

24TH STREET NORTH

WOODMONT CIVIC ASSOCIATION



NEIGHBORHOOD TRAFFIC CALMING

BEFORE AND AFTER STUDY



March 2005 Traffic Calming Project Evaluation for 24th Street North from North Fillmore Street to the End of Cul-de-sac.

Background:

24th Street North, east of North Fillmore Street, became a Neighborhood Conservation (NC) project and was funded in February 2002. This roadway is classified as a neighborhood minor roadway and when selected had a traffic volume east of North Edgewood Street of 1190 vehicles per day and west of North Edgewood Street had 721 vehicles per day. This segment of 24th Street North is in the Woodmont Civic Association. The 85th percentile measured 26 to 32 mph along various segments of this roadway.

24th Street North provides sole access to Fort C. F. Smith Park and to a private retreat called "The Cedar." This roadway ends at a cul-de-sac and cut-through traffic is not a concern. The residents of 24th Street North initially contacted the Neighborhood Traffic Calming (NTC) staff requesting traffic calming measures on their street. NTC staff studied and ranked this street, however due to the low ranking it would have been some time before 24th Street North would be selected as a traffic calming project. Since the Woodmont neighborhood did not have a priority Neighborhood Conservation project, residents began working with NC staff to develop potential projects with 24th Street North as their top priority.

Goals and Objectives of the Traffic Calming Plan:

Residents in the 2100 through 2800 block of 24th Street North were concerned about the speed of motorists using this street to access Fort C. F. Smith Park and "The Cedars." Although a Neighborhood Conservation project, residents worked with Neighborhood Traffic Calming staff since the installation of these measures was governed by procedures of the NTC program.

Description of Measures Selected:

The segment of 24th Street North, east of North Fillmore Street ends at a cul-de-sac. Based upon the roadway conditions and geometrics, speed humps were selected as the measure most likely to have an influence on vehicular travel speeds. Although there are blocks without curb and gutter, staff is unaware of motorists driving off the pavement to avoid the humps. Five speed humps, appropriate signage and pavement markings were constructed during the fall of 2002.

Data Collection and Analysis:

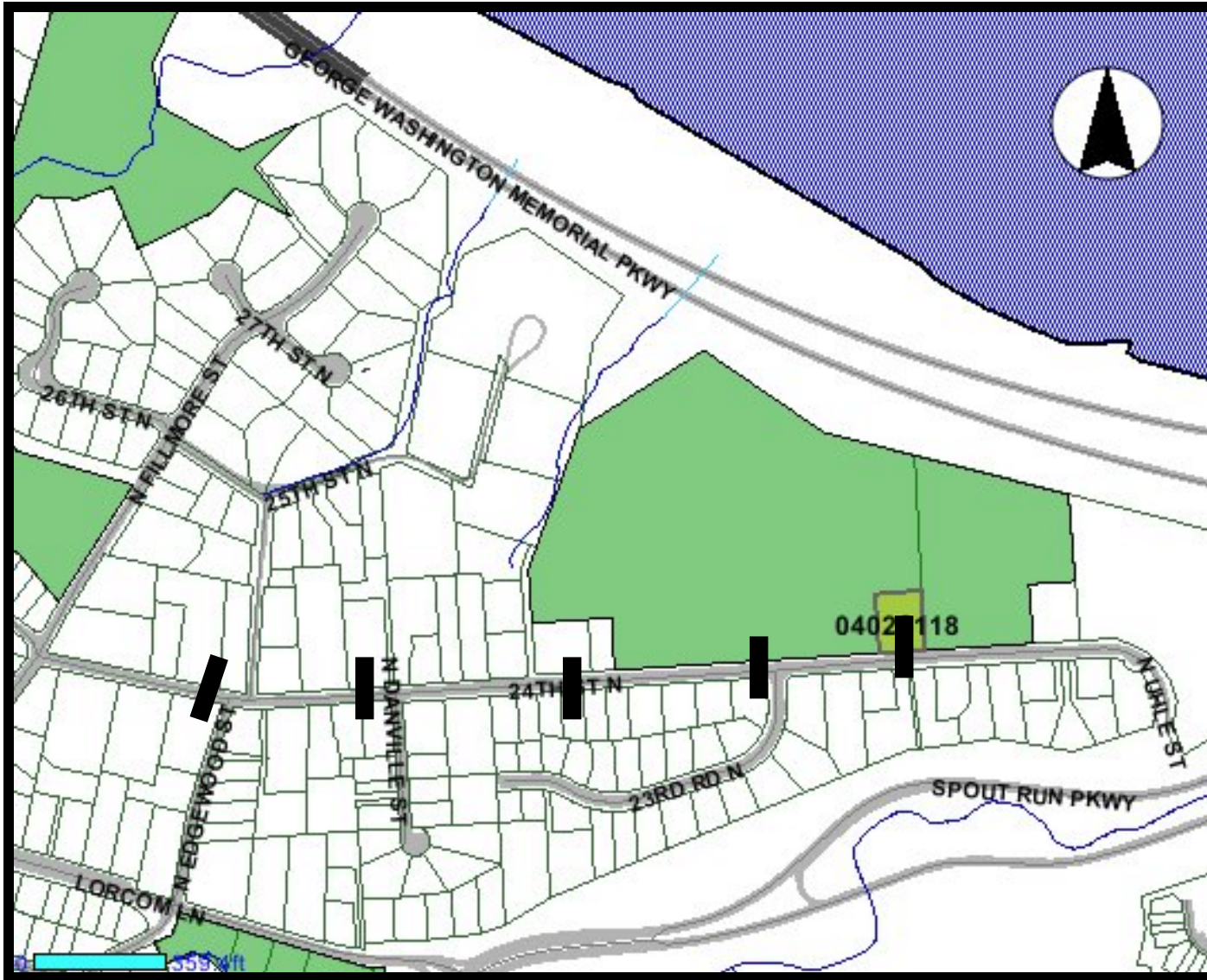
To determine the effectiveness of the speed humps constructed on 24th Street North, traffic volume and speed data were collected and analyzed before and after construction of the speed humps. The results are shown on Table 1.

Data collected in 2000 and 2001 served as baseline data, and data collected at several locations along 24th Street North in 2003 after installation of the speed humps were used as “after” data.

General Findings:

The data shown on Table 1 indicate that the speed humps have been effective at reducing travel speeds. In the baseline years, data collected showed the 85th percentile speeds to be 26 to 32 mph. Average travel speeds were 21 to 26 mph. In 2003, the 85th percentile speeds ranged from 23 to 25 mph, with average speeds in the range of 20 to 21 mph. This represents a reduction in the 85th percentile travel speeds of three to seven mph.

Although not anticipated as part of this project, traffic volumes on the street showed a reduction after the speed humps were installed. Staff believes this may be related to the daily volume fluctuation related to the seasonal and daily activities at Fort C. F. Smith Park and at the “Cedars.”



BEFORE AND AFTER TRAFFIC STUDY - SPEED HUMP PROJECT

TABLE 1

Road Name	County Location	2000 - 2001*			
		Date Collected	Volume (VPD)	Average Speed (MPH)	85% Speed (MPH)
24th Street North	East of North Fillmore Street	7/28/00 (F)	400	20.84	26
24th Street North	East of North Danville Street	5/10/01 (Th)	721	26.46	32
24th Street North	East of North Edgewood Street	6/7/00 (W)	1190	23.5	28
24th Street North	East of 23rd Street North	6/7/00 (W)	520	23.34	29

2003**				2000/2001 vs 2003		
Date Collected	Volume (VPD)	Average Speed (MPH)	85% Speed (MPH)	Volume vehicles per day (vpd)	Ave Speed Inc/Dec mph	85% Speed Inc/Dec mph
-	-	-	-	-	-	-
5/28/03 (W)	730	20.96	25	+ 9 (+ 1.2%)	- 5.5 mph	- 7 mph
5/28/03 (W)	951	19.91	23	- 239 (- 20%)***	- 3.59 mph	- 5 mph
5/28/03 (W)	401	20.05	24	- 119 (- 23%)***	- 3.29 mph	- 5 mph

*Before Speed Hump Installation

** After Speed Hump Installation