

**WILSON DRIVE COMMUNITY-WIDE  
COMMUNITY TASK FORCE  
STEERING COMMITTEE**



**February 15, 2017  
7:00 PM**

Village Hall Committee Room, 2<sup>nd</sup> Floor  
3930 N. Murray Ave  
Shorewood, WI 53211

**AGENDA**

1. Call to order.
2. Consideration of December 14, 2016 meeting minutes.
3. Review and consider approval of revised draft report by MSA Professionals for Wilson Drive design concept scenarios.
4. Discuss lessons learned from Wilson Drive Task Force process.
5. Adjourn.

Should you have any questions or comments regarding any item on this agenda, please contact Ericka Lang, Planning Director, Planning & Development Department, at (414) 847-2647. Upon reasonable notice, efforts will be made to accommodate the needs of disabled individuals.

It is possible that members of and possibly a quorum of members of other governmental bodies of the municipality may be in attendance at the above stated meeting to gather information; no action will be taken by any governmental body at the above stated meeting other than the governmental body specifically referred to above in this notice.

**WILSON DRIVE TASK FORCE  
STEERING COMMITTEE**

**December 14, 2016**

**Meeting Minutes**

3930 N. Murray Ave, Shorewood, WI 53211



**1. Call to order.**

The meeting was called to order at 7:00 p.m. Members present: Co-chair Henk Joubert, Eric Couto, Donna Pollock, Tom Kuhlmann, Tr. Davida Amenta, Tr. Mike Maher, Therese Klein, Tim Vander Mel, and Ellen Eckman.

**2. Consideration of September 14 and 29, 2016 and November 30, 2016 meeting minutes.**

Mr. Maher moved to approve the September 14<sup>th</sup> minutes, seconded by Mr. Couto. Ms. Amenta recommended changes under item #3 that were accepted to revise. Mr. Couto moved to approve the minutes with the amendments, seconded by Ms. Pollock. Vote to approve 9-0.

Mr. Maher moved to approve the September 28<sup>th</sup> minutes, seconded by Ms. Eckman. Motion to approve 9-0.

Mr. Maher moved to approve the November 30<sup>th</sup> minutes, seconded by Ms. Eckman. Motion to approve 9-0.

**3. Discussion of preferred conceptual street designs for the Wilson Drive Corridor.**

Chair Joubert stated that this will be the final working meeting of the Steering Committee. Members reaffirmed the preferred road design scenarios voted on at the last meeting. Each member reviewed the concerns and interests list and identified the top six items and did the same for the list of amenities provided by the consultant.

Ms. Eckman moved to keep the scenario selection from the previous meeting, choosing scenario "D" with eight votes, scenario "B" with six votes and scenarios "A" and "C" each with two votes. Members concluded not to reconsider preferred scenarios.

**4. Discuss next steps.**

Several members will put together a report to the Village Board Strategic Initiatives Committee ideally for a January meeting. Members discussed what materials should be included in the report and that the report should be a summary.

Members agreed to suggest to the SIC that the public continues to be involved and that the committee does not recommend development on the west side.

**5. Adjourn.**

Ms. Eckman moved to adjourn the meeting at 7:55 p.m., seconded by Ms. Amenta. Motion to adjourn 9-0.

Recorded by,

A handwritten signature in cursive script that reads "Ericka Lang". The signature is written in black ink and is positioned below the text "Recorded by,".

Planning Director Ericka Lang

# shorewood

WISCONSIN

wilson drive  
conceptual planning

February 3, 2017

FINAL  
DRAFT



# ACKNOWLEDGMENTS



## Wilson Drive Task Force

---

Elizabeth Beeghly  
John Berges  
Jennifer Cooney Vulpas  
Eric Couto, **Development Chair**  
Tr. Davida Amenta  
Gregg Davis  
Rob Dilgard  
David Drews  
Alexander Dykhne  
Ellen Eckman, **Parks/Rec Chair**  
Sam Essak  
Nathan Hemming  
Kathy Herbst  
Vicki Herman  
Adrienne Houck  
Henk Joubert, **Co-Chair Environment**  
Kathryn Kamm  
Steve Kavalasuskas, **Parks & Recreation Co-Chair**  
Mark Keane

Therese Klein  
Kurt Koenig  
Tom Kuhlmann  
Lou Maris  
Stephen McCarthy  
Katherine McDonnel  
Brook Meier  
Tr. Mike Maher  
Elizabeth Muslin  
Bonnie Pedraza  
Donna Pollack, **Environmental Chair**  
Joshua Pollack  
Peter Sheehan  
Michael Skauge  
Joe Teglia, **Traffic & Safety Chair**  
Tim Vander Mel  
Lois Wesener  
Tyler Zwagerman

Village Staff  
Wilson Drive Committee Members

Prepared by:  
MSA Professional Services, Inc.

# CONTENT

02 Acknowledgements

05 Overview  
Introduction | Plan Purpose  
Planning Process  
Approach  
Plan & Document Review

09 Existing Road Conditions  
Wilson Drive

11 Prototype Design Scenarios  
Scenario A  
Scenario B  
Scenario C  
Scenario D

28 Conclusions  
Wilson Drive Committee  
Planning Consultant

A-B Appendices  
A: Funding Sources  
B: Supplemental Information

“YOUR CHARGE IS TO OVERSEE A RESIDENT DRIVEN PROCESS THAT IS OPEN TO DISCOVERY AND SURPRISE AND IS MARKED BY COMMUNITY ACCESS, INPUT, AND IMPACT FROM START TO FINISH. YOUR CHALLENGE IS TO REACH OUT TO THE COMMUNITY TO ENSURE BROAD BASED ENGAGEMENT THAT CAPTURES RESIDENTS’ HOPES, VALUES, EXPECTATIONS, AND DEMANDS FOR THE WILSON DRIVE CORRIDOR.”

-GUY JOHNSON, VILLAGE PRESIDENT



# OVERVIEW

## INTRODUCTION | PLAN PURPOSE

The Wilson Drive concept planning project is an exploration of design alternatives/scenarios for the future reconstruction of Wilson Drive. Wilson Drive runs parallel to the Milwaukee River Greenway (Estabrook Park) from Capital Drive to E. Hampton Avenue in the Village of Shorewood, WI.

The Wilson Drive Task Force (WDTF) consists of one Steering Committee and four Work Groups. The Steering Committee is charged with developing and implementing a communication plan to ensure public participation; providing oversight and guidance to work groups; reviewing findings and opinions of the work groups; and organizing alternative scenarios for public review and comment.

The four Work Groups are charged with identifying and gathering data and information; engaging experts; identifying priorities, requirements, opportunities and constraints; and developing alternative scenarios.

The Village commissioned MSA Professional Services, Inc. to work with the Wilson Drive Steering Committee (WDSC) to explore four pre-determined road width scenarios to assist the WDSC in making a recommendation to Village Board.

# OVERVIEW |

## PLANNING PROCESS

In June 2015, the Village Board approved the creation of a Wilson Drive Task Force (WDTF) based on a framework presented by the Village Board Strategic Initiatives Committee. The task force was charged with producing a product with specific recommendations that could be examined, tested, and illuminated through alternative design scenarios.

After receiving public comments over the initial seven months, including at a public informational meeting, the WDTF culled and prioritized all concerns and interests and applied them across four road scenarios developed as part of the task force framework. In October 2017, the Village hired MSA Professional Services to help the Wilson Drive Steering Committee (WDSC) to explore the four road width scenarios to assist the WDSC in making a recommendation to Village Board.

This Wilson Drive concept planning process was spread out over the course of five months. The process included the review of existing conditions, documented public and WDTF concerns and interests, review of existing on-street parking occupancy and vehicular traffic count data, evaluation of the most appropriate road features for the corridor, preparation of road design scenarios and (2) two meetings with Village staff and Wilson Drive Steering Committee (WDSC) to discuss the project and the preparation of this report and appendices.

## APPROACH

Led by the WDSC, this project involved key stakeholder engagement that allowed taskforce members to express their concerns and interests, generate ideas, review concepts developed by the planning consultant, and assess the concepts based on meeting desired outcomes.

## DOCUMENT REVIEW

Prior to hiring the consultant, the Village had completed several relevant plans and studies that discuss Wilson Drive. These plans are listed below with a brief summary along with any related recommendations.

### Wilson Drive Interim Report

In 2010, Studio 1032 Architecture (a UW-Milwaukee class) prepared a report broken into seven chapters that discussed

the potential of the area, an analysis, intersections improvements, opportunities, results of the focus group, conclusions and next steps. This document provided a starting point for this project, as many of ideas and concerns provided in this plan still resonate today.

### Shorewood 2012 Bike & Ped Implementation Plan

This document provides specific recommendations for the corridor, including the preferred location of bus stops at the far-side of intersections, the extension of the City of Milwaukee , 'bubl bikes' bike share station system, formalizing the bike path entry to the Oak Leaf Trail from Glendale Avenue, exploring an entrance in the vicinity of the Department of Public Works Yard (Olive Street) and other opportunities for formalized bicycle entry points to the Oak Leaf, especially at Congress Street.

The implementation plan indicates a desire for colored or standard bicycle lanes along Wilson Drive, establishing Kensington Boulevard as a bicycle route, formalizing the Glendale Avenue and Wilson Drive Intersection by providing enhanced crosswalks, wayfinding signs, bicycle parking and other amenities.

### 2014 On-Street Parking Counts

In May of 2014 a parking count was performed on Wilson Drive to determine the supply and demand of parking. The street was observed on three different dates every two hours starting at 9:00am and ending at 7:00pm. These observations were conducted on a Monday, Wednesday and Saturday. The height of use recorded was at 7:00pm on a Saturday, where only 22% of all spaces were occupied.

Parking occupancy refers to the accumulation of parking over the course of the day. Occupancy during peak periods is the primary measure of parking usage and the need for additional parking. Occupancy rates at or close to 100 percent are generally considered undesirable because motorists must hunt for available parking and/or may be tempted to park illegally or not stop at all. Thus, when evaluating parking the "effective" supply is preferred to full supply. The effective supply is the maximum number of parking spaces that can realistically be used within a given district. An effective supply "cushion" can help to protect against the inevitable loss of spaces resulting from temporary disturbances such as construction, mis-parked cars, etc. Parking supply is considered "effective" when approximately 80% of the parking spaces are occupied.

## Committee Desires, Interests & Concerns

The four committee workgroups prepared a list of desires and interests for the Wilson Drive Corridor that were provided to the consultant. The list below summarizes these desires and interests. Also provided are concerns identified through the public process.

### Desires/Interests

1. Preserve, improve and maintain quality of green space: Remove invasive species of plants in a thoughtful manner; Maintain trees; Add Gardens (butterfly/bird, raised bed)
2. Maintain bird and animal habitats—both migratory and native
3. Storm water management: Permeable pavement; Bio swales; Plant more trees
4. Stop snow dumping
5. Increase historical and educational signage
6. Create ADA accessible park / trail entrances.
7. Maintain traffic flow - reduce neighborhood impact from redesigned roadway - Make safe, efficient passage for emergency vehicles
8. Accommodate bicycles on Wilson Drive
9. Improve crossing Wilson Drive safety for all non-motorized users (ped, bike, strollers, wheel chairs, etc.)
10. Reduce speed to the posted speed limit
11. Improve ped safety at intersections as well as on side street crossings (Congress/Woodruff, Wildwood/Olsen)
12. Maintain safe and accessible bus stops
13. Continue street parking on both sides of Wilson Drive
14. Preserving Usable, Attractive, and Healthy green space west of Wilson Drive
15. Accessibility to the Park & Oak Leaf Trail from the East
16. Improve sight lines into Park & Trail from Wilson Drive
17. Improve Ped crossing Wilson Drive & crossing Trail
18. Improve Bicycle safety on Wilson Drive & Oak Leaf Trail
19. Promote Physical, Emotional, and Health benefits of green space - Recreation Opportunities / Relaxation Zones / Quality of Life
20. Make two or more attractive entrances (gateways) to the park that work for pedestrians and bicyclists, and provides ADA accessible paths.
21. Native fauna and flora / Remove invasive species
22. All weather uses – active space
23. Storm water management
24. Responsible use of tax money
25. Enable community enjoyment and meeting space
26. Traffic spillover into neighborhoods; minimize increasing traffic on adjacent side streets
5. Pedestrian safety at night
6. Better/more bike access to Oak Leaf Trail
7. Rush hour Oak Leaf Trail path is unsafe due to high speed cyclists
8. Visual access from Wilson Drive to Oak Leaf Trail and Estabrook Park
9. Improve & maintain quality green/environmental space
10. Maintain habitats for (migrating) birds & animals
11. Native plants/fauna/flora / Remove invasive species
12. Preserve biodiversity
13. Global warming
14. Make Shorewood beautiful
15. Improve stormwater management / Reduce runoff
16. Snow dumping is ugly and environmentally unsound
17. Property values
18. High property costs / High property taxes
19. Maintain a sustainable tax base
20. Maintain a sustainable financial village profile / Responsible use of tax money / Taxing fairness
21. Cost of providing services to western side of Wilson Drive
22. TIF districts / Use of public monies for development
23. Lots of unused retail space in Shorewood / Empty storefronts are problematic
24. Affordable housing
25. Luxury apartments
26. Overcrowded schools
27. Healthy community
28. Enable, promote physical activity
29. Reduce environmental stressors (e.g. noise, etc.)
30. Maintain quality of life
31. Benefits to human health for green space access
32. Encourage use of transit, bicycle, and pedestrian transport modes
33. People are more important than vehicles
34. Improve pedestrian safety crossing Wilson Drive
35. Village political/decision making processes
36. Conversion of community space to private space
37. Selling off of public lands
38. Concern for long-term sustainability for transferring property from the public trust to private ownership
39. All weather uses
40. A place to relax
41. Enable community enjoyment & meeting space
42. Safety issues on Oak Leaf Trail and Estabrook Park
43. Use Wilson Drive for Shorewood, not as artery for non-residents
44. Traffic, population density
45. Traffic Safety / Traffic flow & congestion / Traffic density
46. Minimize segmentation
47. Maintain ability for busses to stop out of traffic
48. Improve safety for transit users at bus stops
49. Maintain thru traffic (to get around turning vehicles)
50. Traffic spillover into neighborhood; minimize increasing traffic on adjacent side streets/neighborhoods
51. Parking spaces: Residents, Visitors, Church goers
52. Visibility issues from side streets: Congress/Woodruff

### Concerns

1. Accessibility issues – pedestrian, bicycles, strollers, handicapped. Confirm ADA requirement.
2. Improve & increase number of ADA access points to the Oak Leaf Trail & Milwaukee County Estabrook Park.
3. Safe Pedestrian/bike access/crossings to park/trail
4. Safety for Cyclists along Wilson Drive



# EXISTING ROAD CONDITIONS

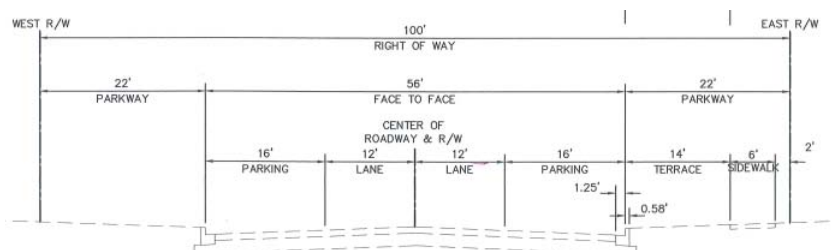
## WILSON DRIVE

Wilson Drive is a minor thoroughfare on the west side of Shorewood, running between Capitol Drive (in the Village of Shorewood) to Hampton Avenue (in the Village of Whitefish Bay). For the purposes of this reconstruction project, only the portion running through the Village is being studied (i.e., Capitol Drive to Glendale Avenue). Within the project limits, there are eight blocks with six standard blocks and two double blocks. As shown in the typical section (in the lower right), the road has fifty-six feet of paved surface in a hundred foot road right-of-way. There is sidewalk only on the east side of the street; however, the Oak Leaf Trail exists just west of the Wilson Drive right-of-way. Several breaks in the wooded area provide access between the trail and the road with the Congress Street connection being the only one paved at this time.

The road (at 56 feet) is wider than Shorewood's Lake Drive on the eastern edge of Shorewood and wider than Oakland Avenue in the central business area. Should the road get narrowed more space can be dedicated to providing/expanding beautification, health, ecological, and environmental benefits in the corridor.



Looking south at Village Limits (near Hollywood Avenue)



Source: Shorewood Engineering

Wilson Drive Existing Typical Section



# PROTOTYPE DESIGN SCENARIOS

## SCENARIOS

Four design scenarios were prepared for the WDSC and Village officials to better understand the pros and cons of each as it relates to street width, crossings, drive lane/traffic flow, bicycle lane accommodations, stormwater management, aesthetics, landscaping, and recreational opportunities. The four scenarios were provided by the Village and include "1) keeping the existing roadway width (56 feet); 2) boulevard using the existing roadway width (56 feet); 3) reducing the roadway width but keep parking on both sides (48 feet); and, 4) reducing the roadway and removing parking on park side (42 feet). Best practices may suggest expanding the above described road widths, but in general the design follows these pre-approved parameters.

For the purpose of this exploration the scenarios were limited to a three block prototypical area of Wilson Drive from E. Kensington Boulevard to N. Sheffield Avenue. Schematic plans and illustrations for Scenarios A-D, a scorecard and ball park cost estimates are provided to assist the Committee in decision-making.

Each scenario includes preliminary cost to reconstruct the entire corridor based on the general layout shown in the three block segment. Even though these cost estimates are extremely rough as there are many unknowns, they provide the WDSC and the Village the ability to compare each of the scenarios based on project costs in addition to the other factors outlined in this Plan.

### Design Elements in All Scenarios

There are a few design considerations that were included in all designs, as noted below.

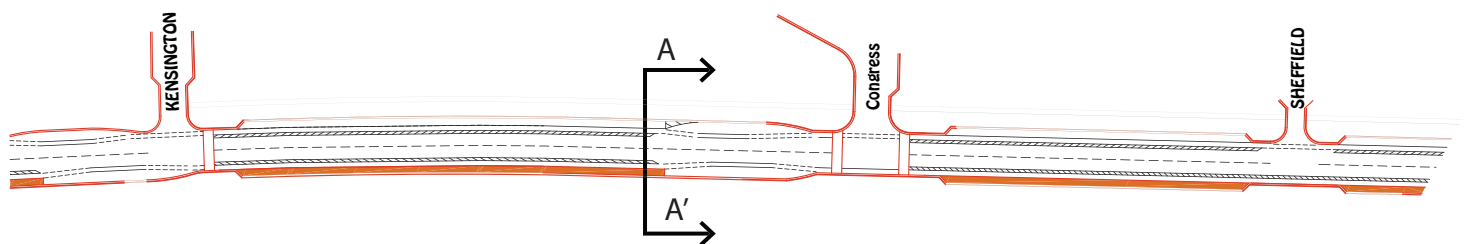
- » It is suggested that Glendale Avenue, Kensington Boulevard, Congress Street, Marlborough Drive, Alpine Avenue, and Olive Street include southbound and northbound bus stops. Per the three block area depicted in this Plan, the Sheffield Avenue stops would be moved one block south on Wilson Drive. Further review and consultation with MCTS will be required.
- » The intersection of Congress Street and Woodruff Avenue could be made safer by expanding the north terrace on Congress, establishing a true "T" intersection Woodruff Avenue. All concepts show this condition with each concept varying in design of the expanded terrace.
- » ADA-accessible trail entrances will be provided (or enhanced) at Kensington Boulevard, Congress Street and Olive Street (no connection currently). Each concept shows additional enhancements at the existing paved Congress connection.

# SCENARIO A | EXISTING ROADWAY (56FT)



A	TERRACE <i>(no change)</i>	PARK* 9.5-FT	BIKE 6-FT	DRIVE 12.5-FT	DRIVE 12.5-FT	BIKE 6-FT	PARK* 9.5-FT	TERRACE <i>(no change)</i>	A'
---	-------------------------------	-----------------	--------------	------------------	------------------	--------------	-----------------	-------------------------------	----

\* Bus stop locations w/ no parking



Top: Concept Plan  
Middle: Cross Section  
Bottom: Plan View with Section Line

Scenario A uses the existing paved roadway width of fifty-six feet. While the width of the roadway largely remains the same, the allocation of space and uses changes slightly. Drive lanes are reduced to twelve-and-a-half feet with a six foot wide marked bicycle lane and a nine-and-a-half foot wide decorative paver parking/bus stop zone. The largest changes would be the addition of a left turn lane at Kensington Boulevard, the decorative parking zone, bike lanes, crosswalk enhancements and bumpouts. Outside of the intersection bumpouts, there is no additional changes to the park side terrace, and no changes are proposed for the terrace on the east side of the street.

## UNIQUE ELEMENTS

- Terrace Addition at Intersections (westside)
- Congress Street Road Diet (landscaping / rain garden)
- Decorative Paving / Pavers Parking Zones
- Bus Stops on Farside (NB) and Nearside (SB)
- Statue at Congress Street / Oak Leaf Trail (westside)

\* Crosswalks segments where left-turn lanes are built (see Kensington Boulevard) can be removed or unmarked to emphasize the preferred safer crossing segment.

### Best Practices

- » Not only is the decorative pavers a placemaking element, it provides a mental narrowing of the roadway (which can help to slow traffic) and can be engineered to reduce stormwater runoff.
- » Bumpouts at road intersections are opportunities for additional green space and provide a shorter and safer pedestrian crossing for pedestrians and bicyclists.
- » Decorative crosswalks at Congress Street and Kensington Boulevard provide a visual cue for vehicle traffic to slow down/stop for pedestrians/bicyclists.\* An added benefit is it can define the corridor as placemaking strategy.
- » Improvements to the park side would include bumpouts at intersections providing additional open space/landscaping. If snow storage continues to be allowed at the intersections, it provides a larger buffer to the existing woodlands.
- » All bus stops have wider pads and are connected to sidewalks. Northbound bus stops are pushed to the far side of the intersection to provide improved visibility for pedestrians looking to cross the street (i.e., buses can block the view between moving vehicles and pedestrians at near side location).
- »

# SCENARIO A | EXISTING ROADWAY (56FT)



Plan View

## ADDITIONAL CONSIDERATIONS

### Congress Terrace (north side) & Trail / Park Connection.

This concept uses the Congress Street north side terrace for decorative landscaping (along the curb edge) and for stormwater management (north of the public sidewalk adjacent to private property).

To enhance the visibility of the trail and park entrance, the break in the woodlands (between the trail and street) has been expanded. A plaza is introduced with a sculptural element (or water feature), bollard lighting and supplemental landscaping.

The plan (above) and illustration (on the next page) depict Scenario A improvements in greater detail.

# SCENARIO SCORECARD **"A"** (Existing - 56FT)

## ENVIRONMENT

Usable Green Space	○
Reduces Runoff	○
Limits Impervious Area (pavement ft.)	○ 56
Human Health Benefit	○

## MOBILITY

Bicycle Safety	●
Pedestrian Safety (max crossing distance)	○ 37
Vehicular Free-Flow	○
Vehicular Speed Control	○

## ECONOMIC DEVELOPMENT

Beautification/Amenity Opportunity	○
Parking Quantity	●
Redevelopment Expansion (on east side only)	○

## COST & MAINTENANCE

Road Maintenance	○
Open Space Maintenance	●
Construction Cost* (in Millions)	○ 2.0

## FACTORS NOT RATED (possible in all road scenarios)

- Preserve Bio-diversity & Habitat Zone
- Gateways, Landscaping & Street Furniture (Decorative) Lighting
- Bus Stop locations - Safety Considerations
- Plaza Space Design (outside of R.O.W.)

**KEY**

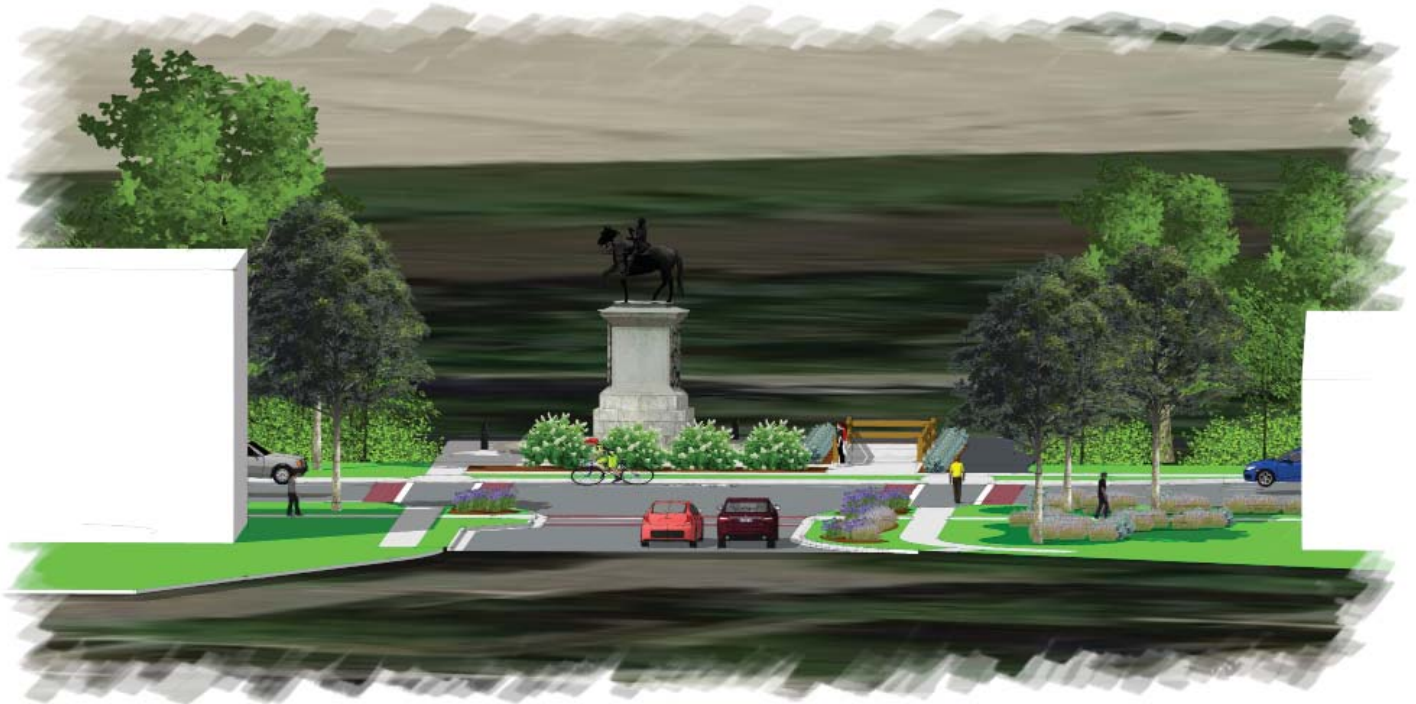
- Good / Strong
- Fair / Neutral
- Poor / Weak

# BALL PARK CONSTRUCTION COST\*

# \$2 MILLION

\* This is a preliminary estimated cost that includes the following: mobilization, bonding, insurance, erosion control, removals, unclassified excavation, curb and gutter, asphalt and aggregate road base, crosswalk/parking/bike enhancements, paving markings, regulatory signs, restoration, bio-swale and landscaping assumptions, 10% contingency and 16% design engineering costs. Notable exclusions include lighting, landscaping, utility work, street furniture, and plaza enhancements.

(SEE APPENDIX A FOR GRANT OPPORTUNITIES)

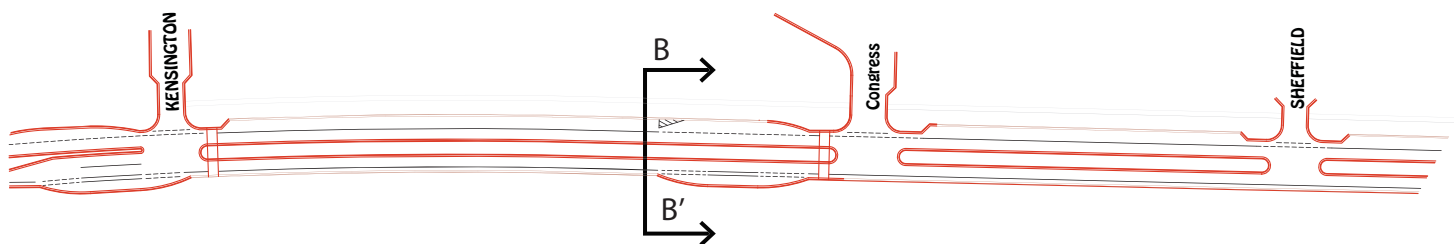


Congress Street, looking west to Oak Leaf Trail Connection

# SCENARIO B | BOULEVARD (56FT+)



B	TERRACE <i>(no change)</i>	SHARED* 11.5-FT	DRIVE 13.5-FT	MEDIAN 12-FT	DRIVE 13.5-FT	BIKE 5.5-FT	BUS 11-FT	TERRACE <i>(Minus bus bay)</i>	B'
---	-------------------------------	--------------------	------------------	-----------------	------------------	----------------	--------------	-----------------------------------	----



Top: Concept Plan  
 Middle: Cross Section  
 Bottom: Plan View with Section Line

## UNIQUE ELEMENTS

- Add Median (bio-swale / landscaping)
- Congress Street Road Diet (plaza / artwork / rain garden)
- Bus Bay Reduces Existing 20-FT Westside Terrace
- Bus Stops on Farside (NB) and Nearside (SB)
- Left Turn Lane at Kensington Blvd.

\*The bike facility could be marked separately if a foot-and-a-half could be gained either by reducing the central median or cutting into one (or both) of the terraces.

\*\* Unless its deemed necessary to include some parking near park/trail entrances, which would require additional encroachment on the parkside terrace.

\*\*\* Crosswalks segments where left-turn lanes are built (see Kensington Boulevard) can be removed or unmarked to emphasize the preferred safer crossing segment.

Scenario B uses the existing roadway width of fifty-six feet, plus some additional park side terrace space (to provide bus stop bays). While the width of the roadway largely remains the same, the allocation of space and uses changes dramatically in this scenario with the introduction of a curbed twelve foot wide median (and bioswale-optional). The drive lanes are thirteen-and-a-half foot wide. The southbound side of the road has five-and-a-half foot wide marked bicycle lanes and an eleven foot bus stop bay (which cuts into the existing park side terrace). The northbound drive lane is thirteen-and-a-half feet wide with a twelve-and-a-half foot wide shared parking/bus/bicycle lane\*. The parking area on the west side of the street (park side) is completely removed to allow for the boulevard\*\*. This scenario would have a left turn lane at the intersection of Kensington Boulevard, as it was assumed this to be most logical intersection to need left turn queuing storage (without data - traffic counts and crash history - to evaluate the need in the corridor).

### Best Practices

- » The amount of impervious area is reduced, which helps to reduce stormwater runoff.
- » Narrow intersection bumpouts (outside of bike lanes) are opportunities for additional green space/landscaping, while providing a shorter and safer pedestrian crossing for pedestrians.
- » Central median creates safe refuge for pedestrians and cyclists, reserves space for left-turn lanes (outside of flow of straight-thru traffic), helps reduce speeds in the corridor (due to narrowing of the road), and provides opportunities for sculptures/landscaping/stormwater management.
- » Painted crosswalks (using the continental pattern) at Congress Street and Kensington Boulevard provide a visual cue for vehicle traffic to slow down/stop for pedestrians/bicyclists.\*\*\*
- » All bus stops have wider pads and are connected to sidewalks. Northbound bus stops are pushed to the farside of the intersection to provide improved visibility for pedestrians looking to cross the street.

# SCENARIO B | BOULEVARD (56FT+)



Plan View

## ADDITIONAL CONSIDERATIONS

**Congress Terrace (north side) & Trail / Park Connection.** This concept provides a parklet on the north side of Congress Street with a central plaza. This plaza would be large enough to incorporate 3-4 (game) circular tables with the landscaped edges providing opportunities for educational signage and/or artwork.

Also shown in this concept is an enhanced trail/park entrance with large planting areas, decorative paving and benches.

The plan (above) and illustration (on the next page) depict Scenario B improvements in greater detail.

## SCENARIO SCORECARD **“B”**

(Median- 56FT)

### ENVIRONMENT

Usable Green Space	○
Reduces Runoff	●
Limits Impervious Area (pavement ft.)	● 44
Human Health Benefit	○

### MOBILITY

Bicycle Safety	○
Pedestrian Safety (max crossing distance)	● 18
Vehicular Free-Flow	●
Vehicular Speed Control	●

### ECONOMIC DEVELOPMENT

Beautification/Amenity Opportunity	○
Parking Quantity	○
Redevelopment Expansion (on east side only)	○

### COST & MAINTENANCE

Road Maintenance	○
Open Space Maintenance	○
Construction Cost* (in Millions)	○ 1.7

### FACTORS NOT RATED (possible in all road scenarios)

- Preserve Bio-diversity & Habitat Zone
- Gateways, Landscaping & Street Furniture (Decorative) Lighting
- Bus Stop locations - Safety Considerations
- Plaza Space Design (outside of R.O.W.)

### KEY

- Good / Strong
- Fair / Neutral
- Poor / Weak

## BALL PARK CONSTRUCTION COST\*

# \$1.7 MILLION

\* This is a preliminary estimated cost that includes the following: mobilization, bonding, insurance, erosion control, removals, unclassified excavation, curb and gutter, asphalt and aggregate road base, crosswalk/parking/bike enhancements, paving markings, regulatory signs, restoration, bio-swale and landscaping assumptions, 10% contingency and 16% design engineering costs. Notable exclusions include lighting, landscaping, utility work, street furniture, and plaza enhancements.

(SEE APPENDIX A FOR GRANT OPPORUTUNITIES)

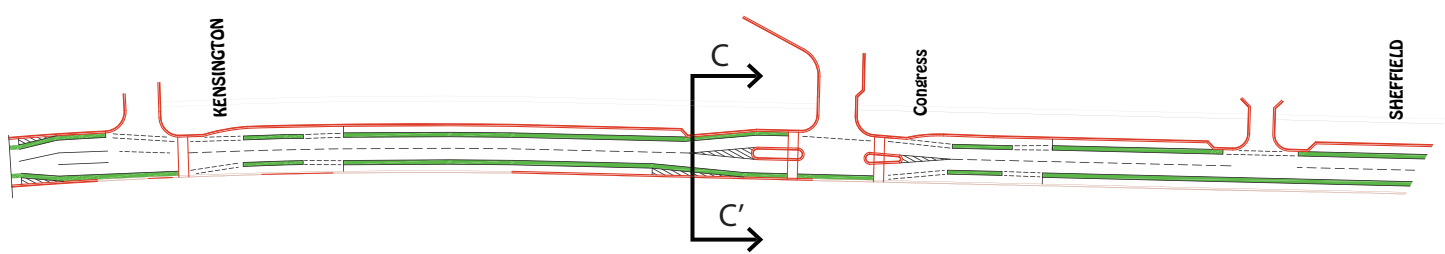


Congress Street, looking west to Oak Leaf Trail Connection

# SCENARIO C | ROAD DIET (48FT)



\* Shared Bike / Parking Lane (plus, bus stop locations w/ no parking)



Top: Concept Plan  
 Middle: Cross Section  
 Bottom: Plan View with Section Line

## UNIQUE ELEMENTS

- Extended Eastside Terrace (bio-swale, landscaping, and/or future development expansion area)
- Congress Street Road Diet (landscaping / rain garden(s))
- Green Bike Lanes (through intersections)
- Bus Stops on Nearside (NB) and Farside (SB)
- Left Turn Lane at Kensington Blvd.

\* Bike lane segments through intersections could use green thermoplastic to hold up to the increased wear and tear. To save costs, the green paint/thermoplastic would not be needed along curb edges (no cross traffic concern).

\*\* Crosswalks segments where left-turn lanes are built (see Kensington Boulevard) can be removed or unmarked to emphasize the preferred safer crossing segment.

\*\*\* This improvement requires diverting traffic and bike lanes, which can become a nuisance if repeated throughout the corridor. Therefore, this improvement should only be used at major pedestrian crossing and limited to one or two intersections, unless this is a desired effect. An example of diverting traffic (around island) is shown in the typical section on the previous page and in Plan View on the next page.

Scenario C narrows the roadway to forty-eight feet. The drive lanes are reduced to eleven-and-a-half feet in order to provide a designated four foot bike lane (painted green). This provides eight-and-a-half foot wide parking lanes (which terminates at bus stops locations). The excess of roadway is allocated to the east side terrace with no change to the park side terrace. A left turn lane is provided at Kensington Boulevard and a median respite is designed at Congress Street.

### Best Practices

- » Intersection bumpouts (outside of bike lanes) provide a shorter and safer pedestrian crossing for pedestrians. It is also an opportunities for green space/landscaping and stormwater management.
- » Unlike the other scenarios, this design increases the east side terrace. This allocation of space allows for the implementation of rain gardens, bio-swales and/or formal (repeating) landscape plantings. It also provides a future redevelopment opportunity should this additional space be allocated to the new development.
- » Bike lanes are painted green through the corridor to emphasize space dedicated to bicycle use, including all the way through intersection\*. This is important, as it visually narrow the road even with a parking/bus lane extending the width of the road.
- » Enhanced crosswalks at Congress Street and one segment across Kensington Boulevard provide a visual cue for vehicle traffic to slow down/stop for pedestrians/bicyclists.\*\* An added benefit is it can define the corridor as placemaking strategy.
- » Congress Street intersection includes refuge islands on both the east and west segments to provide additional safety for pedestrian looking to cross Wilson Drive. This improvement provides a central stopping point for pedestrians/bikes, helps to slow down traffic (as vehicles are diverted around the island), and provides a visual cue of the pedestrian crossing. It also has the added benefit of providing a landscaping opportunity.\*\*\*
- » All bus stops have wider pads and are connected to sidewalks. Southbound bus stops are pushed to the farside of the intersection to provide improved visibility for pedestrians looking to cross the street.

# SCENARIO C | ROAD DIET (48FT)



Plan View

## ADDITIONAL CONSIDERATIONS

**Congress Terrace (north side) & Trail / Park Connection.** This concept highlights an expansion of green space along the north side of Congress Street that can be used to manage stormwater through a variety of best management practices. This area could be further enhanced through art installations and/or educational signage.

The trail/park entrance in this concept provides a grass buffer between the existing paved areas and the roadway. No other improvements are shown; however, a bike share station could be provided on the north of the asphalt path.

The plan (above) and illustration (on the next page) depict Scenario C improvements with greater detail.

## SCENARIO SCORECARD

“C”  
(48FT)

### ENVIRONMENT

Usable Green Space	○	
Reduces Runoff	○	
Limits Impervious Area (pavement ft.)	○	48
Human Health Benefit	○	

### MOBILITY

Bicycle Safety	●	
Pedestrian Safety (max crossing distance)	○	32
Vehicular Free-Flow	●	
Vehicular Speed Control	○	

### ECONOMIC DEVELOPMENT

Beautification/Amenity Opportunity	○	
Parking Quantity	○	
Redevelopment Expansion (on east side only)	○	

### COST & MAINTENANCE

Road Maintenance	○	
Open Space Maintenance	●	
Construction Cost* (in Millions)	○	1.7

### FACTORS NOT RATED (possible in all road scenarios)

- Preserve Bio-diversity & Habitat Zone
- Gateways, Landscaping & Street Furniture (Decorative) Lighting
- Bus Stop locations - Safety Considerations
- Plaza Space Design (outside of R.O.W.)

### KEY

- Good / Strong
- Fair / Neutral
- Poor / Weak

## BALL PARK CONSTRUCTION COST\*

# \$1.7 MILLION

\* This is a preliminary estimated cost that includes the following: mobilization, bonding, insurance, erosion control, removals, unclassified excavation, curb and gutter, asphalt and aggregate road base, crosswalk/parking/bike enhancements, paving markings, regulatory signs, restoration, bio-swale and landscaping assumptions, 10% contingency and 16% design engineering costs. Notable exclusions include lighting, landscaping, utility work, street furniture, and plaza enhancements.

(SEE APPENDIX A FOR GRANT OPPORTUNITIES)

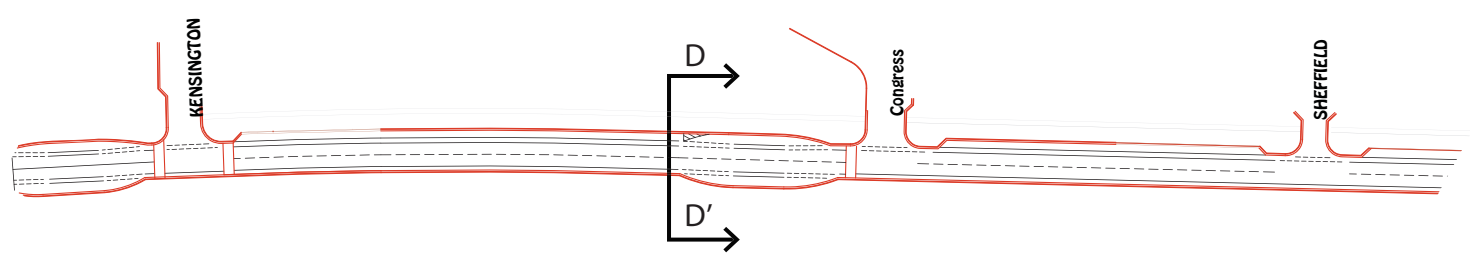


Congress Street, looking west to Oak Leaf Trail Connection

# SCENARIO D | ROAD DIET (42FT+)



\* Bus stop locations w/ no parking



Top: Concept Plan  
Middle: Cross Section  
Bottom: Plan View with Section Line

## UNIQUE ELEMENTS

- Extend Westside Terrace (bio-swale, landscaping, exercise path w/ workout stations)
- Paved Circle w/ Fountain at Congress Street / Oak Leaf Trail
- Congress Street Road Diet (plaza space / landscaping)
- Bus Stops on Farside (NB) and Nearside (SB)

\* Unless its deemed necessary to include some parking near park/trail entrances, which would require additional encroachment on the park side terrace. To minimize impact to pedestrian crossing length, west side parking should only be considered away from intersections.

\*\* This improvement requires diverting traffic and bike lanes, which can become a nuisance if repeated throughout the corridor. Therefore, this improvement should only be used at major cross streets with heavy left turn movements.

Scenario D narrows the road by fourteen feet (down to forty-two feet) with the allocation of space and uses changing dramatically. The drive lanes are reduced to eleven-and-a-half feet and bike lanes are marked (five feet on the east side and five-and-a-half feet on the west side against curb). Parking is eliminated from the park side of the street\*, converting it into additional green space (with the exception of where there is bus stop bays). The north-bound side will have a eight-and-a-half foot parking lane, except at bus stop locations. No left-turn lanes are shown, but would be possible if the road widens at and before the intersection, diverting the thru drive and bike lanes. This will mitigate the planned increase of the park side terrace in these locations.\*\*

### Best Practices

- » The narrowing of the roadway reduces stormwater runoff (i.e., reduced impervious area), and helps to control traffic speeds in the corridor
- » The extended park side terrace provides ample space to provide rain gardens, bio-swales, enhanced landscape plantings, walking paths (with exercise stations), and/or other amenities.
- » Narrow intersection bumpouts (outside of bike lanes) are opportunities for additional green space/landscaping, while providing a shorter and safer pedestrian crossing for pedestrians.
- » Painted crosswalks (using the continental pattern) provide a visual cue for vehicle traffic to slow down/stop for pedestrians/bicyclists.
- » All bus stops have wider pads and are connected to sidewalks. Northbound bus stops are pushed to the farside of the intersection to provide improved visibility for pedestrians looking to cross the street.



Plan View

## ADDITIONAL CONSIDERATIONS

### Congress Terrace (north side) & Trail / Park Connection.

This concept shows a parklet on the north side of Congress with a wider sidewalk and central plaza that incorporates benches and landscaping along the edges.

The narrowing of Wilson Drive provides opportunities to make this trail/park entrance more substantial with a (paver) plaza, water/sculpture feature, kiosk, landscaping, etc. This area also shows a bike access ramp, which allows bicyclist a quick exit from Wilson Drive.

The plan (above) and illustration (on the next page) depict Scenario D improvements in greater detail.

## SCENARIO SCORECARD

“D”  
(42FT)

### ENVIRONMENT

Usable Green Space	●	
Reduces Runoff	●	
Limits Impervious Area (pavement ft.)	●	42
Human Health Benefit	●	

### MOBILITY

Bicycle Safety	●	
Pedestrian Safety (max crossing distance)	○	34
Vehicular Free-Flow	○	
Vehicular Speed Control	●	

### ECONOMIC DEVELOPMENT

Beautification/Amenity Opportunity	●	
Parking Quantity	○	
Redevelopment Expansion (on east side only)	○	

### COST & MAINTENANCE

Road Maintenance	●	
Open Space Maintenance	○	
Construction Cost* (in Millions)	●	1.5

### FACTORS NOT RATED (possible in all road scenarios)

- Preserve Bio-diversity & Habitat Zone
- Gateways, Landscaping & Street Furniture (Decorative) Lighting
- Bus Stop locations - Safety Considerations
- Plaza Space Design (outside of R.O.W.)

### KEY

- Good / Strong
- Fair / Neutral
- Poor / Weak

## BALL PARK CONSTRUCTION COST\*

# \$1.7 MILLION

\* This is a preliminary estimated cost that includes the following: mobilization, bonding, insurance, erosion control, removals, unclassified excavation, curb and gutter, asphalt and aggregate road base, crosswalk/parking/bike enhancements, paving markings, regulatory signs, restoration, bio-swale and landscaping assumptions, 10% contingency and 16% design engineering costs. Notable exclusions include lighting, landscaping, utility work, street furniture, and plaza enhancements.

(SEE APPENDIX A FOR GRANT OPPORTUNITIES)



Congress Street, looking west to Oak Leaf Trail Connection

# CONCLUSIONS

This document is intended to help the Village of Shorewood implement the desired vision for the Wilson Drive Corridor. All options presented provide a safe, functional street that will greatly improve the bikability, walkability and aesthetics of the Wilson Drive corridor. The final selection of the road design will be decided by the Village Board; however, below describes the recommendations by the Steering Committee and the planning consultant based on the feedback provided by past general public and task force efforts.

## STEERING COMMITTEE

The planning consultant provided an explanation of each potential design based on the pre-determined four scenarios, and provided an assessment of these designs per the primary factors discussed by the task force. The steering committee completed their own assessment and concluded that they could eliminate Scenarios "A" and "C". However, consensus on the final preferred scenario could not be made. Therefore, this leaves Scenario B (Boulevard) and Scenario D (forty-two foot width - no park side parking) as the finalists.

The steering committee also provided feedback on potential design elements to be incorporated in the final design per images provided by the planning consultant (see Appendix B for details).

## PLANNING CONSULTANT

The planning consultant concurs and reinforces that Scenarios "B" and "D" are the strongest options for the corridor based on the documented stakeholder feedback and data provided. In particular, the low demand for parking on both sides of the street, especially on the park side, suggest a road diet would better align with the task force and work groups interests/vision. Both Scenarios "B" and "D" reallocate the space currently dedicated to parking on park side, while the other two scenarios maintain parking on both sides of the street throughout the corridor.



Scenario "B" Plan View (at Congress Street)



Scenario "D" Plan View (at Congress Street)

# APPENDIX A - FUNDING SOURCES

NAME & DESCRIPTION	GRANTING AGENCY	APPLICATION DEADLINES	ELIGIBILITY REQUIREMENTS	FUNDING MAXIMUMS	LOCAL MATCH REQUIREMENTS
<b>TRANSPORTATION</b>					
<b>PeopleForBikes</b> * Funds bicycle infrastructure projects such as bike paths, lanes, trails, and bridges, mountain bike facilities, bike parks and pump tracks, BMX facilities, end-of-trip facilities (bike racks, storage), and more.	PeopleForBikes	April 7, 2017 and October 13, 2017	Applicants can be from city/ county agencies or departments working on projects with a focus on bicycling, active transportation, or community development.	\$10,000	>50%
<b>Congestion Mitigation and Air Quality Improvement Program (CMAQ)</b> * Encourages transportation projects that improve air quality. It includes efforts to enhance public transit, bicycle/pedestrian facilities, ridesharing programs and facilities, and technologies that improve traffic flow and vehicle emissions.	WisDOT	2017 (applications are solicited every other year - previous deadline was June 19, 2015)	Three broad categories are eligible for funding: 1. Projects that reduce the number of vehicle trips and/or vehicle miles traveled (VMT); 2. Projects that reduce emissions related to traffic congestion; and/or 3. Projects that reduce the per mile rate of vehicle emissions through improved vehicle and fuel technologies.	CMAQ is a reimbursement program. • Construction projects must have a total projected expense of \$200,000 or more • Non-construction projects must have a total projected expense of \$50,000 or more	20%
<b>Recreational Trail Aids (RTA) Program</b> * Provides reimbursement for development and maintenance of recreational trails and trail-related facilities for both motorized and non-motorized recreational uses.	WDNR	May 1	Eligible projects in order of priority are: maintenance and restoration of existing trails; development and rehabilitation of trails and trailhead facilities and trail linkages; construction of new trails; and acquisition of property for trails.	\$45,000	50%
<b>The Bus and Bus Facilities Program</b> * A federally-funded formula and discretionary capital grant program providing capital funding to public transit systems to replace, rehabilitate, and purchase buses and related equipment and to construct bus-related facilities.	WisDOT	2017 (last year's deadline was November 15, 2016)	WisDOT allocates funds to urban transit systems based upon formula, and also awards discretionary grants to transit systems serving a population of between 50,000 and 200,000 based on evaluation criteria such as consistency with local transit priorities, age and deferred maintenance of vehicles or facilities, and demonstrated commitment of local share.	unavailable	unavailable
<b>The Bus and Bus Facilities Program</b> * A federally-funded formula and discretionary capital grant program providing capital funding to public transit systems to replace, rehabilitate, and purchase buses and related equipment and to construct bus-related facilities.	WisDOT	2017 (last year's deadline was November 15, 2016)	WisDOT allocates funds to urban transit systems based upon formula, and also awards discretionary grants to transit systems serving a population of between 50,000 and 200,000 based on evaluation criteria such as consistency with local transit priorities, age and deferred maintenance of vehicles or facilities, and demonstrated commitment of local share.	unavailable	unavailable
<b>Transportation Alternative Program (TAP)</b> * TAP provides for a variety of alternative transportation projects, including many that were previously eligible activities under separately funded programs. TAP incorporates the following three former WisDOT multi-modal transportation improvement programs: • Safe Routes to School (SRTS) • Transportation Enhancements (TE) • Bicycle & Ped Facilities Program (BPPP)	WisDOT	2017	Eligible activities include construction, planning and design of on-road and off-road trail facilities for pedestrians, bicyclists, and other non-motorized forms of transportation; construction, planning and design of infrastructure-related projects and systems that will provide safe routes for non-drivers; community improvement activities; environmental mitigation activities; recreational trails program; SRTS program; etc.	WisDOT reimburses project sponsors for the federal share of 80% of the approved project cost up to the limit of the award. The minimum project cost is \$300,000 including any design work.	20%
<b>State Infrastructure Bank (SIB) Program</b> * The State Infrastructure Bank (SIB) Program offers a range of loans and credit options to help finance eligible surface transportation projects. The Wisconsin SIB program is a revolving loan program.	WisDOT	Ongoing	Eligible projects include construction of parking facilities, bicycle lanes and pedestrian walkways to better facilitate customer traffic on or near retail centers and tourist attractions; providing signal lights, turn lanes and pedestrian walkways at busy highway intersections; improving an interchange for a new industrial park or commercial development; constructing or widening a road linking an intermodal facility or enhancing a road leading up to a brownfield property.	WisDOT charges a 2% interest rate on the loan principal and projects can be amortized up to 25 years.	N/A

NAME & DESCRIPTION	GRANTING AGENCY	APPLICATION DEADLINES	ELIGIBILITY REQUIREMENTS	FUNDING MAXIMUMS	LOCAL MATCH REQUIREMENTS
<b>STORMWATER MANAGEMENT</b>					
<b>Urban Nonpoint Source &amp; Storm Water Management Grant Program</b> * A program that provides grants to local governments for planning and construction of projects to control stormwater runoff.	WDNR	2017 (last year's deadline was April 15, 2016)	Planning grants can fund stormwater management planning for urban areas, preparation of local stormwater ordinances, evaluation of storm water utilities, illicit discharge detection and elimination and public information and education activities. Construction grants can fund the engineering design and construction of BMPs, streambank stabilization, storm sewer rerouting and land acquisition and easement purchase.	\$150,000 (construction) \$85,000 (planning)	50% (construction) 70% (planning)
<b>Clean Water Fund Program</b> *A subsidized loan/grant program that provides financial assistance to municipalities for wastewater treatment facilities and urban stormwater runoff projects.	WDNR and WDOA	October 31	Primary eligible activities include construction of publicly owned sewage system facilities, collection system, lift stations, treatment plant; publicly owned, operated and controlled individual systems; public projects that mitigate or prevent groundwater pollution or surface water pollution.	\$650,000 maximum	None
<b>Fund for Lake Michigan</b> *A southeastern Wisconsin grant program that invests in efforts which enhance the health of Lake Michigan and its shoreline and tributary river streams and benefit the people, plants and animals that depend on the system.	Fund for Lake Michigan	Early October	Eligible projects enhance the ecological health of near shore and coastal areas and rivers of southeastern Wisconsin through habitat preservation and restoration; and/or improve the quality of water flowing into Lake Michigan through pollutant reductions including toxins and nutrients such as phosphorus.	Unknown	Unknown
<b>Community Development Block Grant - Public Facilities (CDBG - PF)</b> *A grant program for critical infrastructure projects (water and sanitary system improvements, stormwater management improvements, etc.).	WDOA	May 2017	Eligible projects also include downtown enhancements, libraries, EMS/fire stations, senior centers, community centers, etc. Must demonstrate direct benefit to low-to-moderate income (LMI) households.	\$500,000	50%

NAME & DESCRIPTION	GRANTING AGENCY	APPLICATION DEADLINES	ELIGIBILITY REQUIREMENTS	FUNDING MAXIMUMS	LOCAL MATCH REQUIREMENTS
<b>PLACEMAKING OPPORTUNITIES</b>					
<b>Community Development Investment Grant</b> * Provides grants for local shovel-ready community initiatives, with an emphasis on downtown redevelopment. Grants are available for planning efforts or for implementation projects.	WEDC	Ongoing	Implementation grants include: a) development of significant destination attractions; b) rehabilitation and reuse of landmark buildings; c) infill development; d) upper story development; e) blight elimination in downtown locations; f) remediation of downtown industrial properties critical to area redevelopment; and others. Planning grants include: a) plans, feasibility studies and market analysis; b) district or site specific downtown redevelopment plans; c) historic preservation planning; d) branding and marketing; e) business recruitment campaigns; and f) vacant space strategy development.	\$50,000 (planning) \$500,000 (implementation)	30%
<b>Our Town Grant</b> * Supports creative placemaking projects that deliberately integrate arts and culture into community revitalization work.	National Endowment for the Arts	September 2017	Placemaking projects require a partnership between a nonprofit organization and a local government entity, with one of the partners being a cultural organization.	\$200,000	100%



# APPENDIX B - SUPPLEMENTAL INFO

# ROAD PROFILE SCORECARD

## SCENARIOS

	“A” (Existing - 56FT)	“B” (Median- 56FT)	“C” (48FT)	“D” (42FT)
<b>ENVIRONMENT</b>				
Usable Green Space	○	○	○	●
Reduces Runoff	○	●	○	●
Limits Impervious Area (pavement ft.)	○ 56	● 44	○ 48	● 42
Human Health Benefit	○	○	○	●
<b>MOBILITY</b>				
Bicycle Safety	●	○	●	●
Pedestrian Safety (max crossing distance)	○ 37	● 18	○ 32	○ 34
Vehicular Free-Flow	○	●	●	○
Vehicular Speed Control	○	●	○	●
<b>ECONOMIC DEVELOPMENT</b>				
Beautification/Amenity Opportunity	○	○	○	●
Parking Quantity	●	○	○	○
Redevelopment Expansion (only on east side)	○	○	○	○
<b>COST &amp; MAINTENANCE</b>				
Road Maintenance	○	○	○	●
Open Space Maintenance	●	○	●	○
Construction Cost* (in Millions)	○ 2.0	○ 1.7	○ 1.7	● 1.5

\* This is a preliminary estimated cost that includes the following: mobilization, bonding, insurance, erosion control, removals, unclassified excavation, curb and gutter, asphalt and aggregate road base, crosswalk/parking/bike enhancements, paving markings, regulatory signs, restoration, bio-swale and landscaping assumptions, 10% contingency and 16% design engineering costs. Notable exclusions include lighting, landscaping, utility work, street furniture, and plaza enhancements.

## FACTORS NOT RATED (possible in all road scenarios)

- Preserve Bio-diversity & Habitat Zone
- Gateways, Landscaping & Street Furniture
- (Decorative) Lighting
- Bus Stop locations - Safety Considerations
- Plaza Space Design (outside of R.O.W.)

## KEY

- Good / Strong
- Fair / Neutral
- Poor / Weak

## ROAD INFRASTRUCTURE / AMENITY COST LIST

<b>STANDARD ROADWAY</b>		
	<b>Unit</b>	<b>High Estimate</b>
ASPHALT	SY	\$17
ROAD BASE (8-inch aggregate)	SY	\$17
CURB & GUTTER	LF	\$15
CONCRETE SIDEWALK	SF	\$7
WHITE PAVEMENT MARKINGS (6-inches)	LF	\$5
WHITE PAVEMENT MARKINGS (18-inches)	LF	\$17
<b>DECORATIVE ROAD ENHANCEMENTS</b>		
DECORATIVE CONCRETE CROSSWALKS	SF	\$17
PERMEABLE PAVINGS (in 7.5-FT parking zone)	LF	\$100
POROUS ASPHALT (in 7.5-FT parking zone)	LF	\$75
THERMOPLASTIC PATTERNING/MARKINGS	SF	\$14
<b>LIGHTING</b>		
COBRA LIGHTING (standard DOT lights)	EA	\$2,000
DECORATIVE LIGHTING	EA	\$4,000
LIGHT INSTALL	EA	\$2,000
<b>SITE FURNISHINGS</b>		
SINGLE U-SHAPED BIKE RACK	EA	\$250
BIKE RACK	EA	\$2,000
BIKE FIXATION STATION	EA	\$2,500
BENCH	EA	\$3,000
HYDRATION STATION	EA	\$7,000
TRASH/RECYCLING RECEPTACLE	EA	\$2,000
<b>PLAZA FEATURES</b>		
DECORATIVE PAVING	SF	\$35
LARGE KIOSK W/ SOLID BASE	LS	\$20,000
SMALL KIOSK W/ NO BASE (POLE ONLY)	LS	\$7,500
DRINKING FOUNTAIN	LS	\$7,500
<b>TRAIL / CROSSINGS</b>		
EXERCISE EQUIPMENT		VARIABLE
RECTANGULAR RAPID FLASH BEACON (RRFB)	Crossing	\$15,000
<b>BIO-SWALE + PLANTS</b>		
7-FT SWALE (4-ft bottom, 6-inch depth)	LF	\$80
10-FT SWALE (7-ft bottom, 6-inch depth)	LF	\$120

Source: MSA Professional Services

## WILSON DRIVE RECONSTRUCTION PROJECT: *Road Infrastructure / Amenities*

### 1. Vehicle-Oriented Infrastructure

- A. Drive Lane\* : min. 10 feet; 11 – 12 Feet
- B. Left Turn Lane\* : 10 – 12 Feet – *minimize emphasizing (or eliminate) crosswalks on side of the street with left turn lane, unless none is possible on the other leg of the intersection*
- C. Right Turn Lane\* : min. 9 feet; 10-11 Feet – *generally not possible w/ a bumpout present*
- D. Parking Lane\* : min. 6 Feet; 7.5 – 9 Feet
  - a. Standard Asphalt
  - b. Porous Asphalt
  - c. Brick / Pavers (see Character Image D)

### 2. Other Transit Mode Infrastructure

- A. Shared Parking / Bike Lane\* : 10- 12 Feet (see Character Image I)
- B. Bike Lane\* : 4 – 7 Feet
  - a. Standard Lane Striping
  - b. Add Painted Lane Separator: Min. 3 Feet (see Character Image L)
  - c. Add Painted / Thermoplastic Green Lane (see Character Image K)
- C. Bus Lane/Bay/Stop Farside\* : 10 – 12 Feet – *this placement location is safer for pedestrians but can increase walking distance to stop and could lead to jaywalkers (southbound stop)*
- D. Bus Lane/Bay/Stop Nearside\* : 10 – 12 Feet – *this placement can impact visibility of pedestrians crossing the street, but puts the stop closer to the intersection*

### 3. Crosswalk Safety/Beautification Enhancements

- A. Bumpouts on Wilson Only (*outside of bike lane, if applicable*)
- B. Bumpouts on Wilson (*outside of bike lane, if applicable*) and Cross Streets
- C. Median / Pedestrian Safety “refuge” Islands\* : Min. 6 FT; 8-10 Feet (see Character Image M) – *safety refuge islands should be used only at prime crossing locations to minimize impact on weaving drive lanes repeatedly, unless this is a desired outcome*

\* Excludes curb/gutter

- D. Painted / Thermoplastic Decorative Pattern w/ in the Crosswalk (see Character Images N & R) – *if colored pavement is desired, then the crosswalks should be concrete*
- E. Unique Paint Design w/in the Crosswalk (see Character Image Q)
- F. Decorative (stamped/brick) Paving / Painted along border of Crosswalk (see Character Image O) – *if colored pavement is desired, then the crosswalks should be concrete*
- G. Painted Ladder or Continental Pattern Crosswalk (see Character Image P)
- H. Rectangular Rapid Flash Beacon (RRFB) (see Character Image O)

4. Stromwater Management Amenities

- A. Porous Pavement / Pavers / Brick Parking Area (see Item #1D) – *should not be used in heavily traveled areas, especially drive lanes*
- B. Median bioswale w/ option of dry river bed (see Character Images A, B & C)
- C. Bumpout bioswale (see Character Images E & F)
- D. Terrace bioswale w/ option of dry river bed (see Character Images G & H)

\* Excludes curb/gutter

# CHARACTER IMAGES

- The number of dots signifies preference of design elements by the Steering Committee.

## Stormwater Management



Median bioswale with dry river bed



Median bioswale with dry river bed



Median bioswale



Permeable pavers in parking lane



Sunken bioswale with curbed edge



Bump out bioswale



Terrace bioswale



Dry stream with plantings in terrace

## Bicyclist enhancements



Shared bicyclist and parking lane markings



Bike Lane



Green bicycle lane



Bike lane with Lane Separator

## Pedestrian Enhancements



Crosswalk with median respite



Decorative crosswalk border w/ RRFBs



Decorative, painted crosswalk



Painted crosswalk



Painted Crosswalk using ladder pattern



Stamped Brick Outline (thermoplastic)

## Placemaking opportunities



Abstract sculpture



Nature inspired sculpture



Sidewalk gateway feature (Shorewood example)



Nature inspired sculpture



Trail gateway feature



Plaza with water feature

# CHARACTER IMAGES



Specialty bird / plant info sign



Specialty trail entrance signage



Outdoor exercise stations



Bike Share Station



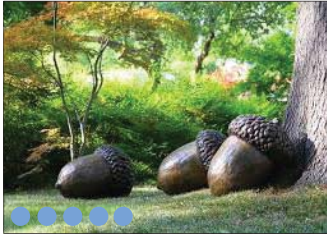
Bike Repair Station



Hydration Station

# CHARACTER IMAGES (TOP RATED)

The highest rated elements in order of preference by the Wilson Drive Steering Committee



Nature inspired sculpture



Green bicycle lane



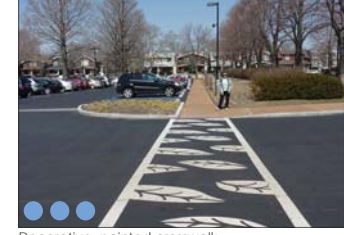
Hydration Station



Specialty bird / plant info sign



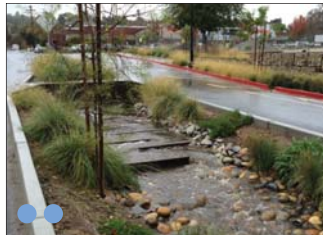
Sunken bioswale with curbed edge



Decorative, painted crosswalk



Median bioswale



Median bioswale with dry river bed



Shared bicyclist and parking lane markings



Bike lane with Lane Separator



Crosswalk with median respite



Terrace bioswale



Median bioswale with dry river bed



Bump out bioswale



Permeable pavers in parking lane



Abstract sculpture



Nature inspired sculpture

The number of dots signifies preference of design elements by the Steering Committee.

A photograph of a residential street lined with trees in autumn. The road is paved and has fallen leaves scattered on it. A person is walking on the sidewalk to the left. A signpost with a '14' sign is visible. The image is overlaid with a red banner on the left and a green banner on the right.

wilson drive  
reconstruction project

WISCONSIN  
shorewood