

Alpine-Balsam Facilities and Services Assessment DRAFT

An initial assessment of the area plan's potential impacts on both city capital and operating budgets for several public services has been conducted as part of the area planning process. As options are refined and a preferred option is identified, staff will refine the assessment of potential impacts and associated costs with estimates of potential revenue from impact fees or other sources.

The overall assessment is broken into the following service assessment topics:

1. Parks and Recreation (Neighborhood and Community Parks; Recreation facilities and programming)
2. Water and Wastewater Utilities
3. Fire and Emergency Response
4. Police Services
5. Library Services
6. Arts and Culture
7. Schools

Each assessment topic evaluates the proposed changes to population in the Alpine-Balsam area based on potential land use changes.

Policy Context

The guiding principles for development in Boulder Valley are defined by the Boulder Valley Comprehensive Plan's (BVCP) policies regarding infrastructure development. The BVCP policies include statements that an adequate range of urban services must exist prior to development in order to support the development increase. The intent of these growth policies, as described in the BVCPs policies, is to strategically channel development. The channeling of development is intended to occur in areas with adequate infrastructure, or in areas designated for service improvements under the Capital Improvements Program (CIP). Where development potential exists, any new development should "pay its way" by paying the cost of added facilities, fair share of impact on services to mitigate negative impacts. A deferment or variance from the requirement to provide adequate urban services for urban development is considered in conflict with the best interests of public health, safety, and welfare, and therefore should not be supported.

The following questions have guided the assessment of city service impacts in the Alpine-Balsam area:

1. What is the **current level of service**?
2. What are the potential **impacts on level of service** from population or employment changes?
3. Are there **additional facility and service needs** required to meet current service standards for each option?
4. What is the **estimated cost of added** facilities and services? Will projected growth (over current trends) adequately pay for the projected added facility and service need (i.e. projected fees, taxes on property and sales)?

5. What impact does projected population growth have on existing and planned school facilities (relative to current trends)?

Assessment Standards

Most public services are guided by level of service (LOS) targets determined by the corresponding department's master plan. The Alpine-Balsam options and projections are assessed according to the degree the options meet the LOS standard for a public facility or service. In instances where the incremental growth associated with an option diminish LOS below the adopted standard and can be applied to that reduction in service, the costs associated with making improvements to meet the LOS standard are summarized.

Whilst master plans may clearly identify a capital fund need, not all needs are fully funded. In many cases, the funding gap occurs due to timing of funds allocation relative to plan creation. Specifically, most City master plans are based on a 20-year timeframe, although the annual budget for Capital Improvements Program (CIP) is based on a 6-year timeframe.

Assumptions

The initial impact assessments were made using broad assumptions for potential projected population growth. These include:

- Elimination of the hospital use (~230,000 sq ft; +/-500 staff; plus patients and visitors)
- Renovate the Medical Office Pavilion for 90,000 sq ft of city offices / service center
- Emphasize housing as the primary use on the city's site with up to 300 units of high-density housing in the form of stacked flats and/or townhomes (~650 population). Housing may serve to address needs of several of the more challenging types of housing needs including senior housing, permanently supportive housing for people transitioning out of homelessness, or housing for harder to serve populations and low/moderate and middle-income priced for-sale homes.
- Continue to explore partnering with Boulder County to locate their services that are currently at Iris/Broadway complex to Alpine-Balsam (+120,000 of county offices/service center instead of approx. 230 of the housing units).
- Explore potential land use changes in the nearby area to address housing goals and may propose changes that would potentially encourage redevelopment resulting in up to an additional 370 more units (over the next 15 years) (~800 population).

Executive Summary

Parks and Recreation

- The potential increased population associated with all options can be accommodated within Level of Service (LOS) for neighborhood parks established by the Parks and Recreation Master Plan.
- While North Boulder Park is classified as a neighborhood park, it serves a wider population because of the aesthetic value of the park and unique features. Given its already high amount of

use, staff recommend providing additional amenities within the park to serve an increase in population.

Wastewater Collection System

- In general, the potential increase in flows can be served by the existing sewer system. The exception to this is a section of sewer in 20th St from Alpine Ave. to Bluff St. that is currently exceeding the city standard that peak dry weather flows shall not cause the sewer to flow more than half full. Although new development would exacerbate an existing deficiency, the Utilities Division will reassess the capacity needs during the next utility plan updates and program the capital project in the Capital Improvements Program accordingly.

Water System

- This area is served with water pipeline infrastructure that is well looped and in close proximity to the city's larger transmission pipelines network. Static pressure in this area is very good and ranges from about 80 to 100 pounds per square inch (psi). However, as construction proceeds in the area there may be the opportunity to accomplish water infrastructure improvements in conjunction with other construction in order to support additional future development and system flexibility.

Fire Rescue

- The area is primarily served by the units housed at Station 1 at 2441 13th Street, within the area plan boundary. In general, demand for fire rescue services is likely to increase over time due to the additional residents and the potential for an increase in calls. The need for additional staff based on growth of population or employment will be considered comprehensively as part of the master plan update in 2020 factoring potential changes in uses and growth from this planning effort as well as other areas of growth in the community.

Police

- Demand for police services are likely to increase over time due to the additional residents. The need for additional staff based on growth of population or employment will be considered comprehensively as part of the master plan update in 2020 factoring potential changes in uses and growth from this planning effort as well as other areas of growth in the community. Including a small office space in the new city service center (i.e. renovated Medical Pavilion) for officers to complete paperwork, use the telephone, etc. would meet an identified capital need for facilities in the northwest section of the city.

Library Services

- All potential additional population growth can be accommodated under the current Library Master Plan and not appreciably impact service levels.

Arts and Culture

- Opportunities exist to integrate arts and cultural improvements in the area in conjunction with new civic facilities and other infrastructure.

Schools

- Neighborhood schools have capacity for projected student yields from new residential development at the Alpine-Balsam site and in the wider area.

Analysis

The following describes the assessment of each topic and projects impacts on each service. The cumulative cost impact on is services is estimated and presented relative to the estimated revenues received in each option.

Parks and Recreation

The Parks and Recreation Master Plan was adopted in 2014 and guides the Parks and Recreation programs and facilities in serving the Boulder community. An update to the master plan is planned for 2020-2021. The master plan is designed to provide strong direction and help the community decide which park and recreational needs are most pressing with revisions undertaken every five years.

The plan identifies levels of service (LOS) standards to measure the amount or type of the public service to be provided to meet community needs and expectations. Among other goals, the standards aim to provide a benchmark for evaluating deficiencies and defining needs for new facilities to serve areas of new development.

Impacts to park and recreation services were assessed based on service area standards outlined in the update to the Parks and Recreation Master Plan. Level of service standards for neighborhood and community parks are measured both by the amount of park land per resident on a city-wide and subcommunity basis and a service radius based on the maximum desired walking distance from residents' homes to a park in their neighborhood. The following are the standards for neighborhood and community parks:

Overall park acreage:

Neighborhood parks:	3.15 acres per 1,000 population
Community parks:	1.5 acres per 1,000 population
City Park	7.3 acres per 1,000 population

Park size and location:

Characteristics of Traditional Neighborhood Parks

- Typically, five acres or larger
- Typically serve residents living within easy walking and biking distance (half-mile/10-minute walk)
- Offer non-programmed outdoor space including paths, seating areas, places to picnic and play catch, children's play areas, and landscaping that enhances and preserves the site's natural character

Characteristics of Smaller Neighborhood Parks

- Smaller than five acres
- Flat, grassy, flexible-use space that is not programmed for active recreation
- Area for children's playground equipment
- Generally used for passive (not active) recreation
- Areas for sitting and picnicking
- Easily accessible to neighbors by sidewalks and/or paths
- Compared to traditional neighborhood parks, more expensive to maintain due to size, materials, and features

Characteristics of Community Parks

- Provide space for those recreational activities that serve a wider population than the surrounding neighborhood and are intended to serve several neighborhoods within a larger geographic area of the city.
- These parks can range from 20 to 100 acres in size and provide a balance of natural environments and developed facilities.
- Physical features commonly found in community parks include multiple sports fields for baseball, softball, soccer, football, and other related sports that are scheduled for leagues and tournaments.
- They can also provide tennis courts and multi-purpose courts for basketball, volleyball, and handball. Other areas include playgrounds, picnic shelters, tables, paths, and off-street parking lots.

The current Parks and Recreation Master Plan does not project housing in the current non-residential areas of the city. Addition of new housing in the commercial and industrial areas would trigger the application of the park service standards in these areas.

Analysis

Impacts to Parks and Recreation are assessed according to LOS standards for: 1) park size and location and, 3) recreational facilities and programming.

1. **Park Size and Location**

Under the existing service standards, the area surrounding the Alpine Balsam area in Central Boulder is well served by an existing park acreage of 41.4 acres provided by the following parks:

- North Boulder Park
- Columbine Park
- Salberg Park
- Eben G. Fine Park
- Civic Park
- Emma Gomez Martinez Park

This equates to a LOS of 3.66 acres per 1,000 population according to population estimates in the area totaling 11,300 residents. With an anticipated potential increase of approximately 1,450 residents, this LOS would only drop to 3.25 acres per 1,000 which is still within the master plan standard LOS of 3.15.

While North Boulder Park is classified as a neighborhood park, many users come from various parts of the city because of the aesthetic value of the park and unique features. Given this, the park can experience a high amount of use at certain times of day and especially weekends and holidays. Given the increased population, the only anticipated impacts would be increased use of amenities in North Boulder Park including the playground, pavilion and multi-use fields for pick up games and passive recreation. Staff recommend providing additional amenities within the park to serve an increase in population. These amenities should be evaluated in the up-coming master plan process and programmed in the Capital Improvements Program to align with the timing of new residents. The chart below describes the draft initial estimated costs of the proposed new amenities.

Table 1: Estimated potential costs for park amenities

Park Amenities	Costs
Playground Amenities (equipment, surfacing, fixtures and furnishings)	\$675,000
Pavilion (structure, plaza, furnishings)	\$125,000
Landscaping and Site Work	\$30,000
Design/Permitting	\$65,000
Contingency	\$89,500
TOTAL PARK COSTS	\$984,500

2. Recreational Facilities and Programming

The Parks and Recreation Master Plan does not outline the need for any additional recreation centers beyond what currently exists. An incremental increase in use of the facilities may result in limitations to available capacity. The existing North Boulder Recreation Center may be redesigned to meet expanded and changing needs of the community. Valmont Park and the regional park site in the Planning Reserve also are expected to address future active recreational needs as they arise. Also, the proposed development should consider best practice of providing a small multi-use fitness room to serve the new residents that might not want to travel to the rec center for strength training, programming and fitness equipment.

Water and Wastewater Utilities

Impacts on water and wastewater utility capacity is assessed using the current master plan. The City's water and wastewater utility master plans outline future system capacity, rehabilitation, and development needs based on the BVCPs growth and development goals and policies. Master plans are generally updated every 5-10 years to reflect changes in projected growth. All of the currently adopted

utility master plans are based on population and employment projections that pre-date the Alpine-Balsam projections.

Wastewater from the area is collected by a series of sanitary sewers that flow generally to the east via the city’s trunk sewer system to the city’s main interceptor sewer at Valmont Rd and Butte Mill Rd. An overview map of the impacted sewers has been provided as *Figure 1 – Sewers Impacted by Proposed Development*.

In order to evaluate the impact of the proposed changes on these sewers the potential net change in wastewater flows was calculated and compared to the remaining capacity in the sewers as estimated by the city’s hydraulic model and field inspections.

The wastewater flow changes were calculated using the guidelines provided in the city’s Design and Construction Standards (DCS). The result of these calculations is provided in *Table 1 - Change in Dry Weather Wastewater Flows*.

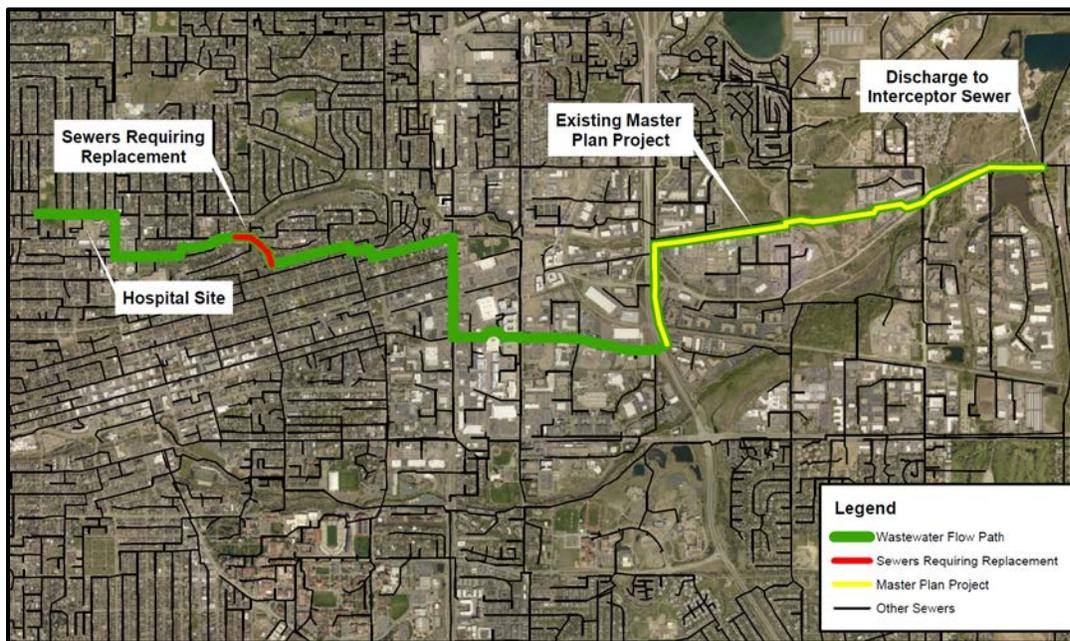


Figure 1- Sewers Impacted by Proposed Development

Table 2. Change in Dry Weather Wastewater Flows

Change in Use	Change in Wastewater Flows
Elimination of the hospital use	-26,500 gpd
Conversion of medical offices to City offices	No Change
300 new housing units on City owned Site	+65,000 gpd
370 new housing units in surrounding Area	+80,000 gpd
Net Change in Flow (gallons per day)	+118,500 gpd

Net Change in Flow (gallons per minute)	+82.3 gpm
--	------------------

In general, the potential increase in flows can be served by the existing sewer system. The exception to this is a section of sewer in 20th St from Alpine Ave to Bluff St that is currently exceeding the DCS standard that peak dry weather flows shall not cause the sewer to flow more than half full. Field inspections have shown that during peak flow times this section of sewer already flows at more than half full (~60% full). As a result, this section of sewer would require replacement to accommodate the potential additional wastewater flows. Staff have estimated the cost for this replacement as \$1.7M with a potential range from \$0.9M to \$3.4M (Class 5 Cost Estimate Range -50% to +100%). A detailed map of the sewers requiring replacement is provided in *Figure 2 – 20th St Sewers Requiring Replacement*.



Figure 2 - 20th St Sewers Requiring Replacement

In the downstream section of the wastewater flow path the city has also identified the need to increase sewer capacity to accommodate wet weather flows. This is being accomplished by the Goose Creek Trunk Sewer Replacement Project and the Main Interceptor Sewer Realignment Project. Both projects are currently under design with construction anticipated in 2020 for the Goose Creek project and 2021 for the Main Interceptor project. The redevelopment of the hospital site and land use changes in the surrounding area are not anticipated to have any impact on the design of these projects.

Although new development would exacerbate an existing deficiency, the Utilities Division will reassess the capacity needs during the next utility plan updates and program the capital project in the Capital

Improvements Program accordingly. Initial cost estimates for replacement of the sewer in 20th St from Alpine Ave to Bluff St is approximately \$1.7 million.

Water System

In general, this area is served with water pipeline infrastructure that is well looped and in close proximity to the city's larger transmission pipelines network. Static pressure in this area is very good and ranges from about 80 to 100 pounds per square inch (psi). However, as construction proceeds in the area there may be the opportunity to accomplish water infrastructure improvements in conjunction with other construction in order to:

- 1) support higher densities possible for future development,
- 2) support flexibility in development type now and into the future, and
- 3) support flexibility in the specific locations of development density within the area.

These system improvements have a range of potential total cost of \$1.4M to \$4.2M. The cost is greatly influenced by many factors including whether other utility work is being constructed simultaneously and/or if other factors allow for shared expenses. Changes to these suggestions can be revisited as more information becomes available regarding development type and the location of density within the development area.



Figure 3 – Conceptual Water System Improvement

Fire and Emergency Response

Impacts on fire rescue service has been assessed based on the level of service standards outlined in the BVCP and Boulder Fire-Rescue Master Plan and through discussions with the Fire Department staff about current facility and staffing needs.

The primary service standard used by the department is a call response time of six minutes or less. The response time standard is the maximum timeframe set for firefighters to arrive at the scene once a call is received. Response time standards are impacted by three related factors: (1) demand and capacity; (2) travel distance; and (3) traffic congestion and mitigation.

1. Demand for fire rescue services is likely to increase over time due to the additional residents and the potential for an increase in calls. The need for additional staff based on growth of population or employment will be considered comprehensively as part of the master plan update in 2020 factoring potential changes in uses and growth from this planning effort as well as other areas of growth in the community.
2. The area is primarily served by the units housed at Station 1 at 2441 13th Street, within the area plan boundary. Currently the station has 2 units that respond to calls. Depending on call volume and concentration, the second unit may be relocated to the new Fire Station #3 at north 30th Street. Staffing levels are evaluated at a minimum at each master plan update and may be shifted over time as redevelopment occurs in this and other areas of the city.
3. Traffic impact studies have concluded that the changes in land use considered in the Alpine-Balsam area will result in significantly fewer trips than when the hospital was operating at full capacity.

Other considerations regarding the potential future uses at Alpine-Balsam that will factor into future planning and staffing include:

- Types of housing and populations served (i.e. senior housing may result in more frequent calls than other multi-family units)

Police Service

Potential impacts to police services are assessed by basing current and projected population and staffing levels on level of service standards outlined in the Police Master Plan which is scheduled to be updated in 2020. The current service ratio standard is 1.7 officers per 1,000 inhabitants and 1 clerical position for every 5 officers. The standard provides a systematic method for translating the impact of growth into the number of police personnel required to maintain an adequate level of service. Even though the service standard only addresses population, staff estimates that 80% of calls for service are generated by individuals and 20% generated by businesses.

Demand for police services are likely to increase over time due to the additional residents. The need for additional staff based on growth of population or employment will be considered comprehensively as part of the master plan update in 2020 factoring potential changes in uses and growth from this planning effort as well as other areas of growth in the community.

There are several considerations regarding the potential future uses at Alpine-Balsam that would potentially provide a benefit to police service delivery:

- New housing for people who were previously unhoused (i.e. permanently supportive housing) may reduce service need to those individuals.
- Including a small office space in the new city service center (i.e. renovated Medical Pavilion) for officers to complete paperwork, use the telephone, etc. would meet an identified capital need for facilities in the northwest section of the city.

Libraries

All potential additional population growth can be accommodated under the current master plan and not appreciably impact service levels. No additional new facilities are needed other than what is included in the current Master Plan (e.g. Mobile Service e.g. bookmobile, mobile maker/program lab, and North Boulder Branch Library). There may be need for some incremental increase in operating funds to support the collection and programs depending on increased demand, as anticipated in current Master Plan.

Arts and Culture

Arts and Culture in public places and public art reflect a community's personality. These components can be integrated into the area with other infrastructure or development projects as they proceed. Types of improvements might include, but are not limited to:

- Access and Mobility (Transportation): corridor-wide public art components to unify routes and serve as innovative approaches to wayfinding; artist-designed crosswalks to promote safety and visibility; creative experiences for transit users, cyclists and pedestrians.
- Environment and Flood: artist-designed elements of flood mitigation projects
- Civic Facilities: integrate public art through the practices of civic dialogue and gathering spaces; small arts (or flex) spaces as locations for education, contemplative arts, community performing arts and civically programmed events.

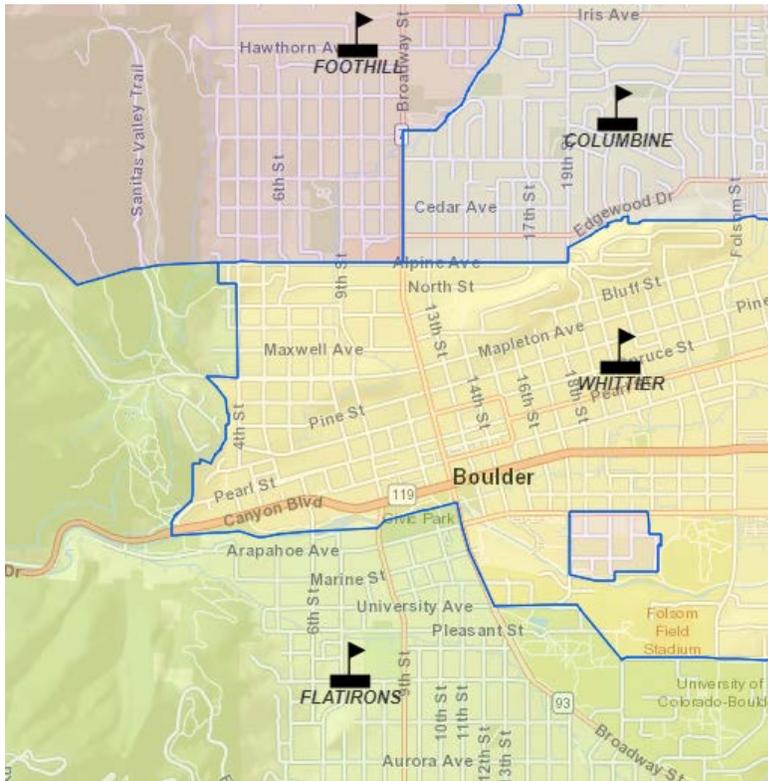
Schools

The elementary schools that currently serve the plan area are Whittier and Foothill Elementary. At the middle level all of the planning area falls within Casey's attendance area. Boulder High School serves this entire area.

Boulder Valley School District staff provided the following assessment of capacity in neighborhood schools.

- The Foothill Elementary neighborhood school is in its 5th year of decline and the school is only 69% of its capacity (even with open enrollment). Casey is 73% while Boulder High is 91% of capacity when looking at resident students only (both are close to full with open enrollment, but that can be managed) and can take the additional students from this development. The district is expecting far fewer high school students in Boulder in the next 10 years since the upcoming elementary classes in Boulder are much smaller than the ones that currently feed the High schools.

- The number of additional students generated by new housing units in the planning area will vary depending on the housing types, number of bedrooms and affordability. Multi-family units in Boulder have not historically yielded very many school-age children. Using student yield factors seen in multi-family areas in Boulder, the number of new students that could be generated from new housing on the city-owned site range from as few as 18 students (E=9, M=4, and H=6) to 42 students (E=20, M=10, and H=12) and not all would attend their neighborhood school. Even at the high end of the range, local schools can absorb the impact. Additional new housing in the area would likely generate additional students at the lower end of the range described for the Alpine-Balsam site. Even if the range doubled, the student impact can be accommodated by neighborhood schools.



(Source: Boulder Valley School District).