



IMAGINE
ARVADA
PARKS, TRAILS AND OPEN SPACE
2016 MASTER PLAN

RALSTON CREEK

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PREPARED FOR THE CITY OF ARVADA
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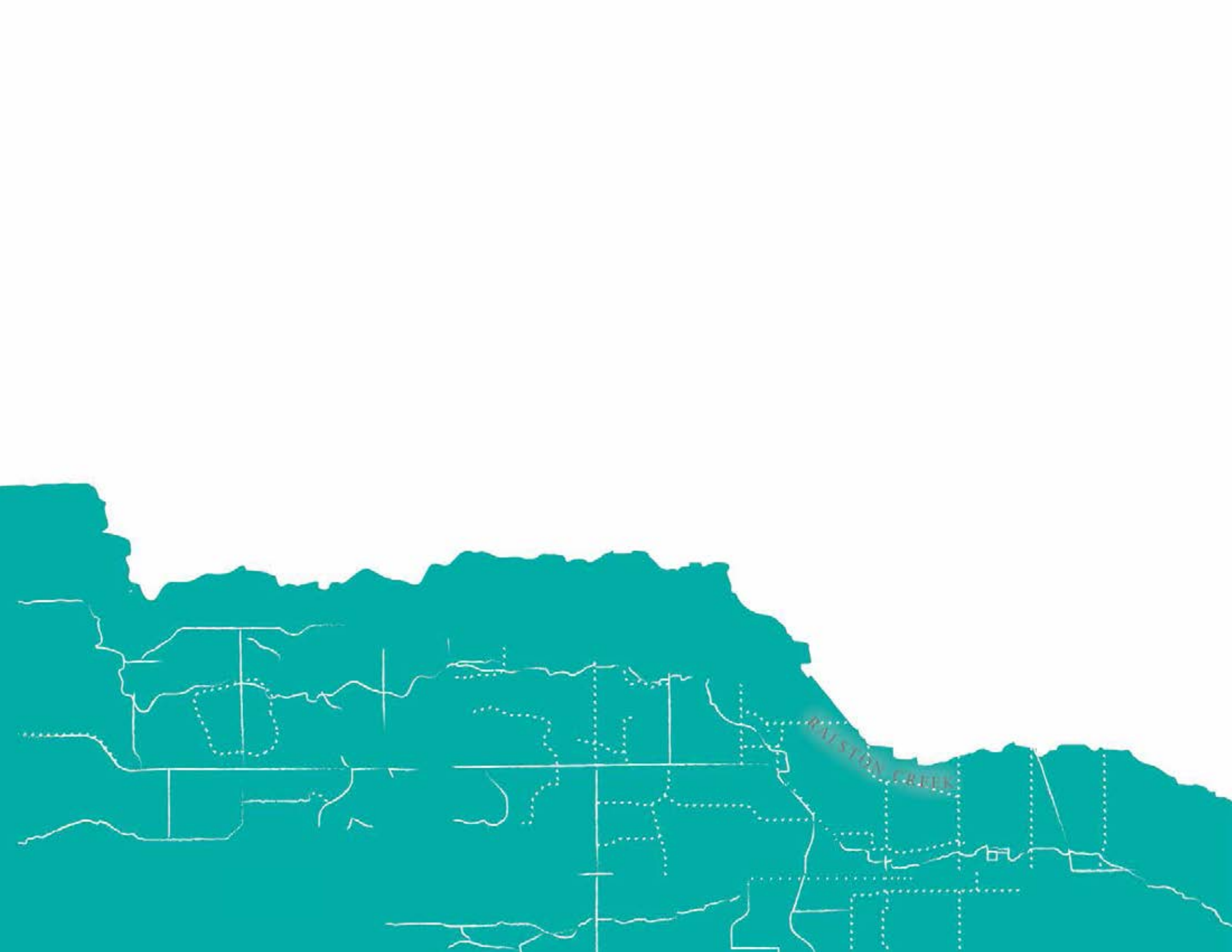
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PLAN SUMMARY



Source: City of Arvada

Arvadans view trails as a contributor to high quality of life and want to increase trail connectivity.

IMAGINING THE FUTURE OF ARVADA'S PARK SYSTEM

INTRODUCTION

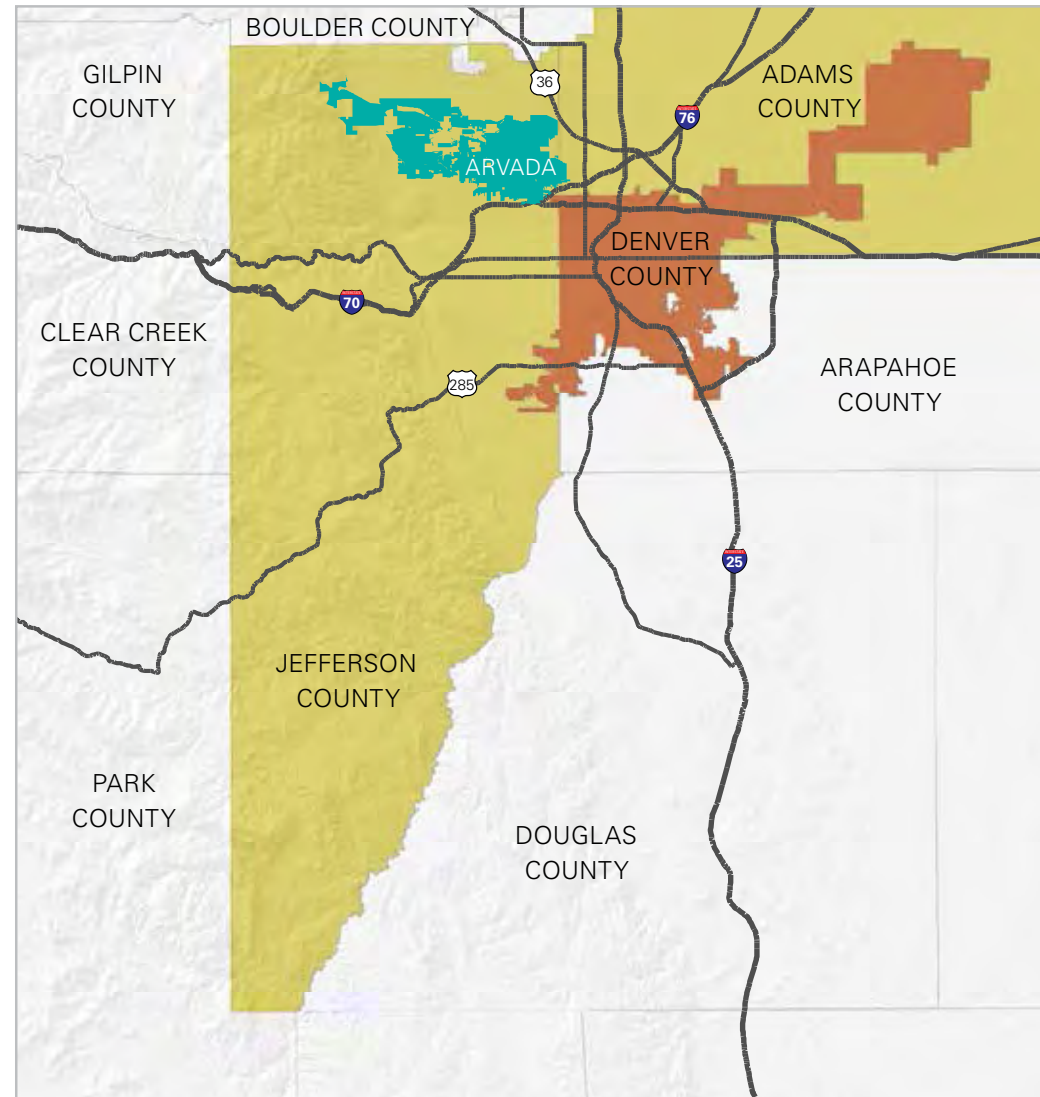
The City of Arvada is a growing, first ring suburb of Denver and is primarily located in Jefferson County (Jeffco) with a small, eastern portion located in Adams County, Colorado. From 2015 to 2025, the City will grow 15.5 percent from 111,529 people to 128,848 people. Over the next ten years, the Parks, Trails and Open Space Master Plan will guide Arvada to successfully manage park system improvements and envision an audacious future for Arvada's parks, trails and open spaces through a new vision called Green Spines, which endeavors to connect residents and neighborhoods to a network of parks, trails, creeks, canals and open space in a contiguous and regionally profound way.

Many of the previous 2001 Master Plan recommendations have been completed or require a new approach to complete. Changes in community demographics and development trends necessitate a fresh look into values, recreation needs and current recreation trends that resonate for Arvada. The primary goal of this Master Plan update is to ensure the City's parks, trails and open space meet the needs of a growing community and encourage outdoor recreation and wellness for Arvada residents.

WHY A MASTER PLAN?

- To address services, management, maintenance, facilities and policies in a fiscally responsible and sustainable manner
- To provide realistic and clear recommendations to guide Arvada's decision making process over the next 10 years regarding parks, open space and trails
- To contribute to a high quality of life, encourage new economic opportunities and promote Arvada as a premier Front Range Community

Map 1: City of Arvada Surrounding Context



HOW TO USE THIS DOCUMENT

ORGANIZATION

Four themes summarize the public's main concerns for the future of Arvada's parks, trails and open spaces:

1. Community
2. Parks
3. Wellness
4. Nature

The themes support the master plan recommendations including the Green Spines vision to expand open space spines and trails in a regionally profound way. Each theme's content is explored in a chapter using the following framework:

- Inventory and Analysis
- Key Findings and Benchmarks
- Community Desires
- Recommendations
- Baseline and Performance Measures

A final chapter, Implementation, provides overarching recommendations that impact all themes for:

- Policy Recommendations
- Staffing Recommendations
- Maintenance Approach

The plan Appendix contains more detailed information on the plan creation process and background information:

- Environmental Background
- Complete Stakeholder and Public Input Results
- Arterial Beautification Report
- Large Format Maps

COMMUNITY



WELLNESS



PARKS



NATURE



Four community-identified themes organize the main chapters and content of the master plan document.

KEY CHAPTER TERMS

BENCHMARKS

Within the theme chapter framework, benchmarks are used to evaluate Arvada's park system conditions against national standards and comparison cities. The benchmark cities in this plan were selected based on several similar criteria, such as size and demographic makeup. Most of the cities are in the Front Range, while the City of St. Louis Park (suburb of Minneapolis) was chosen because of its similar transit development and interest in community agriculture. Benchmarks are helpful in understanding how Arvada's park system stacks up compared to other communities and what areas might be priorities for Master Plan recommendations.

BASELINE

A minimum or starting point used for comparisons and projections.

PERFORMANCE MEASURES

A regular measurement of outcomes and results, which generates reliable data on the effectiveness and efficiency of programs. Performance measures are used to track goals by setting a vision, baselines, targets, and methods for measuring different topic areas related to the goals of the plan.

MASTER PLAN VISION

CONNECT OUR PARK, OPEN SPACE AND TRAIL SYSTEM WITH GREEN SPINES



Expand open space spines (Ralston Creek, Van Bibber Trail and north-south corridors) to create an **open space web** by connecting to other creeks, canals and open spaces **in a contiguous and regionally-focused way.**



Connect every resident to park, trail and open space system with routes designed for biking, walking and active transportation.



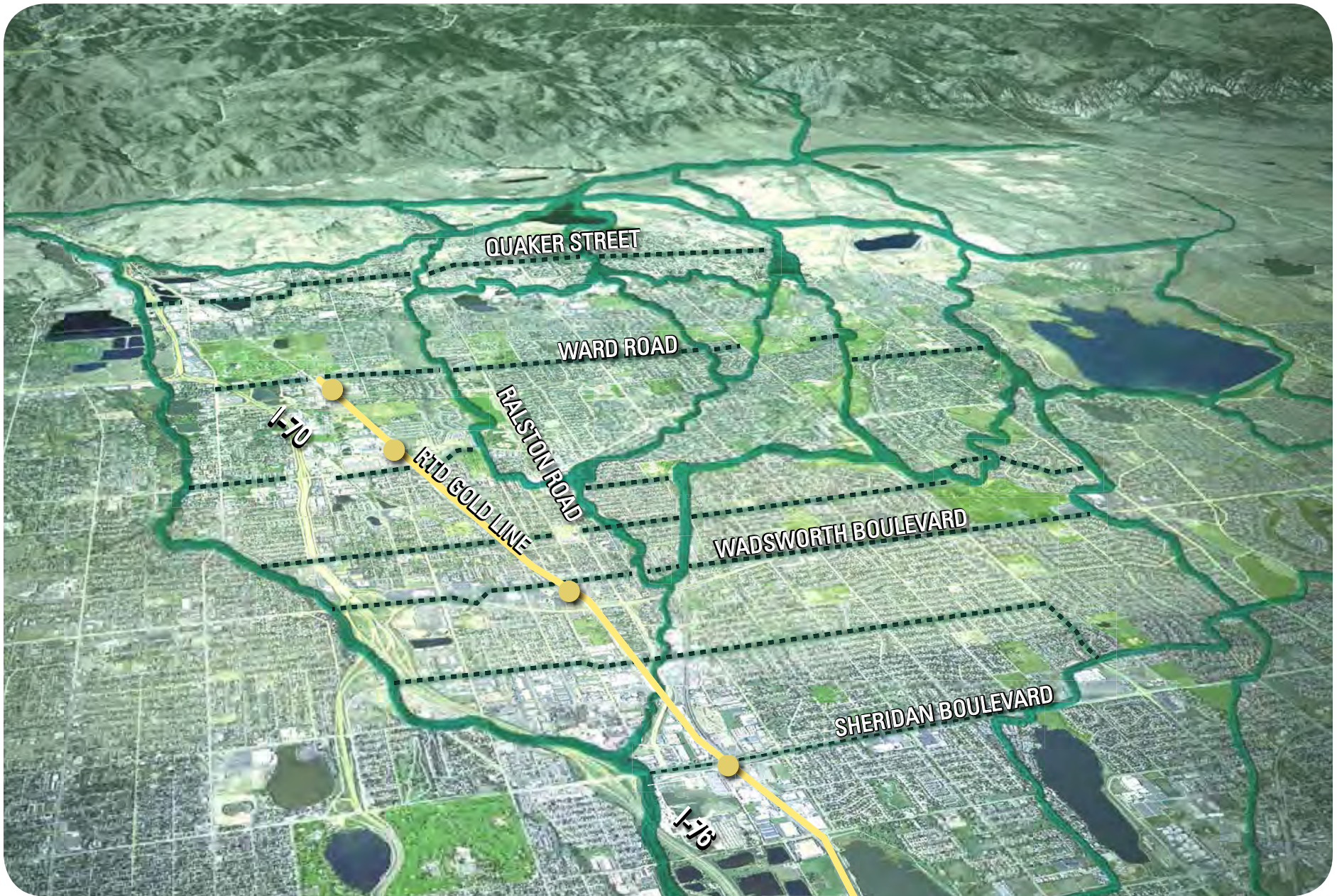
Focus attention on **improving the ecological health of our open space network and waterways** to benefit wildlife habitat and outdoor recreation destinations.



Develop a series of **interconnected cultural and fitness trails** that follow along these green spines.



The City of Arvada encompasses two distinct growth patterns: less dense suburban growth and denser urbanizing areas of growth. The whole City benefits from Green Spines as it connects the public with their parks and open spaces and promotes daily interaction and participation in all four master plan themes—community, parks, wellness and nature.



Map 2: Arvada's open space web of potential Green Spines aims to connect the park, open space and trail system in a contiguous and regionally profound way. Green Spines will provide routes connecting urban cultural centers, Gold Line commuter rail stations, recreation destinations and Front Range open spaces. North South corridors like Wadsworth Boulevard, Sheridan Boulevard, Kipling Street and Ward Road could provide active transportation amenities like on-street trails to connect the community to Green Spines. See the Arterial Beautification Appendix section for more examples of creating walkable streets.

CONCEPT SUMMARY

COMMUNITY

Throughout the stakeholder engagement, residents commented on the importance of connectivity, including the Green Spine trail and open space web, and awareness of the park system. The community chapter content briefly describes Arvada's demographics, how it is projected to change in the future, and current participation in volunteering and events. Overarching master plan recommendations for community include:

- Activate Parks, Trails and Open Spaces
- Celebrate the Breadth of Our Park, Trail and Open Spaces
- Increase Volunteers and Volunteer Opportunities

PARKS

Arvada has over 100 parks that serve different parts of the community from urbanizing areas around commuter transit stations to more suburban parks. The parks chapter content gives an overview of different park types, their classifications and standards, assesses gaps in the park system and looks at comparative benchmarks to evaluate how Arvada's park service levels rate. Park recommendations ensure equitable distribution of parks and park improvements and maintenance to provide well-maintained and engaging destinations for Arvada's Green Spines. Overarching recommendations for parks include:

- Provide Urban Park Types in Urbanizing Areas
- Provide New Parks, Connections and Improvements to Existing Parks
- Expand "Taking Lasting Care" Program (see concept terms at right for definition)

WELLNESS

The theme of wellness encompass the public's desires for connectivity and accessibility of the park system for all residents using routes for walking, biking and active

(or self-propelled) transportation. For the master plan, wellness means improving and expanding trails to provide connectivity to parks and open spaces in order to encourage recreation activities that improve public health and increase regional connectivity-a core value for the Green Spines vision. Overarching master plan recommendations for wellness include:

- Complete Identified Trail Gaps
- Enhance Trail System
- Encourage Access to Healthy Living for All

NATURE

Arvada has over 3,700 acres of open space with site features including streams, canals, reservoirs, grasslands and geologic elements. The nature chapter content provides an inventory of existing open space, classifications of different open spaces in Arvada, identification of potential areas for open space acquisition, and stewardship recommendations to provide healthy, Green Spine ecosystems. Overarching master plan recommendations for nature include:

- Acquire Lands for Open Space Conservation
- Connect Regional Open Space Systems
- Augment Sustainability And Stewardship Measures within Maintenance Standards

CONCEPT MAP

The concept map (Map 3) on the following page locates the key findings and recommendation priority areas for community, parks, trails and open space and ties them together with existing and future Green Spines. Each theme chapter isolates specific recommendations and provides a greater detail of explanation. The concept map reveals how the web of Green Spines connects open space, parks and communities of Arvada.

CONCEPT TERMS

GREEN SPINES

trail and open space web that connects creeks, canals and natural areas in a contiguous and regionally profound way

OPEN SPACE

parcels of land set aside to preserve land, water, vegetative, historic, cultural or aesthetic features in the natural or primarily natural state

TAKING LASTING CARE

philosophy, to ensure that once constructed and maintained, resources are also available for the eventual replacement of the City's park system amenities

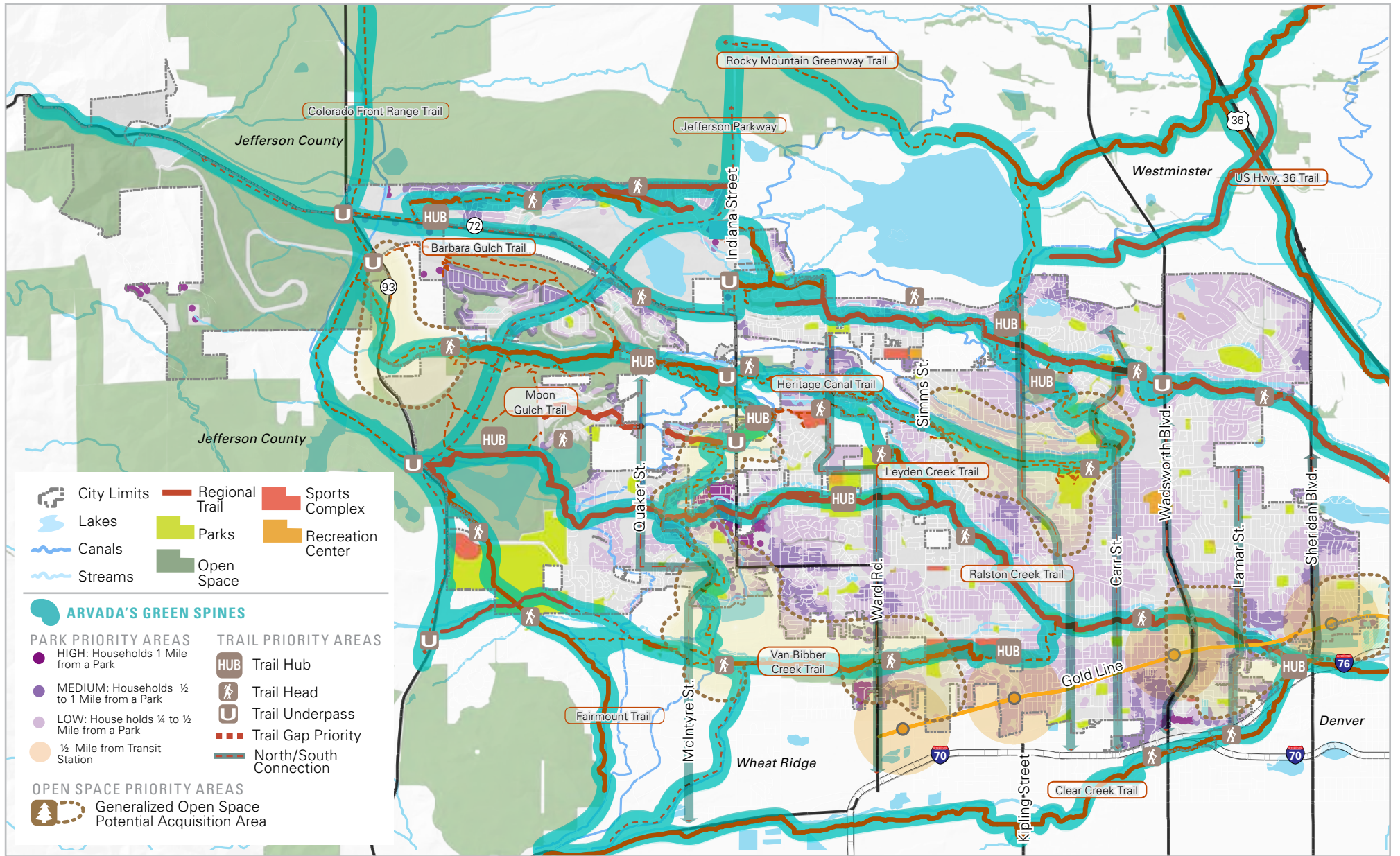
TRAIL HEADS

beginning of trail or major trail access point, most often served by vehicles and adjacent to parking and basic amenities and signs

TRAIL HUBS

strategically located areas where trails, signature park or destination converge

Map 3: The concept map gives an overview of Green Spine locations and priority areas for community, parks, wellness and nature recommendations.



PLAN CREATION SUMMARY

ROLES AND RESPONSIBILITIES

The role of the City is to support park, trails and open space projects that demonstrate clear public value, protect public interest and provide public access to desired, needed and well-designed facilities. The Arvada park system is one system with numerous recreation providers. The Parks Golf and Hospitality (PGH) Department is in charge of parks and maintenance while coordinating with Arvada's recreation providers including Apex Park and Recreation District, Hyland Hills Park and Recreation District and Prospect Recreation and Park District. In general, recreation districts manage active recreation and programming such as youth and adult sports, fitness, swimming, golf, ice skating, etc., while the PGH Department takes the lead on infrastructure and projects to support passive recreation while also managing City golf courses.

Consultation with these recreation groups provides this plan with a clear picture of recreation priorities and future projects impacting Arvada residents. In addition, inventories of existing parks and amenities and analyses of existing park service areas and open spaces inform this plan. The 2016 Master Plan is an implementation tool for the community, city leaders and PGH Department to prioritize and achieve strategic visions and goals for parks, trails and open space.

The Master Plan addresses all the park system services with the exception of operations, maintenance and coordination of the golf courses, City of Arvada enterprise businesses, and Arvada Center for the Arts and Humanities. The Master Plan does not directly address the programs and facilities of Jefferson Center Metropolitan District, Coal Creek, Apex, Hyland Hills and Prospect Parks and Recreation Districts, but rather takes into account the work the PGH Department does in conjunction with these providers to plan and supply recreation opportunities.



Source: City of Arvada

Park amenities like Majestic View Nature Center environmental education classes will continue to be critical to expand the community's awareness of park system resources.

A COORDINATED VISION

From April 2015 to February 2016, Design Workshop provided consulting services to the Arvada Parks, Golf and Hospitality (PGH) Department through various groups including a working group of PGH staff, City staff and technical advisors. A Steering Committee consisting of volunteers from Arvada's Park Advisory Committee led the Master Plan process and the Arvada Sustainability Advisory Committee provided additional input. City Council and Planning Commission participated in briefings at key points in the plan.

The team also consulted Arvada's recreation providers including Apex Park and Recreation District, Hyland Hills Park and Recreation District and Prospect Recreation and Park District to align those providers' current plans and future goals for Arvada's active recreation with the park Master Plan recommendations.

The public participated in several input opportunities including round table meetings in May 2015, a public meeting and online survey in July 2015 and a public open house at the conclusion of the process in winter 2016.

LEADING THE PLAN

Eighteen Steering Committee members led the overall plan direction, guiding themes and recommendations. The Steering Committee was composed of Arvada Park Advisory Committee volunteers who serve a three year appointment and make recommendations to City Council on projects for parks, open space and trails. The Steering Committee provided analysis of the past Master Plan goals, guidance on priorities for the current plan and volunteered at stakeholder engagement events. The working group, composed of PGH staff, City Staff, technical advisors and Design Workshop, interacted daily and supported the steering committee.



Figure 1: Master Plan Schedule

COMMUNITY INPUT SUMMARY

A community planning workshop was held Tuesday, July 14 at the Arvada Center to provide an opportunity for all community members to give input regarding needs, priorities and reaction to initial master plan key themes. Instant keypad polling was used to quantitatively gather information and feedback from community members that use Arvada's parks, trails and open space. This feedback was used to assess future needs and gaps in service and the strengths and successes of Arvada's parks, trails and open space system and also to identify the key themes that received the most support. Following this community planning workshop, the meeting content and identical survey was shared online to encourage those that were unable to attend the workshop to provide their input in the master plan process.



COMMUNITY

Residents frequently enjoy City of Arvada parks, trails and open spaces, but want more information on park and trail events and amenities.

PARKS

Creating new parks and expanding activity and amenities in parks are highly supported by the public.



WELLNESS

The public overwhelmingly desires greater connectivity of the local trail system to parks, open spaces, cultural destinations and regional trails.

NATURE

The Arvada community passionately supports protection and expansion of natural areas throughout existing and future parks, trails and open spaces.

Source: Combined round table meeting, public meeting and online survey results

WHO PROVIDED INPUT

- Over 90 round table participants
- 28 Working Group and Steering Committee Members
- July 14, 2015 Public Meeting at the Arvada Center for the Arts
 - 87 participants
- Online Survey
 - 1,083 participants
- January 13, 2016 Public Open House at the Arvada Center for the Arts
 - 64 participants

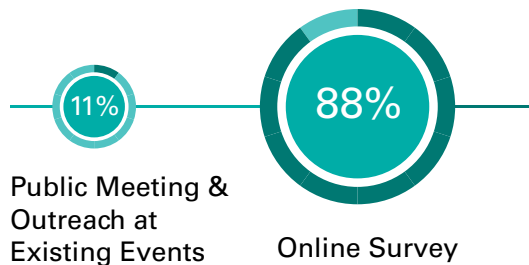


Figure 1: Percent of participants in outreach efforts

ADDITIONAL STAKEHOLDER INPUT

- 2013 Arvada Citizen Survey
- 2014 City of Arvada Comprehensive Plan
 - Community Choice Event-High School Summary
 - Arvada Listens Feedback Summaries
- 2011 Jeffco Open Space Citizen Survey
- 2013 Apex Recreation Survey
- City Council Directives



Map exercise during the July 14th public meeting at Arvada Center for the Arts.



Arvada residents participated in six round table meetings on topics including 1) Program Providers 2) Community Building 3) Recreation Partners 4) Serving a Diverse Community 5) Open Space, Natural Resources and Agriculture 6) Special Events, Arts and Culture.

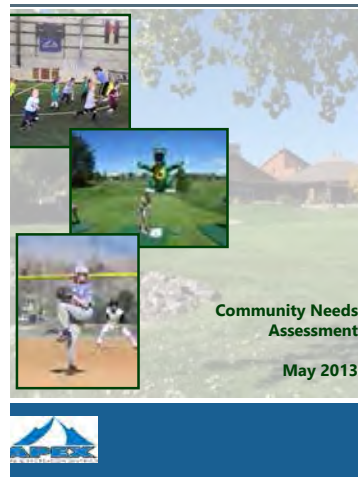
SEE APPENDIX

for a full report on all stakeholder engagement results

ALIGNMENT WITH OTHER PLANNING EFFORTS

The master plan team carefully reviewed the following plans to ensure the Master Plan is aligned with existing Arvada and regional efforts that impact Arvada parks, trails and open space.

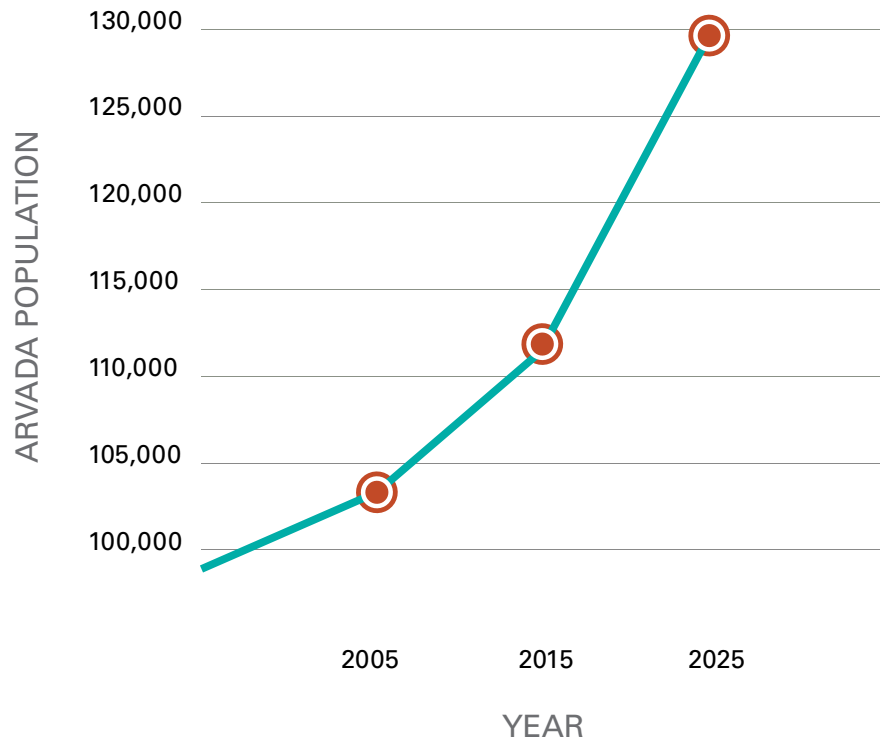
- City Of Arvada Comprehensive Plan (2014)
- Arvada Transit Station Framework Plan (2006)
- City Of Arvada Pedestrian And Bicycle Access Plan (2009)
- Ralston Fields Urban Renewal Plan (2003)
- Vision 2020 Apex Park And Recreation District Citizen's Planning Committee Report And Recommendations (2012)
- Apex Community Needs Assessment (2013) and 2016 Bond Issue
- Jefferson County Open Space Master Plan (2014-2019)
- Sustain Arvada Plan (2011)
- Sustain Arvada-Community Agriculture Guide (2013)
- Arvada Healthy Places (2013)
- City Of Arvada Citizen Survey (2013)
- Water Conservation Plan (2010)
- Arvada Blunn/Pioneer Master Plan (2015)
- Pomona Parcel Plan (2014)
- Arvada Bicycle Master Plan Effort (2016)



KEY DEMOGRAPHIC TRENDS

Arvada's population is increasing and this trend will lower or flat-line park level of service if no new parks are built. Level of service is an industry standard measurement used to relate the quantity of different types of parkland and amenities in relation to population. The measure is made in acres per thousand population in order to compare cities of different sizes across the board on their park system.

Arvada's population is also aging and becoming more diverse. This, coupled with a projected decline of park level of service, are critical trends that inform the following chapters, recommendations and performance measures.



DEMOGRAPHICS

A more detailed inventory of community demographics is in the Community chapter.

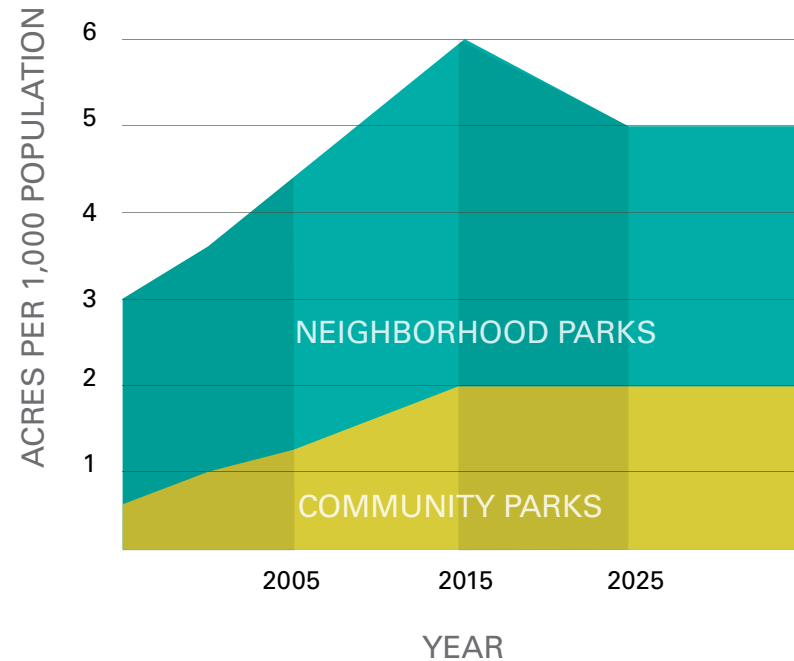
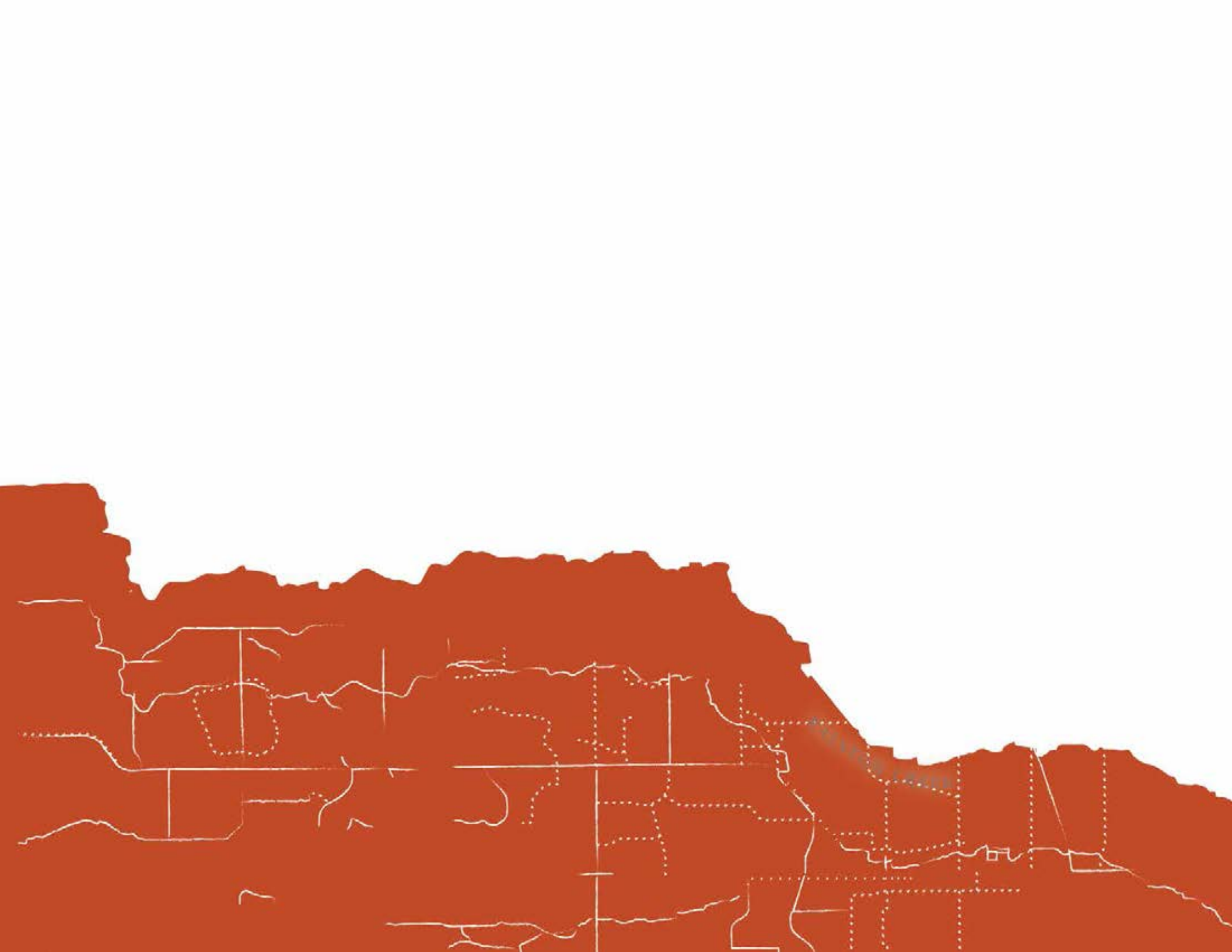


Figure 2: Arvada population projections anticipate increases in population. If no new parks are built, this increase in population will result in a decline of community and neighborhood park level of service in acres per 1,000.

Source: Population projections from 2014 Arvada Comprehensive Plan.



COMMUNITY



INVENTORY AND ANALYSIS

OVERVIEW: COMMUNITY

Throughout the stakeholder engagement, residents commented on the importance of connectivity, including support of the Green Spine initiative and park system awareness-building. The community chapter content briefly describes Arvada demographics, how it is projected to change in the future and current participation in volunteering and events.

POPULATION HISTORY AND GROWTH

Home to over 111,529 residents, Arvada is projected to add over 17,000 residents by 2025.¹ Over the last twenty years, the community has experienced economic development, particularly in its commercial and industrial base, and is preparing for major transit-oriented development driven by the three commuter rail stations on the Gold Line in addition to Jefferson Parkway (a proposed toll road and trail corridor running between Highways 93 and 128). Arvada faces opportunities and challenges as it expands with the rest of the Front Range as one of the country's fastest growing regions.

POPULATION PROJECTIONS

According to the 2014 Arvada Comprehensive Plan, Arvada will add approximately 17,000 residents from 2015-2025 during the master plan time frame (Figure 6 and Table 1). In general, population will grow through 2035 with growth rates peaking around 2020 in Arvada and Jefferson County. Additionally, the population of Arvada is aging and becoming more diverse, similar to overall trends for Jefferson County.

¹ 2014 Arvada Comprehensive Plan.

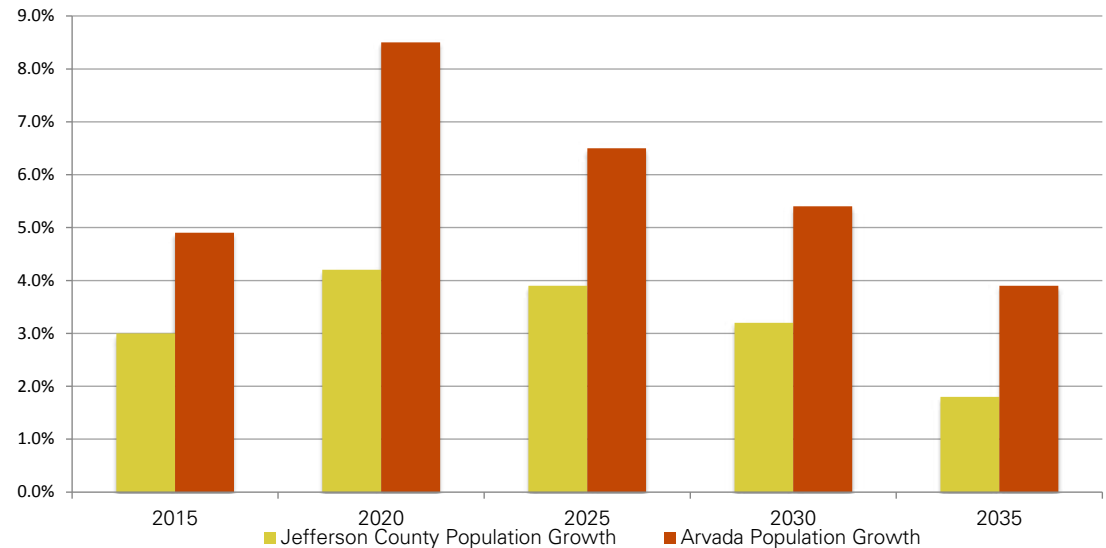


Figure 3: Arvada and Jefferson County Population Growth 2015 - 2035

Table 1: Arvada Historic and Projected Population

ARVADA HISTORIC AND PROJECTED POPULATION TOTALS	
Year	Population
2000	101,095
2010	106,433
2015	111,529
2020	121,031
2025	128,848
2030	136,400
2035	141,187

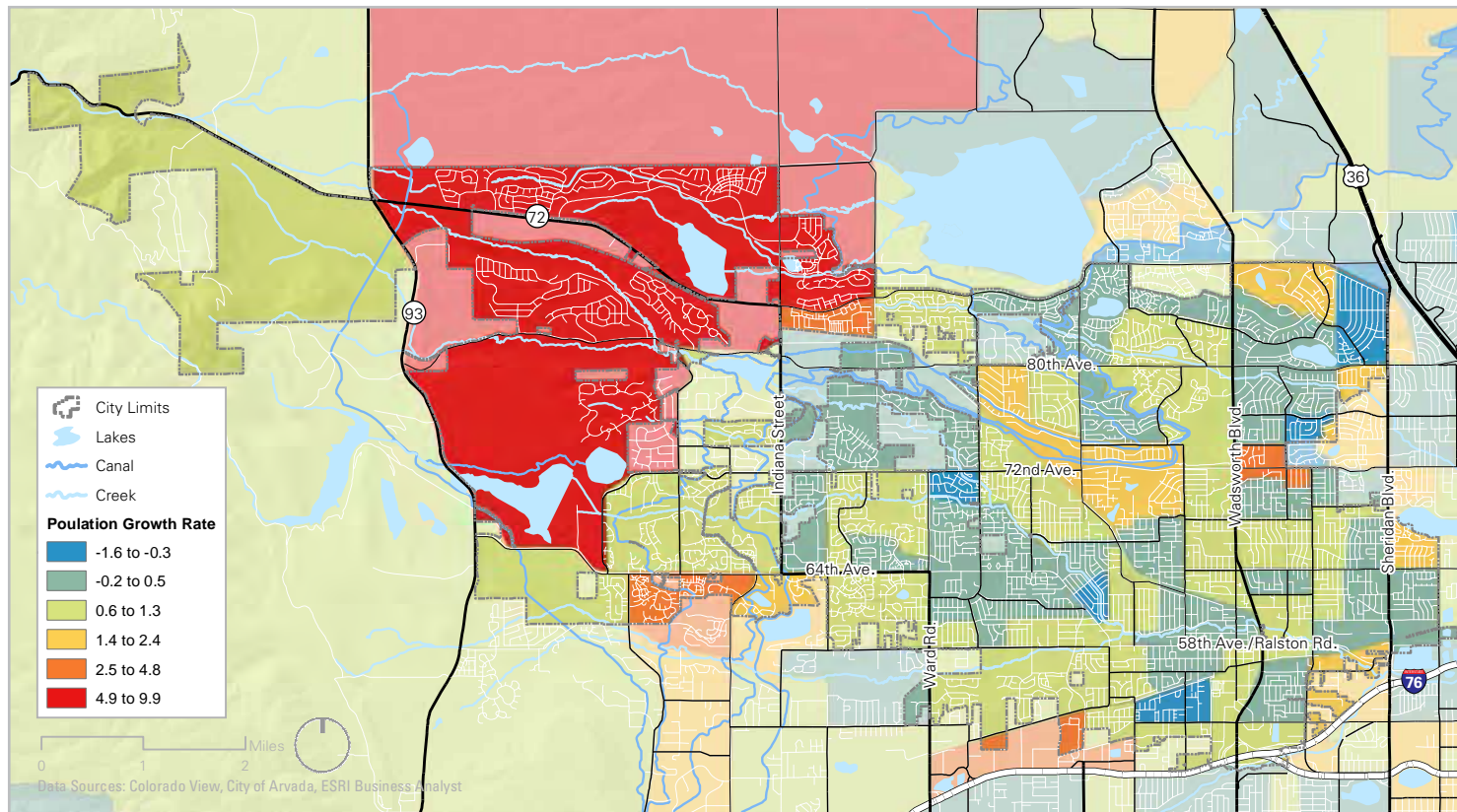
Sources: Colorado State Demographer's Office - Steven B. Fisher, EPS, DRCOG Comprehensive Plan 2005, Arvada Comprehensive Plan 2014, 2001 Arvada Park, Trail and Open Space Master Plan

LOCATIONS OF GROWTH

According to the U.S. Census Bureau and ESRI Business Analyst projections, Arvada's population is expected to grow during the 2015-2020 time period, with stronger growth particularly in the western portion of the city. The distribution of this growth is shown in Map 7 according to census blocks. Arvada's Comprehensive Plan has identified short-term growth within the city emerging from large developments like Leyden Rock, Whisper Creek and

the Candelas development, a 1,500 acre master-planned community that is located in the western portion of Arvada south of Rocky Flats National Wildlife Refuge. Transit Oriented Development (TOD) around Gold Line commuter rail stations will add households in the mid-term. Future redevelopment projects and infill will add households in the long-term.

Map 4: Arvada Projected Population Growth Locations 2015 - 2020



CENSUS BLOCKS

Census blocks are the smallest geographical units used by the U.S. Census Bureau and they are defined by physical and cultural features. They do not take into account city-owned land, or lands that will not be developed, but they do provide a big picture look at areas that will experience growth.

For example, the area shown in red in Map 7 is one census block. In its entirety this area is projected to see growth rates of 4.9 to 9.9 percent. However, this does not imply that all of this area will be developed. This census block contains large open spaces and city-owned lands, particularly around Arvada Reservoir, which will not experience such accelerated population growth rates.

ACCOMMODATING ALL AGES

Figure 8 shows the age by population over the next five years in Arvada. Residents 55 years and older will increase 2-3 percent between 2015 and 2020. Arvada, which lies mostly in Jefferson County, is part of a regional growth trend. By 2040, 25 percent of Jefferson County’s total population will be over 65.¹ Senior populations will require consideration for shorter walking distances (1/4 mile) and appropriate types of park amenities (i.e., walking loops, outdoor fitness equipment).

The figure also shows percentage of youth under age 19 staying relatively the same overall. However in certain areas around new housing development, youth population is growing rapidly as 4,000 to 5,000 residential units are coming online ten years earlier than expected and enrollment at over five Jefferson County elementary schools will be pushed past capacity.²

Diverse age groups will require varying strategies for providing access to the park and trail system, and strategies to ensure all ages are welcome and can participate in park, trail and open space amenities.

¹ 2014-2019 Jefferson County Open Space Master Plan, Aging Well in Jefferson County Initiative, Colorado State Demography Office
² The Denver Post “Rapid Population Growth in North Arvada Pushes Schools Past Capacity.” September 11, 2014.

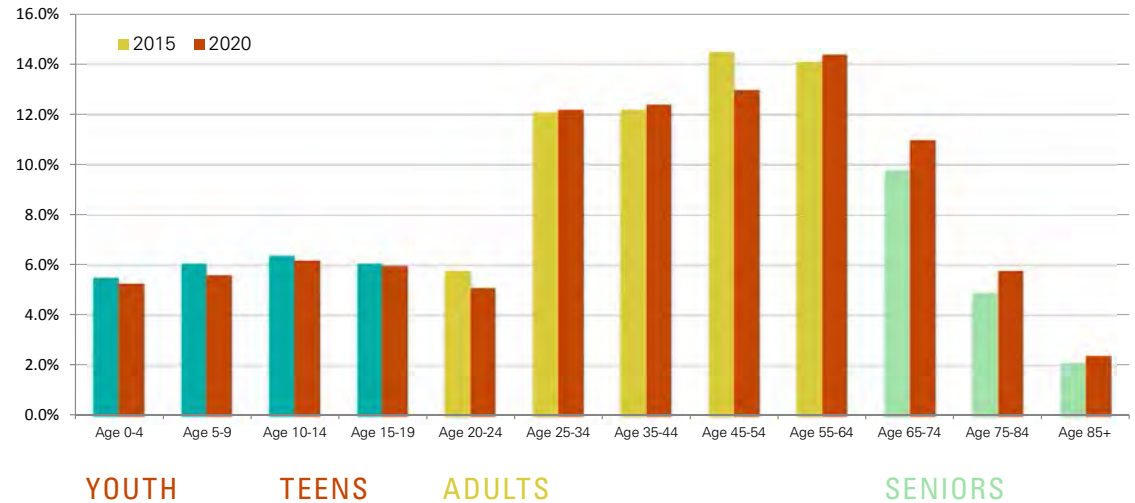


Figure 4: Arvada Population by Age 2015 - 2020
 Source: ESRI Business Analyst 2015



Outdoor recreation can accommodate all ages and contribute to Arvada’s high quality of life.

HISPANIC POPULATION

Another important trend is that the Hispanic population will grow faster than other ethnicities as shown in Figure 9. By 2040, 35 percent of Jefferson County will be Hispanic/Latino.¹ During community outreach events, southeast Arvada was identified as a priority area with 27.8 percent of Arvada’s Hispanic population and 26.2 percent of the overall minority population. The Healthy Places Initiative cites that these groups have limited access to quality nutrition and recreation with resultant higher rates of obesity and diabetes. In general, southeast Arvada will be impacted by influences of future population growth and denser development around the Gold Line commuter rail stations and proximity to Denver. These factors underline the importance of the Master Plan to provide racial equity or fairness in distribution of park system amenities that can positively affect wellness for non-white populations

¹ Woods and Poole Economics for 2013

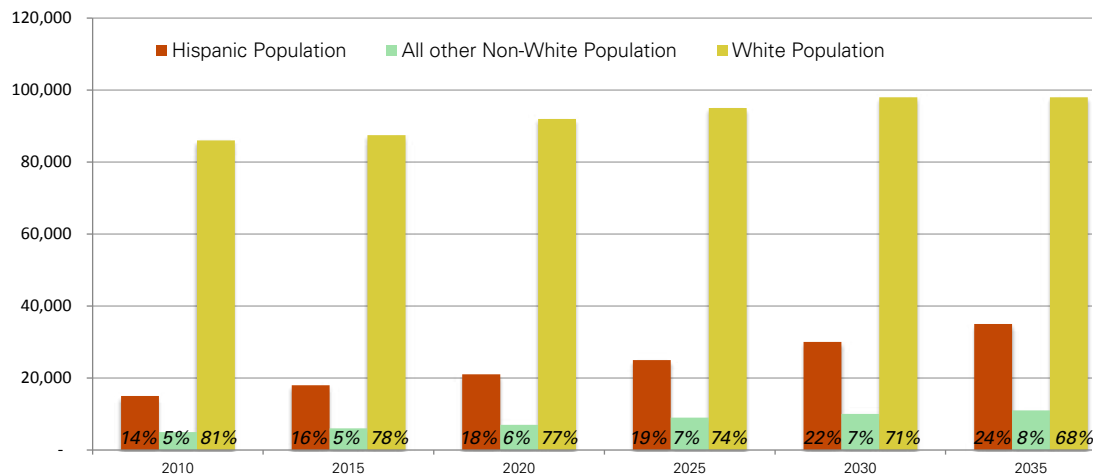


Figure 5: Arvada Ethnic Distribution 2015 - 2035. Percentage of non-white and Hispanic populations increase over time.

Source: ESRI Business Analyst 2015

JEFFERSON COUNTY DEMOGRAPHIC TRENDS

By 2040, the Jefferson County 2014 Open Space Master Plan projects that 25 percent of Jefferson County’s total population will be over 65 and 35 percent of the total population will be Latino.

ARVADA HEALTHY PLACES INITIATIVE

is working with southeast Arvada to improve public health. The program is a community-led process and Arvada is set to become a model of active design for suburban Colorado.

EQUITY IN PARK SYSTEM PLANNING

providing fair and inclusive process for providing park system improvements and amenities through community-led decision making

UNIVERSAL DESIGN

is defined by North Carolina State University’s Center for Universal Design “as the design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design.” Universal design accommodations in the park system can help support user groups like the aging population and younger families.

PEOPLE WITH DISABILITIES

Disabilities can impact a person's physical, cognitive or mental wellness. Arvada has thousands of residents with some form of disability.² It will be important to not only add features in parks for those with disabilities, but to design parks, trails and open space to be inclusive of all age groups and all abilities within those age groups. Mobility accommodations in parks, trails and open spaces including ramps, continuous paving, accessible routes and connections to bus, rail or shuttle resources are important to provide the disabled population and aging residents. Sensory parks or adding sensory-oriented features to existing parks is another strategy the Master Plan stands to influence to include people with disabilities.

EDUCATION

There are over two dozen primary education schools in Arvada and more coming online to accommodate residential development in northwestern Arvada. Arvada residents also have access to over 24 higher education schools in the surrounding area including Red Rocks Community College. Red Rocks is adjacent to the Arvada Ridge transit station, and the campus will triple in size after a campaign to expand the College's Health Careers Campus.

The ongoing success of the parks, open space and trails system is reliant on increasing public awareness of open space as an amenity and institution. Majestic View Nature Center facilitates community interactions with nature through hands-on displays, wildlife exhibits, kid's activity area, interpretive trails and classrooms. This environmental education center also offers on-site school programs to help educate students on wetland and upland ecosystems.

Other nature education partnerships could be negotiated with the State of Colorado Department of Education environmental education curriculum, Two Ponds National

² 2010 U.S. Census

Wildlife Refuge, the Jefferson County Nature Center and nature centers in adjacent communities like Westminster and Standley Lake.

School partnerships are a key way Arvada promotes greater understanding of natural systems and instills a sense of stewardship. Through partnerships with local schools, student volunteers have helped plant trees on Arbor Day and maintained trails throughout the city.

Additional partnerships could include shared uses of playgrounds and creating playgrounds for mixed ages and abilities that would have universal appeal to seniors, people with disabilities and families.



Arvada's two dozen and growing primary schools offer opportunities to expand playgrounds and recreation fields to include shared uses with community residents of different age groups and abilities. Additionally, linking schools to trails and safe routes to schools is an important goal for the community.

LOCAL ECONOMY

Arvada's current median household income is \$69,761. By 2020, median household income is projected to grow faster than overall U.S. household income, but slower than state household income as illustrated in Figure 10. Regardless of income, the park system offers affordable recreation that the community has continually voiced as important to maintaining a high quality of life in Arvada. Additionally, the Gold Line, Arvada's adjacency to Denver and the Front Range Mountains are attractive features to current and prospective Arvada residents and a catalyst for growth. In the face of the demographic and economic trends outlined in this chapter, equal access to high quality outdoor recreation, regardless of socioeconomic status is a Master Plan goal.

DEVELOPMENT TRENDS

The Arvada Economic Development Association (AEDA) reported 351 new jobs created in urbanizing areas and commercial vacancy rates lower than the Denver Metro area.

³Arvada's top businesses include:

- Local Businesses and Restaurants (Olde Town)
- Industrial Technology and Manufacturing
- Biomedical Technology and Medical Products
- Education
- Construction

TRANSIT-ORIENTED DEVELOPMENT

The area plans for the three Gold Line transit stations provide strategies to attract economic growth and new residents based on transit-oriented development (TOD) principles of pedestrian friendly design and activities. The population around the transit stations, with their direct link to Downtown Denver, are projected to grow at a higher rate

than other Arvada neighborhoods. Already, Arvada is currently experiencing more multi-family development in Olde Town and other TODs, resulting in more people using the nearby parks, trails and open space. Additional maintenance, and an urban update to traditional "suburban park model" maintenance, will be required to keep up with more use. During round table master plan discussions, developers also expressed that multi-family residences have high percentage of pet owners and residents appreciate nearby dog amenities in parks. More urban park amenities like pocket parks and festival streets (which can be closed off for events) will also be important to future TOD residents.

ECONOMIC IMPLICATIONS

Updating current policies and maintenance standards around park development for denser housing types, transit-oriented development and a growing population and work force are important factors to consider in the park, trail and open space recommendations that can boost the local economy and attract tourists and future residents. Additionally, some demographics carry an extra burden of health inequities with resulting economic impact of poor health on families, local, regional and state economies. The Wellness chapter illustrates how the park system can make a positive impact on public health, which in turn has economic implications for the Arvada economy.

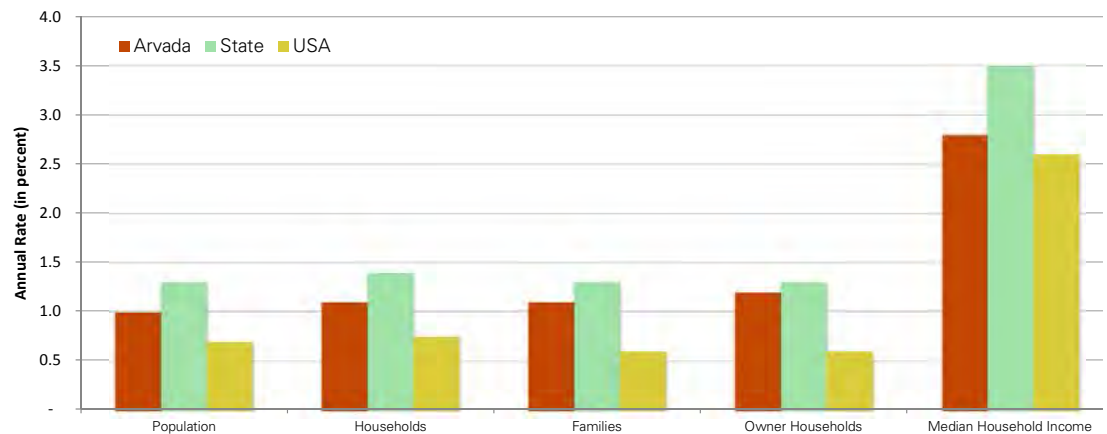


Figure 6: Comparison of Arvada, State of Colorado and US Household Trends 2015-2020

Source: ESRI Business Analyst 2015

KEY FINDINGS AND BENCHMARKS

COMMUNITY

Community growth, diversity and engagement in the park system is the fundamental influence on the future of Arvada's parks, trails and open spaces. The growth of the community will impact levels of service for outdoor recreation and create more use and subsequent wear and tear on the system. Key findings include:

- Arvada's population is growing.
- Arvada is becoming more diverse, following trends in Jefferson County and the state.
- The small town feel of Arvada that many residents nostalgically value may be changing. Areas of Arvada are urbanizing or developing greater suburban density with new master planned communities while other areas strive to maintain a lower population density. Unifying the community is the value placed on outdoor recreation and scenic views.
- Arvada values people of all ages and abilities and the park system should reflect and accommodate everyone.
- Arvadans equate a high quality of life with the park system. Maintaining and improving the park system will ensure that the quality of life is preserved and help attract future residents and subsequent economic growth.
- High-quality, well maintained outdoor recreation opportunities provides economic benefit and defines Arvada's character.
- Arvada hosts multiple events and volunteer opportunities, but as the population grows the need for additional events will grow resulting in more staffing and maintenance needs.

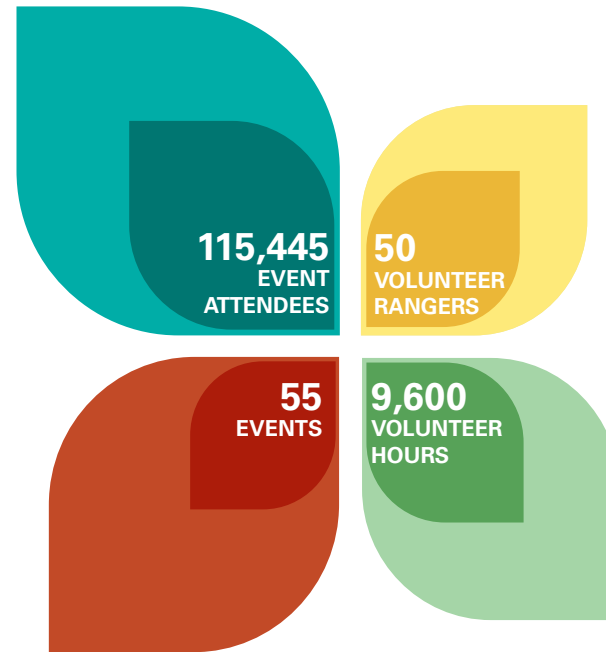


Figure 7: Benchmark of 2015 Arvada Events and Volunteerism

Source: Arvada Maintenance Division and Special Events Coordinator

COMMUNITY DESIRES

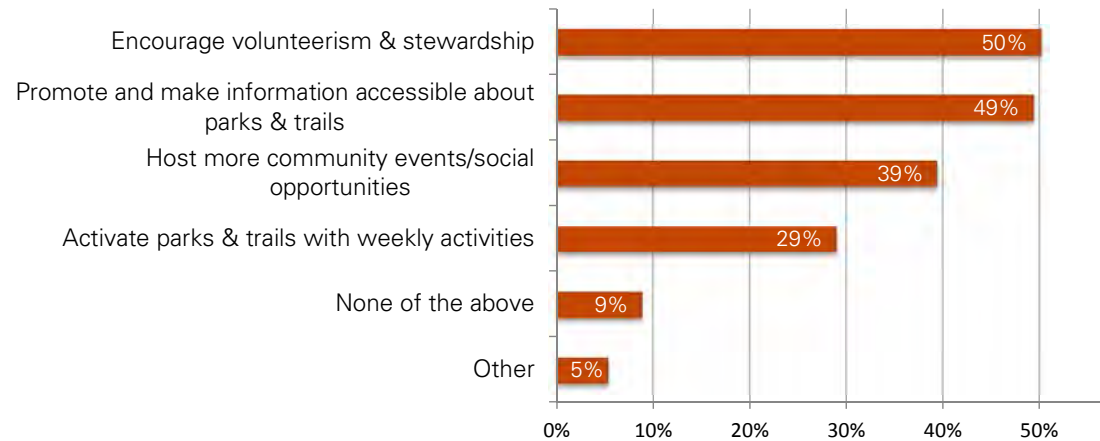
ARVADA PUBLIC INPUT: COMMUNITY

From round table meetings, events and surveys the following key findings reflect community values:

- Provide more volunteer opportunities
- Arvada residents express they don't know the full breadth of the park system
- Make park system information accessible (i.e., park amenities, trail routes and signs to outdoor and cultural destinations)
- Host more events of large and small scale (i.e., neighborhood yoga classes to community-wide park clean-up)

Connecting Arvada's outdoor recreation and cultural destinations like Olde Town through expanded Green Spines of trail and open spaces will support the community's values and make Arvada a community known for its well-connected park system.

Figure 8: Which of these program ideas do you think the parks department should focus providing more of in the future? (select all that apply)



Source: Public Meeting Survey and Online Survey Results

ARVADA CITIZEN SURVEY (2013)

"Residents considered access to parks, recreation, and the attractiveness and cleanliness of the community the top three characteristics of Arvada as a whole."

SEE APPENDIX

for a full report on all stakeholder engagement results



Celebrate Scenic Arvada



Host More Events



Make Information Accessible



Encourage Volunteering

RECOMMENDATIONS



FORMAT

RECOMMENDATIONS

Numbered 1-3, these are the overarching recommendations for the theme and reflect, at the most general level, the community's aspirations for the master plan improvements.

» Action Steps

These steps provide more detailed tasks to help achieve recommendations.

Supporting Content

Includes criteria and exhibits, organized by recommendation (1-3), and provides descriptions, maps, tables and character images to help describe the recommendation vision, prioritization, standards and criteria.

Implementation Chapter: This chapter is located at the end of the master plan and provides overarching recommendations that impact all themes for policy, staffing and maintenance.

COMMUNITY

1. ACTIVATE PARKS, TRAILS AND OPEN SPACES

- » Promote existing park, trail and open space areas that are appropriate for different types of outdoor events.
- » Create pre-planned trail system loops, routes, signs and wayfinding for easier exploring. Feature a "loop of the month."
- » Encourage digital, social-media participation of residents about their parks (i.e., Instagram, Facebook, Twitter, and other social media platforms as they develop).
- » Expand environmental education and outreach programs at the Majestic View Nature Center.

2. CELEBRATE THE BREADTH OF OUR PARKS, TRAILS AND OPEN SPACES

- » Promote and create an awareness initiative that celebrates Arvada's unique park, trail and open space character.
- » Provide additional, updated wayfinding and signage in support of Green Spines and master plan themes.

3 INCREASE VOLUNTEERS AND VOLUNTEER OPPORTUNITIES

- » Increase existing volunteer opportunities like Blunn Reservoir Rangers and Adopt-a-Trail and Park groups to mobilize volunteers.
- » Implement historic site caretaking program.

1 ACTIVATE PARKS, TRAILS AND OPEN SPACES

Promote Existing Park System Destinations for Outdoor Events

Increase park, trail and open space use through events, trail loops and environmental education. Activation can range from:

- Partnering with park and recreation districts like Apex to seek out programming opportunities
- Informal fitness classes in neighborhood parks
- Art and cultural events in community parks and urban park types
- Races on Arvada trails
- Hosting environmental education events in neighborhood parks
- Collaborate with Jeffco Open Space and GOCO Inspire Initiative grants to connect underserved youth and their families to the outdoors



Source: City of Arvada



Source: Cleong



Source: Peter Mooney

In 2015, the Arvada park system hosted 55 events with a total estimated attendance of 115,445. New kinds and scales of events from informal yoga classes to large races have policy and maintenance implications on the park system.

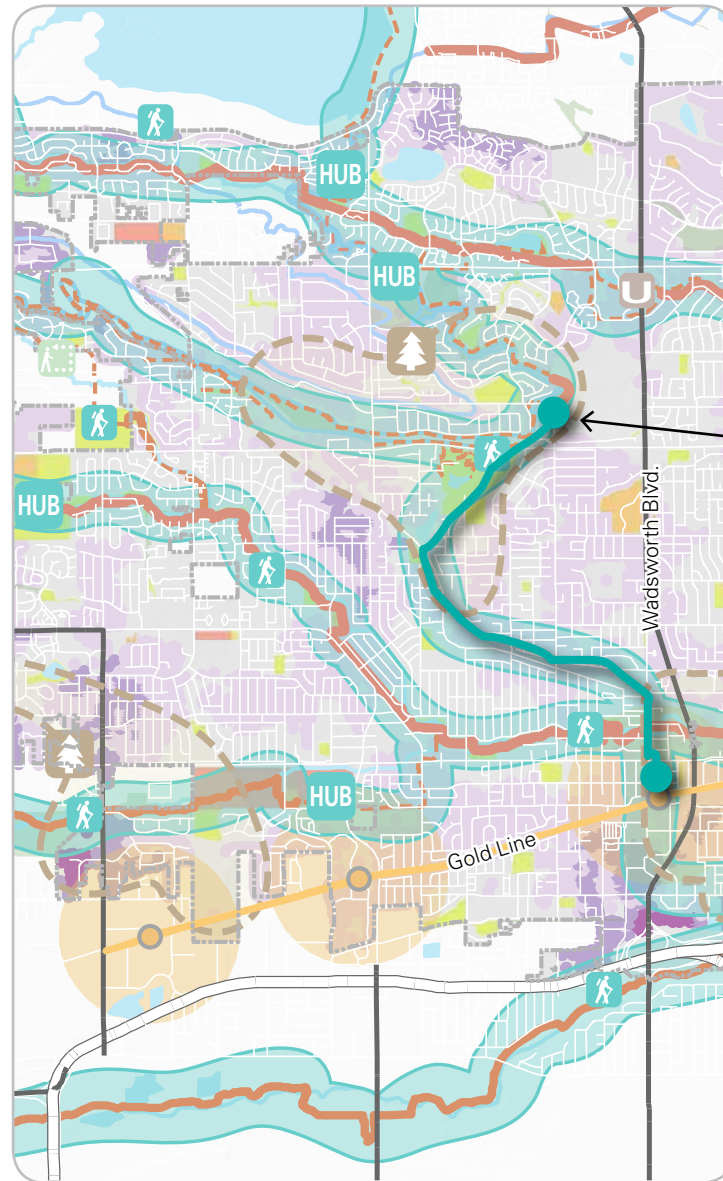
Create Pre-Planned Trail System Loops And Routes

Highlight potential trail loops, destinations, routes and trail head program including:

- Green Spine Trails
- Cultural/historic Destinations
- Transit Connections
- Trail Heads
- Trail Hubs
- Fitness Routes
- Water Recreation Routes
- Recreation Center Destinations
- Scenic Routes
- Arterial Corridors

Share loop and route information with residents through kiosks, providing information to local businesses and communities about greenway efforts (i.e., Rocky Mountain Greenway).

Map 5: Concept Map Detail-Potential North-South Green Spine Trail Route



Potential Green Spine-Cultural Route from scenic Heritage Canal Trail could take pedestrian or cyclist from a canal-side trail to historic Olde Town and transit connection to the Gold Line.



Encourage Digital Park System Participation

Smart phones and laptops give park system users the technology to digitally find parks, share photos through social media sites like Instagram, and track bike, running routes and other fitness data. It is important to encourage digital use in appropriate areas and protect open space values by limiting digital use. Digital park system participation can include:

- In appropriate urban areas, add Wi-Fi to existing and new parks
- Coordinate public's use of fitness apps and watches to create a user-map of Arvada's parks, trails and open spaces (i.e. Atlanta BeltLine free mobile map and maintenance app)
- Feature user's Instagram photos and other social media apps on Arvada parks, trails and open space website as a continuous feed link
- Invest in park amenities with complimentary digital apps to track use
- Encourage park system users to track outdoor recreation activities with smartwatches and apps like Strava and IFit



Source: Oh Ranger! Park Application



Source: Jefferson County Open Space Instagram



Source: Michael Galpert



Source: STRAVA Heat Map of Bicycling and Running activity in NW Arvada

Digital opportunities for park participation are accessible from individual cell phones.

Expand Majestic View Nature Center Programs

Majestic View Nature Center programs provide education to the public on the purpose and benefits of natural areas and open spaces. Expanding the programs into neighborhood parks through events and signage encourages potential for spontaneous everyday interaction with environmental education.



Source: City of Arvada



Source: City of Arvada

Majestic View Nature Center's environmental education will expand program types and bring classes to neighborhood parks.



Source: Pioneer Farmsteads LLC

Xeric plants in the Majestic View Nature Center are inspiration for home gardeners and can be used to frame view corridors to natural areas that often have less attractive, but native plant types.

2 CELEBRATE THE BREADTH OF OUR PARKS, TRAILS AND OPEN SPACES

Promote and Create an Awareness Initiative

Celebrate Arvada's unique park, open space and trail character by starting a promotional campaign that uses digital and social media, traditional media, interactive maps, updated wayfinding and signage. The campaign can range from park system highlights to detailed education on park policy or trail etiquette presented in a user-friendly way, and which encourages exploration and fitness participation. This also involves expanding partnerships with other city programs such as Healthy Places, Festivals and Community Development Departments and collaboration with Jeffco Outdoors map series.



Print



Wayfinding Elements



Park Map Apps



Public Online Participation



Educational Signs

3 INCREASE VOLUNTEERS AND VOLUNTEER OPPORTUNITIES

Reinvigorate Existing Volunteer Programs

Parks, trails and open spaces in Arvada are supported by volunteer groups including:

- Adopt-A-Trail Groups
- Adopt-A-Park Groups
- Arvada Blunn Reservoir Volunteer Rangers
- Church of the Latter Day Saints Volunteers
- Two Ponds Volunteer Events
- School Group Events (Arbor Day)

Mobilizing these groups and others within important demographic groups including seniors and youth will help Arvada achieve Green Spines park and trail goals.



Two Ponds National Wildlife Refuge volunteer event.



Arvada Blunn Ranger volunteering at fishing tournament.

SEE PARKS chapter for further volunteer recommendations in conjunction with "Taking Lasting Care"

Implement Historic Site Caretaking Program

Historic Site Caretaking Programs involve using volunteers to provide caretaking needs in alignment with historic site purpose and use. City may work toward meeting or event rental space at these sites.

Volunteers live rent-free near historic sites in exchange for serving as the property's caretakers. Volunteers will:

- Guide tours
- Provide educational resources
- Assist with site clean-up
- Maintain historic activities on site (i.e., agriculture)
- Provide security (i.e., visual monitoring site off hours)



Source: City of Arvada

The historic barn at Churches Ranch has recently been renovated. Future renovations include the carriage house that could accommodate a caretakers residence.

BASELINES AND PERFORMANCE MEASURES



FORMAT

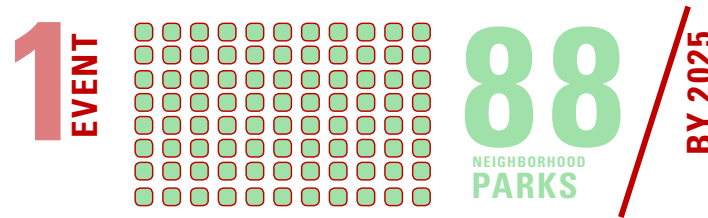
BASELINE

- A minimum or starting point used for comparisons and projections.

PERFORMANCE MEASURE

- ✓ A regular measurement of outcomes and results, which generates reliable data on the effectiveness and efficiency of programs. Performance measures are used to track goals by setting a vision, baselines, targets, and methods for measuring different topic areas related to the goals of the plan.

- *BASELINE: In 2015, Arvada hosted 55 events in the park system and 9,600 hours of volunteer activities.*
- ✓ Through 2025, increase park events by two events annually (total of 65 events by 2025).
- ✓ Through 2025, increase volunteer hours by 100 hours annually.
- ✓ By 2020, start historic caretaker program at Moore Brothers Farm.
- ✓ By 2025, partner with recreation providers to host one event or permitted activity in each of the City's 88 neighborhood parks.



- *BASELINE: The Parks, Golf and Hospitality Department is in the process of updating its map and brochures.*
- ✓ By 2018, provide suite of pre-planned trail routes and loops maps.
- ✓ By 2018, conduct a comprehensive branding campaign for park system.
- ✓ By 2020, install ten signs and wayfinding, based on graphic design from branding campaign, along Green Spines.

- *BASELINE: In 2015, Majestic View Nature Center served over 21,800 people through programs, visits and outreach events. In 2015, Majestic View Nature Center also hosted 499 functions.*
- ✓ Through 2025, annually conduct three on-site education programs sponsored by Majestic View Nature Center in rotating neighborhood parks (total of 30 on-site education sessions by 2025).
- *BASELINE: Currently not measuring park system performance through digital means.*
- ✓ By 2018, begin baseline measurement through coordination of digital apps and digital surveys
- ✓ By 2018, expand Arvada's suite of digital outreach to include a park system virtual identity on platforms like Instagram and other venues.
- ✓ Through 2025, increase digital audience annually by 5 percent.



Source: City of Arvada

Girl Scouts enjoying environmental education at Majestic View Nature Center.



PARKS



INVENTORY AND ANALYSIS

OVERVIEW: PARKS

The City of Arvada has a wide variety of parks that play an important role in enhancing the quality of life. The number and diversity of parks within the system today is in large part due to the recommendation to serve Arvadans with a high park level of service as outlined in the 2001 Parks, Trails and Open Space Master Plan. One regional park, five community parks and more than 80 neighborhood parks combined with urban parks, special purpose parks, historical sites and sports complexes, create a total of 109 parks serving Arvada’s residents.

The City of Arvada manages or operates through joint use agreements 109 developed parks, totaling 1,747 acres. In addition to the developed parks, there are six parks planned totaling 113 more acres of parkland to serve Arvada in the near future. These parks are classified into several different types summarized in Table 2. The definition of each of these park classifications is described below and a summary is provided in Table 3.

REGIONAL PARKS

Long Lake Regional Park is the City of Arvada’s only regional park. This 315 acre park on the city’s western edge serves the recreation needs of city residents, the surrounding community and Jefferson County residents. There are developed ball fields, multipurpose turf fields, natural areas and recreational trails within this park. The park connects to surrounding neighborhoods through the Van Bibber Creek Trail and links to Ralston Creek Trail.

COMMUNITY PARKS

Since the last Parks, Trails and Open Space Master Plan, Arvada has added additional community parks to its system to bring the total to five community parks. The addition of Ralston Central Park and Gibbs West Community Park have enhanced Arvada’s diverse park system while implementation of all phases of improvements in the community parks is ongoing. The popular 56 acre Lake Arbor Park was the city’s first community park and serves the residents of northeast Arvada. Each community park has a service area of about 2 miles to account for the fact that people are typically willing to bike or drive to these parks.

Adjacent to Lake Arbor Community Park, the 28-acre Pomona Parcel has undergone a planning effort in 2014. A series of public meetings and surveys informed the preferred plan for the site that includes native habitats, habitat improvement, sledding hill, retaining existing bike jump, an adventure playground, parking and a soft trail loop. At the time of this document, no final decision has been made by City Council on recommendations for the Pomona Parcel.

ARVADA PARK INVENTORY		
Park Type	Total	Acres
Regional Parks <i>(Includes Planned Parks)</i>	2	396.7
Community Parks <i>(Includes Planned Parks)</i>	6	228.9
Neighborhood Parks <i>(Includes Planned Parks)</i>	88	653.1
Urban Parks	1	0.6
Special Purpose Parks	9	212.8
Historical Sites	3	151.2
Recreation Centers*	10	N/A
Sports Complexes	7	241.6
TOTAL	109	1,884.9



Source: City of Arvada

Double E Park located north of Moore Brothers Farm is one of Arvada’s robust system of neighborhood parks.



Regional Park
Long Lake Regional Park (315 Acres)



Urban Park
Olde Town Square (0.6 Acres)



Community Park
Lake Arbor Park (56 Acres)



Special Purpose Park
Arvada Skate Park (8 Acres)



Neighborhood Park
Michael Northey Park (10 Acres)

Source: City of Arvada



Historic Site
Churches Ranch (94 Acres)

NEIGHBORHOOD PARKS

Neighborhood parks are the backbone of Arvada’s park system, with 88 neighborhood parks distributed across the City. In total, 626 acres of developed neighborhood parkland serves the City of Arvada and its residents. These parks are located throughout Arvada’s neighborhoods, typically within one-half mile of the area they are intended to serve.

URBAN PARKS

The urban park type is a new park classification since the City’s last master planning effort. This addition reflects redevelopment in the City’s urban core, associated population increases, changes related to the development of three new transit stations which will result in population increases in housing density and a need to address different use types than typical suburban parks. Olde Town Square, currently the only urban park, was opened in 2006 as part of a revitalization effort of Arvada’s historic downtown. This vibrant square now features an interactive fountain, picnic areas beneath a grove of trees, perennial gardens and a space to host community events, such as the Arvada Farmers Market and “Flicks in the Square.”

SPECIAL PURPOSE PARKS

Special purpose parks serve a focused community need. There is no specific size for this park type. The City of Arvada has a diversity of special parks within its system spread throughout the city, from disc golf parks to equestrian centers and dog parks. Special purpose parks, like the Arvada Skate Park are top venue destinations and nationally recognized. Other special purpose parks like the Arvada Modelers Airpark provide a niche venue for cutting-edge technology of radio controlled model airplane flying.

HISTORICAL SITES

The City of Arvada's historical sites preserve important remnants of its cultural history and are opportunities to educate with static interpretive signage and/or ongoing programming. This park type is another new park classification since the city's last master planning effort that was created to provide opportunities for the community to interact with its rich western history. Gold Strike Park at the confluence of the Clear Creek and Ralston Creek celebrates the gold discovery by Lewis Ralston that sparked the gold rush. Moore Brothers Farm, historic Leyden and Churches Ranch preserve the mining, farming and ranching that helped settle Colorado's Front Range.

SPORTS COMPLEXES

Sports complexes are intended to serve a community-wide need for higher intensity uses, larger groups, competitions and spectating by offering fields for baseball, softball, football, lacrosse, rugby and soccer and courts for tennis, basketball and volleyball. In some cases, these facilities are similar in size to community parks, but their focus is on developed sports facilities and typically contain limited acreage for unprogrammed uses (i.e., pick-up games, informal outdoor classes, kite flying, neighborhood field games, snow shoeing). Arvada's sports complexes are located throughout the city, so redesign efforts look to add unprogrammed areas, such as multi-purpose fields and open turf, for use by immediate residents and for spectators. There are opportunities in the sports complexes to enhance the user experience by adding facilities traditionally found in community parks such as restrooms, shade structures, seating, picnic areas and playgrounds.

The City of Arvada has seven sports complexes, the largest of which are the Harold D. Lutz and Stenger Sports Complexes. These two complexes are located in south-central Arvada. Additional sports complexes include Foster Ballfields, Jeffco Schools North Area Athletic Complex, Pioneer Sports Complex, Ralston Ballfields and the Youth Memorial Sports Complex.



Source: City of Arvada

Stenger Sports Complex is the site for the annual Arvada Kite Festival and event parking. The event is held each April with thousands in attendance.

Table 3: Parkland Classification and Standards

PARKLAND CLASSIFICATIONS AND STANDARDS				
ACREAGE	PURPOSE AND FUNCTION	SITE CHARACTERISTICS	SERVICE AREA	ACCESS
Regional Parks				
100+ Acres	Provides facilities and recreational amenities intended to serve city residents as well as the surrounding region. Typically, regional parks protect large areas with natural resource values of regional significance. These areas should also provide recreational opportunities for sports and nature-oriented, outdoor recreation.	Emphasis is on achieving a balance between resource protection and public use. Portions of the site should be relatively flat to accommodate fields and facility development. Special site features such as streams, lakes, reservoirs, rock outcrops, historic or archaeological sites may be preserved or enhanced to add to the unique character of the park.	Regional draw	Typically have direct access from an arterial street and access to regional trail systems.
Community Parks				
20 - 100 Acres	Serve as a focal point for community-wide activities and provides a large park area for facilities less appropriate for neighborhood parks due to noise, lights, traffic, etc. Should maintain a balance between programmed sports facilities and other community activity areas such as gardens, water features and plazas to appeal to the broader community. Special purpose park types may also function within community parks.	Portions of the site should have gentle topography to accommodate active sports fields and open turf areas for passive recreation. Special site features such as streams, lakes, reservoirs, rock outcrops, historic or archaeological sites may add to the unique character of the park.	2 mile service area, as people typically walk, bike or drive to these parks and greater distances are more acceptable	It is ideal to have direct access from an arterial street. It is also desirable to have direct access to regional trail systems.
Neighborhood Parks				
5 to 12 Acres	Provide nearby recreation and leisure opportunities within walking distance of the individual neighborhoods they are intended to serve. Should serve as a common area for neighbors of all ages to gather, socialize and play. Typically includes multi-purpose areas for court games, multi-purpose play field, play equipment, accessible trails, and shaded areas for gathering. In most cases, programmed sports should be limited to practices.	Landscape setting is a blend of full irrigation for active uses and natural areas. Features such as interpretive signs, water bodies, and areas of natural vegetation may also be included where appropriate. On-street parking is typically adequate unless picnic pavilions are present, or other features that generate large volumes of vehicle traffic. When possible, locate adjacent to schools or on trail routes.	¼ to ½ mile walking distance, as most people are comfortable walking these distances to reach parks. ¼ mile service area is preferred.	Centrally locate within area served around existing natural habitat, along trail corridors or in urban centers. Desirable to access via trails.

PARKLAND CLASSIFICATIONS AND STANDARDS (CONTINUED)

ACREAGE	PURPOSE AND FUNCTION	SITE CHARACTERISTICS	SERVICE AREA	ACCESS
Urban Parks				
Less than 3 acres	Intended to serve a neighborhood where opportunities for a larger park site are not available.	Varies, but may include play area, play equipment, plazas and gathering space. Hardscapes, lighting and art add to the unique character. Higher initial and ongoing costs, and heavier public demands and daily use can be expected.	Serve residents within ¼ mile of the park and non-resident destination visitors.	Centrally locate within the area served.
Special Purpose Parks				
Varies	Serves a singular or very focused community need, such as dog parks, specific recreation interests, performance areas, or equestrian centers.	Varies based on requirements of the park purpose.	Case by case basis.	Good access from an arterial or collector street.
Historic Sites				
Varies	Locations where important historical sites have been preserved due to their important cultural heritage or natural history value. Provide opportunities for communities to interact with their past.	Portions of the site contain important remnants of natural or social history, which provide opportunities for education, programming and connections with the past.	Case by case basis.	Good access from arterial or major collector streets-plan for trail access if none exists.
Sports Complex				
Varies	Provides opportunities for community-wide programmed and non-programmed sports such as: baseball, softball, soccer, tennis, or hockey in higher intensity use facilities. Limited areas should be available for passive recreation uses and other features that appeal to the broader community and provide community park functions.	The majority of the site should be relatively flat to accommodate active sports fields and other facility development. Locate away from residential areas to avoid light and noise conflicts.	Strategically located to fill service gaps for sports facilities.	Good access from arterial or major collector street.



Source: City of Arvada

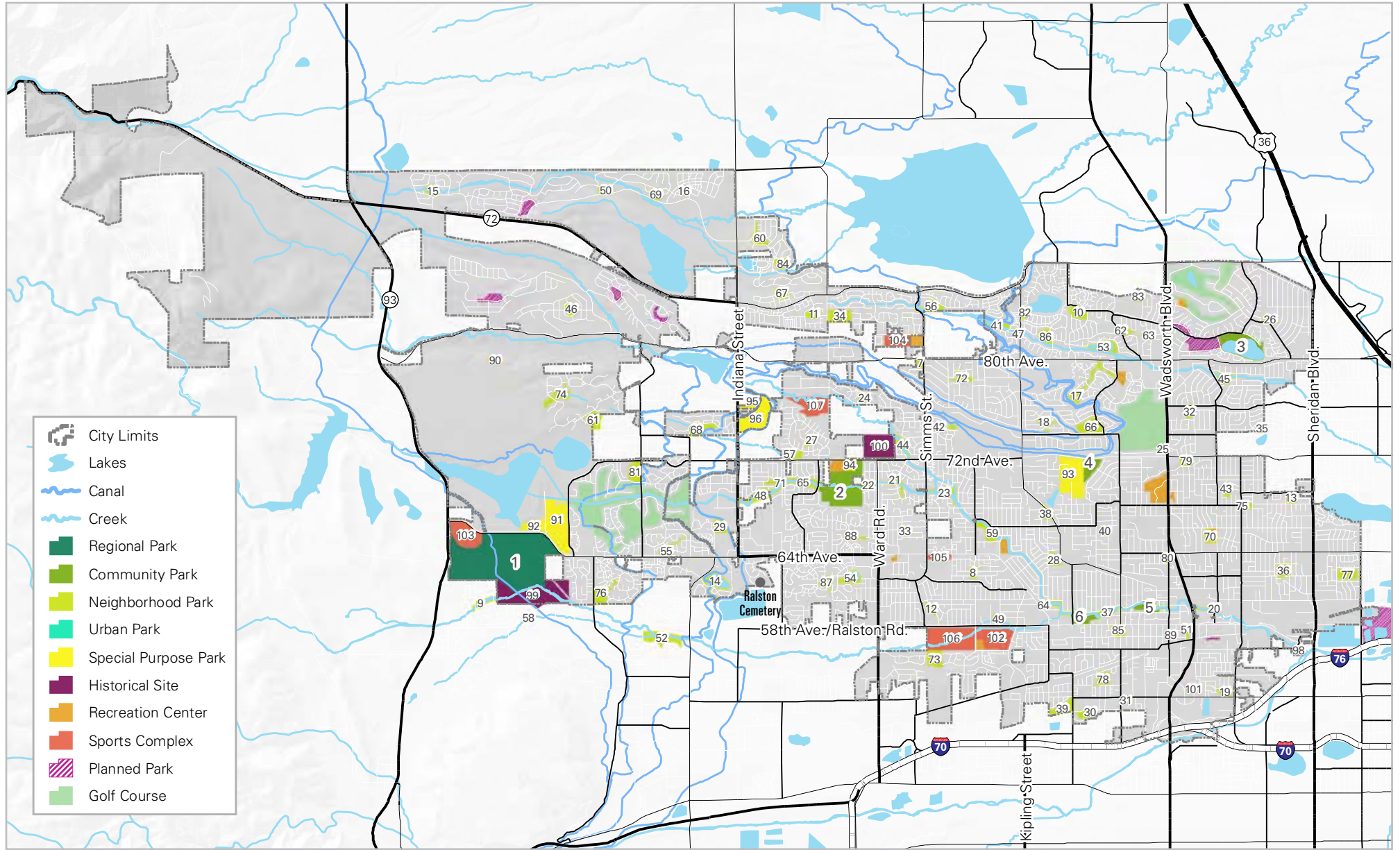
Meadowlake Park is a neighborhood park in south central Arvada where residents enjoy water-based recreation like fishing.

Table 4: Arvada Park Inventory

ARVADA PARKS							
Map #	Park Name	Map #	Park Name	Map #	Park Name	Map #	Park Name
Regional Park		27	Farmstead Park	56	Michael Northey Park	85	Wolff Park
1	Long Lake Regional Park	28	Fitzmorris Park	57	Moon Gulch Park	86	Woodrun Park
Community Park		29	Forest Springs Park	58	North Table Mountain Park	87	Wyndham Park
2	Gibbs West Community Park	30	Four Acre Lake Park	59	Oak Park	88	Yankee Doodle Park
3	Lake Arbor Park	31	Griffith Station Park	60	Panorama Park	Urban Park	
4	Majestic View Park	32	Hackberry Hill Park	61	Quaker Acres Park	89	Olde Town Square
5	Memorial Park	33	Harry S Truman Park	62	Rainbow II Park	Special Purpose Park	
6	Ralston Central Park	34	Hills at Standley Lake Park	63	Rainbow III Park	90	Arvada Modelers Airpark
Neighborhood Park		35	Hillside Park	64	Ralston Cove Park	91	Bird's Nest Disc Golf Course
7	Alice Sweet Thomas Park	36	Homestead Park	65	Ralston Valley Park	92	West Arvada Dog Park
8	Allendale Park	37	Hoskinson Park	66	Robby Ferruffino Park	93	Majestic View Nature Center
9	Apple Meadows Park	38	Independence Park	67	Russell Park	94	Arvada Skate Park
10	Arvada Volunteer Firefighters Park	39	Jack B. Tomlinson Park	68	Saddle Brook Park	95	Arvada Indoor Equestrian Arena
11	Beeman Park	40	Ladybug Park	69	Sarah George Park	96	Indiana Equestrian Center
12	Bridgeside Park	41	Lakecrest Park	70	Secrest Youth Park	97	Johnny Roberts Disc Golf Course
13	Britton Park	42	Lamplighter Park	71	Shadow Mountain Park	Historical Sites	
14	Broad Lake Park	43	Lew Walsh Park	72	Sierra Park	98	Gold Strike Park
15	Church's Crossing Park	44	Leyden Creek Park	73	Skyline Park	99	Churches Ranch National Historic District
16	Cimarron Park	45	Little Dry Creek Park	74	Spring Mesa Park	100	Moore Brothers Farm
17	Club Crest North Park	46	Lookout Park	75	Sunrise Park	Sports Complex	
18	Club Crest South Park	47	MacArthur Park	76	Sunrise Ridge Park	101	Foster Ball Fields
19	Columbine Park	48	Maple Valley Park	77	Tennyson Knolls Park	102	Harold D. Lutz Sports Complex
20	Creekside Park	49	Marge Roberts Park	78	Terrace Park	103	North Area Athletic (Jeffco Schools) Complex
21	Danny Kendrick Park East	50	Maverick Mesa Park	79	Thundercloud Park	104	Pioneer Sports Complex
22	Danny Kendrick Park West	51	Mcllvoy Park	80	Wadsworth Park	105	Ralston Ball Fields
23	Davis Lane Park	52	Meadowbrook Village Park	81	West Woods Park	106	Stenger Sports Complex
24	Double E Park	53	Meadowglen Park	82	Westlake Park	107	Youth Memorial Sports Complex
25	Emil Schneider Park	54	Meadowlake Park	83	Westree Park		
26	Far Horizons Park	55	Meadows at West Woods Park	84	Whisper Creek Park		

Note: Apple Meadows and Quaker Acres Parks have both park and open spaces and those acreages are tabulated separately in subsequent tables.

Map 6: City of Arvada Parks Inventory Map



DISTRIBUTION OF PARKS AND GAP ANALYSIS Geographic distribution of parks is useful to assess the level of service the current park system is providing. Studies show that locating parks within a comfortable walking distance of homes contributes greatly to the quality of life within a community. Close proximity to parks has also been shown to be an important deciding factor for people when choosing where to live.

Innovations in analytical software have enabled more comprehensive analysis of access to parks within a community, providing a more complete understanding of the accessibility of the parks system. In the 2001 master planning effort, methods used to evaluate Arvada's access to parks utilized a set radius, such as one-half mile, that did not account for actual travel routes and barriers that exist in the built and natural environment, such as major roadways, rail lines and waterways. This Master Plan measured the actual travel distances to each park by way of existing transportation and pedestrian networks.

To conduct the analysis, typical transportation modes including walking, driving, and biking were used to build a transportation network. Travel distances to parks were set for each park type ranging from one-quarter mile travel distance for neighborhood parks to two miles for community parks. All lands within the city limits of Arvada were included in the analysis and residential address points were used to determine household locations. The results of the park distribution analyses on the following pages show access to different types of parks within Arvada and provide an understanding of areas of the city and households that are well served and currently underserved by the park system.

OVERALL PARK DISTRIBUTION

This analysis identified areas of Arvada served by all community park types, including regional, community and special purpose parks in addition to historic sites and sports complexes as well as neighborhood park types, including neighborhoods and urban parks. Community park type distribution is evaluated using a two mile service area. Neighborhood park type distribution is evaluated using one-quarter mile service area. Further discussion of analysis methods for neighborhood and community park types can be found on the following pages. Map 7 illustrates the overall proximity of all park types in Arvada.

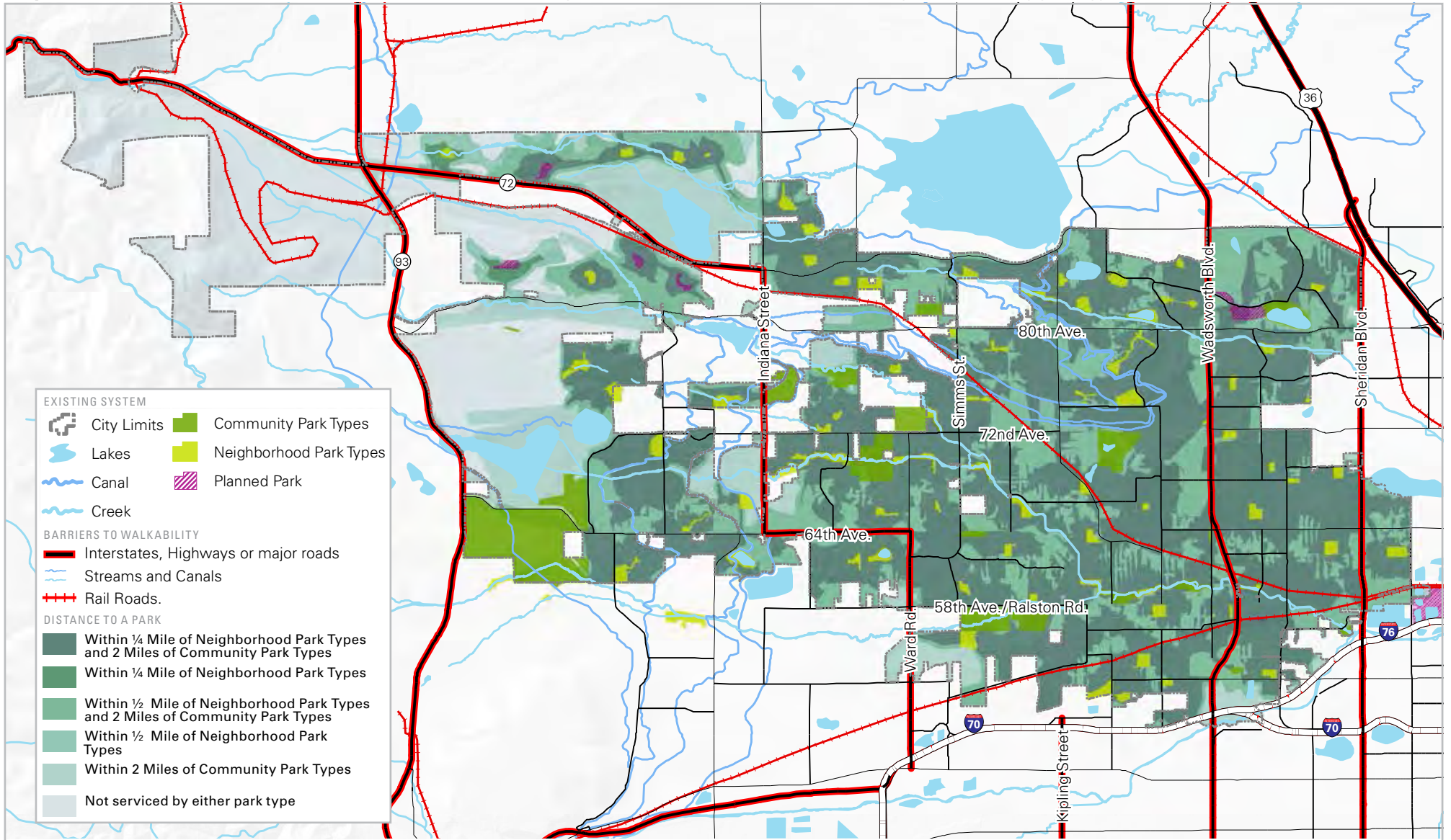
COMMUNITY PARK TYPES

For the purpose of this analysis, this park type includes: regional, community and special purpose parks in addition to historic sites and sports complexes. These parks provide facilities and recreational amenities intended to serve city residents as well as the surrounding community. They are a focal point for community-wide activities and typically contain large park areas for facilities less appropriate for neighborhood parks.

NEIGHBORHOOD PARK TYPES

This park type includes: neighborhood and urban parks. These parks provide nearby recreation and leisure opportunities within walking distance of the individual neighborhoods they are intended to serve.

Map 7: AREAS SERVED BY ARVADA'S PARK SYSTEM. This analysis identified areas of Arvada served by all community park types.



PARK GAP ANALYSIS

The park gap analysis helped identify areas of the city that have limited access to the parks in Arvada's park system. Using all community and neighborhood park types, this analysis looked at the overall proximity of areas in Arvada to park access points. Map 8 illustrates the gaps in Arvada's park system, highlighting areas more than one-quarter mile from a community or neighborhood park type. In terms of areas underserved, large parts of western Arvada and smaller areas adjacent to the interstate on the southeastern edge of Arvada are currently greater than one mile to a park. It is important to note that these areas do not currently contain many households.

HOUSEHOLDS UNDERSERVED BY ARVADA'S PARK SYSTEM

This park gap analysis (Map 8) was compared against Arvada's households (identified by residential address points). In total, only one percent of Arvada's households are located greater than one mile from a park and nine percent of households are between one-half mile and one mile from a park, which are not typically considered comfortable walking distance for most residents. The majority of households in Arvada are within walking distances of a community or neighborhood park type; 37 percent of households in Arvada that are between one-quarter mile and one-half mile from a park and 54 percent are less than one-quarter mile from a park (See Figure 9).

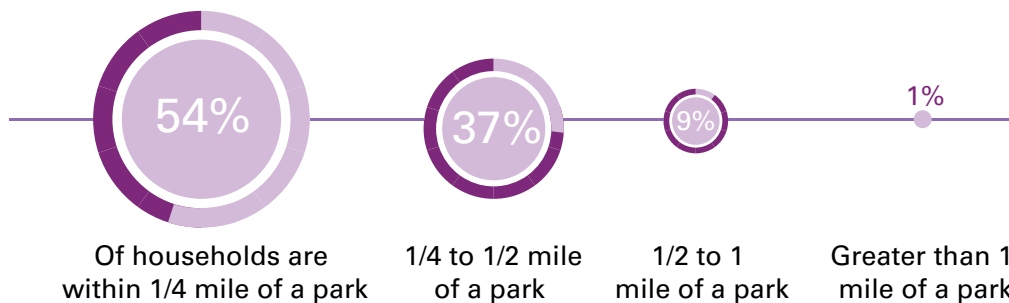
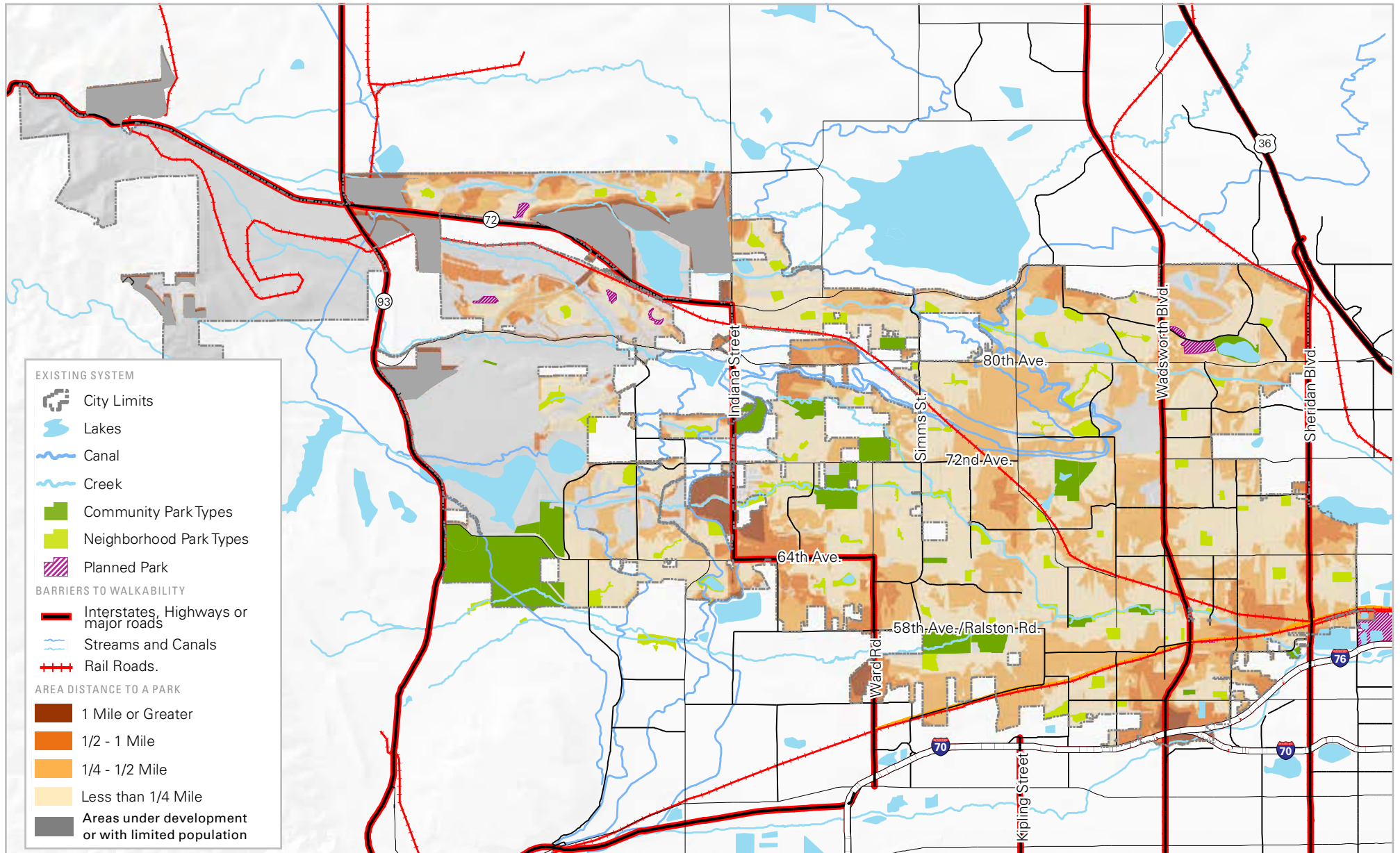


Figure 9: Overall Distance from Households to Arvada's Parks. See Map 10 for households underserved map.

2001 MASTER PLAN

The 2001 plan called for all households to be within a 1/2 mile of a community or neighborhood park. The gap analysis reveals that ninety-one percent of households are within 1/2 mile or less accessible walking distance to a community or neighborhood park

Map 8: AREAS UNDERSERVED BY ARVADA'S PARK SYSTEM. This map shows gaps in Arvada's park system, highlighting areas more than one-quarter mile from a community or neighborhood park type.



COLORADO PARKS AND RECREATION TRENDS

The 2014 Statewide Comprehensive Outdoor Recreation Plan (SCORP) reveals that the population of the state is steadily growing and is anticipated to reach a total population of almost 7 million by 2030. The SCORP breaks the state into regions, and the City of Arvada falls into the Denver Metro region. This region is one of the densest in the state and is a popular area for outdoor recreation. With continued population growth comes an increased demand for opportunities to recreate and enjoy the outdoors and an increase in the value placed on parks, trails and open spaces (as continually documented in the biannual Arvada Citizen Survey).

OUTDOOR RECREATION

SCORP report findings indicate that 90 percent of Coloradans participated in some form of outdoor recreation over the preceding year, and 66 percent of the survey respondents recreated outdoors at least one day a week. The report also indicates that 36.2 percent of the State's population recreates within less than 4 miles from home on an average weekday. The report found barriers to recreation include lack of free time, inconvenience of traveling to outdoor locations and high costs.

The SCORP report indicates 75 percent of statewide outdoor recreation occurs in the Metro, Northwest and North Central regions of the state. Outdoor recreation in the Metro region supports 34,057 jobs and generates \$2.39 billion in revenue. The report also indicates that the Metro region has a large need for open space acquisitions and capital development.

POPULAR ACTIVITIES IN COLORADO

Walking, hiking/backpacking, picnicking, fishing, jogging, camping and wildlife viewing were the most popular activities reported in Colorado. Alternative sports are increasing in demand, such as triathlons (nontraditional/

off road), rugby, lacrosse, multi-sport and adventure racing, triathlon (traditional/road), telemarking, freestyle skiing, boardsailing/windsurfing, hunting (with handgun), white water kayaking, BMX bicycling and kayaking (sea/tour). In the metro area of the state, popular and available activities include swimming outdoors, fishing, sledding, picnicking, playground visits, team sports and golf.

DIVERSITY RECREATION TRENDS

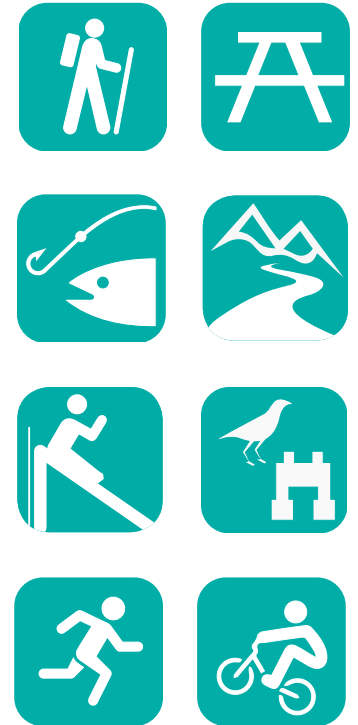
One of the demographic shifts occurring throughout the state is the increase in the Hispanic population¹, which is an important factor when planning parks. Additional groups including areas of Russian immigrants will continue to be important targets for community engagement during park planning.

YOUTH RECREATION TRENDS

Another population group given consideration in the SCORP report is youth, who are increasingly spending less and less time outside. A focus group of Denver metro youth revealed that they value outdoor recreation but time and preference for technology use were barriers to participation. The biggest motivator for outdoor recreation is education activities followed by competition and incentives. Outdoor activities for cohorts of friends like skating, running and biking also encourage youth to get outdoors.

ARVADA COMMUNITY ENGAGEMENT

Understanding the regional trends, the Parks, Golf and Hospitality Department should continue to work with Arvada neighborhoods, various ethnic groups and seniors, using outreach techniques during park system planning to customize recreation and amenity priorities for all populations.



The 2013 SCORP report listed the top Colorado recreation activities including walking/hiking, picnicking, fishing, camping, jogging, road biking/ mountain biking, playground activities and wildlife viewing.

¹ 2014 Arvada Comprehensive Plan, ESRI Business Analyst 2015

ARVADA RECREATION TRENDS

During the outreach process for this plan, the public voiced desires for a bike park, urban playgrounds, natural play opportunities, community gardens, connectivity improvements to trails and sidewalks, and accommodations that expand usability of parks to an 18-hour city model (i.e., safe lighting, seasonal hours to correspond to increased summer activity, heating elements in winter).

Arvada's recreation providers including Apex Park and Recreation District, Hyland Hills Park and Recreation District, Jefferson Center Metropolitan District, Coal Creek Canyon Park and Recreation District and Prospect Recreation and Park District work with Arvada's Parks, Golf and Hospitality Department to provide input on future needs for recreation facilities including lacrosse, soccer, baseball and indoor tennis. In 2013, Apex conducted a statistically-valid survey that identified a diversity of recreation and sports needs over the long term including:

- An eastern community recreation center
- Improvements to Apex Center
- Long Lake Regional Park expansion
- More outdoor aquatics
- A stadium quality venue

Apex is also currently considering a tennis facility renovation and court expansion, additional baseball or softball field, and additional multi-use fields (rugby and lacrosse).

For future recreation needs, Arvada should also consider smaller community recreation centers and parks to serve urbanizing or underserved areas (See Table 5 for information on recreational urban park).



Long Lake Regional Park sports field.

2016 APEX BOND ISSUE PROPOSED FACILITIES

Apex Center Splash Pad and Apex Center Renovation, Arvada Tennis Center Renovation and addition of Indoor Courts, Fitzmorris Park Recreation Center and Pool, Long Lake Ranch Additional Ballfields - Restroom/Concessions and Parking, Harold D. Lutz Sports Complex Ballfields - Restroom/Concessions and Parking, and Secret Recreation Center Replacement.

KEY FINDINGS AND BENCHMARKS

PARKS

The analysis and future projections reveals progress and areas for improvement in park distribution and variety:

- From 2001 to 2015, Arvada has increased neighborhood park level of service from 3.6 acres per 1,000 population to 6.0 acres per 1,000 population.
- From 2001 to 2015, Arvada has increased community park level of service from 0.6 acres per 1,000 population to 4.0 acres per 1,000 population.
- This distribution analysis data revealed that Arvada is well served by neighborhood and community park types; ninety-one percent of households are within ½ mile or less accessible walking distance to a community or neighborhood park.

However, Figure 18 shows that the gains Arvada has made in increasing the amount of neighborhood and community parkland available to residents will decrease in the future with future increases in population. Additionally, in comparisons with benchmark communities (see Figure 19), Arvada is a little above average and should add parklands to be more competitive with benchmarks.

With the majority of Arvada residents expected to age in place, adjusting the 2001 goal to provide an accessible route to parks from ½ mile to ¼ mile, with available benches and resting spots, is more reasonable for senior citizens and will be a major consideration for park development.¹ Families and residents in urbanizing areas are also better served by ¼ mile accessible route to parks. Partnerships with developers, schools, public health organizations, recreation districts and libraries will be critical to meeting the future need for parkland within an accessible route.

¹ Aging Well in Arvada, Planning Department 2015.

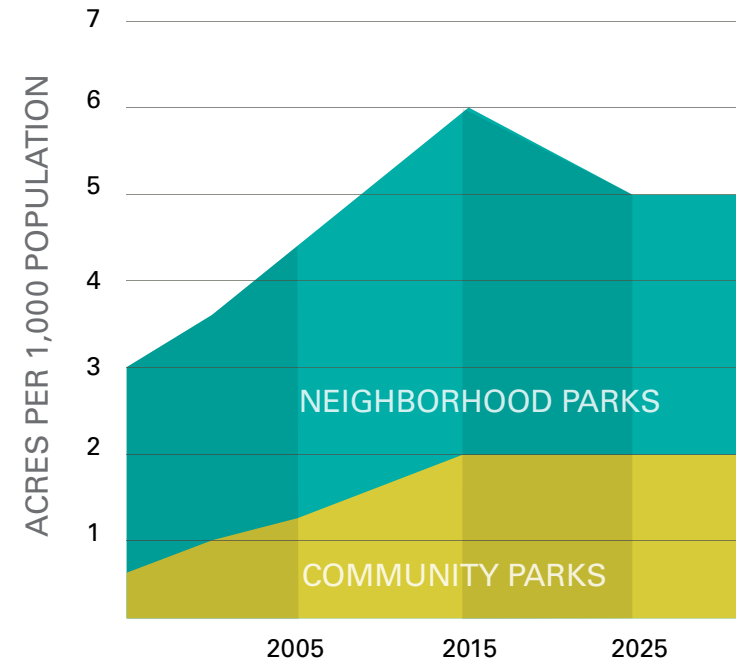


Figure 10: Projected parkland level of service over time
Source: Arvada Inventory and 2014 Comprehensive Plan Population Projections including data from



Memorial Park

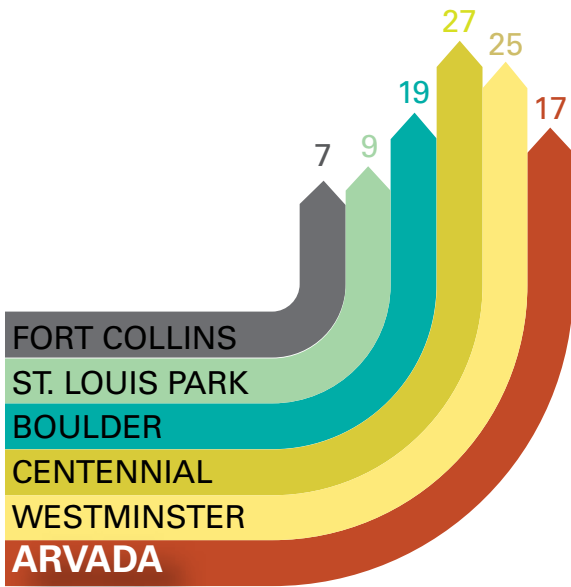


Figure 11: Benchmark Park Acres per 1,000 Population

Benchmark Sources: (2014) Eppley Institute for Parks and Public Lands Boulder Supplemental Benchmark Report, (2015) Arvada Inventory, (2010) St. Louis Park Comprehensive Plan

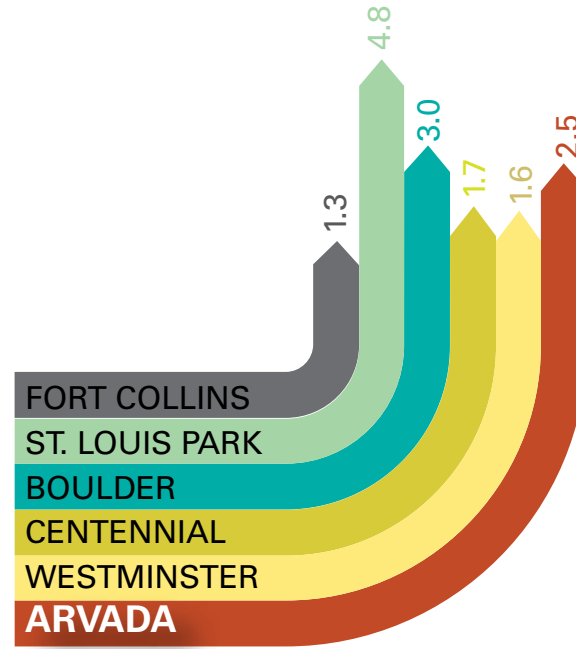


Figure 12: Benchmark Playgrounds per 1,000 Population under 18.

This benchmark is tailored to compare communities' youth population as the main users of playgrounds.

BENCHMARKS

are used to evaluate Arvada's park system conditions against national standards and comparison cities. The benchmark cities in this plan were selected based on several similar criteria, such as size and demographic makeup.



McIlvoy Park



Arvada Volunteer Firefighters Park

COMMUNITY DESIRES

ARVADA PUBLIC INPUT: PARKS

During the master plan stakeholder engagement conversations and polling, key community desires for Arvada parks include:

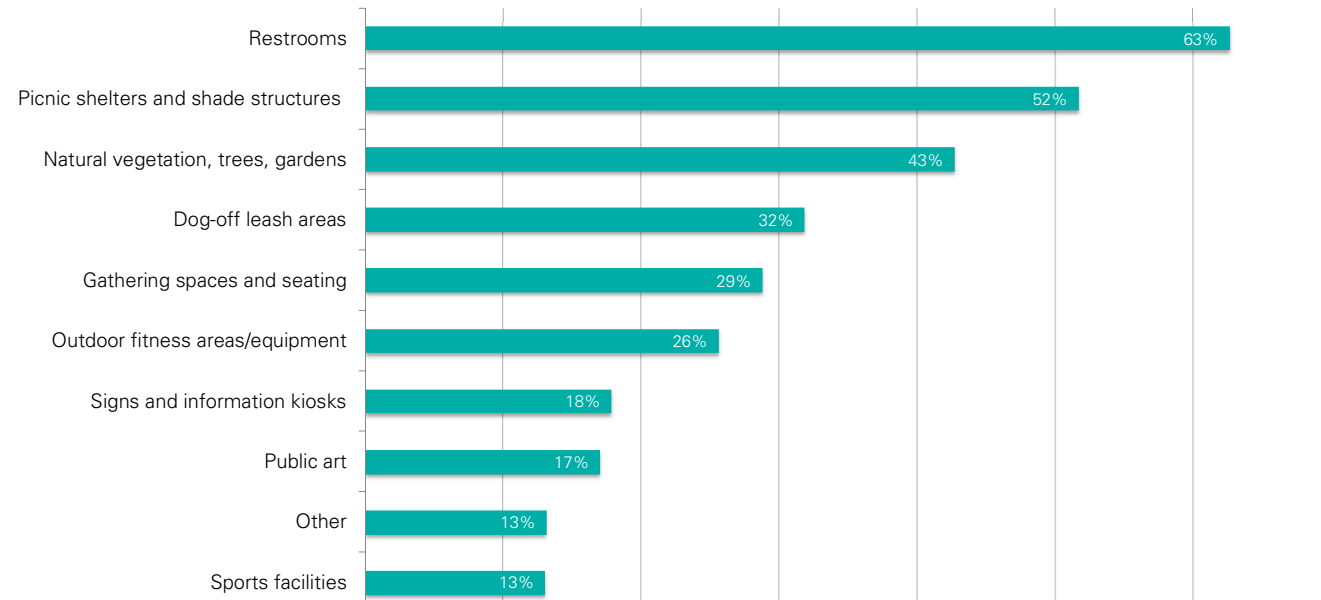
- Community gardens
- Streetscapes that function as parks
- Outdoor event spaces
- Pedestrian promenades
- Dog parks
- Full service bike park
- Multi-purpose fields
- Parks for urbanizing areas

Restrooms, shelters, shade trees and natural plant materials were top amenities the public desires to see in the park system. Site for additional restrooms must be carefully selected considering installation and maintenance costs.

SEE APPENDIX

for a full report on all stakeholder engagement results

Figure 13: Which of these elements do you think Arvada needs more of in parks? (select all that apply)



Source: Public Meeting Survey and Online Survey Results



Pedestrian Promenades

Source: Unless noted, City of Arvada



Community Gardens



Restrooms

Source: Richard Masoner



Natural Vegetation

RECOMMENDATIONS



FORMAT

RECOMMENDATIONS

Numbered 1-3, these are the overarching recommendations for the theme and reflect, at the most general level, the community's aspirations for the master plan improvements.

» Action Steps

These steps provide more detailed tasks to help achieve recommendations.

Supporting Content

Includes criteria and exhibits, organized by recommendation (1-3), and provide descriptions, maps, tables and character images to help describe the recommendation vision, prioritization, standards and criteria.

Implementation Chapter: This chapter is located at the end of the master plan and provides overarching recommendations that impact all themes for policy, staffing and maintenance.

PARKS

1. PROVIDE URBAN PARK TYPES IN URBANIZING AREAS

- » Adopt new park typologies, amenities and locational standards specific to urbanizing areas.
- » Collaborate with Public Works and Community Development Departments to plan and design streetscapes to function as pedestrian promenades, festival streets and play streets.
- » Encourage public-private partnerships to include new park types into commercial development by providing development incentives.

2. PROVIDE NEW PARKS AND IMPROVEMENTS TO EXISTING PARKS

- » Maintain high and equitable park level-of-service by continuing to add parks in strategic locations based on population density (i.e., fill park gaps, keep-up with benchmark communities and maintain a high level of park service for the growing population).
- » Add new, contemporary parks or contemporary elements (such as lighting) to existing parks to create parks that can be used 18 hours a day.
- » Support existing recreation district plans (Jefferson Center Metropolitan District, Coal Creek, Apex, Hyland Hills, and Prospect Park Recreation Districts) and identified community recreation needs (lacrosse, soccer, baseball, lighted tennis, etc.).
- » Actively promote community agriculture.

3. EXPAND "TAKING LASTING CARE" PROGRAM

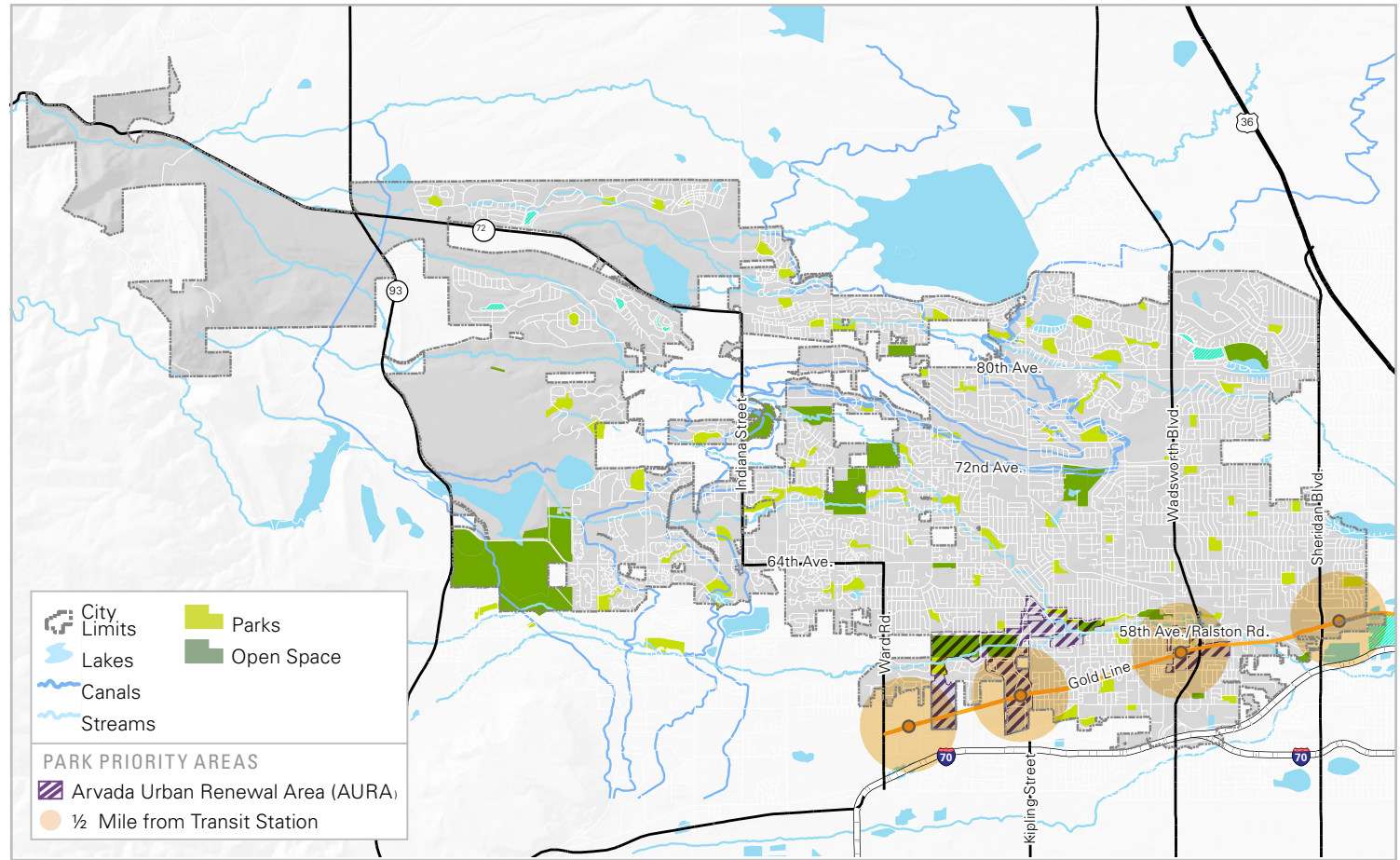
- » Broaden the program to keep up with expanding population, increased amenity use and subsequent wear and tear on existing parks.

1 PROVIDE URBAN PARK TYPES IN URBANIZING AREAS

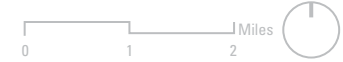
Urban Park Type Priority Locations

The map and following criteria table expands Arvada's existing parkland classification for urbanizing areas. These new urban park types will help Arvada maintain a high level of park service as the City's population grows and areas experience denser development. The map shows current location boundaries around transit stations and Arvada Urban Renewal Areas. Additional triggers for these urban park types are listed on the following page.

Map 9: New Park Types Priority Areas- Urban Renewal Districts and Transit Oriented Developments (TODs)



city of ARVADA DESIGNWORKSHOP
Data Sources: Colorado View, City of Arvada



Urban Park Type Triggers

These new types refine the existing definition of Urban Parks/Mini Parks, generally defined as less than three acres and serving multiple uses for residents, day workers and transit commuters within ¼ mile of the park.

Areas that trigger these new urban park types include:

- Areas around the new commuter rail stations and major transportation nodes
- Redevelopment areas including Arvada Urban Renewal Authority (AURA) defined zones
- Population density (5,000+ persons per square mile)¹
- Mixed-use areas



The above aerial shows an area of Arvada that has several triggers for using the new park types: within ½ mile of transit station, portion of AURA zone and population density over 5,000 persons per square mile.¹

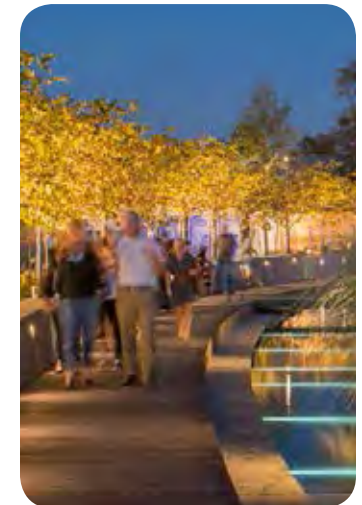
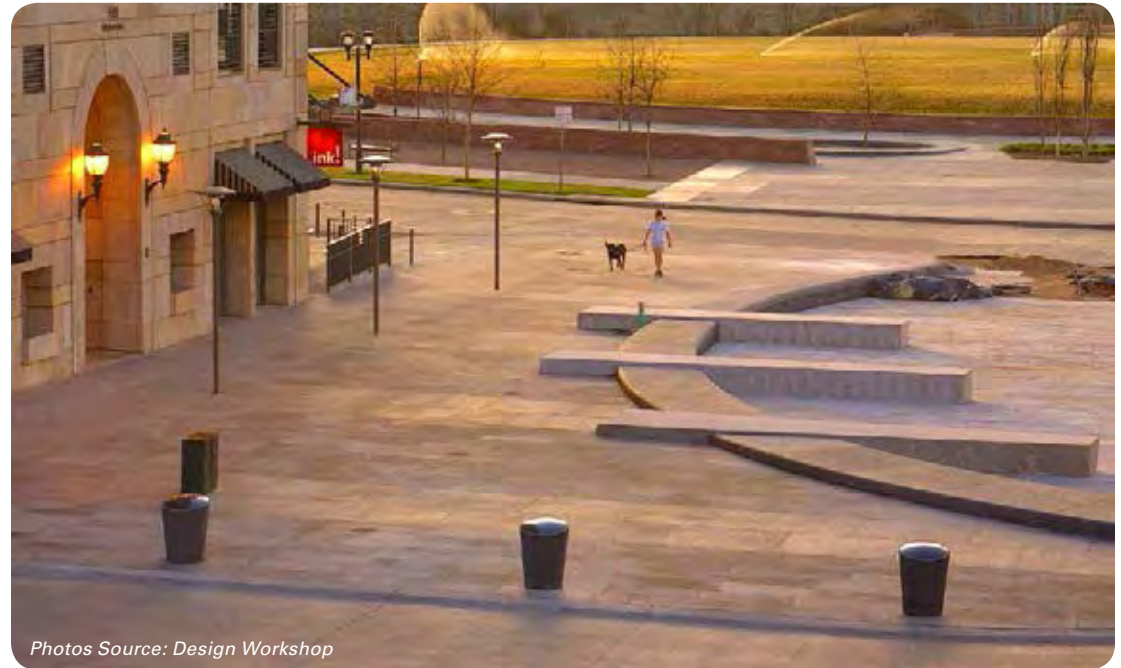
¹ See 2014 Arvada Comprehensive Plan Demographics Appendix for 2010 population density map

Urban Park Type Quality Standards

Given that space to build new urban park types will require collaborations between City staff, various agencies and developers, public accessibility must be a priority; these spaces should not just serve new development users and residents. As these new park types see more use per acre than traditional parks and serve multiple functions for residents, day workers and commuters, they will also require higher levels of maintenance and a high level of detail finish to withstand intense use. Additionally, streets that are to function as festival or play streets have added details needed to accommodate events (i.e., built in tent hook-ups as part of street hardscape, bollards to block off vehicle use, seat walls, lighting).

Urban Restrooms

Restrooms in new urban parks should be included on a case by case basis. Alternative restrooms like Portland's Loos could be installed in key urbanizing public spaces like Olde Town. Cost depends on proximity to sewer and water hook-ups and would require additional maintenance accommodations. Additional considerations are surrounding businesses as some owners offer public restrooms near urban park types as a way to drive traffic into stores. High attendance events could also use temporary restrooms located in flex-spaces of plazas or festival streets.



High quality levels of finish in new urban park types include hardscape, bike amenities, bollards, shade trees, accommodation for festivals, flexible spaces for pedestrian activities and seating.

Table 5: Urban Park Typologies and Standards

NEW URBAN PARK TYPOLOGIES AND STANDARDS				
ACREAGE	PURPOSE AND FUNCTION	SITE CHARACTERISTICS	SERVICE AREA	ACCESS
Pocket Park				
Less than 1 acre	Provides small-scale parks set into surrounding development.	Can include hardscape elements, lawn, landscaped areas, seating and visual amenities.	¼ mile or less	Typically have direct public access from street.
Mini Park				
Less than 10,000 SF	Smaller than a pocket park and serve a smaller population and feature a specific amenity (i.e. mini play or fitness element).	Varies based on requirements of the park purpose.	¼ mile or less	Typically have direct public access from street.
Common Green				
1 acre parks minimum	Normally includes a central lawn and flexible open spaces and is larger than pocket park. Can be used for scheduled or unscheduled recreation and informal events.	Central lawn with surrounding spaces offering a variety of complimentary uses. Provide amenities to host events.	Not Applicable	It is ideal to have direct public access from a collector or arterial street and regional trail systems or be surrounded by public buildings.
Urban Plaza				
Varies	Public gathering space with commercial and civic supporting activities	Urban plazas should be located to enable active edges where there is ground floor activation on a minimum of two sides of the plaza. Urban Plazas are flexible spaces that include hardscape, landscaping, lighting, Wi-Fi, accommodations for festivals and events and a signature art element or water feature.	¼ mile or less	Typically have direct public access from street.
Recreational Urban Park				
Varies	Recreation facilities close to urbanizing areas.	Portions of the site contain areas for active and passive recreation and could also contain historic or cultural sites. Could also include temporary installations like Seasonal ice for outdoor winter recreation (i.e., Skyline Park).	Not Applicable	Typically have limited but direct access from street.



Urban Plaza



Pocket Park

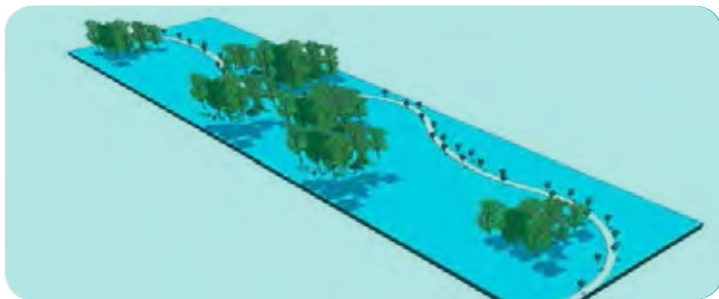


Mini Park

NEW URBAN PARK TYPOLOGIES AND STANDARDS (CONTINUED)

ACREAGE	PURPOSE AND FUNCTION	SITE CHARACTERISTICS	SERVICE AREA	ACCESS
Linear Recreation Space				
Minimum 8' wide	Continuous linear, interstitial spaces woven into urbanizing streetscape to provide interaction with landscape or specific amenity (i.e. fitness trail, dog walking trail).	Visible entries and safe from traffic. Tend to be flat and accommodate users of all ages and abilities.	Not Applicable	Good public access from arterial or major collector street or trail network.
Focal Point				
Varies	A visual amenity (i.e., sculpture, fountain, gateway feature, linear landscape element, lighting) that adds interest to the urban landscape.	In alignment with important axes, viewsheds or points of interest.	Not Applicable	Highly visible from street, trail or park.
Pedestrian Promenade				
Varies	Portion of important streetscape or intersection reserved full- or part-time for pedestrian use to engage with civic, commercial or dining amenities.	Typically located adjacent to ground floor activation and building frontages. Typically flat with special hardscape treatment and accommodations for events.	Not Applicable	Public access from arterial or major collector street.
Festival or Play Street				
Varies	Portion of streetscape or intersection reserved full- or part-time for festivals or play activities. Street use is controlled by flexible bollards and timed with off-time auto use to provide play and festival spaces in dense areas.	Inspired by Complete Streets and Woonerf-style design (Dutch precedent for living streets), this park type will require coordination with Engineering street standards and potentially formally adopting a new cross-section of public street. Design details include expanded pedestrian right-of-way, change of hardscape to indicate flexible street/plaza space, bike facilities and lanes, seating, lighting, human comfort features, WiFi, charging stations, shade trees.	Not Applicable	Typically have direct public access from street or trail network.

Reference: Fairfax County Urban Parks Framework, Addison Park District Urban Park Definitions



Linear Recreation Spaces



Festival Street

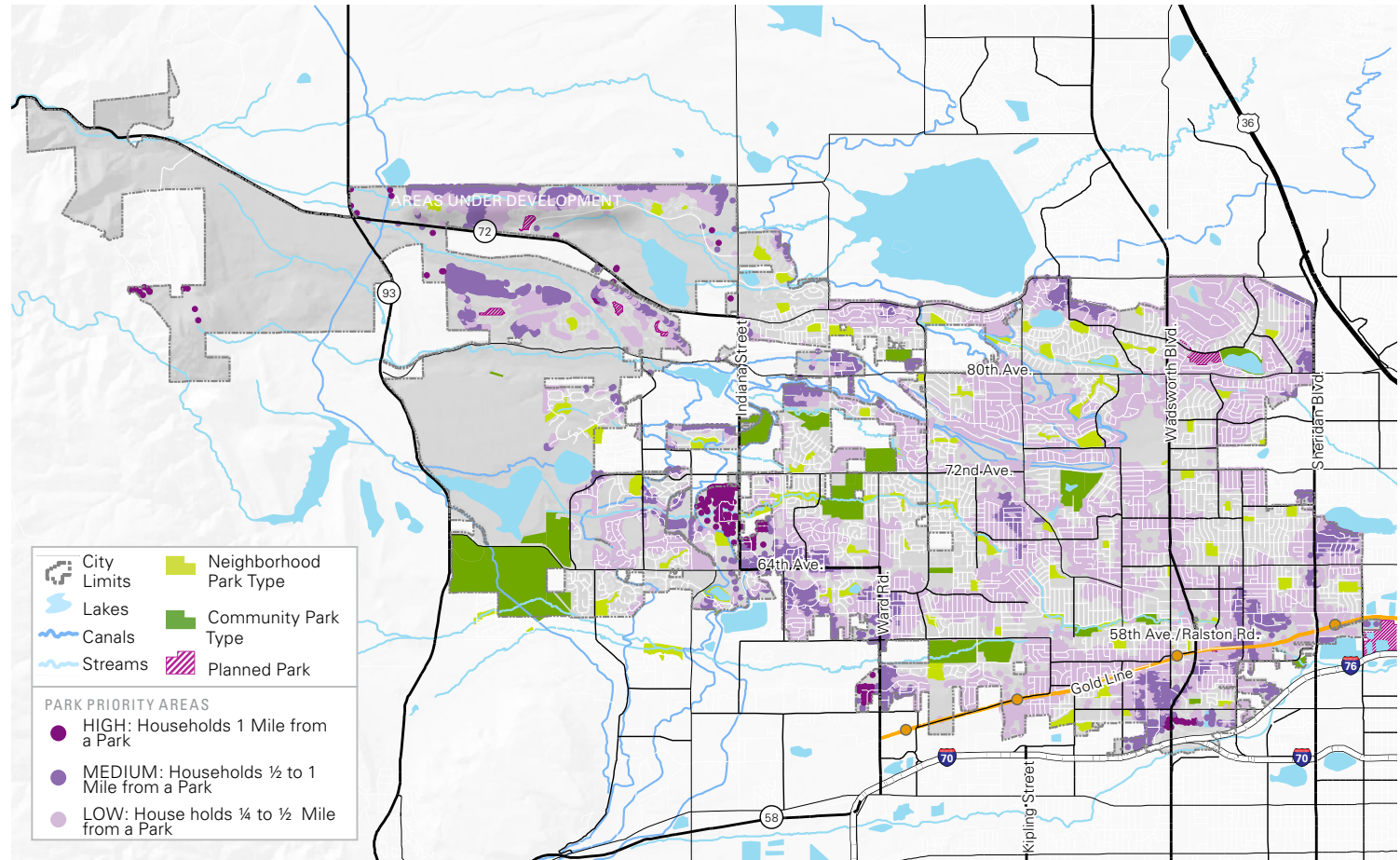
2 PROVIDE NEW PARKS AND IMPROVEMENTS TO EXISTING PARKS

Park Improvement Priority Areas

Arvada will continue to grow and add parks to maintain a high quality of life. Map 10 shows areas identified by the gap analysis (Map 8) that are priorities for new parks. New parks and improvements to existing parks can mean:

- Adding contemporary parks and amenities (i.e., bike parks, nature play areas)
- Supporting existing recreation district plans
- Supporting Arvada's community agriculture efforts
- Providing access to water recreation in Arvada's lakes, reservoirs and creeks
- Adding parks within appropriate service areas (see Table 6) to address contemporary recreation trends

Map 10: Park Priority Areas- Park Gaps



CITY OF ARVADA DESIGNWORKSHOP
Data Sources: Colorado View, City of Arvada

SEE IMPLEMENTATION CHAPTER For a list of priority park projects and funding opportunities.

How many more parks?

The recommended park service (Table 6) offers the ideal distribution of different park types for Arvada’s park system (i.e., one community park within 2 miles of every household).

Table 6: Recommended park service area

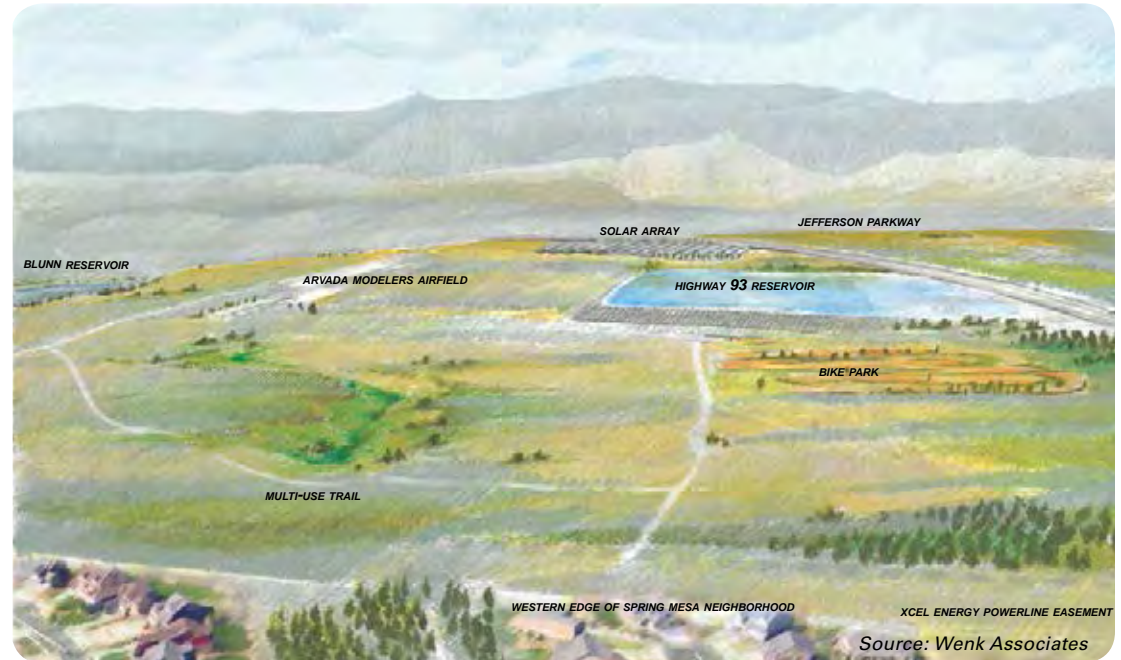
RECOMMENDED PARK SERVICE AREA	
PARKLAND CLASSIFICATION	SERVICE AREA
Regional Parks	n/a
Community Parks	2 miles
Neighborhood Parks	½ mile
Urban Park Type (areas with population density of 5,000+ per square mile)	¼ mile

Park Improvements: Restrooms

Restrooms are typically located in community and regional parks. Other parks with designated Trail Hubs-strategically located areas where trails, signature parks or destinations converge-should also have restrooms installed on a case by case basis (see Map 31). Criteria for installation include anticipated use, community support and maintenance efficiency.

What kinds of parks?

Table 7 describes the character, requirements and scales of possible implementation for a variety of park programs and amenities that have been identified as appealing to the Arvada community through numerous public outreach efforts, including those conducted as part of this master plan.



Example of future park improvements: Aerial rendering of Arvada/Blunn Pioneer Master Plan. The Arvada/Blunn Master Plan (2015) recommended a full service bike park, expansion of dog park, disc golf update, Teepee Rings, trail improvements, lake recreation and other proposed improvements include a Jefferson County Shooting Range and Police Training Facility. This park would fulfill community desires for a full service bike park and expanded trail connectivity to open spaces.

Table 7: Contemporary Outdoor Recreation and Park Amenities

CONTEMPORARY OUTDOOR RECREATION AND PARK AMENITIES		
DESCRIPTION	REQUIREMENTS	SCALES OF IMPLEMENTATION
Bike Park		
<p>Valmont Bike Park in Boulder is a great example of a full service bike park that could be located at the Arvada Blunn/Pioneer site as identified by the recent master plan. Bike skill elements include: cyclo-cross courses, cross-country and skill-building trails, pump parks, a dual slalom racecourse, dirt jumps and a slope-style park. Valmont also offers multi-use paths, passive recreation areas, a run-bike track (Skills 101), a toddler playground, dog park, public artwork including an events plaza and parking for over 200 vehicles. Best practice is for this park type to be located in highly visible locations with close proximity to schools, youth recreation areas, libraries, or other family and youth activity areas.</p>	<p>Smaller scale to 40+ Acres; Access to dirt fill helpful. Depending on size, trash receptacles, restrooms, parking and lighting. Drinking fountains and shade are recommended to be included.</p>	<p>Full Service Bike Park Skills 101 Trail Future Park (smaller scale bike skill elements in neighborhood park) Bike Racks Bike Service Station Bike amenities in coordination with Bike/Pedestrian Coordinator and Healthy Places Initiative Coordinator</p>
Skate Park		
<p>Regional Skatepark: Regional Skateparks are the largest parks, (25,000 square feet or more), and provide a full spectrum of opportunities. Arvada Skate Park is the third largest skate park in the country with a 40,000+ square feet skate surface. Neighborhood Skatepark: Between 6,000 to 10,000 square feet and feature a diverse arrangement of structures. Skate Spot: Between 2,500 to 5,000 square feet and feature a small number of structures arranged so that the skater may move from one structure to the next in a single run. Skate Dot: The Skate Dot is the smallest skateable space possible. Dots are always a single structure and capitalize on existing infrastructure—usually a sidewalk or paved open space. Plaza-style skate and wheel park is the newest type. Size varies. See Grant Park in Chicago as an example. Best practice is for this park type to be located in highly visible locations with close proximity to schools, youth recreation areas, libraries, or other family and youth activity areas.</p>	<p>Depending on size, trash receptacles, restrooms, parking and lighting. Drinking fountains and shade are recommended to be included. Community support or policy allowances for skating on street-type elements or art.</p>	<p>Regional Skate Park-Arvada Skate Park Neighborhood Skate Park Memorial Park “Skate Spot” Skate Dot Skateable Art Street Plaza Transition (Half-pipes, Bowls and Pools) Hybrid Parks (Street and Transition Elements)</p>

CONTEMPORARY OUTDOOR RECREATION AND PARK AMENITIES (CONTINUED)

DESCRIPTION	REQUIREMENTS	SCALES OF IMPLEMENTATION
Nature Play Areas		
<p>Nature Play Areas are composed of regional elements from nature (plants, logs, water, sand, mud, boulders, hills and trees) and arranged in a way to encourage play, hands-on activity and safe exploration of nature. Nature play areas are inspired by the local ecology, children’s gardens, nature centers and adventure playgrounds.</p> <p>Elements include exploratory topography, hands-on pieces, movable materials, variety of spaces, outdoor art, unprogrammed spaces, live animals, physical challenges, different abilities, wild areas, resting spots, observation areas, elements that show change (i.e., rain collection gauges), learning areas and opportunities for performance.</p> <p>Nature Play goals including extending safe water play away from natural water bodies, using natural materials, providing the opportunity to get dirty, and providing graduated risk through tree climbing, water play, adventure play and varied topography.</p>	<p>Parking or trail access. Depending on size, trash receptacles, restrooms, parking and lighting. Locate next to schools or other youth gathering spaces.</p>	<p>Nature Playgrounds-full sized playground devoted to natural play areas. Nature Play Area Feature-smaller mix of one or more elements incorporated into existing park. Nature Play Areas Trail-features elements along a trail.</p>
Art Parks		
<p>Art Parks are parks centered around art and sculpture. Individual art elements can be located in visible areas of park to help create destinations and sense of place (i.e., trail near natural area, trail head, playground).</p>	<p>Parking or trail access. Depending on size, trash receptacles, restrooms, parking and lighting.</p>	<p>Sculpture Park Art in the Park (event) Individual Art Elements Art Trail</p>
Dog Parks		
<p>Dog Parks allow for safe exercise and socialization of dogs and are a gathering place for dog owners throughout the year. Dog parks can be fenced or can be unfenced off-leash areas as part of a larger park with limited hours and specific regulations (i.e., Prospect Park in Brooklyn). Additionally, municipalities have used underutilized facilities (i.e., old tennis parks, pools) to create “instant” dog parks. Dog waste stations can be incorporated into neighborhood parks and key trails to provide a basic dog amenity. Off leash dog trails in Evergreen Dog Park and Riverside Park in Palisade point to the growing demand in Colorado for a hiking experience with dogs, where in the past dog parks were synonymous with an enclosed playlot.</p>	<p>Typically one acre or more of land with 4’ to 6’ fencing. Amenities include paths, waste disposal systems, shade, water, parking and trail access or adjacency.</p>	<p>Dedicated Dog Park Shared Dog Park (part of larger park) Dog Waste Station Off Leash Dog Trails</p>

CONTEMPORARY PARK TYPES AND AMENITIES (CONTINUED)

DESCRIPTION	REQUIREMENTS	SCALES OF IMPLEMENTATION
Water-Based Park		
<p>Water-based parks can range from a splash pad like the popular one at Ralston Central Park to interactive creek or stormwater features (i.e., Canal Park in Washington, D.C.) that utilize rain gardens or other stormwater Best Management Practices. Designed to withstand the extremes of moisture and concentrations of nutrients found in stormwater runoff, a rain garden is a planted area that slows and treats the water quality of rainfall and stormwater runoff. Parks can provide active, water-based recreation like paddle boarding and kayaking to more passive experience like strolling along a rain garden.</p>	<p>Depending on design, requirements can include utilities, water quality management practices, monitoring and typical park amenities. Adherence to Colorado water law.</p>	<p>Splash Pad Reservoir with active recreation Stormwater Garden Canal Park Lake Recreation Fishing, Boating, Sailing, Paddleboarding, etc.* *See Implementation Chapter for “No Wading” or body policy update</p>
Fitness Loops, Fitness Equipment and Flexible Outdoor Fields		
<p>Outdoor fitness equipment and parcourse fitness trails are ways to incorporate outdoor exercise in parks and trails. Additionally, flexible outdoor fields are way to provide flexible outdoor recreation space for a variety of sports and fitness (i.e., outdoor yoga, ultimate frisbee, or true multi-purpose field with dimensions and markings to accommodate a variety of sports).</p>	<p>Fitness Loops are typically at least 8’ wide, one-half to one mile loop with 10 stations minimum. Flexible outdoor fields to multipurpose fields (10–36,000 SF). Depending on size, trash receptacles, restrooms, parking and lighting.</p>	<p>Fitness Equipment Stations Fitness Trails On-Street Fitness Loop combined with pocket and/or mini-parks Flexible Outdoor Field Multi-Purpose Sports Field</p>
18-Hour Use Amenities		
<p>These types of amenities create parks that can be used 18 hours a day. Wi-Fi, charging stations, pedestrian lighting, misters, outdoor heaters and Crime Prevention through Environmental Design elements. Certain amenities (technology, misters, heaters) are best placed in denser areas and would be inappropriate in open space.</p>	<p>Depending on amenity utilities including water, sewer, electricity. Measures to provide park security (i.e., ranger patrol, park ambassadors).</p>	<p>Provide these types of basic amenities to parks, trail heads, trail hubs in urbanizing or dense areas of Arvada.</p>
Basic Amenities		
<p>Restrooms, seating, recycling containers, waste receptacles, benches and shade structures. Provide these types of amenities based on park classification, population density, park design standards, and/or community prioritization in park planning outreach efforts. Restrooms are discussed throughout this document for community and regional parks and some trail hubs and urbanizing areas.</p>	<p>Depending on amenity utilities including water, sewer, electricity.</p>	<p>Varies</p>

Source: www.skatepark.org, IMBA, American Kennel Club, https://naturalplay.files.wordpress.com/2010/07/naturalplay_infopacket_small.pdf, Boulder Colorado Nature Play Symposium Report, 2015.

CONTEMPORARY PARK TYPES AND AMENITIES



Natural Play Areas



Dog Parks



Fitness Equipment



Source: Dave Wright

Bike Park



Art Parks

Sources: Unless noted, City of Arvada and Design Workshop



Water-Based Park



Source: Spohn Ranch Skateparks

Skateable Art

Community Agriculture Criteria

During stakeholder engagement, community gardens ranked highest in types of park amenity that Arvada residents support. Criteria for location of a park land community garden includes:

- Organized community group
- Support of prime park users and surrounding community
- Size
- Access to water tap
- Parking
- Community gardens permitted in all zoning districts

Existing Community Agriculture Resources

The City of Arvada manages or leases several community agriculture sites and classes. The following is a list of resources located on City property (not including the many private community gardens in Arvada).

Arvada Community Gardens

- Rose Roots at The Hills at Standley Lake Park
- Arvada Gardeners Community Garden (9195 W. 57th)

Arvada Community Supported Agriculture Sites

- Majestic View Community Park
- Farm at The Hills at Standley Lake Park

Arvada Education Classes

- Majestic View Nature Center, in partnership with Pioneer Farmsteads, hosted community agriculture classes to over 200 residents during 2015.



Arvada's Community Agriculture includes gardens, classes, CSA's and markets.

3 EXPAND “TAKING LASTING CARE” PROGRAM

“Taking Lasting Care” Capital Maintenance and Replacement Plan

Arvada endeavored to fully resource and implement a “Taking Lasting Care” philosophy, to ensure that once constructed, resources are also available to maintain and eventually replace amenities.

Ongoing priority projects include:

- Replacement/upgrade of irrigation systems
- Motorola computerized irrigation
- Playground replacement
- Playcourts
- Trails
- Tree and shrub replacement program

Increase Funding And Volunteering

As the Arvada community grows, more resources will be needed to keep up with expanding population, increasing amenity use and subsequent wear and tear of the park system. This recommendation aims to broaden the existing capital maintenance and replacement plan, “Taking Lasting Care,” by increasing funding for the program and expanding it to include volunteerism and stewardship events.



By 2025, many of Arvada’s neighborhood parks will have aged fifty years. Coupled with aging park infrastructure, increases in population and subsequent increases in park and trail use, more maintenance will be needed.

BASELINES AND PERFORMANCE MEASURES



FORMAT

BASELINE

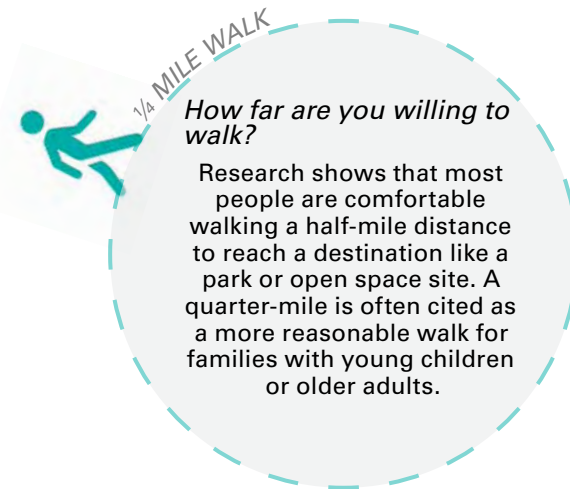
- A minimum or starting point used for comparisons and projections.

PERFORMANCE MEASURE

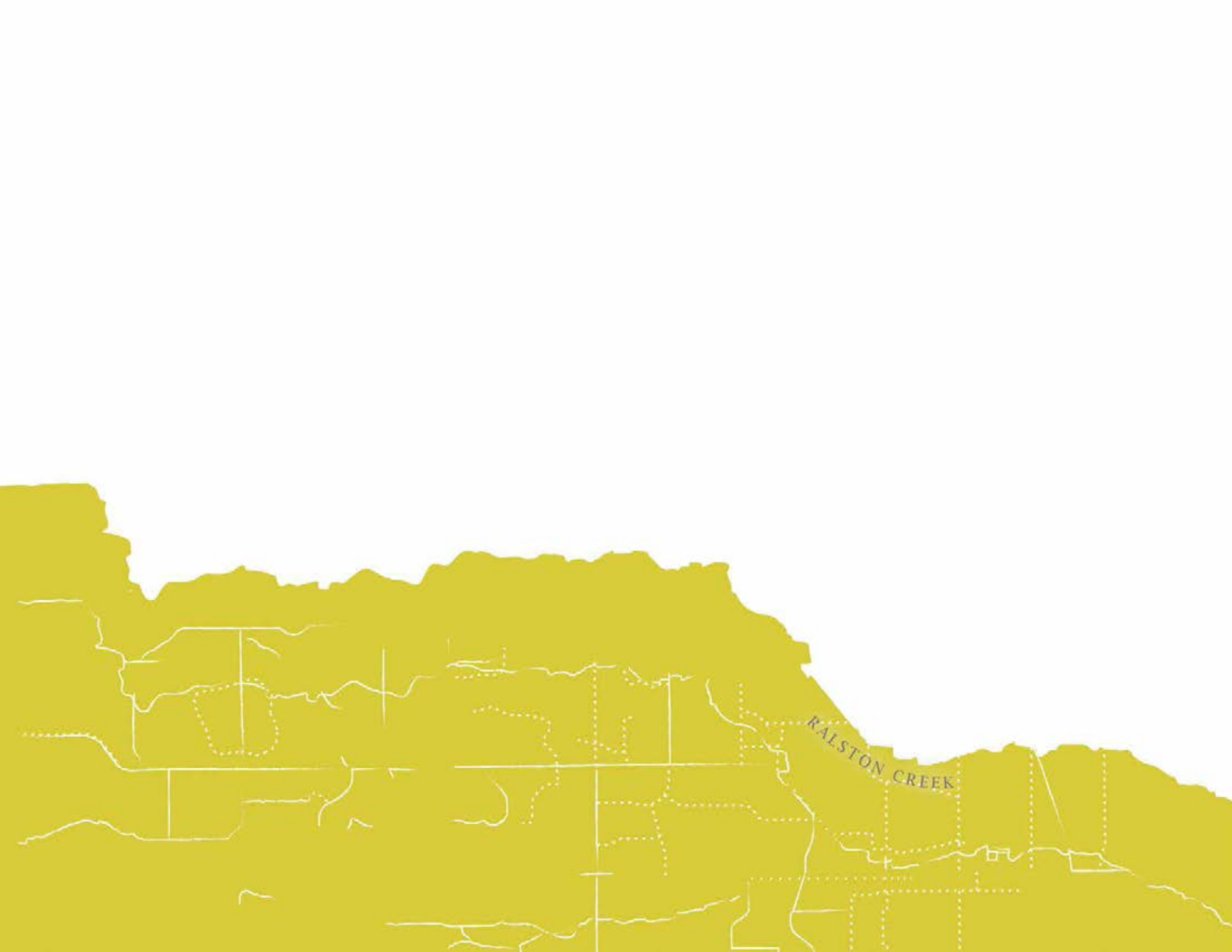
- ✓ A regular measurement of outcomes and results, which generates reliable data on the effectiveness and efficiency of programs. Performance measures are used to track goals by setting a vision, baselines, targets, and methods for measuring different topic areas related to the goals of the plan.

PARKS

- *BASELINE: Arvada does not currently have adopted urban park types that can ensure sufficient and high quality parkland in urbanizing areas.*
- ✓ By 2016, prepare new urban park typology and development standards approval package and schedule adoption steps.
- ✓ By 2017, pursue an updated Station Area Plan for Olde Town, which recognizes previous transportation sub area plan, with the Parks, Golf and Hospitality Department, relevant City Departments and AURA. Adopt a plan that sets framework for street infrastructure, recommended building heights to protect views, and other regulatory criteria and to identify where parks and public right of way improvements should occur.
- *BASELINE: 91 percent of Arvada residents are within ½ to ¼ mile walk or bike route to a community or neighborhood park.*
- ✓ By 2025, locate new parks so that 100 percent of Arvada households are located no greater than ½ mile from a community, neighborhood or urban park type using the 2015 recommended park service area standards.
- ✓ By 2018, construct Full Service Bike Park as part of Arvada Blunn/ Pioneer Master Plan.
- *BASELINE: By 2025, numerous neighborhood parks will be over half a century old.*
- ✓ All existing neighborhood parks (88) will receive one new amenity (i.e., restroom, Wi-Fi, nature playground, skate spot, fitness equipment) or "Taking Lasting Care" improvement by 2025.
- ✓ By 2017, "Taking Lasting Care" annual programs will include on community-wide volunteer opportunity.



- *BASELINE: During stakeholder outreach, sixty-three percent of residents said restrooms are a park amenity priority.*
- ✓ By 2018, install a Portland Loo (or similar restroom) in Olde Town Arvada and a new restroom in conjunction with pilot trail hub project (see wellness recommendations).
- *BASELINE: During stakeholder outreach, forty-seven percent of residents prioritized community parks as an important future park type. Arvada currently supports two community gardens, two community agriculture sites and provides classes to over 200 residents.*
- ✓ By 2020, develop a community agriculture master plan to identify and implement appropriate community agriculture sites and programs (i.e., community gardens, education classes, local food restaurant partners).



WELLNESS



INVENTORY AND ANALYSIS

OVERVIEW: WELLNESS

Wellness encompasses physical and mental wellbeing gained from outdoor recreation and use of Arvada's Green Spines, or web of trails and open spaces. Green Spines provide Arvada residents access to wellness. Enhancing trails can benefit public health by improving residents' access to outdoor recreation. Trail enhancements will require cross-departmental infrastructure projects like underpasses, pedestrian, equestrian and cyclist accommodations. Regional goals call for connecting trails across municipalities to Colorado's epic landscapes.

The inventory and analysis section will provide information on the state of Arvada's public health in relation to outdoor recreation and a trail inventory of the City's regional, community, local, connector, park and historic trails.

Important factors in this discussion include:

- The public's desires for connectivity and accessibility of the park system for all residents using routes for walking, biking and active transportation.
- Improving and expanding trails to provide connectivity to parks and open spaces in order to encourage recreation activities that improve public health and increase regional connectivity including urban areas of interest like transit stations, Olde town and the Arvada Center for the Arts
- Providing trail and park system amenities that will have universal appeal to the community including seniors, people with disabilities and families
- Augmenting wayfinding and signage

HEALTH TRENDS

Studies indicate that exercising outside increases health and wellness benefits in all age groups.¹ Across the country, youth are spending less time outdoors. The Children and Nature Network reports that "71 percent of today's mothers

¹ "Going Green Benefits Physical, Mental Health." Rick Nauert PhD, 2011.



Today's average boy or girl spends just four to seven minutes in unstructured outdoor play each day and more than seven hours in front of TV or phone screen. Increases in myopia, diabetes and obesity are a few of the related health impacts of low physical activity and excessive screen time.

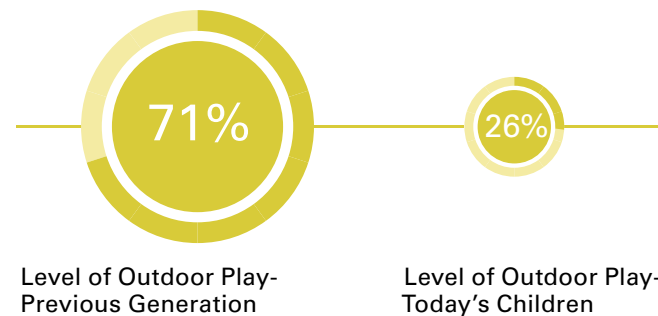


Figure 14: Time Spent Outdoors

Source: Children Nature Network

CDC HEALTHY COMMUNITIES

A recent survey of peer reviewed literature by the Centers for Disease Control (CDC) revealed that the way we design our communities can affect our physical and mental health.

-Dee Merriam, Healthy Communities CDC

The CDC's and National Park Service's (NPS) "Parks, Trails, and Health Workbook A Tool for Planners, Parks & Recreation Professionals, and Health Practitioners" provides additional resources for encouraging wellness through park system design.

said they recalled playing outdoors every day as children, but only 26 percent of them said their kids play outdoors daily.”²

Today’s average boy or girl spends just four to seven minutes in unstructured outdoor play each day and more than seven hours in front of TV or phone screen. Counteracting the negative effects of increased screen time, exposure to natural settings has been shown to be a widely effective way to reduce Attention Deficit Hyperactivity Disorder (ADHD) symptoms. Outdoor play can increase fitness levels and build active, healthy bodies.³

Among older adults, greener environments enhance recovery from surgery, enable and support higher levels of physical activity, improve immune system functioning, help diabetics achieve healthier blood glucose levels and improve functional health status and independent living skills.⁴ Physical activity is also one of the best ways to prevent cardiovascular disease, which is the leading cause of death in Jefferson County.⁴

Compared to national averages, Jefferson County residents, including Arvadans, have lower obesity rates and have higher percentages of people who exercise regularly. Arvada has a number of existing initiatives in place that address public health (Sustain Arvada-Community Agriculture Guide, Healthy Places Colorado) and this plan seeks to support and enhance these initiatives through community agriculture, enhanced access to well-marked trails, and increasing connectivity to the park system.

² “Children’s Nature Deficit: What We Know – and Don’t Know,” 2009.

³ National Wildlife Foundation, “Get Out There-Fact Sheet,” 2014.

⁴ Jefferson County Public Health, “Health People Healthy Places,” 2013.



Source: City of Arvada

Olde Town Plaza pre-race warm-up. Arvada’s trails and park system can provide important venues for outdoor recreation and subsequent benefits to public health.

Table 8: Jefferson County (Jeffco) Obesity and Physical Activity Rates

2011 OBESITY RATE		
Sex	Jeffco	National Average
Females	28.5%	36.1%
Males	27.6%	33.8%
2011 PHYSICAL ACTIVITY RATE		
Sex	Jeffco	National Average
Females	62.6%	52.6%
Males	64.0%	56.3%

Source: Health Data Institute for Health Metrics and Evaluation

TRAIL INVENTORY SUMMARY

The City of Arvada offers a diversity of types within the trail system that form the foundation of the Green Spines network, connecting the community to park system destinations. The trail system includes off-street paved trails, recreational park trails, soft-surface equestrian trails and on-street commuter focused trails. The mileage of trails has increased since the 2001 Trails Master Plan, most notably in riparian areas along Van Bibber and Big Dry Creeks and in developing areas such as Leyden. Regional trails are the most continuous trail type within the system and these trails, often found with equestrian trails adjacent, will be the focus of this plan. Regional and equestrian trails, however, are not the only off-street trails found in Arvada; they are part of a comprehensive network that includes community trails, local trails, connector trails, park trails, regional and national trails.

EXISTING AND PLANNED REGIONAL TRAILS

Arvada's primary, regional trails offer a wide variety of experiences that includes travel through riparian habitats, historical sites and vegetated open spaces. They offer easy access for both young and old users since they typically follow creeks and irrigation canals that are relatively flat grades. While these trails are geared for recreational, off-street use they also provide critical connection east-west across Arvada. Continuous, regional trails will be the backbone of a comprehensive trail system and there is tremendous potential to expand these trail types. For that reason, the existing regional trails are described in detail below.

BARBARA GULCH TRAIL

Barbara Gulch drains a large open space canyon south of State Highway 72 to its confluence with Leyden Creek just west of the Town of Leyden. Residential development on both sides of this canyon is creating an immediate population of potential trail users. While much of this trail is currently undeveloped, developer responsibility in this area includes the construction of regional trails, both paved and soft-surface, running parallel to and crossing Barbara Gulch. The steep slopes forming the face of the canyon above Barbara Gulch will create highly varied trail experiences and opportunities for soft-surface mountain bike trails while the gentler incline of the drainage will lend itself to trails accessible to all user types.

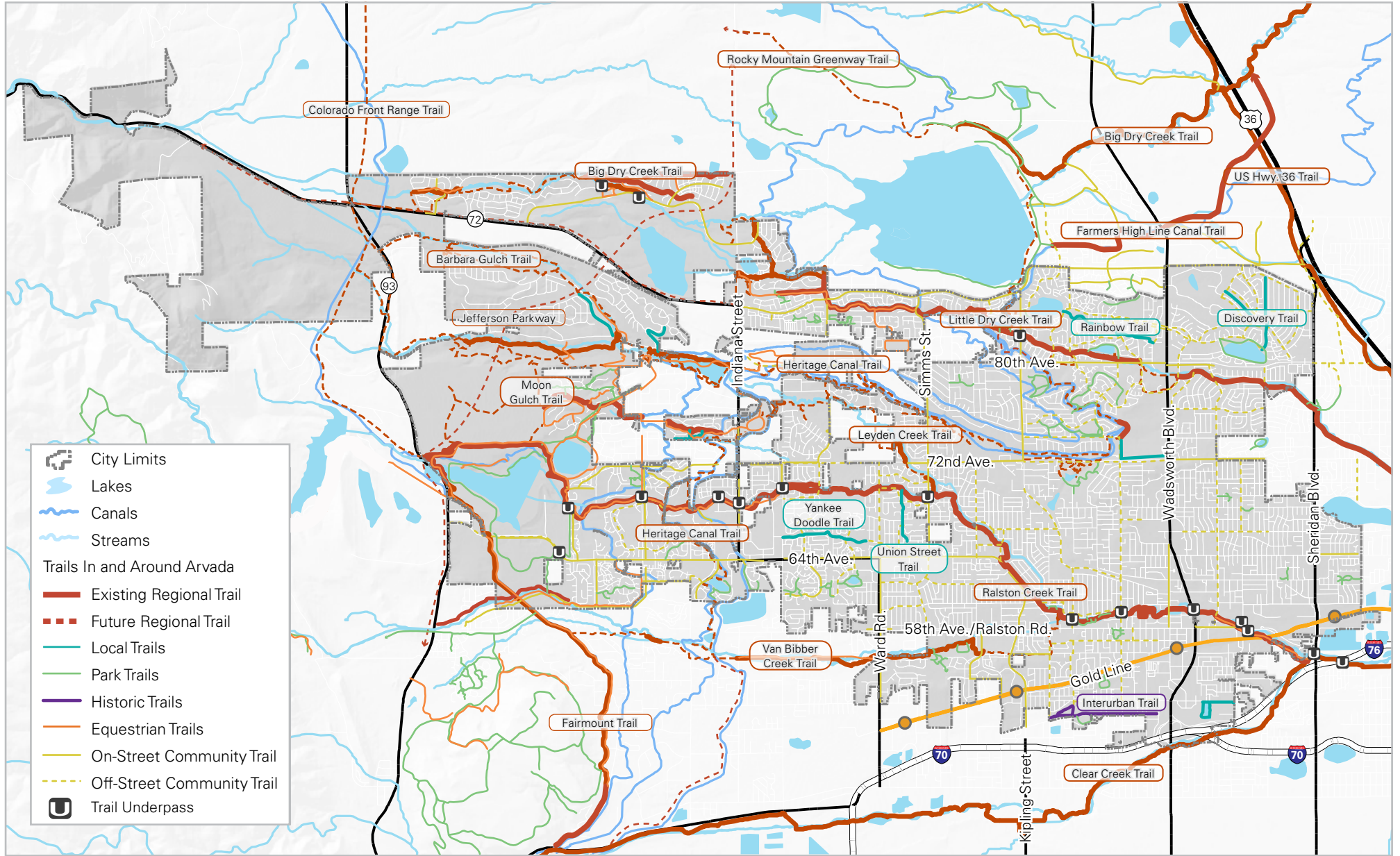
BIG DRY CREEK TRAIL

Big Dry Creek drains east from State Highway 93 to Standley Lake with a tributary drainage that moves downstream to Welton Reservoir and east through Whisper Creek to Standley Lake. The main drainage, west of Indiana Street, has been used by the Candelas developer for the initial construction of this trail and future connections to Standley Lake are under consideration. As trail volumes increase with expanding residential populations, greater trail connections and safe crossings will be important.



Ralston Creek Trail is the longest continuous trail in Arvada's current trail system. It follows Ralston Creek from its confluence with Clear Creek, near Sheridan Boulevard, west to State Highway 93.

Map 11: Trails Inventory



HERITAGE CANAL TRAIL

While few segments along this alignment have been completed, it could become one of the best trail experiences in Arvada, combining gentle slope, riparian and wildlife habitats, and history as it intersects many other regional trails in the City. Construction has proven difficult, however, because this proposed trail alignment follows the course of the parallel Farmers High Line and Croke Canals and the primary purpose of the canal companies is to provide high quality, irrigation water. It is difficult to obtain access rights across ditch company land. This trail would provide valuable connections from southwest to northwest Arvada as the alignment travels from Van Bibber Creek Trail, near McIntyre Street, and ending on the southeast edge of Standley Lake.

LEYDEN CREEK TRAIL

Trails along Leyden Creek will start in the foothills west of Arvada and follow the drainage east toward State Highway 93 before meandering east through large parcels of historic open space in Leyden Canyon to the Town of Leyden. Past Leyden Lake the trail will continue south to the Arvada Equestrian Center and on to Youth Memorial Sports Complex where it will rejoin the creek headed downstream to connect with Ralston Creek Trail. Many segments of this trail are yet to be completed but are part of larger roadway alignment concepts.

LITTLE DRY CREEK TRAIL

This trail follows Little Dry Creek through Arvada from Chase Drive near Sheridan Boulevard to Indiana Street and Little Dry Creek headwaters. East of Chase Drive the trail crosses under Sheridan Boulevard east through Westminster to a connection with Clear Creek Trail. Most segments of this trail are complete.

MOON GULCH TRAIL

From the horse country around the Indiana Equestrian Center, Moon Gulch Trail travels west through residential areas following the Moon Gulch drainage. Paved and soft surface trails have been built through most of the drainage, but connections to planned trails within the system have not yet been constructed.

RALSTON CREEK TRAIL

Ralston Creek Trail is the most continuous trail in Arvada's current trail system. It follows Ralston Creek from its confluence with Clear Creek, near Sheridan Boulevard, west to State Highway 93. The trail travels through Colorado's earliest gold discovery site, past the Arvada City Hall, through a number of City parks and around Blunn Reservoir. While most of this trail has been constructed as an off street trail, there are several on-street sections that provide connectivity until off-street trail segments can be built.

VAN BIBBER CREEK TRAIL

Van Bibber Creek Trail heads west from Ralston Central Park, initially paralleling streets as Van Bibber Creek is channeled through culverts at this point. The off-street trail begins at the Stenger/Lutz Sports Complex and continues west through Skyline Park and Van Bibber Open Space. The current trail ends at Indiana Street and doesn't pick up again until Churches Ranch Historical Site. Jeffco Open Space has identified the Van Bibber Creek Trail corridor as a priority in the next few years for planning, design and construction, which will significantly improve westerly trail connectivity to Golden and beyond.

CONNECTIVITY

Portions of Arvada's regional trails are currently a network of sidewalks, trails, and streets. See Map 12 and Map 14 for recommended trail improvements and enhancements. A goal of the Master Plan is to work with various City Departments to support improvements and additional maintenance for those sidewalks and streets that are part of the trail system.

COMMUNITY TRAILS

This trail type provides continuous trails along arterial and collector streets in Arvada. Typically, no special trail name is attached because these trails run parallel to roadways and the roadway identity is sufficient. These trails are often used for commuting or reaching City amenities. The trail standards provide for a detached eight-foot paved trail way where there is no on-street trail or a six and a half foot paved trail if an on-street trail is available. Examples of this trail type include the trail along 64th Avenue east of Ward Road and west of Easley Road, 86th Avenue west of Kipling Parkway and Wyndham Park Drive south of 64th Avenue and west to Eldridge Street.

LOCAL TRAILS

This off-street trail type is typically located in neighborhoods and connects residents to schools and fills gaps in the trails system. These trails often follow minor drainages or utility corridors. Local trails in Arvada include:

- Yankee Doodle Trail
- Discovery Trail
- Rainbow Trail
- Union Street Trail

CONNECTOR TRAILS

The purpose of this trail type is to get residents onto Local and Regional trails and these trails are found all over Arvada. Examples include the bridge south of Meadowglen Park over Little Dry Creek, which connects to Little Dry Creek Trail.

PARK TRAILS

Park Trails are located within a park to serve a recreation purpose, although they can provide off-street trail connections to destinations as well. Club Crest North Park is an example of a park with internal park trails, recreational in nature, that also connect residents to George Meyers Pool.

HISTORIC TRAILS

This trail type is focused on historic sites but they also provide recreational trail access. The Interurban Trail, built along a historic Arvada trolley line, connects to Four Acre Lake Park and Jack B. Tomlinson Park on its west end. Interpretive signage is needed on this and future historic trails.



Arvada's Interurban Trail is built along part of the historic Denver Tramway System trolley line and connects Griffith Station Park, Four Acre Lake Park and Jack B. Tomlinson Park and other points east.

TRAIL OPPORTUNITIES

The potential for Arvada's trail system to connect with ever expanding regional and national trails is huge. The following list includes regional and national trails that are connected to, or are in close proximity to Arvada.

REGIONAL TRAIL OPPORTUNITIES

- Rocky Mountain Greenway Trail – This trail will connect the Rocky Mountain Arsenal National Wildlife Refuge to Rocky Flats National Wildlife Refuge and ultimately Rocky Mountain National Park. Segments of this trail currently exist via Little Dry Creek Trail and additional new construction is anticipated in 2016.
- Colorado Front Range Trail – This is a north to south trail planned to connect Boulder and Jeffco Open Spaces. Fairmount Trail, an existing soft-surface trail that connects Arvada to Golden through Jefferson County Open Space, is part of this system.
- White Ranch Open Space Trails – A future opportunity exists to connect Van Bibber Creek Trail west to White Ranch Open Space, which has many internal trails connecting to a wide range of wildlife and habitat.
- Peaks to Plains Trail – A roughly 65-mile trail corridor of statewide significance connecting 4 counties and 7 cities, from the Continental Divide at Loveland Pass to the South Platte Greenway north of Denver. Upon completion of the 4 miles of trail currently under construction in Clear Creek Canyon west of Golden, approximately 10.5 miles of trail remain to be constructed through the canyon.

NATIONAL TRAIL OPPORTUNITIES

- American Discovery Trail – A 6,800 mile, non-motorized trail from California to Delaware, traveling through Denver.
- Cherokee Trail – Follows the South Platte from Salina, Oklahoma to Cherry Creek and through Denver.
- Chisholm Trail – A primarily north-south trail used to drive cattle overland to Kansas railheads though many Front Range ranches connected to subsidiary trails driving cattle eastward to Kansas.
- Overland Trail – Also known as the Overland Stage Line, this trail departed Atchison, Kansas carrying mail and passengers west. A split from this trail followed the South Platte River south to Denver.
- Pony Express Trail – This trail followed the Overland Trail south and looped through Churches Ranch, in Arvada.



Source: U.S. Fish and Wildlife Service

The Rocky Mountain Greenway Trail will connect the Rocky Mountain Arsenal National Wildlife Refuge (pictured above) with Rocky Flats National Wildlife Refuge (located in northwest Arvada) and ultimately Rocky Mountain National Park (pictured below).



KEY FINDINGS AND BENCHMARKS

WELLNESS

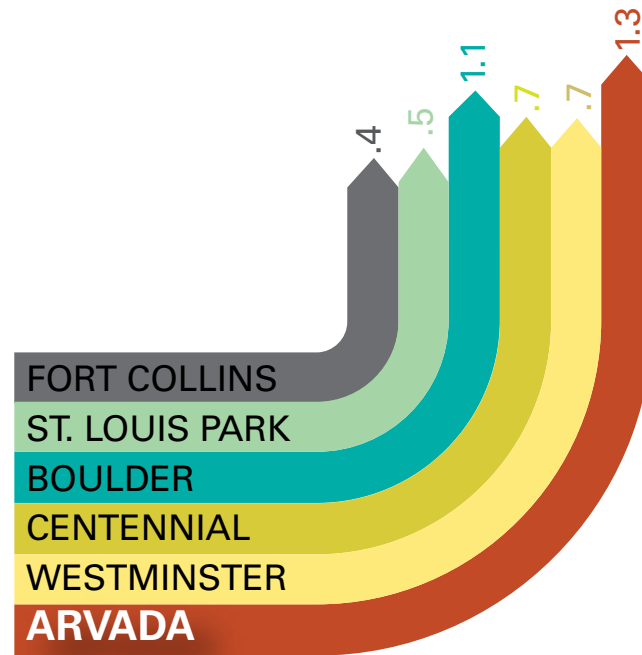
Arvada is a leader in trails per population and its vibrant trail system offers access to outdoor recreation with related benefits to physical and mental wellbeing. The League of American Bicyclists gave the City of Arvada a Silver Level-Bicycle Friendly Community (BFC) Award based largely on the quality of on and off-street trails. In the analysis of public health and trails, key findings include:

- Adults and children are spending less time outside and missing out on valuable fitness and wellness benefits
- Connectivity, or increasing opportunities for walking, biking and active transportation can help improve public health
- Connectivity can take years of interdepartmental and public/private coordination but persistence is a critical success factor
- The biggest obstacle to trail connectivity is land ownership or easement access at critical gaps
- Costs of trail infrastructure needs pose another obstacle

The City of Arvada aggressively began planning and constructing trails in 1974. Along the way, the City has learned that a comprehensive trail system must be dynamic and adaptable to changing demographics and trends. Demographic trends of increasing population, higher densities in urbanizing areas and increases in aging and diversity impact trails:

- Population and density increases will likely increase trail use and required trail maintenance
- Walking, cycling and active transportation accommodations will need to be made in urbanizing streetscapes
- Residents, including seniors and families, benefit greatly from shorter walking distances to recreation destinations and from added amenities along routes including benches and shade.

Figure 15: Benchmark Miles of Trail per 1,000 Population



Benchmark Sources: (2014) Eppley Institute for Parks and Public Lands Boulder Supplemental Benchmark Report, (2015) Arvada Inventory, (2010) St. Louis Park Comprehensive Plan



Councilman Mark McGoff leads hike for Arvada Trail Day

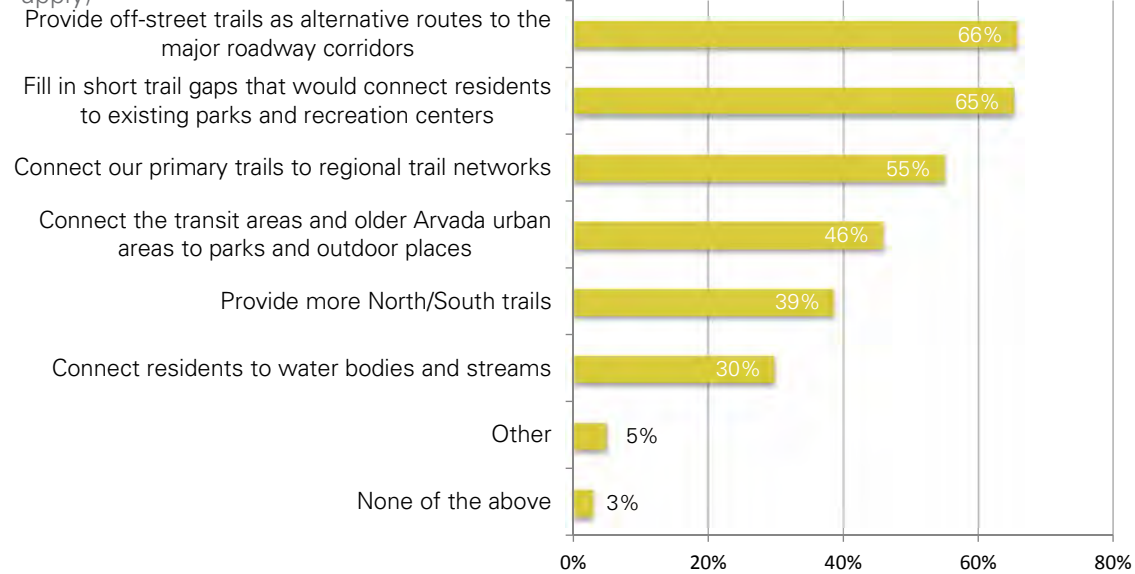
COMMUNITY DESIRES

ARVADA PUBLIC INPUT: WELLNESS

The most popular, well-used amenities in Arvada are places like Ralston Creek Trail, which offers some of the City's longest continuous trail corridor and connectivity to park and cultural destinations. The Clear Creek Trail connection at Gold Strike Park, with Denver's plans to connect regionally to this trail system, is another popular amenity. Key community desires for Arvada parks include:

- Access to parks and recreation is a premier value to residents
- Greater connectivity for walking and biking to parks and open space
- More park, open space and cultural destinations
- Safer, protected, off-street routes
- More regional networks
- Connect short trail gaps to existing trails
- Provide more facilities along trails
- Provide safer, well connected bike lanes

Figure 16: Which recreational trail gaps should be a priority to complete? (select all that apply)



Source: Public Meeting Survey and Online Survey Results

SEE APPENDIX

for a full report on all stakeholder engagement results



Provide Off-Street Routes



Fill In Short Trail Gaps



Connect To Water Bodies And Streams



Connect Urban Areas To Parks

RECOMMENDATIONS



FORMAT

RECOMMENDATIONS

Numbered 1-3, these are the overarching recommendations for the theme and reflect, at the most general level, the community's aspirations for the master plan improvements.

» Action Steps

These steps provide more detailed tasks to help achieve recommendations.

Supporting Content

Includes criteria and exhibits, organized by recommendation (1-3), and provides descriptions, maps, tables and character images to help describe the recommendation vision, prioritization, standards and criteria.

Implementation Chapter: This chapter is located at the end of the master plan and provides overarching recommendations that impact all themes for policy, staffing and maintenance.

WELLNESS

1. COMPLETE IDENTIFIED TRAILS GAPS

- » Complete a comprehensive, spatially accurate inventory of existing and proposed trails and input this data into the GIS system.
- » By 2019, 100 percent of all identified trail gaps (as identified in the master plan, by Arvada Park Advisory Committee and as approved by City Council) are built/completed.
- » Improve existing trails to new design standards to accommodate more trail volume.

2. ENHANCE TRAIL SYSTEM

- » Improve existing trails for safety and accessibility.
- » Provide better connections to parks and other community destinations.
- » Connect primary, regional trails to other regional trails beyond Arvada.

3. ENCOURAGE ACCESS TO HEALTHY LIVING FOR ALL

- » Increase resident activity levels by encouraging alternative transportation and partnering with public health providers.
- » Collaborate with Arvada City departments to include better pedestrian, equestrian and bicycle circulation in future plans for Arvada's corridors.
- » Provide trail and park types for users of all ages and abilities.
- » Study appropriateness of allowing electric bikes or other motorized vehicles on Arvada trails.

1 COMPLETE IDENTIFIED TRAILS GAPS

The City Strategic Plan for 2013 to 2019 states that “by December 31, 2019, 100% of all identified trail gaps and connection points” will be built/completed. This Master Plan update builds upon the goals of the 2001 plan while prioritizing gap completion for future trail system improvements. Map 29 and following descriptions highlight the current locations of major regional trail gaps in the trail system and some of the obstacles to completion these trails face.



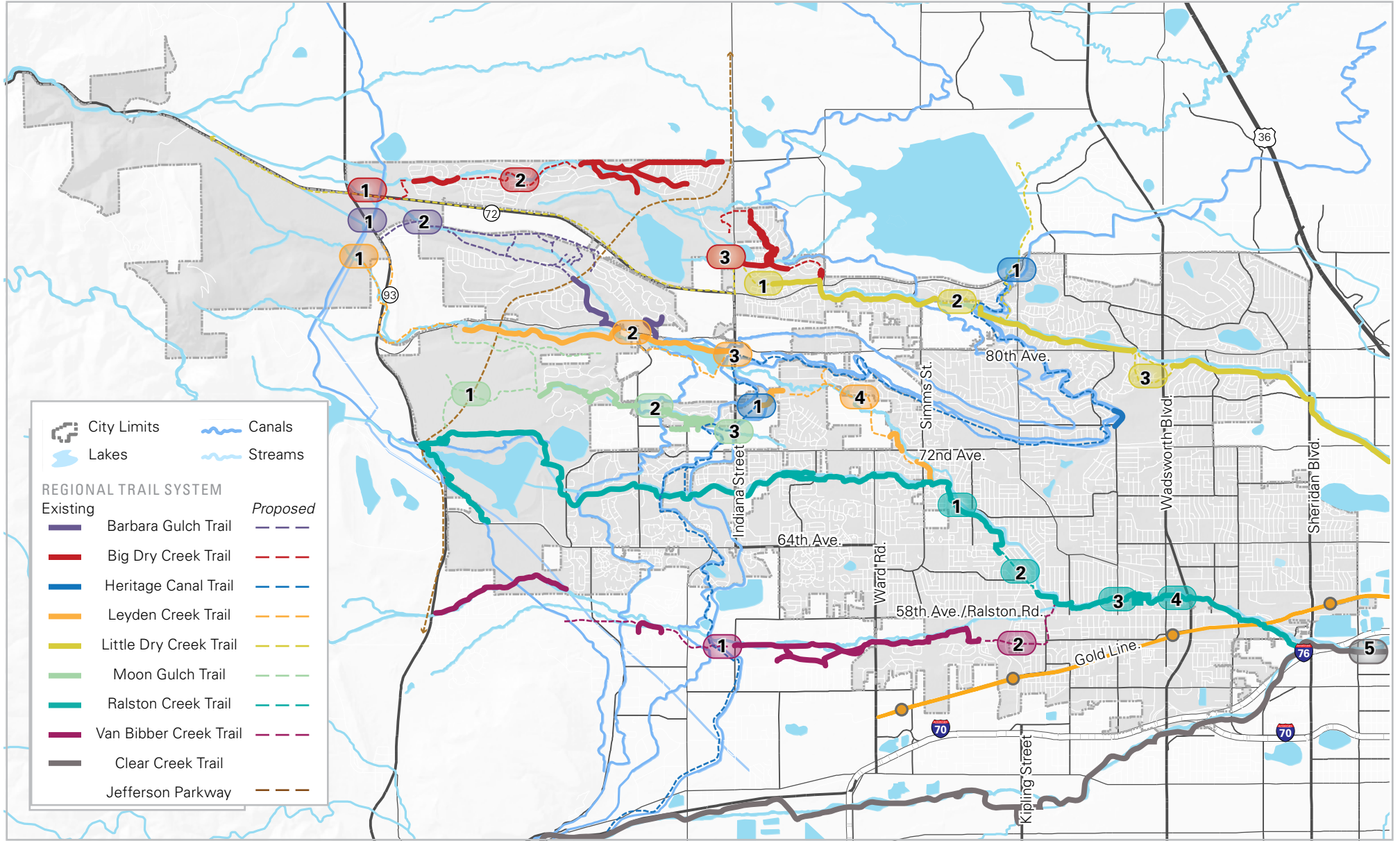
Source: City of Arvada

Arvada residents view trails as a contributor to high quality of life and want to increase trail connectivity over the next 10 years.

SEE IMPLEMENTATION

For a detailed table of identified trail gaps

Map 12: Trails Gap Assessment (See Map 3 for north-south Green Spine corridors)



BARBARA GULCH TRAIL

Developer responsibility in the area will advance construction of this Primary Trail as new homes are built in the surrounding neighborhoods. Planned alignment will pass through Barbara Gulch to S.H. 93 where the trail will head north to S.H. 72 to connect with Big Dry Creek Trail and the Colorado Front Range Trail. Critical to the regional connectivity of Barbara Gulch Trail is land acquisition west along S.H. 93 in to the foothills. Gaps, excluding developer obligations, include:

- 1 Acquisition and construction of trail connection over Union Pacific Railroad and north along S.H. 93.
- 2 Acquisition and trail construction through Plains End Generating Station and Leyden Land Fill to S.H. 93.

BIG DRY CREEK TRAIL

Portions of the Big Dry Creek Trail in Candelas are completed but a significant gaps exists along Big Dry Creek drainage from the planned junction with the Barbara Gulch Trail near State Highway 93 east to Church's Crossing Park. Developer obligated, off-street trail construction is not yet complete from Cimarron Park east to Indiana Street. Until a direct trail route along the drainage is possible, a more immediate trail connection east of Indiana Street follows the tributary drainage of Whisper Creek and east to Standley Lake. Trail gaps include:

- 1 Trail construction west toward Coal Creek Canyon along S.H. 72.
- 2 Trail connections through Candelas Development.*
- 3 Underpass at end of existing trail, west of Whisper Creek Subdivision.*

**Developer Obligation*

HERITAGE CANAL TRAIL

Very few segments of the Heritage Canal Trail are complete. Beyond land ownership, building trails along irrigation canals involves several basic issues like land acquisition or permission to build, ensuring safe trail conditions along the tall, steep banks of the canals along water and defining property ownership and limits of parcels that date back to the 1800s. Also trail development adjacent to these canals cannot interfere with canal maintenance or compromise water quality. For these reasons, construction of this trail has occurred in just two locations near Broad Lake Park and Indian Tree Golf Course. Future trail alignments are dependent on acquisition but should prioritize:

- 1 Access into destinations like the Indiana Equestrian Center and Standley Lake with bridges over canals and underpasses at highways and arterials.

LEYDEN CREEK TRAIL

Leyden Creek Trail is planned to begin in the foothills west of Arvada. Currently, the trail starts as an equestrian and soft-surface trail along Leyden Road, east of S.H. 93, and connects east to Leyden Lake. From Leyden Lake to the eastern end of the Leyden Creek Trail, where the trail joins Ralston Creek Trail there are few continuous, off-street trail segments. Trail gaps and improvements include:

- 1 Trail connection originating in the foothills and moving east through large parcels of open space in Leyden Canyon.
- 2 Trail improvements along Leyden Road and construction of a trail head for access into Leyden Lake.
- 3 Trail and underpass across Indiana Street.
- 4 Off-street trail construction east and west of Alkire Street to parallel Ward Road extension through Moore Farm to Ralston Creek Trail.

LITTLE DRY CREEK TRAIL

Little Dry Creek Trail is well connected from its “headwaters” near 86th Avenue Parkway and Indiana Street east through Arvada. West of Indiana Street, Little Dry Creek Trail will go under Indiana and head west to Welton Reservoir. From the headwaters east, Little Dry Creek Trail off-street trail gaps include segments from Michael Northey Park to Lakecrest Park and from Allison Way to Vance Drive. In both of these segments, on-street trail connections fill these gaps. Trail gaps and improvements needed include:

- 1 Trail construction west of Indiana along S.H. 72
- 2 Off-street trail through Lakecrest neighborhoods.
- 3 Off-street trail from Allison Way to Vance Drive, which will require a trail underpass at Wadsorth Boulevard.

MOON GULCH TRAIL

Moon Gulch Trail parallels Moon Gulch drainage from Indiana Street to S.H. 93 as it travels west from the Indiana Equestrian Center. This trail is well connected; however from Orchard Street west to Quaker Street, the trail follows a gravel road and needs better signage. West of Spring Mesa Park, continuation of this trail is currently blocked by land ownership but the Parks, Golf and Hospitality Department is working to extend this trail to the future Jefferson Parkway trails. Trail improvements include:

- 1 Trail connection to future Jefferson Parkway Trails, which will intersect Moon Gulch, connecting the trail to Ralston Creek Trail and Leyden Creek Trail.
- 2 Trail improvements on the gravel road easement east of Quaker Street and widening the paved and soft-surface trails west of Quaker Street to accommodate increasing trail traffic.
- 3 Off-street trail connection and grade-separated or signalized east-west crossing improvements at Indiana Street to improve pedestrian, cyclist and equestrian safety.

RALSTON CREEK TRAIL

Though Arvada’s best known and most continuous trail, several on-street trail segments satisfy minimum connectivity standards until off-street connections can be built. From west to east, these on street connections that should be moved off street along Ralston Creek connections include:

- 1 South of Davis Lane Park
- 2 Ralston Cove Park to the Arvada Tennis Center
- 3 Memorial Park to Carr Street
- 4 Wadsworth Bypass to Wadsworth Boulevard

This trail sees high volumes of traffic and for that reason, additional infrastructure improvements along the Ralston Creek Trail to improve connectivity and safe crossings (grade-separated or signalized) are needed and include:

- Convert the at-grade crossing at Olde Wadsworth Boulevard to a grade-separated crossing (subject to completion of drainage improvements).
- Improved trail underpasses with bridge improvements at Simms Street, Indiana Street, Joyce Street and State Highway 93.
- Trail underpasses with new bridge construction at Pierce Street, Miller Street, Oak Street, 68th Avenue and Beech Street.
- Trail underpass with new bridge construction designed as part of Ward Road extension

The City of Arvada should also work closely with Jefferson County Open Space and the Denver Water Board to extend Ralston Creek Trail west to White Ranch Open Space.

CLEAR CREEK TRAIL/RALSTON CREEK TRAIL

Portions of Clear Creek Trail run through southeast Arvada and connect to Ralston Creek Trail near Gold Strike Park.

- 5 Connect trail gap at Tennyson to connect north from Clear Creek Trail to the future Clear Creek Regional Park.

VAN BIBBER CREEK TRAIL

With the construction of a trail underpass at Kipling and 56th Place in 2016, Van Bibber Street Trail will be complete from Independence Street to Indiana Street. From Ralston Central Park to the Stenger Sports complex, Van Bibber Trail goes south on Garrison Street trail to West 57th, then south on Garrison Street to Grandview Avenue, then west to Independence (where it will meet up with new trail).

The trail has a large gap from Indiana Street to Churches Ranch. Trail gap and improvements include:

- 1 Trail connection to complete gaps on system from Indiana Street west to Churches Ranch. Maintain regular communication with Jefferson County to coordinate efforts, particularly in unincorporated Jefferson County.
- 2 Off-street trail connections from Ralston Central Park to Independence Street and Grandview Avenue.



Source: Hyland Hills Park and Recreation District (MIG consultant group)

The 2015 Clear Creek Regional Park Master Plan illustrates recreation amenities that will be located adjacent to the southeast corner of Arvada. City staff are collaborating with Hyland Hills Park and Recreation District to provide better access to this park for underserved neighborhoods in southeast Arvada. Potential partnerships for greater trail connectivity could include the District and Adams County.

2 ENHANCE TRAIL SYSTEM

This recommendation includes a number of action steps to improve the safety, accessibility, connectivity to parks and connectivity to regional trails. The following pages of tables and maps provide detail and locations for enhancements including trail heads, hubs and regional trail connections that would help expand Arvada's Green Spine web of regional trails.

Improve Existing Trails for Safety and Accessibility

- Enhance Arvada's well-loved trail system by increasing safety, accessibility and connectivity to parks and to regional trails. Table 8 provides design criteria for accessibility and safety from design of trail surface to signage.

Provide Better Connections to Parks

- Integrate trails connecting parks and open space to regional trail system and produce navigational aids like signage and wayfinding concurrent to park plans and development (Map 31).
- Prioritize development of future improvements to existing Trail Hubs and Trail Heads within city to serve as destinations for trail system (Map 31).

Provide Connections to Community Destinations

- Advocate for connection of the trails system to parks, public schools (Safe Routes to Schools), and other points of interest such as libraries, Old Town Arvada, Two Ponds National Wildlife Refuge and regional destinations like Standley Lake.

Connect Regional Trails

- Map 30 illustrates Arvada's foundational web of Green Spines and priority connections for the immediate future.
- Arvada will support and play a leadership role on a Front Range Regional Trails Committee.
- Jefferson Parkway, a transportation project in western Arvada, provides parallel trails in proposed cross sections that need funding. The parkway alignment is tremendously influential in the future development of Arvada trails and regional trail connections. In order to provide safe trails, grade-separated crossings will be critical to serve as accessible routes under the parkway to recreation destinations.

TRAIL ENHANCEMENTS



TRAIL HEADS

beginning of trail, sometimes located within parks or adjacent to parking and basic amenities and signs



TRAIL HUBS

strategically located areas where trails, signature park or destination converge



GRADE SEPARATED TRAIL CROSSINGS

include underpasses or overpasses to provide safe crossings for pedestrians, bicyclists, equestrians and potentially wildlife across busy streets or barriers like creeks and railroads



PARK CONNECTIONS

smaller trail spurs that connect a park to important regional trail



Source: Daniel Johnson

Trail enhancements include provisions for improving safety of equestrian trails in Arvada.



Source: City of Arvada

An Arvada trail system grade separated crossing, or underpass, under construction.

Table 9: Trail Design for Accessibility and Safety

ACCESSIBILITY TRAIL DESIGN CRITERIA	
Design Criteria	Accessibility Standard
Trail Width	10' Minimum
Trail Surface	Concrete main trail surface, with openings no greater than ½"
Parallel Trail Width	5'wide crusher fines or soft parallel width with 3' non-paved shoulders. In natural areas, 3-5' wide. 8' wide tread for maintenance access
Parallel Trail Surface	Crushed granite (crusher fines) parallel trail surface. Attached in a narrow trail corridor, separated in wider areas to provide for slower, soft trail traffic in natural areas and to separate users from faster, paved trail traffic.
Grades	5% maximum for extended grades. Other grades per ADA standards unless no alternatives are available due to steep terrain. Use water bars to control erosion and aide in creating accessible route by minimizing steep grade.
Cross Slope	2% maximum based on current ADA requirements
Vertical Clearance	12' vertical clearance (10' minimum under structures) with adequate signage where less is available. 12' vertical clearance under structures where equestrian-designated trail use is intended.
Shoulders	3' mowed shoulders with design based on tree and shrub pruning and occasional mowing on trail edges.
Trail Centerline Radius	20' minimum trail centerline radii with adequate signage for shorter radii. 15' minimum centerline radii for soft trails to accommodate maintenance vehicles.
Radius at Intersections of Trails	5' minimum inside edge at all trail intersections.
Striping	Center lane striping where use levels warrant and to indicate trail alignment at confusing intersections.
Signage	Signage as needed for trail and park use regulations and as desired for interpretation and wayfinding. Integrate signage with proposed branding for Arvada's trail system to create new identities for trails.
Underpass Width	10' minimum, 12' preferable
Alternative Transportation Modes	Explore possibility of electric bikes or other motorized vehicles on Arvada trails.
Amenities	Porta-Potties with enclosures and drinking fountains at trail hubs. Benches and trail markers at strategic points
SAFETY TRAIL DESIGN CRITERIA	
Design Criteria	Safety Standard
Sight Distances	130' preferred sight distances for paved trails.
Separation from Roadway	10' minimum separation from roadways where feasible. 8' minimum where tree buffer from road is present. This is especially important at intersections, wherever trail crosses road-vehicular visibility triangle requirements should apply where trails cross streets.
Guardrails	Pedestrian guardrails along vertical drops greater than 30" within 5' of trail. Fencing between trail and vertical drops greater than 30", more than 5' from trail. Railings set 12-18" from trail edge where any vertical drop exists next to trail edge.
Signage	Adequately note trail surface changes and provide mile markers when possible. Trail etiquette signage can help build awareness and minimize potential conflicts between user groups (i.e., horse and cyclist conflicts).

Map 13: Trail Priority Areas- Regional and North-South Trail Connections

CONNECTION POINT

Description of connection needed to network with other regional trail or important transit link.

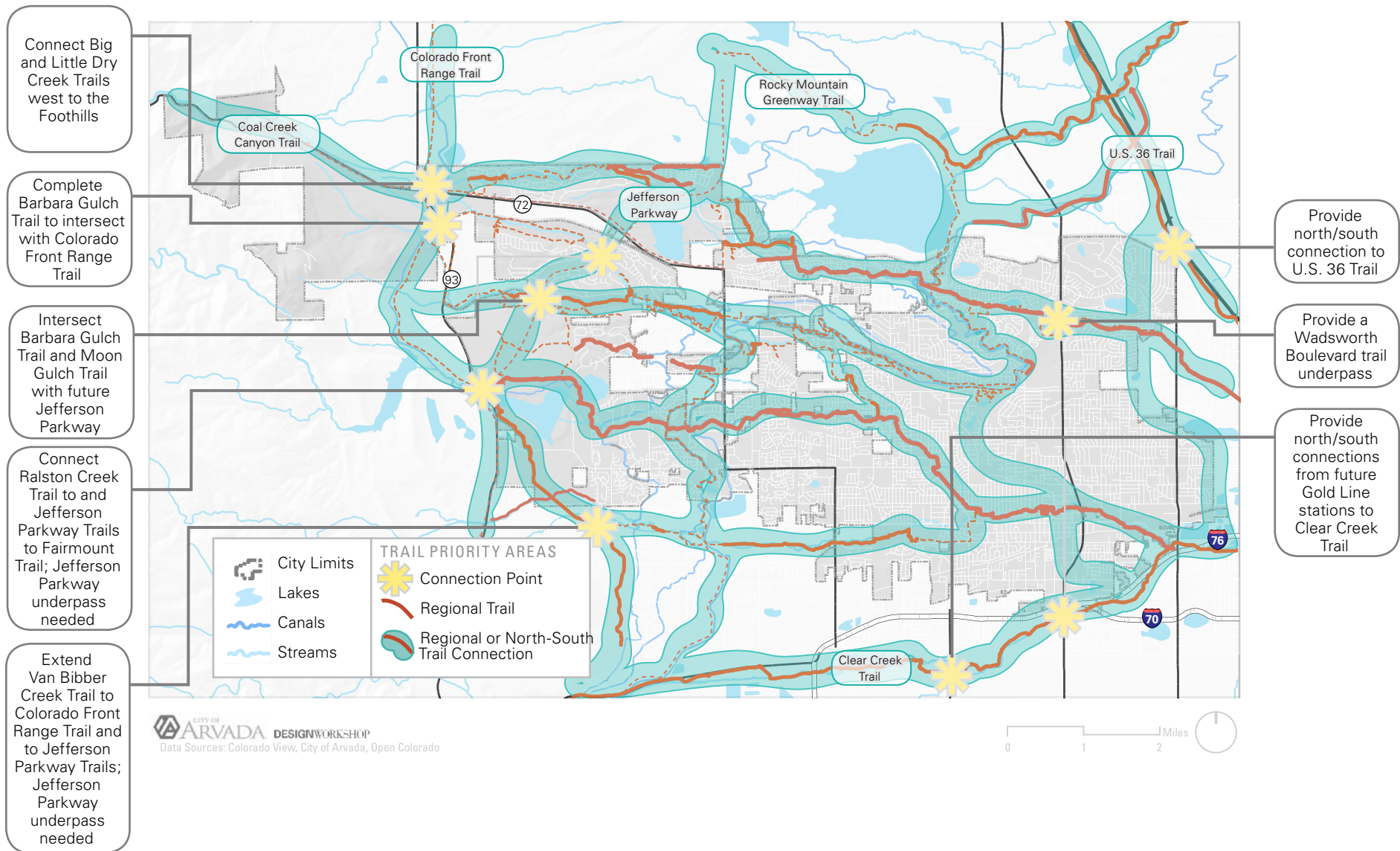


Table 10: Recommended Trail Hub and Trail Head Locations

TRAIL HEAD LOCATIONS	TRAIL HUB LOCATIONS
Big Dry Creek Trail	Big Dry Creek Trail
95th Lane west of Poppy Way	Church's Crossing Park
Yucca Way and 95th Lane	Leyden Creek Trail
Candelas West Community Center	Leyden Lake
Heritage Canal Trail	Heritage Canal Trail
Standley Lake Library	Indiana Equestrian Center
Pearce Park	Majestic View Nature Center
Leyden Creek Trail	Standley Lake Library site
Moore Brothers Farm	Ralston Creek Trail
Youth Memorial Sports Complex	Arvada Blunn/Pioneer Bike Park - Future junction with Jefferson Parkway Trail at intersection of Leyden Creek, Moon Gulch and Ralston Creek Trails
Pearce Park	Gibbs West Community Park
Patridge Open Space	Gold Strike Park
Little Dry Creek Trail	Van Bibber Creek Trail
Thomson Elementary School	Stenger Sports Complex
Hoyt Way	Churches Ranch
Ralston Creek Trail	Barbara Gulch
Memorial Park	Shared Trail Hub at the entrance to Leyden Lake Open Space
Oak Park	
Ralston Central Park	
Blunn Reservoir (64th Ave.)	
Van Bibber Creek Trail	
Ward Road	
Indiana Street	
Clear Creek Trail	
Creekside Park (Wheat Ridge)	
Johnson Park (Wheat Ridge)	



TRAIL HEAD STANDARDS:

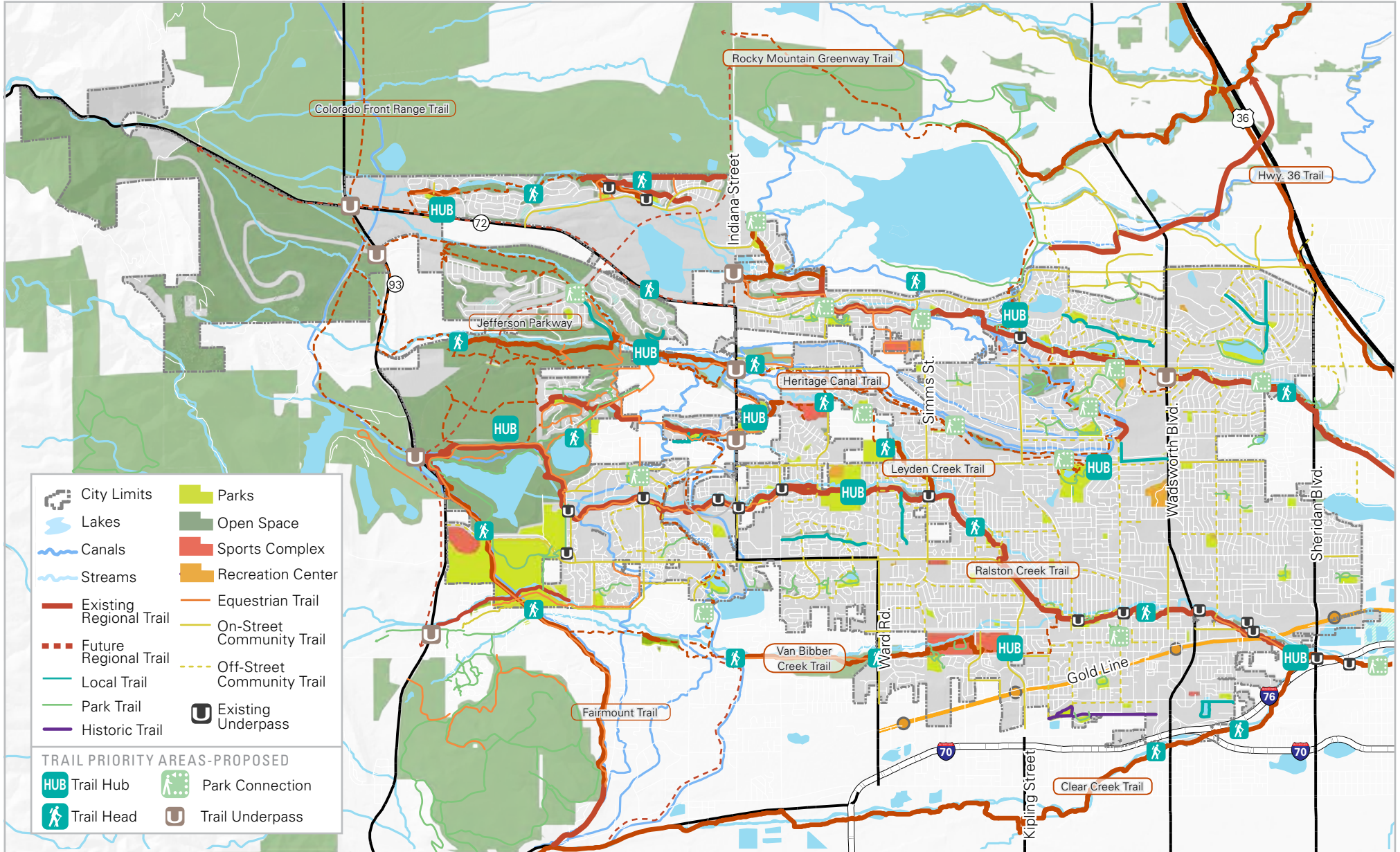
- Needed at intervals along Arvada's regional trails to serve trail users that drive to and access trails from existing public parking areas.
- A "you are here" map at trail heads is encouraged.
- Rules and regulation signage and wayfinding.



TRAIL HUB AMENITIES LIST:

- Off-street parking, or shared parking whenever possible
- Shelter or kiosk with weather protection
- Trail information, rules regulations, maps and signage
- Restrooms
- Potable water (best practice)
- Wayfinding within the ½ mile area leading to the trail hub
- Bike racks
- Tie rails (along equestrian trails)
- Benches with shade
- Trash receptacles with wildlife controls
- Trail intersections or destinations
- Good vehicular access from a collector, parkway or arterial street
- Safety lighting and potential emergency call box
- Room for expansion

Map 14: Trail Priority Areas- Trail Enhancements. See page 85 for further information on trail enhancement definitions.



Obstacles to Providing North To South Trail Access

In Arvada, north-south, off-street trail choices are few and difficult or not immediately available. Potential north-south corridors include:

- Proposed Heritage Canal Trail Sections
 - West of Indiana Street is a wonderful off-street trail, though ditch company access/easement agreements are needed
 - South from Broad lake to Van Bibber to connect to Jeffco plans to build Van Bibber west to Fairmount
 - From Two Ponds to Majestic View
- Parallel trails along Jefferson Parkway
- Colorado Front Range Trail

That leaves on-street trails as the next possibility (see Map 3). From a safety stand point, on-street trails need to follow routes that are not State Highways, due to the traffic volumes, speeds and the unlikely permission necessary from the Colorado Department of Transportation (with the possibilities of Sheridan and Wadsworth as potential exceptions). The remaining Arvada north-south streets include:

- Lamar and Marshall Streets (I-70 north to 72nd Avenue)
- Carr Street and Pomona Drive (I-70 north to 74th Avenue, then Carr Drive north to 80th Avenue and north on Pomona Drive)
- Kipling Street and Garrison Street (south of Standley Lake to Oberon road and south on Garrison Street and trail, then south to I-70)
- Ward Road and Alkire Street (along future Ward Road extension)
- McIntyre Street and Quaker Street (I-70 north on McIntyre to 64th, west on 64th and north on Quaker Street to Leyden Road)
- Wadsworth Boulevard deserves consideration, through off-street accommodations

None of these streets provide continuous north-south access through Arvada and need to be partnered with other streets to be effective trail routes. On-street trails need access to I-70 underpasses for trails headed south of Arvada. Likewise, on-street trail obstacles are hard to avoid on the north side of Arvada, including: Rocky Flats National Wildlife Refuge and Standley Lake Regional Park (though both sites are off-street trail destinations.)

Negotiating these north-south trail alignments will be an arduous and costly process but potentially Arvada's best bet for certain north-south segments. A combination of ditch trail access easements, trails paralleling railroad easements and street trails may serve Arvada's north-south needs.



Existing conditions along Wadsworth Boulevard at the Arvada Center for the Arts.



Proposed condition from the Arterial Beautification Appendix. This document provides examples of how Arvada's arterials can be improved through measures like consistent tree lawn and sidewalks on both sides of the street, a raised landscape median and enhanced pedestrian crosswalks.

3 ENCOURAGE ACCESS TO HEALTHY LIVING FOR ALL

Increase Resident Activity Levels

Provide alternative transportation amenities in the park and trail system and partner with public health providers. Proven improvements include the bike racks and bike repair stations that the Parks, Golf and Hospitality department has installed in Olde Town and Arvada Reservoir Trail Head. Healthy Places is planning four more in southeast Arvada.

These types of amenities encourage cycling or walking to park destinations. Additionally, the park system can encourage activity through:

- Partner with agencies like Jefferson County Open Space, health care providers and Jefferson County Public Health to ensure a strategic and aligned approach to encourage the use of parks to increase physical activity when appropriate and culturally relevant
- Designing parks with crime prevention through environmental design (CPTED) in mind



Bike repair stations have been installed in Arvada through Healthy Places and encourage cycling.

CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN (CPTED)

CPTED's goal is to prevent crime by designing a physical environment that positively influences human behavior. The theory is based on four principles: natural access control, natural surveillance, territoriality, and maintenance.

PUBLIC HEALTH COLLABORATIONS

Partnerships with public health providers like Jefferson County Public Health can encourage residents to take advantage of the park system's abundant and low-cost recreation amenities.

HEALTH EQUITY

equal opportunity to a healthy lifestyle regardless of race, gender, income or neighborhood

SMOKE FREE

Arvada's park and trail system are smoke (tobacco) free

Improve Pedestrian, Equestrian And Bicycle Circulation

Access to the park system can help increase resident activity levels by encouraging active (self-propelled) transportation to recreation, civic and commercial destinations.¹ North-south trail corridors in Arvada are limited and collaborations are imperative with Arvada City departments to include better on-street accommodations for pedestrian, equestrian and cyclists in future plans for Arvada’s street corridors.

Complete Streets

Complete Streets are streets for everyone. They are designed and operated to enable safe access for all users, including pedestrians, bicyclists, motorists and transit riders of all ages and abilities. Complete Streets make it easy to cross the street, walk to shops and bicycle to work.

By adopting a Complete Streets policy, communities direct their transportation planners and engineers to routinely design and operate the entire right of way to enable safe access for all users regardless of age, ability, or mode of transportation.

Safe Routes to Schools

Collaborate with Arvada City Departments to help use trails to connect neighborhoods to schools. Colorado Safe Routes to School (SRTS) uses a comprehensive approach to make school routes safe for children when walking and bicycling to school. The Colorado Department of Transportation (CDOT) administers Colorado’s SRTS program. In Colorado, many communities, parents and schools are fostering a safe environment for their students by using SRTS programs to not only fund education and safe infrastructure, but also to encourage healthy options for our children that are safe for both walking and bicycling.



As north-south off-street trail corridors are limited in Arvada, roads and creative use of the pedestrian zone and tree lawn may be needed. Collaborations with other City departments is essential to connecting on-street improvements to the park and trail system.

IMPLEMENTATION

Implementing complete connectivity involves more than the Parks, Golf and Hospitality resources. True connectivity will require partnerships with other City agencies, community based groups and advocacy groups (i.e., parent and school groups, bike and pedestrian advocacy groups, housing advocacy groups, etc.) on the vetting and implementation of this plan.

COORDINATED PLANNING EFFORTS

The Arvada Transit Station Framework Plan (2006) and Arvada Pedestrian and Bicycle Access Plan (2009) offer additional suggestions to improve active transportation routes. The Arvada Bicycle Master Plan effort is also underway and will provide additional recommendations for bicycle connectivity.

¹ *Physical Activity Guidelines for Americans Mid-course Report: Strategies to Increase Physical Activity Among Youth.* Washington, DC: U.S. Department of Health and Human Services, 2012.



Source: Missouri Bike Federation

Safe Routes to Schools



Source: Bike SLO County

Collaborate with City Departments to connect park trails to safe routes and recreation opportunities



Source: City of Arvada

Improve equestrian safety and trail connectivity



Source: City of Arvada

Complete streets with pedestrian accommodations

Provide Trail And Park Types For Users Of All Ages And Abilities

Parks and amenities should include elements that universally serve the Arvada community. In accommodating people of all abilities, park amenities can include:

- Sensory parks or elements
 - Tactile sculpture
 - Scent garden
 - Light, sound, motion, interaction with all senses
- Accessible routes/ surfaces
- Benches, picnic tables and shade structures along prescribed intervals along trails.

Motorized Vehicles On Arvada Trails

- Study appropriateness of allowing electric bikes or other motorized vehicles on Arvada trails.
- Policy update may be required. Public safety education and outreach will be needed regarding electric assisted bicycle use policies.



Maggie Daley park in Chicago provides an accessible play surface, playful sensory elements, seating and shade.



Electric-assisted bikes on Arvada trails warrant further study especially as Arvadans age in place.

BASELINES AND PERFORMANCE MEASURES



FORMAT

BASELINE

- A minimum or starting point used for comparisons and projections.

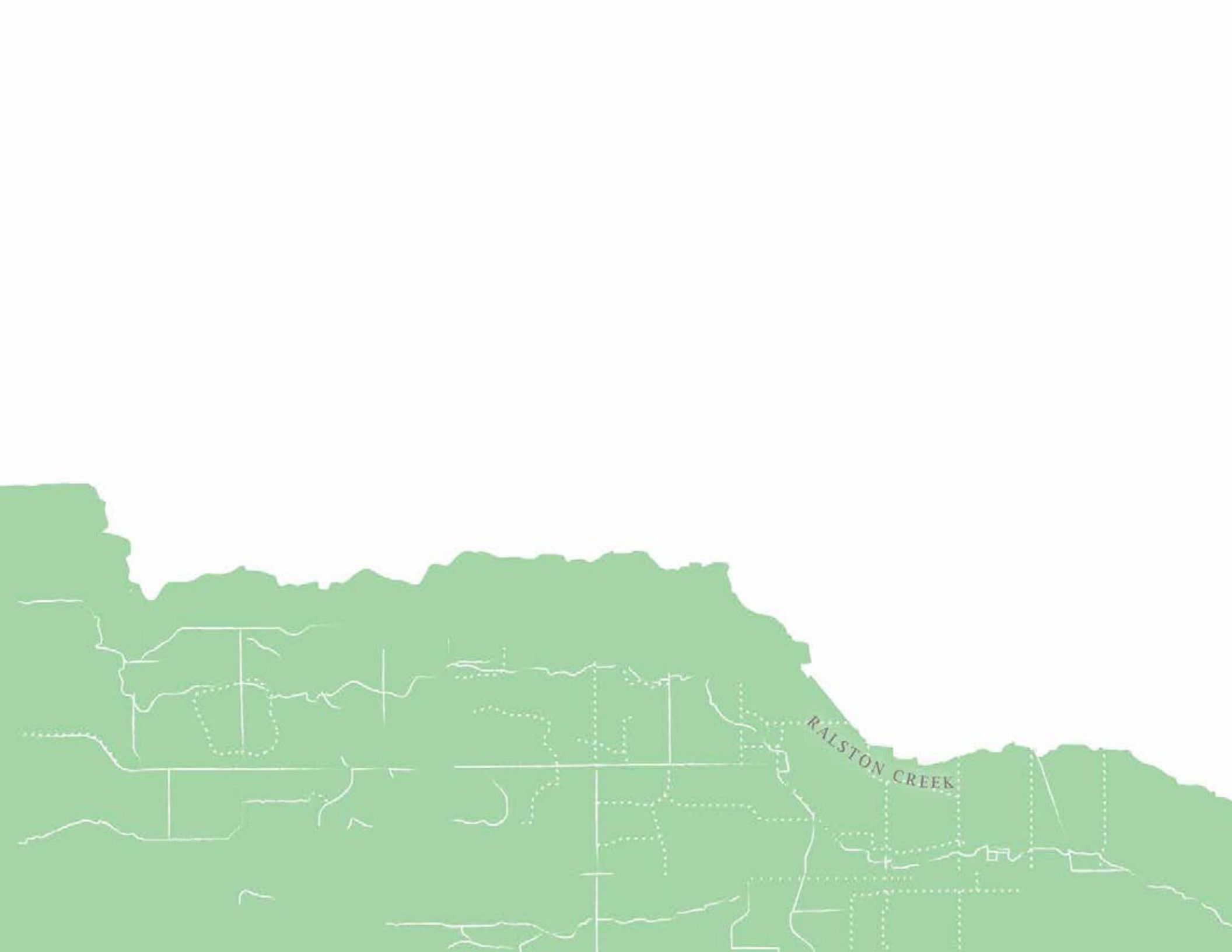
PERFORMANCE MEASURE

- ✓ A regular measurement of outcomes and results, which generates reliable data on the effectiveness and efficiency of programs. Performance measures are used to track goals by setting a vision, baselines, targets, and methods for measuring different topic areas related to the goals of the plan.

WELLNESS

- *BASELINE: Arvada is in the process of mapping trails and park and trails amenities using GIS technology.*
- *BASELINE: Arvada currently has 149 miles of hiking, biking and equestrian trails.*
- ✓ By 2017, complete 100 percent of mapping of trails, including amenities, and park amenities using GIS technology.
- ✓ Through 2025, pursue amenities that have an associated app or other measurable result to track participation at park system locations. For example, in addition to printed maps, communities are providing online trail maps with search engines (i.e., find dog friendly, soft-surface trails). The online maps are linked with park amenities listing and park event calendars and program offerings and could be tracked for number of searches.
- ✓ By 2025, provide one new amenity (i.e., bench, restroom, drinking fountain, shade shelter, fitness equipment) along every five miles of trails (roughly 30 new amenities).
- ✓ Increase activity levels in parks by measuring new wellness amenities in parks (like playgrounds, bike repair stations, fitness equipment, trail loops with mileage markers etc.).
- *BASELINE: The Parks, Golf and Hospitality Department has submitted a draft trail gap plan to the Arvada Park Advisory Committee to review. The Master Plan provides priority trail gap maps and tables.*
- ✓ By 2019, 100 percent of all identified trail gaps (as identified in the master plan, by Arvada Park Advisory Committee and as approved by City Council) are built and completed.
- *BASELINE: Arvada has an ongoing partnerships with the Colorado Health Foundation with Healthy Places in southeast Arvada, Adams County Open Space and with Jefferson County Open Space..*
- *BASELINE: The Parks, Golf and Hospitality department has completed its park system map and guide.*
- ✓ Through 2025, support Jefferson County Open Space, Jeffco Outdoors Foundation and Adams County Open Space efforts for regional map projects.
- ✓ By 2020, partner with Adams County, Jefferson County Open Space and Jefferson County Public Health Department to pursue healthcare provider partnerships for new activities that could strengthen conservation, stewardship and healthy live styles.
- ✓ Through 2025, in conjunction with the Community recommendation for park system branding, ensure that conservation, stewardship and healthy lifestyle messages are taken into account with all programs and marketing materials.
- ✓ Through 2025, promote the wellness connection of being outdoors in all programs and marketing materials.





RALSTON CREEK

NATURE



INVENTORY AND ANALYSIS

OVERVIEW: NATURE

This chapter explores the types and quality of the open space system, the community’s key desires for open space use and ways to expand stewardship (long-term care of natural areas) and sustainability practices for the entire park system(i.e., recycling containers). Arvada’s natural areas are protected by the 3,400 acre open space system. Residents are seeking a balance of stewardship with access for outdoor recreation. Similar to park types, Arvada’s future open space typologies are influenced by the different development patterns of suburban and urban growth. Categories of open space range from traditional, large natural areas to smaller pockets of protected natural areas. These urban open space types can provide ecosystem services like stormwater treatment to recreational use like natural play.

CITY OF ARVADA OPEN SPACE

Arvada’s open space system consists of city-held and maintained open space as well as privately held and maintained open space, both with public trail rights-of-way. The City of Arvada owns 31 open space areas ranging in size from less than one acre to more than 1,000 acres. Arvada/Blunn Reservoir and its 1,319 acres provide the largest, contiguous open space area in Arvada’s system. Additionally, Big Dry Creek, Barbara Gulch, Pattridge, Tucker Lake Park and Leyden Lake open spaces are each greater than 100 acres. The City has also been acquiring trail easement from many new developments to conserve open space and ensure public use rights around future trail alignments. Developments with trail provisions include Candelas, Leyden Rock and the proposed Jefferson Parkway Regional Trail.

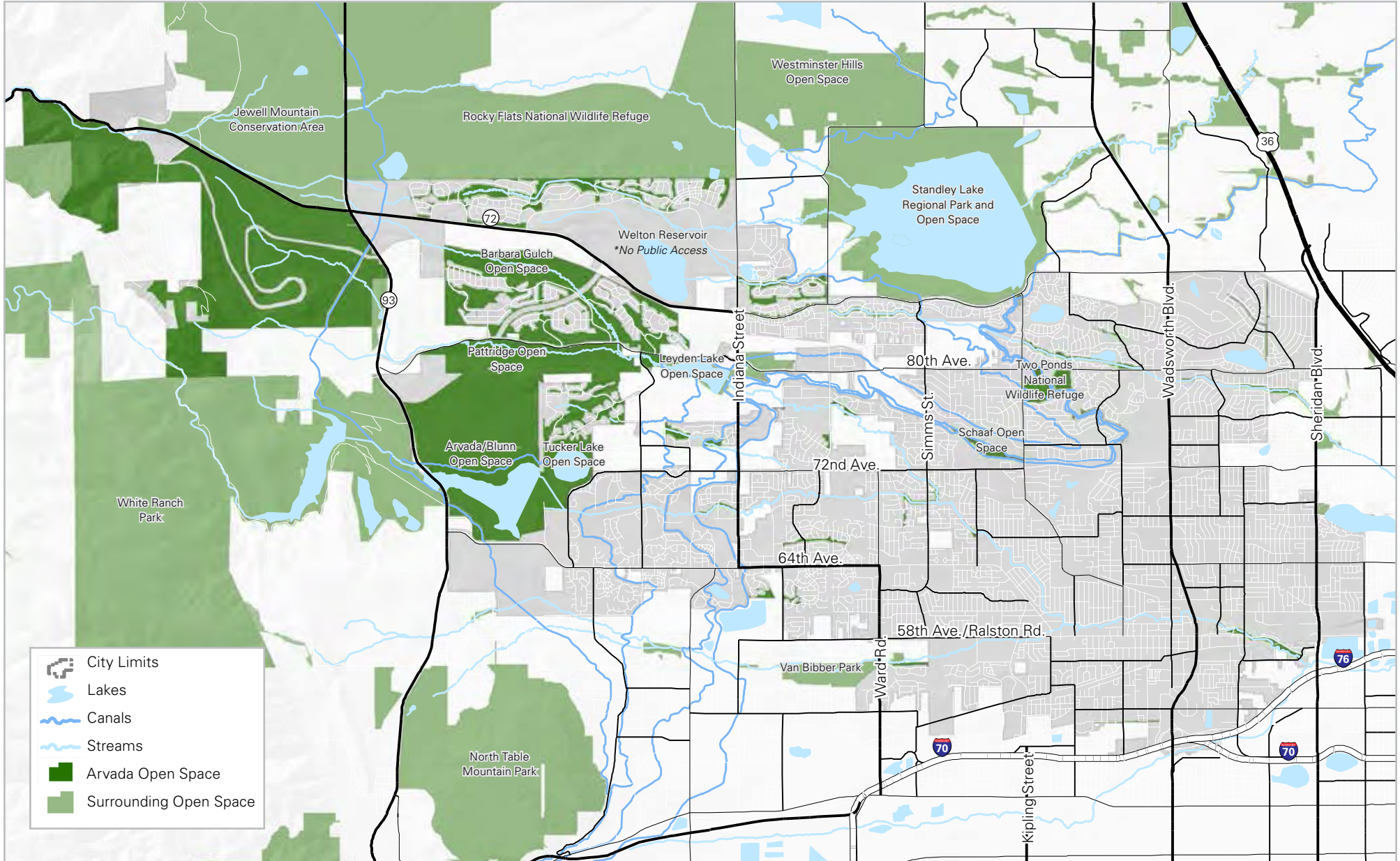
By providing opportunities to connect with nature, the City can instill an appreciation of natural systems and address the disconnect with nature that often occurs in urbanizing areas. Establishing a strong system of contiguous open spaces is essential to protecting Arvada’s unique Front Range character, scenic resources and wildlife habitat. Map 32 shows the location of all open space in and around the City of Arvada.

Table 11: *Regional Open Space Inventory*

ARVADA OPEN SPACE INVENTORY	
Arvada Open Space	
NAME	ACREAGE
Arvada/Blunn Reservoir	1,319.0
Barbara Gulch Open Space	413.3
Big Dry Creek Open Space	0.1
Discovery Trail and Open Space	8.9
Heritage Canal Open Space	6.9
Interurban Trail	4.8
Leyden Creek Trail and Open Space	12.2
Leyden Lake Open Space	105.9
Little Dry Creek Trail and Open Space	47.8
Lively Park	0.7
Meadowbrook Village Park	22.9
Melody Park	3.7
Pattridge Open Space	386.6
Pearce Park	65.1
Rainbow Trail Corridor	3.2
Ralston Creek Trail and Open Space	29.8
Saddle Brook Open Space	20.8
Schaaf Open Space	26.4
Spring Mesa Open Space	23.1
Tucker Lake	141.9
Union Street Trail	1.3
Van Bibber Creek Trail & Open Space	16.4
Wildflower Ponds Open Space	7.8
Wyndham Park Trail and Open Space	4.3
Yankee Doodle Trail and Open Space	9.4
Trail Easements	748.1
TOTAL	3,438.1

NEARBY OPEN SPACE RESOURCES	
<i>National Wildlife Refuges</i>	
TOTAL	6,257.0
<i>Jefferson County Open Space</i>	
TOTAL (Within Map Extent)	21,180.5
<i>Boulder Open Space</i>	
TOTAL (Within Map Extent)	1,491.1
<i>City and County of Denver Open Space</i>	
TOTAL (Within Map Extent)	1,936.4
<i>Westminster Open Space</i>	
TOTAL (Within Map Extent)	3,080.3

Map 15: Regional Open Space Inventory (Includes federal, state and local-partner owned open space lands)



GENERAL CHARACTERISTICS

Arvada's diverse open space system has successfully protected large areas with natural resource and social value. Special site features include streams, canals, reservoirs, rock outcrops and the varied topography unique to this Front Range community. Opportunities for nature-oriented, outdoor recreation and wildlife habitat preservation are key in open space areas. Emphasis, however, must be placed on achieving a balance between resource protection and public use. Degradation to Arvada's open space system includes human and environmental threats such as social trails, prairie dog colonies, drought and flooding.



Patridge Open Space



Van Bibber Creek Open Space



Arvada/Blunn Reservoir

Note: Apple Meadows and Quaker Acres Parks have both park and open spaces and those acreages are tabulated separately in subsequent tables. Welton Reservoir is not included in Arvada's open space inventory as it is a private entity with no public recreational use allowed.

GREEN SPINES

trail and open space web that connects creeks, canals and natural areas in a contiguous and regionally profound way

OPEN SPACE

areas are parcels of land set aside to preserve land, water, vegetative, historic, cultural or aesthetic features in the natural or primarily natural state

STEWARDSHIP

responsible planning and management to conserve and preserve the quality of natural resources in Arvada's open space for future generations.

SUSTAINABILITY

taking care to create practices that provide measurable benefits to the environment, economics, art and community in order to ensure legacy places of timeless beauty, significant value and enduring quality.

SUSTAIN ARVADA

the City of Arvada strives to set an example for the community by creating sustainable business practices that will have a positive affect on the environmental, economic and social vitality of the community.

ECOSYSTEM SERVICES

Benefits obtained from ecosystems (i.e., oxygen from trees).

JEFFERSON COUNTY OPEN SPACE RESOURCES

The City of Arvada lies primarily within Jefferson County, which established an open space program in 1972 funded by a one-half percent sales tax on all sales. In 1980, the purpose of the funds was expanded to allow expenditure of these funds for construction, acquisition and maintenance of park and recreational capital improvements. Since the inception of this program, the County has worked with various partners to acquire an impressive 53,000 acres of open space, of which 21,000 acres are located within approximately 3 miles of Arvada's city limits. Cities within Jeffco's jurisdiction have received partial financial assistance to acquire open space; Arvada has primarily purchased properties in the western portion of the city.

NEARBY OPEN SPACE RESOURCE

Two Ponds National Wildlife Refuge, within Arvada's city limits, is the smallest urban unit in the Refuge System and serves as a rare educational gem for residents and particularly school age kids, as most Refuges are far removed from population centers.

The larger Rocky Flats National Wildlife Refuge, bordering Arvada on the north, also provides valuable wildlife habitat and in the future will provide environmental education and wildlife-focused visitor opportunities. Combined, these National Wildlife Refuges augment Arvada's open space system with 6,257 acres.

Additional open space areas within approximately three miles from Arvada's city limits include 490 acres of City and County of Boulder open space, 936 acres of the City and County of Denver open space and 3,080 acres of Westminster open space.



Source: Seth Beres/USFWS

Two Ponds National Wildlife Refuge is an important open space resource located within Arvada city limits and managed by the US Fish and Wildlife Service. Two Ponds is the smallest urban unit in the Refuge System and originated as a community-led conservation project.



Source: City of Arvada

Nearby Jefferson County open spaces provide Arvada residents gateways to the Rocky Mountains.

OPEN SPACE SUITABILITY METHODOLOGY

Open space serves a dual purpose in Arvada by maintaining and preserving environmentally important lands and providing valuable opportunities for community interactions with nature. Input from the public, experts and key stakeholders established the criteria used to determine environmental quality and community interactions. Criteria important to maintaining and preserving environmental elements important to Arvada and the region, includes:

- Wildlife
- Landcover
- Natural hazards,

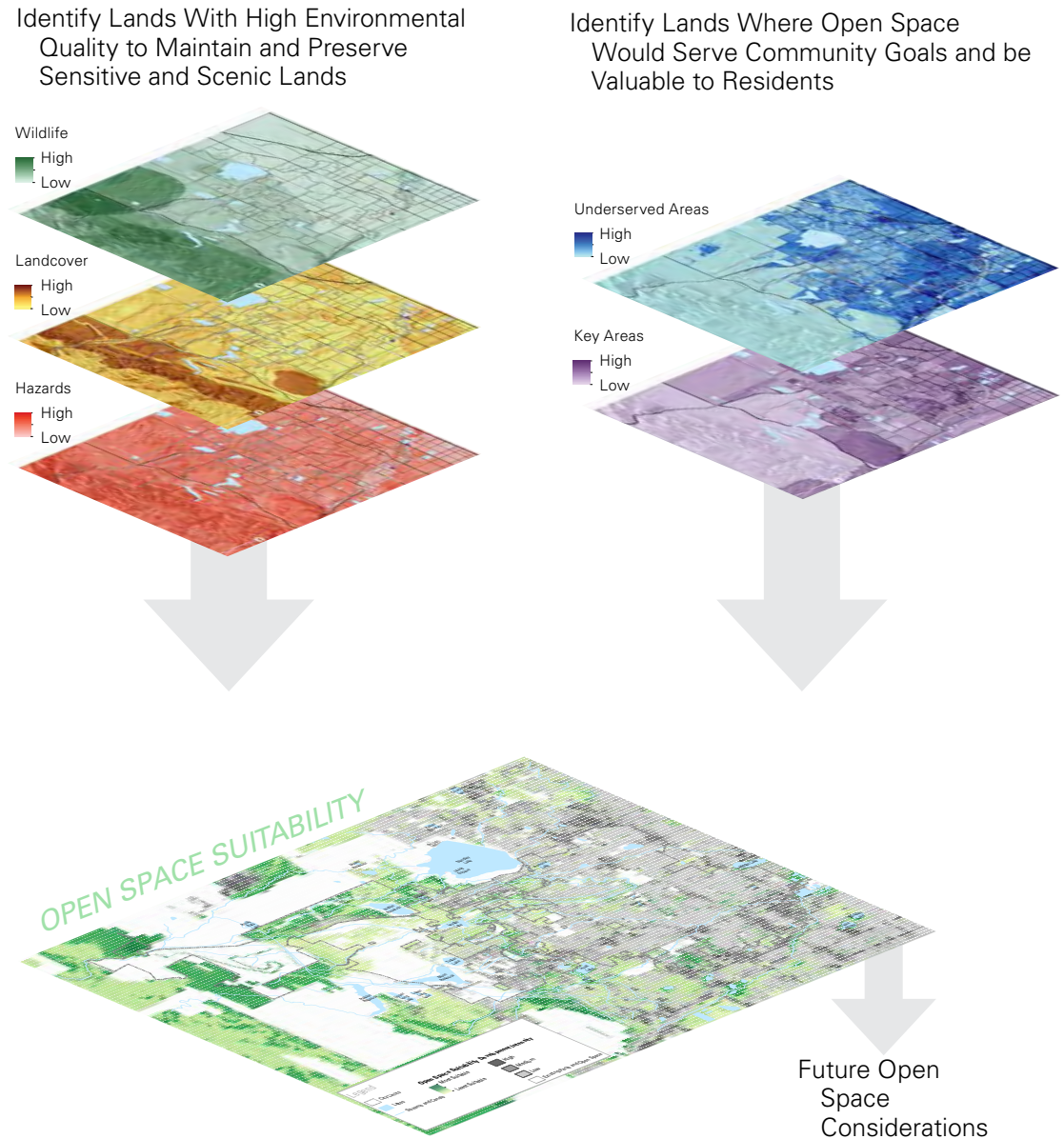
Criteria important to community elements includes:

- Underserved areas
- Key areas (See Table 13)
- Views

A database of these important criteria was built using Geographic Information (GIS) data from various sources. Each input criteria was ranked from high to low based on relative importance. These criteria were overlaid and areas containing more favorable conditions resulted in higher values. The analysis maps were combined to create a composite open space suitability map (Map 36).

This methodology, shown in Figure 33, provides a framework for prioritization and decision making for future open space acquisitions. The overall suitability analysis will be considered along with development pressures to identify key park, trail and open space linkages in advance of future growth pressures.

Figure 17: Open Space Suitability Analysis Process Diagram





Native Colorado Columbine



Elk



Peregrine Falcon



Riparian Corridors

Open space suitability analysis looks at wildlife value, land cover, environmental hazards, underserved communities and lands of high scenic value. Source: City of Arvada-all photos.

ENVIRONMENTAL QUALITY

Identifying lands with high environmental quality was the first step in the open space suitability analysis. Important criteria to environmental quality includes wildlife habitat, land cover and natural hazards. Wildlife habitat data was ranked from high to low and overlaid to identify lands critical to the success of wildlife populations. Landcover data (the physical materials-asphalt, trees, water-on the earth's surface) was analyzed to identify high quality environmental lands in Arvada. Lastly, natural hazard data was analyzed to determine lands that are environmentally sensitive and also carry a risk to human health, safety and welfare. Compiling the wildlife, landcover and hazards analyses identified lands with the highest environmental quality.

WILDLIFE HABITAT

The wildlife habitat criteria includes those species present in Arvada as defined by the Colorado Division of Wildlife (See Table 11). The highest ranking was assigned to species and habitat types based on input from experts within the Division of Wildlife. Areas along the foothills and the riparian corridors have the highest value while areas toward east Arvada had the least value.

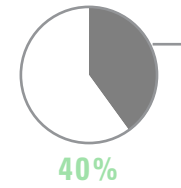
LAND CHARACTERISTICS AND LAND COVER

Land characteristics and landcover criteria includes hydrology, vegetated landcover and scenic quality data. Rankings were established by compiling expert advice from the Division of Wildlife, stakeholder input and public input from the community survey. Public input informed the scenic quality rankings for the landcover analysis. Mountain backdrops, streams and reservoirs have the highest value.

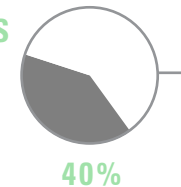
HAZARDOUS AREAS

Natural hazard criteria includes areas that have the potential to pose significant risks to human health, safety and welfare including flooding, landslides, steep slopes, wildfires and earthquakes. Ranking of these sensitive lands were verified using input from experts at the Division of Wildlife and stakeholder input. Areas identified as having the highest risks included the steep, vegetated slopes of the foothills where wildfire and landslide risks were present. Equally high areas of risk included lands adjacent to stream corridors where flooding can have devastating consequences.

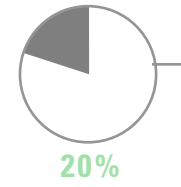
WILDLIFE



LAND CHARACTERISTICS



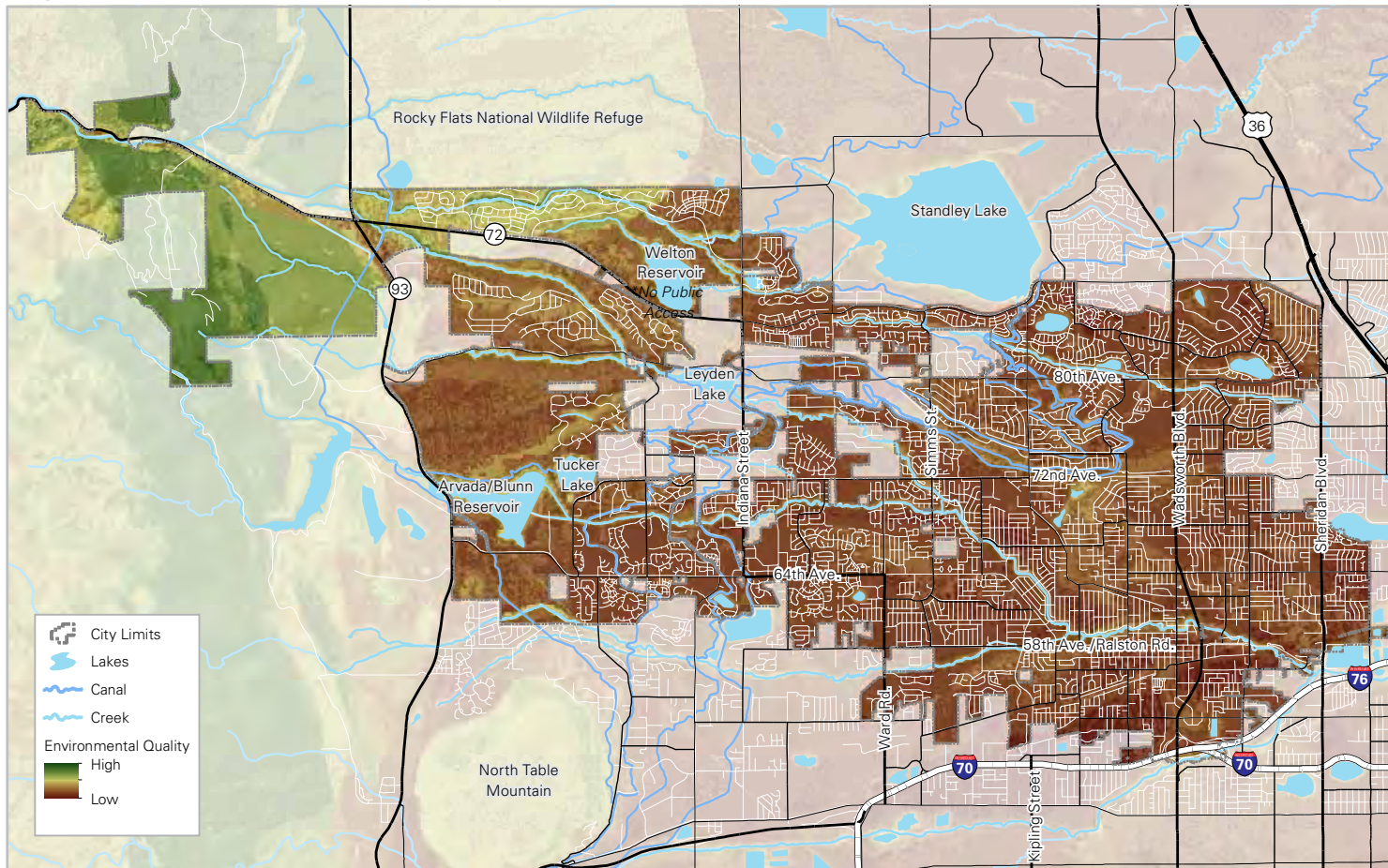
NATURAL HAZARDS



MAP

Table 12: Overall Environmental Quality Composite Map Inputs. Percentages represent how the data was ranked in order to assign a relative importance value to each set of criteria. Those sets with a higher percentage were valued more importantly than sets with lower percentages. See Appendix page 9 for list of inputs and rankings for wildlife, land characteristics and natural hazards.

Map 16: Overall Environmental Quality Composite



OVERALL ENVIRONMENTAL QUALITY

The composite of all environmental quality input layers identifies lands that are important to preserve and maintain. The Front Range foothills are a clear target for preservation due to the quality of the habitat these lands offer, the scenic mountain backdrop and the elevated risks of wildfire and landslides present on steeper slopes. The streams, canals, North Table Mountain and the transition zone between the grasslands and foothill ecosystems are also quality areas for active preservation and acquisition. The City of Arvada, Jefferson County and various other city, county and federal entities have done a commendable job preserving much of these valuable lands. Examples of large areas of land that have been preserved, outside Arvada city limits, where high environmental quality has been identified include North Table Mountain Park, White Ranch Park and Rocky Flats National Wildlife Refuge.



Data Sources: Colorado View, City of Arvada, National Land Cover Database, Colorado Parks and Wildlife, Colorado Natural Heritage Program, Jefferson County, City of Westminster



The map reflects the most recent land cover data available from the National Land Cover Database (2011), which does not accurately reflect landcover conditions resulting from the more recent development in northwest Arvada (i.e., Candelas, Leyden Rock).

COMMUNITY VALUE

Identifying lands where open space would serve community goals and be valuable to the residents was the second step in the open space suitability analysis. Important criteria to community value includes underserved areas and key areas. Underserved areas, or areas not in close proximity to open space, were identified and ranked from high to low. Criteria was overlaid to identify lands where additional access to open space would connect more residents to open space and serve a large number of residents. Key areas were also identified and ranked from high to low. Criteria was overlaid to identify lands that could provide densely populated and ethnically diverse areas access to open space and preserve highly visible lands to retain a feeling of open space. Compiling underserved areas and key areas identified lands where open space would serve the greatest community value.

UNDERSERVED AREAS

Underserved areas criteria included open space gaps and urban areas. Open space gaps determined using ESRI's network analysis tool showed areas of the city that have no access to open space within one mile, one to three miles or three to five miles and these distance increments were ranked from low to high. Intensity of development was identified using National Land Cover Database data from 2011, which this plan acknowledges is significantly out of date with current conditions in northwest Arvada. More intensely developed areas were ranked high while less intensely developed areas were ranked low. The resulting overlay analysis identified areas in the more urban southeast portion of Arvada as having a higher need for open space offerings than areas on the western portion of Arvada.

KEY AREAS

Input from stakeholders and the public helped identify key areas, which include residential population centers, target demographic centers and locations of high visibility. The City of Arvada's Land Use Plan was used to identify residential population centers and the data was ranked from high to low based on residential population density. Target demographics criteria included minority populations, lower income populations and youth and these criteria were ranked from high to low. The locations of high visibility in this analysis identified areas often seen in the community where preservation of open spaces would create a feeling of open space and add to the scenic quality of Arvada. The resulting key areas analysis identified dense and diverse residential portions of southeast and central Arvada and highly visible corridors as having a higher need for open space.

UNDERSERVED AREAS



50%

KEY AREAS

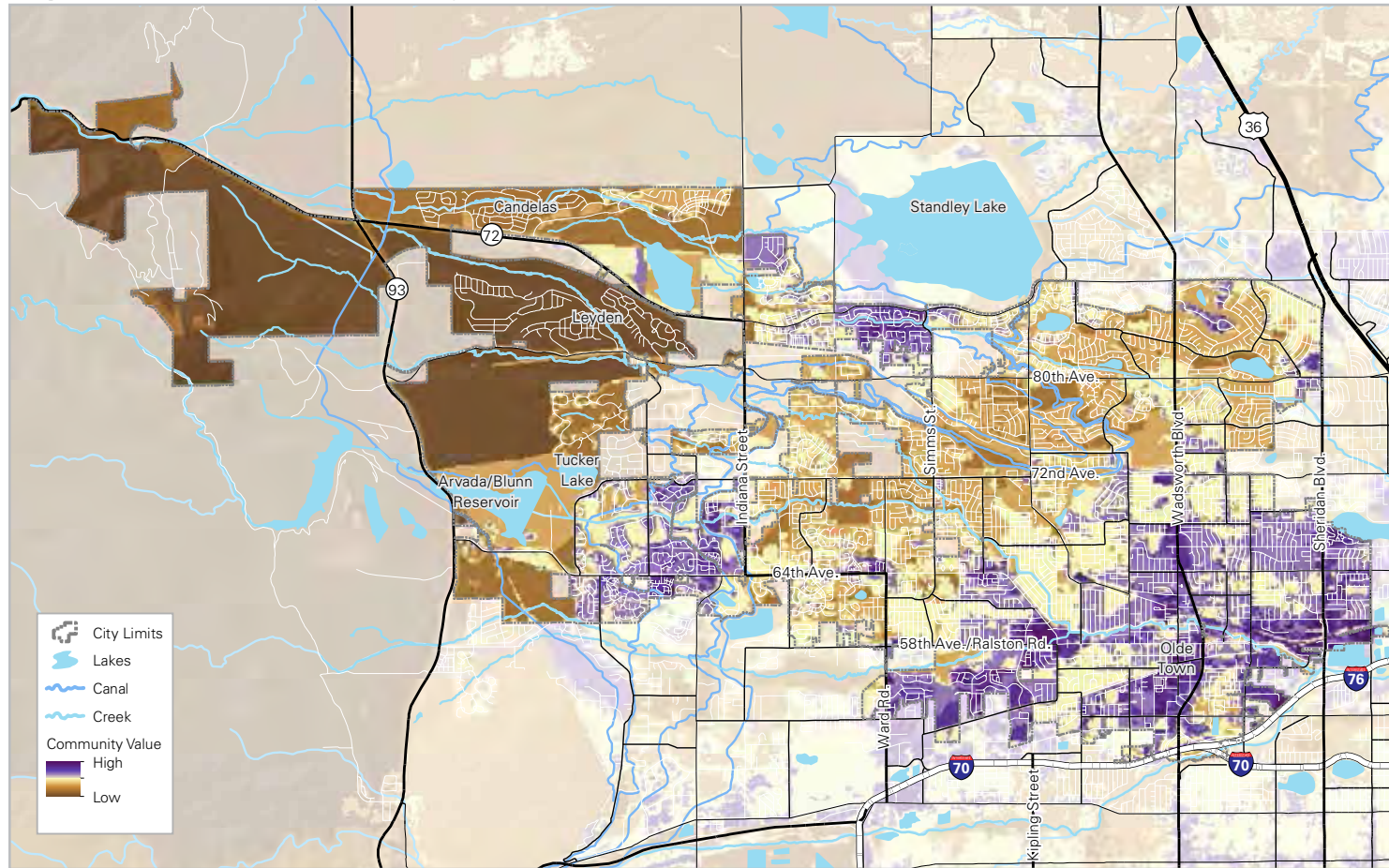


50%

MAP

Table 13: Overall Community Value Composite Map Inputs
Percentages represent how the data was ranked in order to assign a relative importance value to each set of criteria. Those sets with a higher percentage were valued more importantly than sets with lower percentages. See Appendix page 9 for list of inputs and rankings for underserved areas and key areas.

Map 17: Overall Community Value Composite



OVERALL COMMUNITY VALUE

The composite of all community value input layers identifies lands where the need for open space is greatest and open space acquisitions would be a valuable community addition. Lands in central Arvada, north of the Interstates and between Ward Road and Sheridan Boulevard are a target for future open space acquisitions because these areas are currently underserved and have diverse residential concentrations. In these areas, open space acquisitions will be difficult because much of this land has already been developed. Reuse of industrial sites, brownfields and vacant lots will need to be explored in order to serve these areas in the city. Notable challenges for future acquisitions include accompanying need for restoration and revegetation and associated costs of previously developed sites.



Data Sources: Colorado View, City of Arvada, US Census Bureau, Jefferson County, City of Westminster



The map reflects the most recent land cover data available from the National Land Cover Database (2011), which does not accurately reflect landcover conditions resulting from the more recent development in northwest Arvada (i.e., Candelas, Leyden Rock).

OVERALL OPEN SPACE SUITABILITY

The overall environmental quality and community value analyses were combined to produce a composite open space suitability analysis for Arvada. Open space acquisitions in southeast Arvada would serve the greatest number of residents, provide open space for key demographics and further wildlife connections between the foothills to the west and the plains to the east. Continued open space conservation in western portions of Arvada would preserve additional habitat and native landscapes.

DEVELOPMENT CONSIDERATIONS

Existing development is an important limiting factor for future open space acquisitions. Many areas suitable for open space have already been conserved particularly in west Arvada and around water bodies such as Oberon Lakes. However, fewer open spaces have been preserved in southeastern portions of Arvada. This area also has fewer undeveloped areas left for open space as this is where the highest intensity development is located. Small pockets of highly suitable land (having all or combination of high environmental quality, scenic qualities and or high community value) for open space do exist and it will be important to assess lands transitioning uses for their open space suitability moving forward.

COLORADO NATURAL HERITAGE PROGRAM

The Colorado Natural Heritage Program is a comprehensive resource for information and locations of Colorado's rarest and most threatened species and plant communities. CNHP tracks and ranks Colorado's rare and imperiled species and habitat and provides scientific information and expertise to promote the conservation of Colorado's wealth of biological resources. Established in 1979, the CNHP is a non-profit scientific organization affiliated with the Warner College of Natural Resources at Colorado State University.¹

¹ Colorado Natural Heritage Program website, <http://www.cnhp.colostate.edu/>, assessed 2/12/16.

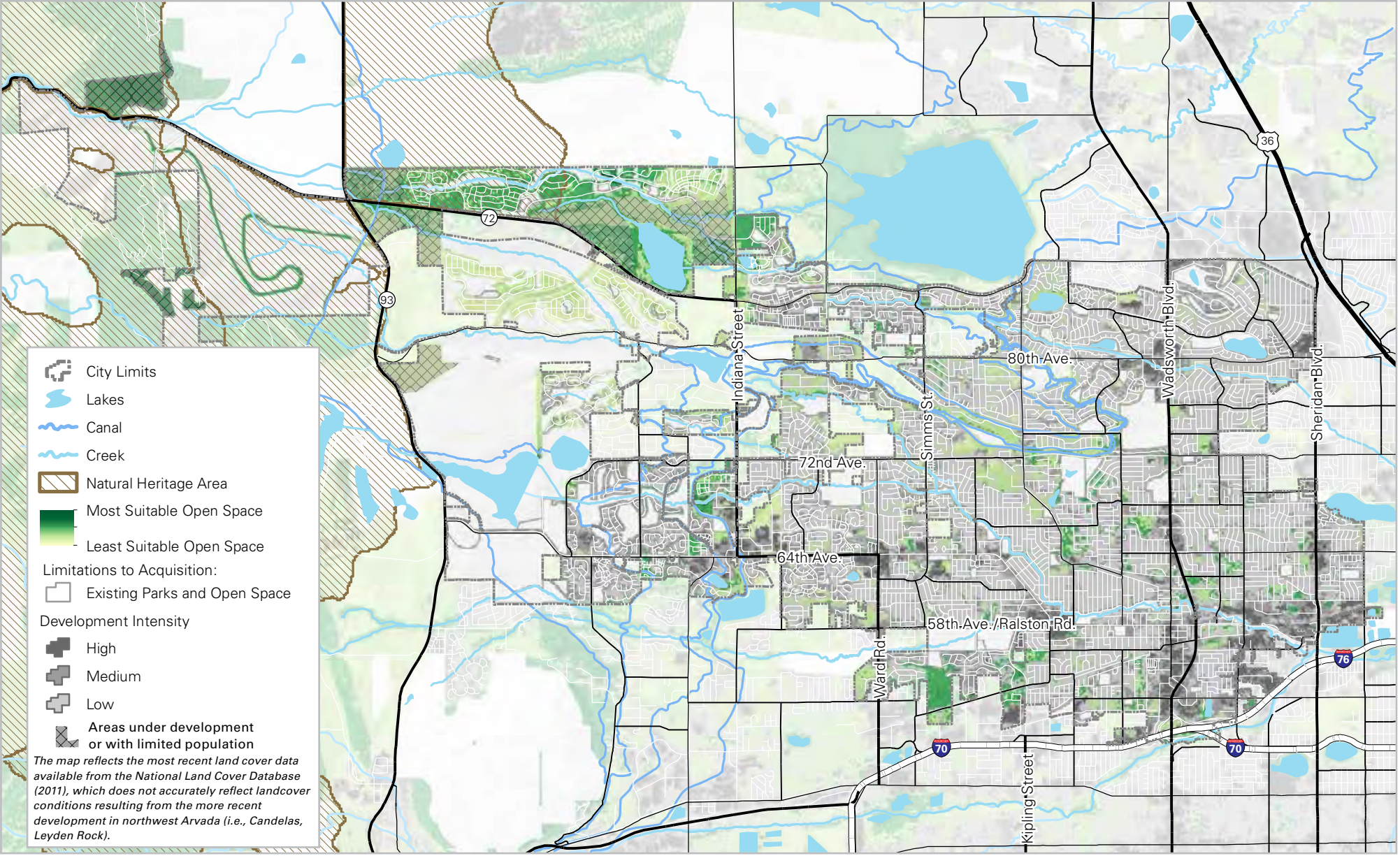


Two Ponds National Wildlife Refuge—originally slated for residential development—protects natural wetland landscapes of cattails and willows.



Western areas of Arvada open space are typically large swaths of land, connected to neighboring open space

Map 18: OVERALL OPEN SPACE SUITABILITY. This map shows both areas that have high environmental quality and/or high community value as open space.



KEY FINDINGS AND BENCHMARKS

NATURE

Arvada offers residents a high amount of open space per population considering acres of open space preserved in the selected benchmark cities. However, without future acquisitions or partnerships this benchmark will decline as population grows.

The City of Arvada along with Jefferson County and neighboring municipalities have made significant strides in acquiring and conserving valuable open space lands that will continue the legacy for these communities. It is important to be aware of these nearby open space areas, like Clear Creek, when considering future open space acquisition in Arvada in order to improve linkages within the regional ecosystem.

Key findings for nature include:

- Arvada's open space and natural areas include several different types that will require different levels of maintenance and stewardship:
 - Western Open Space that includes large, connected swaths of natural areas
 - Narrower Corridors and Pockets around residential/commercial development
 - Drainage Corridors
- Areas in the west and around water bodies are well conserved.
- Small pockets of suitable land do exist in more developed areas of Arvada.
- As explored further in the implementation chapter, maintenance and stewardship of Arvada's large and well-used open spaces will require additional staffing and have policy implications.

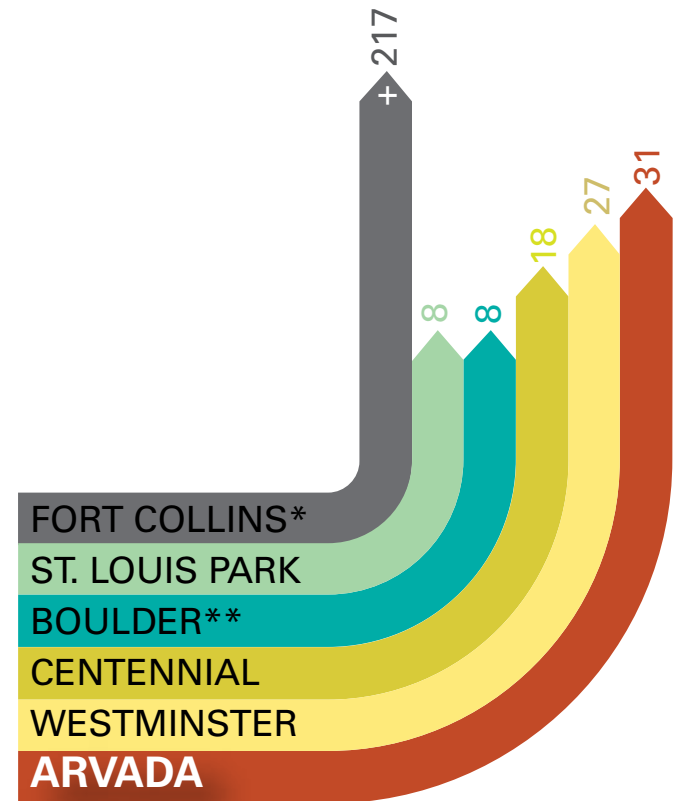


Figure 18: Benchmark acres of Open Space per 1,000 Population

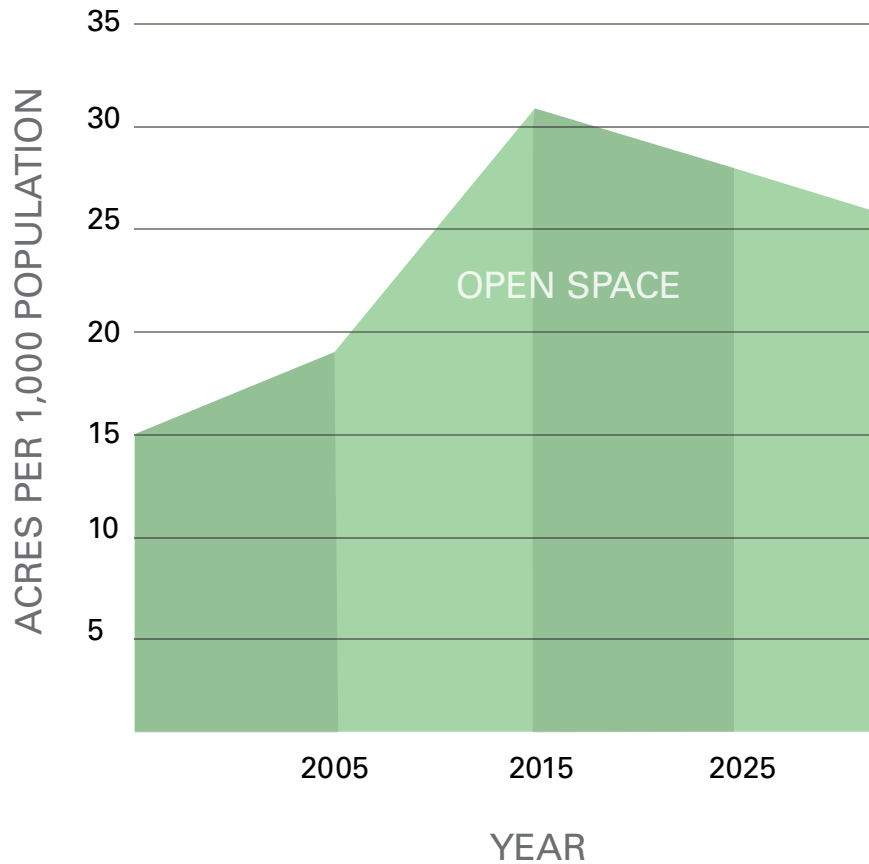
Note: Benchmark data is for acres of open space owned/managed by city.

* Fort Collins has a separate Natural Areas Department, which manages surrounding open spaces that. In other cities, this resource is typically managed outside the municipal system.

**For example, the City of Boulder ranks somewhat low, but the surrounding open space is managed by entities like the County of Boulder.

Benchmark Sources: (2014) Eppley Institute for Parks and Public Lands Boulder Supplemental Benchmark Report, (2015) Arvada Inventory, (2010) St. Louis Park Comprehensive Plan

Figure 19: Benchmark acres of Arvada open space forecasted over time



Source: Arvada Inventory and 2014 Comprehensive Plan Population Projections



Arvada's partnership with Jefferson County has added significant areas of open space to Arvada since 2001.



Jefferson County Open Space recommendations emphasize achieving a balance between preservation of open space and parklands, protection of natural and park resources and providing for healthy nature based experiences

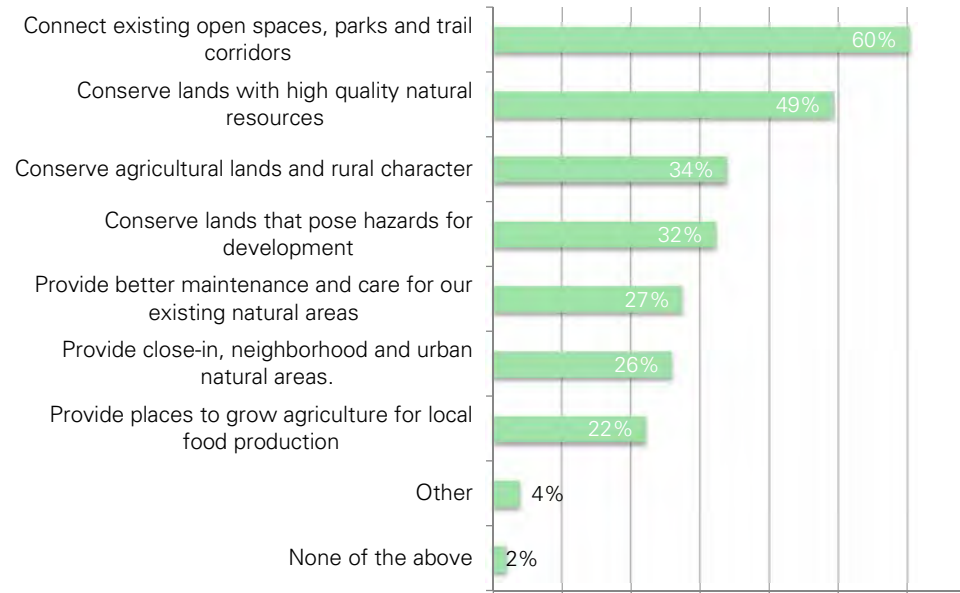
COMMUNITY DESIRES

ARVADA PUBLIC INPUT: NATURE

Public input, gathered through an online survey and community workshop, provided insight on the most important reasons to acquire and conserve open space lands, the top results of which include:

- Protect scenic views
- Mountain backdrops, streams and reservoirs are Arvada’s scenic resources with the highest value
- Connect existing open spaces, parks and trail corridors
- Provide equal access to open space for all residents
- Expand existing stewardship and sustainability practices throughout the parks, trails and open space system

Figure 20: What should be the City’s open space priorities?



Source: Public Meeting Survey and Online Survey Results

SEE APPENDIX

for a full report on all stakeholder engagement results



Source: City of Arvada

Protect Scenic Views



Source: City of Arvada

Provide Views to Mountains and Water



Source: Seth Beres/USFWS

Connect Existing Open Spaces, Parks and Trails



Source: City of Arvada

Provide Equal Access

RECOMMENDATIONS



FORMAT

RECOMMENDATIONS

Numbered 1-3, these are the overarching recommendations for the theme and reflect, at the most general level, the community's aspirations for the master plan improvements.

» Action Steps

These steps provide more detailed tasks to help achieve recommendations.

Supporting Content

Includes criteria and exhibits, organized by recommendation (1-3), and provides descriptions, maps, tables and character images to help describe the recommendation vision, prioritization, standards and criteria.

Implementation Chapter: This chapter is located at the end of the master plan and provides overarching recommendations that impact all themes for policy, staffing and maintenance.

NATURE

1. ACQUIRE LANDS FOR OPEN SPACE CONSERVATION

- » Conserve lands that have high ecological quality, community value and scenic value.
- » Assess suburban and urban open space conservation potential and acquire critical land that will fill open space gaps in underserved areas or along potential open space corridors.

2. CONNECT REGIONAL OPEN SPACE

- » Preserve lands that reduce fragmentation within Arvada's open space system and add additional points of access to regional systems in strategic locations.

3. AUGMENT SUSTAINABILITY AND STEWARDSHIP MEASURES WITHIN MAINTENANCE STANDARDS

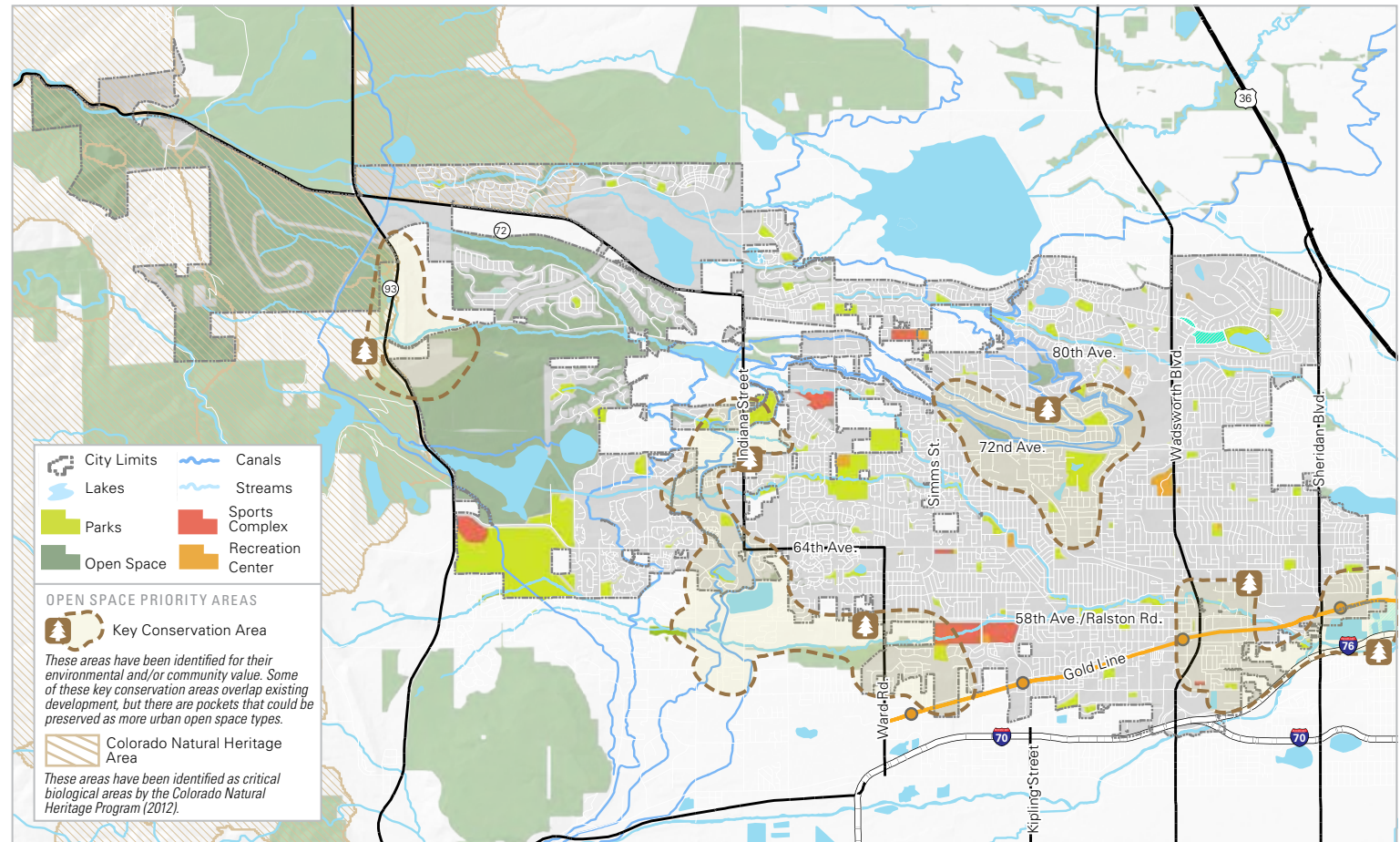
- » Refine stewardship practices for open space, natural areas and degraded lands in maintenance standards and adopt a formal open space stewardship plan.
- » Augment "green" infrastructure practices (i.e., street trees, stormwater gardens) in maintenance standards to increase ecosystem services, or benefits, and improve how City parks, trails and open spaces function.

1 ACQUIRE LANDS FOR OPEN SPACE CONSERVATION

Conserve Lands

The areas highlighted in brown are generalized, potential areas to seek conservation of open space based on ecological quality, community value and scenic value. These areas support the community's value on protecting open space that provides mountain views, access to water resources and are located throughout a variety of neighborhoods in Arvada-providing equitable distribution to as much open space as possible.

Map 19: Open Space Priority Areas- Conservation Areas



CITY OF ARVADA DESIGNWORKSHOP

Data Sources: Colorado View, City of Arvada, Colorado Natural Heritage Program, Jefferson County, City of Westminster



SEE IMPLEMENTATION

For a detailed table of identified priority open space acquisition areas

Assess Suburban and Urban Open Space Conservation Potential

Consider expanding urban open space by incorporating park preserves, natural preserves, native areas and green infrastructure into the open space system.

Acquire urban lands to strengthen connections and provide accessible open space system to denser areas of Arvada. Consider acquisition of transitional industrial lands, school yards, riparian corridor/canal connections, municipally owned vacant space or land adjacent to city border or potentially privately held land. For example, conserving the Clear Creek corridor southern edge has possible partnerships with Denver and Wheat Ridge.



Image: Design Workshop

POTENTIAL OPEN SPACE CONSERVATION AREA

This image is a bird's eye view of confluence of Clear Creek and Ralston Creek at Arvada's southeast city limit. The Square Lakes area is a prime example of potential Green Spines open space and/or trail right of way as it is a primary gateway to the city and is adjacent to important waterways, historic Gold Strike Park, a commuter rail transit station at 60th and Sheridan and existing primary and regional trails. Additionally the area is within the Clear Creek floodplain, limiting commercial development opportunities.



Image: Jeffrey Beall

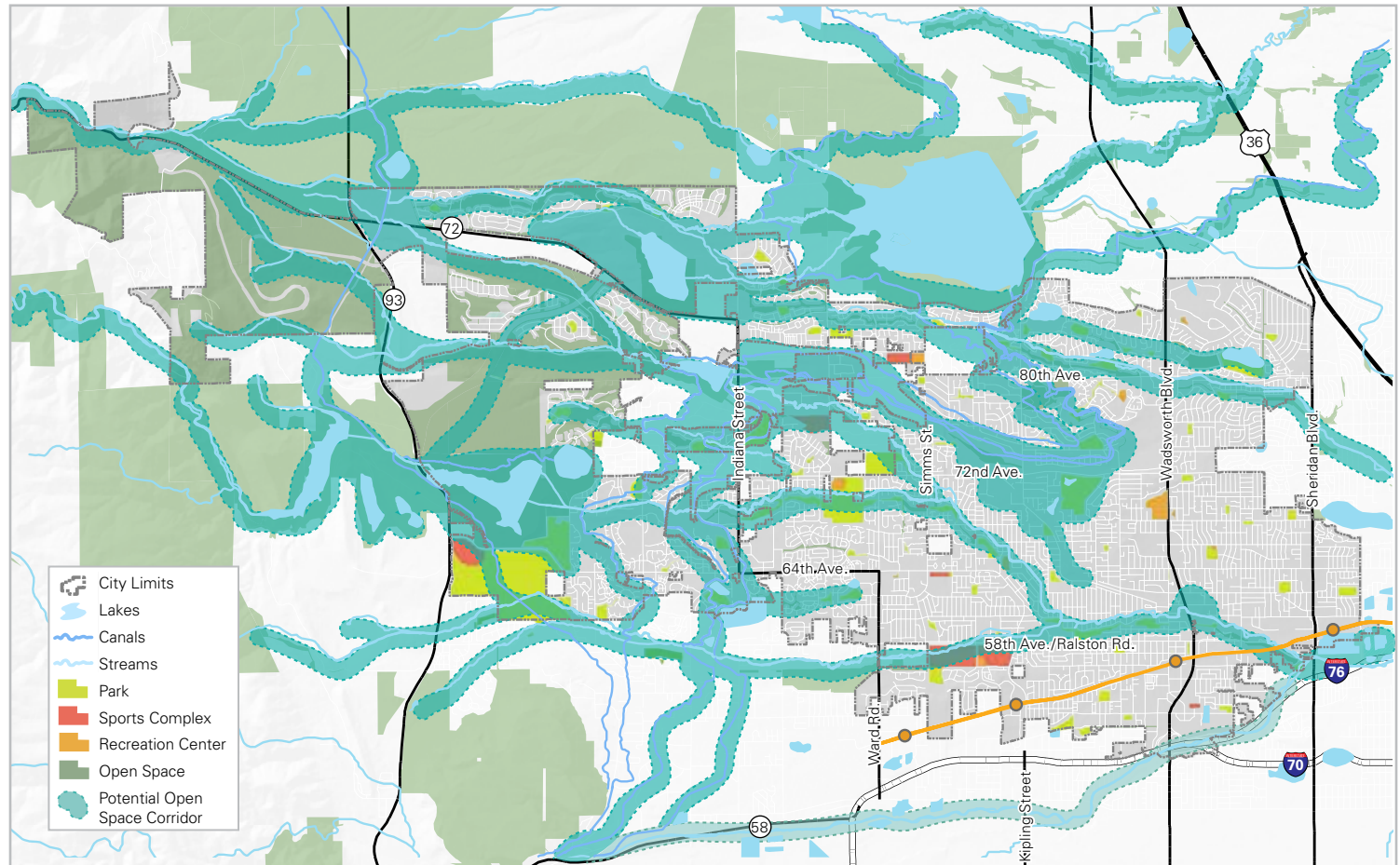
2 CONNECT REGIONAL OPEN SPACE

Preserve lands that reduce fragmentation within the Front Range open space system and provide open space access to areas that connect to regional systems and trails.

Acquire land within existing flood plains to preserve land that ties into larger, regional watershed (i.e., Clear Creek).

Comprehensively measure quality and quantity of open spaces and trails. Use GIS technology to track status over time to better understand corridor and potential for improving the health or quality open space and wildlife corridors.

Map 20: Important Wildlife Corridors and Open Space Connections



CITY OF ARVADA DESIGNWORKSHOP
Data Sources: Colorado View, City of Arvada, Jefferson County Open Space, City of Westminster



3 AUGMENT SUSTAINABILITY AND STEWARDSHIP MEASURES WITHIN MAINTENANCE STANDARDS

This recommendation includes refining stewardship standards for open space, the park system's 30,000 trees, natural areas, restoration efforts, noxious weed control and trail maintenance. Majestic View Nature Center will be key to launching many of these strategies.

"Green" infrastructure practices will be augmented to increase ecosystem service and improve how City parks, trails and open space function. Strategies include:

- Promoting current and future recycling, composting, water conservation, energy use reduction and use of sustainable materials.
- Working with Maintenance Division and Sustainability Committee to provide public awareness of maintenance practices (i.e., infrequent mowing in natural areas).
- Continuing to use stormwater Best Management Practices (BMPs) and pursue interactive stormwater park features.
- "Returning to the creek" by acquiring aging development parcels (especially along Ralston Creek as they become available) that covered or confined creeks to optimize home building sites. Opportunities for this type of acquisition abound along Little Dry Creek where flood plain areas have been left to recover over time. These efforts would need concurrent public outreach and environmental education.

SEE IMPLEMENTATION

For a detailed table of open space classifications and management guidelines



Thousands of street and park trees in Arvada impart important ecosystem services including providing shade, stormwater mitigation and bird habitat.

MAINTENANCE STANDARDS

Maintenance standards are requirements put in place to keep the park system maintained at a consistent and high level of quality. These standards are published documents the Parks, Golf and Hospitality Maintenance Division uses and already include performance measures for park system amenities (i.e., soft trail repairs, irrigation water use to maintain turf) crafted as part of the Focus Arvada Strategic Results.

STEWARDSHIP PLAN

Land Stewardship involves responsible planning and management to conserve and preserve the quality of natural resources in Arvada's open space for future generations. A stewardship plan is a long term management plan for open space including natural areas and trails. The plan includes tools to help make land management decisions, identify responsible parties, determine needed resources and plan for future capital improvements.

ECOSYSTEM SERVICES

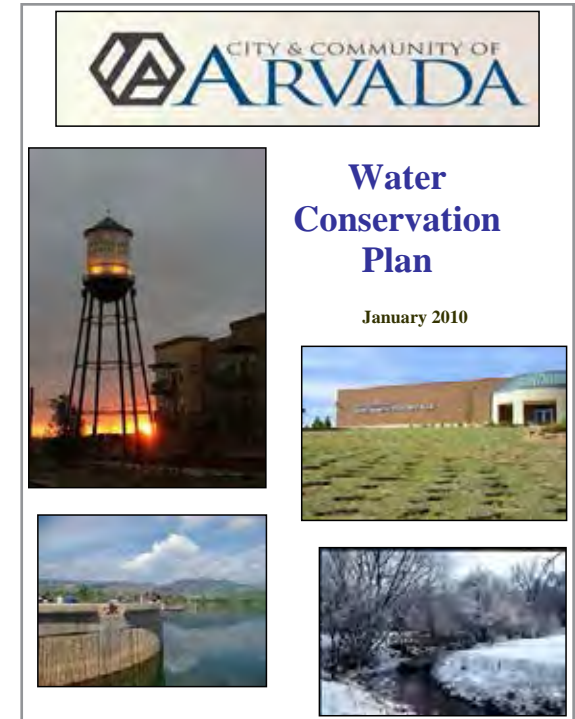
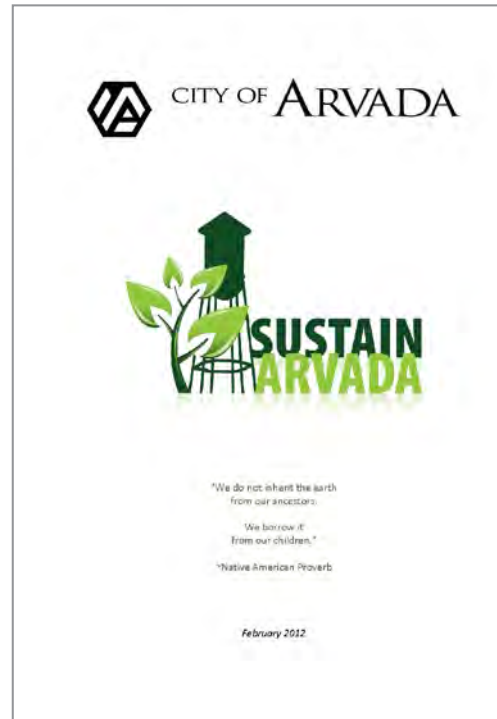
The benefits people obtain from healthy ecosystems (i.e., a street tree provides shade, storm water treatment, reduction in heat island effect and oxygen production).

Arvada's Existing Sustainability Measures

In determining appropriate sustainability recommendations for the Park System Master Plan, the planning team carefully reviewed the Sustain Arvada Plan and Water Conservation Plan. Sustain Arvada is an effort to formalize the city's goals and practices around sustainability to add value and protect resources for the community.

- The Sustain Arvada plan has six performance measurement categories: community vitality, energy, land use, transportation, waste and water.
- Specific performance measures and goals that relate to the Park System Master Plan include:
 - Add four new affordable community food assets in underserved areas by 2019
 - Achieve Utilities percent water use reduction by the community on a per capita basis (referenced Water Conservation Plan)
 - Provide more opportunities for residents to volunteer on local, enriching projects
 - Encourage community based agriculture
 - Ensure walkable recreation adjacent to accessible housing
 - Improve air quality (street trees/urban forest)
 - Active Living Performance Measures
 - Sustain Arvada and the 2010 Water Conservation Plan support water conservation outreach including the xeriscape demonstration gardens and classes at Majestic View Nature Center.

The Park System Master Plan proposes additional performance measures (see page 123) including recycling containers that are not addressed in the current Sustain Arvada and Water Conservation Plan efforts.



Example Sustainability and Stewardship Measures



Public Awareness of Open Space Management



Recycling



Storm Water Best Management Practices: Rain gardens that slow down and filter storm water with landscape.



Sources: Unless noted, City of Arvada and Design Workshop

Natural Areas



Open Space Stewardship Plan



Source: Nature80020

Noxious Weed Control

Open Space Classifications

The 2001 Master Plan included three open space classifications: park preserves, natural areas and special resource areas (see Table 14). New open space categories are needed to address conservation and land management needs along a spectrum of rural to urban opportunities in Arvada. Within the existing open space classifications, this plan has identified different qualities of open space that warrant a fresh look at how they are managed. The Master Plan recommends a further open space stewardship plan effort be conducted to help assess Arvada’s open space and determine specific management goals and priorities for spaces (see Table 15).

Table 14: Existing Open Space Classifications and Management Guidelines

EXISTING OPEN SPACE CLASSIFICATIONS		
ACREAGE	PURPOSE AND FUNCTION	MANAGEMENT GUIDELINES
Park Preserve		
100 acres or greater	Provides opportunities for nature-oriented, outdoor recreation. The Arvada Blunn Reservoir and Tucker Lake are examples of this type of space, which is often managed by multiple entities including Jefferson County and Arvada Utilities Department.	Emphasis is on achieving an appropriate balance between resource protection and public use. Noxious weed control, overuse as evidenced by social trails and erosion are types of management challenges for Park Preserves.
Natural Areas		
Size Varies	Conserves natural values on parcels smaller than the park preserves. May provide opportunities for nature-oriented, outdoor recreation, including trails.	Emphasis is on resource protection with public access only allowed in locations that potential detriment to the natural environment is insignificant. Limited site area may be dedicated to park-like uses, including roads, parking, trails, environmental education/interpretive areas, picnic sites and visitor support facilities.
Special Resource Areas		
Size Varies	Protects areas with important natural, cultural and other community values. These may include areas of significant vegetation, important and sensitive habitat, scenic areas or areas that contribute to the urban shaping and buffering goals of the community.	Emphasis is on protection of the values that qualify the area for designation as a special resource area. Where detrimental to the protected resources, public access will not be provided and no facilities will be developed. If public access is not desirable or needed, conservation easements may be a suitable preservation tool.

Sources for Table 14 and Table 15 include Arvada Parks, Trails and Open Space Master Plan (2001); Ted Trzyna et al., Urban Protected Areas: Profiles and Best Practice Guidelines (2014); City of Westminster, Studio CPG and ERO Resources Corporation, Westminster 2014 Open Space Stewardship Plan (2014); and discussions with City staff, Steering Committee and Technical Team (2015-16).

Table 15: Additional Open Space Classifications and Management Guidelines suggested by this Master Plan

ADDITIONAL OPEN SPACE CLASSIFICATIONS		
ACREAGE	PURPOSE AND FUNCTION	MANAGEMENT GUIDELINES
Sensitive Open Space		
Size Varies	These types of open spaces help maintain healthy populations of native flora and fauna at a local and regional scale (i.e., habitats of threatened and endangered species, wetlands, wildlife corridors). These lands might also contain historic or cultural resources that require the greatest care to protect them from disturbance.	This open space type is the most restrictive to public access. Additional management strategies can include closing of social trails and adding regulation and educational signage. These lands require specialized environmental care and monitoring.
Urban Open Space		
Size varies. Small spaces with low ecological importance are valuable if they serve an unmet need of providing convenient access to nature experiences.	Provides the opportunity for contact with the natural world in urban areas with medium to high population density or dense development. Urban open spaces are different from traditional parks in that their emphasis is on nature and human interaction rather than a recreation purpose. May include nature play areas, learning landscapes, native plant gardens, pollinator habitat gardens, restorative/healing gardens, nature-based activities (i.e., fishing ponds).	Urban open space management guidelines should promote public access and interaction, provide volunteer opportunities, offer clear communication of regulations, provide educational opportunities that demonstrate open space environmental value, and establish standards for noxious weed control. Additional management strategies can include controlling erosion, enforcing natural landscape standards and providing formalized trails.
Functional Landscape Areas		
Size Varies	These types of open spaces include functional landscapes that serve as dams, drainage areas, ditches and right-of-way landscape strips. Includes green infrastructure networks that manage and or treat storm water (i.e., rain gardens, green roofs, urban tree canopy, permeable pavements, bioswales, green streets and alleys, green parking)	Physical appearance of these spaces is important as residents pass by rather than through these areas. Specific maintenance guidelines and best management practices vary by type (i.e., green roofs are managed differently than ditch). May include recreation opportunities, such as trails, when potential safety issues are addressed.
Restoration Area		
Size Varies	These open spaces are limited to public access on a temporary basis for restoration purpose.	Management guidelines include restoration measures, educational signage, and possible stewardship or volunteer activities.
Corridor Open Space		
Size Varies	A linear open space intended for conservation of riparian areas, wildlife movement corridors, and/or nature trails.	These corridors often connect such as park preserve or natural area open spaces.



Source: City of Arvada



Image (left) shows Arvada/Blunn Reservoir Open Space, which at over 1,000 acres is considered a traditional Park Preserve. Image (right) shows canal functional landscape areas and Ralston Creek corridor open space near Indiana Street and 64th Street. These additional types of open space classifications (see Table 15) can help define management and guidelines for non-traditional types of open space in urbanizing areas.

BASELINES AND PERFORMANCE MEASURES



FORMAT

BASELINE

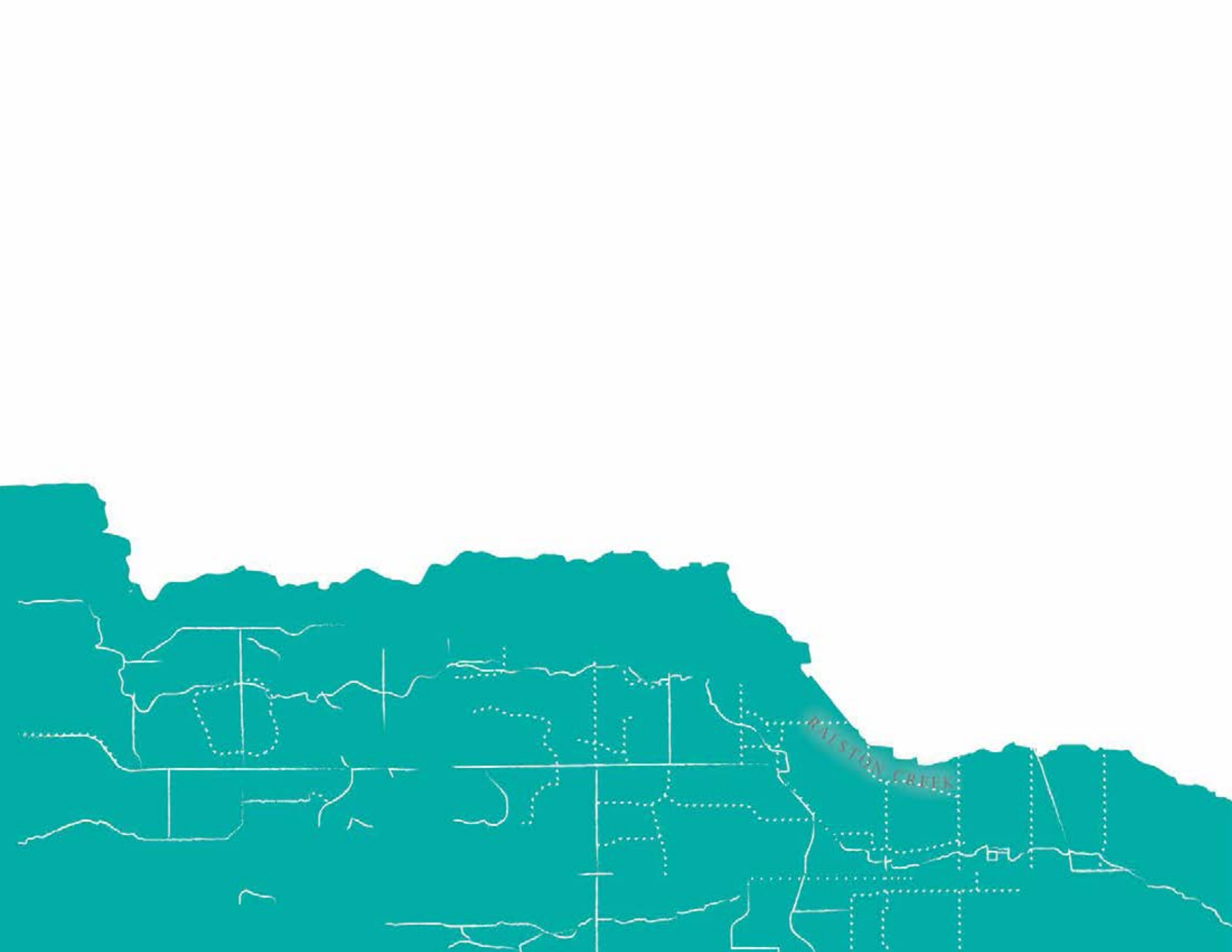
- A minimum or starting point used for comparisons and projections.

PERFORMANCE MEASURE

- ✓ A regular measurement of outcomes and results, which generates reliable data on the effectiveness and efficiency of programs. Performance measures are used to track goals by setting a vision, baselines, targets, and methods for measuring different topic areas related to the goals of the plan.

NATURE

- *BASELINE: Currently parks do not offer recycling containers.*
- ✓ By 2025, all parks will have recycling containers.
- *BASELINE: All new parks are required to include a portion of land dedicated to natural areas.*
- ✓ By 2025, all new non-urban parks to include 15 percent natural area (and accompanying public education) either interior to the park or be located adjacent to existing open space (unless along a drainage way where no less than 50 percent is preserved or restored to a natural condition).
- ✓ By 2017, all new urban park type design criteria shall include requirement to use native or adapted landscape materials and when possible, provide views to mountains, water or provide wayfinding to connect active transportation-user to trail or open space Green Spine.
- *BASELINE: Currently, Arvada provides 31 acres of open space per 1,000 population.*
- ✓ By 2025 and with increase in population, continue to provide 31 acres of open space per 1,000 population. This would mean adding an additional 500 acres of open space by 2025 to provide 31 acres of open space per 1000 for 128,848 projected population. Partnerships with organizations like Jefferson County Open Space and increasing funding sources (see Implementation chapter) will be critical to achieving this goal.
- *BASELINE: Efforts are underway to assess open space by the Parks, Golf and Hospitality Department.*
- ✓ By 2018, complete an Open Space Stewardship Plan similar to the 2014 City of Westminster's effort.
- ✓ By December 30, 2017 the maintenance division will have completed 100 percent of the ARGIS asset management inventory.
- ✓ By December 30, 2017, there will be a plan in place to appropriately staff maintenance based on benchmark staffing levels.
- ✓ By December 30, 2017, combine open space and forestry as a new Division outside of Maintenance Division.



IMPLEMENTATION



RECOMMENDATIONS

IMPLEMENTATION INTRODUCTION

Many of the recommendations within the Master Plan direct city staff, government officials, and partners to make approach and priority changes. The implementation section provides explanation of existing funding sources, a listing of near-term priority capital projects, and recommendations to address current issues through the creation/ modification of policies, staffing changes, and approach to maintenance.

IMPLEMENTATION

1. EXPLORE ADDITIONAL FUNDING OPPORTUNITIES

- » Develop new funding sources to ensure money is available for accomplishing the big ideas contained in the Master Plan.
- » Vary the methods of funding parks and trails projects in urban areas to suit the new types of development that will occur and urban park typology.
- » Dedicate funds to maintain current parks, trails and open space and anticipate funding needed for the expanding system.

2. CREATE OR MODIFY CITY POLICIES TO ADDRESS:

- » Special event permits fee increase and fee structure tailoring
- » Concessions and food trucks provision in parks
- » “No Wading” or water contact to include situations where access to waterways would be appropriate without posted permission.
- » Updates to public park and trail dedications and fees rates
- » Electric vehicle use on trails
- » Park and trail restroom location standards
- » No gold panning policy
- » Study no dogs on sports turf policy impacts

3. STAFFING RECOMMENDATIONS

4. MAINTENANCE APPROACH

IMPLEMENTATION

FUNDING OVERVIEW

Arvada has a variety of funding sources that are used to provide high-quality parks, recreation opportunities, trails, open space and services. Arvada's approach is financially conservative when it comes to infrastructure investment and staffing. Funds have been wisely managed to achieve goals in expanding services to keep pace with community needs and invested in facilities that have become lasting treasured places and signature assets. The diversification of funding sources, particularly the Jefferson County Open Space Tax, has helped Arvada Parks Department weather economic recessions more successfully than most Colorado communities. Revenue from these existing funding sources is projected to remain steady or slightly increase in the near-term to maintain the status-quo. Arvada must continue to diversify and expand funding sources to accomplish the big ideas set forth in this master plan.

In 2013 the City of Arvada initiated an integrated management system called FOCUS, which includes performance-based budgeting and strategic planning to help the City accomplish goals. The City has identified the following priorities to address through the FOCUS budget process:

- Growth and economic development
- Vibrant community and neighborhoods
- Infrastructure
- Organizational and service effectiveness

These FOCUS priorities are relevant to the park system as it lays out goals for trails and sustainability measures to be achieved by 2019 and will be used to weigh future budget allocations and expenditures.

The 2016 FOCUS budget allocates \$15.2 million for the Parks, Golf and Hospitality (PGH) Department, which operates four lines of business:

- Arvada Parks
- Arvada Golf
- Arvada Hospitality
- Administration

The Arvada Parks line of business provides design, maintenance, nature education and event services to the community and visitors so they can play, celebrate, and engage in the vitality of Arvada's welcoming community. As Arvada's population increases, issues impacting the future ability of the PGH Department to fulfill its mission include increasing demands for more parks and amenities and extensive maintenance improvements to existing parks, trails and open spaces.

FOCUS STRATEGIC RESULT

By December 31, 2019, 100% of all identified trail gaps and connection points recognized in the City's Parks, Trails and Open Space Master Plan and Bicycle Master Plan as identified by the Arvada Park Advisory Committee and as approved by City Council are built/completed.

CITY REVENUE SOURCES

PARKS FUND

This fund accounts for costs associated with the acquisition, design, development, maintenance and beautification of parks, open space and trails within the City. Revenues contributed to this fund in 2015 were \$8,041,160 and the beginning fund balance was approximately \$4.5 million. Figure 42 shows various sources that contribute to the Parks Fund including Jefferson County Open Space Tax, transfer from the Arvada General Fund, charges for services, licenses, permits and fees, and miscellaneous.

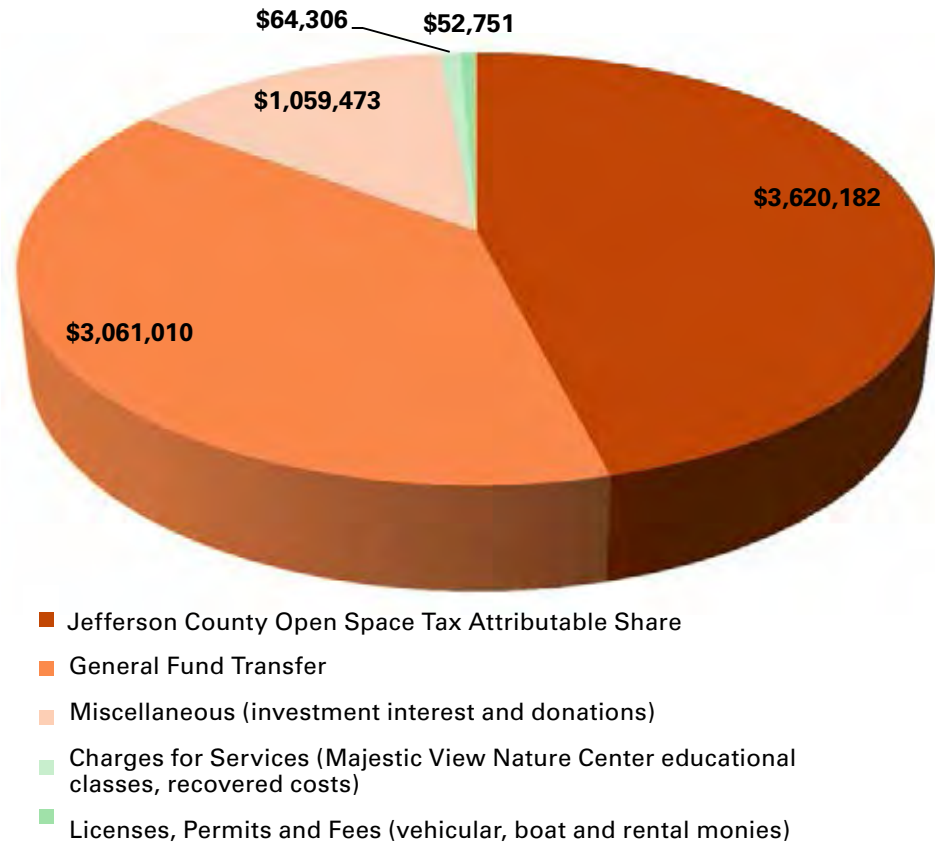
GENERAL FUND CONTRIBUTIONS

Arvada PGH Department received 39 percent of its budget in 2015 from the City's General Fund (GF). The GF revenue has several contributing sources, primarily the city's three percent sales tax rate on all goods sold within the City limits (56 percent of the GF) and building activity. Building activity including building use tax and building permits generated \$5.4 million in 2015 for the City's general operating purposes. Both of these revenue sources are anticipated to remain steady or increase in the future.

RECREATION DISTRICTS FUNDING

Recreation districts including APEX (that generally provide active recreation to Arvada residents) are funded independently through district funding. Those districts respectively manage their own budgets, funding priorities and operations while collaborating with Arvada's PGH Department on land for recreation improvements. A 2016 APEX bond measure proposes funding for sports fields, pools, tennis facilities and recreation facilities.

Figure 21: 2015 Arvada Parks Line of Business Revenue Sources



PARK DEVELOPMENT FEES

(Revenues placed in Park Development Escrow Fund)

Arvada's park and trail dedication and fee requirements legally oblige new developments to:

- Provide adequate parks, trails, and associated facilities that new residents will demand;
- Recognize that the necessity for, and cost of, new or expanded parks and trails facilities be properly attributed to and paid for by new residential development.

Arvada has a dedication methodology that is intended to closely approximate the additional park and trail needs and burdens generated by new residential development, and imposes exactions of land for park and trail purposes (or payment in lieu thereof) and payment of park development fees that are proportional to the demands created by a new residential development.

A total of \$253,967 was collected in Park Development Fees in 2015. Arvada's park development fee rates are currently \$1,506.87 per single family and \$1,265.77 per multi-family unit. Figure 43 shows Arvada's rates are far below other comparable Front-Range communities of Windsor, Loveland, Fort Collins, Longmont, Boulder and Greeley.

Recently, in significant annexations like Leyden Rock and Candelas, City Council has required developers to cover 100 percent of design and construction costs for parks and trails as an alternative to development fees.

FEES-IN-LIEU

(Revenue placed in Lands Dedicated Fund)

These are funds contributed by residential developments in-lieu-of land dedication and in situations where the land dedication is under minimum acreage required for neighborhood park (5-12 acres) or is not desirable for park land purposes.

Arvada requires new developments to provide adequate parks, trails, and associated facilities that the subsequent increase in population will demand from the existing park system. This fund accounts for annexation requirements of land dedication based on new residential population or equivalent cash contribution to be used primarily for park or trail purposes. In 2015 revenues from this fund were \$175,231 and the overall fund balance at the beginning of the year was approximately \$2.7 million. Fees-in-lieu may become more common as urban development continues.

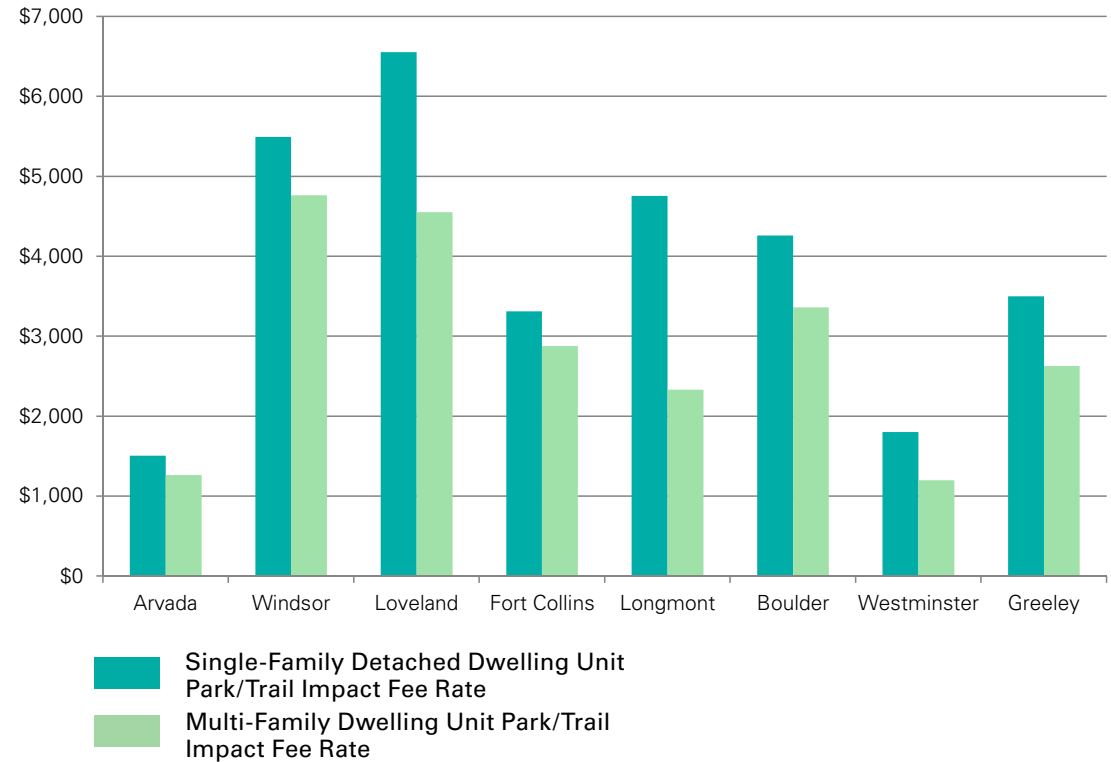
Analysis and Key Findings.

Arvada's Developer Impact Fee for parks and trails is two to five times lower than many other comparable cities such as Windsor, Loveland, Fort Collins, Longmont, Westminster and Boulder as shown in Figure 43. Examining the rates charged by these seven cities shows the average impact fee for single-family detached dwelling units is \$4,263 and \$2,878 for multi-family units. Arvada's rates are significantly lower, in part, due to Community and Special Purpose Parks creation costs are not born by developers. The majority of these comparable cities has either separate rates for Neighborhood and Community Parks or combine the impact fees for both park types into one rate.

Community Park Funding

It is expected that funding will primarily come from the General Fund to maintain and make modest improvements to existing large parks that serve residents far beyond their surrounding neighborhoods. However, one-time infusions from the General Fund may not be sufficient to fund large major renovations, new amenities and pay for new Community, Regional and Special Purpose Parks. Bonds, specifically ones sought in partnership with the recreation districts is a good method to fund parks that have a citywide draw or for improvements in multiple park locations. Additionally, a sustainable model for supplying Community Parks to serve the projected population growth and anticipated spread of development includes requiring developers to bear their share of the cost of providing new/improved

Figure 22: Park/Trail Development Fee or Impact Fee Municipal Comparisons



Source: Impact Fee Study, City of Greeley, Duncan Associates, November 2014. City municipal code 2015

COUNTY REVENUE SOURCES

JEFFERSON COUNTY OPEN SPACE ATTRIBUTABLE SHARE

(Revenue placed in Parks Fund)

Jefferson County has a voter approved one-half of one percent in sales tax dedicated to ensuring perpetual land conservation, stewardship of open space and parklands, and access for public enjoyment. Thirty percent of revenue this sales tax collects is distributed to cities within Jefferson County. In 2015 approximately \$3.6 million was Arvada's share of this sales tax. Since the county sales tax was initiated in 1972, Arvada has received over \$41.5 million from this source. In addition to use for open space, the resolution was amended by voters in 1980 to authorize expenditure of these funds for construction, acquisition and maintenance of park and recreation capital improvements.

Jefferson County Open Space revenue was almost 10 percent greater in 2015 compared to a similar period in 2014 and is representative of the robust growth in Jefferson County.

JEFFCO OPEN SPACE LOCAL PARKS AND RECREATION GRANTS

(Revenue placed in Grants Fund)

This is a competitive grant program for land acquisition and park development projects and includes a City match (0 to 50 percent). Recent examples of funding received from this source include the Griffith Station Neighborhood Park (\$55,000) and multi-agency trail signage program (\$25,000).

STATE OF COLORADO REVENUE SOURCE

CONSERVATION TRUST FUND

(Revenue placed in Grants Fund)

Funded through Colorado Lottery revenues, this fund apportions resources to cities on the basis of population. Revenues are generally constant and funds may be used to acquire, develop and maintain parks and recreation programs. Arvada's revenue from this source in 2015 was \$561,055 and beginning funds available were approximately \$1.8 million.

GREAT OUTDOORS COLORADO (GOCO)

(Revenue placed in Grants Fund)

GOCO grants are awarded on a competitive basis. GOCO also periodically offers special opportunity grants with varied objectives and dedicated funding. Grants received recently by Arvada include School Play Yard Initiative, Local Parks and Government Park Grants and a new program entitled Connect Initiative, which focuses on large trail projects and connectivity of local to regional trails. Arvada has received 3 grants since 1993 with over 17 applications.



Source: City of Arvada

CAPITAL IMPROVEMENT PRIORITIES

Capital Expenditures for PGH from the 2016 Proposed Revised Budget total approximately \$2 million. Current PGH Department capital improvements priorities include:

- “Taking Lasting Care” Program
- Neighborhood Parks
- Community and Regional Park System
- Historic Parks (Churches Ranch)
- Special Purpose Parks (Equestrian Centers, Dog Park, Arvada Tennis Center, Birds Nest Disc Park)
- Sports Complex (Long Lake & Stenger/Lutz)
- Street Medians (Arterial Beautification)
- Trail System (Leyden Creek Trail and Van Bibber Creek Trail, Open Space Improvement (Tucker Lake, Leyden Lake Open Space, Hyatt Lake Preserve)
- Environmental Education (Majestic View Nature Center)
- Replacement of Urban Forest
- Lake Recreation Program



Source: City of Arvada

Arbor Day planting in Arvada supports the expansion and maintenance of the urban forest.

“TAKING LASTING CARE” CAPITAL MAINTENANCE AND REPLACEMENT PLAN

Arvada recently endeavored to resource and implement a “Taking Lasting Care” philosophy, to ensure that once constructed and maintained, resources are also available for the ongoing replacement of the City’s park system amenities. Funding for the plan comes from four sources:

- An increase in the amount currently funded from conservation trust fund (lottery) dollars,
- A newly created transfer from the general fund,
- Maintaining the existing 3 cents per 1,000 monies funding for computerized irrigation equipment; and,
- A \$10,000,000 bond dedicated for funding park system capital maintenance and replacement fund needs.

FUNDING OPPORTUNITIES

As Arvada urbanizes, new park typologies (i.e., plazas, festival streets) become more appropriate. These park types are usually smaller than traditional parks but have more expensive finishes and amenities to suit an urban setting and for durability in use and maintenance. Increasing population also adds to the wear and tear of park system elements with subsequent increases in overall use.

In turn, new ways of funding public park space are needed that encourage innovative residential development while maintaining Arvada's current level-of-service for park access and parkland acres provided to residents. The last successful Arvada park bond passed in 1974 and greatly expanded the park system. These parks are aging and to reach the goal of providing parkland within $\frac{1}{4}$ to $\frac{1}{2}$ mile of all Arvada households a bond measure should be further investigated in conjunction with an overall park system branding campaign to build awareness and support for park improvements.

Additionally, to accomplish the Green Spines vision, Arvada needs to organize a large-scale, multi-year funding program.

Table 14 provides examples of alternative funding opportunities to Arvada's current sources.



Source: Design Workshop

While smaller than traditional parks, new park typologies for urbanizing areas like urban plazas and festival streets can have higher-cost material finishes and more amenities (lighting, benches, special event accommodations) per square foot.

Table 16: *Funding opportunities.*

FUNDING OPPORTUNITY RESEARCH		
Program	Example Location or Organization	Details
Free vs. Fee	Maggie Daley Park, Chicago, Illinois	Charging fees to access certain parks or special activities.
Park and Trail District	St. Louis Great Rivers Greenway District, Missouri & Illinois	Great Rivers Greenway is a regional park and trails district, created by a vote of the people to connect St. Louis City, St. Louis County and St. Charles County.
Foundation Support	Jeffco Outdoors Foundation Colorado Health Foundation	Involves private or community-based foundations who provide financial and/or organizational support.
Park or Trail Nonprofit Organization	High Line Conservancy, Denver Region, Colorado Poudre River Trail Corridor, Inc. Greeley, Weld County and Winsor, Colorado	Nonprofits can seek grants, fundraise, and create endowments to fund projects within a region, a site and/or programs.
Urban Park Grant Program	El Paso County, Colorado	The Urban Park Grant/Nonprofit Contract Program establishes policies and procedures for considering proposals from organizations who wish to receive an Urban Park Grant or Nonprofit Contract from El Paso County to establish urban park opportunities.
Park Impact Fee Districts, Urban Park Fee Districts	Clark County, Vancouver, BC	PIFs are determined for each district by calculating the cost of acquiring and developing parkland to serve growth. The calculation includes an “adjustment factor” representing user fees, debt service payments and other payments by new development for park system improvements. Fees are calculated separately for each park district. PIF rates, once established or updated, are fixed until modified by county or city action.
Real Estate Transfer Tax or Fees	Roaring Fork Conservancy, Basalt, Colorado	The Roaring Fork Conservancy is funded by a Real Estate Transfer Tax. During a good economy, these organizations were flush with money and during the bad times, they were lacking funds.
Incentive Zoning	New York, New York	Allows developers more density in exchange for community improvements (open space, public art, enhanced streetscapes). In New York, incentive zoning provides a bonus, usually in the form of additional floor area, in exchange for the provision of a public amenity or affordable housing. There are incentive bonuses for the provision of public plazas (privately owned public spaces), visual or performing arts spaces, subway improvements, theater preservation, FRESH food stores and affordable housing (Inclusionary Housing Program).

FUNDING OPPORTUNITY RESEARCH

Program	Example Location or Organization	Details
Donations (private individuals and or corporations)	Millennium Park, Chicago, Illinois, High Line Park, Manhattan, New York Health in the Park, St. Louis Park, Minnesota	Can include exchanging Naming Rights for new facilities, partnerships to combine assets and create destinations for recreation and commerce. Funding for Health in the Park project is provided by the Center for Prevention at Blue Cross and Blue Shield of Minnesota.
GOCO Multi-Municipal Partnerships	Jefferson County Open Space, Colorado	Partnerships with public health organizations or school districts.
GOCO Inspire Initiative and Jefferson County Open Space	Great Outdoors Colorado (GOCO)	To help activate park system, collaborate with Jeffco Open Space and GOCO on Inspire Initiative planning and implementation grants to connect underserved youth and families to the outdoors.
GOCO School Play Yard Initiative		Creates safer, more active play areas and environments for outdoor learning at schools.
GOCO Protect and Connect Initiative		New initiatives are introduced every few years to reflect GOCO's strategic plan. The Protect Initiative and Connect Initiative grant programs, developed as part of our new strategic plan, will address large open space protection goals and regional trail networks around the state to better connect people to open spaces and parks.
GOCO Local Grants		Local Government Park, Outdoor Recreation and Environmental Education (LPOR) Grants—and Mini Grants for smaller projects costing \$60,000 or less—are designed for the following types of projects: new park development, enhancing existing park facilities, park land acquisition and environmental education facilities.
Park Maintenance Fees		City of Medford Parks & Recreation, Oregon
Land and Water Conservation Fund	National Park Service	The LWCF Program provides matching grants to States and local governments for the acquisition and development of public outdoor recreation areas and facilities (as well as funding for shared federal land acquisition and conservation strategies). Recent focus has included funding to create outdoor recreation facilities in disadvantaged neighborhoods.
Jeffco Open Space Program		Jeffco Open Space Local Park and Recreation Grants are provided on an annual basis to municipalities within Jefferson County on a competitive basis. Additionally, Arvada will provide support and encourage Jefferson County sales tax increase, additions, or bond efforts that result in an attributable share to Arvada parks, trails and open space.

ADDITIONAL FUNDING OPPORTUNITIES

Items in bold may be most appropriate for Arvada:

- **Bonds**
- **Friends Associations**
- **Volunteerism**
- **Parking Fee**
- Special Fundraisers
- Program Contractor Fees
- Product Sales
- **Film Rights**
- Surplus equipment sales by auction
- Advertising sales
- Agricultural/garden leases
- Alcohol tax
- ATM machines in park facilities
- Business Excise Tax
- Capital Improvement Fees
- Cell Towers
- Cigarette Tax
- **Corporate Sponsorships**
- Entertainment Tax
- Equipment Rental
- **Establish a Greenway Utility (selling development rights for underground utilities)**
- Facilities Benefit Assessment
- **Family Tree Program**
- Lodging/Tourism Tax
- Industrial Development Bonds
- **Irrevocable Remainder Trusts**
- **Land Swaps**
- **Land Trust**
- Licensing Rights (Department Name) of resale items
- **Lighting Fees**
- **Maintenance Endowments**
- **Special Use Permits**
- Tax Increment Financing (TIF) Zone, Business Improvement District (BID) or Enterprise Zone with park and trail dedicated funding
- Commercial development park fees
- Bicycle sales tax
- Service fees
- Increase or one-time infusion from the General Fund



IMPLEMENTATION STRATEGIES

The master plan recommendations for parks, wellness, nature and community are supported by three implementation strategies:

- Policy Recommendations
- Staffing Recommendations
- Prioritization Criteria

1. POLICY RECOMMENDATIONS

SPECIAL EVENT PERMITS

Current City policy for special events includes an application and \$100 application fee (nonprofits are exempt). Arvada has seen a dramatic increase in special events including races, informal fitness classes in parks and film production. To ensure costs associated with events and the related maintenance and public safety needs are covered, add language to current special event permit fees and policies to be tailored to event size.

Increase fee schedule for:

- Film Production
- Races (in parks and within trails)
- Races on Streets

Tailor fee schedule to reflect scale of events for:

- Park Special Events
- Informal Fitness Classes (in parks or open space)
- Parties, large gatherings and Sports Leagues

CONCESSIONS AND FOOD TRUCKS

Independent groups and Food Trucks are not allowed to sell concessions during park and sports events, particularly youth league events. Current policy requires Food Trucks to provide Health Department Certification, liability insurance and written permission from the PGH Department
Recommended Change:

- Examine criteria in Transient Merchant License to allow select concessions to be sold at smaller sporting and park events (especially where PGH Department concessions are not in service) to help activate parks. Food Services which is an PGH enterprise currently staffs selected events at city owned facilities and needs to be directly involved in discussion of this policy change.

PUBLIC PARK, TRAIL AND OPEN SPACE DEDICATIONS AND FEES

The following includes recommendations to add or amend to the current City policy (7.11 Public Park and Trail Dedications and Fees). These recommendations address the current issue of urbanizing areas and challenges to finding and developing large acreages of park space while maintaining the current system's high parkland level of service (10 acres of parkland per 1,000 Arvada residents).

- Add in the following to the "applicable residential development" definition:
 - » Mixed-use development that contains residential units.
 - » Commercial development providing outdoor spaces for employees and/or trails connecting to the trail system. Refer to the trails master plan for identified trails.
- Do not exempt the following from dedications and fees:
 - » Make a distinction that active living retirement community/housing is not exempt (currently exempt are nursing homes and similar residential accommodations primarily providing care and supervision to persons who are disabled or generally confined to the care facility for medical, physical, or mental reasons)
- For residential development located (partially or wholly) within ½ mile of a RTD Gold Line Transit station, require creation of a Maintenance Funding Plan (for Olde Town Station, tie to Station Area Plan).

- Current park land dedication ratios are geared to single-family development and require unrealistic dedication for high density multi-family projects in denser areas of Arvada (see chart).
- Increase Arvada’s park development fee rate from \$1,506.87 per single family and \$1,265.77 per multi-family unit to be more in-line with the rates of comparable front-range communities. It is recommended the rates increase in the range of \$3,000 to \$4,500 per housing unit based on evaluation of present-day cost of park creation in Arvada.
- Arvada is also open to other arrangements for park system improvements like the dedication agreements for the Candelas master-planned community.
- Require all park/park-like amenities that are identified as public benefit as part of the development agreement to be made publicly accessible and signed to permit public access in perpetuity.
- For urbanizing areas in Arvada, new park typologies with lower acreage requirements (i.e., pocket park, urban plaza) should be substituted for standard parkland dedication. This could be achieved through a couple different scenarios.

Policy could provide a density threshold for triggering new urban park types.

- » Population density (5,000+ persons per square mile)¹

Or, adjust parkland dedication ratio for different areas of Arvada. The City of Fairfax, VA uses different park service standards for suburban, and urban areas:

- » For Local Parkland in suburban areas, provide a minimum of 5 acres per 1,000 population.
- » For Local Parkland in urban areas, provide a minimum of 1.5 acres per 1,000 residents and 1 acre per 10,000 employees.

- » In urban areas, Local Parks should be within ½ to ¼ mile of nearby offices, retail, and residences. In all other contexts (except within rural and semi-rural areas), all residents should live within 1 mile of a Local Park.

Credit for Trail Land Dedications

- » Allow dedication requirement for new park typologies (i.e., urban plazas, play streets, festival streets) that developers create within street rights-of-way or privately-owned public land.
- » Add in language to require the trail to connect to public recreation amenities and existing trails.
- » As specified in the City’s Land Development Code, require developers to build those sections of trail within their project that are represented on the current trails masterplan.
- » Address access, public event & maintenance standards for privately-owned land.

Form of Land Dedication/Payment of In-Lieu Fees

- » Add that cash-in-lieu payments can also be used for the acquisition and development of the new park typologies.
- » Add language to define reasonable proximity for new park typologies.
- » In urbanizing areas where park land exists and is sufficient to serve the new resident population, require park development fees to upgrade the park condition and amenities. Add language to authorize development fees and park land dedication fee-in-lieu to be used to upgrade existing park.

CURRENT RATIOS

Parkland Dedication Ratio	
Acres	10
Per 1,000 population	1,000

Population Density Standards	
Single-Family	2.84
Multi-Family	1.87
Multi-Family within 1/2 mile of transit	1.7
Housing for Older Persons	1.5

If a developer built a 200 unit project under the current requirements, the following parkland dedication acreage would apply:

Single Family	5.68
Multi-Family	3.74
Multi-Family within 1/2 mile of transit	3.4
Housing for Older	3

Note: Density standards indicate population per unit

¹ See 2014 Arvada Comprehensive Plan Demographics Appendix for 2010 population density map

“NO WADING” OR WATER CONTACT

Add language to the “No Wading” policy to include situations (i.e., interactive stormwater features) where access to waterways would be appropriate without posted permission.

ELECTRIC VEHICLE USE ON TRAILS

Study the appropriateness of allowing electric bikes or other motorized vehicles on Arvada trails. Determine if there are trail segments that are appropriate for electric or electric assist bicycles. If trail use by these vehicles is determined appropriate, revise ordinances and develop public safety education and outreach regarding these policies.

PARK AND TRAIL RESTROOM LOCATION STANDARDS

Specify policies that public restrooms are to be provided in community and regional parks. Neighborhood parks are not a priority to provide public restrooms because of neighborhood park’s close proximity to the residents they serve. Trail Hubs (strategically located areas where trails, signature park or destination converge) restrooms to be installed on case by case basis. Criteria for installation include anticipated use, community support and maintenance efficiency.

NO GOLD PANNING POLICY

Clarify the City’s position on gold panning and enforce restrictions for gold panning within the Arvada parks system.

2. STAFFING RECOMMENDATIONS

The Park Golf and Hospitality (PGH) Department currently has 46 full time equivalent (FTE) staff members in the Arvada Parks line of business. To accomplish master plan goals additional staffing is recommended.

VOLUNTEER COORDINATOR

- A full-time volunteer coordinator is needed to implement the Community recommendations and may be fulfilled as a city-wide role.

SENIOR AND SPECIAL NEEDS SERVICES

- Transport, outreach programs, activity management, and facilities planning focused on the needs of seniors and people with disabilities is an increasing need. This role requires specialized skills and might be fulfilled in partnership with APEX.

MAINTENANCE STAFF

- Front Range ratios of Full Time Equivalent (FTE) open space managers to acres of open space ranges from 1:300 to 1:700. With over 3,000 acres of open space, this would put Arvada at needing 5 FTE (1:700 ratio) to 12 FTE (1:300 ratio) for open space management. Current FTE for this program is 3.2 so an additional 1.8 to 8.8 FTE would be needed.
- Additionally, in the next 10-20 year time frame, newer developments will seek to transfer maintenance obligations for parks and trails from HOAs and Metro Districts to the City of Arvada. Additional staffing for maintenance should be planned to accommodate this transition.
- New urban park types will require maintenance support. Maintenance responsibilities should be coordinated with Olde Town BID and Old Town Parks Service Program (OTPS)
- Separate Open Space and Forestry departments to allow focus on natural resources management.
- Park Rangers

GRANT WRITING RESOURCES

- The PGH Department uses 1/6 of a full-time City grant writer's time. Additional hours or staffing could be used to create more successful grant applications to GOCO, Jeffco and research specific grant opportunities for parks, trails and open space.

ARVADA PARKS DESIGN AND ADMINISTRATION

The division has the following 2015 staffing levels:

- The Parks and Urban Design-Collaborative Planning and Partnerships Program (1 FTE)
- Administrative Management Program (2 FTE)
- Increase in staffing these programs is needed to accomplish the following:
 - Development Plan Review and Inspection to respond to the many development applications anticipated in the near-future.
 - Master plan recommendations for annual performance measurement, standards review, new park typology development, park development and trail expansion will require additional park planning and design staff time. Reduce dependence on consultant fees and match institutional resources to master plan projections.
 - The Arvada Park Advisory Committee could take on tasks including creating/updating standards for park memorials, naming, prioritization of parks and amenities (i.e., restrooms, dog parks) using the Green Spines prioritization criteria. Staff assistance will be needed.

3. PRIORITIZATION CRITERIA

The following criteria outlines how potential projects and improvements that support Green Spines can be prioritized for funding and implementation. Additional recommendations for prioritization include incomplete projects and lists for parks, open space and trail priorities. The priority projects are selected from the Master Plan recommendations as near-term priorities.

GREEN SPINES

- Projects that meet one or more of the following criteria shall receive higher priority for funding and time:
 - Serve underserved communities
 - Connect to regional trail, community service or transit station
 - Provide north to south trail connectivity
 - Close a trail gap or open space gap along water corridors
 - Provides a cultural, historic or wellness destination
 - Could garner additional funding or volunteer support (i.e., GOCO's Connect Initiative)

INCOMPLETE PROJECTS

- Prioritize incomplete projects (i.e., Gibbs West, Hills at Standley, Historic Parks) concurrently with new park projects.
 - Evaluate park-specific master plans completed prior to 2015 master plan to identify park phases that meet Green Spines Initiative Criteria and add appropriate projects to priority list.

PARK IMPROVEMENT PRIORITY PROJECTS

Near-term, priority park projects include improvements or new facilities for the following:

- Neighborhood Parks
 - Double E Park
 - Quaker Acres Park
 - Hills at Standley Lake Park
 - Panorama Park
- Community Parks
 - Lake Arbor Park
 - Gibbs West Park
- Historic Parks
 - Church Ranch
 - Gold Strike Park
 - Moore Brothers Farm and Agriculture Center
- Special Purpose Parks
 - Indiana Equestrian Center and Indoor Equestrian Center
 - Dog Park
- Birds Nest Disc Park
- Sports Complex and Recreation Centers
 - Long Lake Regional park
 - Stenger/Lutz Sports Complex
- Arvada/Blunn Pioneer Master Plan
 - Bike Park
 - Expansion of Dog Park
 - Disc Golf Course Operational Changes
 - Trail Hub and New Trails
 - Leyden-Brookes Stone Circles - Teepee Rings

OPEN SPACE PRIORITY PROJECTS

The following is a list of potential acquisitions or land use negotiations necessary to complete Green Spines and hubs, particularly new north-south spine route(s).

- Kelly Lake north to Little Dry Creek near Alkire Street
- Two Ponds to Majestic View Park and southward on route into Olde Towne-potentially along Oberon Road
- Clear Creek Corridor connections and/or additional public land approximately between Wadsworth Boulevard and Sheridan Boulevard Could include property near Square Lake, along Marshall Street, along I-76 Corridor and land adjacent to Gold Strike Park.
- Lands near Square Lake east of Sheridan Boulevard in Clear Creek Valley.
- Clear Creek Valley improvements south of I-76 and I-70 along City of Arvada limits.
- Additions to Pattridge Open Space
- Open spaces adjacent to canals
- Regional trail corridor acquisitions

Connectivity improvements to reduce distance travelled from park and public spaces in and around Olde Town area and or additional parkland itself includes the potential places:

- Acquisition of land off Reno Drive between Saulsbury Street and Quay Court (pedestrian connections to 56th Avenue).
- Additional land immediately west of Foster Ballfields, fronting Vance Street to improve park level of service and pedestrian experience.
- Additional land or public space adjacent to or west of Columbine Professional Plaza Inc. pond, south of 52nd Avenue at Quay Court in conjunction with Arvada marketplace redevelopment.
- Additional land or public land commitment for urban parkland needs, including urban plaza in vicinity of 55th Avenue and Olde Wadsworth Boulevard.

Table 17: Ten-year trail priorities. See Map 12 for location and gap information. Developer obligated trail and street crossings are noted within table.

TRAIL PRIORITIES		
GAP PRIORITIES	TRAIL & STREET CROSSINGS	CONNECTIVITY IMPROVEMENTS
Barbara Gulch Trail (BGT)		
<ul style="list-style-type: none"> (BGT-Gap 1 - See Map 12) Acquire trail access over the Union Pacific Railroad and north along S.H. 93 (BGT-Gap 2 - See Map 12) Acquire trail corridor through Plains End Generating Station and Leyden Land Fill to S.H. 93. (Developer Obligation) Trail in Barbara Gulch north of Leyden Road. 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> Connect to Railroad Ridge Trail by creating a diversity of trail experiences for mountain bikers and provide accessible connections for all users. In addition to a connection to the Railroad Ridge Trail, the RRT needs to be extended through the Jefferson County (dormant) land fill west of Indiana. Connecting to South Ridge Trail by creating a diversity of trail experiences. Connect to Jefferson Parkway Trail Connect through Plains End Generating Station and Leyden Land Fill to a connection with the Colorado Front Range Trail (CFRT), which will require a S.H. 93 underpass and a Union Pacific overpass. Locations for both crossings need to be coordinated with the CFRT location
Big Dry Creek Trail (BDCT)		
<ul style="list-style-type: none"> (BDCT-Gap 1 - See Map 12) Extension west toward Coal Creek Canyon along S.H. 72 Developer Obligation (BDCT-Gap 2-See Map 12) Connections through Candelas from Indiana Street to S.H. 93. Developer Obligation (BDCT-Gap 3 - See Map 12) gap at west end of existing trail, west of Whisper Creek Subdivision. 	<ul style="list-style-type: none"> Alkire Street trail crossing State Highway 93 trail underpass (Developer Obligation) Safe trail crossing east/west across Indiana Street 	<ul style="list-style-type: none"> Connect east to Standley Lake Regional Park Connect west to foothills Coal Creek Canyon Trail Coordinate with U.S. Fish and Wildlife Service for connections to trails in Rocky Flats National Wildlife Refuge
Heritage Canal Trail (HCT)		
<ul style="list-style-type: none"> Pursue rights/access along Canal corridors to complete trail (HCT Gap 1 - See Map 12) Access into destinations like the Indiana Equestrian Center and Standley Lake with bridges over canals and underpasses at highways and arterials 	<ul style="list-style-type: none"> Indiana Street trail underpass near 75th Avenue for access into the Indiana Equestrian Center and Trail Hub 	<ul style="list-style-type: none"> Pursue rights/access to complete trail Pursue land transfers with other businesses Establish binding agreements with ditch companies to secure access roads into trail system Encourage a JCOS extension of the HCT south of Van Bibber Creek Trail to connect with the Clear Creek Trail through Jefferson County
Leyden Creek Trail (LCT)		
<ul style="list-style-type: none"> Trail through Youth Memorial Sports Complex with trail head Trail completion in Patridge and Leyden Lake Open Space (LCT Gap 2 - See Map 12) Trail improvements along Leyden Road and construction of a trailhead for access into Leyden Lake (LCT Gap 3 - See Map 12) Trail along Indiana Street (LCT Gap 4 - See Map 12) Off-street trail construction east and west of Alkire Street to connect with Ralston Creek Trail 	<ul style="list-style-type: none"> Indiana Street Trail underpass (east end of Leyden Lake Open Space) Church Ditch bridge crossing (west end of Leyden Lake) Croke and Farmers High Line Canal crossings at Indiana Equestrian Center and Arvada Indoor Equestrian Center 	<ul style="list-style-type: none"> Complete trail from Ralston Creek Trail to foothills Complete trail hub at Indiana Equestrian Center and Leyden Lake Open Space Coordinate connections to Jefferson Parkway Trails

TRAIL PRIORITIES

GAP PRIORITIES

TRAIL & STREET CROSSINGS

CONNECTIVITY IMPROVEMENTS

Little Dry Creek Trail (LDCT)

- (LDCT-Gap 1 - See Map 12) Extension west toward Coal Creek Canyon along S.H. 72
- (LDCT-Gap 2 - See Map 12) Off-street trail through Lakecrest neighborhoods
- (LDCT-Gap 3 - See Map 12) Off-street trail from Allison way to Vance Drive

- Wadsworth Boulevard trail underpass
- Improved trail and school crossing at Harlan Street

- Augment with Rocky Mountain Greenway Trail (signage/wayfinding will be important)
- Pursue access through commercial developments on both sides of Wadsworth Boulevard for access to the proposed underpass
- Build trail head near Thomson Elementary School

Moon Gulch Trail (MGT)

- Acquire access across Public Service Company (Xcel) ownership west of Spring Mesa Park.
- (MGT-Gap 2 - See Map 12) Trail improvements on the easement east of Quaker Street and trail widening of the paved and soft-surface trails west of Quaker Street
- (MGT-Gap 3 - See Map 12) Off-street trail connection at Indiana Street

- Indiana Street trail underpass for bicyclists, pedestrians and equestrian uses

- Connect from Indiana Equestrian center west to planned Jefferson Parkway
- Add trail hub as part of Arvada Blunn/Pioneer Master Plan proposed bike park with connections to Jefferson Parkway Trails

Ralston Creek Trail (RCT)

- (RCT-Gap 1 - See Map 12) South of Davis Lane Park off-street trail connection
- (RCT-Gap 2 - See Map 12) Ralston Cove Park to the Arvada Tennis Center off-street trail connection
- (RCT-Gap 3 - See Map 12) Memorial Park to Carr Street off-street trail connection
- (RCT-Gap 4 - See Map 12) Wadsworth Bypass to Wadsworth Boulevard off-street trail connection

- Active warning beacon for Old Wadsworth Boulevard at-grade crossing
- Active warning beacon for Beech Street
- Acquire access under Sheridan Boulevard for a connection to Sheridan Gold Line Station

- Complete off-street trail sections with acquisition for drainage and trail improvements
- Connect to Arvada Blunn/Pioneer Trail Hub, Bike Park and Jefferson Parkway Trails and trail underpass

Van Bibber Creek Trail (VBCT)

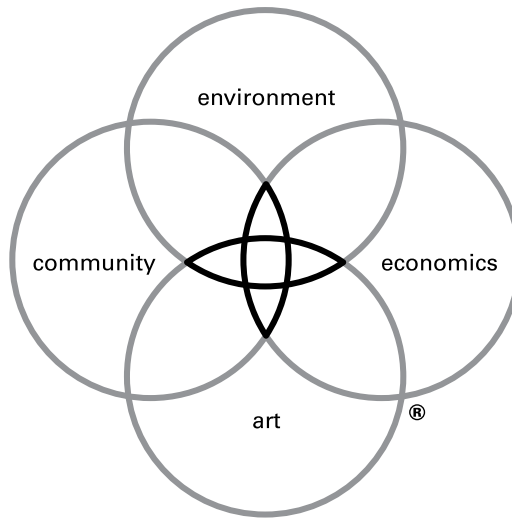
- (VBCT-Gap 1 - See Map 12) Trail connection to complete gaps on system from Indiana Street west to Churches Ranch in Jefferson County
- (VBCT-Gap 2 - See Map 12) Off-street trail connections from Ralston Central Park to Independence Street and Grandview Avenue
- Extension west to connect with the Colorado Front Range Trail
- Add connections to Jefferson Parkway Trails

- Independence Street at-grade street crossing improvements
- Add trail underpasses at S.H. 93 and Jefferson Parkway

- Complete trail from Ralston Central Park to Jefferson Parkway
- Support Jefferson County efforts to extend VBCT west of Indiana to Long Lake Regional Park.
- Obligate developers for VBCT improvements east of Ward Road to Stenger Sports Complex.

North-South Green Spine Corridors (Potential Cross-Departmental Collaborations, Land Acquisitions and Negotiations)

- Carr Street south to I-70 underpass and north to Pomona Drive
- Kipling Street and Parkway south to I-70 underpass and north to Standley Lake Regional Park
- Ward-Alkire south to I-70 underpass and north with Ward Road extension to Alkire and north to Stanley Lake Regional Park
- Wadsworth Boulevard and Bypass on detached off-street trails
- Jefferson Parkway Trails provide a major north(east) to south(west) trail opportunity intersection several regional trails
- Use of Heritage Canal Trail in strategic, north-south locations (i.e., linking Little Dry Creek Trail to Ralston Creek Trail between Two Ponds Wildlife Refuge and Majestic View Nature Center).



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