



Town of

**Columbine Valley**

**Colorado**

**Master Plan 2020**

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# Acknowledgments

*Special thanks to the many community members who volunteered their time and ideas to help shape the future of the Town of Columbine Valley.*

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# Introduction – 1

## What is a Master Plan?

For many years, the Town of Columbine Valley's Master Plan has guided the town's growth and development by providing a broad vision for the Town's future and suggesting goals, policies and actions to achieve that vision.

This Master Plan incorporates residents' input through surveys, open houses and a public hearing. It reflects residents' views of what makes Columbine Valley special and suggests how to preserve or enhance those special attributes moving forward.

While Colorado statutes require that communities develop Master Plans, they are not typically binding. Most communities, including this one, use Master Plans as advisory documents to help achieve residents' aspirations and intentions. Columbine Valley's Master Plan is developed with citizen and staff input by the Planning & Zoning Commission, which consists of community members who volunteer their time. The commission then recommends a plan for adoption by the Town Board of Trustees.



*The current Town Hall was dedicated in 2004, replacing rented office space in Littleton.*

## Changing Community, Changing Plan

Columbine Valley in 2019, as this plan was being developed, was vastly different from the Town at the time of its founding in 1955. Initially, roughly 100 homes were built around Columbine Country Club in the area known today as “Old Town.” At first, nearly all residents were members of the club.<sup>1</sup>

The City of Littleton adjoined Columbine Valley on the north and east. Vast stretches of farm and ranch land remained to the south and west. The Town's streets were gravel and traffic volumes were

<sup>1</sup> William A. Newton, A History of the Town of Columbine Valley (Columbine Valley Homeowners Association, 1978), Section 1, Early Days.

low. Bowles Avenue was the primary east-west street; Mineral Avenue did not exist. There were few, if any, public parks in Columbine Valley or nearby. There was no regional trail system.

As the 21st century moves into its third decade, Columbine Valley now encompasses more than a dozen neighborhoods and is home to nearly 1,400 residents. Town staff has greatly expanded to address the needs of the still-growing community. Town streets are paved and tie into a robust network of neighboring streets and highways that serve ever-growing traffic volumes in the metro area. In town, use of streets by motorists, bicyclists, golf carts, and pedestrians also is on the rise. Parks and trails, in and around Columbine Valley, provide recreational and transit opportunities previously unavailable. Thanks to extensive stormwater and drainage management projects during the decades, the vast majority of the town's homes are no longer in the floodplain.

Despite the changes over time, Columbine Valley remains an attractive, relaxed, safe, primarily residential community – an oasis of calm in the bustling south Denver metro area.

The Master Plan takes into account residents' wishes to maintain the Town's welcoming, residential character as it implements planning and development goals, strategies and decisions, using the recommendations in this Master Plan as guidance. The hundreds of respondents in the Town's 2019 Vision Survey praised Columbine Valley's small community feel, broad streets, friendliness, security and spaciousness (enhanced by no fences, ample yards and the golf course green space).

*Specifically, decisions made by Town leaders should recognize that residents value and wish to maintain:<sup>2</sup>*

- The quality of life
- Town aesthetics
- Proximity to amenities
- The sense of community

*The vision for the town is discussed in Chapter Two.*

<sup>2</sup> Top four responses in descending order to Town Vision Survey question, "What is important about living in Columbine Valley?"



*Columbine Valley stretches along the South Platte River.*

## What Lies Ahead

The Master Plan is a snapshot of the community in 2019-2020. As years pass and changes continue, Columbine Valley's Planning & Zoning Commission will revisit the Master Plan at regular intervals and recommend changes as needed to the Board of Trustees, always considering the insights of residents and Town staff and leadership.



*The country club played a vital role in the Town's establishment and remains part of its social fabric.*

## Town History

The Town of Columbine Valley grew out of the development of the Columbine Country Club. In 1955, the 17 founding club members incorporated as Middlefield Development Company and selected the 295-acre Heckendorf Farm in the South Platte River Valley for the development of a championship golf course to be surrounded by homes. The club was named after the state flower, the columbine. The Columbine Valley Mutual Improvement and Maintenance Association (the first homeowners association) was formed to enforce covenants running with the land. The first home was occupied in 1956 at 27 Wedge Way.

Concerned about the community's possible annexation by Littleton or Denver, as well as commercial and higher-density residential development west of the club, the homeowners voted to incorporate. On August 15, 1959, the Town of Columbine Valley was incorporated with a mayor and Board of Trustees. The Town took over many of the duties previously performed by the homeowners association. Many of the

covenants and bylaws of the homeowners association were adopted as Town ordinances.

In 1965, a severe storm upstream from Columbine Valley triggered a devastating flood along the South Platte River. "The Great Flood," as it was called, swept uprooted trees and debris down the river until the mass, described as 15 feet high, failed to negotiate a curve in the river. Water swept up across the golf course and into homes along Driver Lane. The flood carried away two dwellings. Roughly 25 homes in total were damaged or destroyed.<sup>3</sup> The flood continued downriver and destroyed 16 bridges and 120 homes in the metro area's river corridor, causing a total of \$540 million in damages from south of Castle Rock to the Nebraska border.<sup>4</sup>

<sup>3</sup> Newton, A History of Columbine Valley, Section VII, The Great Flood.

<sup>4</sup> The Denver Post archives, 2013.

For Columbine Valley, the 1965 flood was the most catastrophic event to affect the community to date. Homes were rebuilt relatively quickly – and the club hosted the Professional Golfers Association tournament in 1967, a one-year postponement because of the flood. Elected leaders throughout metro Denver worked with the federal government and the Army Corps of Engineers to authorize construction of Chatfield Dam, dedicated in 1973, to help prevent future catastrophes.

## Town Growth

Initially, there was no thought of Town expansion. However, in order to control the type and quality of adjacent development, the Town annexed properties to the north, east and south to ensure that growth would be in keeping with the founders' vision.

The first property annexed by the Town in 1967 included the area that is now Columbine Villas. It was zoned Planned Unit Development (PUD) and developed with single-family attached townhomes. This was followed by the annexation and platting of land that became the Village subdivision in 1975. In the early 1970s, Littleton's annexation of the southeast corner of Platte Canyon Road and West Bowles Avenue prompted the remaining landowners east of Middlefield Road to petition for annexation by Columbine Valley. In 1976, the Town Board approved annexation of the properties (except the Littleton property) between Platte Canyon Road and Watson Lane and between Bowles Avenue and the original Town boundary. This annexation set the northern boundary of the Town.

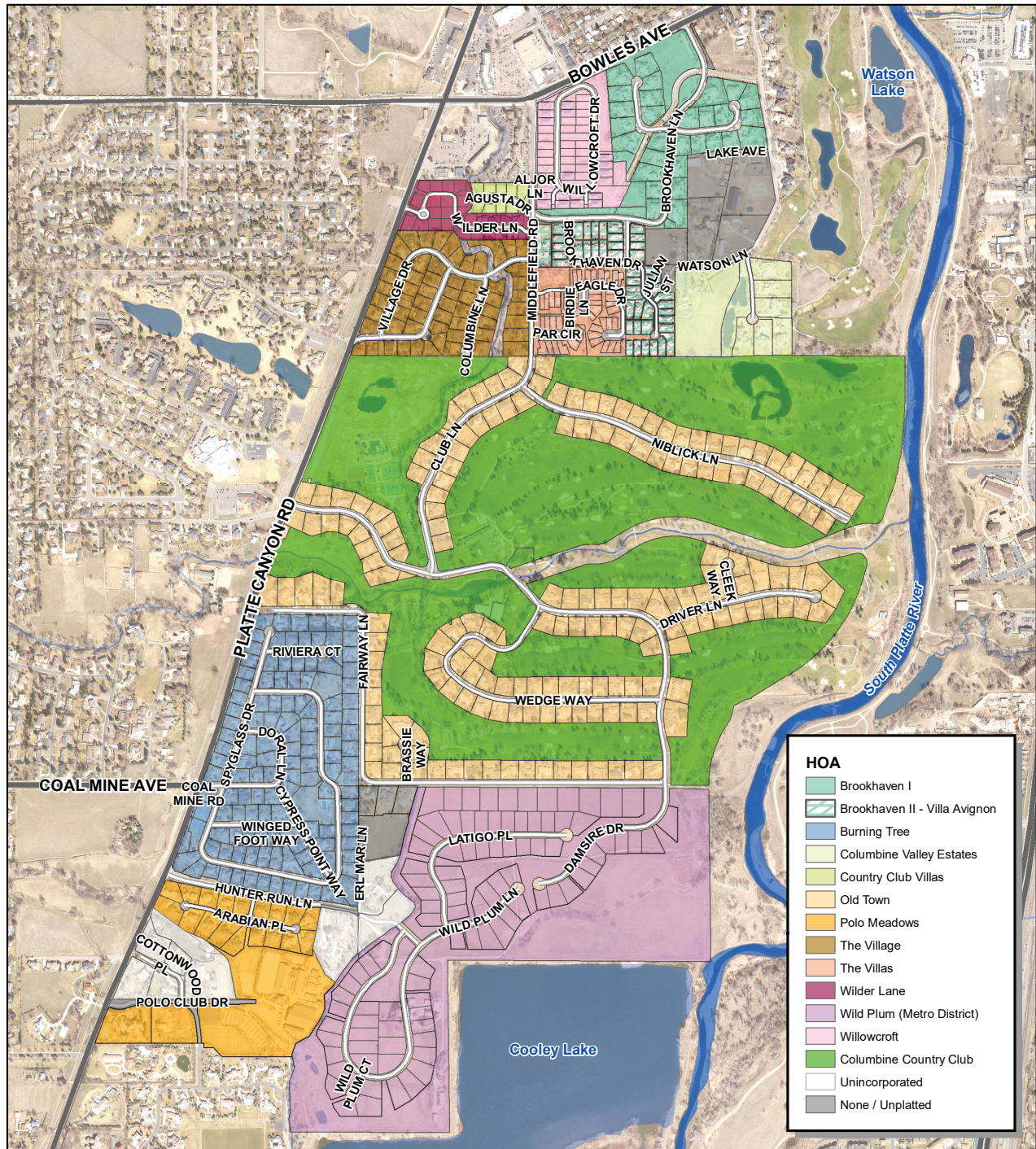


*Families decorate bicycles and golf carts in red, white and blue for the annual 4th of July parade.*

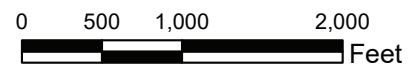
The Town continued to grow through annexations of properties south of the original Town site. The 105-acre Wild Plum Farm was annexed in two stages in 1973 and 1974. This annexation set the southern boundary of the Town. The 55-acre Burning Tree subdivision was annexed in 1977 and developed as single-family detached homes. Both annexations helped prevent a possible extension of Coal Mine Road from Platte Canyon Road east to South Santa Fe Drive. Finally, in 1994, the Polo Meadows/Polo Reserve subdivision was annexed.

Map A shows the present boundaries of the Town, which is located in Arapahoe County. The City of Littleton abuts the Town on the north, east and south, and unincorporated Arapahoe County borders the Town on the west. Generally, Platte Canyon Road is the western boundary, West Bowles Avenue the northern boundary, the South Platte River the eastern boundary, and Cooley Lake the southern boundary. Map A also shows the Town's platted subdivisions, unplatted parcels, the names of HOAs and unincorporated enclaves.

## Map A – Town Boundaries & Homeowners Associations



## TOWN BOUNDARY & HOMEOWNER'S ASSOCIATIONS



## Today's Community

As of August 2019, the Town comprises 655 acres with 588 households, 99 undeveloped platted building lots and 22.05 acres of land that are zoned agricultural. There are 12 homes not within homeowner associations (HOAs), including on the land currently zoned agricultural.

The Town has 12 homeowners associations (HOAs). They are:

- Columbine Valley Homeowners Association (Old Town)
- Columbine Villas Homeowners Association
- The Village at Columbine Valley Homeowners Association
- Burning Tree Homeowners Association
- Polo Reserve/Polo Meadows Homeowners Association
- Brookhaven at Columbine Valley Homeowners Association
- Villa Avignon Homeowners Association
- Country Club Villas Homeowners Association
- Columbine Valley Estates Homeowners Association
- Willowcroft Manor Homeowners Association
- Wilder Lane Homeowners Association
- Wild Plum Metro District (de facto HOA)

Each HOA has a set of separate but similar restrictive covenants. Additional HOAs may be formed if additional development occurs.



*Columbine Valley's sunsets are often spectacular.*

## Population

Table 1 shows Columbine Valley’s population from 1970 to 2010. The Town population increased from 481 in 1970 to 1,256 in 2010, a 161% increase. There is no census information for the Town prior to 1970. Without any change to the Town boundaries, the population is projected to increase to 1,392 by the end of 2020 and to 1,538 by 2025. Projections are based on the number of households the Town expects to add, multiplied by the number of persons expected per new household. The average household size has declined in each census, falling from 2.99 in 1980 to 2.45 in 2010. The largest change by age category is in the 65+ age category, going from 8% in 1980 to 22% in 2010.

**TABLE 1**  
**TOWN POPULATION 1970-2020**

Year	Average Household Size	Age of Residents					Population of Town	Percentage Population Change
		0-4	5-9	10-17	18-64	65+		
1970	2.99	N/A	N/A	N/A	N/A	N/A	481	
1980	2.99	41	51	179	577	75	923	92%
1990	2.76	48	69	130	668	156	1,071	16%
2000	2.64	37	67	161	641	226	1,132	7%
2010	2.45	51	67	147	711	280	1,256	10%
2020 Projected	2.30						1,392	10%
2025 Projected	2.30						1,538	10%

Source: 1970, 1980, 1990, 2000, 2010 Average Household Size and Population, U.S. Census Bureau.  
2020 and 2025 based on Town Planner projections.

Age of Residents, National Historic Geographic Information Systems

## Households

Table 2 traces the actual and projected number of households in the Town of Columbine Valley from 1970 to 2025. The Census Bureau counted 161 households in 1970 and 504 in 2010, an increase of 213%. The number of households projected for 2020 and 2025 is based on the number of vacant platted lots. As of October 2019, the active subdivisions are Wilder Lane with three vacant lots and Wild Plum with 95 vacant lots. Build-out of all subdivided lots is projected by 2025. Also, there are several small parcels that could support future development, but these are not included in the projections.

**TABLE 2**  
**HOUSEHOLDS 1970-2020**

Year	Number of Households	Percentage Change	Median Household Income
1970	161	—	N/A
1980	309	92%	\$49,605
1990	400	29%	\$81,789
2000	436	9%	\$118,196
2010	504	16%	\$130,095
2020 Projected	622	23%	\$143,183
2025 Projected	713	13%	\$150,385

Source: 1970, 1980, 1990, 2000, 2010, U.S. Census Bureau.  
2020 and 2025 based on Town Planner projections.

## Summary of Master Plan Chapters

In addition to this introduction, the Master Plan consists of eight additional chapters that address key issues pertaining to the Town's future. They are:

### *Chapter Two – Vision & Mission*

Columbine Valley's vision statement is a vital element of the Master Plan. It affirms the Town's values and unique characteristics. It speaks to how the community plans to address future growth and change while protecting Columbine Valley's desirable attributes.

### *Chapter Three – Use of the Master Plan*

This chapter explains in detail how the Master Plan serves Town leaders and other groups. While required by state statute, the Master Plan is not a regulatory document. The Town's government uses the Master Plan as guidance for making decisions about the Town's management and growth. The

plan also serves to inform prospective residents and businesses about the community. It provides an underpinning for the Town’s zoning codes, land use regulations and capital improvement programs.

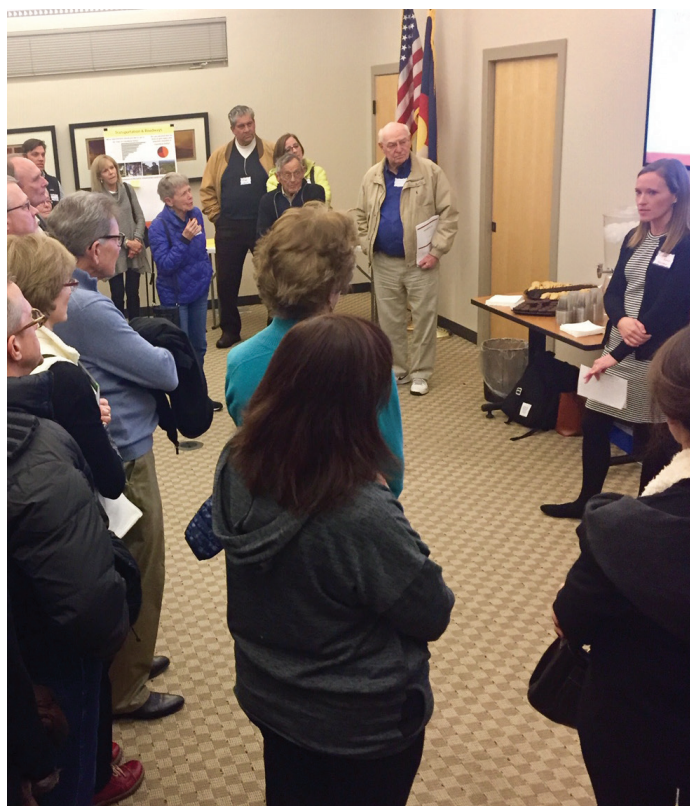
### *Chapter Four – Land Use*

This chapter describes existing and potential land uses in detail. With the exception of the golf course, equestrian center and HOA or Town-owned open space, land use within the Town is primarily single-family residential, with some land zoned as agricultural. There is no retail or commercial development within the Town.

Homes in the community are single-family except for the attached townhomes in Columbine Villas. In the Columbine Valley HOA (“Old Town”) and several other subdivisions, homes are restricted to one story; other parts of the Town allow two-story homes. With the exception of Columbine Villas, lot sizes in subdivisions platted prior to the late 1990s range from one-third of an acre to nearly one acre. Since the late 1990s, the trend has been toward smaller lots (less than one-fifth of an acre in Villa Avignon, Country Club Villas, Willowcroft Manor and Wilder Lane) for homeowners who want to minimize yard maintenance. Open space, where it exists, generally has been HOA owned and designated for use by residents of the subdivision. However, the Town’s newest subdivision, Wild Plum, which is now under construction, has lots that average one-half acre in size and will include roughly 48 acres of trails and open space that can be enjoyed by all residents of the Town.

### *Chapter Five – Annexation*

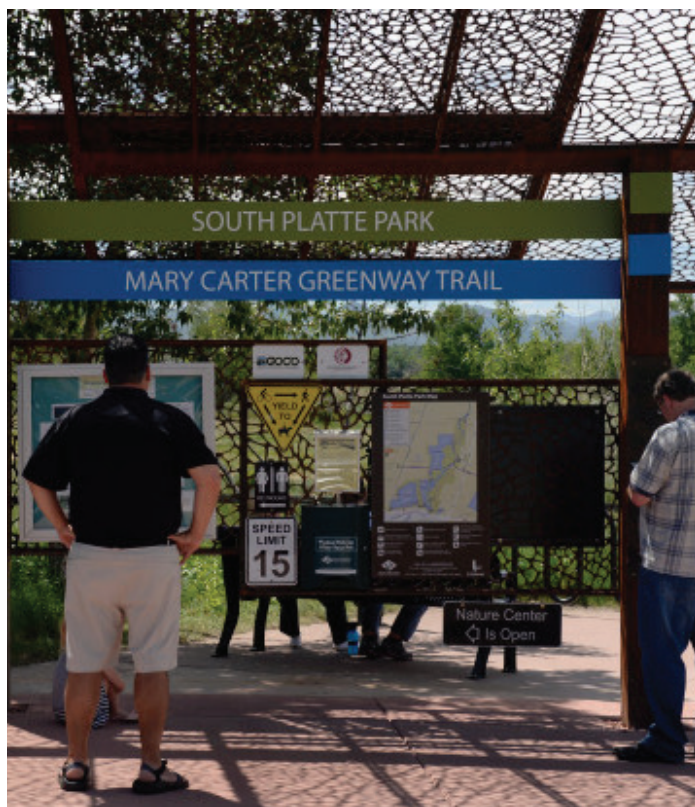
Chapter Five discusses in detail the potential and legal considerations for future annexations. Annexation can be an effective means of controlling undesirable or incompatible development in unincorporated areas adjacent to Columbine Valley. As explained in the Town history section of the plan, Columbine Valley has used annexation throughout most of its existence. This plan suggests that future annexation be considered by the Board of Trustees. Annexing property for commercial use could bring in additional sales tax revenue for Columbine Valley. Annexation of property also results in added costs to the Town since the new areas would require town services such as road maintenance, snow removal and police.



*Residents listen as consultants explain the results of a townwide survey as part of the master planning process.*

## Chapter Six – Parks, Open Space & Trails

This chapter details existing open space, trails and parks in the community and suggests potential future enhancements. The golf course provides open vistas throughout the community. As the Town grew, new subdivisions were built with HOA-owned open space. In Burning Tree, both passive and active HOA parks were included. However, until 2018, the only public park was the small grass area on the north side of Town Hall. In 2018, the approval of Wild Plum provided the first large open space area and trail system that is available to all Town residents.



*More area residents are using the improved Mary Carter Greenway Trail along the South Platte River.*

As the areas adjacent to the Town developed, so did the interest in having parks, trails and open space. In the 1960s, there were no regional parks or trail systems serving the area. The construction of Chatfield Dam was followed by the development of the South Platte Park and the Mary Carter Greenway trail along the river. Other parks and golf courses were constructed as the surrounding agricultural land gave way to residential development.

The community survey conducted as part of the master planning process revealed a high degree of interest in community parks and trails and especially in improved accessibility to the existing regional parks and trail systems. This plan urges Town leaders to take advantage of opportunities to enhance the community's connections to area parks and trails and recommends that any future development in the Town incorporate public open space and/or parks.

## Chapter Seven – Roadways & Transportation

The transportation modes and routes that residents use in and around Columbine Valley are addressed in Chapter Seven. The internal streets and the adjacent arterials that serve the Town have not changed significantly over the years. West Bowles Avenue and South Platte Canyon Road remain the main roadways by which residents access the larger community. While internal streets have been added during the years, Fairway Lane, Club Lane and Middlefield Road are the community's primary internal collector streets. Roadway maintenance is now scheduled on a prioritized system and funded by the Town through an annual appropriation.

Transportation options have grown since the Town’s incorporation in 1959. While the automobile remains the primary mode of transportation, light rail, an expanded bus system and bike trails have been added. Traffic volumes have increased significantly and while the streets still operate at a high level of service, there are safety issues that should be addressed.

### *Chapter Eight – Stormwater & Floodplain Management*

This chapter describes drainage and flood-control characteristics of the Town. Columbine Valley, in partnership with other entities, has taken significant steps to reduce the potential for major flooding and has developed a stormwater drainage system that provides for efficient drainage throughout the Town. The Town sits in the South Platte River watershed, which has experienced severe floods. A significant portion of Columbine Valley was originally within the floodplain, but thanks to a variety of projects during the past five decades, only a small portion of the Town remains in the floodplain.

### *Chapter Nine – Programs, Services & Utilities*

This chapter describes the many programs, services and utilities provided to Columbine Valley residents. Some essential municipal functions are provided directly by the Town, while others are supplied by partner entities.

The Town directly provides administrative staff, a police force, a building department, code enforcement, snow plowing and street maintenance and infrastructure. While some minor aspects of some of these functions are contracted to outside vendors, Town employees manage all operations. The Town also sponsors special events and programs that promote citizen participation and a sense of community, such as the 4th of July celebration, and offers services of convenience such the secure shredding of documents.

Many partner organizations support or provide additional Town programs and services. The Town and Columbine Country Club jointly sponsor 4th of July fireworks. The summer concerts in Columbine Park receive generous support from corporate sponsors. The Town also contracts for some essential services. For example, South Metro Fire Rescue provides fire protection, while Republic Services of Colorado removes trash and recycling. Electricity, natural gas, cable, telephone, water and sewer are all provided by private companies or public utilities.



*Walking is a popular pastime in Columbine Valley.*

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# Vision & Mission – 2

The mission and vision statements are vital elements of the master planning process because they help direct Town leaders and staff as they shape the Town's future.

The vision statement focuses on the future and articulates the Town's aspirations. The mission statement expresses what the Town will do to create that future. Both are succinct and to the point.

To develop the Town's vision and mission statements, the 2019 Town Vision Survey was used to identify what aspects of Columbine Valley were valued by residents and what they would like to see in years to come.

Words that appeared often in respondents' answers to the question, "What do you see as unique or important" about Columbine Valley included "aesthetic beauty," "hidden gem," "sense of community," "small-town atmosphere," "family friendly," "friendly environment" and "near to amenities." These attributes inform not only the vision and mission, but also the goals throughout this plan.



*Columbine Park adjoining the Town Hall hosts several events throughout the year, such as summer concerts like this one.*

## Vision

*To remain a friendly, attractive, safe and desirable community – in a fast-growing metro area – through thoughtful development and civic policies.*

## Mission

*To preserve our small-town heritage and quality of life by providing high-quality public services and giving citizens a voice in shaping the town's future.*

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# Use of the Master Plan – 3

The Master Plan is the primary planning document for Columbine Valley. It is a written and graphic picture of the community now and in the future. The plan elements include the history of the community, the population, land uses, the streets, drainage, utility systems, open space and parks, police and fire services, public works and Town-sponsored programs. It analyzes plan elements and recommends future planning activity.

The plan is used many ways. For residents, the plan envisions how the community might grow. For prospective residents and business owners, it describes the type of community into which they would move. For prospective developers, it outlines the Town's expectations for types and sizes of developments. For the Town staff, it guides their review of development applications. For the Planning & Zoning Commission and Board of Trustees, it guides deliberations on their land-use decisions and influences annual budgets.

The Master Plan is an integral element of the decision-making process for appointed and elected officials because the plan's adoption includes the discussion of how individual properties fit into the vision for Columbine Valley. To adjacent communities, it provides information about projected land uses and potential impacts along common boundaries.

The Master Plan is not a legally enforceable document. It is a guide that provides the basis for developing a regulatory system that will bring the vision of the plan to reality. The plan is implemented through zoning and subdivision codes, the capital improvement program and the annual budget. The zoning ordinance delineates locations and establishes standards for future development. The subdivision regulations establish the lot and utility easement boundaries of subdivisions, the street system, areas for open space and parks, and acceptable methods for financing public improvements.

To continue to be a relevant document, the Master Plan must be reviewed periodically (5-7 years) by the Planning and Zoning Commission and the Town Board to consider circumstances that may shift the vision of the community.

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# Land Use – 4

## Introduction

Land use describes the various ways in which human beings make use of and manage the land and its resources. Land use planning is the process of regulating the use of land in an effort to promote more desirable social and environmental outcomes as well as a more efficient use of resources.

Columbine Valley's land use planning process has endeavored through the decades to protect the unique nature of the community through development that complements its aesthetics and quality of life.

After the Town's incorporation in July 1959, its growth was driven primarily through annexation of undeveloped property. Parcels were typically annexed because of concerns about impacts from their eventual development and the quality of architectural design. Therefore, previous master plans focused predominantly on land use recommendations to manage growth. The approval of the Wild Plum subdivision in 2018 essentially completed the major land development activity in the Town. There are several relatively small parcels that have development potential, including three accessed from Watson Lane, one parcel accessed from Middlefield Road and one from Hunter Run Lane (refer to Table 4). Any new development of a significant size would occur only if the Town annexed additional property. Chapter Five of this plan discusses the possibility of future annexations.



*Trees bloom each spring along Hunter Run Lane.*

## Existing Land Uses

Residential subdivisions, unplatted parcels (not subdivided), public and private open space and recreation constitute Columbine Valley's land uses. Non-residential uses include a country club, agriculture (including horse boarding) and the Town Hall. Development is primarily single-family residential. The residential densities of the subdivided properties range from less than one dwelling unit (DU) per acre to more than four DUs per acre. The unplatted parcels, each typically containing

one single-family home, range in size from 1 to more than 7 acres and total 17.5 acres. There is currently no retail or commercial development within the Town. This plan recommends that Town leaders consider annexation opportunities that might enhance the Town’s tax base without detracting from the community’s overall residential atmosphere. In addition, the Town does not currently have any senior retirement-oriented housing. The Town should be alert for opportunities to provide housing for people who want to remain in Columbine Valley, but desire simpler or more supportive living options.

At first, homes were developed bordering the golf course. These homes, within the Columbine Valley HOA and known as Old Town, are on lots averaging one-half acre and are limited to one-story, ranch-style homes. While the golf course provides open vistas for some of these homes, there is no HOA-owned open space in Old Town. Subsequent subdivisions and homes included a more diverse mix of lot sizes and architectural style and include HOA-owned open space of different sizes.



*Streets with golf cart lanes on each side are typical in parts of Columbine Valley.*

Columbine Villas, developed in the 1970s, are the only townhomes within the Town. Columbine Valley has no apartments or condominiums.

The lots in the Village and Burning Tree subdivisions average about one-third acre in size and consist of both single-story/ranch and two-story homes. The lots in Brookhaven Estates and Polo Reserves/Polo Meadows average about one-half acre. Homes are predominantly two-story with some single-story/ranch style homes. Columbine Valley Estates subdivision lots average close to 1 acre and consist of two-story and single-story/ranch homes.

From just after 2001 to the present, The Country Club Villas, Villa Avignon, Willowcroft Manor and Wilder Lane subdivisions were developed and reflect a transition away from larger lots with two-story homes to smaller lots with mostly single-story, ranch-style homes. These subdivisions’ lots average less than one-fifth acre. Some homes in these newer neighborhoods are of contemporary styles less often seen in other parts of the Town. The HOAs for these subdivisions are responsible for yard maintenance, making these developments attractive to homeowners who don’t want to be responsible for landscape maintenance or who are “snowbirds” (residents who spend the winter months in a warmer climate).

The most recently approved subdivision in Town, Wild Plum, has an average lot size of about one-half acre and will have both two-story and single-story ranch-style homes. The first homes in Wild

Plum should be completed in 2020. Most notably, Wild Plum is the first subdivision in Town to include a significant amount of open space, park land and trails that will be available for use by all Town residents.

Map A in Chapter One shows all the Town’s platted subdivisions and unplatted parcels.

Table 3 lists total acres, number of lots, average lot sizes, gross densities (number of dwelling units per acre) and the density classification in each of the subdivisions. Average lot size is calculated by dividing the total square footage of all the lots by the number of lots in the subdivision. Gross density is calculated by dividing the number of lots or DUs by the total acreage within the subdivision. Density classifications were established by the 2007 Master Plan and are calculated as follows:

Low:	One or fewer DU per gross acre
Medium:	Greater than one DU to fewer than 2.4 DUs, per gross acre
High:	2.4 DUs or greater per gross acre



*The Wild Plum neighborhood, currently under construction, is the newest addition to Columbine Valley.*

**TABLE 3  
DEVELOPED AND DEVELOPING SUBDIVISIONS**

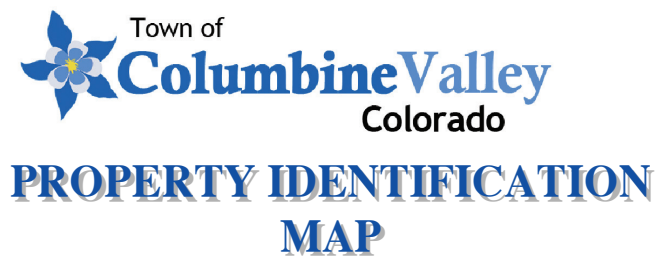
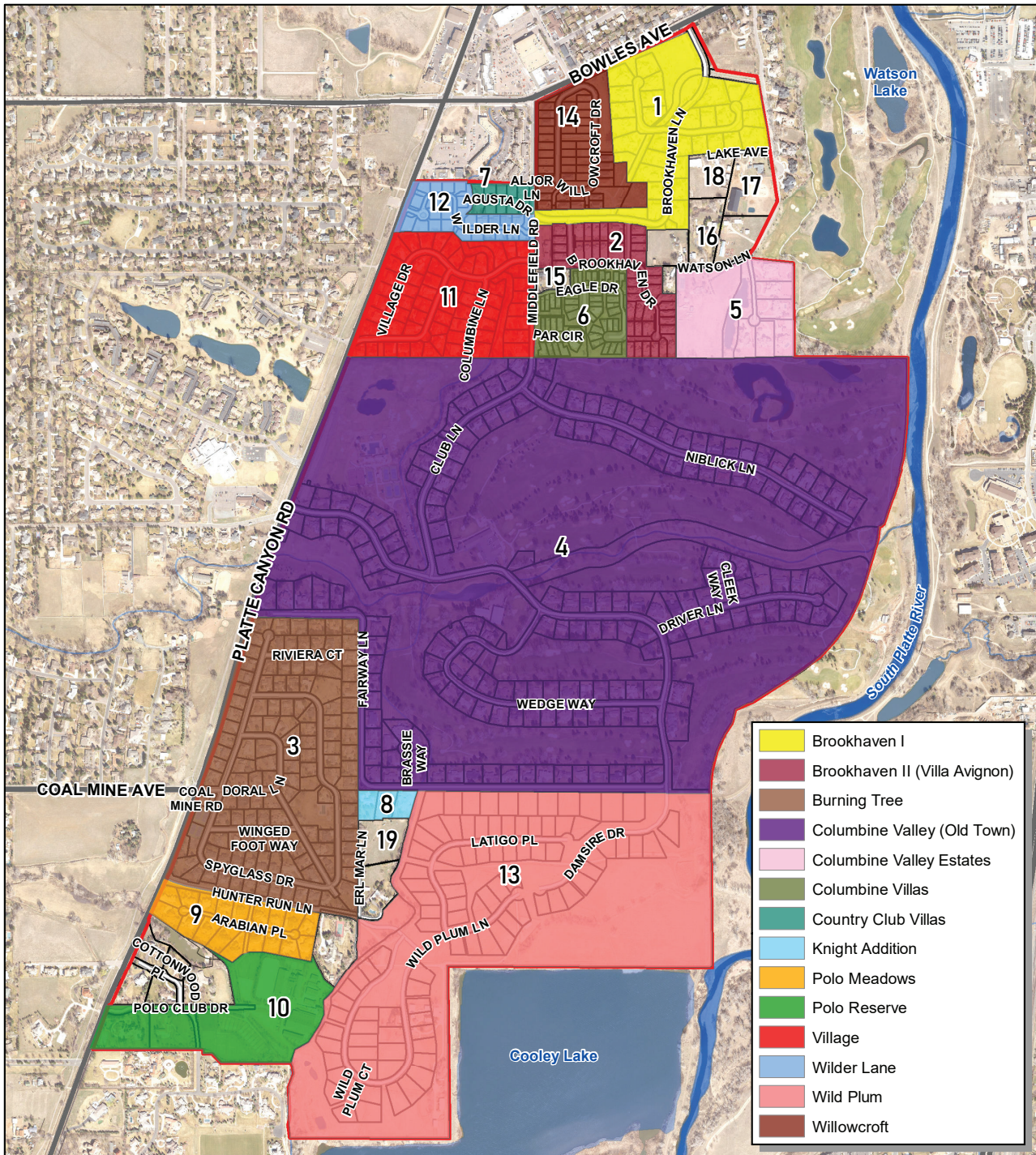
Subdivision	Map Reference Number*	Total Acres	Number of Lots	Average Lot Size (sq. feet)	Gross Density (DU/acre)	Density Classification
Brookhaven I	1	27.40	29	23,509	1.06	Medium
Brookhaven II (Villa Avignon)	2	11.14	45	9,244	4.04	High
Burning Tree	3	54.00	122	14,521	2.26	Medium
Columbine Valley (Old Town)	4	139.0	179	20,719	1.29	Medium
Columbine Valley Estates	5	13.36	7	76,141	0.52	Low
Columbine Villas	6	9.88	45	4,698	4.45	High
Country Club Villas	7	2.48	8	8,947	3.23	High
Knight Addition	8	2.05	3	29,830	1.46	Medium
Polo Meadows**	9	9.65	18	25,595	1.86	Medium
Polo Reserve**	10	18.98	3	275,592*	0.16	Low
Village	11	25.15	60	14,193	2.39	Medium
Wilder Lane***	12	6.62	24	8,166	3.63	High
Wild Plum	13	104.8	95	21,748	0.91	Low
Willowcroft	14	14.24	42	7,779	2.95	High
Totals		438.75	680			
Average		31.34		17,980	1.58	Medium

\* See Map B -Property Identification Map

\*\* Polo Meadows and Polo Reserve are part of the same subdivision plat. They are separated here because Polo Reserve is primarily non-residential (Equestrian)

\*\*\* It is projected that Wilder Lane will be built out in 2020 and Wild Plum by 2025.

## Map B – Property Identification



See Map Reference Column  
in Tables 3 & 4

## Potential Land Use

The Town envisions residential development in keeping with the present character of the community. The Town Trustees will determine future residential development densities after weighing the impacts on adjacent developed properties, open space and architectural design. Consideration will also be given to the proposed developments' traffic impact, amount of open space, peripheral versus infill location, ease of access, connectivity to the Town and other appropriate factors.

Table 4 lists the parcels/properties in the Town that have additional development potential and recommends density classifications for each. These parcels include the Wilwerding/Letbetter property on Middlefield Road, three parcels on Watson Lane and the Schomp/Wallace property between Burning Tree and Wild Plum, as shown on Map B.

**TABLE 4  
PARCELS WITH ADDITIONAL DEVELOPMENT POTENTIAL**

Property Owner	Map Reference #	Acres	Number of Units		Density Class
			Existing	Maximum Permitted	
Wilwerding/Letbetter	15	1.05	2	4	High
Ausfahl	16	7.20	3	17	Low-Med
Berg/Carlson	17	3.93	1	9	Low-Med
Swenson	18	2.60	1	6	Low-Med
Schomp/Wallace	19	2.71	1	6	Low-Med
Total - Other Property		17.49	8	42	



*Development of the Willowcroft neighborhood was approved in 2013, and construction, shown here underway, was completed in 2016.*

Development of the properties in Table 4 cannot be predicted. It seems unlikely, based on the Town planner’s experience, that no development will occur or that the maximum of 34 new residences will be added. The plan estimates a middle number of 13 residences might be added in the next five years.

In the case of an owner of a single parcel who wishes to create one or two additional lots, the Town zoning regulations provide for a “minor subdivision” process with a combined preliminary and final development plan. A proposal for three or more additional lots, from a single owner or multiple owners joining together, would go through a preliminary plan followed by a final development plan. Depending on the specific proposal and the number of lots, a formal drainage study and traffic analysis may be required.

In summary, with the build-out of Wilder Lane and Wild Plum and some development of the unplatted properties listed above, it is projected that by 2025 there will be 713 households within the Town’s present boundaries, up from 588 in August 2019.

## Annexation

As explained at the beginning of this chapter, Columbine Valley has exhausted opportunities for major land development and does not expect to significantly increase the number of households in the Town. Expanding Town boundaries through annexation of adjacent property, however, could foster additional growth and development. As noted in Chapter One, the Town has grown through annexation since 1967. This Master Plan recommends the Town continue that practice, provided annexation conforms to state law, benefits the community and is consistent with the goals of the Master Plan.

See Chapter Five for a discussion of annexation.

## Goals

The Town of Columbine Valley’s land-use goals are to:

1. Maintain the relatively low-density, primarily residential character of the community.
2. Ensure that future residential developments are compatible with, or not detrimental to, adjacent existing residential development.
3. Ensure that any new streets to accommodate development are built as two-lane roads with room for on-street parking and safe use by pedestrians, bicycles and golf carts.
4. Encourage new developments to incorporate off-street guest parking.
5. Encourage the protection of important wildlife habitat and significant natural landforms.
6. Encourage development that protects the environment through reduced use of fossil fuels and water and the adoption of alternative energy systems.
7. Ensure that new development has a net positive effect upon the Town’s property tax base and financial viability.
8. Improve the connectivity among the Town’s neighborhoods with pedestrian and bike trails, golf cart paths and wide, improved shoulders along the Town’s roadways.
9. Acquire, where appropriate, new open space and parks that would be available to all Town residents and fund acquisitions through the Arapahoe County Open Space Share-back Fund (refer to discussion in Chapter Six) or establish open space through the dedication of tracts within new subdivisions.
10. If an appropriate location is identified, encourage the development of age-focused housing for residents who want to transition from a traditional single-family home and do not wish to move out of the Town.

# Annexation – 5

The build-out of Wilder Lane and Wild Plum will complete major land development in Columbine Valley. As discussed in Chapter Four, some vacant or underdeveloped parcels could potentially accommodate small development proposals, but these are not expected to significantly add to the number of housing units projected for the Town in 2025. Annexation of property, however, provides opportunities for additional growth and development. Indeed, the Town has grown through annexation since its inception. This Master Plan recommends that Town leadership continue that practice, provided annexation conforms to state law, benefits the community and is consistent with the goals of the Master Plan.

Towns and cities in Colorado pursue annexation chiefly for two reasons:

- **Enhanced revenue:** In this case, the municipality recognizes that annexing adjacent unincorporated property, whether vacant or developed, would provide additional sales or property tax revenue that would exceed the cost of providing services to the annexed area.
- **Community protection:** In this case, the municipality believes that adjacent unincorporated property, either vacant or underdeveloped, could be developed in a way that would affect the community negatively.

To date, Columbine Valley has annexed property primarily for community protection, achieved by assuming control over the type and quality of development in annexed areas. Enhancing revenue was either not considered or was a secondary issue. In the future, generating revenue in excess of the costs of servicing a new area may be a major element when considering annexation.

## The Three-Mile Plan

A state statute adopted in 1987 provides an additional but limited way to have some control over development in adjacent areas. A municipality can adopt a plan for an area extending up to three miles from its boundary. The Three-Mile Plan can be either included in the comprehensive (master) plan or adopted separately and must precede annexation. A municipality may adopt a Three-Mile Plan even though another municipality has adopted a plan for the same area. In fact, the City of Littleton adopted a Three-Mile plan in 2015 that includes all the land west of Platte Canyon Road.

When both jurisdictions wish to annex the same property, state statutes provide for a conflict-resolution process.

The annexation process can begin and proceed without a Three-Mile Plan, but the Plan must be in place before final approval of an annexation. Three-Mile Plans are not required to cover the entire three miles around the Town and could include only unincorporated property.

Columbine Valley does not currently have a Three-Mile Plan.

## Criteria for Annexation

According to state statutes, a municipality may annex property if one of the following criteria is met:

1. The area is an “enclave” surrounded by the annexing municipality, or the property is owned by the municipality. In these cases, the municipality can annex by simply passing an ordinance.<sup>5</sup>
2. A petition requesting an annexation election has been received by the municipality.<sup>6</sup> A majority of the voters in the area proposed to be annexed vote in favor of annexation.<sup>7</sup>
3. A municipality has received a petition for the annexation of an area signed by more than 50% of the landowners in the area who own more than 50% of the area, excluding public streets and alleys and any land owned by the annexing municipality.<sup>8</sup>

There are other legal requirements relating to continuity with the area to be annexed and the process to be followed.

## Areas of Interest

Areas where the Town could consider annexation are in the south area of Town and adjacent to the west right-of-way line of South Platte Canyon Road. The characteristics of these two areas differ:

1. South area: Except for one vacant parcel, all properties that could legally be annexed contain single-family residential homes and are unlikely to be redeveloped for any foreseeable time. As shown on Map B these properties are surrounded by Columbine Valley and could be annexed at the sole discretion of the Town.
2. West of South Platte Canyon Road: Because the Town’s boundary is the west right-of-way line of the road, the properties fronting the road would be eligible for annexation. These properties are either vacant or developed as single-family residential. There are conditions under which the Town should consider annexation in this area:
  - Some vacant or underdeveloped properties may be suitable for limited retail use, which could provide sources of sales tax revenue to the Town.
  - Some vacant or underdeveloped properties, if developed under Arapahoe County regulations, could result in incompatible design or density, negative traffic impact and/or flood control issues.
  - Some developed residential areas have architectural designs comparable to Columbine Valley neighborhoods; these areas may be interested in petitioning for annexation to the Town.

<sup>5</sup> 31-12-106 CRS

<sup>6</sup> 31-12-107 (2)

<sup>7</sup> 31-12-112 C.R.S.

<sup>8</sup> 31-12-107 (1)

In summary, the Town should be open to opportunities for annexation, but only if the financial benefits of adding a specific area outweigh the cost of providing services, the character of any residential areas are, or will be, compatible with the Town's neighborhoods and any adverse impacts can be mitigated.

## Goals

1. Protect against potential adverse impacts of development in the unincorporated area to the west of the Town by adoption of a Three-Mile Plan.
2. Maintain existing good relationships with the City of Littleton and Arapahoe County in considering any annexation.
3. Be proactive in pursuing annexation opportunities if they are in the best interest of the Town.



*In fall, the cottonwoods along the Nevada Ditch turn golden-yellow.*

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# Parks, Open Space & Trails – 6

## Introduction

Open space helps establish and maintain the quality of life in a community. Parks, trails and other open spaces provide opportunities for recreation and exercise, boost property values<sup>9</sup>, and contribute to the environmental well-being of a community.

At the time of Columbine Valley's founding in 1955, there were no formal parks or trails in the Town. Initially, there was a single subdivision with spacious residential lots adjacent to a golf club. While the golf course was (and is) private property, residents enjoyed the course's open vistas and considered it an amenity. In the Town's early days, residents could access the natural areas along the South Platte River, but there were no trails or other improvements. Nearby communities had few parks and no regional trail systems. The South Suburban Park and Recreation District was formed in 1959, the year Columbine Valley was incorporated as a town, and began acquiring land for parks and trails. Columbine Valley is part of the South Suburban special district and its taxpayers support and enjoy the many parks, trails, open space, recreation facilities and programs the district has developed.



*The Willowcroft neighborhood is among several areas of the Town that have HOA-owned open space.*

As the Town grew over the decades, small open space tracts and parks were formed as new development occurred, but these typically were designated for use by residents of each specific development. Not until 2019, with the construction of Wild Plum, did the Town have any publicly accessible open space or parks other than Columbine Park next to the Town Hall. Wild Plum includes 48 acres of both active and passive open space, open to all Town residents. There are hard- and soft-surface trails, a playground, a shelter, large turf areas and native grass and wetlands areas.

In recent years, Town residents have expressed growing interest in parks, open space and trails. In the 2019 Town Vision Survey, some respondents said Columbine Valley would be a better place if it had more parks and open space and better access to nearby parks. Nearly half of respondents said

<sup>9</sup> John L. Crompton, Texas A&M University, "The Impact of Parks on Property Values," Journal of Leisure Research, (2001).

they'd like to see better access to the South Platte River and Mary Carter Greenway. About a third said they would like additional trails or additional open space in Town.

To aid understanding of this chapter, terms used are defined in the box below. The chapter also has inventories of the Town's open space, parks and trails, both private and public and public open space, parks and trails outside of town within a one-mile radius of Town limits. Finally, the chapter sets goals and strategies for implementing the residents' responses to the 2019 Town Vision and Parks surveys and open houses.

## Definitions

### Open Space

*Columbine Valley defines open space broadly as private or public undeveloped accessible and non-accessible areas within town that may include natural upland, riparian and wetland vegetation areas and may or may not include trails. Accessible open space that allows for passive use has the least impact to natural areas. Recreation in these areas could include walking and biking on trails and viewing wildlife. Open space includes drainageways and floodplains, including the areas adjacent to the South Platte River and Cooley Lake, the Nevada Ditch property and water runoff detention facilities.*

### Parks

Parks are defined as active areas that may include turf grass areas, playgrounds, shelters and/or trails. Only two active public parks exist in Columbine Valley at the time of this plan's completion: Wild Plum Park and Columbine Park. The Burning Tree neighborhood has 3.3 acres of parks that are only open to Burning Tree residents. Willowcroft neighborhood has a 1.4-acre park for its residents only. This plan also defines Columbine Country Club golf course a "park." Although the course is not open to the public, it gives the town a park-like, open feeling.

### Trails

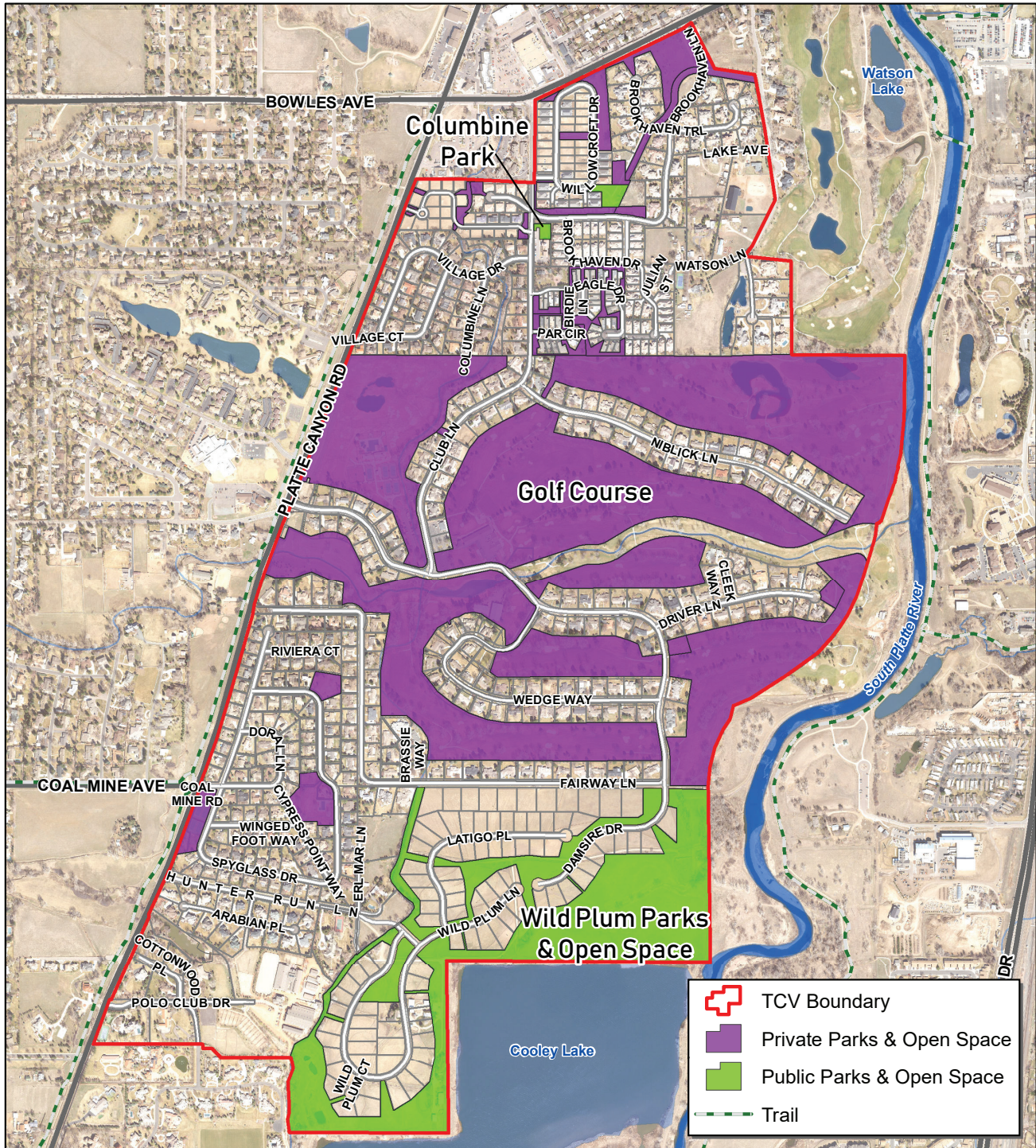
Columbine Valley has both official trails (trails that are recognized by plat or plan) and unofficial trails (places used as trails but have no legal status as such). The Town's trails are made of concrete, crusher fines or dirt, and are in both passive and active areas.

### Recreation

Active recreation is defined as activity that requires use of special facilities, courses, turfgrass fields or structures including playground equipment. This would include golf courses.

Passive recreation is defined as activity that does not include prepared facilities like sports fields, pavilions or playground equipment. Birdwatching and walking are examples of passive recreation.

## Map C – Parks & Open Space Inside Town Limits



## PARKS & OPEN SPACE



## Town Private and Public Parks, Open Space and Trails Inventory

### Columbine Country Club

- Two golf courses (18 hole and par 3), clubhouse, tennis courts and a swimming pool are available for members. (Private)
- Dutch Creek drainage runs from Platte Canyon Road to the South Platte River. (Private)

### Columbine Park

- A gently sloped lawn north of the Town Hall serves as the gathering area for municipal functions, including concerts in the park and the 4th of July celebration.



*Columbine Country Club is private but provides open vistas for part of town.*

### Burning Tree

- Three parks are set aside for residents only. (Private)
- A concrete drainage between Spyglass Drive and Fairway Lane serves as an unofficial path between Burning Tree and Old Town.

### Brookhaven

- Drainageway areas, maintenance access paths and a large native vegetation area that serves as a flood detention facility that is part of Drainageway D comprise the neighborhood's open space. (Private)
- Two tracts are planted in turf grass (Private)
- A golf cart, pedestrian and bicycle trail link Brookhaven Lane and Watson Lane (Private restricted easement for use by residents of the Brookhaven and Watson Lane HOAs only).
- A concrete path, used by golf carts, bicycles and pedestrians, extends from the Willowcroft emergency access along the Urban Drainage easement and connects Brookhaven Lane and Willowcroft Drive to Brookhaven Trail. (Private)

### Willowcroft

- The neighborhood has 1.4 acres of open space planted in native and turf grasses. (Private)
- A passive open area for emergency access as well as access to the maintenance path along Drainageway D is planted with both turf grass and native grass. (Public)
- A paved emergency access connects Willowcroft Drive to Brookhaven Lane and serves as a golf cart, bicycle and pedestrian trail. (Public)
- A concrete path, used by golf carts, bicycles and pedestrians, extends from the emergency access along the Urban Drainage easement and connects Brookhaven Lane and Willowcroft Drive to Brookhaven Trail. (Private)

#### Wilder Lane

- Various drainage areas including the Nevada Ditch serve as open space for the neighborhood. Entryways also provide visual openness but are unusable for recreation. (Private)
- Three common areas in the neighborhood are planted in turf grass with planting beds. (Private)

#### Wild Plum

- 48 total acres of active and passive open space are open to all residents of Columbine Valley. This acreage has turf areas, a playground, shelter/plaza area overlooking Cooley Lake and trails throughout. (Public)
- The plat for Wild Plum provides for a possible future trail connection to the South Platte River trail system, if jointly requested by the Town Trustees and the South Suburban Park and Recreation District.

#### Country Club Villas

- Drainageway areas and an entryway provide visual openness but aren't usable for recreation. (Private)

#### The Village in Columbine Valley

- A drainage easement (pocket park) is located near Platte Canyon Road and Nevada Ditch, which runs from south to north through the neighborhood. (Private)

#### Polo Meadows

- Nevada Ditch runs from south to north on the east side of the neighborhood while Normandy Gulch runs through the neighborhood from west to east. (Private)

#### Columbine Valley Estates

- 1.9-acre open space with pond is available for use by HOA residents. (Private)

#### Columbine Villas

- Common open space around its single-family attached homes is set aside for residents of the HOA. (Private)

#### Denver Water

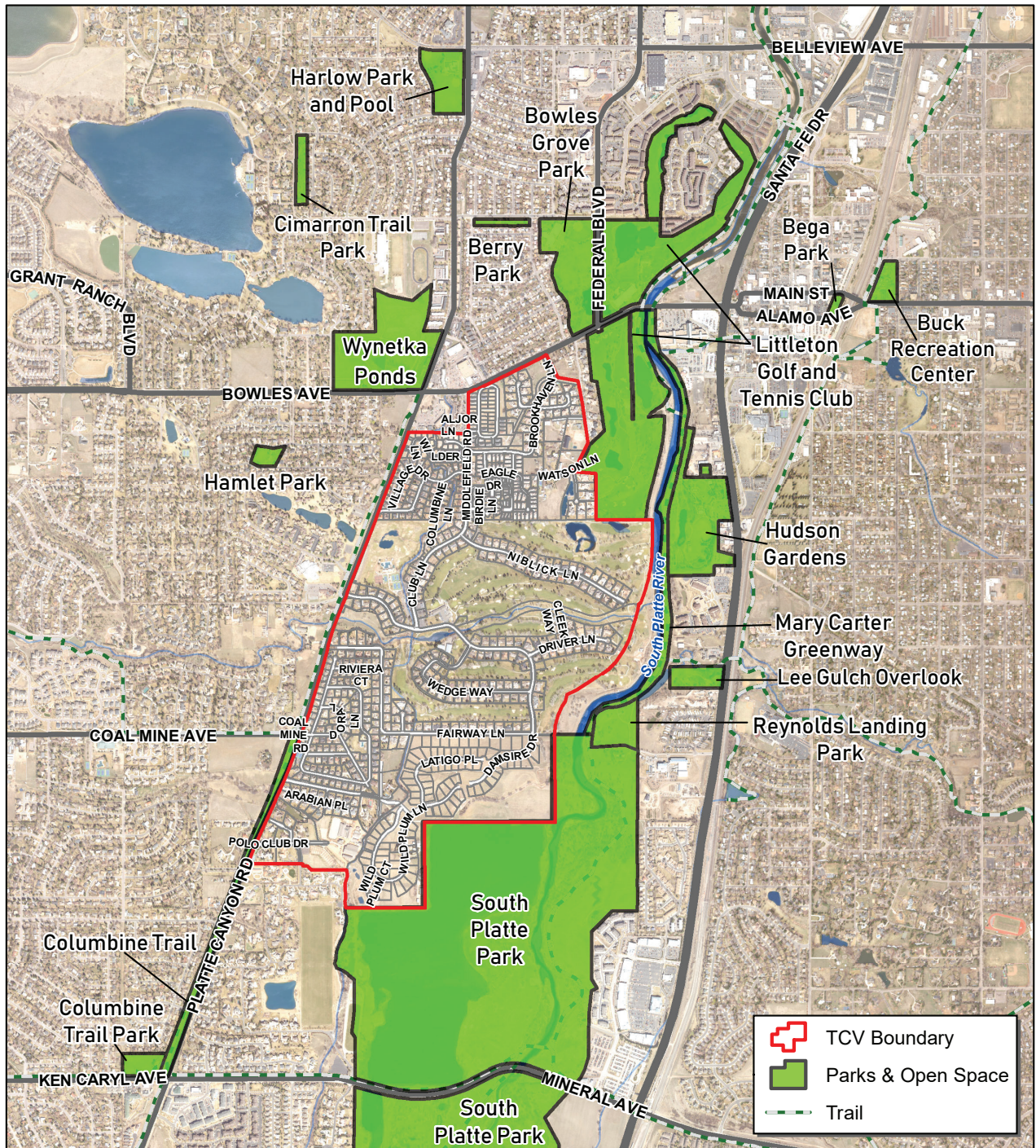
- The Nevada Ditch, running south to north through the community, provides a natural linear narrow open space within the Town that is currently not available for public use.

## Amenities Outside of Town Within 1 Mile

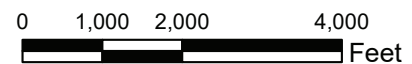
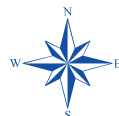
Map D shows the location of 13 amenities.

- |                         |                                  |
|-------------------------|----------------------------------|
| • South Platte Park     | • Mary Carter Greenway           |
| • Hudson Gardens        | • Wynetka Ponds                  |
| • Hamlet Park           | • Berry Park                     |
| • Harlow Park           | • Littleton Golf and Tennis Club |
| • Bowles Grove Park     | • Columbine Trail Park           |
| • Columbine Trail       | • Bega Park                      |
| • Reynolds Landing Park |                                  |

## Map D – Parks, Open Space & Trails Outside Town Limits



## PARKS & OPEN SPACE OUTSIDE TOWN LIMITS (1 MILE)



## Open Space, Parks and Trails in the Future Columbine Valley

Goals and strategies in this chapter are offered as guidance for the leaders of Columbine Valley as they consider capital improvements or new development proposals. The goals and strategies reflect residents' responses to the 2019 Town Vision Survey and community meetings regarding open space, parks and trails.

### Open Space

Community surveys identified the preservation of open space as a high priority for Columbine Valley. Residents perceive there is less open space in the community now that the last large properties have been developed for homes. Survey respondents would like to see parts of remaining undeveloped areas preserved as open space, either through landowner designation or public acquisition or both.

### Goals

1. Provide open space to encourage the protection of views and water quality.
2. Preserve natural attributes such as floodplain and wetlands areas, geological hazards, vegetative stands and wildlife habitats.
3. Provide open space in areas of Town that aren't near publicly accessible open space.
4. As the infill parcels in Town develop further, strive to create open space areas through purchase or dedication.
5. Focus creation of any new open space areas on passive recreational opportunities such as trails or natural landscapes. Encourage opening these spaces to all Town residents.

### Strategies for Implementation

1. Consider acquiring currently underutilized open space from neighborhoods for use by all Town residents.
2. Identify specific projects for the capital improvements project list.
3. Consider projects that would beautify and improve pedestrian safety along Platte Canyon Road where feasible.



*The South Platte River is east of Columbine Valley and has miles of trails and amenities.*

4. Use available funding sources for identified open space projects as allowed, including Arapahoe County Open Space shareback funds. Arapahoe County has the largest shareback program in the state with 50% of Open Space Sales and Use Tax revenue distributed to participating cities and towns, based on population.
5. Preserve and restore undeveloped open space, such as the South Platte River floodplain, the Nevada Ditch and existing drainageways within the Town.

## **Parks**

Some respondents to the 2019 Town Vision Survey and the subsequent open house/park survey backed the idea of an active area for children to play. The goals and strategies reflect this desire.

### *Goals*

1. As infill parcels in town develop, open space acquisition should be proactively pursued to help create park areas through purchase or dedication.
2. New parks should consider an active (playground) recreational component and be open for use by all Town residents.

### *Strategies for Implementation*

1. Consider acquiring currently underutilized open space from neighborhoods for use by all Town residents, especially on the north end of Town.
2. Identify specific projects to put on the capital improvements project list.
3. Use available funding sources for identified open space projects as allowed, including Arapahoe County Open Space shareback funds.
4. Consider partnerships with South Suburban Parks and Recreation District or other entities to facilitate and fund parks within the Town.

## **Trails**

Residents also expressed a desire for more trails in Town and better connections to existing trails in response to the Town Vision Survey and subsequent meetings and surveys. The goals and strategies for trails reflect this and urge the Town to be more proactive in providing safe and convenient connections in and around the community.

### **Goals**

1. Establish safe connections from Columbine Valley to schools and regional pedestrian and bicycle trails.
2. Expand the Wild Plum trail system to connect Town neighborhoods as much as possible and improve off-street movement of pedestrians, bicycles and golf carts through the Town.

### **Strategies for Implementation**

1. Work to ensure the preservation of the unofficial trails within Town.
2. Investigate better and safer access to the Mary Carter Greenway and South Platte Park that avoids Bowles Avenue.
3. Cooperate with other governmental bodies to enhance routes for pedestrians and bicyclists to amenities outside of Town such as Downtown Littleton, the South Platte River, shopping centers, trails and adjacent park areas.
4. Consider acquisition of existing underused open space that could become a trail corridor.



*Snow covers the former Tuck Family Farm, now the Wild Plum development.*

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# Roadways & Transportation – 7

## Introduction

Roads not only connect Town neighborhoods, they allow residents to access the greater metro area and beyond via motorized and non-motorized modes of transportation. The types of streets in Columbine Valley also lend to the Town's overall look and atmosphere. The Town's streets do not have sidewalks, but most have wide enough shoulders to also accommodate pedestrians, bicyclists, skateboarders, golf carts and others.

This chapter serves three purposes. The roadways section describes the existing and future street system and the programs developed to maintain and expand the system. The transportation section describes the existing and projected traffic movement in and near the Town. Goals for the Town's transportation and road systems conclude the chapter.

## Roadways

Columbine Valley is linked to the regional transportation network by two prominent arterials: South Platte Canyon Road and West Bowles Avenue.

Town residents reach these two roads via intersections with traffic signals at South Platte Canyon Road and Doral Lane, South Platte Canyon Road and Fairway Lane and at West Bowles Avenue and Middlefield Road. There are also connections to these two arterials at intersections without traffic signals at South Platte Canyon Road and Hunter Run, Village Court and Wilder Lane and at West Bowles Avenue and Brookhaven Lane and Watson Lane. Four Town neighborhoods have only a single access to an arterial: Burning Tree via a traffic signal at Doral Lane and South Platte Canyon Road, Watson Lane at Watson Lane and West Bowles Avenue (no traffic signal) and Polo Meadows and Wild Plum at Hunter Run and South Platte Canyon Road (no traffic



*The Town is near two RTD light rail stations, this one in downtown Littleton and another at South Santa Fe Drive and Mineral Avenue.*

signal). Maintaining transportation safety and acceptable mobility at these key access points is very important to the Town.

Motor vehicles constitute the Town’s primary mode of travel, but light rail, bus, bicycle and pedestrian transportation opportunities also exist. Nearby, the Regional Transportation District (RTD) has bus routes along West Bowles Avenue (Route 49), South Platte Canyon/Lowell Boulevard (Routes 36 and 36 Limited), Federal Boulevard (Route 29) and Mineral Avenue (Route 77). Light rail stations for RTD’s Southwest Line are located one mile east at South Prince Street and West Alamo Avenue (Littleton-Downtown station) and three miles southeast at South Santa Fe Drive and West Mineral Avenue (Littleton-Mineral station).

The South Suburban Parks and Recreation District has two multi-use trails near the Town. The Greenway Trail follows the South Platte River on the eastern boundary of the Town. The Greenway Trail extends almost 30 miles, from Chatfield State Park through downtown Denver to East 120th Parkway, and it connects to many other regional trails including the Bear Creek, Dry Creek and Cherry Creek paths. South Suburban’s Columbine Trail parallels the town boundary along the west side of Platte Canyon Road and links West Bowles Avenue to the C-470 Bikeway.

### *Roadway Maintenance*

Town road maintenance is prioritized by the capital improvement program and paid for through the annual budget approved by the Board of Trustees. The annual work plan is based on recommendations from the Town engineers. The Town has adopted a street maintenance program that cycles large-scale repairs, such as seal-coating with oil and gravel, on a 10-year schedule and less extensive repairs, such as gutter pan work, more frequently. Gutter pan replacements are prioritized based on issues with run-off flow, followed by impact to public right of ways, and finally, on aesthetics.

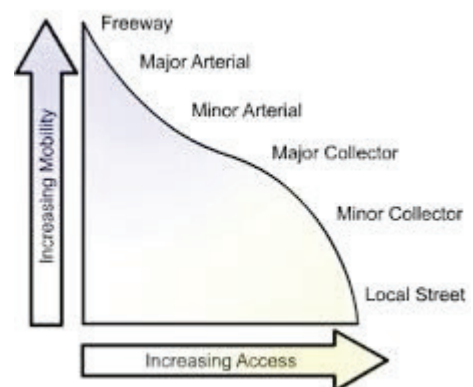
With proper maintenance, the Town’s pavement should have a life span of approximately 50 years. The remaining life of each section of road within the Town varies. Over time all roads need full depth, full width replacement.

### *Roadway Classification*

Roadways are classified into categories based upon the function they serve in the transportation network. Understanding how roads are classified is important in ensuring that the functioning of the community’s road system does not degrade over time.

Generally, roadways serve two primary travel needs: going to and from specific locations – accessibility – and efficiency of travel – mobility.

Roadways that provide a high level of mobility are classified as “arterials” while those that provide a high level of accessibility are classified as “locals.” Roadways that blend mobility and access are classified as “collectors.”



The only arterial road within the Town’s boundaries is South Platte Canyon Road. South Platte Canyon Road is a state highway (CO-75) and while the Town’s police patrol the highway, the Colorado Department of Transportation is responsible for its operations and maintenance. West Bowles Avenue is maintained and patrolled by Littleton.

The Town’s collector roads are Fairway Lane, Club Lane/Middlefield Road and Hunter Run Lane. All other Town roads are classified as local roads.

## Transportation

The number of residences in Town has increased and will continue to grow as new neighborhoods are completed. With population growth comes increased traffic of all types. The Town has completed several traffic studies that document current and projected future traffic conditions and will help plan for transportation needs.

### Traffic Counts

In preparing for this Master Plan update, new peak-hour turning movement counts were taken on Tuesday, May 14, 2019, and Thursday, May 16, 2019. These provided traffic volumes for each movement at intersections, as well as giving truck percentages, number of golf carts, pedestrians and bicycles for the following intersections:

- Fairway Lane & Club Lane
- Middlefield Road & Village Drive
- West Bowles Avenue & Middlefield Road
- West Bowles Avenue & Brookhaven Lane
- West Bowles Avenue & Watson Lane
- South Platte Canyon Road & Coal Mine Avenue
- South Platte Canyon Road & Fairway Lane
- South Platte Canyon Road & Village Court
- South Platte Canyon Road & West Bowles Avenue



*Peak hour traffic counts are taken in morning and evening as residents are leaving for or returning from work or school.*

To capture the traffic volumes while schools are out of session, additional turning movement counts were taken on Tuesday, June 25, 2019, at:

- Fairway Lane & Club Lane
- Middlefield Road & Village Drive

Using this data, as well as counts taken in previous years, existing average daily traffic volumes (ADT) were estimated for all relevant roadway segments in Columbine Valley. The ADT values include golf carts. The 2019 counts are shown on Map E.

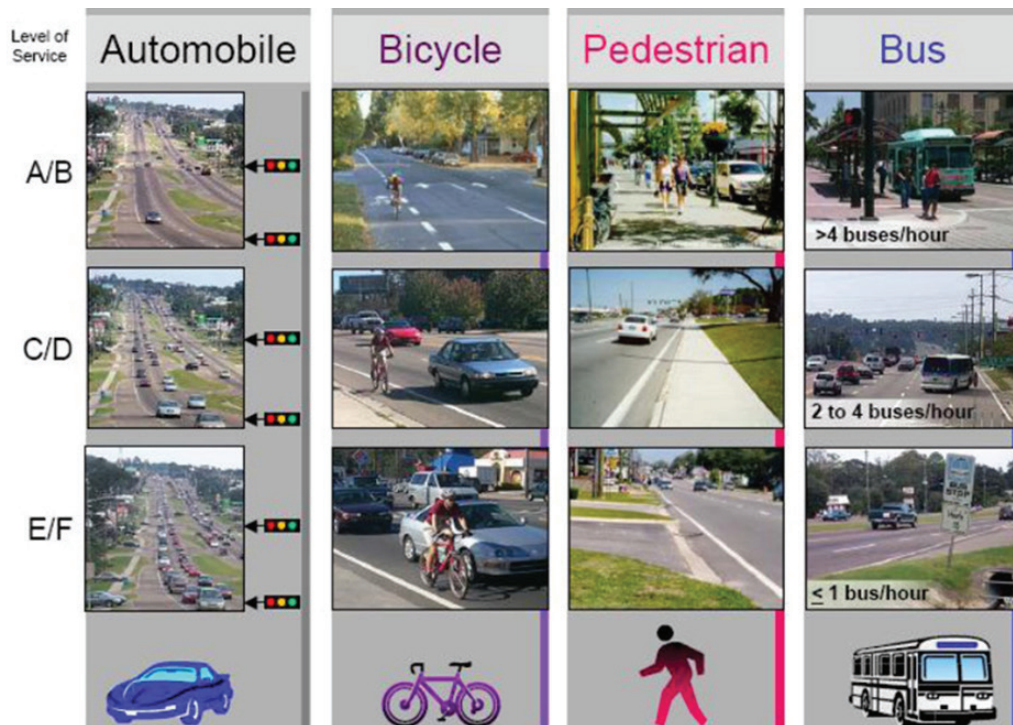
To estimate 2025 traffic volumes, forecast volumes from the development of Wild Plum, the remaining build-out of Wilder Lane and a minor amount of background traffic growth were added to the existing counts.

The projected peak hour volumes and ADT for each roadway segment are found on Map F.

### Level of Service

Level of Service (LOS) is an important yardstick to assess the operational quality of a specific segment of the transportation system. The Highway Capacity Manual defines LOS for various travel modes (auto, pedestrian, bicycle, and transit) and roadway system element (street or intersection). LOS ranges from A, the best operating conditions from the traveler's perspective, to F, the worst. During peak rush hours in the Denver metro area, LOS D or better conditions are typically considered acceptable at intersections; however, LOS E conditions are common on many streets. LOS F also is frequently measured for cross street traffic at full movement <sup>10</sup>, unsignalized intersections with high-volume arterial roadways.

An illustration of LOS for various modes of travel is shown below:



Source: FDOT Quality/Level of Service Handbook

<sup>10</sup> A full movement intersection allows both right and left turn in and out.

Existing LOS for intersections in or near Columbine Valley is listed in Table 5. Three intersections are operating at poor service levels of E or F. There are plans to add a second northbound right-turn lane at South Platte Canyon Road and West Bowles Avenue, which will improve the LOS for the morning rush hour from LOS E to a D or better level.



*South Platte Canyon Road is one of two major arterial streets linking Columbine Valley to the regional road system.*

The stop-controlled intersections of South Platte Canyon Road and Village Court and West Bowles Avenue and Watson Lane both operate at LOS F at peak hours. Heavy traffic on the arterial roadway makes it difficult for vehicles to turn left from the cross streets. Since the cross-street traffic volumes are still relatively low, the poor LOS does not translate into significant vehicle stacking or other operational concerns.

The projected 2025 LOS for both stop-controlled and signalized intersections are shown in Table 6.

Projected levels of service in 2025 do not significantly change from 2019

since traffic volumes are not forecast to significantly increase. An exception is the intersection of Hunter Run Lane and South Platte Canyon Road, which will carry more traffic when the Wild Plum development is completed. However, Town traffic studies project that few vehicles will make a left turn from Hunter Run, so significant vehicle stacking or other operational concerns are not anticipated. The other internal stop-controlled intersections within Columbine Valley are expected to operate at LOS A.

### **Safety**

The fact that the internal Town streets will continue to operate at LOS A or B for vehicle traffic is encouraging for motorists. However, pedestrian and bicyclist safety must also be considered. On-street parking, for example, can force pedestrians, bicyclists and golf carts from the edge of road into the traffic lanes. In addition, speeding can put all street users at risk, especially pedestrians and bicyclists. Residents identified the following locations posing risk for non-motorized street users:

- Fairway Lane bridge
- The intersection of Fairway Lane and Club Lane
- Club Lane at the swimming pool/tennis court entrance
- Easternmost intersection of Fairway Lane at Wedge Way
- Brookhaven Lane at Bowles Avenue

If safety concerns develop at any of these locations, steps could be considered to separate pedestrians and bicyclists from vehicle traffic. However, given that incidents have been very rare, no immediate actions are being recommended by the Master Plan.

## Summary

Regular maintenance and timely major improvements of roadways contribute to the quality of life in Columbine Valley. Well-maintained roads also help preserve community standards and property values. A priority-based maintenance system ensures that the streets are properly maintained at an acceptable cost.

Traffic has increased as the Town has grown, as confirmed by traffic studies. A moderate amount of traffic growth is forecast as Wilder Lane and Wild Plum are built out; however, streets in the Town will continue to function at a high LOS.

While the Town has not experienced a serious accident involving a vehicle and a pedestrian or bicyclist, a handful of locations have been identified for continued observation and monitoring by the Town. If safety is compromised at any of these locations, the Town will act appropriately to mitigate the problem.

## Goals

### *Roadways*

1. Continue annual road maintenance to protect and further extend the life of existing asphalt pavement sections.
2. Review and carefully study traffic restrictions and modifications to minimize heavy, multi-axle loading of the roadways.
3. Coordinate maintenance with storm drain improvements. As roadways are scheduled for full replacement, a new storm drain system should be installed as needed under the new road, which would significantly increase the useful life of the new road.
4. Require restoration of streets and drainage facilities to Town standards if they are damaged by new home construction, major home remodeling or utility repair or installation. Consider requiring that a bond or other financial guarantee be posted for this work when permits are issued.
5. Continue to work with nearby jurisdictions on proposed transportation improvements to ensure connectivity and continuity of roadways.

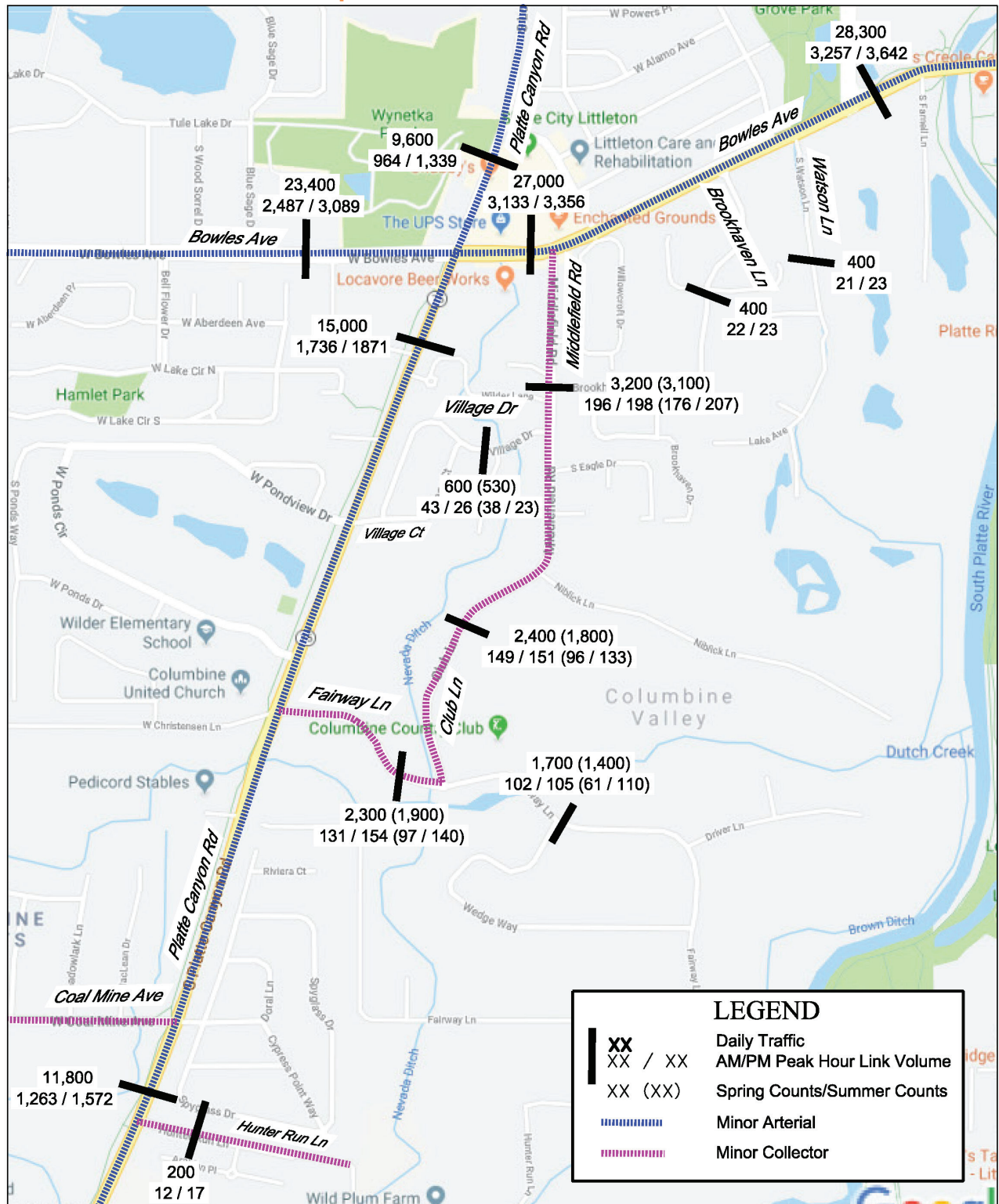
## Transportation

1. Continue collaboration with agencies including Arapahoe County, City of Littleton, Colorado Department of Transportation, and Denver Regional Council of Governments regarding important transportation corridors, including South Platte Canyon Road, West Bowles Avenue, South Federal Boulevard and West Mineral Avenue.
2. Build sidewalks and improve access to protected crossings along South Platte Canyon Road to provide safer access to area amenities.
3. Maintain the existing transportation character of the Town and continue to allow pedestrians, bicyclists, golf carts and vehicles to mix on local streets.
4. Where appropriate, take steps to separate pedestrian and bicycle traffic from travel lanes by restricting on-street parking or other measures to address transportation safety concerns.
5. Where possible, provide off-street connections for pedestrian and bicyclists, both within and between subdivisions.
6. Work with schools to provide safe walking and bicycling routes for students.
7. Consider improvements that could address transportation or safety problems at any identified points of conflict.
8. Establish a multimodal (pedestrian, bicycle, skateboard, golf cart) safety program.
9. Encourage bicycling and walking by improving existing, and creating new, bicycle and pedestrian paths within and adjacent to the Town.
10. Keep cut-through traffic at low levels, and take action when considering new developments or infrastructure changes to ensure streets remain safe for all local users.
11. Maintain the practice of periodic traffic studies to detect unacceptable cut-through traffic or excessive speeding.
12. Ensure that the Wild Plum escrow (\$300,000) for a traffic signal at Hunter Run and South Platte Canyon Road is not released prior to the completion of a warranty study.



*Bicycle and walking paths nearby offer Town residents an alternative to motorized travel.*

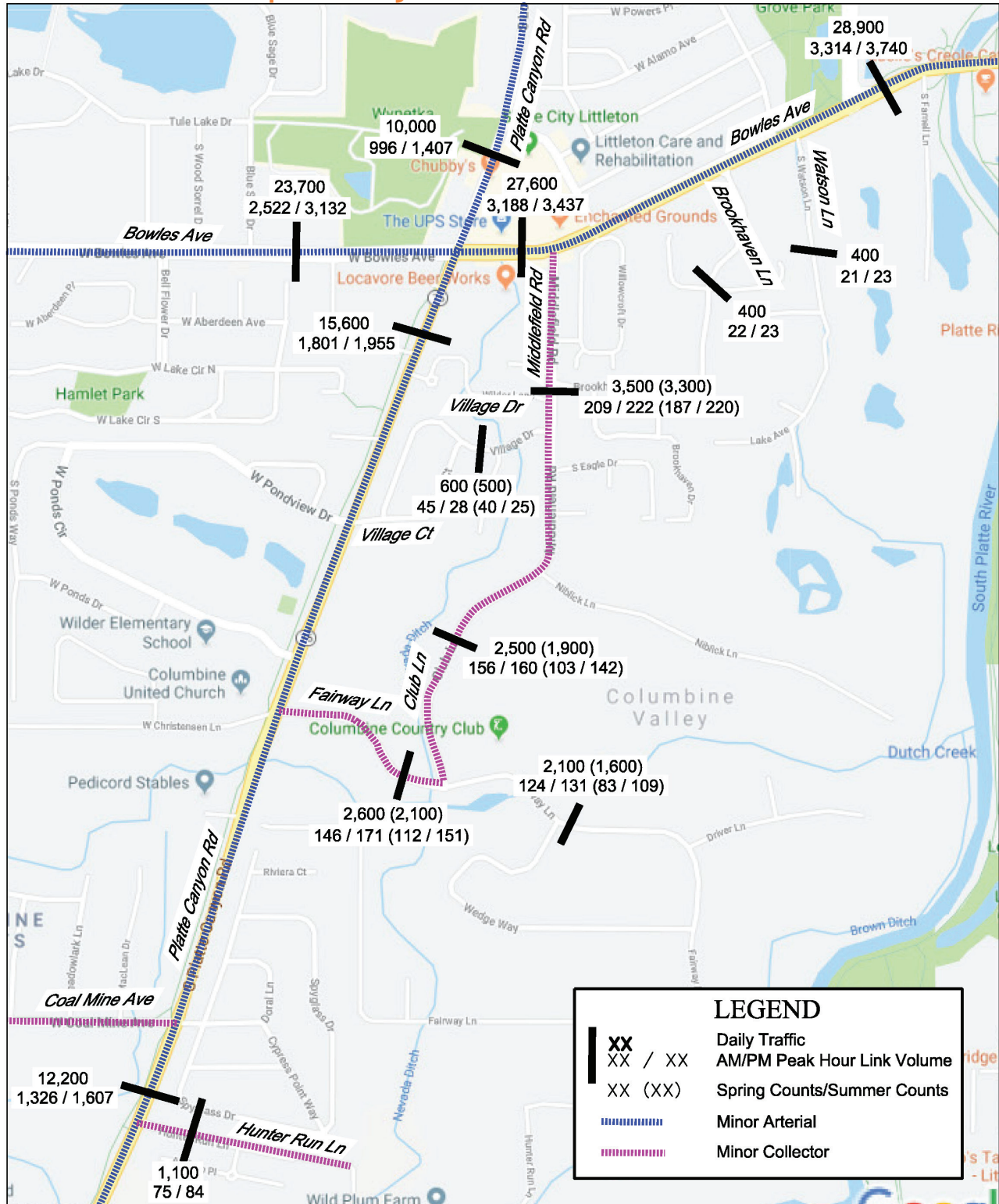
## Map E – 2019 Traffic Volumes



## Year 2019 Traffic Volumes



Map F – Projected 2025 Traffic Volumes



## Year 2025 Traffic Volumes



**TABLE 5**  
**LEVEL OF SERVICE 2019**

Intersections with Traffic Signals 2019		
Intersection	AM	PM
South Platte Canyon Road/Coal Mine	D	D
South Platte Canyon Road/Fairway Lane	B	B
South Platte Canyon Road/Bowles Avenue	E	D
West Bowles Avenue/Middlefield Road	C	B

Stop Controlled Intersections 2019		
Intersection	AM	PM
Hunter Run/South Platte Canyon Road	D	C
South Platte Canyon Road/Village Court	F	F
South Platte Canyon Road/Wilder Lane	C	C
Watson Lane/West Bowles Avenue	F	C
Wilder Lane/Middlefield Road	A	A
Club Lane/Fairway Lane	A	A
Fairway Lane/Driver Lane	A	A
Village Drive/Middlefield Road (summer counts)	A	A
Club Lane/Fairway Lane (summer counts)	A	A

**Table 6**  
**PROJECTED LEVEL OF SERVICE 2025**

Intersections with Traffic Signals 2025		
Intersection	AM	PM
South Platte Canyon Road/Coal Mine	D	D
South Platte Canyon Road/Fairway Lane	C	B
South Platte Canyon Road/Bowles Avenue	D	D
West Bowles Avenue/Middlefield Road	C	B

Stop Controlled Intersections 2025		
Intersection	AM	PM
Hunter Run/South Platte Canyon Road	D	F
South Platte Canyon Road/Village Court	F	F
South Platte Canyon Road/Wilder Lane	D	C
Brookhaven Lane/West Bowles Avenue	D	C
Watson Lane/West Bowles Avenue	F	C
Wilder Lane/Middlefield Road	A	A
Middlefield Road/Village Drive	A	A
Club Lane/Fairway Lane	A	A
Fairway Lane/Wedge Way	A	A
Fairway Lane/Driver Lane	A	A
Village Drive/Middlefield Road (summer counts)	A	A
Club Lane/Fairway Lane (summer counts)	A	A

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# Stormwater & Floodplain Management – 8

*“The flooding South Platte River, fed by cloudbursts south of Denver, ripped through the metropolitan area late Wednesday in the worst natural disaster of the city’s history. The normally placid South Platte and dry-stream tributaries were turned into half-mile-wide torrents, which swept out bridges, flooded thousands of homes, business firms and factories, and for a time, split the capital city.”*

*The Denver Post, June 17, 1965*

## Introduction

Perhaps the most memorable event in Columbine Valley history was the devastating flood of the South Platte River in June 1965. In the Town alone, two homes were destroyed and many others suffered heavy damage. Damage extended the length of the South Platte from south of Columbine Valley to the Nebraska border. The subsequent construction of the Chatfield Dam, completed in 1975, provided significant protection from future flooding. However, the dam can only control or moderate the flow of the river; it does not change the floodplain.

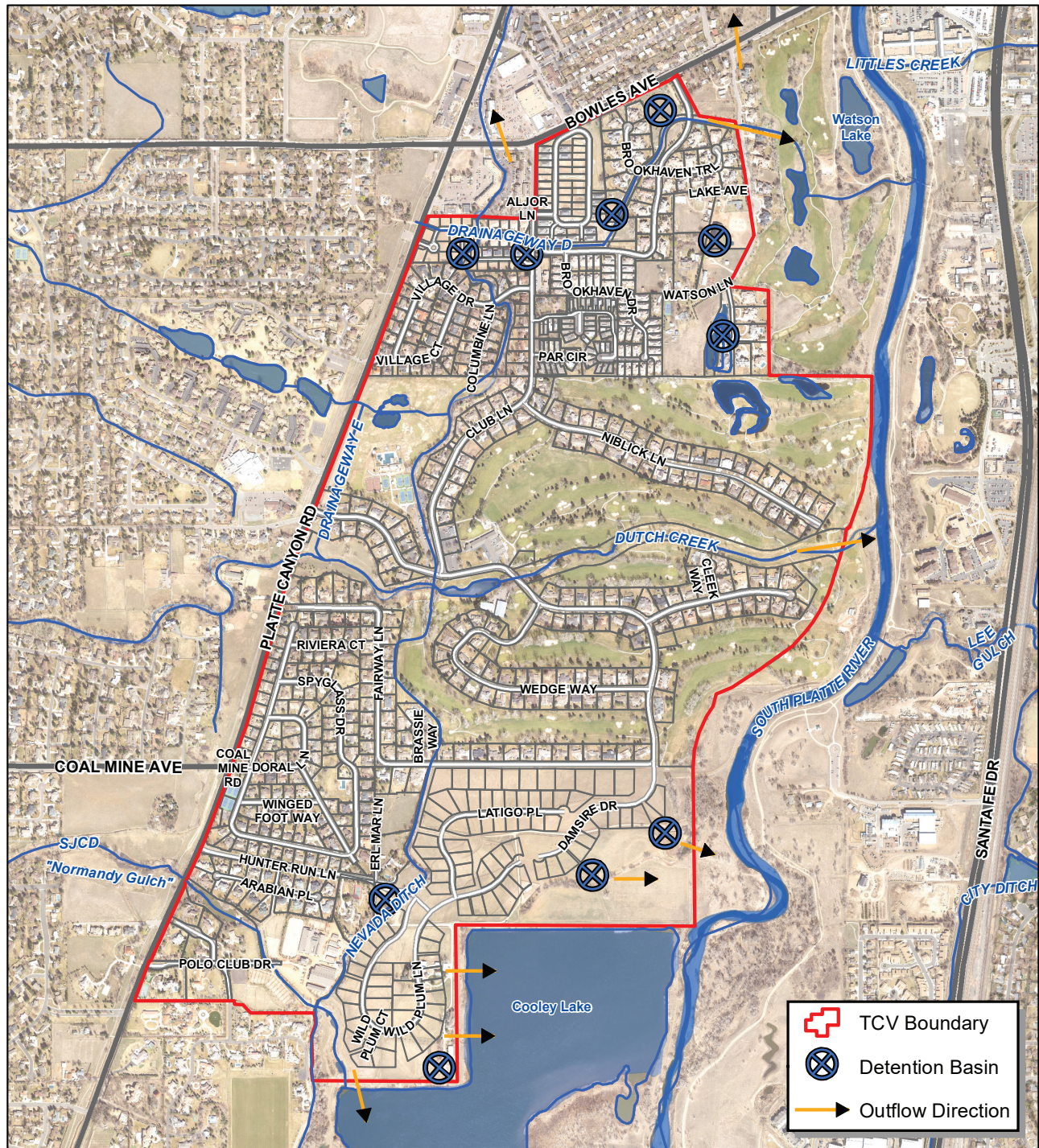
The Town and other governmental organizations including the Urban Drainage and Flood Control District (Urban Drainage) have completed several projects to alleviate flood threats. These projects together constitute a significant achievement in Town safety in the decades since the 1965 flood. The projects have taken nearly all Town residences out of the flood plain.

This chapter describes the topography of Columbine Valley, as it relates to stormwater flow, and explains the impact of stormwater and completed floodplain management projects to date. It suggests steps the Town can take to further enhance protection from flooding.



*The South Platte River Flood in 1965 killed numerous people and washed out bridges north of the Town of Columbine Valley, including this bridge to the Centennial Race Track in Littleton. Photo courtesy Cloyd Teter, Denver Post File Photo.*

## Map G – Stormwater Drainage Map 2019



## Mitigating Drainage Threats

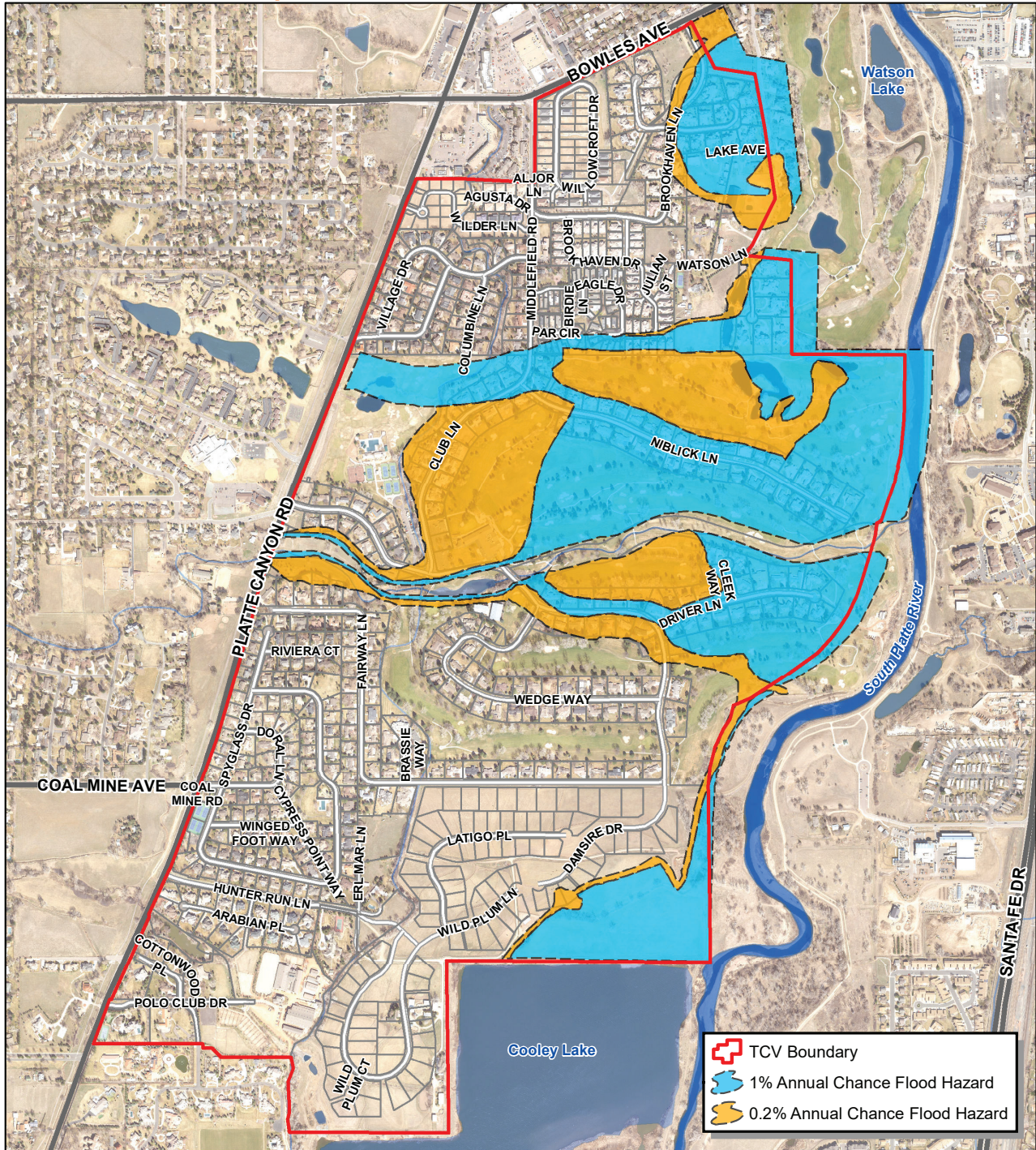
Map G shows the three main drainageways that traverse the Town from west to east and empty into the South Platte River. These drainageways, Drainageway D, Dutch Creek/Drainageway E, and 6100 Channel (Normandy Gulch), convey water from west of Platte Canyon Road from subdivisions that, in many cases, were developed without adequate drainage improvements. Map H shows the areas of the Town (current boundaries) that were in the floodplain of the South Platte River and the three drainageways in 1978.

The terms used to describe flood risks are moving away from 100-year flood and 500-year flood in favor of percentage chances. To many people, the term 100-year flood implies there is only one chance per century of a flood of that size occurring when actually these areas have a 1% chance in any given year. The same is true with 500-year flood risks: There is a *yearly* 0.2% chance of that size flood occurring. Map I uses the newer terminology, showing areas of the Town with 1% and 0.2% chances of flooding.

- Drainageway D in the northern portion of the Town has been channelized and has had storm sewer constructed from Platte Canyon Road to the Littleton Golf Course. A detention basin built west of South Platte Canyon Road slows stormwater by detaining and releasing it in measured amounts. The water is then piped under Wilder Lane, Country Club Villas and Middlefield Road into an open channel drainage and a detention basin within Brookhaven, then to a culvert under Watson Lane and across the Littleton Golf Course to the South Platte River. The project removed much of the adjacent residential property from the floodplain.
- On the east side of South Platte Canyon Road in the central portion of the Town, Drainageway E has been redirected south until it intersects with Dutch Creek. Dutch Creek then flows east through the Columbine Country Club golf course to the South Platte River. The Drainageway E improvements significantly reduced flow spills into Nevada Ditch and flooding potential for nearby residential properties. This diversion channel has protected portions of the Village, Old Town, and the golf course from flood damage since the early 1990s.
- The 6100 Channel (Normandy Gulch) is located on the south side of Town and flows from South Platte Canyon Road southeast across Nevada Ditch to Cooley Lake. The Town and Urban Drainage completed a project at the Nevada Ditch crossing to minimize spills into the irrigation ditch and direct the majority of the flow into Cooley Lake. These improvements helped to reduce flooding potential along the Nevada Ditch. This work was completed in the early 2000s, well ahead of the Wild Plum Farm redevelopment, which allowed the new channel to establish a healthy wetland and improved habitat that ultimately benefited the Town and the Wild Plum development project.
- At the northeast side of Cooley Lake, the U.S. Army Corps of Engineers constructed a wing dike to protect portions of the Town from South Platte River flooding.
- When the Wild Plum development was proposed, existing floodplain along the South Platte River and in the eastern part of Wild Plum was preserved to protect future homeowners.

Map I shows the floodplain today.

Map H – Historic Flood Hazard Area 1978



## HISTORIC FLOOD HAZARD AREA - 1978

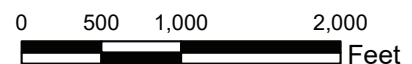


0 500 1,000 2,000  
Feet

## Map I – Current Flood Hazard Area 2019



### CURRENT FLOOD HAZARD AREA - 2019



## Future Concerns

Most of Columbine Valley is no longer in a floodplain. The channeling of major drainageways in the Town has significantly reduced flooding risks. In addition, the Town Land Use Regulations now require that the drainage characteristics of new developments are carefully analyzed, and improvements are installed that will mitigate each development's drainage impact on downstream neighbors.

Some questions and concerns remain. Where Middlefield Road becomes Club Lane, there is a stormwater drainage structure that may be related to stormwater flows in the nearby Nevada Ditch. The structure's history, purpose and function are unclear. It has a 4-foot-diameter, open-top manhole and is in the backyard of the home at 13 Middlefield Road. Past surveys (Benchmark, 1998) have identified a pipe in the manhole, but cannot determine the depth or discharge point of the manhole. Further study about the nature of this structure would be useful for any redevelopment plans in the area.

Also, subsurface water remains a potential problem. Subsurface water levels along the South Platte River are very high, which may require future developments within Columbine Valley adopt dewatering measures in their construction plans.

The concept of responsible floodplain management is exemplified in the past work by Urban Drainage along Dutch Creek: open, natural and recreational use buffered floodplains. FEMA maps depict the remaining flood hazard areas within the community. The FEMA maps are updated as development and private landowners submit Letters of Map Change based on physical changes to the regulatory flood hazards.



*The Town has ensured that new development, such as Willowcroft shown here, is designed with proper stormwater management.*

## Goals

The Master Plan recommends that the Town continue to evaluate conditions to ensure lives and property are protected. The Town should:

1. Require future developments to adequately manage stormwater to protect proposed and existing developments from flooding.
2. Require future developments to treat the quality of stormwater runoff to remove sediments and debris.
3. Study current stormwater infrastructure for deficiencies and improve infrastructure, including storm inlets, storm sewers, culverts and drainage pans to improve stormwater management within Town property and rights-of-way.
4. Investigate whether Nevada Ditch could convey stormwater or provide water quality treatment if irrigation service is discontinued. Historic features of the Nevada Ditch and its privately owned irrigation laterals will require research and surveys to determine if this would be possible.
5. The advantages of easements and buffers for all flood hazard areas should be documented and the Town should support any local, regional and national floodplain management efforts to this end.
6. Preserve, through easements and dedications, those areas along the drainageways in Town and along the South Platte River closest to Columbine Valley that carry a 1% chance of flooding.
7. Monitor drainage infrastructure within the Town for operational capacity and ability to improve water quality. Stormwater carries sediment and debris that can interfere with the ability of pipes and channels to safely convey water downstream.
8. Be aware of the condition and capacity of both private and public storm sewer systems. Water quality standards continue to evolve with technological advancements and regulatory processes.
9. Maintain compliance with regulatory standards and seek opportunities to improve quality of stormwater discharges.

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# Programs, Services & Utilities – 9

## Introduction



*The final summer concert of 2019 also celebrated the 60th anniversary of the incorporation of Columbine Valley.*

The Town strives to identify, preserve and enhance the qualities and character that make Columbine Valley a special place to live, including aesthetics, environment and public safety. The staff of Columbine Valley, under the direction of the elected Trustees, endeavors to offer a comprehensive level of services to citizens, visitors and others conducting business in or with the Town.

Columbine Valley is not a full-service community. There are several essential municipal functions that the Town does not provide internally, either by choice or as a function of size. For these reasons, the Town engages in effective regional cooperation that promotes the interests and well-being of its population, recognizing that development, transportation, environmental and quality-of-life issues transcend Town boundaries. Numerous partner organizations contribute to the Town residents' welfare and quality of life.

The Town has a 3% sales tax, which is collected on building permits and major purchases such as motor vehicles, on internet purchases delivered to Columbine Valley and on food transactions at Columbine Country Club. The tax money helps fund programs and services in Columbine Valley.

## Programs

The Town provides special events and programs that promote citizen participation and a sense of community. These include long-standing social traditions such as the 4th of July Parade and Festival, and in cooperation with Columbine Country Club, the 4th of July fireworks display. More recently, the Town has offered several concerts each summer in Columbine Park adjacent to the Town Hall, with

the support of corporate sponsors. Each concert features a local band and a food truck. The concerts have been well attended and the response has been positive.

The Town also offers programs of convenience such as twice-annual dumpster days, document-shredding events, prescription drug drop-offs, an annual flu shot clinic and opportunities to dispose of hazardous household materials.

A quarterly newsletter is sent to all residents and posted on the Town website to ensure residents are up to date on community activities.

## Services

The Town is dedicated to promoting public safety through the enforcement of building and other codes, the retention of a dedicated police force, and the installation and maintenance of safe roadway infrastructure. To do so, the town maintains a full building department, code enforcement, police and public works functions. While some minor aspects of these functions are contracted to outside vendors, Town employees manage all operations.

The Town's Public Works department is responsible for road maintenance and snow removal, right-of-way functions including street lighting and sign integrity and the upkeep of the Town's stormwater system.

Other necessary functions are contracted from or provided by outside entities. South Metro Fire Rescue provides fire protection. The Town also contracts with Republic Services of Colorado for trash collection and recycling.

Columbine Valley also is in the South Suburban Parks and Recreation District and Arapahoe Library District, and residents are afforded the benefits associated with those governmental entities.

## Utilities

Columbine Valley does not directly provide any utility services. The Town maintains franchise agreements with and receives electricity and gas services from Xcel Energy and communication services from Comcast and CenturyLink. Denver Water delivers potable water, and sewer services are provided by Platte Canyon Water and Sanitation District, Southwest Water and Sanitation District, and Columbine Water and Sanitation District. The sewer districts provide the infrastructure to deliver the sewage to the Littleton/Englewood Treatment Center, which processes the waste.

## Goals

1. Maintain and expand the qualities and character residents have come to associate with Columbine Valley.
2. Continue to innovate and explore partnerships and ensure the Town's short- and long-term ability to provide services and programs.
3. Explore opportunities to add new events that create opportunity for residents to gather in a social setting.
4. Continue the Town's good relations with service providers and together work to ensure proper maintenance and upgrades of the utility systems.