City of Town & Country
Trails and Parks Master Plan Update 2009
FINAL MASTER PLAN
February 2010
ACKNOWLEDGEMENTS

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SECTION 1

Introduction

This master plan document represents the next step in the development of the City of Town & Country Trails and Parks System. Following completion of the 1998 master plan the city began to implement recommendations including acquisition of green space, development of parks, and implementation of connector walks and trails throughout the city. In a short 11 years the City of Town & Country has provided residents and visitors a unique and active trails and parks system with a full time Director of Parks and Recreation and parks staff, and a parks office with community space.

With the implementation of many of the master plan goals comes a need to evaluate where we are, and identify opportunities for the continued development of the trails and parks system. The purpose of this plan is to analyze the existing trails and parks system, and identify opportunities for future improvements and development over the next 5-10 years. The five goals identified for this master plan update include:

- Evaluation of the Existing Trails
- Evaluation of the Existing Parks
- Future Trail Connections
- Future Parks and Open Space Preservation
- Future Programming Opportunities

1 Photos from website tandccityparks.org
photographer: Bruce Schwartz
Implementation of the 1998 Trails and Parks Master Plan

The 1998 plan created the foundation for development of a trails and parks system for the City of Town & Country. Along with the 1997 Parks and Open Space Plan the 1998 master plan identified opportunities for the acquisition of land for park development and made recommendations for amenities within the parks based on community and staff input and review of the community needs.

Along with parks the 1998 master plan looked at the development of a city wide trails system. Trails had been a high priority in planning workshops and phone survey. Understanding the complexity in developing trail systems in established communities the 1998 plan identified conceptual trail routes, trail types, and development costs to meet the goals of the plan.

It is important to acknowledge the development that has occurred in such a short time based on this plan. Below is a list of trails and parks improvements that have been made based on recommendations in the 1998 Trails and Parks Master Plan. The following page contains two maps showing the trails and parks system in 1998 and the current trails and parks system. The City of Town and Country should be very proud of this achievement, and use this success to continue the development of the trails and parks system.

- Developed five miles of trails and walks along city streets (not counting interior neighborhood sidewalks)
- Developed two miles of trails within city parks.
- Acquired and developed three city parks totaling 61 acres.
- Established a shared use agreement with CBC High School at Cadet Park to provide active recreation amenities to city residents and park visitors.
- Developed community and preservation oriented programming within the parks.
- Used the 1998 master plan to acquire grant funding for development of parks and trails.
- Established a Parks and Recreation Department with a director, staff, and office with community space at Longview Farm Park.
1998 - Existing Trails and Parks

- No developed parks
- Limited connectivity

2009 Existing Trails and Parks

In 11 years the city has:
- Completed approx. 5 miles of trails along city streets.
- Developed two miles of trails within city parks.
- Acquired and developed three city parks totaling 61 acres.
- Developed community and preservation oriented programming within the parks.
- Acquired grant funding for the development of trails and parks within Town and Country.
The methodology used in preparing the master plan update included meetings with residents, Parks and Recreation Staff, Parks and Trails Committee, and Board of Aldermen, while also researching the existing parks and trails and collecting base information. This information included maps, photographs, and existing planning documentation. This data was then analyzed and reviewed against current park standards to identify conceptual improvement recommendations. These recommendations were reviewed with residents and staff, and refined to final master plan recommendations that the City of Town & Country can implement as smaller projects and in phases. The staff, board and public input in the planning process was pivotal to the creation of the final Master Plan Recommendations.

At each public forum the community was presented several opportunities to provide input. These included discussion during the meeting, maps for notes or drawing thoughts and ideas, and a take home input form that could be completed at the meeting or returned to the park office when completed. The forms were also available on the city website and at the parks office in Longview Farm Park. All input received is included in the appendix of this report.

The process to complete the Master Plan included four tasks:

1) Project Initiation / Data Collection
2) Analysis
3) Conceptual Design Recommendations
4) Final Recommendations and Master Plan Update

**TASK I - PROJECT INITIATION / DATA COLLECTION**

- Base Map Collection: Gathered existing base maps, surveys, and aerial photographs of the two properties.
- Review existing planning documents and trails plans for neighboring communities to identify future park and trail development.
- Site Visits and Inventories: Conducted several walking tours of the existing parks and driving tour of the existing trails system to view, photograph, and inventory existing conditions and amenities.
- Met with staff, Parks and Trails Commission, and the community to obtain input and identify program items for the trails and parks. Input opportunities included one-on-one discussions with the design team, workshop maps, and comment session. These Data Collection input sessions included:
  - Staff Kick-Off Meeting: January 22, 2009
  - Park and Trail Walks with Staff: April 14, 2009
  - Parks & Trails Commission Kick-Off Meeting: April 20, 2009
  - Public Forum #1: April 20, 2009 at Longview Farm Park
TASK 2—ANALYSIS

- Identified and evaluated programming opportunities within the parks system based on national standards and review of park use with Parks and Recreation Staff.

- Identified and evaluated opportunities for acquisition of open space for preservation and/or development of future parks based on national standards and allocation of existing parkland within the city.

- Identified and evaluated opportunities for expanding the existing trails system to provide a city wide system with connections to key destinations within the city and neighboring communities.

- Met with the Parks Staff to review community input from Public Forum #1 and discuss program items for the parks.

- Organized feedback from the Parks Staff, Parks and Trails Commission and Board of Aldermen to identify the issues relevant to the City of Town & Country.

TASK 3 & 4 - CONCEPTUAL DESIGN RECOMMENDATIONS & FINAL MASTER PLAN UPDATE

The final tasks involved the development of conceptual design recommendations based upon the needs and program items identified in Tasks 1 and 2. This information was compiled and presented to staff and the community. Final design recommendations were created based on feedback, and a narrative was developed for the final City of Town & Country Trails and Parks Master Plan Update document.

- Developed city wide trail recommendations to complete the internal city trail system, link internal destinations, and make connections to neighboring communities. Recommendations included design guidelines and priorities for implementation of the trails system.

- Developed recommendations for future land acquisition, programming for future parks, and improvements to existing parks. Recommendations were based on community and city input and review of parks and recreation standards.

- The conceptual design recommendations and cost opinions were presented to staff and the community for their review and discussion. These discussion sessions included:
  - Staff Design Review: August 28, 2009
  - Public Forum #2 Design Review: September 1, 2009

- The final designs and cost opinions were refined per the community input and further review with staff, and a final presentation was given to the community and Board of Aldermen on October 26, 2009 at City Hall.
  - Staff Final Design Review: September 23, 2009
  - Staff Final Priorities and Cost Review: October 22, 2009
• The final master plan document was prepared including identification of financing alternatives available to help generate revenue for proposed projects.

• The final master plan document was delivered to the City in December 2009.

Please note that the Town & Country Trails and Parks Master Plan Update 2009 is a work in progress. Recommendations made within the document speak to the needs and desires at the time it was prepared. As the City of Town & Country begins the implementation of the recommendations it is important to keep in mind the difficulties of anticipating exact budgets, time lines and opportunities. For this reason, it is recommended that this plan be reviewed and updated periodically to ensure it continues to be based on current data and standards.
Trails and connectivity have been a priority of residents and the city dating back to the 1998 Master Plan, and the city has pursued the implementation of several of the short range trail projects from the 1998 plan. This update plan looks to evaluate what is needed to complete these connections, determine if the existing short and long term trail options from 1998 are still applicable, and identify the next steps for the implementation of a city wide trails system.

One noticeable difference from the 1998 planning process was that previously the focus had been on creating connections within the city, but based on input for this update the focus has expanded to connecting to neighboring communities and their parks and trails systems.

Examples of the trail focused input received during the planning process includes the items listed below. A full copy of all input is included in the appendix of this report.

- Connect existing trail sections and link city parks.
- Trails to schools, retail, and municipal buildings.
- Trail connections outside Town & Country.
- Safe crossings of 141 and Highway 64/40.
- Complete sidewalk around Longview Farm Park.
- Mason Road and Weidman Road Queeny Park connections.
- Connect Clayton Road to Bopp Road trail.
- Add trail along Topping Road to Clayton Road.
- Add bike lanes back to Clayton Road following construction.

Based on this input, discussions with staff, and review of the previous planning documents the master plan recommendations for the overall trail system are focused on three design themes:

1. Continue to Build on the Existing Trails System.
2. Develop Design Standards for the Community Wide Trails System.
3. Identify Opportunities for Connections Outside Town & Country.
1. Continue to Build on the Existing Trails System

Following the 1998 Master Plan the City of Town & Country has made significant progress in building a foundation for the city wide trails system. The biggest areas of development have occurred along Clayton Road and Mason Road. These two roads represent the dominate East/West and North/South connections through the city respectively. As a result they are heavily used vehicular routes and ideal spines for the trails system. Recommendations for building on the existing trails system include:

a. Identify missing sections and connections in the trails system.

b. Identify destinations not linked by the trails system. These links include schools, retail, and municipal destinations.

c. Complete connections to Queeny Park.

d. Identify connections to neighboring communities and parks.

To better define these recommendations the overall trails plan graphic has been updated to show a city wide trails system. This plan divides the overall system into three priority levels based on trail sections that will have the biggest impact on creating connections within the city and into neighboring communities. While higher priority trail sections are preferred for implementation it is understood that this plan is a fluid document and over time priorities may change, funding may be available, or developments may occur that present opportunities for implementation of trail sections from lower priorities before those of higher priorities.
Priority #1 Trail Sections
These trail sections focus on completing the main trail spines through the city along Clayton Road and Mason Road. Sections are:

a. Completion of Clayton Road Spine
   - From West of 141 to Bopp Road
   - Includes safe crossing of 141
   - Requires coordination for crossing of The Principia.
   - Trails on both sides of Clayton Road or sections of trail along the south side of Clayton linking residential neighborhoods to safe crossing points to the main trail on the north side of Clayton Road.

b. Completion of Mason Road Spine
   - From Conway Road to Queeny Park / Thornhill Road.
   - Includes safe crossing of Interstate 64/40.
   - Includes coordination with Saint Louis County and MoDOT for crossings and connections to Queeny Park.

Priority #2 Trail Sections
These trail sections include links from the spine trails to parks, schools, municipal, and retail destinations within and adjacent to Town & Country. Sections are:

a. Links to Parks from Spines
   - Mason Ridge
   - North 40 Drive

b. Links to Schools, Municipal, and Retail Destinations
   - S. Mason Road North of Conway
   - New Ballas Road (North and South of Clayton Road)
   - Municipal Center Drive
   - South Outer 40
   - Maryville Center Drive

Priority #3 Trail Sections
These trail sections include completion of loop trails within the City, neighborhood connections to the spine trails, and connections to neighboring communities. Sections are:

- Loop Trails along 64/40 and 141
- Connection from Conway Road to Ladue Road
- Residential Sidewalk Connections (by neighborhoods)
- Connections to neighboring communities
TRAILS SYSTEM - CIRCULATION STYLES

The trail system is developed to provide an alternative transportation system within the city linking destinations within and outside the city, and providing recreational opportunities for the community. The priority trail sections are made up of one or more circulation styles based on their role in the overall trails system. These circulation styles will help define a hierarchy for the trail types based on the role of the trail sections. Circulation styles include:

- Primary Spine Trails
- Secondary Loop Trails
- Connector Trails
- Internal Park Trails
- Residential Sidewalks

Primary Spine Trails
This circulation style defines the two primary spine trails that create the foundation for the layout of the overall trails plan. Large sections of these trails have been implemented as defined in the 1998 master plan. These linear trails include Clayton Road and Mason Road from Conway Road to Thornhill Road.

Secondary Loop Trails
These trails complete loops within the city that can be used as transportation routes or for recreation. They include sections of the primary spines and are focused on high traffic roads, minimizing routes through residential areas of the city.

Connector Trails
Connector trails provide alternative transportation links to numerous destinations within and adjacent to the City of Town & Country. These destinations include, but are not limited to:

- City Parks
- Schools
- Retail
- Municipal Buildings
- Places of Worship
- Neighboring Communities and Parks

Internal Park Trails
Trails within existing and future parks are intended to provide recreation opportunities and circulation within the park for visitors. These trails should link to the city wide trails system.

Residential Sidewalks
These walks provide pedestrian circulation within residential developments, and connections to the overall trails system. Locations and extents of this circulation style are dictated by the individual neighborhoods.
TRAILS SYSTEM - TRAIL TYPES

The trail types identified in the 1998 master plan were reviewed based on the expanded trail system, built trail segments, and existing conditions. Based on this review the five trail types proposed in 1998 have been consolidated and reduced to three preferred types. These trail types are:

- **Type A: Off-Road Multiuse Trail**
- **Type B: On-Road Striped Multiuse Trail**
- **Type C: On-Road Bicycle with Off-Road Pedestrian Trail**

The following section of the report will discuss design standards for each trail type.

**Type A: Off-Road Multiuse Trail**

This trail type is the preferred type for all trails, with the exception of residential sidewalks, where feasible. Off-road trails provide separation of pedestrians and bicycles from vehicular traffic, and increase the use of the trail system by residents of all ages and comfort levels. Due to the limited space for trail development and precedents set with the existing trail development this trail type will be limited in its application, but should be explored for use as primary spine trails, secondary loop trails, and connector trails where possible.

**Type B: On-Road Multiuse Trail**

These trails are to be used when the development of off-road trails is not feasible. The locations of these trails should be identified based on volume of vehicular traffic, and ability to widen shoulders for designated trails in each direction. Physical barriers can be used to separate trail users from vehicular traffic. Trails should be striped and appropriate signage posted to clearly identify the routes. Where on-road trails cross intersections, sight distances should be maximized and crossings should be improved as needed to create a safe crossing location for pedestrians and bicycles. The secondary loop trails along South Outer 40 and Municipal Center Drive are locations where on-road trails may be an option along with some connector trails including North 40 Drive. In these locations it appears adequate shoulder exists for designated multiuse trails.

**Type C: On-Road Bicycle with Off-Road Pedestrian Trails**

This trail type likely to be the most common in the trails master plan. Due to limited access for trail development and the variety in vehicular traffic speed and volume two variations of this trail type should be applied within the trails system.

1. Striped On-Street Bicycle with Off-Road Pedestrian Trail
2. Share-the-Road (sign only) with Off-Road Pedestrian Trail
1. Striped On-Street Bicycle with Off-Road Pedestrian Trail

This trail combination type should be used in locations where an off-road multiuse trail is not feasible, but space is available for an off-road pedestrian trail. Routes with high vehicular volume and speeds are recommended for this trail type. Roadway striping and signage are important for alerting motorists and cyclist, and for safety. Where on-road bike lanes cross intersections, sight distances should be maximized and crossings should be improved as needed to create a safe crossing location for bicycles.

The off-road pedestrian trails should be a paved asphalt or concrete surface and signed and striped at intersections with vehicular traffic. Many of the primary spine sections, connector trails, and possibly the secondary loop trails would fall into this trail type.

2. Share-the-Road (sign only) with Off-Road Pedestrian Trail

This trail type should be used on routes where vehicular traffic is minimal and/or have reduced speed limits. New share-the-road signs should be installed along these routes, and where on-road bike lanes cross intersections, sight distances should be maximized and crossings should be improved as needed to create a safe crossing location for bicycles.

The off-road pedestrian trails will typically be concrete sidewalks in these locations and should be striped at intersections with vehicular traffic. Babler Road, Mason Ridge, Thornhill Road, and residential neighborhoods would fall into this trail type.

The final design and engineering of the trails will include the determination of appropriate trail types based on existing conditions and vehicular traffic levels. The following pages contain the city wide trails plan graphic and priorities summary sheet for the trail sections.
SCHOOLS
1. Covenant Christian School
2. Newoehner School
3. Parkway United Nursery School
4. Academy of the Visitation
5. Moog Center for Deaf Education
6. Churchill Center and School
7. Mason Ridge
8. Trinity Lutheran Preschool
9. Westminster Christian Academy
10. Parkway Central High School & Parkway Central Junior High School
11. Bellerive Elementary
12. Whitfield School
13. West County Technical School
14. Parkway West High School & Early Childhood Center
15. Priory School of St. Mary
16. Bellerive Elementary
17. Solomon Schecter Day School
18. Missouri Baptist College

PUBLIC PARKS
1. Queeny Park
2. Longview Farm Park
3. Preservation Park
4. Drace Park

CIVIC FACILITIES
1. City Hall/Police Station
2. Fire Station
3. Post Office

SHOPPING CENTERS
1. Clayton Village & Twin Oaks Crossing
2. Lamp and Lantern Village
3. Mason Woods Village

LEGEND
- Existing Parks
- Schools
- Shopping Centers
- Municipal Buildings
- City Limits
- Park & Trail Connections
- Highway
- Priority #1 Sections
- Priority #2 Sections
- Priority #3 Sections
- Residential sidewalk connections
- Commercial and Institutional trail connections
- Trail priority sections

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SWT Design

Trail Priority Sections
<table>
<thead>
<tr>
<th>Priority # 1</th>
<th>Time: 1-5 Years for Planning and Construction</th>
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<tbody>
<tr>
<td><strong>Description:</strong> Projects Completion of Mason Road Spine Trail and Clayton Road Spine Trail. Includes Some Sections that are Currently Funded or Identified for Funding</td>
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<tr>
<td><strong>Key</strong></td>
<td><strong>Trail Section</strong></td>
</tr>
<tr>
<td>1a.</td>
<td>Clayton Road - East</td>
</tr>
<tr>
<td>1b.</td>
<td>Clayton Road - West</td>
</tr>
<tr>
<td>1c.</td>
<td>S. Mason Road - Interstate 40/64 Crossing</td>
</tr>
<tr>
<td>1d.</td>
<td>S. Mason Road - North</td>
</tr>
<tr>
<td>1e.</td>
<td>S. Mason Road - South Infill</td>
</tr>
<tr>
<td>1f.</td>
<td>South of Peacock Farm Road</td>
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<td><strong>Totals for Priority Group</strong></td>
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<tr>
<th>Priority # 2</th>
<th>Time: 6-10 Years for Planning and Construction</th>
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<tbody>
<tr>
<td><strong>Description:</strong> Links from spines to parks, schools, municipal, and retail destinations</td>
<td></td>
</tr>
<tr>
<td><strong>Key</strong></td>
<td><strong>Trail Section</strong></td>
</tr>
<tr>
<td>2a.</td>
<td>Mason Ridge Infill</td>
</tr>
<tr>
<td>2b.</td>
<td>North 40 Drive</td>
</tr>
<tr>
<td>2c.</td>
<td>S. Mason Road</td>
</tr>
<tr>
<td>2d.</td>
<td>Conway Road</td>
</tr>
<tr>
<td>2e.</td>
<td>West of Conway Hill Road</td>
</tr>
<tr>
<td>2f.</td>
<td>South 40 Drive</td>
</tr>
<tr>
<td>2g.</td>
<td>Municipal Center Drive</td>
</tr>
<tr>
<td>2h.</td>
<td>N. Balls Road</td>
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<tr>
<td><strong>Totals for Priority Group</strong></td>
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<tr>
<th>Priority # 3</th>
<th>Time: 11+ Years for Planning and Construction</th>
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<tr>
<td><strong>Description:</strong> Completion of Loop Trails, Neighborhood Connections, and Connections to Neighboring Communities</td>
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<tr>
<td><strong>Key</strong></td>
<td><strong>Trail Section</strong></td>
</tr>
<tr>
<td>3a.</td>
<td>Babler Road</td>
</tr>
<tr>
<td>3b.</td>
<td>South Outer 40 to Clayton Road Loop</td>
</tr>
<tr>
<td>3c.</td>
<td>South 40 to Clayton Road Loop</td>
</tr>
<tr>
<td>3d.</td>
<td>Westmen Road</td>
</tr>
<tr>
<td>3e.</td>
<td>Overhead Powerline Easement</td>
</tr>
<tr>
<td>3f.</td>
<td>Topping Road</td>
</tr>
<tr>
<td>3g.</td>
<td>Topping Road</td>
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<tr>
<td><strong>Totals for Priority Group</strong></td>
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**Conceptual Community Wide Trails Plan Total Length** | 83,470 | 15.81 | |

**Notes**

1. Projects within each priority section are not listed in order of importance. Implementation should occur as appropriate funding and opportunities are presented.
2. All Trail Section lengths are estimated at this time. As projects are identified for implementation more detailed lengths and improvement requirements can be determined for conceptual cost estimating.
3. Conceptual Community Wide Trails Plan Total Length does not include existing built trails and walks.
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Circulation Styles

LEGEND
Circulation Styles
- Spine
- Loop
- Connector

Existing Parks
Schools
Shopping Centers
City Limits

1. Trail Section
1a. Clayton Road - East
1b. Clayton Road - West
1c. S. Mason Road - Interstate 40/64 Crossing
1d. S. Mason Road - North
1e. S. Mason Road - South

2. Trail Section
2a. Mason Ridge Infill
2b. North 40 Drive
2c. S. Mason Road
2d. Conway Road
2e. South Outer 40
2f. Municipal Center Drive
2g. N. Balls Road

3. Trail Section
3a. Babler Road
3b. South Outer 40 to Clayton Road Loop
3c. South 40 to Clayton Road Loop
3d. Weidman Road
3e. Overhead Powerline Easement
3f. Topping Road
3g. Thornhill Road
2. Develop Design Standards for the City Wide Trails System

The recommendations identified within this theme are intended to build on the trail types and safety and security discussion presented in the 1998 master plan. They will assist the city in the planning of trail routes and creating consistency in materials and details for future trail development. The recommendations are intended to create a unified plan for connectivity within Town & Country. These recommendations are based on national standards and best practices established throughout the United States.

The basic components for the trails system have been identified through the master planning process and include, but are not limited to: paved off-road trails, on-road trails where necessary, sidewalks were appropriate, safe at grade crossings and transitions at interstate overpasses, comprehensive signage program, and trailheads providing rest opportunities and trail access.

As projects are identified for development a detailed design process will be required to coordinate the application of these recommendations based on actual site conditions. The design development and construction documentation for on-street routes, for example, will determine if widened lanes, striped bike lanes, or paved shoulders will be the appropriate solution for the individual section of trail.

The recommendations for design standards should be applied with the understanding that each project is unique and that design modifications may be necessary to create a safe and successful trail system. All trail segments will require a design development and review process that may include St. Louis County Highways, Missouri Department of Transportation, and /or Metropolitan St. Louis Sewer District prior to development of construction documents.

Circulation Styles and Standards

American Association of State Highway and Transportation Officials (AASHTO), Manual of Uniform Traffic Control Devices (MUTCD), and Missouri Department of Transportation (MoDOT) standards for trail and intersection design are the default guidelines for alternative transportation trail design. These guidelines provide information necessary for the creation of a safe pedestrian and bicycling environment. They focus on high speed and high use alternative transportation routes, and their intersections with vehicular traffic. Due to the significant amount of the Town & Country trails system that runs parallel or shares pavement with major vehicular routes these standards and guidelines should be incorporated into the final design of all segments accordingly. Trails located off the main traffic routes and within parks or residential neighborhoods should be designed to ensure the safety of users, and may be limited in size and routing do to restricted right-of-way or easements within these areas.

The following are recommendations for general characteristics of the trail types when applied in each of the circulation styles. As sections of the trail system are identified for implementation these standards will assist in preliminary routing and budgeting along with the priorities summary sheet. A more thorough design process will be required with appropriate reviews, engineering, and design standards applied.
**Primary Spine Trails** - Major alternative transportation routes north/south and east/west through the City of Town & Country. Slopes and alignments of trails should conform to AASHTO / MoDOT guidelines where feasible.

**Trail Materials**
- **Type A (Standard)** - Asphalt; 6” base / 4” asphalt
- **Type A (Heavy Duty)** - Asphalt; 10” base / 4” asphalt
  (Used where regular vehicular traffic is anticipated)
- **Type C Pedestrian Trail** - Asphalt; 6” base / 4” asphalt or Concrete 4” base / 4” concrete
- **Type C Bike Lanes** - Paved bike lanes per AASHTO / MoDOT

**Trail Widths**
- **Type A** - 10’-12’ wide with 2’ shoulders each side
- **Type C Pedestrian** - 6’-8’ wide
- **Type C Bike Lanes** - 3’-5’ wide striped and signed bike lanes both sides per AASHTO / MoDOT

**Conceptual Trail Development Costs (2009 development costs)**
- **Type A** - $275,000.00 / mile (trail only, on-grade with minimal excavation)
- **Type C Pedestrian** - $360,000.00 / mile concrete trail (trail only, on-grade with minimal excavation)
  - $212,000.00 / mile asphalt trail (trail only, on-grade with minimal excavation)
- **Type C Bike Lanes** - $20,000.00 / mile on existing pavement (includes signs, striping and grates)
  - $385,000.00 / mile for new 5’ wide lanes both sides (includes items above and widened pavement)

*Trail development costs are for trail and any other items noted only. They do not include land acquisition, design, engineering or construction administration fees, maintenance costs, etc.*

**Secondary Loop Trails** - Trails that along with the spine trails create alternative transportation and recreation loops within the City. These loops follow the primary spines and run adjacent to the interstates within Town & Country. Slopes and alignments of trails should conform to AASHTO / MoDOT guidelines where feasible.

**Trail Materials**
- **Type A (Standard)** - Asphalt; 6” base / 4” asphalt
- **Type A (Heavy Duty)** - Asphalt; 10” base / 4” asphalt
  (Used where regular vehicular traffic is anticipated)
- **Type B** - Paved multiuse per AASHTO / MoDOT
- **Type C Pedestrian Trail** - Asphalt; 6” base / 4” asphalt or Concrete 4” base / 4” concrete
- **Type C Bike Lanes** - Paved bike lanes per AASHTO / MoDOT
Trail Widths

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type A</td>
<td>10’-12’ wide with 2’ shoulders each side</td>
</tr>
<tr>
<td>Type B</td>
<td>6’-8’ wide striped and signed multiuse trail both sides per AASHTO / MoDOT</td>
</tr>
<tr>
<td>Type C Pedestrian</td>
<td>6’-8’ wide</td>
</tr>
<tr>
<td>Type C Bike Lanes</td>
<td>3’-5’ wide striped and signed bike lanes both sides per AASHTO / MoDOT</td>
</tr>
</tbody>
</table>

Conceptual Trail Development Costs (2009 development costs)*

<table>
<thead>
<tr>
<th>Type</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type A</td>
<td>$275,000.00 / mile (trail only, on-grade with minimal excavation)</td>
</tr>
<tr>
<td>Type B</td>
<td>$20,000.00 / mile on existing pavement</td>
</tr>
<tr>
<td></td>
<td>$615,000.00 / mile for new 8’ wide multiuse lanes both sides</td>
</tr>
<tr>
<td></td>
<td>(includes items above and widened pavement)</td>
</tr>
<tr>
<td>Type C Pedestrian</td>
<td>$360,000.00 / mile concrete trail</td>
</tr>
<tr>
<td></td>
<td>(trail only, on-grade with minimal excavation)</td>
</tr>
<tr>
<td></td>
<td>$212,000.00 / mile asphalt trail</td>
</tr>
<tr>
<td></td>
<td>(trail only, on-grade with minimal excavation)</td>
</tr>
<tr>
<td>Type C Bike Lanes</td>
<td>$20,000.00 / mile on existing pavement</td>
</tr>
<tr>
<td></td>
<td>(includes signs, striping and grates)</td>
</tr>
<tr>
<td></td>
<td>$385,000.00 / mile for new 5’ wide lanes both sides</td>
</tr>
<tr>
<td></td>
<td>(includes items above and widened pavement)</td>
</tr>
</tbody>
</table>

*Trail development costs are for trail and any other items noted only. They do not include land acquisition, design, engineering or construction administration fees, maintenance costs, etc.

Connector Trails - Links from Primary Spine Trails to destinations including parks, schools, municipal buildings, retail, and residential neighborhoods. Slopes and alignments of trails should conform to AASHTO / MoDOT guidelines where feasible.

Trail Materials

| Type A (Standard) | Material: Asphalt; 6” base / 4” asphalt                               |
| Type A (Heavy Duty) | Material: Asphalt; 10” base / 4” asphalt (Used where regular vehicular traffic is anticipated) |
| Type C Pedestrian Trail | Material: Asphalt; 6” base / 4” asphalt or Concrete 4” base / 4” concrete |
| Type C Bike Lanes | Material: Paved bike lanes per AASHTO / MoDOT                       |

Trail Widths

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type A</td>
<td>10’-12’ wide with 2’ shoulders each side</td>
</tr>
<tr>
<td>Type C Pedestrian</td>
<td>6’-8’ wide</td>
</tr>
<tr>
<td>Type C Bike Lanes</td>
<td>3’-5’ wide striped and signed bike lanes both sides</td>
</tr>
<tr>
<td></td>
<td>(includes items above and widened pavement)</td>
</tr>
<tr>
<td></td>
<td>(No defined width for Share-the-Road)</td>
</tr>
</tbody>
</table>
Conceptual Trail Development Costs (2009 development costs)*

| Type A - | $275,000.00 / mile (trail only, on-grade with minimal excavation) |
| Type C Pedestrian - | $360,000.00 / mile concrete trail (trail only, on-grade with minimal excavation) |
| | $212,000.00 / mile asphalt trail (trail only, on-grade with minimal excavation) |
| Type C Bike Lanes - | $20,000.00 / mile on existing pavement (includes signs, striping and grates) |
| | $385,000.00 / mile for new 5' wide lanes both sides (includes items above and widened pavement) |

*Trail development costs are for trail and any other items noted only. They do not include land acquisition, design, engineering or construction administration fees, maintenance costs, etc.

**Internal Park Trails** - Paved multiuse trails within city parks that provide recreation opportunities to park users and provide connections to the community wide trails system. Slopes and alignments of primary spine trails should conform to AASHTO / MoDOT guidelines where feasible.

**Trail Materials**
- Type A (Standard) - Asphalt; 6" base / 4" asphalt
- Type A (Heavy Duty) - Asphalt; 10" base / 4" asphalt (Used where regular vehicular traffic is anticipated)

**Trail Widths**
- Type A - 10'-12' wide with 2' shoulders each side

**Conceptual Trail Development Costs (2009 development costs)*

| Type A - | Location Specific |

**Residential Sidewalks** - Predominately located in neighborhoods with share-the-road bicycle routes. The routing and details for these walks would be decided by the neighborhoods when they are private streets. Slopes and alignments of the walks should conform to AASHTO / MoDOT guidelines where feasible.

**Trail Materials**
- Type A (Standard) - Asphalt; 6" base / 4" asphalt
- Type A (Heavy Duty) - Asphalt; 10" base / 4" asphalt (Used where regular vehicular traffic is anticipated)
- Type C Pedestrian Trail - Concrete 4" base / 4" concrete
- Type C Bike Lanes - Share-the-Road

**Trail Widths**
- Type A - 10'-12' wide with 2' shoulders each side
- Type C Pedestrian - 5' wide
- Type C Bike Lanes - No defined width for Share-the-Road
Conceptual Trail Development Costs (2009 development costs)*

<table>
<thead>
<tr>
<th>Type</th>
<th>Cost</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type A</td>
<td>$275,000.00 / mile</td>
<td>Trail only, on-grade with minimal excavation</td>
</tr>
<tr>
<td>Type C Pedestrian</td>
<td>$185,000 / mile</td>
<td>One side of street</td>
</tr>
<tr>
<td>Type C Bike Lines</td>
<td>$2,500 / mile</td>
<td>For signage</td>
</tr>
</tbody>
</table>

*Trail development costs are for trail and any other items noted only. They do not include land acquisition, design, engineering or construction administration fees, maintenance costs, etc.

Trail Amenities

The following are support items for a trails system. They may not occur on all sections of a trail, but most will be incorporated into the community wide trails system at some level.

Bike Racks - Bicycle racks should be located throughout the trails system at locations where cyclist would transition to pedestrian mode including trail heads, parks, buildings, bus stops, etc. They should be located in public areas within view from main pedestrian ways and should not interfere with pedestrian circulation. The bike racks selected should be easy to install, vandal resistant and work well with popular security locks. A standard model should be selected for use throughout the trail system.

Bollards - Bollards are intended to provide separation between vehicles and trail users. They are typically located at trail and roadway intersections. Bollards should be chosen according to the specific needs of the site. Together with signage, striping, furnishings, and landscape, bollards can create a standard for intersections along the community wide trails system. Scale and style of the bollards may vary based on location and surrounding context. Removable or knockdown bollards can be used to provide trail access to emergency and maintenance vehicles.

Culverts - The use of culverts is important to ensure proper stormwater drainage, safety of trail users, and longevity of the trail materials. Site conditions and trail design will determine the specific needs for culvert locations.

Bridges - Bridges are used in locations to cross drainage, water ways, and roads. The type and size of bridges can vary greatly and should be site specific. Emergency and maintenance vehicle access should be a consideration in the design of bridge crossings.

Fencing - Fencing and railings are often needed on trails for safety and to serve as barriers. The design and materials used should be site specific and consideration should be given to the aesthetic impact of the materials. Fencing and railings should blend in with the surroundings and be consistent throughout the trail system.

Trail Lighting - Lighting can make the difference in whether a person bikes or drives to a destination. Lighting along the main spines and connectors should be considered in locations where the multi-use trail
is off-road and away from existing city lighting. Consideration should be given to the security, cost, and maintenance commitment providing a lighted trail requires.

**Landscape** - The amount of landscape along the trails will vary greatly throughout the trails system. Landscape uses include, but are not limited to screening and buffering, habitat restoration, erosion control, and aesthetic impact. Native plant species are recommended for use along trail routes due to their tolerance for local weather and soil conditions.

**Site Furnishings** - Benches, trash receptacles, information kiosks, and drinking fountains are just a few of the amenities that will support high use of a trail system. These furnishings can be located periodically along the trails and at key stopping points including trail heads and parks. Site furnishings will need to be considered in the overall maintenance needs for a developed section of trail.

**Signage** - A comprehensive signage program for the trails system will be required to ensure that safety and other important trail use information is provided to trail users. Trail signage should be developed to conform to the Manual on Uniform Traffic Control Devices (MUTCD) and AASHTO. Several types of trail signage that could be implemented with the Community Wide Trails Plan include:

- **Key Entry Signage** - typically placed at trail heads and roadway intersections. They are designed to be read by trail users and vehicles and include the trail name and possibly a map of the trail system and surrounding context.

- **Regulations and Warning Signage** - display rules, warnings and regulations regarding trail use. This signage type also includes standard signs such as yield, stop, etc.

- **Directional / Informational Signage** - trail user information signage typically located at trail heads and intersections. This signage is typically designed at pedestrian height and includes trail specific information including, rules and regulations, maps, directions and distances to destinations and amenities along the trails.

- **Education / Cultural Signage** - denotes points of interest along a trail. May included wetlands, other environmental areas, historical structures or locations, etc.

- **Distance Markers** - Simple markers on the pavement or signage that displays the distance from the beginning to the end of the trail. Typically placed in 1/4 mile or 1/2 mile increments.
3. Opportunities for Connections Outside Town & Country

With this update to the trails master plan there is an interest in linking Town & Country to neighboring communities and the greater regional trails network. Neighboring communities and regional trail networks include:

Communities:

- Ballwin
- Chesterfield
- Creve Coeur
- Des Peres
- Frontenac
- St. Louis County / County Park

Regional Trail Networks:

- Great Rivers Greenway - Centennial Trail
- Katy Trail

While no specific connections can be made at this time, the planning phase is the ideal time to look for connections that can be implemented over time. The following are recommendations for identifying these potential connections and opportunities to work with neighboring communities to create these connections. Recommendations include:

1. Implementation of Town & Country Trails Plan - A successful trails system within Town & Country will begin to reveal ideal locations for connections and encourage neighboring communities to connect to the existing trails system. The primary spine trails should be the dominate locations for these connections when possible due to user volume and visibility.

2. Community Wide Trail Plans - Currently Chesterfield is working on an overall trails plan for the city, and Ballwin has a conceptual trails plan completed. Coordination with these cities to identify destinations within the communities, and connections within the plans will create the most advantageous links for pedestrians and bicyclists. These connections will increase the success of the trails systems. The remaining neighboring municipalities along with St. Louis Country have yet to prepare a trails master plan. Opportunities should be explored to work with these neighbors to identify connections now and/or when they develop plans.

3. Connections to Regional Trails - While the city has no direct connections to regional trails at this time, there are opportunities to connect through neighboring communities. The City of Creve Coeur includes the planned route for the Great Rivers Greenway Centennial Greenway and connection to the Katy Trail. The City of Chesterfield includes the Great Rivers Greenway Monarch Chesterfield Levee Trail which is part of the Missouri River Greenway.
The City of Town & Country has successfully developed three parks totaling over 60 acres of park land in the past eleven years. These parks represent the successful implementation of the recommendations for the 1998 Trails and Parks Master Plan. A focus on passive recreation, connections to the history of the city, and preservation of open space is evident in these parks. A mutually beneficial shared use agreement with CBC High School to develop Cadet Park within Preservation Park provides active recreation amenities for city use without the maintenance and staffing demands these amenities have on a parks department.

This update plan is intended to evaluate the existing parks system and identify opportunities for the acquisition of additional green space and future park development within Town & Country. It will also review the existing parks and identify needs or opportunities for improvements within the parks.

Recommendations for the existing parks and future green space were identified based on input from staff and the community as well as evaluation of the existing parks system using state and national standards for parks and recreation. A summary of the feedback received at the public meetings is included with each park, and copies of all input is located in the appendix of this report.

The parks master plan update includes the following sections:

- Benchmark Comparisons / Statistical Need
- Future Green Space Acquisition and Park Development
- Drace Park
- Longview Farm Park
- Preservation Park
Benchmark Comparisons / Statistical Need

The statistical evaluation of the existing parks system included the 2008-2012 State of Missouri Statewide Comprehensive Outdoor Recreation Plan (SCORP) for overall parkland and park amenities. These standards are based on a statewide inventory and identify a target number of each component type for a parks system based on population. In addition, the NRPA Urban Standards for Parkland Comparison and Recreation Components were used to evaluate the parks system and opportunity for additional greenspace within the City of Town & Country. These national standards are developed for more urban communities with larger population density and less undeveloped open space. Combined these two standards identify a range in which the City of Town & Country can target goals for the parks system.

While these comparisons provide a target range for a quantity of each component and amount of park land it is important to understand that every community is unique. While the comparisons identify opportunities and provide the statistical support for need and funding, any improvements, additional green space, or new parks should meet identified needs and desires of the City of Town & Country and its residents. The recommendations within this plan discuss opportunities and conceptual construction costs for park improvements. The Parks and Recreation Staff, Parks and Open Space Committee, Board of Aldermen, and residents will determine the actual need and schedule for implementation.

The benchmark comparisons for the City of Town & Country parks system are provided below. A summary of these comparisons is included following the analysis.

---

### Table 4.1 - NRPA Urban Standards for Park Land Comparison

<table>
<thead>
<tr>
<th>Park Classification (size)</th>
<th>Existing Facilities</th>
<th>Proposed Standard</th>
<th>2009 Existing Acreage</th>
<th>2009 Calculated Demand¹</th>
<th>2009 Surplus / Demand¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pocket Park (up to .5 ac.)</td>
<td>0</td>
<td>0.3 ac. / 1000</td>
<td>0 ac.</td>
<td>3.3 ac.</td>
<td>(-3.3 ac.)</td>
</tr>
<tr>
<td>Mini Park (1-5 ac.)</td>
<td>0</td>
<td>0.25 ac. / 1000</td>
<td>0 ac.</td>
<td>2.75 ac.</td>
<td>(-3.75 ac.)</td>
</tr>
<tr>
<td>Neighborhood Park (5-20 ac.)</td>
<td>1</td>
<td>1.5 ac. / 1000</td>
<td>9 ac.</td>
<td>16.5 ac.</td>
<td>(-7.5 ac.)</td>
</tr>
<tr>
<td>Community Park (20-80 ac.)</td>
<td>2</td>
<td>2.5 ac. / 1000</td>
<td>52 ac.³</td>
<td>27.5 ac.</td>
<td>+24.5 ac.</td>
</tr>
<tr>
<td>Metropolitan Park (80-175)</td>
<td>0</td>
<td>5 ac. / 1000</td>
<td>0 ac.</td>
<td>55.0 ac.</td>
<td>(-55.0 ac.)</td>
</tr>
<tr>
<td>Special Use Park²</td>
<td>0</td>
<td>N/A</td>
<td>0 ac.</td>
<td>0 ac.</td>
<td>n/a</td>
</tr>
<tr>
<td>Historic Park²</td>
<td>0</td>
<td>N/A</td>
<td>0 ac.</td>
<td>0 ac.</td>
<td>n/a</td>
</tr>
<tr>
<td>Natural Resource Area²</td>
<td>0</td>
<td>N/A</td>
<td>0 ac.</td>
<td>0 ac.</td>
<td>n/a</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>19</td>
<td></td>
<td><strong>642.9 ac.</strong></td>
<td><strong>706 ac.</strong></td>
<td><strong>(44.0 ac.)</strong></td>
</tr>
</tbody>
</table>

¹ Based on 2009 Population = 11,000
²Special areas and facilities park classifications have no standard requirements.
³Cadet Park counts as half of the 20 acres as it is not a fully public facility.
<table>
<thead>
<tr>
<th>RECREATION COMPONENT</th>
<th>STATE OF MISSOURI SCORP # of facilities/# of people</th>
<th>URBAN PARK STANDARDS # of facilities/# of people</th>
<th>2009 FACILITY BENCHMARK</th>
<th>2009 TOWN &amp; COUNTRY FACILITY INVENTORY</th>
<th>2009 BENCHMARK NEED FOR FACILITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parkland Acres</td>
<td>1 acre / 47</td>
<td>Per Classification</td>
<td>105 - 235 acres</td>
<td>61 acres</td>
<td>(44 - 174 acres)</td>
</tr>
<tr>
<td>Walking/Nature Trails</td>
<td>1 mile / 4,446</td>
<td>1 mile / 2,000</td>
<td>3 - 4 miles</td>
<td>6 miles</td>
<td>-</td>
</tr>
<tr>
<td>Bicycle / Exercise Trails</td>
<td>1 mile / 2,624</td>
<td>1 mile / 4,000</td>
<td>4 - 5 miles</td>
<td>1 mile</td>
<td>(3 - 4 miles)</td>
</tr>
<tr>
<td>Swimming Pools</td>
<td>1 pool / 6,500</td>
<td>1,000 sf / 1,000</td>
<td>2 pools / 11,000 sf</td>
<td>0 pools / 0 sf</td>
<td>(2 pools / 11,000 sf)</td>
</tr>
<tr>
<td>Picnic Tables</td>
<td>1 table / 128</td>
<td>1 table / 125</td>
<td>86 - 88 tables</td>
<td>24 tables</td>
<td>(62 - 64 tables)</td>
</tr>
<tr>
<td>Ball Diamonds</td>
<td>1 field / 1,545</td>
<td>1 field / 1,500</td>
<td>7 fields</td>
<td>1 fields</td>
<td>(6 fields)</td>
</tr>
<tr>
<td>Playgrounds</td>
<td>1 playground / 1,379</td>
<td>1 playground / 1,000</td>
<td>8 - 11 playgrounds</td>
<td>3 playgrounds</td>
<td>(5 - 8 playgrounds)</td>
</tr>
<tr>
<td>Tennis Courts</td>
<td>1 court / 2,333</td>
<td>1 court / 2,000</td>
<td>5 courts</td>
<td>9 courts</td>
<td>-</td>
</tr>
<tr>
<td>Play Fields</td>
<td>1 field / 7,886</td>
<td>--</td>
<td>1 fields</td>
<td>1 fields</td>
<td>-</td>
</tr>
<tr>
<td>Volleyball</td>
<td>1 court / 4,659</td>
<td>1 court / 3,000</td>
<td>2 - 4 courts</td>
<td>1 courts</td>
<td>(1 - 3 courts)</td>
</tr>
<tr>
<td>Basketball</td>
<td>1 court / 4,410</td>
<td>1 court / 3,000</td>
<td>2 - 4 courts</td>
<td>0 courts</td>
<td>(2 - 4 courts)</td>
</tr>
<tr>
<td>Football / Soccer Fields</td>
<td>1 field / 3,274</td>
<td>1 field / 4,000</td>
<td>3 fields</td>
<td>3 fields</td>
<td>-</td>
</tr>
<tr>
<td>Multi-Use Courts</td>
<td>1 court / 6,073</td>
<td>1 court / 10,000</td>
<td>1 - 2 courts</td>
<td>0 courts</td>
<td>(1 - 2 courts)</td>
</tr>
<tr>
<td>Horseshoe Pits</td>
<td>1 pit / 2,810</td>
<td>1 pit / 2,000</td>
<td>4 - 5 pits</td>
<td>0 pits</td>
<td>(4 - 5 pits)</td>
</tr>
<tr>
<td>Shuffle Board Courts</td>
<td>1 court / 4,251</td>
<td>1 court / 3,000</td>
<td>2 - 4 courts</td>
<td>0 courts</td>
<td>(2 - 4 courts)</td>
</tr>
<tr>
<td>Skateboard Park</td>
<td>1 park / 34,435</td>
<td>--</td>
<td>N/A</td>
<td>0 park</td>
<td>N/A</td>
</tr>
<tr>
<td>Golf Course</td>
<td>1 course / 26,647</td>
<td>1 course / 25,000</td>
<td>N/A</td>
<td>0 courses</td>
<td>N/A</td>
</tr>
</tbody>
</table>

1 Based on 2009 Population = 11,000
The following is a summary of the benchmark comparisons for parkland and park amenities:

**Park Land**

There is an opportunity to add 44 - 174 acres of park land to the parks system. The breakdown of acres by park type is shown below.

- There is an opportunity to add 3.3 acres of Pocket Parks (under 1 acre). This park type is smaller than the minimum residential lot size for Town & Country and does not meet the goals and desires of the city for its parks system.
- There is an opportunity to add 3.75 acres of Mini Parks (1-5 acres). This size of this park type does not meet the goals and desires of the city for its parks system.
- There is an opportunity to add 7.5 acres of Neighborhood Parks (5-10 acres). Drace Park is a Neighborhood Park.
- The city meets the statistical need for Community Parks (parks 20-80 acres). Longview Farm Park and Preservation Park are Community Parks.
- There is an opportunity to add 55 acres of Metropolitan Parks (parks 80+ acres). This park type typically focuses on active recreation and athletic field complexes and aquatic centers. A park of this type does not meet the goals and desires of the city for its park system.

Based on this breakdown of additional park land by park type it is recommended that future acquisition focus on properties that would be classified as Neighborhood Parks and Community Parks. These park types are consistent with the desires of the city and with the existing developed parks.

Property in the Metropolitan Park category should be considered if purchased for preservation of green space or development consistent with goals of focusing on passive recreation and unique destinations for residents of Town & Country.

**Park Components**

Overall a statistical need can be made for all but four of the inventory components. The components that meet standards for the parks system include:

- Nature Walking Trails
- Tennis Courts
- Playfields
- Football / Soccer Fields (includes Cadet Park fields)

Trails are a focus of the parks system and future development of nature trails in parks should not be restricted due to the fact that the existing trails meet the statistical benchmark for this component.
Future Green Space Acquisition and Park Development

The existing Town & Country parks system fulfills the recommendations from the 1998 master plan, and provide park users with three unique recreation experiences. Community input received during this master planning process identified a desire for the city to continue exploring opportunities to add park land to the parks system. Initially this land should be obtained for preservation of green space within Town & Country, but over time may be developed as community parks. As with the exiting parks, any new park within the city should provide a unique experience for users and focus on passive recreation with possible active amenities to meet specific needs.

Review of the benchmark comparisons identifies an opportunity for expanding the parks system by an additional 44-174 acres to serve the existing population of Town & Country. Additional assessment of the existing parks system helps identify areas of the city where additional parks and open space would have the biggest impact on providing walkable parks for all residents and distribution of parkland throughout all four wards of the city. The graphic below shows the service area for all three existing parks, and the locations of the parks within the city.

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**Existing Park Service Areas**
Drace Park: Neighborhood Park /1 mile Service Area
Longview and Preservation Parks: Community Parks / 5 mile Service Area

**Existing Park Locations with Wards**
Examples of the future land acquisition and development focused input received during the planning process includes the items listed below. A full copy of all input is included in the appendix of this report.

- Acquire parkland south of Conway Road.
- Open space near municipal building.
- Ward IV does not have a park.
- Acquire land and preserve green space when possible.
- Activities in new park should focus on passive recreation.
- More fitness trails, nature trails, and playgrounds in parks.
- Dog park, tennis courts with lights, and ball fields in parks.
- Not necessary, there are plenty of existing parks.
- Explore the option of leasing open space.

Based on this input, discussions with staff, and review of the benchmark standards the master plan recommendations for the future acquisition of green space and future park development based on three themes:

1. **Additional Parkland / Green Space**
2. **Future Park Amenities**
3. **Shared Use Agreements**

1. **Additional Parkland / Green Space**

Recommendations for the future growth of the parks system are intended to provide Parks Staff and the Board of Aldermen with a guide when presented with opportunities to add green space to the parks system. These recommendations will also be beneficial when applying for funding assistance for acquisition and development. The recommendations include:

1. Consistent with the 1998 master plan future park land within Town & Country should be a minimum of 10 acres and provide a unique park experience for users. Mix of topography, open space and woodland cover, and the potential for destination features should be considered when assessing property. Parcels of smaller size may be considered if the property contains a unique natural feature, built amenity, or location that is desired by the City of Town & Country.

2. Land acquisition for the preservation of green space should be the immediate goal of expanding the parks system. Development of a new park is not an immediate desire of residents, but should be the long range goal of some or all acquired park land.

3. Emphasis should be placed on acquisition of land for a future park in Ward IV. This is the only ward without and existing park and should be considered first when the next park is developed within Town & Country.
2. Future Park Amenities

While the immediate development of a new park is not the desire of the community, this possibility should be considered if the right property in the right location is available. During the master planning process several themes and specific amenities where presented by the community and staff that should be considered when future parks are developed. These recommendations for amenities may not be appropriate for all potential park sites and may change over time. Programming for any new park development should be reviewed with staff and the community prior completing a design for the park. The recommended amenities to consider in future park development include:

- Overall Passive Recreation Focus
- Fitness Trail
- Playgrounds
- Gardens and Education / Interpretative Opportunities
- Dog Park
- Ball Field

3. Shared Use Agreements

The development of Preservation Park has been a success in providing park users a mix of passive and active recreation opportunities. A large part of this success is Cadet Park, the northern twenty acres of the park sold to CBC High School for the development of ballfield and athletic practice fields. Through a shared use agreement these fields are available to park users when not used by the high school. Each community is unique and Town & County does not have a large demand for athletic fields or the staff to maintain such a facility. This agreement is ideal for the city as it provides amenities for resident use that does not have the demand to justify the space and maintenance required to provide it in a community park.

It is recommended that the City of Town & Country continue to explore the opportunities the implement additional shared use agreements to provide residents access to recreation amenities that may not be appropriate or feasible for development in city parks. These agreements could be with, but are not limited to, neighboring communities, colleges and universities in and adjacent to Town & Country, and future facility development at CBC High School.
DRACE PARK

This nine acre neighborhood park is located just east of Interstate 270 and south of Clayton Road along Cedar Valley Drive. The park property was purchased from the Drace family and it’s design compliments the existing cabin and barn remaining on the property. The mix of amenities including the exiting structures, relocated play cabin, playground, shelter, restrooms, native prairie, and trails provide park users a blend of active and passive recreation facilities.

Drace Park, along with Longview Farm and Preservation Park are very successful parks that are enjoyed and used regularly by residents and visitors. The goal of this master plan update is to assess the park and identify opportunities to improve or modify the park to better meet the needs and expectations of residents and staff.

During the design process input from the community and staff was obtained to assist in the review of the park and development of recommendations. Examples of the input received focusing on Drace Park is listed below. A full copy of all input is included in the appendix of this report.

- Feedback totals for visiting the park in the last 12 months:
  - Never (2)/ 1-5 Times (8)/ 6-10 Times (2)/ 11-15 Times (0)/ 16+ Times (1)
- Add historic toys (wagons; old feeders, etc.).
- Add play sculpture.
- Explore program opportunities for center open lawn.
- Safer access for pedestrians and bicyclists.
- Two sectioned off areas for small and large dogs.
- Don’t do much, the park is great.
- Use the buildings.
- Make the barn an education site.
- Keep the park natural, don’t overdo it just to increase usage.
- More programs and activities.

1 Photos from website tandccityparks.org
photographer: Bruce Schwartz
RECOMMENDATIONS
Based on this input, discussions with staff, and review of the park, master plan recommendations have been prepared for Drace Park. These recommendations are:
1. Programming for the Central Lawn.
2. Assessment and Programming for Reuse of the Barn
3. Create Education Area at the South End of the Park.
4. Add Play Sculpture Within the Park.
5. Expand the Natural Prairie Area.
1. Programming for the Central Lawn

This lawn area located east of the picnic shelter and parking lot is a dominate feature within the park and currently functions as unprogrammed open space.

Several options for this space were discussed including the development of a dog park. While a dog park may be a desired amenity by residents this location is not recommended for this use. The proximity of the open lawn to neighboring residences could lead to noise concerns, and the size of the lawn area is not adequate for use as a dog park. A minimum of one acre is recommended for dog parks to allow separation of large and small dogs, or to divide the area for resting and reestablishment of the lawn. At approximately one half acre the open space would not allow for dividing, and the constant use would result in a highly visible worn and muddy area in the center of the park.

Improvements to this area for use as a programmable youth sports or practice space is the recommended use for the central lawn. Minor modifications to this half acre area will allow for an expanded use of the space while maintaining the open lawn appearance. Recommended modifications include:

- Fine grading of area to improve drainage, and sod limits of disturbance.
- Layout of a 75’x150’ athletic field (under age 8 soccer). Field should not have permanent goals or benches.
- Install irrigation system to assist in maintenance of lawn with increased use of the space.
- Use of the field will need to be limited and scheduled with Parks Staff due to the limited parking (20 spaces) within the park.
2. Assessment and Programming for Reuse of the Barn

The Drace Park Barn is undoubtedly in need of some attention, and a formal Feasibility Study is a best first step in helping establish how to proceed. Prior to undertaking a Feasibility Study, it is worth considering the following:

- **Process** - How will a project Feasibility Study be conducted and how will a Program and Schematic Design be developed?
- **Possible Programs** - What are potential uses of the Barn and scope of work associated with each?
- **Fees and Construction Costs** - What are estimated costs associated with each potential use?

**Process**

The first step in a Feasibility Study is to examine possible programs for the barn. The Barn and its place in the park suggest good opportunity to repurpose the building. Through discussions with representatives of Town and Country, various potential programs will be developed. Identifying the possible, and likely, programs for the barn will allow us to identify the likely fees, construction costs and project schedule.

Following programmatic decision making, the next step is to evaluate the existing structure and services to the structure. At a minimum this would require:

- Structural Engineering Assessment
- Mechanical, Electrical and Plumbing (MEP) Assessment

Depending on the scope of the program, additional site evaluation might be required to do a topographical survey and to locate and size utilities.

With the program and existing conditions established, an appropriate budget can be established for the project and the Schematic Design process can commence. The goal, as a part of a Feasibility Study, is to develop the design to a level at which preliminary construction cost estimates can be made by General Contractors. The Schematic Design would, again be developed through presentations to and discussions with representatives of Town and Country.

The goal is to provide the information necessary for determining whether or not the project should go forward.

**Possible Programs**

Any repurposing of the Barn will need to address some features of the building and the adjacent site. An evaluation of the building by a structural engineer will identify areas that require attention no matter what program is pursued. Similarly, the south entrance to the park from Cedar Valley will need to be assessed for new vehicular traffic and the paved area in the park will need to be repaired and reconfigured to accommodate some accessible parking and, at least, area for a drop-off. With these assumptions, the following are possible programs for the space:
• **Event Pavilion**
  As with the Market Place option, an Event Pavilion would allow the interesting features of the barn to be retained. The east, west and north walls could be significantly opened to provide an open air pavilion suitable for events (corporate picnics etc.) While the park currently has a pavilion, the barn’s location in the park is more secluded and well located to be dedicated for events.

• **Market Place/Gallery**
  An enclosed “pavilion” would allow the most interesting historic elements of the structure - the cobblestone floor, some of the “stable” features - to remain and allow most of the existing structure (shored up as required) to be cleaned up and left exposed. Removing the floor of the hay-loft, simplifying the structure through the middle of the space and providing wider openings across the north wall the structure could be transformed into an inviting center of a small farmers’ market or a temporary gallery space.

• **Conference Center**
  With some extra effort, the existing Barn could be converted into a Conference Center and made available to groups within the community. It is likely that additional parking would need to be provided. A significant remodeling would be required to provide adequate climate control, interior finishes, and services (power outlets, WIFI, Audio-Visual capabilities).

• **Conference Center with Restrooms**
  To increase the usefulness of a Conference Center considerably, restrooms could be added to the program. While restrooms would broaden the appeal of a Conference Center, they would also increase construction cost significantly.

**Construction Costs**
Ultimately, the scope of the project will determine the cost associated with both fees and construction. The following spreadsheet is a preliminary estimate of cost associated with a completed project. Necessarily, some assumptions have been made about levels of structural remediation that may be required from touring the barn and the site.

Construction cost opinions for the barn are located at the end of this section with the overall costs for the park improvements.
3. Create Education Area at the South End of the Park

In addition to exploring improvements to the barn structure this zone of the park has the potential to be developed as a more cohesive amenity. Creating a space that focuses on the history of the park and allows for educational programming and events would provide a unique destination within the park. Components of this space could include:

- Improved pedestrian circulation to the barn, garden, and cabin including paved accessible walks.

- Outdoor classroom with informal seating and paved educator platform below the stand of trees located between the barn and the cabin. The space should be located along the accessible walk and will create a hub for the historical park amenities.

- Additional parking located off the service drive from Cedar Valley Drive. Amount of parking will depend on the reuse of the barn, but a minimum of one or two accessible parking spaces should be provided.

- Landscape enhancements include those associated with the barn and a buffer for the outdoor classroom and walks from the improved entry drive and additional parking. Depending on the size and design of the additional parking additional screening may be necessary along the south property line of the park. Landscape design should be consistent with the historical context and existing gardens at the cabin.
4. Add Play Sculpture within the Park

West of the playground along the walking trail is a lawn hillside that is open to the playground and buffered by the treeline and understory from the cabins and Cedar Valley. This location is ideal for a piece of environmental art that will function as a play piece for children. This location creates an element of discovery as it is hidden from view as you approach from either direction on the loop trail while being a safe location for play as it is open to view from the playground and shelter. Components of this space could include:

- Grading of the hill to create an accessible space and access to the sculpture. A poured concrete retaining wall can cut the space into the hill side and provide a location for signage or as a canvas for expanding the design idea. A poured wall will link the area to the playground which uses poured concrete seatwalls.

- Environmental art piece themed to compliment the homestead and agricultural history of the park property. Design should be appropriate for the scale of the space and to serve as a play piece for children.

- Paved accessible walks should connect the space to the loop trail. The surfacing at the sculpture should be a safety surfacing to provide cushioning for play. Depending on the surface type color and a graphic design can be used to compliment the art or link this space to the existing playground.

- Landscape to reinforce the buffer west of the sculpture location and create a backdrop for the sculpture piece.
5. Expand the Natural Prairie Area

At the south end of the loop trail is a native prairie area covering approximately 0.3 acres. This area can be expanded to cover nearly an acre within the loop trail south of the woodland. Expanding this meadow area within the park will:

- Increase the visual impact of the amenity and link it to the educational area near the barn and cabins.
- Increase the wildlife habitat and provide opportunities for birdhouses and interpretative signs related to wildlife and native plants.
- Allow for development of natural surface trails within the native plants and connections to the loop trail and woodland picnic area.
- Reduce the annual lawn maintenance necessary within the park.

The following page includes a photo of the existing prairie and a rendering of the proposed expansion.
COST OPINION

Below is the conceptual cost opinion for the Drace Park master plan recommendations. The costs have been broken out by recommendation focus areas for future use when planning conceptual budgets for project implementation.

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* Does not include modifications to service drive or additional parking.

**Total** | **$139,708.75**

10% Design Fee | **$13,970.88**

10% Contingency | **$13,970.88**

Topographic Site Survey | **$2,500.00**

**Grand Total** | **$170,150.50**

* Opinion based on 2009 costs and does not include any utilities.

Key:
- ea - each
- sff - square foot of wall face
- lf - linear foot
- sy - square yard
- ls - lump sum
- sf - square foot
- cy - cubic yard
LONGVIEW FARM PARK

The largest of the city parks at approximately 30 acres Longview is also the most heavily used due to it’s variety of amenities and location in the heart of the city along Clayton Road at Mason Ridge. This community park is home to the parks office and community building located in the Longview Farm House addition. The park design takes advantage of the existing topography, lake, and woodland on the site as well as incorporating the existing stable and house. These amenities along with walking trails, a picnic pavilion, and tennis court, create a community destination for daily use with it’s blend of active and passive recreation, and a gathering space for special events.

Longview Farm Park along with Drace Park and Preservation Park are very successful parks that are enjoyed and used regularly by residents and visitors. The goal of this master plan update is to assess the park and identify opportunities to improve or modify the park to better meet the needs and expectations residents and staff have for their parks.

During the design process input from the community and staff was obtained to assist in the review of the park and development of recommendations. Examples of the input received focusing on Longview Farm Park is listed below. A full copy of all input is included in the appendix of this report.

- Feedback totals for visiting the park in the last 12 months:
  - Never (0)/ 1-5 Times (3)/ 6-10 Times (4)/ 11-15 Times (1)/ 16+ Times (7)
- High brush and weeks make it difficult to see the lake.
- Need water play near the pavilion.
- Perennial beds in the lawn near Mason and Clayton.
- More parking.
- Ballfield (baseball or soccer) and horseshoes.
- Urban farm (6-10 acre organic farm)
- Tower with viewing elevation at 100’ height.
- Expand Edith Mason Garden around building.
- Docent with golf cart for elderly, manage house, and operate a coffee shop.
- Distance markers along trails.
- Erosion issues along natural surface woodland trail.

1 Photos from website tandccityparks.org
 photographer: Bruce Schwartz
RECOMMENDATIONS

Based on this input, discussions with staff, and review of the park master plan recommendations have been prepared for Longview Farm Park. These recommendations are:

1. Trail Markers and Interpretative Signs.
2. Additional Parking.
3. Continue Landscape Enhancements and Honeysuckle Removal.
4. Lawn Amphitheater Northeast of Longview House.
6. Water Play and Drainage Improvements at Playground.
1. Trail Markers and Interpretative Signs

The exiting trails system within the park is heavily used by park visitors. A common question to parks staff from trail users is the length of the trails or sections of the trails. The park also contains many unique natural and man made features. Some of these have signs describing them to park visitors, but there is not a standard sign design to alert park users to these educational or informational items. To address these items and enhance the park experience for visitors a system of trail and interpretative signage should be developed for Longview Farm Park. Recommendations for this signage program include:

- Provide regular distance markers along the loop trails. Markers should indicate distances along each of the tree trails when they overlap. These markers can be flush on the pavement, or on vertical posts.

- Interpretative signage within the park should alert park users to an item of interest and provide graphic and narrative information that is easy to understand for visitors of all ages. Opportunities to create themes or styles for defined categories would allow for variety in the signs within the program. Examples of categories may include: flora, fauna, architecture, etc.

- The system should be developed to define a standard for parks, and should be carried through the parks system. The details could be modified to match the character of each park while maintaining a standard form or layout of information.

- The internal park trails signage should be unique to parks, but compliment the city wide trails system signage.

2. Additional Parking

Longview Farm Park is a highly used park and home to many special events and community gatherings throughout the year. With this level of use comes the need for parking to accommodate park users. The existing parking lot provides parking for approximately 65 cars, and on a nice spring afternoon finding a parking space can be difficult. During events the lawn on the east side of the Longview House is used as a parking lot. Depending on the weather this can cause serious damage to the lawn, and if increased can result in long term damage.

Expanding the parking within the park is a challenge due to the existing facilities surrounding the parking lot and lack of open space adjacent to the parking. The conceptual solution presented below recommends removing the single tennis court west of the parking lot and expanding the parking in this location. This renovation would provide approximately 25 additional parking spaces. This would not solve the parking issue with all events, but would provide sufficient parking for most park use and small events.

While this solution does keep the parking on the west side of Longview House and increase the parking by about a third with minimal impact on existing amenities it does include several drawbacks.
1. The expanded parking would be sufficient for most day use when there are smaller events or meeting occurring in the park or Longview House, but it would not meet the need associated with special events.

2. The expanded parking requires the removal of the only tennis court within the park. It is also the only city court outside of Preservation Park. During the public meetings there was concern voiced by the community about removing this court.

3. The tennis court was renovated with Municipal Parks Grant funds. Removing this court would require coordination with the Grant Commission, and may jeopardize future funding for parks improvement projects.

While this plan for expanding the parking would help address the day to day needs within the park without expanding parking to the east side of Longview House it would be at a cost to existing facilities and not completely solve the problem. A long term solution to the parking issues at Longview Farm Park would be to acquire land adjacent to the park where additional parking and park amenities could be developed and provide safe pedestrian access to the existing park facilities.
3. Continue Landscape Enhancements and Honeysuckle Removal

The City of Town & Country Parks Department has placed an emphasis on maintaining the parks to the level expected by residents. To continue to meet this goal and provide additional horticultural services the Parks Department added a Parks Maintenance Technician to their staff in 2009.

Longview Farm Park has seen significant improvements in the removal of honeysuckle from the woodlands, and in maintaining and expanding the Edith Mason Garden at Longview House. Recommendations for continuing these improvements include:

- Continue honeysuckle removal along the north and east sides of the woodland.
- Establish native understory planting within the woodland for wildlife habitat, seasonal interest, and soil stabilization.
- Explore areas to establish native prairie that would not impact open space use within the park. Native prairie will reduce the lawn maintenance within the park and create or expand existing wildlife habitat.
- Expand seasonal landscape from around Longview House out to the park entries, both vehicular and pedestrian, and create a fence row landscape along Clayton Road to define the park.

4. Lawn Amphitheater Northeast of Longview House

The addition of a small space for concerts or recitals that takes advantage of the existing topography within the park would add a unique amenity to the parks system for use by residents and the city. This space would also serve as a seating area along the full loop trail. Located along the loop trail northeast of the Longview House, music would project into the shaded hillside leading up to the house addition and patio. The open lawn, berm, and evergreen tree buffer east of this performance space will assist in deadening the sound and visually screening the structure from neighboring residential properties.

It is understood that neighbors of the park may have concerns about the development of this amenity within the park. Residents should be involved in any future planning or design of this structure to ensure that their concerns are heard and appropriately addressed.

A conceptual sketch for this space is included on the following page. Recommendations for this amphitheater amenity include:

- Paved area for performances should be sized for smaller, intimate groups. Paving surface should engage the loop trail and could include design details connected to the history of the park.
- Small seatwall along the east side of the space would provide seating area when not used for special events. Seatwall should be stacked stone or veneer with a cap for seating.
- A custom shade structure extending from the seatwall should be designed with materials consistent with existing structures within the park. This shade structure should provide scale to the space without overpowering the area.
- Minimal grading of the hillside may be required to provide a well drained seating area the focuses on the performance space. Removal of hazard trees or limbs will be required on the hillside for public safety.
- Additional landscape screening and a visual backdrop should be provided behind the amphitheater space. Foundation planting can be added along the base of the seatwall.

View North Along Loop Trail Towards Proposed Amphitheater Location

Concept Sketch of Proposed Amphitheater from Hillside Northeast of the Longview House.
5. Erosion Along Woodland Trails

Within the woodland area of the park there is a series of natural surface and mulch surface trails. These trails are located mainly on the south and east sides of the lake and provide alternative routes for park users to access the stream and lake. These trails also provide quiet seating areas overlooking the stream and lake away from the paved trails. Located on the steeper slopes of the woodland area washing away of the mulch surface has been an issue along the trails. With the removal of honeysuckle within the woodland the trails are less defined and erosion has increased.

To address this issue the following design details are recommended to better define trail routes, address areas with channelized water flow, address areas with sever slopes, and assist in the reestablishment of native understory landscape. Combined these recommendations will provide parks staff with options to implement along the woodland trails to address specific areas of concern. These design details include:

- Compacted Rock Trails
- Stepped Trail
- Soil Stabilizer with Understory Planting
- Drainage Crossing

Compacted Rock Trails - Mulch trails are an ideal informal trail surface on areas with relatively gentle slopes. In areas of steep slopes they can become a maintenance issue as the loose mulch surfacing slides down the slope or is washed down. Over time the exposed dirt surface can also begin to erode down the slope. Cutting the trail into the grade 2"-3" can help reduce the loss of surfacing and help keep it in the designated trail corridor, but you will still have material loss when it is loose and on a slope. Once the mulch is gone water can begin to erode the trail path.

A compacted rock trail will better define the trail route, reduce the maintenance requirements, and reduce erosion of the soil on trails in steep slope locations. Angular trap rock will hold the slope better than mulch, cutting the trail into the grade 2"-3" will allow the trail to hold its location while understory vegetation is established. Rock can be selected in a variety of colors, and a binder agent can be applied to increase the stability of the trail. Once the vegetation is established along the edge of the trail mulch can be applied over the rock to soften the appearance if desired.

Stepped Trail - Another alternative for sections of trail climbing down a steep slope is to create a stepped trail. A series of flights with one to six steps made of large flat rocks with a consistent thickness of 3"-6" will help step down the slope. The steps will allow the trail between flights to be less steep reducing washout and erosion along the trail. Combined with one of the rock or soil stabilizer trail type options this detail will reduce erosion along trails climbing steep slopes, and make the trails safer by breaking up a long continuous slope.
Soil Stabilizer with Understory Planting - Similar to the compacted rock trail this option will provide a trail that holds the soil surface material, reducing wash of the surface soil and erosion of soil below. This method results in the soil itself being bound together creating the stabilized trail surface. While maintaining a more natural appearance than the compacted rock trail this method will make relocating the trail more difficult as the stabilized soil will not support plant growth and would need to be removed.

Drainage Crossing - In locations where channelized water crosses the trail erosion can quickly become a significant problem and safety concern for trail users. In these locations a small stone crossing with stone dry stream will allow the water to continue to follow its natural course while preventing erosion of the trail. Two smaller stones set on end either side of the drainage route will protect the soil from erosion and provide support for a larger bridge rock over the drainage. Setting the vertical stones down the depth of the bridge stone will allow the trail surface to be flush with the top of the bridge stone.

6. Water Play and Drainage Improvements at Playground

Expanding the playground to include a water play area was a recommendation of the community and staff. This additional amenity would add to the play value of the playground zone, and provide an amenity not found within the parks system. A water play area could be designed to minimize water waste when in use and serve as an education space when not in season. The education aspect comes from an opportunity to address an existing drainage and erosion issue along the hillside south of the playground.

Currently runoff along this hillside and from the playground follows as swale to the southeast towards the loop trail. Over time erosion has become an issue along this swale and the drainage has begun to create channelized ruts in the lawn area. This swale does not drain over the trail and as a result the water pools and standing water backs up the swale.

Along with the water play component at the playground this recommendation includes modifying this drainage way to create an educational dry stream or bioswale to properly control the drainage and stop the erosion and standing water issue. This environmentally responsible solution for site drainage can become the backdrop for the playground and water and an educational amenity within the park. Master plan details for this recommendation include:

- Water play area to have an informal organic shape and be located on the south side of the playground. Access to this amenity should be through the playground or from a paved connection to the loop trail.
- Water play components should be ground level or in-grade and the overall feel of the space should blend with the natural environment and connect to the dry stream or bioswale.
- Water play system should be user activated live water feed or recirculation system to minimize water waste.
Site drainage improvements should include a rock base dry stream or vegetated bioswale to control runoff and prevent erosion. Design should engage water play area with natural boulders and/or plant material.

Educational signage should be installed at the water play area with narrative and graphic descriptions of the drainage enhancements.

If needed, a drain inlet can be located at the end of the dry stream / bioswale to prevent standing water. This inlet should daylight on the east side of the loop trail.

Landscape with these amenities should include native plant material and be designed to engage the entire playground, water play, and drainage improvements components as a single park amenity.
COST OPINION

Below is the conceptual cost opinion for the Longview Farm Park master plan recommendations. The costs have been broken out by recommendation focus areas for future use when planning conceptual budgets for project implementation.

<table>
<thead>
<tr>
<th>Trail Improvements</th>
<th>Quantity</th>
<th>Unit</th>
<th>Unit Cost</th>
<th>Subtotal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distance Markers and Interpretative Signage</td>
<td>1</td>
<td>al</td>
<td>$7,500.00</td>
<td>$7,500.00</td>
</tr>
<tr>
<td>Erosion Control at Woodland Trails (4’ wide trails)*</td>
<td>4,500</td>
<td>sf</td>
<td>$5.50</td>
<td>$24,750.00</td>
</tr>
<tr>
<td>Honeysuckle Removal</td>
<td>10</td>
<td>ac</td>
<td>$1,500.00</td>
<td>$15,000.00</td>
</tr>
<tr>
<td>Understory Landscape Establishment</td>
<td>5</td>
<td>ac</td>
<td>$20,000.00</td>
<td>$100,000.00</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td></td>
<td></td>
<td>$147,250.00</td>
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</tr>
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</table>

<table>
<thead>
<tr>
<th>Parking Lot Expansion</th>
<th>Quantity</th>
<th>Unit</th>
<th>Unit Cost</th>
<th>Subtotal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demolition of Existing Tennis Court and Retaining Wall</td>
<td>1</td>
<td>al</td>
<td>$5,000.00</td>
<td>$5,000.00</td>
</tr>
<tr>
<td>Site Grading and Entry Alignment from Upper Lot</td>
<td>1</td>
<td>al</td>
<td>$7,500.00</td>
<td>$7,500.00</td>
</tr>
<tr>
<td>Parking Lot Asphalt Pavement</td>
<td>20,000</td>
<td>sf</td>
<td>$3.75</td>
<td>$75,000.00</td>
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<tr>
<td>Concrete Curb and Gutter</td>
<td>1,000</td>
<td>lf</td>
<td>$12.00</td>
<td>$12,000.00</td>
</tr>
<tr>
<td>Parking Lot Security Lighting</td>
<td>4</td>
<td>ea</td>
<td>$2,500.00</td>
<td>$10,000.00</td>
</tr>
<tr>
<td>Modular Retaining Wall</td>
<td>450</td>
<td>sff</td>
<td>$24.00</td>
<td>$10,800.00</td>
</tr>
<tr>
<td>Concrete Walks</td>
<td>2,500</td>
<td>sf</td>
<td>$6.50</td>
<td>$16,250.00</td>
</tr>
<tr>
<td>Landscape and Buffer</td>
<td>1</td>
<td>al</td>
<td>$5,000.00</td>
<td>$5,000.00</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
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<td></td>
<td>$141,550.00</td>
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</table>

<table>
<thead>
<tr>
<th>Seating Area and Amphitheater</th>
<th>Quantity</th>
<th>Unit</th>
<th>Unit Cost</th>
<th>Subtotal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site Grading</td>
<td>1</td>
<td>al</td>
<td>$1,500.00</td>
<td>$1,500.00</td>
</tr>
<tr>
<td>Special Paving</td>
<td>250</td>
<td>sf</td>
<td>$15.00</td>
<td>$3,750.00</td>
</tr>
<tr>
<td>Stone Seatwall with Cap</td>
<td>100</td>
<td>sff</td>
<td>$65.00</td>
<td>$6,500.00</td>
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<tr>
<td>Custom Shade Structure</td>
<td>1</td>
<td>al</td>
<td>$50,000.00</td>
<td>$50,000.00</td>
</tr>
<tr>
<td>Landscape Enhancements (backdrop landscape and screening)</td>
<td>1</td>
<td>al</td>
<td>$2,500.00</td>
<td>$2,500.00</td>
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<tr>
<td><strong>Subtotal</strong></td>
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<td></td>
<td>$64,250.00</td>
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<table>
<thead>
<tr>
<th>Spray Ground and Drainage Improvements</th>
<th>Quantity</th>
<th>Unit</th>
<th>Unit Cost</th>
<th>Subtotal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site Grading</td>
<td>1</td>
<td>al</td>
<td>$1,500.00</td>
<td>$1,500.00</td>
</tr>
<tr>
<td>Bioswale / Dry Stream with Landscape and Rock Outcrops (6’ wide)</td>
<td>200</td>
<td>lf</td>
<td>$150.00</td>
<td>$30,000.00</td>
</tr>
<tr>
<td>Interpretative Sign</td>
<td>2</td>
<td>ea</td>
<td>$1,500.00</td>
<td>$3,000.00</td>
</tr>
<tr>
<td>Special Paving at Spray Ground</td>
<td>1,200</td>
<td>sf</td>
<td>$15.00</td>
<td>$18,000.00</td>
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<tr>
<td>Spray Ground System with User Activated In-Grade Nozzles</td>
<td>1</td>
<td>al</td>
<td>$30,000.00</td>
<td>$30,000.00</td>
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<tr>
<td>Landscape Enhancements</td>
<td>1</td>
<td>al</td>
<td>$1,500.00</td>
<td>$1,500.00</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td></td>
<td></td>
<td>$84,000.00</td>
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*Cost will vary based on control method and quantity applied.

Total: $437,050.00

<table>
<thead>
<tr>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>ea - each</td>
</tr>
<tr>
<td>If - linear foot</td>
</tr>
<tr>
<td>ls - lump sum</td>
</tr>
<tr>
<td>cy - cubic yard</td>
</tr>
</tbody>
</table>

10% Design Fee: $43,705.00
10% Contingency: $43,705.00
Topographic Site Survey: $2,500.00

Grand Total: $526,960.00

* Opinion based on 2009 costs and does not include any utilities.
Preservation Park / Cadet Park Entry Sign

Preservation Tennis Courts

Preservation Loop Trail

**Preservation Park**

This 12 acre community park is located just north of Interstate 40/64 along North 40 Drive east of Mason Road. This park is part of a 32 acre property that includes Cadet Park. Together these parks provide a community park amenity with a mix of active and passive recreation for residents of Town & Country. With the eight lighted tennis courts, sand volleyball court, playground, and shared use access to the Cadet Park athletic fields Preservation Park is the most active of the three city parks. The west end of the park contains parking, shelter, and woodland trails that connect to the overall park loop trail system providing a passive balance to the park.

Preservation Park along with Drace Park and Longview Farm Park are very successful parks that are enjoyed and used regularly by residents and visitors. The goal of this master plan update is to assess the park and identify opportunities to improve or modify the park to better meet the needs and expectations of residents and staff for their parks.

During the design process input from the community and staff was obtained to assist in the review of the park and development of recommendations. Examples of the input received focusing on Preservation Park are listed below. A fill copy of all input is included in the appendix of this report.

- Feedback totals for visiting the park in the last 12 months:
  - Never (3) / 1-5 times (6) / 6-10 times (2) / 11-15 times (0) / 16+ times (2)
- More nature focused programming
- Competition pool – expansion of shared use agreement with CBC
- Expansion / improvements to existing trails
- Improvements to west end trail entry steps

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1 Photos from website tandccityparks.org
photographer: Bruce Schwartz
RECOMMENDATIONS

Based on this input, discussions with staff, and review of the park, master plan recommendations have been prepared for Preservation Park. These recommendations include:

1. Evaluation of West End Stone Steps
2. Honeysuckle Removal and Native Understory Program
3. Review and modify West End Woodland Trails
4. Lighting from the Parking Lot to the Tennis Courts
5. Expand Shared Use Agreements
1. Evaluation of West End Stone Steps

The stone steps leading from the West Entrance parking lot and shelter to the woodland trails are a unique feature in the park and blend very nicely into the natural setting of the park. Over time sections of the steps have become unbalanced, and due to the shaded location the surface of some steps is covered in moss and lichen making them slippery and dangerous when wet. The length of these steps, covering over 20 vertical feet can be difficult to climb with inconsistency in the stone heights.

While these steps are an attractive amenity within the park it is recommended the design of these steps be modified to create a safer entry to the woodland trails. Two options are proposed for modifying the connection from the upper parking and shelter to the trails.

1. Maintain the current location and start the step transition further up the hillside looking to create landings and switchbacks across the slope west of the existing steps. This option will require a grading study to determine the best locations for the flights of steps and landings. It may also result in a significant amount of clearing and tree removal on the hillside for grading and construction of the steps and trail landings. The new steps should be in flights with six risers or less if possible, and the treads should be single slabs of stone to minimize differential settling across a step. The new stairs will require handrails to meet current safety codes.

2. Relocate the steps to the clearing behind the shelter further west along the hillside. This clearing provides a less steep slope and a series of boulder steps could be installed along the trail to lessen the slope even more. This option would require minimal clearing or tree removal as a majority of the grading and construction could occur in the existing clearing. The steps could be grouped in flights of two or four depending on the slope, and handrails may not be required with this option.

The second option would have less impact on the woodland and be more cost effective, but would not have the same aesthetic impact as the first option. In addition, if the first option were pursued the existing clearing suggested for option two would remain a less steep connection to the trails without steps. Both options will require more study and design development prior to implementation.
2. Honeysuckle Removal and Native Understory Program

Following the success of the honeysuckle removal at Longview Farm Park it is recommended the same focus be put on the woodland in Preservation Park. This section of the park is under used when compared to the woodland trail in Longview Farm Park. Reasons for this may be that the woodland is located in a valley within the park, the trails area not very well defined, and the dense honeysuckle adds a feeling of seclusion or being unsafe when on the trails. Thinning the understory will emphasize the openness of the woodland and allow views through the park. Visually opening this area will increase the feeling of safety in the park and may encourage more park users to explore the woodland trails.

Bush honeysuckle removal is a long term commitment. On average it will take four years to get a woodland under control. The program will include cutting and pulling of plants in the spring and fall along with twice yearly spraying. Once the area is cleared a long term management plan should be implemented to prevent recolonization. A key piece of this plan should include establishing a native understory.

Native plants for the woodland understory should be selected based on location, upland verses lowland, wet verses dry, etc. They should provide seasonal interest and food and cover for wildlife while adding various levels of screening along the trails.

More information on preparing a removal and management plan along with recommended plants for understory establishment can be found at the following websites:

- Missouri Department of Conservation
  [www.mdc.mo.gov/nathis/exotic](http://www.mdc.mo.gov/nathis/exotic)
- Missouri Botanical Garden
  [www.mobot.org/invaders](http://www.mobot.org/invaders)
- Missouri Department of Agriculture
  [www.mda.mo.gov](http://www.mda.mo.gov)
- Grow Native
  [www.grownative.org](http://www.grownative.org)

Several of these sources provide funding for habitat restoration and long term maintenance.

3. Review and Modify West End Woodland Trails

The honeysuckle removal and native understory establishment provides an opportunity to review the woodland trail layout. Modifications should be made to the trails to create a more inviting experience for users, better define the trail routes, and take advantage of existing natural features and views created by opening the woodland understory.

A conceptual drawing of the trail routes is provided below. Final design of the trails should be performed in the park to take advantage of
natural conditions following honeysuckle removal and review of the west steps. Recommendations for a revised woodland trails system include:

- Create a hierarchy of trails within the low woodland. A paved loop trail would provide a defined path within the woodland and become an extension of the existing paved trail within the park. This trail should connect to the existing paved trail north of the woodland and to the west end stairs. A paved trail should connect the west end parking lot to the shelter and stairs. Secondary wood chip or natural surface trails could lead off the paved loop and allow park users to explore more of the woodland.

- Develop a wayfinding or signage system for the trails. The existing trails are wood chip surface and without signs or markings it can be confusing to users what is trail and what is just a clearing in the underbrush. Signage along the trail should be part of a larger signage program for all park trails. (As discussed in the Longview Farm Park sections)

- Landscape enhancements beyond the native understory include identification of any wetlands or ecologically sensitive areas in the woodland and protecting these areas. Also, establishing a riparian edge along the two creeks within the woodland would help prevent erosion of the banks and create wildlife habitat. These landscape focus areas should be amenities along the trails system. Interpretative signage, overlooks, and access to the creeks where appropriate are all landscape focused enhancement opportunities along the woodland trail system.
4. Lighting from the Parking Lot to the Tennis Courts

A safety concern that was raised by the community and staff was providing low level lighting along the steps and walks from the tennis courts to the parking lot. The park has minimal ambient light from the interstate and neighboring properties, and there is no internal lighting between the tennis courts and parking lot. The tennis court lights are on a timer and when they go out it is difficult for court users to safely walk to their vehicles. Low level security lighting should be provided in both locations so all court users have a safely lit route to their vehicles.

5. Expand Shared Use Agreements

The success of the shared use agreement with CBC High School at Cadet Park should be a catalyst for exploring opportunities to expand this program. The location of Preservation Park adjacent to the high school and Missouri Baptist College is ideal for future agreements that would allow Town & Country residents access to amenities that are not feasible for the city to provide within the parks system.
COST OPINION

Below is the conceptual cost opinion for the Preservation Park master plan recommendations. The costs have been broken out by recommendation focus areas for future use when planning conceptual budgets for project implementation.

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Unit</th>
<th>Unit Cost</th>
<th>Subtotal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pedestrian Lighting at Stairs and Ramp from Tennis Courts (25' o.c.)</td>
<td>14</td>
<td>ea</td>
<td>$2,750.00</td>
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<tr>
<td>West End Stone Steps (Removal and Reuse of Existing)</td>
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<td>al</td>
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<tr>
<td>Woodland Trail - Asphalt Loop Trail (6' wide)</td>
<td>2,500</td>
<td>lf</td>
<td>$20.00</td>
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<tr>
<td>Woodland Trail - Natural Surface Trails (6' wide)</td>
<td>550</td>
<td>lf</td>
<td>$3.50</td>
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<tr>
<td>Honeysuckle Removal</td>
<td>7</td>
<td>ac</td>
<td>$1,500.00</td>
<td>$10,500.00</td>
</tr>
<tr>
<td>Understory Landscape Establishment</td>
<td>7</td>
<td>ac</td>
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<td>10% Contingency</td>
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</tr>
<tr>
<td>Topographic Site Survey</td>
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<td><strong>Grand Total</strong></td>
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<td></td>
<td><strong>$300,610.00</strong></td>
</tr>
</tbody>
</table>

* Opinion based on 2009 costs and does not include any utilities.

**Key**

- ea - each
- sff - square foot of wall face
- lf - linear foot
- sy - square yard
- ls - lump sum
- sf - square foot
- cy - cubic yard
Programming within a parks system can promote a sense of community through public events. These events can be focused on any number of subjects including seasonal activities, recreation, music, or education and history of a park or city. The City of Town & Country Parks Department has focused on developing programming that is attractive to a wide spectrum of the city population.

Based on feedback received in the planning process and discussion with staff the existing programming is very successful, and there is a desire to expand programming within the parks system. The following list of programming opportunities for each existing park has been developed to identify opportunities to continue and expand the programming available to residents of Town & Country. This list identifies existing amenities or amenities included in this master plan update that could be used in future program development.

**Drace Park**

- History - The Cabins, Barn, and New Community Garden
- Environmental - Prairie and Native Planting
- Barn - Development as Art or Community Space
- Youth Sports / Instructional Camps - Open Play Field

**Longview Farm Park**

- Longview House and Community Building
- Horse Stable and Grounds
- Amphitheater
- Woodland and Natural Trails

**Preservation Park**

- Athletics - Tennis, Volleyball, Soccer, and Baseball / Softball
- Extensive Paved and Natural Surface Trail System
SECTION 6.

FUNDING ALTERNATIVES

An evaluation of financing alternatives and methods for development of major park improvement plans and acquisition of green space was conducted. This evaluation included:

- Identification and definition of potential funding sources
- Identification of individual grants available through federal, state, and other sources.

TYPES AND DEFINITIONS

Parks and Recreation projects are funded in a multitude of manners. Methods of financing projects used in various Missouri communities are identified for consideration in funding the City of Town & Country acquisition, programs and projects. These methods and their definitions follow.

Dedication/Development Fees

Dedication of open space or payment of fees for park development or recreation purposes. As open space is consumed, developers may either dedicate a portion of the property for open space or in lieu of land, pay an impact development fee so that alternate open space may be purchased.

Foundations/Grants/Gifts

Tax-exempt, non-profit organizations established with private donations in promotion of specific causes, activities or issues. Offers a variety of means to fund capital projects including capital campaigns, gift catalogs, fundraisers, endowments, and sales of items. Included in this document is a summary of various grants that are available to parks and recreation agencies and co-sponsored organizations.

Activity and/or User Fees

This is a dedicated user fee established by ordinance for the purpose of constructing and maintaining recreation facilities and programs. The fee applies to all organized activities that require a paid registration or reservation of some type. Fees are based on activity level. For example, in sports leagues each participant may be charged $1.45 per scheduled game with $1.00 going to offset operating and maintenance costs (mowing, utilities, field preparation, etc...) and $0.45 used for construction or renovation of facilities. The enticement is that it is the users that pay and the funds are earmarked for the facilities that generate the revenue.

Departments also have the opportunity of developing Resident and Non-Resident Fees. Those who reside within the city limits pay a reduced fee compared to those who live outside of the city limits.

Sales Tax Dedicated to Capital Improvements

In 1995, state-enabling legislation was passed allowing Missouri cities and counties to pass up to a half-cent sales tax for parks and recreation (and/or storm water control). Since its passage over 40 Missouri cities and counties have passed a parks/storm water
sales tax. Several cities have employed a strategy where voters are promised a reduction in property taxes if the sales tax is passed. Most cities have computed the percentage of sales taxes collected from non-residents and campaigned on the concept of using non-resident’s money to finance city parks and recreation facilities. The sales tax requires a simple majority for passage.

Another sales tax option is to seek a half-cent sales tax issue to pay off sales tax bonds. This requires a super majority (four-sevenths) for passage.

**Land and Water Conservation Fund (LWCF)**

Grants available to cities, counties and school districts to be used for outdoor recreation projects. Projects require a 55 percent match. All funded projects are taken under perpetuity by the National Park Service and must only be used for outdoor recreational purposes. Development and renovation projects must be maintained for a period of 25 years or the life of the manufactured goods. Grant cap has been set at $150,000.

**Recreational Trails Program (RTP)**

Grants to be used for motorized or non-motorized trail development, renovation, maintenance and/or the development/renovation of trailheads. Projects require a minimum match of 20 percent. All projects must be maintained for a period of 25 years. Grant requests up to $100,000 are eligible. Eligible applicants include cities and counties, schools, and private, non-profit, and for-profit businesses.

**Landmark Local Parks Program**

In 1996, Governor Carnahan created a matching grant program to fund local parks and recreation projects in Missouri. The funds are available for outdoor recreation projects.

**Metropolitan Parks and Recreation District**

This district was formed beginning in 2000 and funds several levels of grants through a 1/10-cent sales tax in participating counties. The distribution of these grants is as follows;

- 50% to the district as a whole to “develop, operate and maintain a public system of interconnecting trails and parks throughout the counties comprising the district.”

- 30% of the funds go directly to the counties for “park purposes.”

- 20% to the cities through grants by a municipal commission for “park and recreation purposes.”

**General Obligation Bonds**

Bonded indebtedness issued with the approval of the electorate for capital improvements and general public improvements. Approval requires a super majority (four-sevenths) vote for passage during general elections, primary or general elections and a two-thirds majority at all other elections.
Revenue Bonds
Revenue bonds are municipal securities that are secured by the revenues or receipts of a project or special fund rather than the full taxing power of the borrower. Revenue bonds may be issued if approved by a simple majority.

Ad Val Orem Property Tax
Tax levied on the assessed valuation of all non-exempt real and personal property.

Hotel, Motel and Restaurant Tax
Tax based on gross receipts from charges and meal services which may be used to build and operate golf courses, tennis courts and other special park and recreation facilities.

Special Improvement District/Benefit District
Taxing districts established to provided funds for certain types of improvements, which benefit a specific group of affected properties. Improvements may include landscaping, the erection of fountains, the acquisition of art, and supplemental services for improvement and promotion, including recreation and cultural enhancements.

Tax Increment Financing
The concept behind the tax increment financing is that taxes in a designated area are frozen and the redevelopment that occurs in the blighted, conservation or economic development area will increase the assessed valuation of the property and generate new property tax revenues. The increase can be used on an annual basis to retire revenue bonds issued to finance redevelopment costs. A great deal of development is required to generate sufficient revenues to make it work.

Lease Purchased Financing
Facilities for public use financed and built through an entity separate from the municipality – either another public entity, a non-profit corporation set up for that purpose, a bank, a leasing company, or joint powers authority.

There are several types of lease purchase funding mechanisms, including certificates of participation in which investors can purchase tax free investments in the leased facility, and sales leaseback which is a means for public entities to sell an existing facility to a separate entity such as a non-profit organization, an investor, or a group of investors. Improvements can be made by the separate entity who then leases the facility back to public entity for an agreed to period of time and interest rate.
Interlocal Agreement
Contractual relationships entered into between two or more local units of government and/or between a local unit of government and a non-profit organization for the joint usage/development of a program or facility.

Private Concessionaires
Contracts with private business to provide and operate desirable recreational activities financed, constructed and operated by the private sector with additional compensation paid to the City.

Transportation Equity Act for the 21st Century
The Federal Government authorized this funding program, commonly called TEA-21. Funds are distributed through the Missouri Highway and Transportation Commission. There are enhancement dollars available for transportation related projects including bicycle and pedestrian trails, rail depot rehabilitation, landscaping, and beautification programs.

Neighborhood Assistance Program
In 1978 Missouri became the third state in the nation to adopt legislation creating a NAP. Any person, firm or corporation in the state is eligible to receive NAP credit by making an eligible contribution to an approved NAP in Missouri. The amount of tax credit is generally equal to half of the contribution (70% for projects in some communities under 15,000 population). NAP credits may only be used to offset income tax, franchise tax, financial institution tax, gross premium receipts tax and gross receipts tax. Only 501 (c)(3) organizations, Missouri businesses, and nonprofit organizations authorized to operate in Missouri are eligible applicants.

Trust for Public Land
A national not for profit organization working to conserve land for people to enjoy as parks, gardens, and other natural places ensuring livable communities for generations to come. The TPL helps communities and government agencies identify land for protection. They help identify funds that might be used to protect that land and sometimes help raise funds through charitable campaigns and legislative or voter initiatives. The TPL also has the staff to help complete the purchase transaction.

Missouri Conservation Heritage Foundation
Nonprofit charitable organization created in 1997 to meet the financial demands placed on Missouri’s natural resources. Its mission is to advance the conservation and appreciation of Missouri’s forest, fish, and wildlife resources by matching financial resources with the priorities of donors, the Foundation and the Missouri Department of Conservation. The Foundation receives funding from the Stream Stewardship Trust Fund, Conservative Heritage license plate sales, grants, and individual donations.
GRANTS

Federal
Pollution Prevention Grants
Environmental Protection Agency
Michele Amhaz
Pollution Prevention Division (7409M)
Office of Pollution Prevention and Toxics
Environmental Protection Agency
1200 Pennsylvania Ave, NW.
Washington, DC 20460-0001
Telephone: 1-202-564-8857
E-mail amhaz.Michele@epa.gov
http://www.epa.gov/p2/

Recreational Program Grants CFDA #84.128J
Kerri Brown
U.S. Department of Education, OSERS
400 Maryland Avenue, SW, Room 3329, MES
Washington, DC 20202-2647
Telephone: 1-202-401-9707
E-mail Kerrie.brown@ed.gov

Land and Water Conservation Fund
Division of State Parks & Historic Preservation
Department of Natural Resources
P.O. Box 176
Jefferson City, MO 65102-0176
Telephone: 1-573-751-2479
http://www.ncrc.nps.gov/lwcf

State
Landmark Local Parks Program
Grant Management Section
P.O. Box 176
Jefferson City, MO 65102
Telephone: 1-573-751-8560
E-mail: moparks@dnr.mo.gov
http://www.mostateparks.com
Recreational Trails Program
Grant Management Section
P.O. Box 176
Jefferson City, MO 65102
Telephone: 1-573-751-0848
E-mail: moparks@dnr.mo.gov
http://www.mostateparks.com/grantinfo.htm

Metropolitan Parks and Recreation District
Municipal Parks Grant Commission of St. Louis County, Missouri
St. Louis County Municipal League
121 S. Meramec Avenue
First Floor
Clayton, Missouri 63105
Telephone: 314-726-4747
E-mail: staff@stlmuni.org
http://www.stlmuni.org

Waste Tire Grants
Missouri Department of Natural Resources
Solid Waste Management Program
P.O. Box 176
Jefferson City, MO 65102
Telephone: 1-573-751-5401
http://www.dnr.state.mo.us/financialopp/solid_waste.htm

Historic Preservation
Department of Natural Resources
Division of State Parks
P.O. Box 176
Jefferson City, MO 65101
Telephone: 1-800-334-6946
E-mail: moparks@dnr.mo.gov

Community Assistance Program (lake/pond management)
Missouri Department of Conservation
P.O. Box 180
Jefferson City, MO 65102-0180
http://www.conservation.state.mo.us/
TRIM II (Tree Resource Improvement and Maintenance Program)
Community Forestry Coordinator
Forestry Division
Missouri Department of Conservation
P.O. Box 180
Jefferson City, MO 65102-0180
Telephone: 1-573-522-4115, ext. 3116
http://www.conservation.state.mo.us/

Community Stewardship Grant Program
Missouri Department of Conservation
Powder Valley Nature Center
11715 Cragwold Road
Kirkwood, Mo. 63122

Other
National Fish & Wildlife Foundation
Five-Star Restoration Challenge Program
(wetland, riparian, or coastal habitat restoration)
Lisa Burban, Group Leader/Urban Forester
USDA Forest Service -- NA S&PF
1992 Folwell Ave.
St. Paul, MN 55108
Phone: 651-649-5245
Fax: 651-649-5238
http://www.nfwf.org/programs/5star-rfp.htm
Partnership Enhancement Monetary Grant Program
(for organizations whose programs & activities are managed by volunteers-need to establish a “Tree-Keeper” Volunteer group to apply)

National Tree Trust
1120 G Street NW, Suite 770
Washington DC 20005
Phone: (202) 628-8733
Fax: (202) 628-8735
http://www.nationaltreetrust.org/
SECTION 9.

APPENDIX

April 20, 2009 - Public Forum #1 Data Collection
- Sign-In Sheet
- Presentation
- Summary Notes
- Feedback Forms
- Workshop Plans

June 6, 2009 - Board of Aldermen Presentation
- Presentation

September 1, 2009 - Public Forum #2 Conceptual Recommendations
- Sign-In Sheet
- Presentation
- Summary Notes
- Feedback Forms

October 26, 2009 - Board of Aldermen Final Recommendations
- Presentation