkage Project Study Area
N
North Greenbush
Road
Census Tract
Municipal Boundary
Limited English Proficiency Population
Linkage Project Study Area
Data Sources: 2013-2017 American Community Survey, Esri, HERE, Garmin, INCREMENT P, USGS, EPA NYS GIS Program Office, CDTC
0
0.5
1
Miles
CDTC
Capital District Transportation Committee
May 2021

Consideration for including minority in the planning process was given in the following ways:

- The Internet was used to display and advertise information about the study.
- Social media was used to provide information and input opportunities.
- Two formal public participation opportunities were provided.
- Public comment was accepted throughout the study process.
- Final products will be posted to CDTC's website, the City of Rensselaer website and on social media.

Conclusion

CDTC defines plans and projects with a primary or significant focus on transit, bicycling, walking, or carpool as being "positive". The purpose of this study is to generate concepts for improved multimodal travel in the study area for all roadway users. Transportation improvements that result from this study are expected to improve connections to the Rensselaer Waterfront, as well as local schools and places of business. Consideration is given to roadway users of all ages and abilities, including pedestrians, bicyclists, motorists, transit users, freight, emergency vehicles, children, elderly, and people with disabilities. As such, the project outcomes are expected to be positive for all residents in and around the study area.

Limited English Proficiency

Introduction

Inclusive public participation is a priority consideration in CDTC-sponsored plans, studies, and programs. Understanding and involvement are encouraged throughout the process. CDTC encourages input from all stakeholders and ensures that all segments of the population, including those that do not speak English as their primary language and who have a limited ability to speak, read, write, or understand English, have the opportunity to be involved in the transportation planning process.

Executive Order 13166, "Improving Access to Services for Persons with Limited English Proficiency" (LEP) was signed in 2000 to improve access to federally assisted programs and activities for persons who, as a result of national origin, are limited in their English proficiency. To ensure that programs and activities normally provided in English are accessible to LEP persons and thus do not discriminate on the basis of national origin in violation of Title VI of the Civil Rights Act of 1964, recipients must take reasonable steps to ensure meaningful access to their programs and activities by LEP persons.

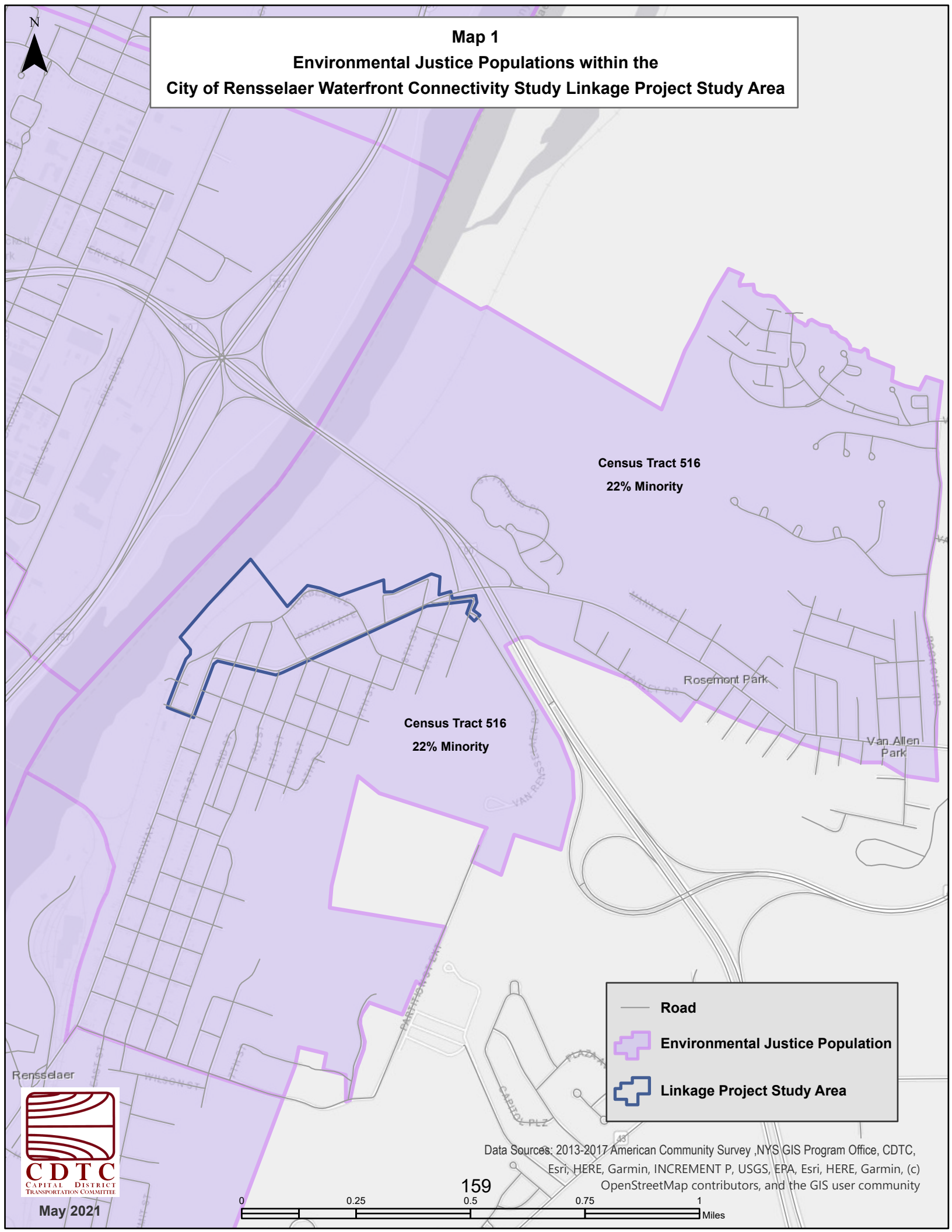
Data and Analysis

According to 2013-2017 data from the American Community Survey (ACS) table B16004, 3.2 percent of the region's population 5 years of age and older, or over 25,000 people, reported that they do not speak English "very well". USDOT guidance sets a written translation threshold at 5% eligible to be served or 1,000 people, whichever is less. Thus, census tracts with a rate of 5% or higher of LEP persons or 1,000 LEP persons are identified as LEP census tracts.

The CDTC project manager should seek further data sources or community knowledge to indicate which languages are present. If any of them constitute 1,000 people or 5% of the total study area population, whichever is less, key documents will be translated into those languages on request, and requested oral interpreting services will be provided when necessary and possible. In addition, initial outreach materials should be translated into languages meeting the above criteria.

Map 2 provides an overview of the Rensselaer Waterfront Connectivity study area. Although there are no LEP populations in the study area according to the LEP thresholds (5% or 1,000 people), the 2018 data in CDRPC's Community Indicators page for Census Tract 516 indicates 93 people who speak Spanish at home and speak English less than very well. That is about 1.5% percent of the total Census Tract population.

Since this document is a regional analysis performed at the census tract level, small scale populations may be overlooked. It therefore may still be useful to scan the project area, particularly if the project area is small, as people who don't speak English very well may form a significant portion of the study area residents but not be reflected in the larger census tract areas. In addition, the project should look for worksites and other generators where people who don't speak English very well are over-represented, as the data only captures the residential population.


N
Map 1
Environmental Justice Populations within the
City of Rensselaer Waterfront Connectivity Study Linkage Project Study Area
Census Tract 516
22% Minority
Census Tract 516
22% Minority
Rosemont Park
Van Allen Park
Rensselaer
Road
Environmental Justice Population
Linkage Project Study Area
Data Sources: 2013-2017 American Community Survey ,NYS GIS Program Office, CDTC, Esri, HERE, Garmin, INCREMENT P, USGS, EPA, Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community
0
0.25
0.5
0.75
1
Miles
CDTC
Capital District Transportation Committee
May 2021

Environmental Mitigation

Introduction

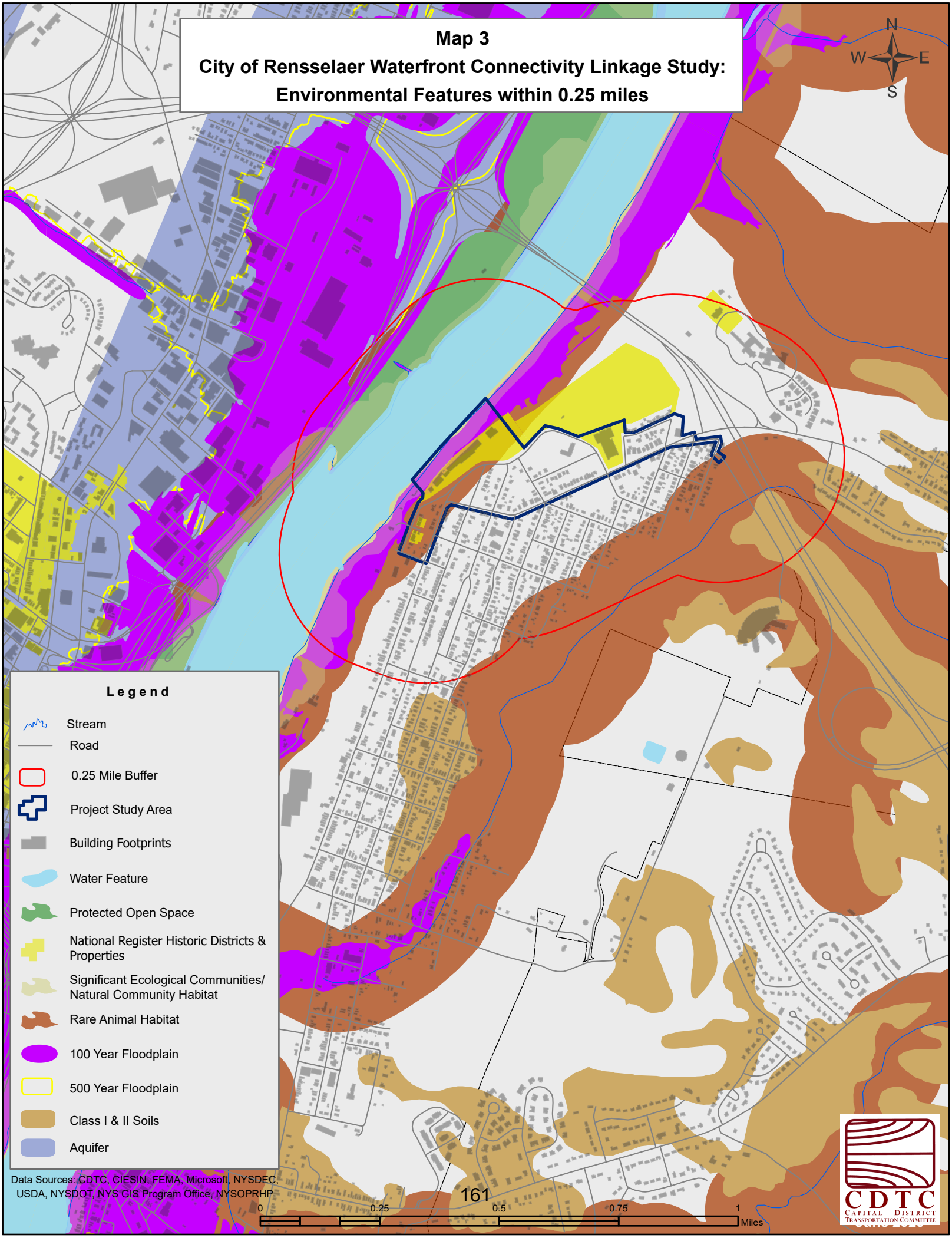
Per federal requirements, the Capital District Transportation Committee (CDTC) undertakes an Environmental Features Scan in all Community and Transportation Linkage Planning Program (Linkage Program) initiatives. The Environmental Features Scan identifies the location of environmentally sensitive features, both natural and cultural in relation to project study areas. Although the conceptual planning stage is too early in the transportation planning process to identify specific potential impacts to environmentally sensitive features, the early identification of environmentally sensitive features is an important part of the environmental mitigation process. It should also be noted here that as specific projects advance through the project development process, the applicable NEPA and SEQRA regulations requiring potential environmental impact identification, analysis and mitigation will be followed by the implementing agencies as required by federal and state law. CDTC is not an implementing agency.

Data and Analysis

CDTC staff relies on data from several state and federal agencies to maintain an updated map-based inventory of both natural and cultural resources. The following features are mapped and reviewed for their presence within each study area as well as within a quarter mile buffer of the defined study area boundary.

- sole source aquifers
- aquifers
- reservoirs
- water features (streams, lakes, rivers and ponds)
- wetlands
- watersheds
- 100 year flood plains
- rare animal populations
- rare plant populations
- significant ecological sites
- significant ecological communities
- state historic sites
- national historic sites
- national historic register districts
- national historic register properties
- federal parks and lands
- state parks and forests
- state unique areas
- state wildlife management areas
- county forests and preserves
- municipal parks and lands
- land trust sites
- NYS DEC lands
- Adirondack Park
- agricultural districts
- NY Protected Lands
- natural community habitats
- rare plant habitats
- Class I & II soils

Map 3 provides an overview of the environmentally sensitive (cultural and natural) features located within the Rensselaer Waterfront Connectivity study area as well as within a quarter mile buffer of the defined study area boundary.


Map 3
City of Rensselaer Waterfront Connectivity Linkage Study:
Environmental Features within 0.25 miles
N
W
E
S
Legend
Stream
Road
0.25 Mile Buffer
Project Study Area
Building Footprints
Water Feature
Protected Open Space
National Register Historic Districts & Properties
Significant Ecological Communities/ Natural Community Habitat
Rare Animal Habitat
100 Year Floodplain
500 Year Floodplain
Class I & II Soils
Aquifer
Data Sources: CDTC, CIESIN, FEMA, Microsoft, NYSDEC, USDA, NYSDOT, NYS GIS Program Office, NYSOPRHP
0
0.25
0.5
0.75
1
Miles
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Conclusion

A number of environmental and cultural features are in or within a quarter-mile of the study area:

- The study area contains National Register Historic Districts & Properties, including the Hilton Center and Doane Stuart School
- The riverfront portion of the study area is within the 100-year Hudson River floodplain
- Rare animal habitats are identified in the riverfront area, and within the quarter-mile buffer east of the study area

The purpose of this study is to improve multimodal connections within the study area, and the study is therefore not expected to negatively impact environmental or cultural features. No new roadway construction or increase in impermeable surface area is expected.