




# Grant and Sherman Circles Community Meeting

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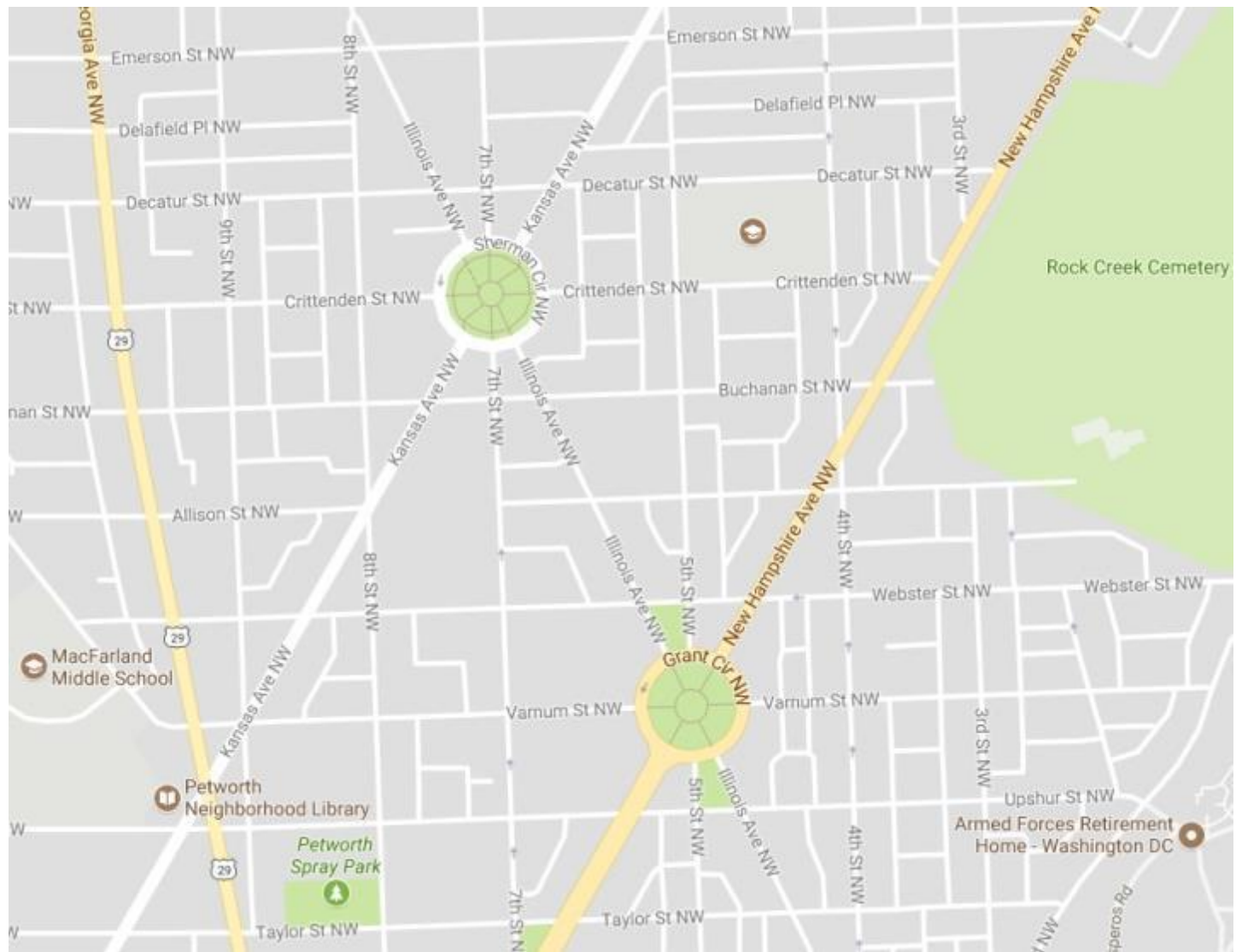
July 26, 2017

# Agenda

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- Existing Conditions and Issues
  - Rock Creek East II Livability Study
  - Grant Circle
    - One Lane Trial Period
    - Results of Trial Period Analysis
  - Sherman Circle
    - Analysis
  - Next Steps
  - Q&A
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# Grant and Sherman Circles



# Existing Conditions

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- Average daily traffic volume is 10,000 vehicles at Grant Circle and 7,000 vehicles at Sherman Circle
  - No traffic signals at either circle
  - All circle approaches are controlled by stop or yield signs
  - Five crosswalks into Grant Circle park and ten crosswalks into Sherman Circle park
  - 11 and 12 foot wide travel lanes, and one 17 foot wide parking and bus stop lane
  - New Hampshire Avenue south of Grant Circle is only street that intersects circles with two lanes in the same direction
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# Issues

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- Speed
  - High travel speeds increase the severity of crashes
- Safety for all users
  - Vehicles have flipped over from crashes in circle roadways
  - Pedestrians don't feel safe walking into or around the circles
- Confusing lane geometry
- Width of parking lane
- Crash Data (2013-2015)
  - Grant Circle: 14 crashes
  - Sherman Circle: 4 crashes

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## Rock Creek East II Livability Study

- Concept design: Remove one travel lane in each circle
- Goal: Slow drivers, improve pedestrian safety
- Implementation: 4-8 years

## Fall 2016 ANC Walk Through – Grant Circle

- Safety concerns remain
- Timing of implementation
- Concerns about vehicle capacity and diversion
- Discussion of temporary improvements in near term

## May 2017 ANC Walk Through – Sherman Circle

- Similar concerns were expressed
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Learn more:

Rock Creek East II Livability Study  
Final Report

[RockCreekEast2.com/final-report/](http://RockCreekEast2.com/final-report/)

# Grant Circle Analysis

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- DDOT used traffic model to analyze data and test impacts of one-lane design on Grant Circle
  - Analysis predicted negative impacts on traffic flow, but had some limitations
  - Because of these limitations, and given the safety concerns, DDOT tested one-lane design in real time (week of May 22)
  - DDOT collected data before, during, and after the trial period
  - DDOT and consultants also performed site visits during the trial period
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# Grant Circle Trial Period




# Grant Circle Trial Period - Comments

## Comments in support

- Grant Circle is currently dangerous for pedestrians to cross, and the experiment is working well from a pedestrian safety perspective. With the new pattern, speeding has decreased and drivers can no longer pass a driver in front of them that has stopped to yield to a pedestrian.
  - Speeds in the circle were slow, but it worked very well for biking. Drivers were better about yielding due to reduced speeds. Entering the circle on bike was easier.
  - Support for our approach piloting different options in the real world, instead of just relying on modeling
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# Grant Circle Trial Period - Comments

## Comments in opposition

- Not supportive of a permanent reduction of one travel lane at Grant Circle, but expressed support for DDOT's trial period experiment, and for future studies at Grant Circle
  - Temporary traffic pattern contributed to increased backups on surrounding streets
  - Temporary pattern caused a traffic nightmare, and increased danger to pedestrians and drivers alike
  - Grant Circle has been there for years and worked fine
  - Address issues through more education to drivers, bicyclists, and pedestrians, raised crosswalks
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# Grant Circle Resident Photos



Photo Source – K. Lockett

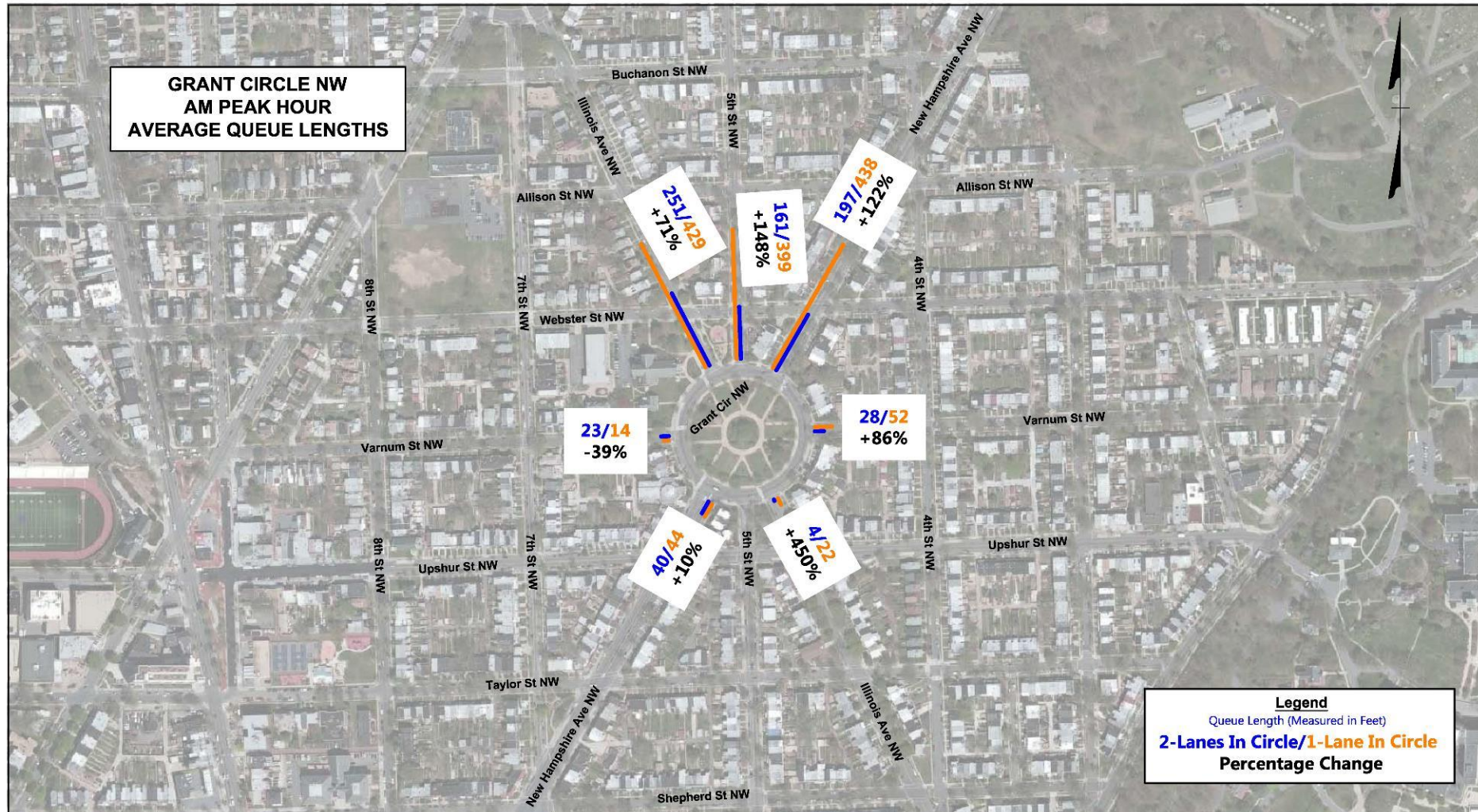


# Grant Circle Resident Photos



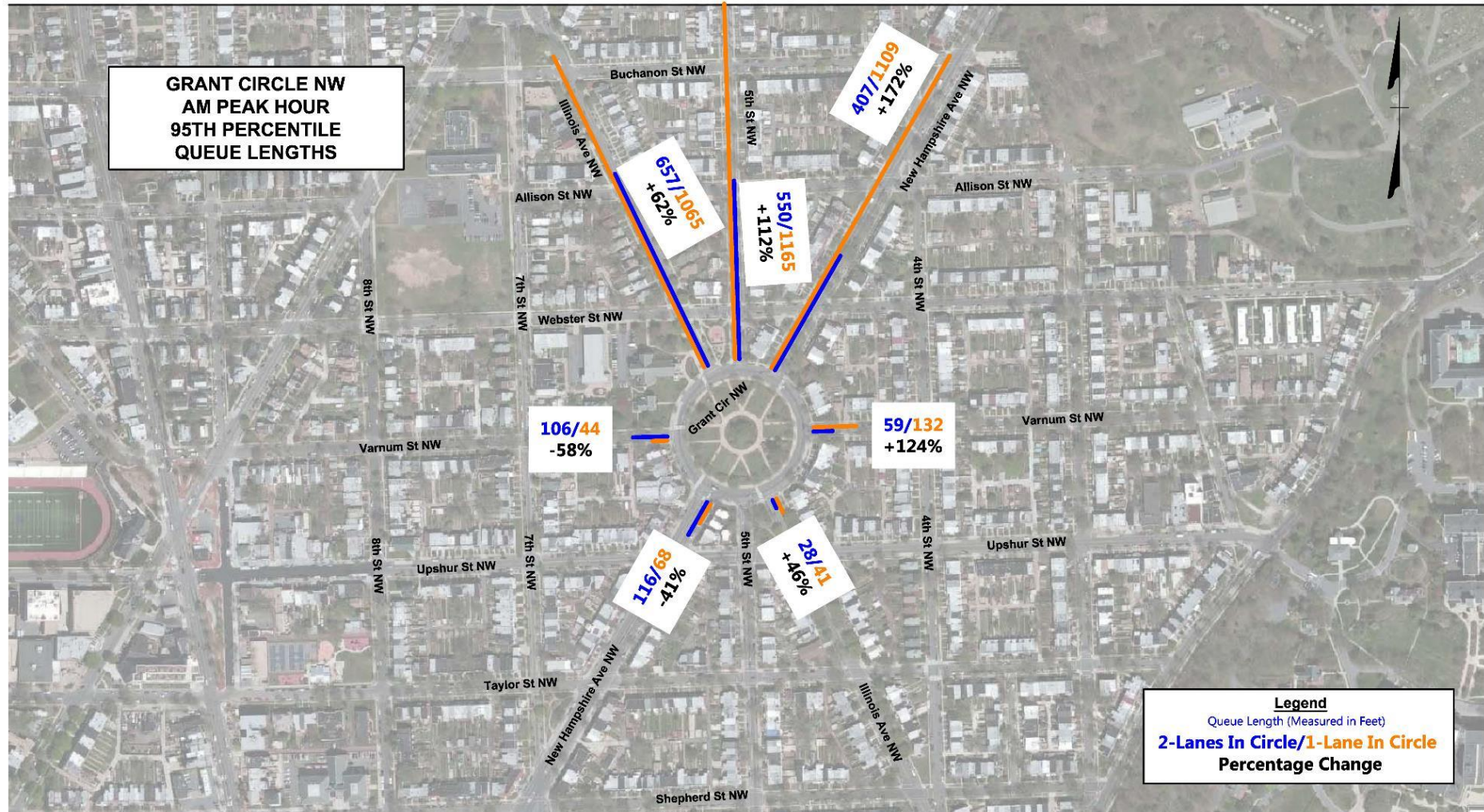
Photo Source – K. Lockett

# Grant Circle Average Queue Lengths





# Grant Circle 95<sup>th</sup> Percentile Queue Lengths





# Grant Circle Average Travel Time

GRANT CIRCLE NW  
WEEKDAY 2 HOUR  
AM PEAK PERIOD  
AVERAGE TRAVEL TIME

Buchanan St NW

125/180  
+44%

Allison St NW

Illinois Ave NW

7th St NW

Webster St NW

5th St NW

New Hampshire Ave NW

4th St NW

107/194  
+81%

Varnum St NW

8th St NW

7th St NW

New Hampshire Ave NW

Taylor St NW

5th St NW

Upshur St NW

Illinois Ave NW

4th St NW

Varnum St NW

Shepherd St NW

Grant Cir NW

## Legend

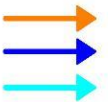
Travel Time (in Seconds)

2-Lanes In Circle/1-Lane In Circle  
Percentage Change

SB New Hampshire Avenue

SB Illinois Avenue

SB 5th Street

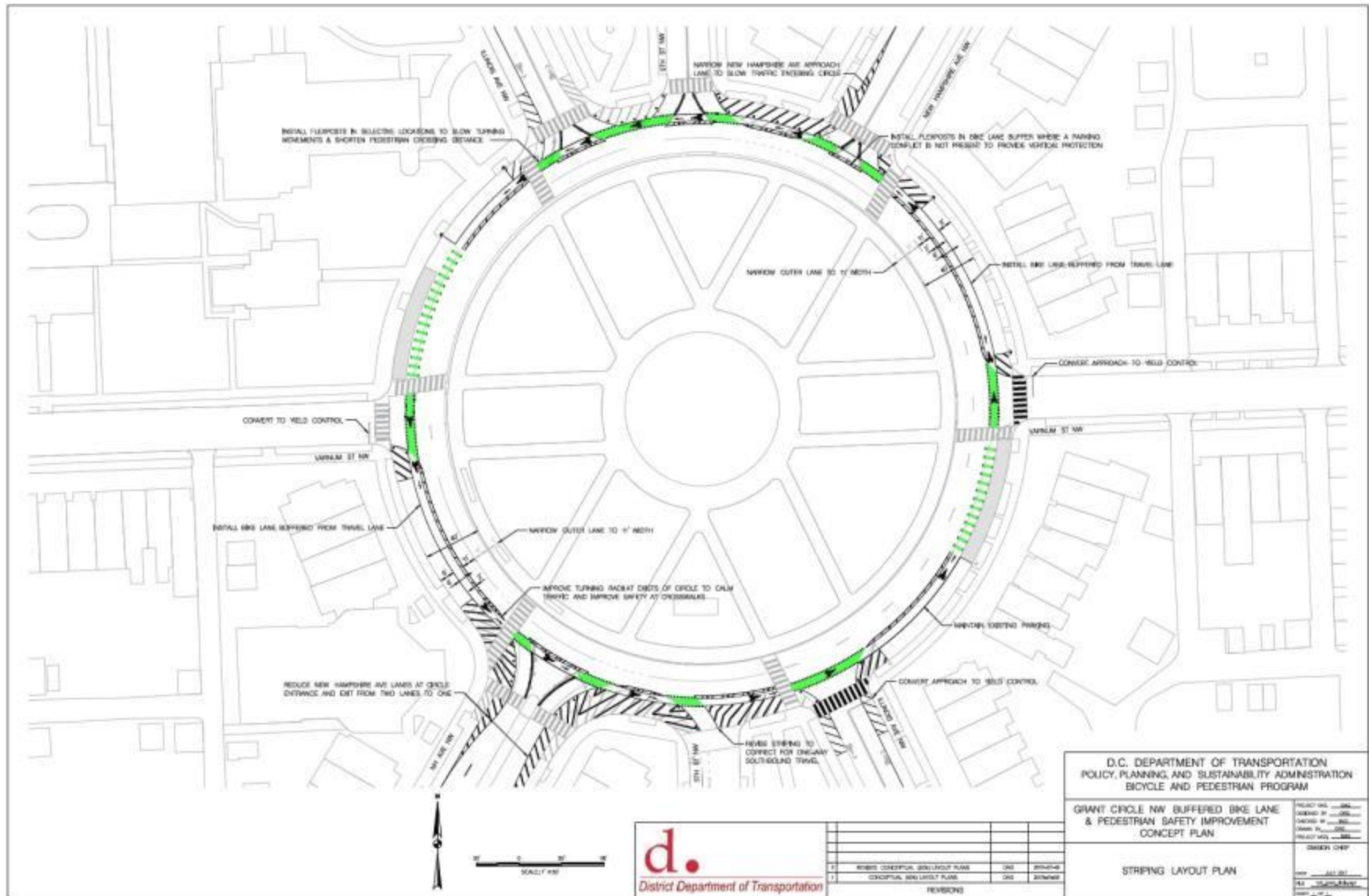




# Next Steps – Grant Circle

- DDOT will not move forward on reducing Grant Circle to one lane
- DDOT has designed an updated two-lane design for Grant Circle that addresses safety concerns and manages traffic
- Variety of treatments are included
  - Narrowing of New Hampshire Avenue approach to one lane south of circle
  - Bicycle lane with buffer (flexposts added where parking not present)
  - Revised striping
  - Converting approaches to yield
  - Reduce turning radii to slow turns
  - Narrow travel lanes to 11 feet
  - Shorter crosswalks into the circle

# Grant Circle - Two-Lane Design



# Sherman Circle

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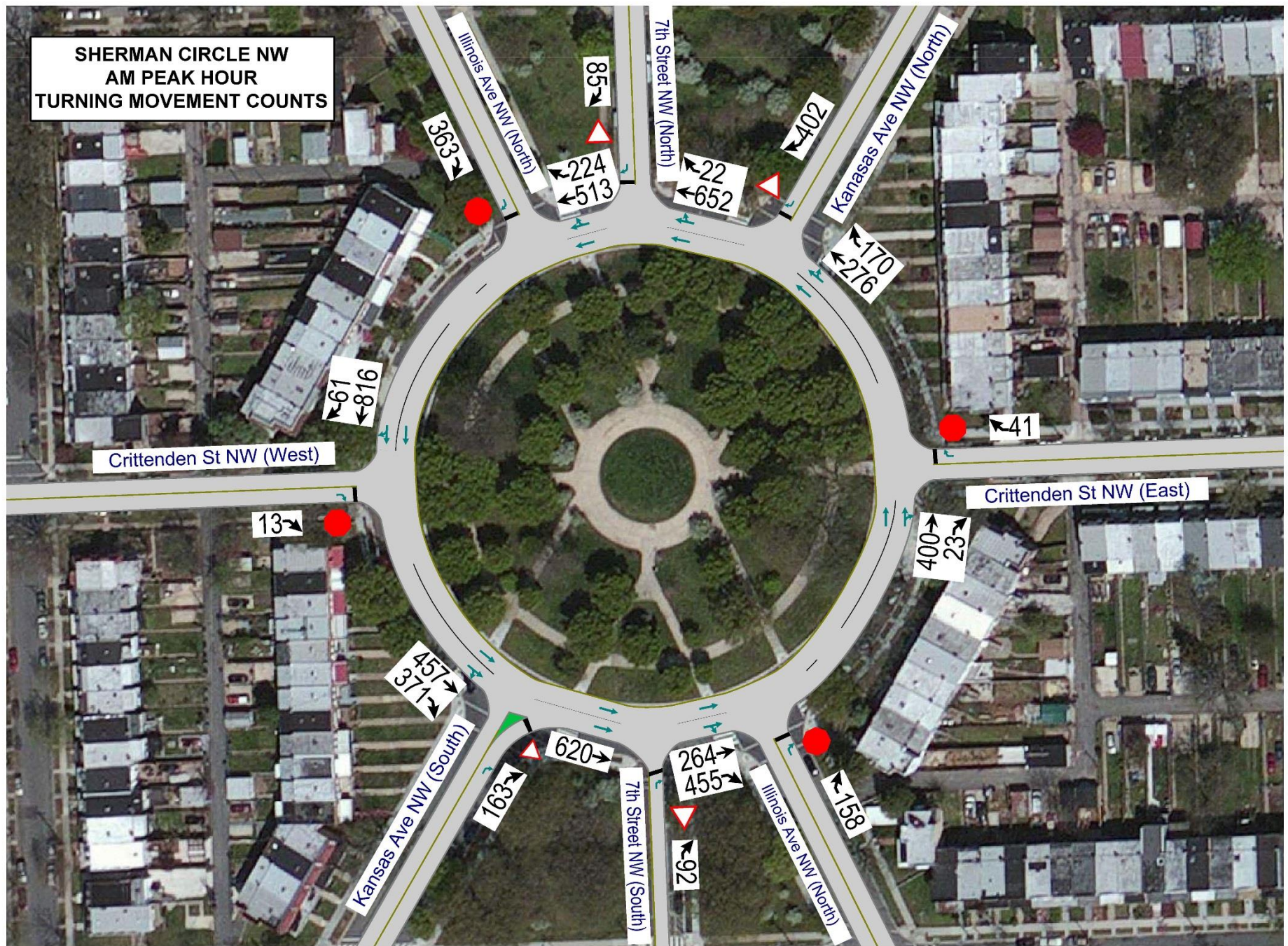
- DDOT performed same analysis for Sherman Circle that was done for Grant before the trial period
  - Existing traffic volumes were used to run operational analysis for AM/PM peaks
  - Analysis evaluated impacts to delay and queuing for vehicles entering circle
- DDOT analysis revealed minimal changes to delay and queuing as a result of reducing Sherman Circle to one travel lane
- Results support the feasibility of reducing Sherman Circle to one lane



# **PEAK HOUR TURNING MOVEMENT COUNTS**

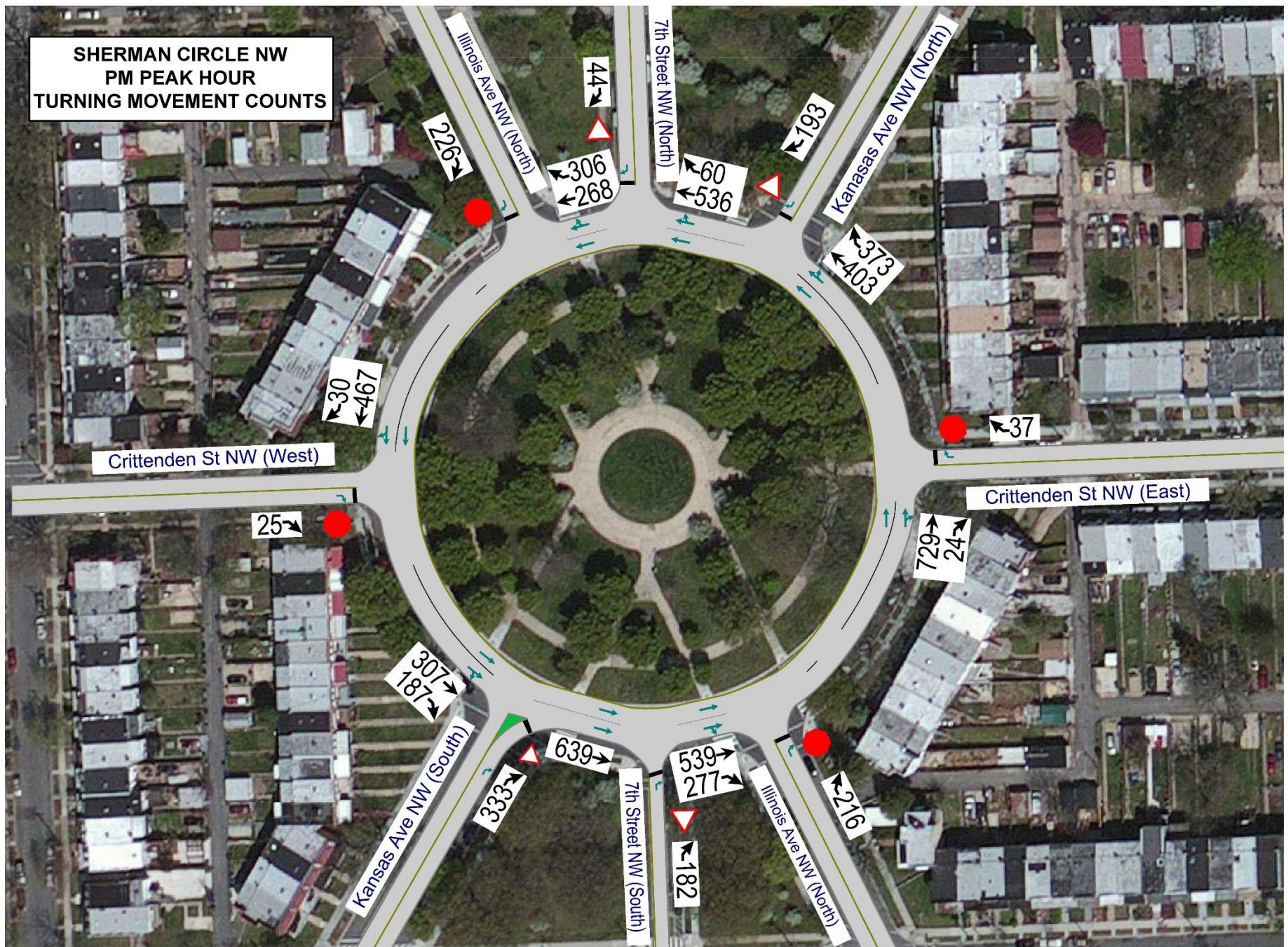


SHERMAN CIRCLE NW  
AM PEAK HOUR  
TURNING MOVEMENT COUNTS





**SHERMAN CIRCLE NW  
PM PEAK HOUR  
TURNING MOVEMENT COUNTS**

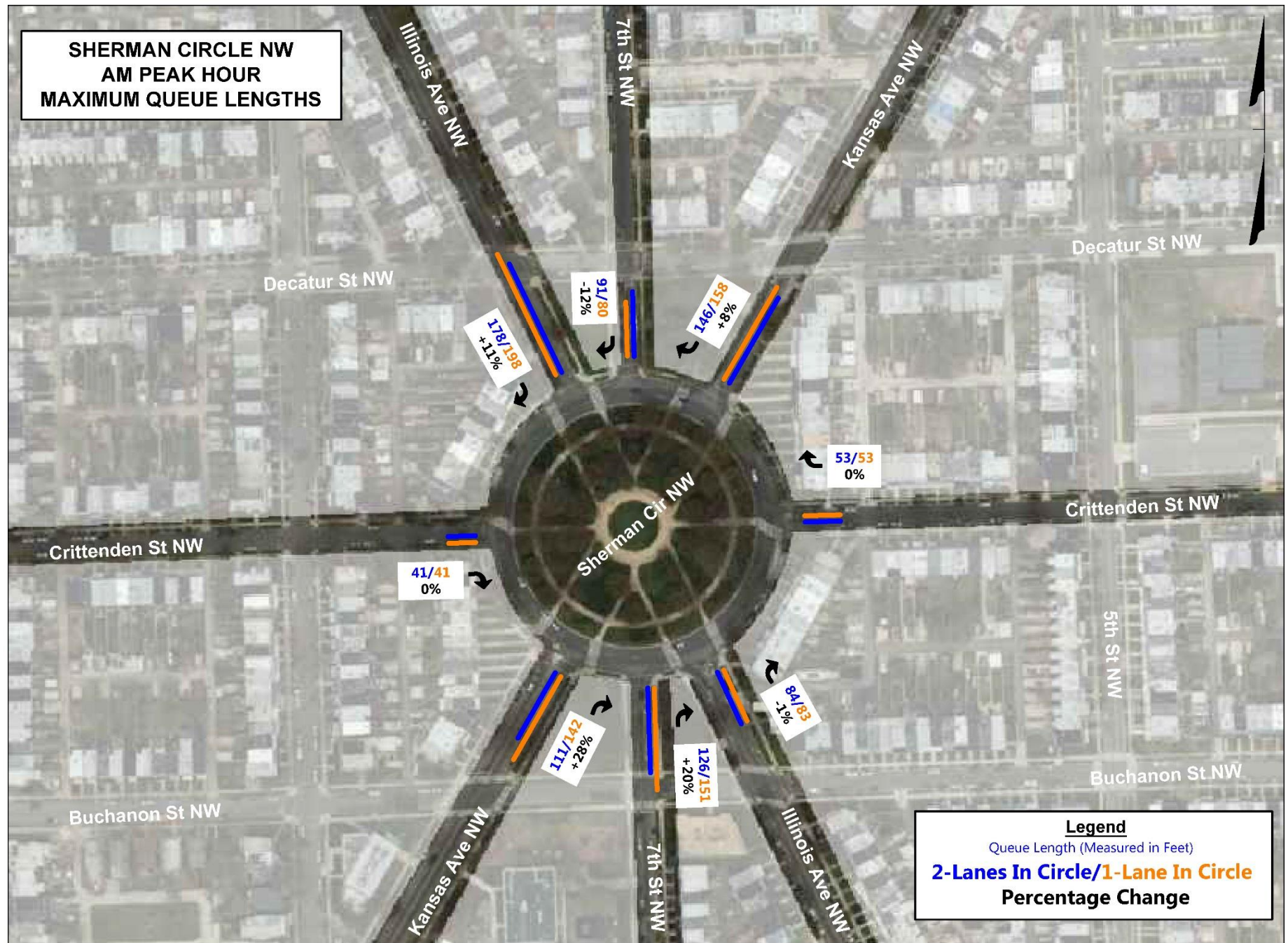




# MAXIMUM QUEUE LENGTH

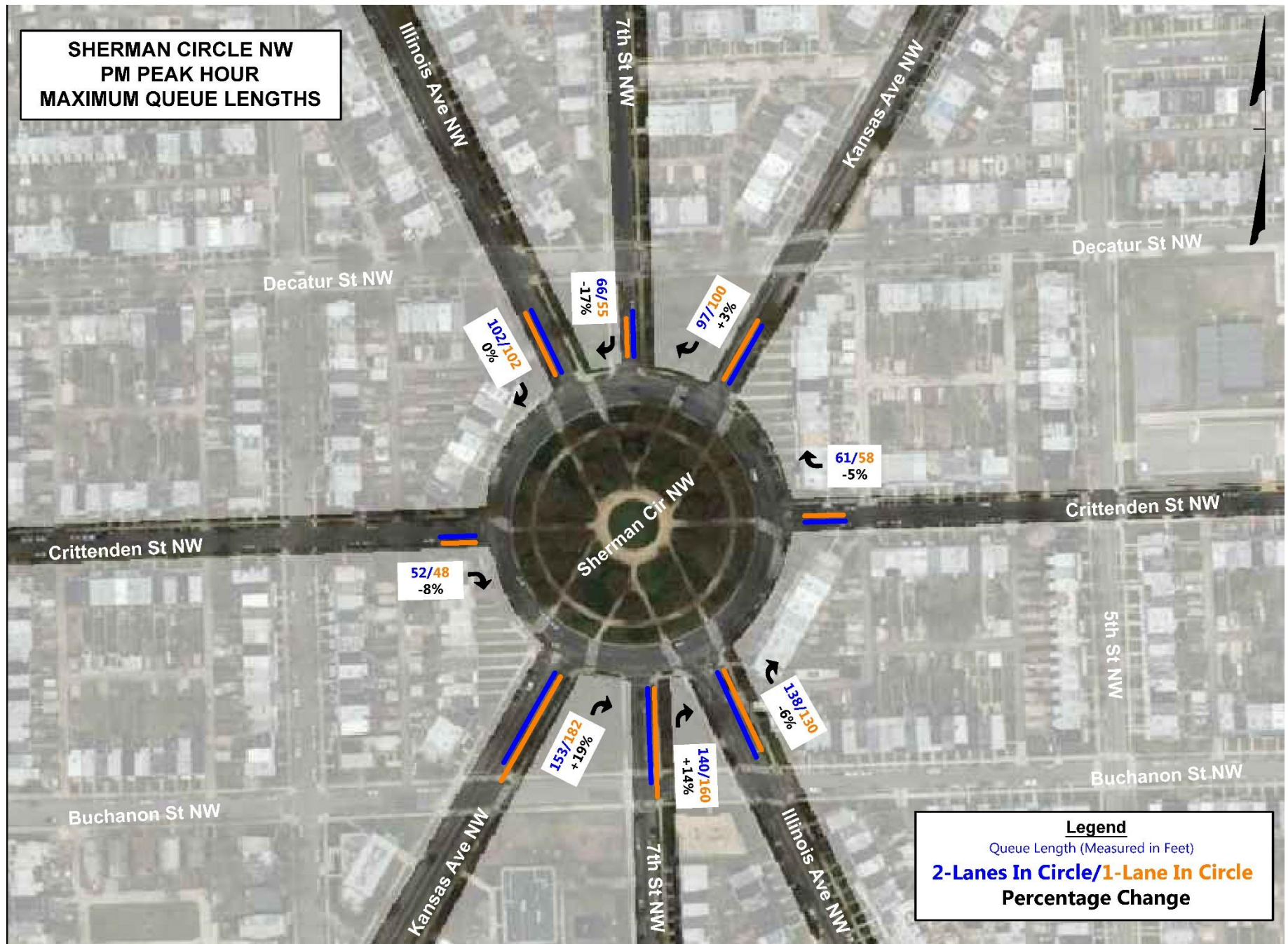


**SHERMAN CIRCLE NW  
AM PEAK HOUR  
MAXIMUM QUEUE LENGTHS**

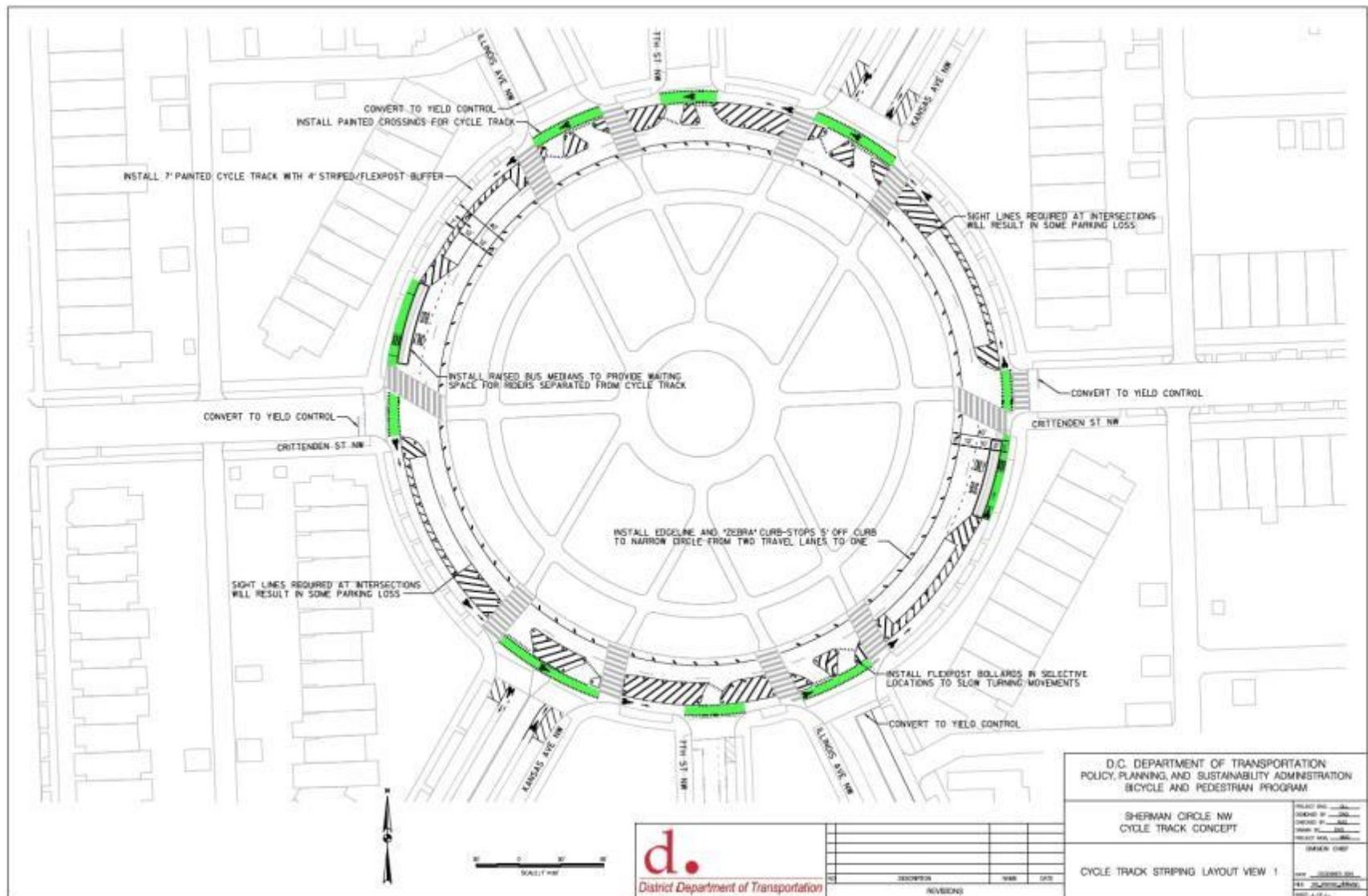




**SHERMAN CIRCLE NW  
PM PEAK HOUR  
MAXIMUM QUEUE LENGTHS**



# One-Lane Design – Cycle Track





INSTALL FLEXPOSTS IN SELECTIVE LOCATIONS TO SLOW TURNING MOVEMENTS

INSTALL FLEXPOSTS IN BIKE LANE BUFFER, WHERE IT DOES NOT CONFLICT WITH PARKING, TO PROVIDE VERTICAL PROTECTION

INSTALL BIKE LANE, BUFFERED FROM TRAVEL LANE

CONVERT TO YIELD CONTROL

INSTALL EDGELINE AND 'ZEBRA' CURB-STOPS 10' OFF CURB TO NARROW CIRCLE FROM TWO TRAVEL LANES TO ONE

INSTALL PLANTERS (OR A SIMILAR DEVICE) TO PROTECT CROSSWALKS AND SHORTEN THE CROSSING DISTANCE

NARROW NEW HAMPSHIRE AVE FROM TWO APPROACHING LANES TO ONE

MAINTAIN EXISTING PARKING

CONVERT TO YIELD CONTROL

VARNUM ST NW

5TH ST NW

5TH ST NE

ALOND AVE NW

NEW HAMPSHIRE AVE NW

0 10 20 30  
FOOT

**d.**  
District Department of Transportation

NO.	DESCRIPTION	DATE	BY
1	DESIGN		
2	REVISION		


D.C. DEPARTMENT OF TRANSPORTATION  
POLICY, PLANNING AND SUSTAINABILITY ADMINISTRATION  
BICYCLE AND PEDESTRIAN PROGRAM

GRANT CIRCLE NW  
BUFFERED BIKE LANE CONCEPT

STRIPING LAYOUT VIEW 1

PROJECT NO. \_\_\_\_\_  
DESIGNED BY \_\_\_\_\_  
DRAWN BY \_\_\_\_\_  
CHECKED BY \_\_\_\_\_  
DATE \_\_\_\_\_  
BRUSH: CHD

# Next Steps – Both Circles

- DDOT will consider all public comments we receive
  - Based on these comments, DDOT may further refine designs
  - Next step is the Notice of Intent process, which includes a 30-day comment period
    - Separate NOIs for Grant and Sherman
    - NOIs could be sent out as early as August or September
    - ANC's encouraged to pass resolutions during the comment period
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Send feedback to:

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Transportation Planner

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