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Highland Park Neighborhood Association Traffic Calming Team

A Presentation to the City of Rochester Southeast Quadrant Neighborhood Service Center

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Highland Park Neighborhood Traffic Calming Team

Goals:

- 1: To promote & preserve safe and efficient mobility, accessibility, and transportation choice within the Highland Park Neighborhood for all residents and visitors by taking a “placemaking” approach.**

Placemaking has been defined by the City Repair Project in Portland, OR as a multi-layered process within which citizens foster active, engaged relationships to the spaces which they inhabit, the landscapes of their lives, and shape those spaces in a way which creates a sense of communal stewardship and lived connection.

- 2: To begin a constructive partnership with City officials concerning traffic calming and other traffic, transportation, and access related issues that impact the safety and quality of life among residents of the Highland Park Neighborhood.**

Traffic calming has the ability to create vibrant neighborhoods, enrich the social and cultural life of the city and create a robust local economy.

~ from David Engwicht, *Intrigue & Uncertainty: Towards New Traffic-Taming Tools*

- 3: To increase the connectivity within the neighborhood by increasing the safety (or perceived safety) of those who choose to walk in and around the neighborhood, especially bridging the divide across S Goodman Street.**
- 4: To identify and rank according to priority the “hot spots” of traffic concerns that require an action plan.**
- 5: To investigate, plan, and implement solutions to the effect of calming traffic and otherwise educate drivers, residents, and visitors within the Highland Park Neighborhood so as to:**
 - O Increase the safety of pedestrians with initial focus on children and their access to the playground in Ellwanger and Barry Park.
 - O Increase the walkability of the neighborhood according to standards of desirability within the urban life experience.



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- O Restore the continuity and increase connectivity between areas of the neighborhood that have been affected by increased traffic flow and speed on Goodman Street.
- O Involve and educate the entire resident community to the effect that they embrace (understand) the solutions as these are progressed.
- O To grow a culture of respect for pedestrian and non vehicular transportation that would rival the best among "walking friendly" communities across the US

Methodology:

A standard paradigm for creating changes within the public realm takes a 3-4-tiered approach. The traditional 3 E's represent Enforcement, Education, and Engineering, and some include a fourth E, Evaluation.

Members of the neighborhood association plan to engage in the Enforcement aspect by conducting a Neighborhood Speed Watch program to monitor local traffic speed and other traffic behavior. Additionally, Speed Trailers may help local officials determine how many motorists are in violation and how severe the offense. Warnings may also be issued to violators to fulfill both enforcement and educational goals.

The neighborhood association will work together with other community members, such as school personnel and public officials, to Educate by providing public safety training including pedestrian, bicycle, and vehicular safety for all residents of all ages. Training materials may include videos, workbooks, role-playing and other methods of teaching about traffic and pedestrian safety.

We will Evaluate initial successes and use them as a model and motivation for affecting solutions for additional issues and longer term objectives.



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Issues and Concerns observed and discussed among neighborhood residents:

- Neighbors have witnessed too many “close calls” for comfort. HPNA would like to be proactive versus reactive regarding traffic safety. We don’t want to sustain a tragedy in order to obtain traffic calming measures.
- Most recently, many residents witnessed the aftermath of a severe accident on Meigs Street within one block of Ellwanger and Barry Park that apparently was the result of excessive speed. This prompted a Neighborhood petition requesting traffic calming measures (which has been previously submitted to City officials).
- Many motorists do not heed playground warning signs on Meigs and Linden and do not slow down prior to the 4-way stop at the intersection. Additionally, many motorists do not come to a complete stop but merely slow down and proceed. Some think a speed limit of 30 mph is too high of a design speed for a street with proximity to a playground.
- The playground entrances are midblock on Linden & Meigs creating a concentration of pedestrian traffic at these midblock locations. Except for alternate on-street parking, there is no traffic calming until the Stop sign-controlled intersection at Meigs & Linden.
- Playground visitors who park across the street from the playground. Are susceptible to Mid-Block Dart outs
- Playground visibility is limited on the westbound Linden St approach and on the Meigs St southbound approach.
- Many people living on the east side of Goodman Street believe it to be unsafe to cross Goodman St with children and therefore do not walk to the playground so they either drive or do not enjoy one of the great benefits our neighborhood has to offer. *Please see attached statement from a neighbor on the east side of Goodman.*



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Research Summary: Preliminary Conclusions

1. Vertical shifts are most effective measure in slowing traffic. Speed humps head the list.
 - a. Speed tables and split speed humps can be used on emergency routes
2. "The probability of a pedestrian being severely injured and/or killed when struck by a vehicle increases as the motorist speed increases. The correlation of vehicle impact speed and pedestrian death rates: 85% at 40 MPH, 45% at 30 MPH, 15% at 20 MPH" Source: [A Walkable Community](#), Publication no. FHWA-_SA-_00-01, U.S. Department of Transportation
3. Pedestrian Characteristics need to be considered. Age of pedestrians is an important factor.
Sources: <http://www.tfrc.gov/safety/pedbike/pubs/05085/pdf/lesson8lo.pdf>, <http://www.fhwa.dot.gov/environment/sidewalks/chap2.htm> section 2.2 children, [A Walkable Community](#), Publication no. FHWA-_SA-_00-01, U.S. Department of Transportation
 - a. Playground users are children of all ages including the most vulnerable age group, the 0 to 4 year cohort.
 - b. Adults with children and strollers and/or wagons, etc. equate to longer crossing times
4. Portland Oregon Project (AKA: Intersection Repair or City Repair) would add attractiveness to the neighborhood environment
 - a. Phone message from Sharon White, City of Portland Transportation Department, she is unaware of any studies conducted by the city of Portland to measure the effectiveness of these projects in traffic calming.
 - b. Phone conversation with a volunteer at City Repair indicates the original purpose of the City Repair projects was to slow down traffic.
 - c. Available resources from City Repair: **Placemaking Guidebook**, \$15-25 sliding scale and **Transforming Space Into Place DVD**, \$10-15 sliding scale www.cityrepair.org



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5. Seasonal changes of traffic and related park usage need to be examined.
6. Heed the Speed study: Combination of techniques appears to be best approach
7. National Highway Traffic Safety Administration (NHTSA) : Good source of pedestrian safety information to utilize for "Education" portion of traffic calming <http://www.nhtsa.dot.gov>
8. Awareness that traffic calming in one area can have an effect in surrounding areas.
9. Cultural changes needed: driver's attitudes toward pedestrians
 - a. Other communities appear to be successful in promoting this change. Apparent examples are Burlington, VT, Canandaigua, NY
10. A Different approach to traffic calming worth exploring "Intrigue & Uncertainty Towards New Traffic-Calming Techniques" by David Engwicht www.lesstraffic.com

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Engineering/Design Options

Objective:

Slow vehicular traffic approaching the Park, including possible treatments at the intersection of Meigs and Linden as well as the segments of Meigs between Benton and Crawford and Linden between S Goodman and Mt. Vernon.

Intersection treatment options:

- **Raised Intersection:**



Raised Intersection

- **Bump-outs (Bulb-outs):**



Bulb-out

- **Creative intersection pavement treatment:**



Intersection Artwork

- **Adding Stoplines preceding the crosswalk**



Intersection stop lines

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ENGINEERING/DESIGN OPTIONS (Continued)

Roadway segment treatment options:

- Speed humps, asphalt or removable rubber



Asphalt speed hump



Rubber speed hump

- Speed table, split speed table, or speed lump (with wheel cut-outs for emergency vehicles)

Suggested for:

- Meigs St between Benton and Crawford,
- Linden St between S Goodman and Meigs
- and possibly between Meigs and Mt Vernon



Speed Table



Speed lump

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ENGINEERING/DESIGN OPTIONS (Continued)

- **In-road “Yield To Pedestrians” signs**

Suggested for:

- Midblock on Meigs between Benton and Linden at playground boundary
- and on Linden between S Goodman and Meigs at playground boundary.



In-road YTP sign

- **Mid-block crossing,**

- possibly a raised or contrasting-color crosswalk, on Linden
- and/or Meigs at playground entrances



Contrasting-color crosswalk
with in-road signage



Raised crosswalk

Other measures to promote safety:

- **Reduce Speed Limit to 25 mph on Meigs from Benton to Crawford and on Linden from S Goodman to Mt Vernon**
- **On-street parking on playground side of street only during the day**



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Questions:

Emergency vehicle routes? If so, why is there an emergency route adjacent a playground? School routes?

Other benefits:

Increasing connectivity, increases walkability and hence accessibility. An increase in walkability, may increase pedestrianism which preserves the environment by not releasing greenhouse gases as vehicular travel does. Additionally, walking has positive health benefits such as reducing the risk of obesity, diabetes, and other ailments resultant of a lack of exercise.

Effectiveness of Traffic Calming Measures... from <http://www.trafficcalming.org/>

Speed Impacts of Traffic Calming Measures (standard deviations in parentheses)				
	Sample Size	85th Percentile Speed Afterward	Average Change in 85th Percentile Speed	Average % Change
12' Speed Hump	179	27.4 mph (4.0 mph)	-7.6 mph (3.5 mph)	-22% (9%)
14' Speed Hump	15	25.6 (2.1)	-7.7 (2.1 mph)	-23 (6)
22' Speed Table	58	30.1 (2.7)	-6.6 (3.2)	-18 (8)
Longer Table (>22')	10	31.6 (2.8)	-3.2 (2.4)	-9 (7)
Raised Intersection	3	34.3 (6.0)	-0.3 (3.8)	-1 (10)
Traffic Circle	45	30.3 (4.3)	-3.9 (3.2)	-11 (10)
Narrowing	7	32.3 (2.8)	-2.6 (5.5)	-7 (22)
Choker	5	28.6 (3.1)	-2.6 (1.3)	-14 (4)
Half Closure	16	26.3 (5.2)	-6.0 (3.6)	-19 (11)
Diagonal Diverter	7	27.9 (5.2)	-1.4 (4.7)	-0 (17)
Note: speeds are measured at midpoints between measures				
Volume Impacts of Traffic Calming Measures (standard deviations in parentheses)				
	Sample Size	Average Change in Volume	Average % Change	
Choker	5	-392 vehicles per day (384 vehicles per day)	-20% (19%)	
Full Closure	19	-671 (786)	-44 (36)	
Half Closure	53	-1611 (2444)	-42 (41)	
Diagonal Diverter	27	-501 (622)	-35 (46)	
Other Volume Control	10	-1167 (1781)	-31 (36)	
Safety Impacts of Traffic Calming Measures (U.S. Experience)				
	Number of Observations	Average Number of Collisions		% Change in Collisions
		Before Treatment	After Treatment	
12' Speed Hump	49	2.7	2.4	-11%
14' Speed Hump	5	4.4	2.6	-41%
22' Speed Table	8	6.7	3.7	-45%
Traffic Circle (w/o Seattle)	17	5.9	4.2	-29%
Traffic Circle (w/ Seattle)	130	2.2	0.6	-73%
All Measures				
w/o adjustments	192	2.6	1.3	-50%*
w/ adjustments	42	3.8	3.0	-21%**
* Significant at 0.001 probability level ** Significant at 0.04 probability level				



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One Neighbor's Perspective:

The Highland Park Neighborhood Traffic Problem
By Debra Eileen Lewis

The Highland Park Neighborhood in the South East Area of the City of Rochester is bisected by Goodman Street, an urban thoroughfare. Our section of Goodman Street runs from Highland Avenue to South Clinton Street. We have a tremendous speed problem on this stretch of Goodman Street.

After you hit the stop light at Highland, with the Highland Park on your left, you pass the Divinity School on your right, while driving around the bend, increasing speed as you go. The entrance to Highland Park is almost impossible to enter on foot from the opposite side of the street. Vehicle traffic picks up speed up the incline from Highland Avenue and whips around the bend, picking up speed even further as it passes Pinetum Drive and begins to descend the hill. There is nothing to slow these cars down until South Clinton. Nor anything to slow them down as they turn down Linden Street and cut over to South Clinton by Honor Park. Meanwhile, all our Highland Park Neighbors between South Clinton and South Goodman are isolated from the rest of the neighborhood, and from access to the park and the Meigs Street Playground.

Traffic cuts into Rockingham, Linden and Caroline, already moving at high speeds, to access other areas of Rochester before being held up at the South Clinton intersection. To cut over to South Clinton from Goodman, drivers race onto Linden Street at the Y entrance by Honor Park. They turn down Rockingham, Linden and Caroline to enter our business districts on South and South Clinton. Residents who would like to cross Goodman, either on foot, stroller, leash, bike or by car, wait and wait, while drivers race down the hill on Goodman Street at speeds that seem to approach 55-60 mph. Parents in the isolated half of the Highland Park neighborhood are reluctant to bring their children to the playground for fear of crossing Goodman Street where there isn't even one crosswalk connecting our neighborhood.

Accidents happen at the intersection of Linden and Goodman. Children, pets, bikers, all of us are put in danger by Goodman Street traffic. Just recently I lifted a dying cat off Goodman just past Honor Park at the second Linden entrance. Goodman Street speed is at the root of all speed problems throughout our neighborhood, especially on the streets described above. The Meigs Street Playground (Ellwanger and Barry Park) is at the heart of our neighborhood. The nearby Linden-Goodman intersection has Honor Park... and it is also the heart of the speed.



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This is where drivers are going the fastest as they pass through our neighborhood.

Goodman Street is shameful as far as walkability, especially when trying to cross into the park or the playground, or to visit one of our business districts on South Avenue. This is unacceptable. There are grants that can be obtained, if need be, but cries of financial hardship are nothing compared to the safety and well-being of our neighborhood, and thus of our entire city. We must find a way. Safety of residents living near Goodman Street, as well as their pets, should be the number one reason for addressing the speed problem, as well as the safety of the many visitors to our neighborhood, who come for our playground, our parks, Highland Park and Ellwanger and Barry Park and Playground festivals and events, and our business districts on South and South Clinton. Many of these adults and children walk, bike, and ride strollers.

I am ready to enter the conversation, and to do the work necessary to facilitate the best solution for the speed problems of the traffic on Goodman Street and Linden Street, as well as Caroline and Rockingham. I look forward to working with a team of professionals in the city to develop the best plan that will provide an acceptable solution to this problem, and to implement it in a timely manner. I propose contacting the Rochester Police Department's Traffic Enforcement Unit at 428-6714 to schedule active radar enforcement on Goodman Street, with possible inclusion of a digital speed display at Honor Park in conjunction to educate drivers on how fast they are really going on this non-impeded downhill section of Goodman Street. These programs are part of the city's traffic calming program. Hopefully, these measures will help us understand the extent of the problem as statistics are generated. I also propose that more research is done, past statistics reviewed, and a general history of traffic in the area be made available for study. The Monroe County Regional Traffic Operations Center would be a good place to obtain information regarding the area traffic patterns. I also recommend approaching the city's traffic control board with our ideas and working with them on a plan for Goodman Street speed reduction.

The inclusion of traffic lights and crosswalks on Goodman Street between Highland and South Clinton should be priority consideration, with the areas near the park and the playground being highlighted as areas of utmost concern. Other traffic calming measures should be considered as recommended and reviewed. Possible measures include stop signs, neighborhood signs, kids and pets at play signs, textured and or colored pavements such as crosswalks, center street signs, yellow lines on side streets, reorganization of the Linden/Goodman intersection and Honor Park, speed bumps near Honor Park on Linden, speed bumps near the entrance to the park at the bend in the road, speed bumps on Linden and Meigs near the playground, and/or on-street parking on Goodman Street. Thank you for your concern in this matter. Let it be done.

Debra Eileen Lewis, home and business owner in the Highland Park Neighborhood.