

City of Wauwatosa

Joint 2023 SS4A Demonstration Activities Grant Application #1

I. Activity #1 – Demonstrate Temporary Neighborhood Traffic Circles

Approximately 5% of the City’s KAB crashes and 9% of its bike/ped crashes occurred on neighborhood local streets from 2017 through 2021. The City views neighborhood traffic circles as an effective means to enhance safety by slowing speeds in neighborhoods, while also improving the bicycling environment by replacing stop signs with yield control. This demonstration activity will create five (5) temporary traffic circles at locations that meet crash, speed, and/or volume thresholds for intervention under the City’s Neighborhood Traffic Management Program (NTMP). The purpose of this activity is to demonstrate to the community how traffic circles can enhance safety by slowing speeds at intersections. This activity informs the City’s Safe Streets Action Plan development; follows the City’s Strategic Plan Priority #2: Public Safety, Goal 2 – Proactively Address Pedestrian, Bicycle, and Vehicular Safety; and will inform further development and deployment of the City’s NTMP. This activity can be completed in year 2024, which is within the SS4A 18-month preferred timeframe.

II. Measure and Track Results

The City Engineering Division will work with its police, fire, and public works to identify and layout five (5) temporary traffic circles at locations that qualify for the City’s NTMP based on measured crashes, speeds, and/or volumes. Under step one, chalk, traffic cones, and a fire truck will be used to fine-tune a preliminary layout. Under step two, temporary bollards, flexible rubber stops, planters/plants, and signs will be used to create temporary traffic circles. The temporary traffic circles are planned to be in place for two- to three-months. Before- and during-demonstration crash, speed, and volume data will be collected to document effectiveness. The opinions of residents in the impact area will also be collected through mailed and online surveys during the demonstration period to gain insight as to what worked well, what can be done differently, and overall satisfaction with neighborhood traffic circles.

III. Budget

Our budget for this activity is \$70,922.50 (\$56,738.00 federal funding, \$14,184.50 local match). Materials will be chosen in a manner that enables reuse to the greatest practical extent so-as to avoid post-demonstration waste.

	<b>Total Estimate</b>	<b>Federal 80%</b>	<b>Local 20%</b>
<i>Materials (5 Intersections):</i>			
Bollards	\$ 2,640.00	\$ 2,112.00	\$ 528.00
Flexible Rubber Stops with Reflectors	\$ 14,850.00	\$ 11,880.00	\$ 2,970.00
Planters	\$ 5,500.00	\$ 4,400.00	\$ 1,100.00
Plants & Soil	\$ 1,100.00	\$ 880.00	\$ 220.00
Signs	\$ 6,600.00	\$ 5,280.00	\$ 1,320.00
Misc. (Letters, etc.)	\$ 550.00	\$ 440.00	\$ 110.00
<i>Subtotal:</i>	<i>\$ 31,240.00</i>	<i>\$ 24,992.00</i>	<i>\$ 6,248.00</i>
<i>Labor (5 Intersections):</i>			
City Engineering	\$ 18,150.00	\$ 14,520.00	\$ 3,630.00
City Fire Department	\$ 1,485.00	\$ 1,188.00	\$ 297.00
City Department of Public Works	\$ 20,047.50	\$ 16,038.00	\$ 4,009.50
<i>Subtotal:</i>	<i>\$ 39,682.50</i>	<i>\$ 31,746.00</i>	<i>\$ 7,936.50</i>
<b>Activity Total:</b>	<b>\$ 70,922.50</b>	<b>\$ 56,738.00</b>	<b>\$ 14,184.50</b>

IV. Activity Summary

Approximately 5% of the City’s KAB crashes and 9% of its bike/ped crashes occurred on neighborhood local streets from 2017 through 2021. The City views neighborhood traffic circles as an effective means to enhance safety by slowing speeds in neighborhoods, while also improving the bicycling environment by replacing stop signs with yield control. This demonstration activity will create five (5) temporary traffic circles at locations that meet crash, speed, and/or volume thresholds for intervention under the City’s Neighborhood Traffic Management Program (NTMP). The purpose of this activity is to demonstrate to the community how traffic circles can enhance safety by slowing speeds at intersections. This activity informs the City’s Safe Streets Action Plan development; follows the City’s Strategic Plan Priority #2: Public Safety, Goal 2 – Proactively Address Pedestrian, Bicycle, and Vehicular Safety; and will inform further development and deployment of the City’s NTMP. This activity can be completed in year 2024, which is within the SS4A 18-month preferred timeframe.

V. Data

- A. City of Wauwatosa Population – 47,289 (V2022)
- B. Number of Census Tracts – Wauwatosa has 13
- C. Fatalities – 9 (2017-2021)
- D. Fatality Rate – 19.03 fatalities / 100,000 people

VI. Map (attached)

# CITY OF WAUWATOSA

2016

**Activity #1: Demonstrate Temporary Neighborhood Traffic Circles**

**5 neighborhood local street intersections for temporary traffic circles will be chosen based on crash, speed, and volume data. It is likely the intersections will be located in these shown areas.**

## STREET INDEX

N. 59th St.	F6	N. 93rd St.	B, D3	Abderdon Ct.	D4	Day Court	E4	W. Marion St.	B2, 3	N. Parkside Dr.	A2	Swan Blvd.	D, E3
N. 60th St.	D, F6	N. 94th St.	B, D3	Aetna Ct.	F5	W. Dearborn Ave.	F1	Mariposa Ln. (PvL)	E3	Park View Ct.	E4	Terrace Ct.	F5
N. 61st St.	D, F6	N. 95th St.	B, D, F3	Alice St.	E5	N. Delco Ave.	A2	W. Martha Dr.	F1	Pasadena Blvd.	D4	W. Townsend St.	C2
N. 62nd St.	D, F6	N. 96th St.	B, D3	Alta Vista	E5	W. Derby Ave.	A1, 2	Martha Washington Dr.	E6	Perry Ct.	F4	Two Tree Lane	E6
N. 63rd St.	E6	N. 97th St.	B, D, F3	W. Argonne Dr.	C3	Dewey Ave.	E4	Martin Dr.	E6	Plank Ct.	E2	Underwood Ave.	E4
N. 63rd Ct.	D, F6	N. 98th St.	B, F3	Auburn Ave.	E5	Diane Dr.	F1	Mary Ellen Pl.	F4	Pleasant St.	D, E4	W. Washington Ct.	F1
N. 64th St.	D, F6	N. 99th St.	A, B, F3	W. Auer Ave.	F2	Discovery Pkwy.	E3	Mayfair Ct.	D1	Pleasant View St.	F4	W. Underwood Pkwy.	F1
N. 65th St.	D, F5	N. 100th St.	A - C2, D3	Avon Ct.	C4	Doyle Ave.	E4	N. Mayfair Frontage Rd	E2	Portland Ave.	E2	Upper Parkway North	E5, 6
N. 66th St.	D, F5	N. 101st St.	A - D2	Betsy Ross Pl.	E5, 6	Eagle St.	D4	N. Mayfair Rd.	F1, 2	W. Potter Rd.	F1, 2	Upper Parkway South	E6
N. 67th St.	D, F5	N. 102nd St.	A, C, D2	Beverly Pl.	D2, 3	Echelon Ln. (Pvt.)	E3	Maywood Ave.	F4	Powell Pl.	E5, 6	W. Vienna Ave.	B2
N. 68th St.	D, F5	N. 103rd St.	A, C, D, F2	Blanchard St.	E5	Elm Lawn	E4	Maywood Ct.	F4	Roverswood Cir.	F4	Vista Ave.	E5, 6
N. 69th St.	D, F5	N. 104th St.	A - D, F2	Blue Mound Ln.	F5	Elmhurst Pkwy.	E1	W. McKinley Ave.	E6	Raymir Pl.	B2	W. Vlet St.	E1
N. 70th St.	D, F5	N. 105th St.	A, C, D, F2	W. Blue Mound Rd.	F1 - 6	Elmspring Ave.	F4	Meadow Ct.	C1	Raymir Pl.	B2	W. Walnut Rd.	E1, 2
N. 71st St.	D, F5	N. 106th St.	A, C, D, F2	Brookside Pl.	F4	Eschweiler Dr. (Pub and Pvt)	E3	W. Meinecke Ave.	D1 - 6	Red Arrow Ct.	E4	Warren Ave.	E4
N. 72nd St.	D, F5	N. 107th St.	A - D, F2	Beverly Pl.	D2, 3	W. Fairview Ave.	F1	Milrose Ave.	E5	Research Dr.	F2	W. Washington Blvd.	E5, 6
N. 73rd St.	D, F5	N. 108th St.	F2	W. Burling Frontage Rd.	C1 - 3	Fairwood Ct.	C1	W. Hillside Ave.	B2, 3	Revere Ave.	B2	Washington Ct.	E5, 6
N. 74th St.	D, F5	N. 108th St.	A2	W. Byron Pl.	B3	W. Feerick Pl.	B2	Hillside La.	F5	Richmond Ct.	D3	Watertown Plank Rd.	E1 - 4
N. 75th St.	D, F5	N. 109th St.	A, F2	W. Capitol Dr.	B1, 2	W. Feerick St.	B1	Homewood Ave.	F1	Ridge Blvd.	D4	Watson Ave.	D5
N. 76th St.	D, F5	N. 110th St.	F2	W. Cathedral Ave.	F1	W. Fibranz Ave.	B2, 3	Honey Creek Pkwy.	E, F4, E5	Ridge Ct.	E4	Wauwatosa Ave.	D, E5
N. 77th St.	D, F4	N. 110th St.	A, B, F2	Cathedral Ct.	F2	W. Fisher Parkway	D2	W. Hope Ave.	B2, 3	W. Ripley Ave.	F1	Webster Ct.	B2
N. 78th St.	D, F4	N. 111th St.	F5	Cedar St.	F5	Forest St.	D, E4	W. Keele Ave.	D5	River Park Ct.	D3	Wellsau Dr.	F5
N. 79th St.	F4	N. 112th St.	C, D, F2	W. Center St.	D1 - 6	W. Garfield Ave.	D1, 2, 5, 6	Kenwood Ave.	E4	River Pkwy.	F2, 6	W. Wells St.	F2, 5, 6
N. 80th St.	D1	N. 113th St.	D - F1	Charles Hart Pkwy.	E4	Geratlaine Cir	F4	Kinman St.	E5	Rivers Bend (Pvt.)	E1	Wilson Blvd.	D3
N. 81st St.	D, E4	N. 114th St.	C, D, F1	W. Chambers St.	C1	Geratlaine Dr.	F4	N. Knoll Blvd.	C2	Robertson Ave.	F4	Windsor Ct.	F4
N. 82nd St.	D, E4	N. 115th St.	D, F1	W. Cherry St.	E1	W. Gilbert Ave.	D, E1	N. Knoll Terrace	C2	Rockway	F1	W. Wirth St.	B1
N. 83rd St.	D, E4	N. 116th St.	D - F1	Chestnut St.	E4, 5	Glencoe Cir	F4	Laurel Ct.	F5	Rogers Ave.	D4	W. Wisconsin Ave.	F1 - 6
N. 84th St.	D, E4	N. 117th Pl.	D1	Christine Dr.	E1	Glencoe Pl.	E1	Lefebvre Ave.	D5	Romona Ave.	E5	Woodland Ave.	E1, 4
N. 85th St.	D, F4	N. 117th St.	A, C - F1	Church St.	E4	W. Glendale Ave.	A1 - 3	Lernen St.	E3	W. Ruby Ave.	A2, 3	Woodside Ct.	E1
N. 86th St.	D, F4	N. 118th St.	B, D, E1	W. Clark St.	D1, 3 - 6	Glenview Ave.	E, F4	W. Lincoln Pl.	E5	W. Sarassia Pl.	B3	W. Woodward Ave.	B2
N. 87th St.	E, F4	N. 119th St.	A, D - F1	Collegium St. (Pvt.)	E3	Glenview Pl.	E4	W. Lisbon Ave.	B3	St. Charles St.	E5	W. Wright St.	D2 - 6
N. 88th St.	D, F4	N. 120th St.	B - D, F1	W. Concordia Ave.	C2	Glenway Ct.	B2	Livingston Ave.	D4	St. James Ct.	E4	Yale Pl.	E5
N. 89th St.	D, F3	N. 121st St.	C, E, F1	W. Congress St.	A2, 3	Glenway St.	A, B2	W. Lloyd St.	D5, 6	St. Jude Ct.	F1	York Ct.	B2
N. 90th St.	D3	N. 122nd St.	C - F1	Connell Ave.	F3, 4	Grand Parkway	F5	W. Locust St.	C1, 2	St. State St.	E5, 6	York Pl.	B2
N. 91st St.	D3	N. 123rd St.	F1	W. Courtland Ave.	A2, 3	W. Grantosa Dr.	E2, 3	Ludington Ave.	D, E4	W. Stewart Ave.	B2, 4		
N. 92nd St.	A, B, E, F3	N. 124th St.	A - E1	Crescent Ct.	F5	Gridley Ave.	B4	Ludington Ct.	D, E4	Stickney Ave.	D3, 4		
				Crestview Ct.	D1	W. Hadley St.	D1	Maple Lane	A2	Sunset Ave.	B3		
				Curie Avenue	F4	N. Harding Blvd.	D3	Maple Terrace	F5	Sunset Ct.	D3, 4		
				Curie Place	F4	Harley Davidson Ave.	A, B1	Harmonee Ave.	E4				

City of Wauwatosa, Milwaukee County

Joint 2023 SS4A Demonstration Activities Grant Application #2

I. Activity #2 – Demonstrate Use of Data Collection Equipment in Performing Near-Miss Safety Studies

A traditional safety analysis uses crash report data to determine the safety of an intersection. This is a reactive method of analysis that ignores the behaviors of intersection users. Near-miss analysis is a proactive method of analysis that measures the frequency and severity of near-misses to better understand human behaviors and to predict severe crashes. This demonstration activity will pilot video analytics of near-miss data to demonstrate and better understand the benefits and limitations the technology may have if deployed citywide. This activity informs the City’s Safe Streets Action Plan development; follows the City’s Strategic Plan Priority #2: Public Safety, Goal 2 – Proactively Address Pedestrian, Bicycle, and Vehicular Safety; and will inform if and how technologies can be employed in performing detailed crash analysis and mitigation citywide. This activity can be completed in year 2024, which is within the SS4A 18-month preferred timeframe.

II. Measure and Track Results

The City Engineering Division will work with MioVision Technologies Incorporated to purchase and deploy two Scout Explore camera systems at two pilot intersections.

- *North Avenue & Wauwatosa Avenue* is a signalized intersection with right-turn slip lanes on all four corners. The intersection is abutted by a middle school in the northwest corner, City Hall and the City Library in the southwest corner, a senior housing facility in the northeast corner, and a dense retail and residential development planned in the southeast corner. Transit includes east/west service to Downtown Milwaukee and north/south service to the far reaches of Milwaukee County. 310- to 350- pedestrian crossings occur each peak hour through this intersection – the majority of which are middle-school students.
- *Swan Boulevard & Menomonee River Parkway* is a signalized intersection with the crossing of the 135-mile long Milwaukee County Oak Leaf Trail on the south side of the intersection. The trail served 124,565 users at this intersection in 2019. Six injury crashes had occurred at the intersection from 2017 through 2021 with eight injured persons.

The camera systems will collect at least 5 days of video at each intersection. The data will be sent to MioVision to perform intersection counts and to analyze the vehicle trajectories and the near-miss interactions for the 60 vehicle-pedestrian, vehicle-cyclist, vehicle-scooter, and vehicle-vehicle conflicts that exist at the intersections. Measurables such as post-encroachment time (PET), time-to-collision (TCC), and the speed, impact angle, order of interaction, and user types will be used to classify crash risk (high, middle, low) based on the potential for serious injury. The results will be compared to

crash experience to identify if correlations exist and to identify where changes to the intersections may be needed. A report will be prepared based on the pilot projects to highlight the potential applications and limitations of near-miss data in performing detailed safety analysis and crash mitigation citywide.

III. Budget

Our budget for this activity is \$53,053.00 (\$42,442.40 federal funding, \$10,610.60 local match). Materials will be chosen in a manner that enables reuse of equipment and avoids post-demonstration waste.

	<b>Total Estimate</b>	<b>Federal 80%</b>	<b>Local 20%</b>
<i>Materials (2 Intersections):</i>			
Miovision Scout Explore	\$ 16,962.00	\$ 13,569.60	\$ 3,392.40
Rechargeable Batteries	\$ 3,498.00	\$ 2,798.40	\$ 699.60
Connectivity	\$ 473.00	\$ 378.40	\$ 94.60
<i>Subtotal:</i>	<i>\$ 20,933.00</i>	<i>\$ 16,746.40</i>	<i>\$ 4,186.60</i>
<i>Labor (2 Intersections):</i>			
Consultant (Miovision)	\$ 17,600.00	\$ 14,080.00	\$ 3,520.00
City Engineering	\$ 14,520.00	\$ 11,616.00	\$ 2,904.00
<i>Subtotal:</i>	<i>\$ 32,120.00</i>	<i>\$ 25,696.00</i>	<i>\$ 6,424.00</i>
<b><i>Activity Total:</i></b>	<b><i>\$ 53,053.00</i></b>	<b><i>\$ 42,442.40</i></b>	<b><i>\$ 10,610.60</i></b>

IV. Activity Summary

A traditional safety analysis uses crash report data to determine the safety of an intersection. This is a reactive method of analysis that ignores the behaviors of intersection users. Near-miss analysis is a proactive method of analysis that measures the frequency and severity of near-misses to better understand human behaviors and to predict severe crashes. This demonstration activity will pilot video analytics of near-miss data to demonstrate and better understand the benefits and limitations the technology may have if deployed citywide. This activity informs the City’s Safe Streets Action Plan development; follows the City’s Strategic Plan Priority #2: Public Safety, Goal 2 – Proactively Address Pedestrian, Bicycle, and Vehicular Safety; and will inform if and how technologies can be employed in performing detailed crash analysis and mitigation citywide. This activity can be completed in year 2024, which is within the SS4A 18-month preferred timeframe.

V. Data

- A. City of Wauwatosa Population – 47,289 (V2022)
- B. Number of Census Tracts – Wauwatosa has 13
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- D. Fatality Rate – 19.03 fatalities / 100,000 people

VI. Map (attached)



# CITY OF WAUWATOSA

2016

**Activity #2: Demonstrate Use of Data Collection Equipment In Performing Near-Miss Safety Studies**

**North Avenue & Wauwatosa Avenue**

**Swan Boulevard & Menomonee River Parkway**

## STREET INDEX

N. 59th St.	F6	N. 93rd St.	B, D3	Abardon Ct.	D4	Day Court	E4	W. Marion St.	B2, 3	N. Parkside Dr.	A2	Swan Blvd.	D, E3
N. 60th St.	D, F6	N. 94th St.	B, D3	Aetna Ct.	E5	W. Dearborn Ave.	F1	Mariposa Ln. (PvL)	E3	Park View Ct.	E4	Terrace Ct.	F5
N. 61st St.	D, F6	N. 95th St.	B, D, F3	Alice St.	E5	N. Delco Ave.	A2	W. Martha Dr.	F1	Pasadena Blvd.	D4	W. Townsend St.	C2
N. 62nd St.	D, F6	N. 96th St.	B, D3	Alta Vista	E5	W. Derby Ave.	A1, 2	Martha Washington Dr.	E6	Perry Ct.	F4	Two Tree Lane	E6
N. 63rd Ct.	E6	N. 97th St.	B, D, F3	W. Argonne Dr.	C3	Dewey Ave.	E4	Martin Dr.	E6	Plank Ct.	E2	Underwood Ave.	E4
N. 63rd St.	D, F6	N. 98th St.	B, F3	Auburn Ave.	E5	Diane Dr.	F1	Mary Ellen Pl.	F4	Pleasant St.	D, E4	W. Vienna Ave.	B2
N. 64th St.	D, F6	N. 99th St.	A, B, F3	W. Auer Ave.	F2	Discovery Pkwy.	E3	W. Hillside Ave.	F2	Pleasant View St.	F4	W. Underwood Pkwy.	F1
N. 65th St.	D, F5	N. 100th St.	A - C2, D3	Avon Ct.	C4	Doyle Ave.	E4	W. Hibbard Ave.	F2	Portland Ave.	E2	Upper Parkway North	E5, 6
N. 66th St.	D, F5	N. 101st St.	A - D2	Betsy Ross Pl.	E5, 6	Eagle St.	D4	W. Highwood Ave.	C2	Portland View St.	F4	Upper Parkway South	E6
N. 67th St.	D, F5	N. 102nd St.	A, C, D2	Beverly Pl.	D2, 3	Echelon Ln. (Pvt.)	E3	Hill St.	F4	W. Potter Rd.	F1, 2	W. Watson Ave.	B2
N. 68th St.	D, F5	N. 103rd St.	A, C, D, F2	Blanchard St.	E5	Elm Lawn	E4	Hillcrest Dr.	E4, 5	Powell Pl.	E5, 6	Vista Ave.	E5, 6
N. 69th St.	D, F5	N. 104th St.	A - D, F2	Blue Mound Ln.	F5	Elmhurst Pkwy.	E1	W. Hillside Ave.	B2	Riverswood Cir.	F4	W. Vliet St.	E1
N. 70th St.	D, F5	N. 105th St.	A, C, D, F2	W. Blue Mound Rd.	F1 - 6	Elmspring Ave.	F4	Hillside La.	F5	Raymjr Pl.	B2	W. Walnut Rd.	E1, 2
N. 71st St.	D, F5	N. 106th St.	A, C, D, F2	Brookside Pl.	F4	Eschweiler Dr. (Pub and Pvt)	E3	Hillcrest Dr.	E4, 5	Red Arrow Ct.	E4	Warren Ave.	E4
N. 72nd St.	D, F5	N. 107th St.	A - D, F2	W. Burling Frontage Rd.	C1 - 3	W. Fairview Ave.	F1	Hilcrest Dr.	B2, 3	Research Dr.	F2	W. Washington Blvd.	E5, 6
N. 73rd St.	D, F5	N. 108th St.	F2	W. Burling St.	B3	Fairwood Ct.	C1	Hoyt Park Dr.	E4	Revere Ave.	F2	Washington Ct.	E5, 6
N. 74th St.	D, F5	N. 108th St.	A2	W. Byron Pl.	B3	W. Feerick Pl.	B2	Innovation Dr.	E, F2, F3	Richmond Ct.	D3	Watertown Plank Rd.	E1 - 4
N. 75th St.	D, F5	N. 109th St.	A, F2	W. Capitol Dr.	B1, 2	W. Feerick St.	B1	Jackson Park Blvd.	D3, 4	Ridge Blvd.	D4	Watson Ave.	D5
N. 76th St.	D, F5	N. 110th Pl.	F2	W. Cathedral Ave.	F1	W. Fibranz Ave.	B2, 3	Kavanaugh Pl.	E4	Ridge Ct.	E4	Wauwatosa Ave.	D, E5
N. 77th St.	D, F4	N. 110th St.	A, B, F2	Cathedral Ct.	F2	W. Fisher Parkway	D2	W. Keele Ave.	D5	W. Ripley Ave.	F1	Webster Ct.	B2
N. 78th St.	D, F4	N. 111th St.	C, D, F2	Cedar St.	F5	Forest St.	D, E4	Kenwood Ave.	D5	River Park Ct.	D3	Wellsauer Dr.	F5
N. 79th St.	F4	N. 112th St.	D1 - 6	W. Center St.	D1 - 6	W. Garfield Ave.	D1, 2, 5, 6	Kenyon Ave.	E4	River Pkwy.	E5, 6	W. Wells St.	F2, 5, 6
N. 80th St.	D1	N. 113th St.	D - F1	Charles Hart Pkwy.	E4	Geratlaine Cir	F4	Kinsman St.	E5	Rivers Bend (Pvt.)	E1	Wilson Blvd.	D3
N. 81st St.	D, E4	N. 114th St.	C, D, F1	W. Chambers St.	C1	Geratlaine Dr.	F4	N. Knoll Blvd.	C2	Robertson Ave.	F4	Windsor Ct.	F4
N. 82nd St.	D, E4	N. 115th St.	D, F1	W. Cherry St.	E1	W. Gilbert Ave.	D, E1	N. Knoll Terrace	C2	Rockway	F4	W. Wirth St.	B1
N. 83rd St.	D, E4	N. 116th St.	D - F1	Chestnut St.	E4, 5	Glencoe Cir	F4	Laurel Ct.	F5	Rogers Ave.	D4	W. Wisconsin Ave.	F1 - 6
N. 84th St.	D, E4	N. 117th Pl.	D1	Christine Dr.	E1	Glencoe Pl.	E1	Lefebvre Ave.	D5	Romona Ave.	E5	Woodland Ave.	E1, 4
N. 85th St.	D, F4	N. 117th St.	A, C - F1	Church St.	E4	W. Glendale Ave.	A1 - 3	Lernen St.	E3	W. Ruby Ave.	A2, 3	Woodside Ct.	E1
N. 86th St.	D, F4	N. 118th St.	B, D, E1	W. Clark St.	D1, 3 - 6	Glenview Ave.	E, F4	Lincoln Pl.	E5	W. Sarasota Pl.	B3	W. Woodward Ave.	B2
N. 87th St.	E, F4	N. 119th St.	A, D - F1	Collegium St. (Pvt.)	E3	Glenview Pl.	E4	W. Lisbon Ave.	B3	St. Charles St.	E5	W. Wright St.	D2 - 6
N. 88th St.	D, F4	N. 120th St.	B - D, F1	W. Concordia Ave.	C2	Glenway Ct.	B2	Livingston Ave.	D4	St. James Ct.	E4	Yale Pl.	E5
N. 89th St.	D, F3	N. 121st St.	C, E, F1	W. Congress St.	A2, 3	Glenway St.	A, B2	W. Lloyd St.	D5, 6	St. Jude Ct.	F1	York Ct.	B2
N. 90th St.	D3	N. 122nd St.	C - F1	Connell Ave.	F3, 4	Grand Parkway	F5	W. Locust St.	C1, 2	St. Jude Ct.	F1	York Pl.	B2
N. 91st St.	D3	N. 123rd St.	F1	W. Courtland Ave.	A2, 3	W. Grantosa Dr.	B2, 3	Lombard Ct.	E8	St. James St.	E5	Stickney Ave.	B2, 4
N. 92nd St.	A, B, E, F3	N. 124th St.	A - E1	Crescent Ct.	F5	Gridley Ave.	E4	Ludington Ave.	D, E4	W. Stewart Ave.	B3	Sunset Ave.	D3, 4
				Crestview Ct.	D1	W. Hadley St.	D1	Ludington Ct.	D4	Stickney Ave.	B2, 4	Sunset Ct.	B3, 4
				Curne Avenue	F4	W. Harding Blvd.	D3	Maple Lane	A2	Sunset Ave.	B2		
				Curie Place	F4	N. Harding Blvd.	D3	Maple Terrace	F5	Sunset Ct.	B3, 4		
						Harley Davidson Ave.	A, B1						
						Harmonee Ave.	E4						