

CENTRAL GREENWAY

Regional Trail Master Plan

South Segment: Interstate 94 to Cottage Grove Ravine Regional Park



September 6, 2017
Draft

Washington
County

Central Greenway Regional Trail

South Segment: Interstate 94 to Cottage Grove Ravine Regional Park
Master Plan

Washington County, MN

Draft, September 6, 2017

Prepared for:



Prepared by:



Acknowledgments

The Central Greenway Regional Trail Master Plan has been a team effort led by a dedicated group consisting of Washington County staff, along with local city and agency staff.

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Executive Summary

The Central Greenway Regional Trail will enhance the region's multi-modal transportation and recreation system by providing a safe and accessible trail connection between three of the region's premier regional park facilities, Big Marine Park Reserve, Lake Elmo Park Reserve and Cottage Grove Ravine Regional Park. The Central Greenway Regional Trail will provide direct connections for people living in the suburban communities of Lake Elmo, Cottage Grove and Woodbury to vital employment, retail, and recreational sites in the east metropolitan area – providing safety, economic development, mobility, and environmental benefits.

Trail Location

This trail master plan will cover segments of existing and proposed trail between I-94 and Cottage Grove Ravine Regional Park. The 4.0 mile trail segment between I-94 and County Road 18/Bailey Road is developed. This plan includes designating these segments as a regional trail. This plan also proposes developing 5.65 miles of trail that will connect County Road 18/Bailey to Cottage Grove Ravine Regional Park. A majority of the trail distance exist on both the east and west side of County Road 19/Keats Avenue.

Natural Resource Description

The Central Greenway Regional Trail corridor is located in a suburban edge area with connections to local and regional trails and parks in both the City of Woodbury and the City of Cottage Grove. The trail corridor is mostly flat. The Central

Greenway Regional Trail provides access high quality nature resources in the Cottage Grove Regional Park. The park's terrain includes hardwood and dry oak forest, oak savanna, and prairie.

The Minnesota Land Cover Classification System (MLCCS) identifies the majority of the Central Greenway Regional Trail route as two main land covers. North of Bailey Road the land cover is predominantly impervious. South of Bailey Road the land cover is predominantly agricultural land, except southwest of 70th Street S., which the MLCCS identifies as impervious. There are several locations adjacent to the corridor that the MLCCS identifies as forest and short grasses, including Eagle Valley Golf Course and Prestwick Golf Club.

Development Concept

A fully developed Central Greenway Regional Trail will act as a central arterial route. This is an important link in Washington County's trail network and will connect to many of region's amenities. When fully developed, the Central Greenway Regional Trail will provide residents of Washington County with direct access to a regional trail that connects three premier regional park facilities: Big Marine Park Reserve, Lake Elmo Park Reserve and Cottage Grove Ravine Regional Park. In addition, the regional trail will provide a separated, off-road facility for recreation and transportation purposes that will connect with adjacent local trails and other recreation amenities, such as Eagle Valley Golf Course and a future city park along the west side of Keats Avenue in Cottage Grove.

Central Greenway Regional Trail Segments				
Segment	From	To	Along	Length
A	I-94	Valley Creek Road	County Road 19/Keats Avenue	2.0 Miles
B	Valley Creek Road	Bailey Road	County Road 19/Keats Avenue	2.0 Miles
C	Bailey Road	Crossroads Church	County Road 19/Keats Avenue	1.85 Miles
D1	Crossroads Church	Military Road	County Road 19/Keats Avenue	1.0 Mile
D2	Crossroads Church	Military Road	Off-Road Alignment West of Crossroads Church	1.6 Miles
E	Military Road	85th Street	County Road 19/Keats Avenue	1.6 Miles
F	85th Street	Park Entrance	County Road 19/Keats Avenue	1.2 Miles

Figure I: Central Greenway Regional Trail Proposed Alignment

Trail Segments

The section of the Central Greenway Regional Trail covered in this master plan has been divided into six segments (Figure 15) that are composed of developed and undeveloped trail. The trail segments generally follow the County Road 19/Keats Avenue alignment but there are two exceptions. The first is in Lake View Knolls Park where the trail follows existing park trails south until Valley Creek Road. The second location is west of Crossroads Church, where an alternate alignment has been identified that would extend the trail off-road for a distance of 1.6 miles, connecting at Military Road with the proposed trail corridor as it extends south along the west side of County Road 19/Keats Avenue. Washington County will determine which alignment is best suited for trail development at a future date.

Implementation

It is anticipated that the regional trail will be implemented in stages, with the construction of various stages driven by available funding and local factors, such as timing of adjacent roadway improvements, and public desire to expand the

regional trail system. Until the corridor is fully developed, gaps in the regional trail will exist. However, the ultimate trail geometry will consist of a 10-foot-wide (minimum) paved surface, separate from any adjacent roadway, so that trail users will not share the roadway with motorized vehicles.

Development Costs

Regional trail development includes the cost to prepare the site; reconfigure roadways as required; modify drainage patterns where necessary; pave the trail; and install signage, striping, and landscaping. In total, the estimated development cost for the Central Greenway Regional Trail is \$7,901,000. The cost for development from I-94 to Bailey Road, including rest stops, signage and pedestrian crossing upgrades is estimated to be \$1,299,000, including contingencies. Improvements for the existing segment of trail from Bailey Road to the Cottage Grove Ravine Regional Park entrance is estimated to cost \$6,602,000, including contingencies. The total cost for acquisitions within the proposed corridor is \$470,500.

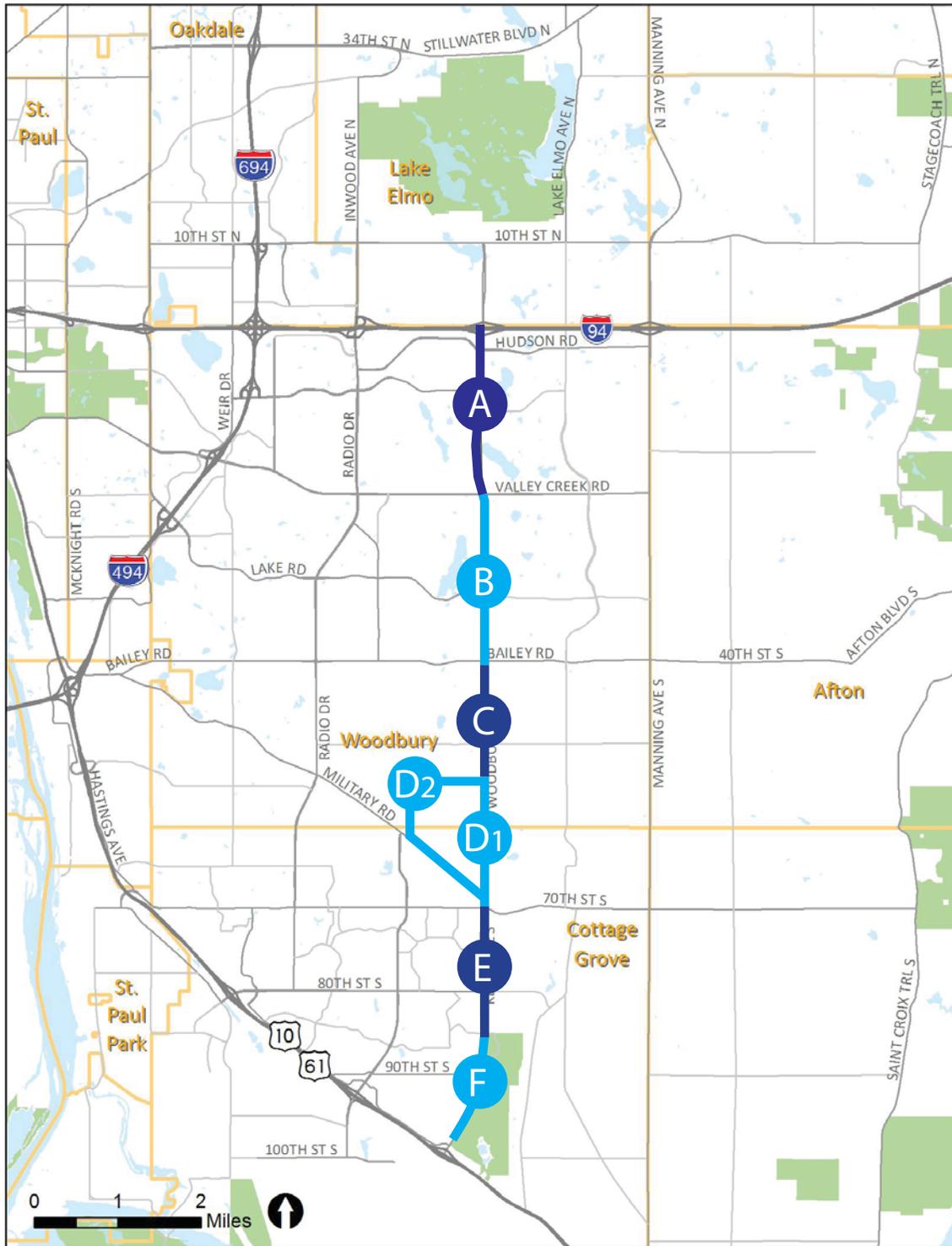


Figure II: Central Greenway Regional Trail Segment Map.

Table of Contents

- Executive SummaryVII
- Introduction.1
- Section I: Boundaries & Acquisitions3
- Section II: Natural Resources9
- Section III: Demand Forecast11
- Section IV: Development Concept.15
- Section V: Conflicts and Coordination with Adjacent Public Services39
- Section VI: Operations & Maintenance41
- Section VII: Public Engagement and Participation43
- Section VIII: Public Awareness51
- Section IX: Accessibility.53
- References54
- Appendix A: Detailed Cost Estimate.55
- Appendix B: Rare Species List.57
- Appendix C: Local Trail Maps59
- Appendix D: Resolutions of Support61

Figures

- Figure 1: Central Greenway Regional Trail Location4
- Figure 2: Land Acquisition and Acreage Summary.6
- Figure 3: Land Acquisition Map.7
- Figure 4: MLCCS Map10
- Figure 5: Trail Primary Service Area Map12
- Figure 6: Household Description.12
- Figure 7: Age Distribution12
- Figure 8: Race12
- Figure 9: Regional Population Forecast.13
- Figure 10: Population Growth Comparisons.13
- Figure 11: Typical Trail Cross-Section16
- Figure 12: Wayfinding Signage Locations18
- Figure 13: Wayfinding Signage Location Map.19
- Figure 14: Existing Eight-Foot Wide Trail Segments20
- Figure 15: Central Greenway Regional Trail Segment Map.21
- Figure 16: Trail Corridor Maps.27
- Figure 17: Summary of public comments and responses49



Introduction

The Central Greenway Regional Trail will enhance the region’s multi-modal transportation and recreation system by providing a safe and accessible trail connection between three of the region’s premier regional park facilities, Big Marine Park Reserve, Lake Elmo Park Reserve and Cottage Grove Ravine Regional Park. The Central Greenway Regional Trail will provide direct connections for people living in the suburban communities of Lake Elmo, Cottage Grove and Woodbury to vital employment, retail, and recreational sites in the east metropolitan area – providing safety, economic development, mobility, and environmental benefits.

When completed, the trail route will measure approximately 25 miles from Big Marine Park Reserve at the north end of the corridor to Cottage Grove Ravine Regional Park at the south end of the corridor. Opportunities for local trail connections will exist along the proposed trail route, and there will be connections to other local attractions including community parks and golf courses.



The Central Greenway Regional Trail will extend south along County Road 19/ Keats Avenue through the Cities of Woodbury and Cottage Grove.



The Central Greenway Regional Trail will connect with trails in Cottage Grove Ravine Regional Park.



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Section I: Boundaries & Acquisitions

Location and Contextual Relationship

The Central Greenway Regional Trail will extend from Big Marine Park Reserve in May Township south to Cottage Grove Ravine Regional Park in the City of Cottage Grove. The trail will be a Regional Linking Trail, as defined by the Metropolitan Council. Linking trails are intended to provide connections between regional parks or park reserves. The Central Greenway Regional Trail will provide a connection between Big Marine Park Reserve and Cottage Grove Ravine Regional Park, generally along the County Road 19/Keats Avenue corridor. County Road 19/Keats Avenue is also referred to as Woodbury Drive, Keats Avenue North, Chemolite Road South and Innovation Road. For this master plan, the roadway will be referred to as County Road 19/Keats Avenue.

This trail master plan will cover the two segments of existing and proposed trail between I-94 and Cottage Grove Ravine Regional Park. The 4.0 mile trail segment between I-94 and County Road 18/Bailey Road is developed, and for a majority of this distance, trails exist on both the east and west side of County Road 19/Keats Avenue. One purpose of this master plan is to identify which existing trail segments will become part of the Central Greenway Regional Trail, and which segments will remain local trails.

South of County Road 18/Bailey Road, there are only small segments of existing trail, interspersed along both sides of County Road 19/Keats Avenue, and in varying conditions. The purpose of the master plan for this 5.65 mile segment of trail is to identify the best location for the trail to connect

the existing trails north of County Road 18/Bailey Road to Cottage Grove Ravine Regional Park.

The Cities of Woodbury and Cottage Grove have plans for extensive local trail systems. Woodbury's local trail system is more fully developed than Cottage Grove's system, due, in part, to the level of development within the cities, in this part of Washington County. As development in Cottage Grove expands to the south, the local trail system will expand accordingly.

In addition to the local trail systems, South Washington Watershed District owns several parcels of property along the County Road 19/Keats Avenue corridor, which may play an important role in providing locations for local trails to connect between existing and future neighborhoods and connections to the Central Greenway Regional Trail.

Acquisition Status

The Central Greenway Regional Trail consists of developed and undeveloped segments in the corridor between Interstate 94 and Cottage Grove Ravine Regional Park. Existing local trails between Interstate 94 and Bailey Road will be identified as segments of the regional trail. No land acquisitions are needed for this segment of trail.

The Central Greenway Regional Trail south of County Road 18/Bailey Road is mostly undeveloped. As a general guideline, Washington County Parks will attempt to work within the established right-of-way along County Road 19/Keats Avenue. Washington County will coordinate with the local municipalities and other potentially affected agencies,





Figure 1: Central Greenway Regional Trail Location

including MnDOT, as needed. The proposed trail alignments along County Road 19/Keats Avenue south of Bailey Road have been identified with the understanding that future roadway improvements, such as widening the road to four lanes, would require additional right-of-way. If, in the future, the County expands the roadway and additional land is acquired, it is assumed that the proposed roadway plans will include trail in the design. As such, additional right-of-way acquisitions, if needed for incorporating the regional trail adjacent to a future county road widening project, was not studied as part of this master plan.

In the event Washington County does not expand County Road 19/Keats Avenue or trail development precedes roadway improvements, additional right-of-way will be required to develop the proposed trail. The amount of right-of-way required depends on the existing conditions. There are three locations identified in this master plan where additional right-of-way may be required to develop or improve the proposed regional trail. These segments and the right-of-way needed are identified in more detail below and in Figure 3.

Acquisition Area A

Segment C is the proposed trail segment that will extend the regional trail along the west side of County Road 19/Keats Avenue from Bailey Road to Crossroad Church. This plan calls for an underpass located north of Dale Road and south of Bailey Road (see Figure 16). 0.25 acres of additional right-of-way is needed to accommodate the underpass.

Acquisition Area B

Segment D2 is the alternate alignment that would extend the trail west from County Road 19/Keats Avenue north of Crossroads Church south to Military Road on land that

is owned by the City of Woodbury, South Washington Watershed District and is presently in agricultural use. One parcel is owned by a private corporation. This segment is approximately 1.75 miles long and would require a corridor twenty feet wide to accommodate a new trail with clear zones and room for drainage and grading modifications. The total estimated acquisition needed for this segment is 4.25 acres.

Acquisition Area C

There is an existing trail between 80th Street and 85th Street on the east side of County Road 19/Keats Avenue that is eight feet wide. The trail is adequate on a short-term basis, until a permanent trail on the west side of County Road 19/Keats Avenue can be developed. This segment is approximately 0.50 miles long and to develop a trail along the west side of the County Road, an additional ten feet of right-of-way would be needed to accommodate a new trail with clear zones and room for drainage and grading modifications. The total estimated acquisition needed for this segment is 0.60 acres.

Acquisition Area D

Segment F is the proposed trail segment that will extend the regional trail along the west side of County Road 19/Keats Avenue between 85th Street South and the proposed new entrance to Cottage Grove Ravine Regional Park. There are nine parcels along this proposed segment of trail that may be impacted. Land use includes five single-family lots, a church and agricultural fields. This segment is approximately 0.85 miles long and would require an additional twenty feet of right-of-way to accommodate a new trail with clear zones and room for drainage and grading modifications. The total estimated acquisition needed for this segment is 2.0 acres.



Boundaries & Acquisition Costs

The Central Greenway Regional Trail corridor is planned for development within the County Road 19/Keats Avenue right-of-way, with an alternate alignment that may extend west into Woodbury and Cottage Grove. Several segments of the proposed regional trail exist and need little or no improvement. Three segments may need additional right-of-way for development. These segments are described in Section I: Boundaries & Acquisitions. The anticipated cost to acquire the necessary right-of-way for these segments is approximately \$470,500, as shown in Figure 16. Development of trail underpasses may require additional right-of-way, which will depend on the final alignment. Determination of the final alignment of potential underpasses will require coordination with other Washington County agencies, adjacent communities, MnDOT and the South Washington Watershed District.

It is estimated that the underpass located south of 85th Street will require additional right-of-way. The right-of-way needed is included in the 2.0 acres acquisition measurement indicated for the Acquisition Area D in Figure 2.

An additional 0.25 acres of right-of-way is needed for the underpass north of Dale Road. This includes widening the ROW an extra 15 feet, both on the west and east side of County Road 19/Keats Avenue for a short segment indicated on Figure 3. The estimated cost for this acquisition is indicated in Figure 2.

Willing Seller Policy

The regional trail acquisition process is typically a “willing-seller” approach. This means parcel acquisition typically occurs when a property owner is willing and ready to sell, and several acquisition alternatives are often evaluated to best meet the needs of the property owner and the implementing agency. In addition, it is also common for an

implementing agency to closely coordinate with local and regional agencies to partner on other opportunities that may assist in securing the required trail right-of-way. In turn, it is difficult to determine when acquisition will occur and when the trail construction will begin. Acquisition alternatives may include the following:

- » Route the regional trail to use portions of the property with marginal development potential. This could include land adjacent to wetland or flood fringes.
- » Acquire regional trail easements for the trail route through owner/developer negotiations that may include redevelopment incentives.
- » Work with the city and owner/developer to secure park dedication lands for the regional trail in advance of the actual development as applicable.
- » Coordinate with city initiatives that may result in the acquisition of the entire property/parcel, with the intent to resell the property subject to easements for the regional trail.
- » Acquire the development rights to the property. Development areas would then be negotiated with the developer.
- » Accept donations for portions of the property for the regional trail corridor.
- » Acquire a portion of the property through purchase.

Future Acquisition Summary	Acres	Cost*
Acquisition Area A	0.25	\$20,000
Acquisition Area B	4.25	\$164,000
Acquisition Area C	0.6	\$11,500
Acquisition Area D	2.0	\$275,000
Total	7.1 (approx.)	\$470,500
* Based on 2017 tax assessed value of adjacent property.		

Figure 2: Land Acquisition and Acreage Summary

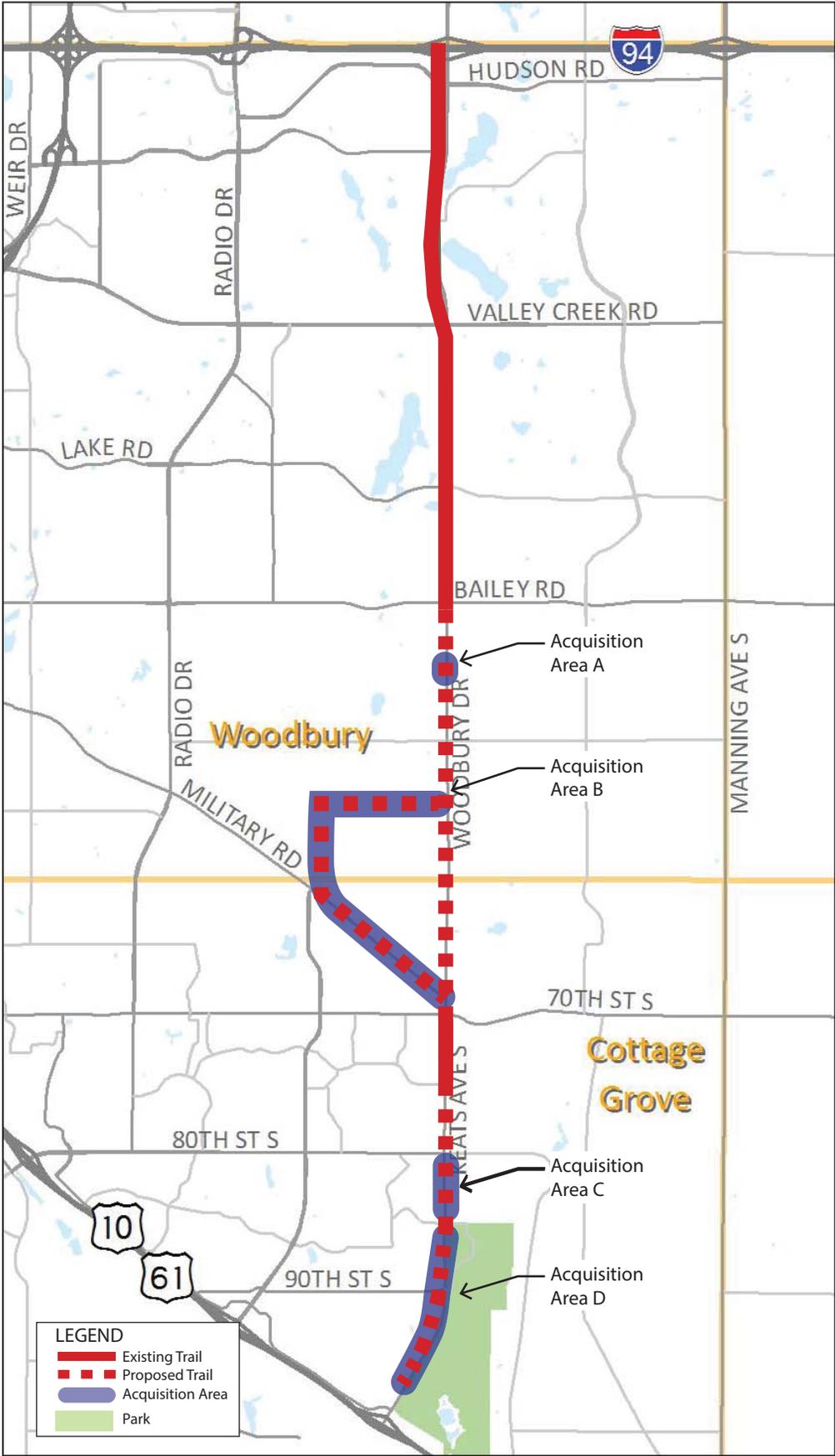


Figure 3: Land Acquisition Map

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Section II: Natural Resources

The Central Greenway Regional Trail corridor is located in a suburban edge area with connections to local and regional trails and parks in both the City of Woodbury and the City of Cottage Grove. The trail corridor is mostly flat.

The Minnesota Land Cover Classification System (MLCCS) identifies the majority of the Central Greenway Regional Trail route as two main land covers. North of Bailey Road the land cover is predominantly impervious. South of Bailey Road the land cover is predominantly agricultural land, except southwest of 70th Street S., which the MLCCS identifies as impervious. There are several locations adjacent to the corridor that the MLCCS identifies as forest and short grasses, including Eagle Valley Golf Course and Prestwick Golf Club.

The Minnesota Department of Natural Resources (DNR) has documented several rare species and high-quality plant communities near the Central Greenway Regional Trail corridor. A one-mile buffer surrounding the project limits was evaluated for the presence of rare plants, animals, native plant communities, and other rare features using Geographical Information Systems (GIS) in conjunction with the MnDNR's Natural Heritage Information System (NHIS) (Copyright 2014 State of Minnesota, Department of Natural Resources). The Natural Heritage data is provided by the Division of Ecological Resources, Minnesota DNR, and was current as of December 2014 (license agreement 625). These data are not based on an exhaustive inventory of the state. The lack of data for any geographic area shall not be construed to mean that no significant features are present.

All documented observances are not directly adjacent to the regional trail and are not anticipated to be impacted by the regional trail. There were seven species identified within three-mile of the Central Greenway Regional Trail. A complete list of species is provided in Appendix B.

No specialized maintenance or construction is proposed for the regional trail corridor to manage any wildlife adapted to urbanized conditions. The Central Greenway Regional Trail provides access high quality natural resources in the Cottage Grove Ravine Regional Park. The park's terrain includes hardwood and dry oak forest, oak savanna, and prairie.

Native Plantings & Pollinator Habitats

Washington County is committed to providing healthy habitat for wildlife. This includes pollinators, such as bees, birds, bats, and other insects, who play a crucial role in flowering plant reproduction and in the production of most fruits and vegetables. Providing habitat for pollinators has a number of benefits:

- » Native flowers and the wildlife they attract will add visual interest to the corridor.
- » Habitat corridors provide the connectivity of habitats that are important for species migration, dispersal, and mixing.
- » Prairie plants help infiltrate water, one acre of established prairie can absorb 9" of rainfall per hour before runoff occurs - capturing stormwater pollutants and increasing groundwater recharge.
- » Cost savings from a reduction in mowing area and frequency.
- » Reduced noise and air pollution.
- » Increases food production for neighborhood gardens and farms.
- » Habitat offers opportunities for people to connect to the land via education, volunteering and community involvement.

In the development of the Central Greenway Regional Trail, the County will consider planting pollinator-friendly vegetation along the trail buffer, outside a 2-foot mowed shoulder. The vegetation will be planted where appropriate, as to match the aesthetic of the adjacent landscape. Specific locations will be determined during the design and development phase. In particular, the portion of the trail south of Bailey Road will be considered because it is surrounded by undeveloped or rural land and most of the trail segments are yet to be built. Diverse seed mixes will be comprised of native grasses and flowers, as recommended by the Minnesota Department of Natural Resources Field Guide to the Eastern Broadleaf Forest Province Native Plant Communities.

Where pollinator-friendly vegetation is planted, Washington County will coordinate the necessary maintenance. This will include annual mowing during the first one to two years of establishment to provide sunlight and to decrease competition for seedlings. Once established, the following maintenance activities will be used; controlled burns, haying and mowing, and noxious weed control on an as-needed basis, based on yearly staff assessments.

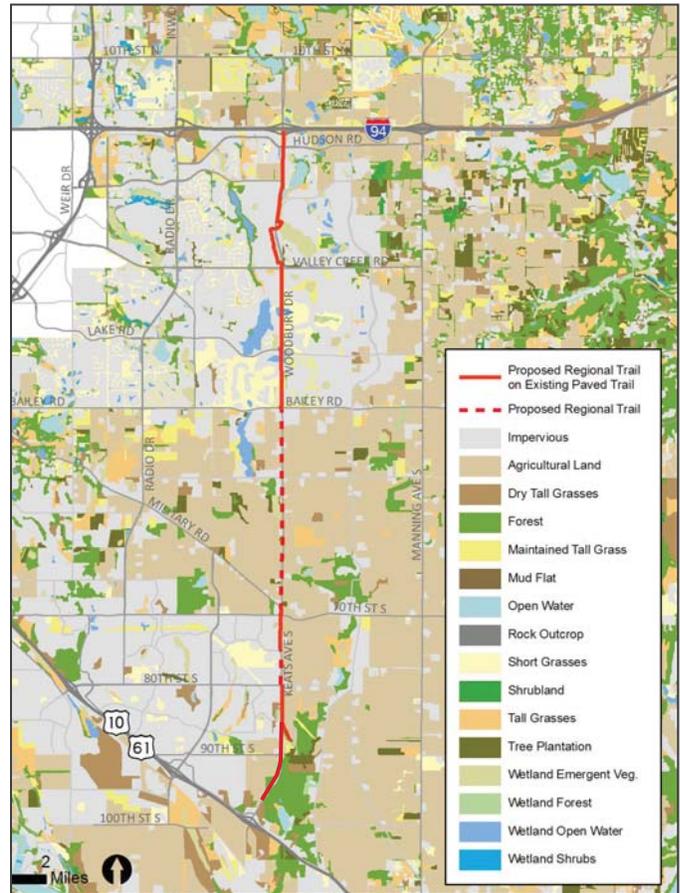


Figure 4: MLCCS Map

Section III: Demand Forecast

Demographic Overview

In general, recreation use trends are affected by demographic trends. By analyzing statewide and regional data, Washington County can begin to assess how the Central Greenway Regional Trail will function within the larger trail network.

Statewide and Regional Trends

The 2014-2018 State Comprehensive Outdoor Recreation Plan (SCORP), published by the Minnesota DNR, gives outdoor recreation decision-makers and managers a focused set of priorities and suggested actions to guide them as they make decisions about outdoor recreation. The SCORP outlines outdoor recreation trends, challenges, and issues, including protecting existing natural resources, sustaining existing facilities, promoting healthy lifestyles, connecting people with nature, and an increasing demand for a diverse range of recreation opportunities based upon population changes.

The Metropolitan Council's 2040 Regional Parks Policy Plan notes that, according to SCORP, several studies show that involvement in nature-based outdoor recreation among young adults and their children had decreased since the 1990s. SCORP also notes that location plays an important role because many users of the regional trail system live within three miles of the park or trail that they utilize. Regional trails play an important role because they provide healthful forms

of exercise for people of all age groups that can be carried out by families, groups, or individuals.

According to SCORP, Minnesota's growth rate has increased since 2000, but at a slower rate than in the 1990s. Although population growth in the state has slowed, the geographic pattern of growth remained largely the same with the high growth areas centered on the Twin Cities metropolitan area. This new growth will fuel demands for near-home recreation opportunities in these areas. The Metropolitan Council's Thrive 2040 MSP forecasted growth rate for the Central Greenway Trail's primary service area is anticipated to increase by close to 30,000 people (Figure 9). Outside factors such as gas prices, trail infrastructure improvements, and increased local sidewalk and trail network connectivity, may also promote increased use as trail users look for more recreation opportunities closer to home and use of the regional trail system as part of their transportation network. Within fully developed areas where population levels are expected to remain relatively stable, trail visitation levels and type of use will also reflect shifting demographics of those areas.

Methodology

To analyze demographics specific to the Central Greenway Regional Trail, Washington County used a quantitative measuring methodology that identifies a primary service area that is three miles on all sides of the proposed trail corridor



(Figure 5). This methodology provides detail specific to the primary service area for the proposed trail corridor, which is defined as users within three miles of the trail corridor. The demographic data on the following pages is based on the primary service area.

Aging Population

While the trend of young adults and their children shows a reduction in their involvement in nature-based recreation, SCORP notes that older adults have maintained a more stable involvement in outdoor recreation. Older adult recreation habits are well established and demand for their preferred activities will continue to be strong. However, as this group ages, physical limitations will require some park and trail visitors to change their recreational activities from higher

intensity activities such as running, in-line skating, and biking to lower-impact recreational activities such as walking, nature observation, and educational opportunities. Figure 7 shows that approximately 25 percent of the residents in the primary service area are currently between the ages of 40 and 55. Many of these activities are accommodated by the regional trail system. The Central Greenway Regional Trail provides a

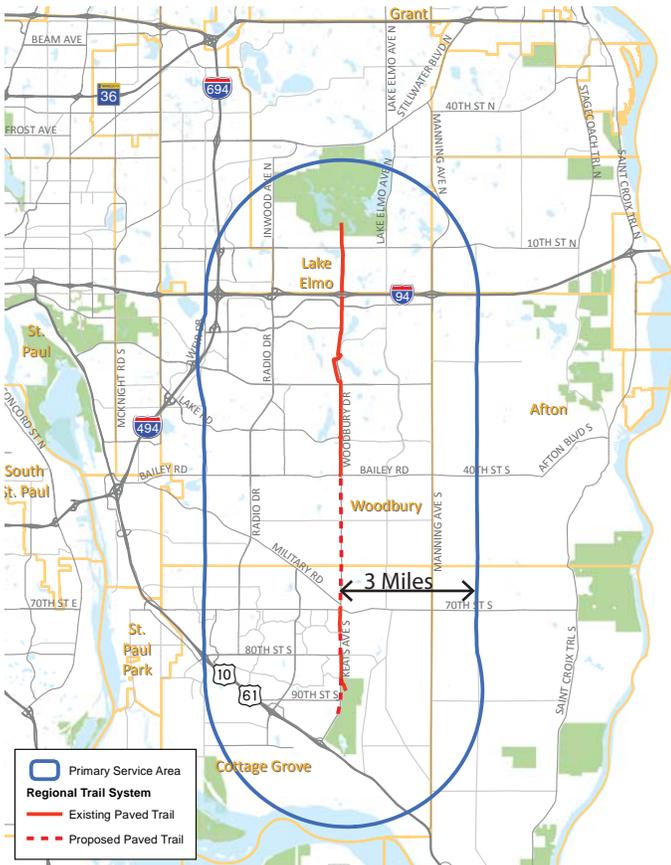


Figure 5: Trail Primary Service Area Map

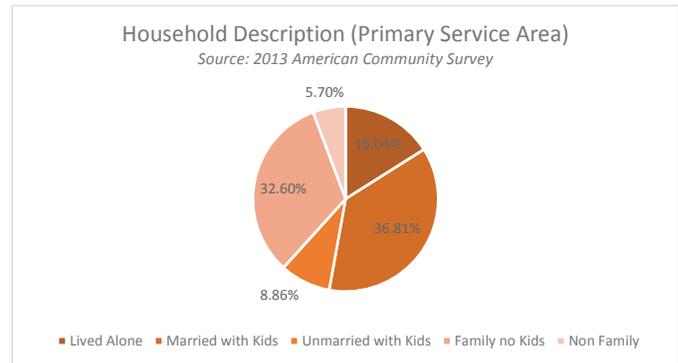


Figure 6: Household Description

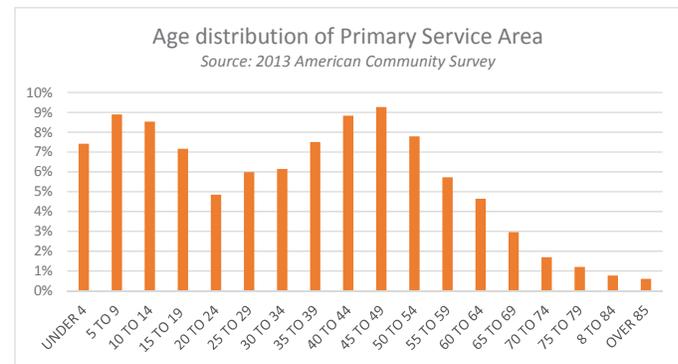


Figure 7: Age Distribution

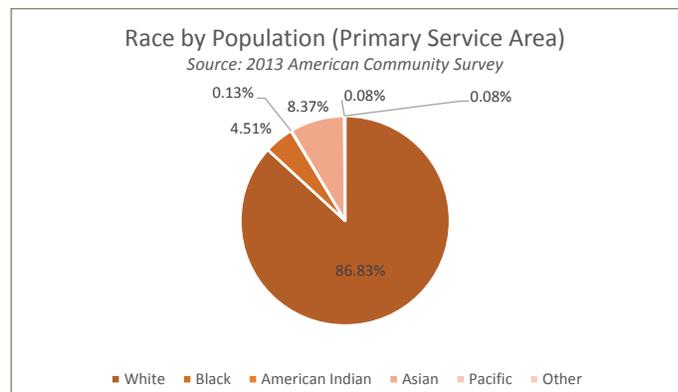


Figure 8: Race

recreational opportunity for older residents. A continuous, wide, and separated trail with limited elevation changes will serve this population well.

Minority Populations

Metropolitan Council demographers anticipate that by 2040, 40 percent of the region’s population will be people of color, compared with 24 percent in 2010. Within the region, there are three prevalent immigrant groups: Hmong/Southeast Asians, Hispanic/Latino, and Somali/West Africans. Within the primary service area, 13 percent of the population are non-white (Figure 8). Washington County will look to provide trail amenities to accommodate trail users of all backgrounds. One strategy that will be explored is providing multi-lingual signage.

Other Trends Affecting Recreation

A 2013 study by the Minnesota Department of Health found that statewide 26 percent of adults were obese and 36 percent were overweight. Obesity is a key predictor for many future health problems, including diabetes. Lack of adequate exercise – partially resulting from inadequate outdoor recreation facilities or opportunities – is often cited as a contributor to obesity. Many young people are not getting enough exercise and face future health risks as a result. The economic health of the state relies on continued use and enjoyment of our outdoor recreation resources. Availability

of a wide range of outdoor recreation opportunities is one of the factors most often cited as contributing to the state’s perceived high quality of life. Participation in outdoor recreation may correspond to a greater interest in and support for measures to protect land, facilities, and resources necessary to ensure those same activities are available for future generations.

Population growth in the region and the primary service area will lead to an increase in the demand for recreational opportunities within Washington County. New trails, such as the Central Greenway Regional Trail, will be needed to accommodate the increase in demand.

Active Living By Design – A Complementary Vision

The “active living by design” movement gaining momentum across the country complements the vision for the regional trail. As stated by one of the initiators of the movement, active living by design “is a way of life that integrates physical activity into daily routines.” Key principles of this movement as it pertains to this plan include:

- » Physical activity is a behavior that can favorably improve health and quality of life.

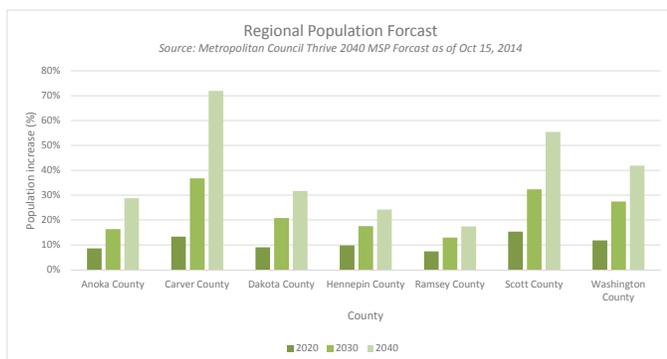


Figure 9: Regional Population Forecast

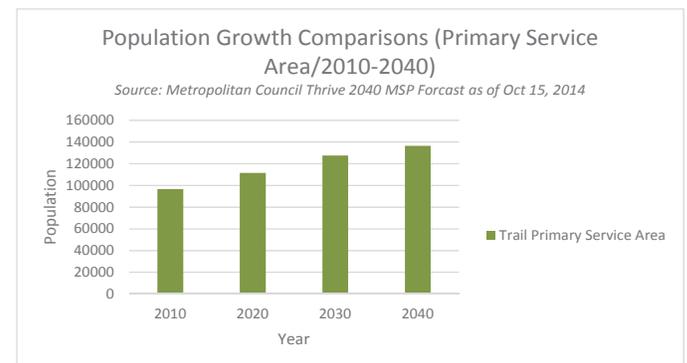


Figure 10: Population Growth Comparisons

- » Everyone, regardless of age, gender, language, ethnicity, economic status or ability, should have safe, convenient and affordable choices for physical activity.
- » Parks and trails, should be safe, accessible and part of a transportation network that connects destinations of interest, such as other parks, housing, schools, work sites, transit, community services and businesses.
- » Municipalities and other governing bodies should plan for ongoing interdisciplinary collaboration, promotion of facilities, behavioral supports, policies that support the vision of active living, and routine maintenance that ensures continued safety, quality and attractiveness of the physical infrastructure and the natural environment.

The following provides an overview of pertinent findings from research that supports the active living movement and development of this regional trail.

Physical Activity/Preventing Obesity

Physical inactivity causes numerous physical and mental health problems, is responsible for an estimated 200,000 deaths per year in the United States, and contributes to the obesity epidemic. The design of communities and the presence or absence of parks, trails, and other quality public recreational facilities affects people’s ability to reach the recommended 30 minutes each day of moderately intense physical activity. A growing number of studies show that people in activity-friendly environments are more likely to be physically active in their leisure time.

For example, research findings clearly indicate that better access to facilities, pleasant surroundings, safe places, walkable neighborhoods, and activity-friendly environments all encourage higher levels of active recreation. Proximity, connectivity, and design quality of trails can be added to this list to encourage more active lifestyles.

This is especially the case with children, where better access to healthy choices is vital to reducing the rate of obesity. Since the 1970s the percentage of obese children 6 to 11 years old has tripled. Obesity has doubled among preschool children and adolescents. Turning these statistics around means increasing children’s physical activity and improving what they eat.

Connectivity and Accessibility

Being able to reach or access a variety of destinations (e.g., parks, retail areas, tourist site, workplaces, health services, grocery stores) via trails is critical to many dimensions of a healthy community and healthy personal lifestyle. Ensuring that trails meet ADA standards is important to accommodate the broadest cross-section of user groups.

Mental Health

A number of studies have demonstrated how being outdoors and in direct contact with nature leads to improved mental health and psychological development. Recent data show that mental health disorders will account for some of the world’s largest health problems in upcoming decades. People do not have to actively use nature to benefit from it; rather, visual exposure is enough. The outdoor experience offered along the Central Greenway Regional Trail will, at some level, contribute positively to the collective well-being of the communities along the trail corridor.

Statewide Health Improvement Program (SHIP)

Washington County, through the SHIP program, has developed the Living Healthy in Washington County initiative in order to implement policies and practices that create active communities by increasing opportunities for non-motorized transportation and access to community resources and recreation facilities.

Section IV: Development Concept

When fully developed, the Central Greenway Regional Trail will provide residents of Washington County with direct access to a regional trail that connects three premier regional park facilities: Big Marine Park Reserve, Lake Elmo Park Reserve and Cottage Grove Ravine Regional Park. In addition, the regional trail will provide a separated, off-road facility for recreation and transportation purposes that will connect with adjacent local trails and other recreation amenities, such as Eagle Valley Golf Course and a future city park along the west side of County Road 19/Keats Avenue in Cottage Grove.

Regional Bicycle Transportation Network

Washington County trails and the local trail network are further supported and enhanced by the Regional Bicycle Transportation Network (RBTN), which is identified as part of the 2040 Transportation Policy Plan (TPP). The RBTN helps define the region's on-street bikeways and off-street trail connections, and how they work together to serve regional transportation trips by bicycle. The RBTN is also used to identify corridors and alignments for future trail development and infrastructure investments. These corridors and alignments provide transportation connectivity to outlying regional destinations within and beyond the urban/suburban areas and serve to connect priority regional bicycle transportation corridors/alignments. County Road 19/Keats Avenue from I-94 to the Cottage Grove Ravine Regional Park entrance is recognized as a Tier 2 Corridor and assigned the second tier priority for regional transportation funding. Thus, the proposed alignment for the Central Greenway Regional Trail should be considered for inclusion as a Tier 2 alignment in the TPP update (2018), making it fully eligible for the Metropolitan Council's Regional Solicitation for federal transportation funds.

Development Plan

Permitted Regional Trail Uses

The regional trail will be open to the general public. Its intended uses include walking, jogging, in-line skating, bicycling, and

other uses mandated by state law including, but not limited to, non-motor electric personal assisted devices. Motorized vehicle and equestrian uses will be prohibited, except for motorized vehicles used by the Washington County and partner cities for maintenance or law enforcement activities or otherwise permitted for ADA access.

Regional Trail Design Guidelines

The trail design for the Central Greenway Regional Trail is a 10-foot-wide paved surface separated from vehicular traffic. There may be instances that require the trail to be temporarily reduced in width for short segments until funding is available to improve sections that do not meet typical regional trail design guidelines (Figure 14). A bituminous trail surface is preferred because it is cost-effective, less prone to erosion than aggregate surfaces, provides for a more desirable trail user experience.

A number of factors will be taken into consideration as final designs for unconstructed segments are implemented, such as:

- » Right-of-way width
- » Topography and drainage impacts
- » Existing vegetation
- » Curb cuts and driveway crossings
- » Overhead and subsurface utilities
- » Intersection crossings
- » Proximity to adjacent buildings, homes, farms, businesses and churches

In circumstances with limited right-of-way, trails will still be located off-road, but with less boulevard between the trail edge and back of curb. In these locations, the trail will be separated from the road by a minimum paved two-foot-wide clear zone. This paved clear zone between the back of curb and trail edge provides a buffer between the trail users and

motorists and will be striped to delineate the edge of the trail. Curb ramps will be used at all roadways. Regional trails should have a maximum of five percent grade and a cross slope of two percent for drainage. A regional trail may be wider than 10 feet if forecasted user volumes warrant an increased width and space is available for the trail. In addition, where right-of-way allows, final trail design will attempt to maximize the boulevard width to account for sign placement and snow storage.

Regional trail segments will be designed in accordance with all applicable federal, state, and local codes. In addition, the following sources will be referred and adhered to when preparing the design and construction plans as appropriate:

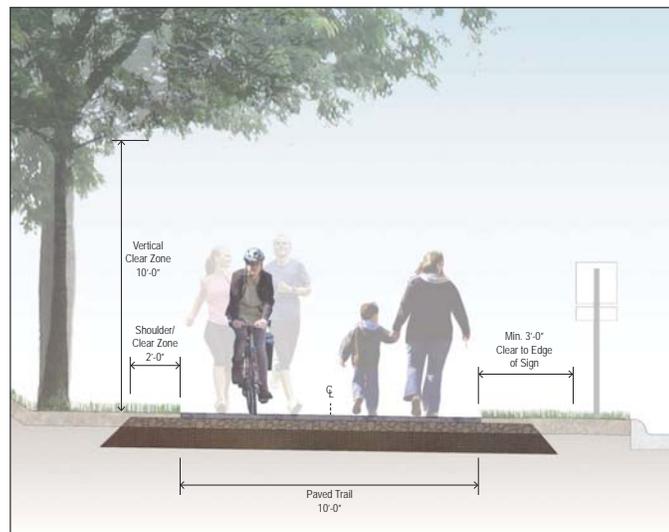


Figure 11: Typical Trail Cross-Section

- » Guide for the Development of Bicycle Facilities, prepared by the American Association of State Highway and Transportation Officials (AASHTO), 2012
- » MnDOT Bikeway Facility Design Manual, Minnesota Department of Transportation (MnDOT), March 2007
- » State Aid Rule 8820.9995 Minimum Bicycle Path Standards, State Aid for Local Transportation
- » Trail Planning, Design, and Development Guidelines, Minnesota Department of Natural Resources (MnDNR)
- » Manual on Uniform Traffic Control Devices (MUTCD), MnDOT, 2014
- » Public Right-of-way Access Guidelines (PROWAG)
- » Best Practices for Traffic Control at Regional Trail Crossings, A collaborative effort of Twin Cities road and trail managing agencies, July 2011
- » Selecting Roadway Design Treatments to Accommodate Bicycles, Federal Highway Administration, January 1994
- » Bicycle and Pedestrian Wayfinding, Metropolitan Council, October 2011

Primary Trail Design Elements

Trail Crossings

The suburban setting for the Central Greenway Regional Trail requires that it coexist with higher volume roadways. There are numerous locations where the regional trail crosses such roadways, including:

- Hudson Road
- Commerce Drive
- Valley Creek Road
- Lake Road
- Bailey Road
- 70th Street S.

The types of trail crossing treatments appropriate for each crossing location will be designed in accordance with industry best practices, in order to minimize conflicts between trail users and roadway traffic.

In all cases, existing roadway configuration, infrastructure elements, vegetation, and other potential visual obstructions will be evaluated so sight lines can be maintained. Special provisions, such as mirrors, may be added to improve trail visibility from driveways if deemed appropriate. As vehicular traffic fluctuates, there may be a need for additional traffic signals or modifications to existing signalized intersections. These type of design considerations and trail enhancements will be addressed during the trail design development phase.

Trail Underpasses

In some situations where the regional trail crosses higher volume roadways it may be appropriate to install a grade-

separated trail underpass. The benefit of a trail underpass is that it provides safe access to the other side of a high-volume roadway without interaction with vehicular traffic. Several factors need to be considered when planning the location for underpasses. Groundwater levels, existing grades and sufficient right-of-way are all important considerations to assess when locating underpasses. These types of design considerations and trail enhancements will be addressed during the trail design development phase.

Supporting Trail Elements

Trail wayfinding signage, traffic signage and devices, rest stops, and drainage are important elements of regional trails. Their proper design and placement add both aesthetic and functional value to the trail.

Trail Amenities

Wayfinding Signage: Regional trail wayfinding signage provides trail users with orientation and location information for amenities and services. Wayfinding signage may provide:

- » An overview map of the regional trail network in Washington County, and the specific regional trail.
- » Directions and distances to major destinations and points of interest along the regional trail.
- » Directions for long-term detours or interim routes when there are gaps within the regional trail.
- » Location information for nearby amenities such as local parks and local trails. The Cities of Woodbury and Cottage Grove's parks and trail plans are included in the appendix.
- » Location information for nearby services, such as drinking water, public restrooms, and public parking.



» Visual identification of the regional trail network through physical kiosk/signage structures.

The suburban nature of the Central Greenway Regional Trail requires wayfinding signage at strategic delineated points (Figure 12 & Figure 13). These typically include major roadway intersections with other trails, trailheads, parks or other adjacent public facilities. The exact location and content of wayfinding signage will be determined in conjunction with local community input and is often dictated by available public right-of-way.

Washington County Parks uses kiosks in their parks as wayfinding signage to identify trail routes and system amenities. Developing directional signage for the Central Greenway Regional Trail that includes visual indication of direction and location of points of interest along the trail will benefit trail users along the trail route. The design of the directional sign can include arrow blades and/or text to identify features. Descriptions of each are as follows:

Kiosks: A free-standing structure that provides trail users with a map of the park or trail system, the park or trail rules, and general information about the park or trail.

Directional Signage: A post structure depicting the direction, the name, and the distance to major destinations and points of interest on the trail.

Rest Stops: Rest stops are located at key locations and provide places for trail users to stop and rest along the trail and an area for amenities such as benches, and bicycle racks. These simple but important amenities can serve to reinforce the identity of the regional trail route. Locations for rest stops will be evaluated and incorporated into Central

Directional Sign	Kiosk
I-94 Bridge	City Walk Drive
Markgrafs Lake	Powers Lake Park
Powers Lake Park (2)	Future Cottage Grove City Park
Lakeview Knolls Park	Cottage Grove Middle School
Valley Creek Road Intersection	Cottage Grove Ravine Regional Park
Lake Road Intersection	
Bailey Road Intersection	Rest Stop
Dale Road Intersection	Bailey Road
Watershed District Property (Alignment D2)	Cottage Grove Middle School
Military Road (2) (Alignment D2)	
80 th Street South Intersection	
Cottage Grove Ravine Regional Park Entrance	

Figure 12: Wayfinding Signage Locations

Greenway Regional Trail as appropriate during design and implementation. The cost per rest stop is approximately \$6,000 each (2016 dollars).

Traffic Signage and Devices

In addition to wayfinding signage, the regional trail will incorporate traffic control signs and devices, such as trail stop signs and trail crossing signage. These signs and devices will reflect the physical characteristics and usability of individual trail segments and the system as a whole. Therefore, as trail segments are developed (or reconstructed), trail signs and devices may require modification. The cost to add traffic control signs and devices, to a regional trail is approximately \$1.50 per linear foot.



Figure 13: Wayfinding Signage Location Map



Example of kiosk concept and signage for Washington County trails. (Artwork provided by Washington County)



Hardwood Creek kiosk and rest stop. (Photo provided by Washington County)

Drainage

In many locations, the drainage of the regional trail is similar to that of a typical sidewalk. Stormwater sheet flows over the trail pavement and onto the adjacent roadway, where it is collected and conveyed by the roadway stormwater drainage system. In areas where the regional trail is on an independent route, such as through parks or other green spaces, alternative stormwater best management practices, such as rain gardens and infiltration swales, may be explored during the design



phase of the regional trail. Stormwater must shed rapidly from the surface of the trail to prevent hazardous situations for the users, such as water pooling on the trail surface.

Sub-Standard Trail Segments

Three existing trail segments do not meet regional trail design standards, which are identified in Figure 14. The proposed trail widening in Lakeview Knolls Park and between 70th Street and Indian Boulevard will fit within existing public right-of-way and no additional acquisition is needed to widen these segments of trail. The trail segment from 80th Street to 85th Street is proposed as a temporary trail alignment, until a

permanent trail can be developed on the west side of County Road 19/Keats Avenue, which is identified as Acquisition Area C in Section I: Boundaries & Acquisitions of this report. It is the intent of Washington County to bring existing segments of trail into compliance when reconstruction is needed, or other opportunities present themselves.

From	To	Length
Lakeview Knolls Park	Valley Creek Road	.60 Miles
70th Street	Indian Blvd.	.50 Miles
80th Street*	85th Street	.50 Miles
*Temporary alignment		

Figure 14: Existing Eight-Foot Wide Trail Segments

Route Assessment

The section of the Central Greenway Regional Trail covered in this master plan has been divided into six segments (Figure 15) that are composed of developed and undeveloped trail. To preserve and protect the longevity of the trail and rights and responsibilities associated with owning, operating, and maintaining a regional trail, public trail easements are recommended for the entire corridor, regardless of the compliance of existing segments with the design standards of the governing agency. Securing easements to bring non-compliant trail segments into compliance is important, but it is less important than securing easements for trail sections that currently do not exist.

The trail segments are described on the following page.

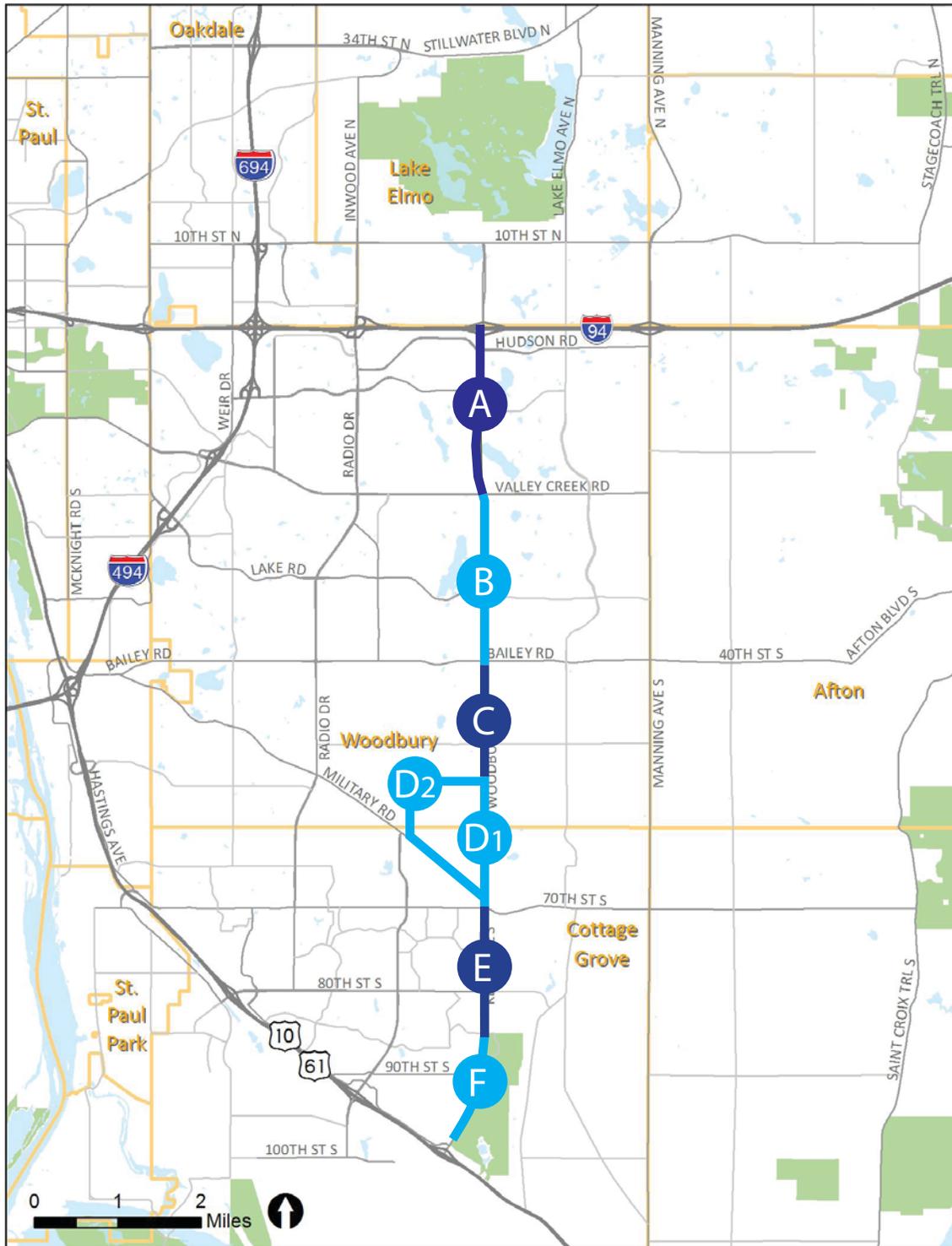


Figure 15: Central Greenway Regional Trail Segment Map

Central Greenway Regional Trail Segments				
Segment	From	To	Along	Length
A	I-94	Valley Creek Road	County Road 19/Keats Avenue	2.0 Miles
B	Valley Creek Road	Bailey Road	County Road 19/Keats Avenue	2.0 Miles
C	Bailey Road	Crossroads Church	County Road 19/Keats Avenue	1.85 Miles
D1	Crossroads Church	Military Road	County Road 19/Keats Avenue	1.0 Mile
D2	Crossroads Church	Military Road	Off-Road Alignment West of Crossroads Church	1.6 Miles
E	Military Road	85th Street	County Road 19/Keats Avenue	1.6 Miles
F	85th Street	Park Entrance	County Road 19/Keats Avenue	1.2 Miles

Segment A- I-94 to Valley Creek Road

Segment A measures approximately two miles long and extends from I-94 to Valley Creek Road. South of I-94, the Central Greenway Regional Trail will utilize the existing trail along the east side of County Road 19/Keats Avenue, through signalized intersections at Hidden Road, Markgrafs Lake Drive, Tamarack Road, and along the shore of Markgrafs Lake. South of Markgrafs Lake, the regional trail will continue along the existing trail, extending south through a signalized intersection at Wynstone Drive before entering Powers Lake Park. In Powers Lake Park the trail will pass under County Road 19/Keats Avenue through an existing trail underpass, where the trail will cross through Lakeview Knolls Park, still continuing along the existing trail corridor. The trail width through the park and extending to Valley Creek Road is 8-feet wide. The trail will be widened to ten feet at a future date in conjunction with park or roadway improvements. From this point south, the trail will continue on the west side of County Road 19/Keats Avenue. Trail underpass improvements will also be considered at this time.

South of Lakeview Knolls Park, the trail crosses Regatta Drive at a mid-block crossing that is striped, and includes Americans with Disabilities (ADA) compliant pedestrian ramps with raised truncated domes and trail stop signs. Continuing south, the trail extends along an independent alignment, crossing Regatta Alcove, which includes ADA compliant pedestrian ramp on the north side, but requires a new pedestrian ramp on the south side to meet current ADA standards. South of Regatta Alcove, the trail continues south across Catalina Drive and a second crossing of Regatta Drive, both requiring upgraded pedestrian ramps to be ADA



compliant. A short distance further south, the trail crosses Valley Creek Road, which also requires upgraded pedestrian ramps.

Segment B- Valley Creek Road to Bailey Road

South of Valley Creek Road, the trail extends south along the west side of County Road 19/Keats Avenue, passing Valley Crossing Community School and across Park Crossing, a signalized four-way intersection that includes striped crosswalks, but needs upgraded pedestrian ramps. The trail extends south along the existing trail to Hidden Lake Drive.

From Hidden Lake Drive south to Lake Road, the trail will continue to follow the existing trail along the west side of County Road 19/Keats Avenue. Upgraded pedestrian ramps have been incorporated at crossings of Edgewater Drive, the roundabout at Lake Road, Antrim Road and the Bailey Road roundabout.

Segment C- Bailey Road to Crossroads Church

Segment C measures approximately 1.85 miles long and extends from Bailey Road to Crossroads Church. There is no existing trail along the west side of County Road 19/Keats Avenue between Bailey Road and just north of Crossroads Church. A new, ten-foot-wide trail will be constructed in the

County Road right-of-way. A new pedestrian crossing will be required at Dale Road, which is a stop condition only for Dale Road, but is a through-street for County Road 19/Keats Avenue.

A new pedestrian underpass is planned to pass under County Road 19/Keats Avenue approximately 0.30 miles north of Dale Road to provide a mid-block crossing and a future connection to development on the east side of County Road 19/Keats Avenue. It is anticipated that this trail underpass will not be constructed until significant development has occurred on the east side of County Road 19/Keats Avenue.

There are 15 driveway crossings and three field access roads along the west side of County Road 19/Keats Avenue between Bailey Road and Crossroads Church that will require trail stop signs or yield signs for trail users.

Segment D

There are two alternatives for Segment D between Crossroads Church and Military Road that include an alignment along the west side of County Road 19/Keats Avenue and off-road to the west of Crossroads Church. Washington County Parks will determine which alignment is best suited for trail development at a future date. There



Segment D Alternatives				
Segment	From	To	Along	Length
D1	Crossroads Church	Military Road	County Road 19/Keats Avenue	1.0 Mile
D2	Crossroads Church	Military Road	Off-Road Alignment West of Crossroads Church	1.60 Miles

are several unknown circumstances in this area including patterns of residential development, future local park locations and land protection for water quality that may provide suitable locations and connections for the regional trail. Both trail alternatives are described below.

Segment D Alternatives

Washington County will determine which alignment is best suited for implementation at a future date. This decision will be based on a number of factors, including available resources, stakeholder input, timing of corresponding projects, and the development in the region.

Segment D1

Segment D1 extends along the west side of County Road 19/Keats Avenue between Crossroads Church and Military Road. There are three driveway crossings and two field access drives that will require stop or yield signage for trail users. Military Road is a three-way stop intersection, but will require pedestrian ramps and a crosswalk across Military Road.

Segment D1 would provide the trail user a more direct connection through this corridor. This alternative follows a county-operated road, so implementation and maintenance may be easier to coordinate. This route would best serve trail

users looking to get from one destination to another in a quick and direct fashion.

Segment D2

Segment D2 extends west from County Road 19/Keats Avenue and south to Military Road in an off-road alignment through several undeveloped parcels that are currently in agricultural production. Properties include one parcel owned by the City of Woodbury, one parcel owned by a private entity and two parcels owned by the South Washington Watershed District. Once the alignment reaches Military Road, it extends southeast along the north edge of Military Road to County Road 19/Keats Avenue. In this section, the proposed alignment crosses three private parcels.

Segment D2 intends to offer a more scenic experience, since it would direct trail users off of County Road 19/Keats Avenue and through an area of open space owned by the South Washington Watershed District. This alternative would add .6 more miles and \$1,094,800 to the route than Segment D1. If Segment D2 was to be implemented, the trail shall be strategically placed to mitigate adverse impacts to the surrounding natural resources, in collaboration with project partners.



Segment E

South of Military Road, there is a roundabout at 70th Street South and intersections at Jorgensen Lane South, Jordan Avenue South and Indian Boulevard South. An existing eight-foot-wide trail exists between 70th Street South and Indian Boulevard South that will need to be widened to ten feet, at a later date, to meet regional trail standards. The pedestrian ramps at these intersections do not meet current ADA standards.

South of Indian Boulevard South, the trail will pass by Cottage Grove Middle School, where a rest stop could be developed that would provide a kiosk for trail users. The trail will cross intersections at 77th Street South, 80th Street South and 82nd Street South.

The City of Cottage Grove has acquired Safe Routes to School funding to develop the trail segment between Indian Boulevard South and 80th Street South for development in 2017. This trail segment will be constructed to meet regional trail standards.

When the trail reaches 80th Street South, it will extend south along the west side of County Road 19/Keats Avenue to 85th Street South. This segment of trail is currently undeveloped. A temporary alignment will cross County Road 19/Keats Avenue at the existing marked pedestrian crossing to join the existing eight-foot trail that extends along the east side of County Road 19/Keats Avenue until it enters Cottage Grove Ravine Regional Park.



Safe Routes to School funding will be utilized to develop a segment of trail along County Road 19/Keats Avenue.



Existing 8-foot trail segments will be reconstructed at a later date to regional trail width standards of 10-feet.



Trail access into Cottage Grove Ravine Regional Park at 85th Street S.



Trails in Cottage Grove Ravine Regional Park that will connect with the Central Greenway Regional Trail.

Segment F

Segment F will extend south along the west side of County Road 19/Keats Avenue between 85th Street South and the proposed new entrance to Cottage Grove Ravine Regional Park. The new park entrance will be located approximately 1/3 mile north of Highway 61. The trail will cross 90th Street South at-grade and will require pedestrian ramps on both sides of the intersection. The trail will cross three driveways between 85th Street South and 90th Street South. Two new pedestrian underpasses will be developed to provide grade-separated crossings under County Road 19/Keats Avenue to access Cottage Grove Ravine Regional Park. One will be south of 85th Street South. The other will be located south of 90th Street South, at the park's future entrance.

Implementation

It is anticipated that the regional trail will be implemented in stages, with the construction of various stages driven by available funding and local factors, such as timing of adjacent roadway improvements, and public desire to expand the regional trail system. Until the corridor is fully developed, gaps in the regional trail will exist. However, the ultimate trail geometry will consist of a 10-foot-wide (minimum) paved surface, separate from any adjacent roadway, so that trail users will not share the roadway with motorized vehicles.

The development and implementation of unconstructed trail segments and upgrading of certain trail segments to regional trail standards will require additional activities beyond the master plan phase. These activities typically include the preparation of final construction documents, additional property and natural resource analysis, final cost

estimates, city staff review, trail-way cooperative agreements, and public approval meetings (such as City Council and Park Commission and County Board meetings).

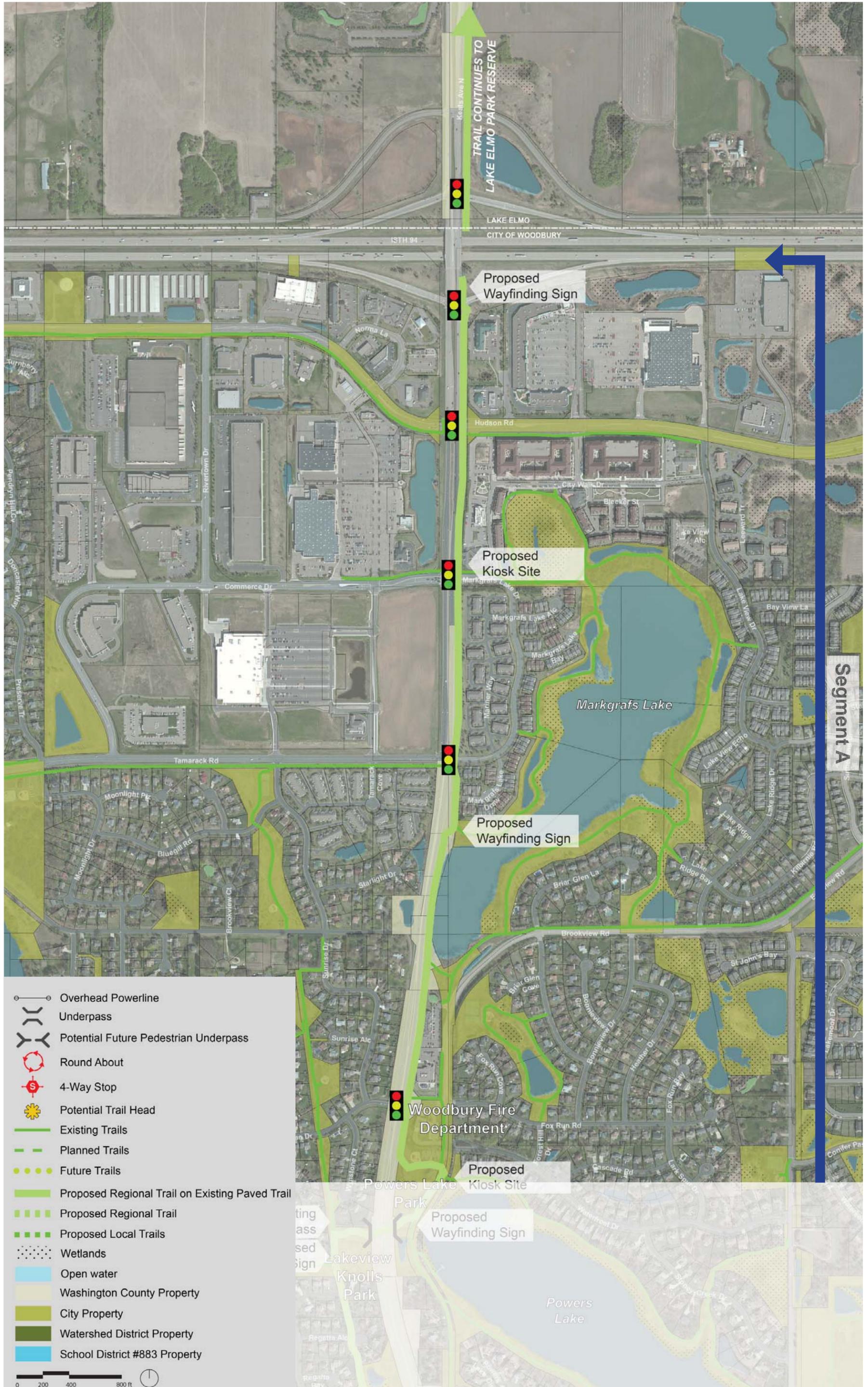
Estimated Costs & Funding

Regional trail implementation has both initial costs (acquisition and development) and on-going costs (operations and maintenance). Trail development will occur as opportunities to coordinate with other agencies/projects occur, funding becomes available, and at the discretion of the Washington County Board of Commissioners, Woodbury City Council and Cottage Grove City Council. Individual development projects may move ahead of schedule to coincide with development adjacent to the trail corridor that can result in cost savings.

Development Costs

Regional trail development includes the cost to prepare the site; reconfigure roadways as required; modify drainage patterns where necessary; pave the trail; and install signage, striping, and landscaping. In total, the estimated development cost for the Central Greenway Regional Trail is \$7,901,000. The cost for development from I-94 to Bailey Road, including rest stops, signage and pedestrian crossing upgrades is estimated to be \$1,299,000, including contingencies. Improvements for the existing segment of trail from Bailey Road to the Cottage Grove Ravine Regional Park entrance is estimated to cost \$6,602,000, including contingencies. The total cost for acquisitions within the proposed corridor is \$470,500. See Appendix A. Detailed Cost Estimate for further information.

Figure 16: Trail Corridor Maps











Proposed
Wayfinding Sign

Edgewater
Park

Wedgewood
Valley Park

Prestwick
Golf Club

Proposed Rest Stop
& Wayfinding Sign
Resurrection
Lutheran
Church of
Woodbury

St. Ambrose of
Woodbury Church

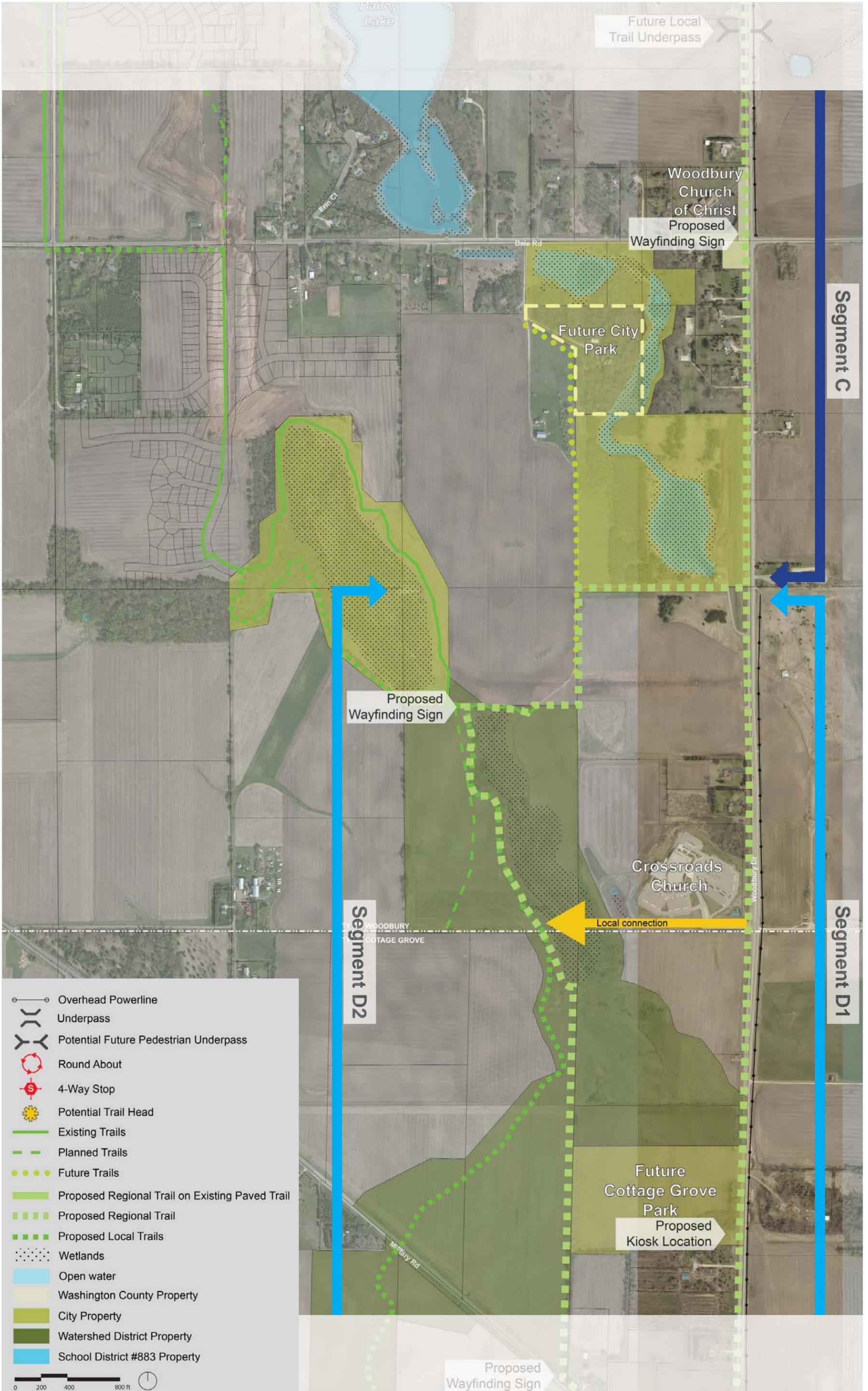
Segment B

Segment C

- Overhead Powerline
- Underpass
- Potential Future Pedestrian Underpass
- Round About
- 4-Way Stop
- Potential Trail Head
- Existing Trails
- Planned Trails
- Future Trails
- Proposed Regional Trail on Existing Paved Trail
- Proposed Regional Trail
- Proposed Local Trails
- Wetlands
- Open water
- Washington County Property
- City Property
- Watershed District Property
- School District #883 Property

Future Local
Trail Underpass





- Overhead Powerline
- Underpass
- Potential Future Pedestrian Underpass
- Round About
- 4-Way Stop
- Potential Trail Head
- Existing Trails
- Planned Trails
- Future Trails
- Proposed Regional Trail on Existing Paved Trail
- Proposed Regional Trail
- Proposed Local Trails
- Wetlands
- Open water
- Washington County Property
- City Property
- Watershed District Property
- School District #883 Property







- Overhead Powerline
- Underpass
- Potential Future Pedestrian Underpass
- Round About
- 4-Way Stop
- Potential Trail Head
- Existing Trails
- Planned Trails
- Future Trails
- Proposed Regional Trail on Existing Paved Trail
- Proposed Regional Trail
- Proposed Local Trails
- Wetlands
- Open water
- Washington County Property
- City Property
- Watershed District Property
- School District #883 Property





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Section V: Conflicts and Coordination with Adjacent Public Services

The Central Greenway Regional Trail is proposed to be developed within public right-of-way along County Road 19/Keats Avenue. Additional right-of-way may be needed to develop some segments of the trail, and for the development of trail underpasses. Final determination of right-of-way needs will be identified when the underpasses are proposed, which may coincide with road widening projects or adjacent property development. The total estimated cost of additional right-of-way is \$470,500.

There are buried utilities, including gas and sanitary sewer along portions of the County Road 19/Keats Avenue right-of-way, and high-voltage overhead power lines cross the proposed trail corridor in two locations. Coordination with utilities will be required during design development to ensure that the trail is constructed without imposing on utility easements or otherwise impacting the utility corridors.

The City of Cottage Grove and the South Washington Watershed District own property on the west side of County Road 19/Keats Avenue north of Military Road that may be beneficial for future trail development. The City of Cottage Grove is planning to develop a park on a parcel west of County Road 19/Keats Avenue. Coordination with the City of Cottage Grove and South Washington Watershed District when the trail is developed may provide opportunities for local connections and developing alternative trail alignments.



Trail rest stop example, which is located on Ravine Parkway South.



Existing conditions along the west side of County Road 19/Keats Avenue.

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Section VI: Operations & Maintenance

Washington County manages and operates its park and trail system with internal staff including 19 permanent employees. In addition, approximately 100 seasonal employees are hired each year as life guards, maintenance workers and gate attendants. The Parks Division has an annual operations and maintenance budget of approximately \$3,025,700 to operate and maintain the County's park and trail system.

The Central Greenway Regional Trail will be overseen by professional public safety, operations and maintenance staff operating out of the South Maintenance Unit based at St. Croix Bluffs Regional Park.

This trail will add new mileage to the Washington County's regional trail system and operations and maintenance costs will increase because of the expansion of the system. Additional staff time and equipment will be needed to maintain the new trail segments. No new equipment will be needed as the County will utilize existing trucks and mowers to maintain the trail. It is anticipated that the annual cost to maintain the trail upon full build out will be \$16,000, including additional staff and time and resources. An additional \$2,000 annually will be needed for the first five years to establish the



Mowing turf trail shoulders.

prairie and pollinator plantings along the trail, as proposed in the natural resources section of the master plan.

Proposed Maintenance Activities

Maintenance operations will include seasonal condition assessments and periodic inspections, followed by necessary maintenance actions. Inspections will address possible safety issues, vandalism, and non-routine maintenance concerns. Washington County will also respond to maintenance issues identified by the public, on a timely basis, as funding permits. Extraordinary maintenance may be required to respond to storm damage, vandalism and other unplanned circumstances.

The Central Greenway Regional Trail will receive scheduled seal coating and reconstruction in accordance with Washington County standards, and as funding permits.

Washington County will provide routine maintenance as identified below.

- » Sign inventory and replacement, spring cleanup, trail sweeping, trash pickup, erosion repair, fence repair, bituminous patching, and striping replacement, as needed.
- » Mowing adjacent to the trails will be coordinated by Washington County.
- » Washington County will coordinate snow removal maintenance for the trail south of Bailey Road if appropriate.



Public Safety

Washington County Sheriff's Department, along with the Woodbury and Cottage Grove Police officers will provide public safety services on Central Greenway Regional Trail.

Sources of Revenue

Washington County budgets annually for operating the park and trail system. The budget includes maintenance of recreation facilities and management of natural resources within the parks. Revenue for these expenditures originates from three primary sources:

- Vehicle passes and campground reservations at County parks
- County levy
- Operations and maintenance grants consisting of State general funds and lottery in-lieu sales tax funds that are disbursed through the Metropolitan Council

Washington County does not charge for trail use.

Ordinances

Washington County has adopted Ordinance No. 174 which establishes rules and regulations for park and trail use and management under its jurisdiction. The ordinance incorporates Minnesota statutes that address regulations for:

- » Public Use
- » General Conduct

» General Parkland Operation

- » Protection of Property, Structures and Natural Resources
- » Recreational Activities
- » Motorized Vehicles, Traffic and Parking

A copy of the ordinance is available for review through Washington County.

Rules and regulations are posted, as needed, throughout Washington County park properties and facilities. Posted information includes park hours, permitted and prohibited activities, fees, map of the parks and trails, and who to contact in case of an emergency.



Regular trail maintenance including pavement repair will be scheduled by Washington County to keep the trail functional and operational.

Section VII: Public Engagement and Participation

Overview

Washington County strives to provide an inclusive public engagement process for its trail planning efforts. To reach a diverse cross-section of the community and to engage people of diverse races, ethnicities, classes, ages, abilities and national origin, Washington County staff developed a plan to provide information to the public in multiple ways with an emphasis on trying to make it easy and accessible for all interested citizens to participate in the planning process. The public engagement process included several meetings with a technical advisory committee, updates to the Washington County Parks Commission on the plan development progress, conducting public open houses and pop-up meetings to provide public updates and presenting information at local city council meetings to keep the communities updated about the master plan process. The general public, including park and trail users and Washington County residents are important stakeholders in the master planning process and their input is highly valued. Comments received have been addressed in revisions to the master plan.

Regional Trail Planning

Planning for the Central Greenway Regional Trail is in response to expressed demand for recreational and non-motorized transportation options in suburban edge communities. The Central Greenway Regional Trail is identified as a Regional Trail Search Corridor in the Metropolitan Council 2040 Regional

Parks Policy Plan. As such, the Central Greenway Regional Trail needs an approved master plan to become eligible for Metropolitan Council regional parks system funding for development.

Central Greenway Regional Trail Technical Advisory Committee

A Central Greenway Regional Trail Technical Advisory Committee was established to guide the trail master plan and coordinated planning efforts within the local communities and greater region. Members of the Task Force included representatives from the following stakeholders: City of Woodbury, City of Cottage Grove, Washington County and the South Washington Watershed District.

The responsibilities of the Task Force included:

- » Coordinating with respective governing bodies, such as City Councils, Planning Commissions, Park Commissions and other staff/departments within the respective city/agency.
- » Assisting in implementing public participation opportunities.
- » Providing information and support necessary to identify feasible trail routes and review/complete the trail master plan that meets city and applicable agency goals.
- » Assisting Washington County in local municipality/agency approval processes.



The full Task Force met six times:

- » May 12, 2015
- » June 30, 2015
- » July 15, 2015
- » September 1, 2015
- » September 30, 2015
- » January 12, 2016

Throughout the master planning process, Washington County staff met with Task Force members to identify opportunities and address and resolve their issues and concerns. These meetings often involved other individuals, groups, and organizations as detailed route information was exchanged.

Washington County Park Commission

The Washington County Park Commission reviewed planning updates and the final draft master plan four times throughout the planning process, including:

- » September 17, 2015
- » November 19, 2015
- » December 17, 2015
- » January 21, 2016

Municipal Presentations & Input

Washington County staff presented updates on the master plan process to local city councils, city government

committees and watershed district meetings several times throughout the master plan process to keep local authorities updated and to solicit additional input about the master plan. Meetings were held on the following dates:

- » September 14, 2015 City of Cottage Grove Parks and Recreation Commission
- » September 29, 2015 City of Woodbury Park, Planning and Economic Development staff presentation
- » February 17, 2016 Cottage Grove City Council presentation
- » February 24, 2016 Woodbury City Council presentation

Washington County received letters of support from Woodbury and Cottage Grove. These are included in the appendix.

Public Communications/ Social Media

Online and social media tools were identified as alternative ways to get information and updates to the public. The Washington County website was the primary on-line portal for meeting information and for posting draft plans for public review. All open houses and pop-up meetings were listed on the County's website. The County utilized its Facebook and Twitter accounts to promote the pop-up events. In addition, fliers were printed and posted at County facilities to promote the pop-up events.

A MySidewalk social media site was developed for the master plan, but the site was not made public because this phase of the master plan process coincided with a county-wide update of on-line and social media materials, which impacted opportunities to utilize this on-line tool in a timely fashion for appropriate public engagement.

Public Open Houses & Pop-up Meetings

Washington County, with the support and assistance of select Technical Advisory Committee members presented the Central Greenway Regional Trail planning efforts and held six public engagement events where the public had an opportunity to review the status of planning efforts and provide comments. In an effort to reach out to a variety of Washington County residents, Washington County held meetings at public buildings accessible to the public. In addition, one open house was held at a public housing facility to provide easier access to the information. Public presentations were held on the following dates:

- » July 28, 2015 Open House at the Washington County South Service Center
- » September 22, 2015 Open House at the Washington County South Service Center
- » November 18, 2015 Open House at the Washington County South Service Center
- » December 12, 2015 Open House at The Woodlands Apartment Complex

Washington County initiated two additional public pop-up events to seek more public input about the master plan update. The 2040 Regional Parks Policy Plan requires that the public engagement process seek to mitigate existing racial, ethnic, cultural, or linguistic barriers and include people of diverse races, ethnicities, classes, ages, abilities and national origin. In order to reach out to populations that may not feel comfortable attending open houses or public meetings, the County set up two pop-up events designed to “meet people where they are already located.” Staff set up tables at strategic locations and times that are frequented by Washington County residents of all backgrounds. Pop-up style tabling allowed for more in-depth, one-on-one conversations. The County received positive feedback on conducting this type of engagement, as several members of the public mentioned they would not typically attend an open house, but were happy they were given the opportunity to provide feedback in this setting. The pop-up meetings were held on the following dates:

- » April 24, 2017 Central Park Atrium in Woodbury
- » April 26, 2017 Park Grove Library in Cottage Grove

Open House #1 Approach & Findings

The first public open house was held on July 28, 2015 at the Washington County South Service Center. The Service Center is located adjacent to the trail corridor in an easily accessible public building with ample parking. Attendance at the open house included 21 members of the public and

representatives from Washington County, the City of Cottage Grove, the City of Woodbury and the South Washington Watershed District. The proposed trail alignment maps were presented at the meeting. Feedback from the first open house was positive with interest in developing a linking regional trail along County Road 19/Keats Avenue with connections to Cottage Grove Ravine Regional Park. Specific comments from the open house are listed in Figure 17.

Open House #2 Approach & Findings

A second open house was held on September 22, 2015 at the Washington County South Service Center. Attendance at the open house included ten members of the public and representatives from Washington County, the City of Cottage Grove, the City of Woodbury and the South Washington Watershed District. In addition to the analysis graphics presented at the first open house, revisions to the trail alignment maps were shown. While attendance was light at this open house, those in attendance provided input on the proposed revisions to the trail alignments. Positive feedback was given about the proposed regional trail. A complete list of comments from the public meetings is included in Figure 17.

Open House #3 Approach & Findings

The third open house, held on November 18, 2015 at the Washington County South Service Center was meant to provide the public with another opportunity to learn about and comment on the proposed trail master plan. Attendance at the open house included three members of the public and representatives from Washington County, the City of Cottage Grove, the City of Woodbury and the South Washington Watershed District. A complete list of comments from the public meetings is included in Figure 17.

Open House #4 Approach & Findings

The public engagement opportunity that was added to the public process was an open house at the Woodlands Apartments in Cottage Grove, located just a couple miles from the trail corridor. County staff felt it was important to reach out to nearby residents who may not have easy access to the South Service Center or other public meeting venues. The draft trail corridor was presented at the open house on December 12, 2015. Attendance was light at this open house with three members of the public providing input. Staff was surprised at the low attendance and discussed additional ways to solicit input from existing and future trail users. A complete list of comments from the public meetings is included in Figure 17.

All open house materials were also posted on the Washington County website for public review and comment.



The open house meetings included presentations and numerous information boards and maps describing the current trail plan. Attendees were given the opportunity to write comments on comment cards to add their ideas.

Pop-Up Event #1 Approach & Findings

In an effort to obtain more input from the public about the Central Greenway Regional Trail Master Plan, Washington County held two pop-up meetings. The first pop-up event was held at Central Park Atrium in Woodbury on April 24, 2017. This pop-up event was strategically located here because this is a popular mid-day destination for many community members that would be potential trail users. The facility connects to Washington County R.H. Stafford Library, Woodbury YMCA, Lookout Ridge Indoor Playground, and Stonecrest Senior Living. Several County service buildings, multifamily developments, and schools are also located within walking distance. The Central Park Atrium is located adjacent to the trail corridor. Several comments were made about the trail amenities that are planned for this corridor. These comments were used in locating signage/kiosks/rest stops. Twenty visitors asked questions about the master plan and provided input.

Pop-up Event #2 Approach & Findings

The second pop-up event was held at the Park Grove Library in Cottage Grove on April 26, 2017. Four people stopped by the pop-up event to provide comments and ask questions about the trail master plan.

This pop-up meeting was scheduled during the morning, providing an alternative to evening meeting times. The library is located approximately three miles west of the park in an area with several apartment complexes and nearby two schools. The library's story time program was scheduled for the same



Washington County held two pop-up meetings in April 2017 to seek additional public input about the master plan update.

time frame and this created the opportunity for families and youth trail users to provide input. Input from this event included new residents to Washington County, one of which who does not have access to a vehicle and relies on a bicycle as his only method of transportation. These new perspectives were helpful in planning the regional trail connections to the local network.

Community Engagement Results

The various meetings and public outreach events that were conducted as part of the Central Greenway Regional Trail Master Plan process provided the project team with beneficial input about what the public wants for this regional trail. The comments received in the community engagement process supported the County's sentiment to expand the regional trail

system and develop the trail in a safe and thoughtful way. Several themes and ideas came out during the public process. These included:

- » A trail by nature is a linear feature that not only passes through its surroundings, but becomes part of the community fabric.
- » Make local trail connections a priority.
- » Provide connectivity with established points and destinations.
- » Provide safe route with least amount of driveway crossings, utility poles, etc.
- » Minimize adjacent property impacts.
- » Provide consistency with existing agency planning and policies.
- » Provide preferred trail route that is politically palatable.

Summary of Public Engagement Comments

The following table summarizes the comments that were received at the open houses and pop-up meetings throughout the master planning process. Several of the comments were repeated at multiple events but are listed only once for clarity.

Public Comment/Question	Response
Open House Meetings	
Avid road biker who likes the proposed regional trail alignment	Regional Trail will be developed for all trail user types
Can a Nice Ride bike rental facility be added?	Nice Ride Minnesota is an independent non-profit not affiliated with Washington County Parks
Plow paved trails in winter.	Winter maintenance will be covered in the master plan
Why does the County need a regional trail along a County Road?	This trail type is a regional connector, designed to link regional parks and facilities, and this is the most direct route.
Preserve the underpass south of 85th as a way to cross CR 19 safely	This crossing has been added to the master plan
Wayfinding signage is needed	Signage will be addressed in the master plan
Pop-Up Meeting #1	
There are a lot of bicyclists in the area that would benefit from the trail.	The plan addresses this comment.
It will be good to have a trail connection to Cottage Grove Ravine Regional Park.	The plan addresses this comment.
The underpass into Cottage Grove Ravine Regional Park is a really good idea.	The plan addresses this comment.
Traffic along CR 19 travels too fast [for bikers].	The independent trail will address this concern.
A comment was made that the alternate route does not fit with the purpose of a linking regional trail.	An alternate alignment is included so future study at implementation is allowed to determine the best route.
Include intermediate stops with water fountains and benches placed along the trail.	Rest stops are noted on the plan.
Develop space at intersections for pop-up events or food trucks.	Better addressed during design development.
Kiosk signage depicting local destinations near trail, distance and estimated minutes of travel to next kiosk, information on local history.	Important information that will be addressed during design development.
Look for ways to avoid bike and pedestrian spacing conflicts.	Trail will be minimum ten feet wide.
A north-south arterial trail through the entire County is needed.	The plan addresses this comment.
Preference for separated trails over sidewalks.	The plan addresses this comment.
Pop-Up Meeting #2	
Biking in Washington County can feel dangerous due to lack of bike infrastructure and high speed roadways.	The master plan includes separate trail alignment.
Users who do not own cars find it difficult to move around the county safely.	The regional trail system benefits all users in the region and city.
Trail connections to shopping centers and major areas of employment will improve bikeability in the county.	The plan addresses this comment.
Concerns over pedestrian bike conflict of sidewalks.	The plan addresses this comment.
Concerns over steep climbs along trail.	The trail typically follows County Road 19/Keats Avenue and will mirror grades on the adjacent roadway.
Amenities suggested that would improve the Central Greenway Trail include: drinking fountains, signage to local trails, signage indicating time to major destinations, shelters to provide cover during rain and snow events, and restrooms.	The plan addresses this comment with rest stops planned and connections to local and regional parks and facilities.
Winter plowing of trails would be great.	The plan addresses this comment.
Include signage for connecting to local trail network.	The plan addresses this comment.

Figure 17: Summary of public comments and responses

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Section VIII: Public Awareness

Washington County uses public relations, marketing, and media relations tools, such as a website, event planning, press releases, and promotional materials to promote their parks and trails. Washington County also collaborates with a wide array of community, business, and government organizations to promote their facilities, programs, and services and to educate the public about the available resources.

Washington County Parks engages the public through several on-line and social media tools. The County website has a page dedicated to parks and trails that provides information on the parks and trails across the county, lists information about programs and events, explains how individuals can support the park system by donating or volunteering, and provides information and a link for reservations and permits. Washington County actively posts information on Twitter and Facebook to share news and information about the park system.

Opportunities for expanding social media and on-line resources for public awareness will likely expand in the future as new media tools and new platforms become available. Younger park users frequently access public service information on-line and will continue to seek additional ways to engage with the County about the park system through social media.

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Section IX: Accessibility

Washington County is committed to providing access and recreational opportunities to all people, including persons with disabilities, minorities, and other special-population groups. Washington County meets this commitment through appropriate facility design and programming considerations and by actively addressing potential barriers to participation.

All regional trail facilities described in the master plan will be developed in accordance with Americans with Disabilities Act (ADA) standards and guidelines. More specifically, the Central Greenway Regional Trail will adhere to the Minnesota Bikeway Facility Design Manual (MnDOT 2007); Trail Planning, Design and Development Guidelines (MnDNR 2007); Designing Sidewalks and Trails for Access, Part I and II: Best Practices Design Guide (FHWA); ADA Accessibility Guidelines for Outdoor Developed Areas (United States Access Board); and ADA Accessibility Guidelines for Buildings and Facilities (U.S. Access Board) unless more current guidelines and standards exist at the time of development.

All unconstructed segments and those associated with regional trail reconstruction, associated trailheads and trail amenities, such as rest stops, parking, rest rooms and water access, will be designed to accommodate individuals with disabilities. In addition, the paved trail will safely accommodate two-way directional non-motor vehicle traffic and incorporate periodic rest stops to provide users an opportunity to rest, overlook the natural environment, and comfortably interact with other trail users.

Compliance with ADA standards is an important goal of trail design. Routing the trail within existing street right-of-way makes it a challenge to fully comply with ADA standards in certain areas. Washington County and local municipalities have made every attempt to identify a trail route that minimizes these occurrences. Parking is available at existing local parks, shopping centers, and regional parks on and along the trail. Regional and community parks function as trailheads for the proposed trail in addition to other identified key orientation points along the trail.

Crossing major roadways is necessary because the trail passes through fully developed urban areas. Washington County will investigate opportunities to coordinate grade-separated pedestrian crossings with appropriate agencies, modify, or add traffic signal timing, crosswalks and signage to ensure the trail meets all relevant design guidelines. The trail has also been planned to provide access to important local community destinations such as parks, commercial areas, community facilities, and transit facilities. The regional trail passes through a variety of neighborhoods with varying demographics, providing access to people with a wide range of social and cultural backgrounds.

On a broader scale, the Central Greenway Regional Trail provides direct access to the metropolitan regional trail system for an area currently under served by regional trails. Communities adjacent to the trail will not only have access to the Central Greenway Regional Trail, but also gain direct access to three existing regional parks/park reserves. Local trail connections are anticipated at regular intervals along the trail to further increase access to neighboring communities.



Affordability

Trails are free to use in Washington County, providing a recreational opportunity to residents of all income levels. The Central Greenway Regional Trail will also provide access to the Cottage Grove Ravine Regional Park without purchase of a parking pass. Park access fees are not charged for patrons who walk or bicycle into parks. Trail users who access Washington County parks will have access to free programming for park users including campfire talks, fitness hikes, bird walks and other programs coordinated with free Tuesdays.

The Washington County Parks Division and Community Services is working to provide free park permits to individuals who receive financial assistance from the County.

References

- » Metropolitan Council, "Annual Use Estimate of Metropolitan Regional Parks System for 2014," Metropolitan Council, July 2015.
- » Metropolitan Council, "2040 Regional Parks Policy Plan," Metropolitan Council, St. Paul, MN. February 2015.
- » Minnesota Department of Natural Resources, "Minnesota's State Comprehensive Outdoor Recreation Plan 2014-2018". Minnesota Department of Natural Resources, St. Paul, MN 2014.
- » Health and obesity data retrieved from Minnesota Department of Health website: https://apps.health.state.mn.us/mndata/obesity_basic#byage.

Appendix A: Detailed Cost Estimate

Estimated Project Construction Cost	Estimated Quantity	Unit of Measurement	Estimated Unit Cost	Estimated Total Cost	Notes
North Segment (I-94 to Bailey Road)					
Existing 8' Trail Removal	3,200	Lin Ft	\$16.00	\$51,200	
Trail Construction	3,200	Lin Ft	\$90.00	\$288,000	
Pedestrian Ramps	9	Each	\$2,000.00	\$18,000	
Wayfinding Directional Signage	7	Each	\$4,000.00	\$28,000	
Wayfinding Kiosk	2	Each	\$20,000.00	\$40,000	
Rest Stops	1	Each	\$6,000.00	\$6,000	
Traffic Control Signs and Devices (includes MUTCD signage)	21,120	Lin Ft	\$1.00	\$21,120	
			North Segment Total	\$452,000	
South Segment (Bailey Road to Ravine Park Entrance)					
Existing 8' Trail Removal	5,230	Lin Ft	\$16.00	\$83,680	3
Trail Construction	27,700	Lin Ft	\$90.00	\$2,493,000	5
Wayfinding Directional Signage	4	Each	\$4,000.00	\$16,000	10
Wayfinding Kiosk	3	Each	\$20,000.00	\$60,000	
Rest Stops	1	Each	\$6,000.00	\$6,000	
Traffic Control Signs and Devices (includes MUTCD signage)	30,000	Lin Ft	\$1.50	\$45,000	
Pairie and Pollinator Habitat Planting	14	Acres	\$6,000.00	\$81,000	8
			South Segment Total	\$2,785,000	
Trail Underpasses					
<i>Underpass north of Valley Creek Road (Improvements)</i>	1	Lump Sum	\$450,000.00	\$450,000	9
<i>Underpass at 85th Street South (New Structure)</i>	1	Lump Sum	\$900,000.00	\$900,000	9
<i>Underpass at future Cottage Grove Ravine Regional Park entrance (south of 90th Street South) (New Structure)</i>	1	Lump Sum	\$900,000.00	\$900,000	9
			Underpasses Total	\$2,250,000	
Subtotal Construction Cost Estimate				\$5,487,000	
20% Construction Contingency				\$1,097,000	
Subtotal Construction Cost Estimate with Construction Contingency				\$6,584,000	
20% Design and Engineering Contingency				\$1,317,000	
Total Estimated Construction Cost				\$7,901,000	

Future Property Acquisitions (2017 tax assessed values)	Acres	Cost
Acquisition Area A	0.25	\$20,000.00
Acquisition Area B	4.25	\$164,000.00
Acquisition Area C	0.6	\$11,500.00
Acquisition Area D	2	\$275,000.00
Total Anticipated Acquisition Cost in 2017 Dollars	7.1	\$470,500.00

D2 Segment					
Trail Construction	8,500	Lin Ft	\$90.00	\$765,000	
Traffic Control Signs and Devices (includes MUTCD signage)	8,500	Lin Ft	\$1.00	\$8,500	
Wayfinding Directional Signage	2	Each	\$4,000.00	\$8,000	
			D2 Segment Total	\$782,000	
20% Construction Contingency for D2 Segment				\$156,400	
20% Design and Engineering Contingency for D2 Segment				\$156,400	
			Total Estimated Cost for D2 Segment	\$1,094,800	

Estimated Annual Operations & Maintenance Costs	Estimated Cost	Notes
Equipment Costs	\$7,100	11
Staff Wages	\$8,900	12
Total Estimated Annual Operations & Maintenance Costs	\$16,000	

Estimate Notes

1. Construction cost estimate includes a 20% design and administration fee and an additional 20% construction contingency factor for unforeseen costs.
2. Estimates are based on current 2017 construction costs.
3. Existing trail removal assumes 8' wide bituminous trail or concrete walk. Actual dimensions may vary.
4. Estimate does not include any utility relocation costs except as noted for trail underpass.
5. Existing trail construction assumes 10' wide bituminous trail, turf establishment, and signage. Estimate does not include any retaining walls or streetscaping such as boulevard trees and decorative lighting.

6. Estimate includes items such as removing and reinstalling curb and gutter, driveway aprons and storm sewer catch basins.
7. Segments of existing trail do not conform to regional trail design standards. In light of recent construction of certain segments, the trail will stay in its current condition. When road reconstruction occurs in the future, the trail will be reconstructed to meet regional trail design standards.
8. Native prairie planting for pollinator species assumes planting area is 20 feet wide, length of segments C-F. Cost includes seed purchase, planting, mowing, burn and weed control by hired contractor. Assuming internal County staff undertakes work, cost estimated at \$1,256 per acre.
9. Trail underpass price includes contingency costs for utility relocation, traffic control, construction and contractor safety.
10. Directional signs will increase from 4 to 6 if Segment D2 is implemented.
11. Equipment costs based on anticipated service needs; including, plowing, sanding, mowing, sweeping, and grooming.
12. Based on estimated 184 staff hours needed to annually to perform maintenance tasks.

Appendix B: Rare Species List

This appendix includes a complete list of rare species found within one mile of the Central Greenway Regional Trail.

A one-mile buffer surrounding the project limits was evaluated for the presence of rare plants, animals, native plant communities, and other rare features using Geographical Information Systems (GIS) in conjunction with the MnDNR's Natural Heritage Information System (NHIS)¹. The Natural Heritage data is provided by the MnDNR's Division of Ecological Resources and Water Resources, and was current as of December 2014 (License Agreement 625). These data are not based on an exhaustive inventory of the state. The lack of data for any geographic area shall not be construed to mean that no significant features are present.

Species:

- » Bald Eagle
- » Loggerhead Shrike
- » Western Fox Snake
- » Blanding's Turtle
- » Peregrine Falcon
- » Pugnose Shiner
- » Least Darter

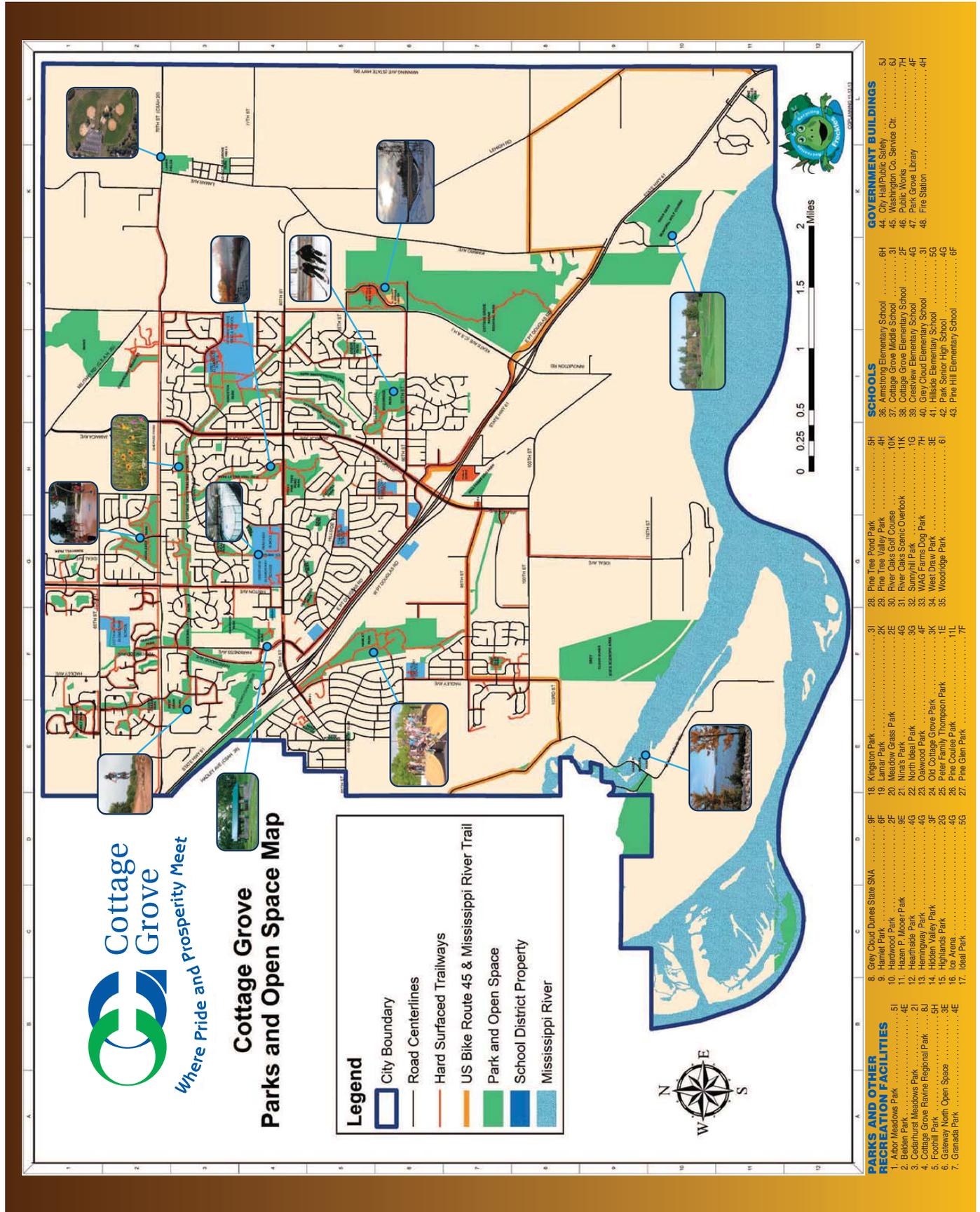
¹ Copyright 2014 State of Minnesota, Department of Natural Resources.

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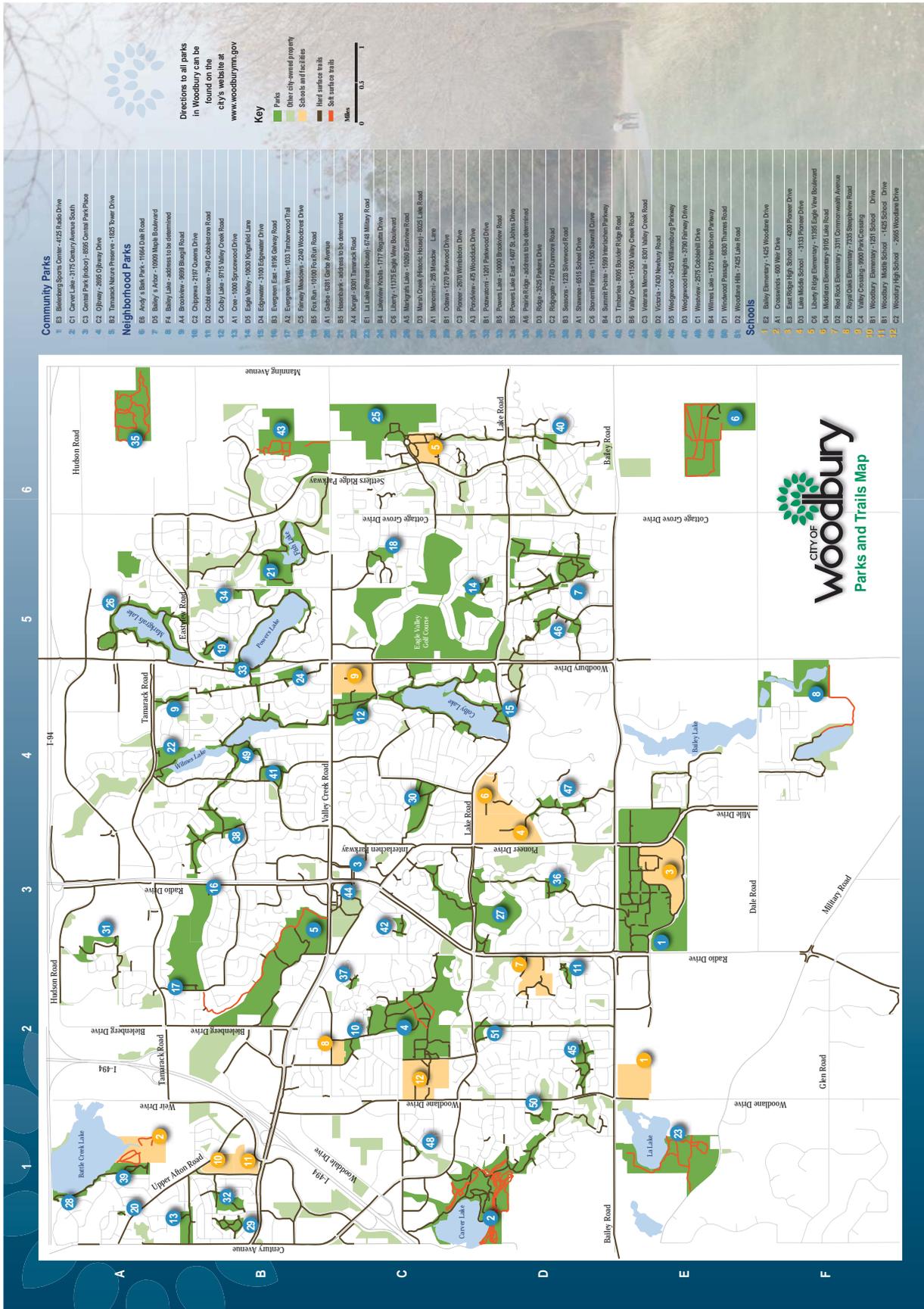


Appendix C: Local Trail Maps

City of Cottage Grove Park and Trail Map



City of Woodbury Park and Trail Map



Appendix D: Resolutions of Support



August 25, 2017

Metropolitan Council
390 North Robert Street
St. Paul, MN 55101

Support for the Central Greenway Regional Trail Master Plan submitted to the Metropolitan Council

Dear Metropolitan Council Parks and Open Space Commission:

The City of Cottage Grove is pleased to provide this letter of support for Washington County's Central Greenway Regional Trail master plan proposal to the Metropolitan Council. The planned development of this trail in the City of Cottage Grove is an important part of the regional trail system. The master plan conforms to the City's 2030 Comprehensive Plan and will be identified in the upcoming 2040 Comprehensive Plan.

The Central Greenway Regional Trail will benefit surrounding communities and further the development of a trail network within Cottage Grove. The trail will run along County Road 19/Keats Avenue allowing trail users safe off-road access to Cottage Grove Ravine Regional Park. Ultimately, this trail will provide a needed link in the regional trail system that will connect Cottage Grove Ravine Regional Park, Lake Elmo Park Reserve, and Big Marine Park Reserve.

Thank you for your consideration of this important project. If you have any questions, comments, or concerns, please do not hesitate to contact me at 651-458-2808.

Sincerely,

A handwritten signature in black ink, appearing to read 'Zac Dockter', with a long horizontal line extending to the right.

Zac Dockter
Parks and Recreation Director





8301 Valley Creek Road • Woodbury, Minnesota 55125-3330 • www.ci.woodbury.mn.us
651/714-3500 • TDD 651/714-3568 • FAX 651/714-3501

August 30, 2017

Metropolitan Council
390 Robert Street North
St. Paul, Minnesota 55101

**Re: Support for the Central Greenway Regional Trail Master Plan
Submitted to the Metropolitan Council**

Dear Metropolitan Council Parks and Open Space Commission:

The City of Woodbury is pleased to provide this letter of support for Washington County's Central Greenway Regional Trail master plan proposal to the Metropolitan Council. The planned development of this trail in the City of Woodbury is an important part of the local and regional trail system. The master plan conforms to the City's 2030 Comprehensive Plan and will be identified in the upcoming 2040 Comprehensive Plan.

The Central Greenway Regional Trail will benefit surrounding communities and further the development of a trail network within Woodbury. The trail will run along County Road 19/Keats Avenue allowing trail users safe off-road access to Cottage Grove Ravine Regional Park. Ultimately, this trail will provide a needed link in the regional trail system that will connect Cottage Grove Ravine Regional Park, Lake Elmo Park Reserve, and Big Marine Park Reserve.

Thank you for your consideration of this important project. If you have any questions, comments, or concerns, please do not hesitate to contact me at (651) 714-3576.

Sincerely,

Mary Giuliani Stephens
Mayor

MA/bjr