

UrbanBloom 2040

A hybrid redesign of Denver's Highland neighborhood.



MEET THE TEAM



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An aerial illustration of a city skyline, likely Denver, viewed from a distance. The skyline is composed of several tall, modern skyscrapers of varying heights and shapes. In the foreground, a dense forest of trees with green and yellow foliage stretches across the landscape. The sky is a pale blue with a few soft, white clouds. A dark green rectangular box is overlaid on the lower half of the image, containing the word 'VISION' in large white letters and a paragraph of text below it.

VISION

Highland will be a sustainable, green exhibition of Denver. Accessibility, equity, and inclusivity will be at the heart of the city's design. The neighborhood features will be created with all species in mind, human and non-human. As a place that has it all, highland will bridge the gap between nature and humankind through innovation and community.



INITIAL RESEARCH

Denver Comprehensive Plan 2040

The Denver Comprehensive Plan 2040 provides a guide in shaping and supporting the city's future. Through immense community engagement and data collection the plan was comprised to reflect a shared vision of Denver and the city's growth. Community engagement was led through many different methods, including, public meetings and workshops, online map-based surveys, and participation through a task force. This engagement allowed the City of Denver to create its guiding elements. The plan has 6 key vision elements to help guide the process. These elements are:

1. Equitable, Affordable, and Inclusive

The first vision element ensures that all residents have equal access to housing, jobs, education, and amenities needed on a day-to-day basis. Within this element there is a focus on reducing the housing displacement and providing more affordable housing options.

2. Strong and Authentic Neighborhoods

The second vision element is to preserve the authenticity of neighborhoods and maintain their unique character while simultaneously providing resources for growth. This element promotes walkability, active transportation, and community participation in the planning process.

3. Connected, Safe, and Accessible Places

The third vision element was implemented to expand reliable transportation options. This element prioritizes the development of infrastructure that will benefit the connection between people and their jobs. There is a focus on designing and redesigning streets to become more pedestrian friendly and accessible.

4. Economically Diverse and Vibrant

The fourth vision element prioritizes a diverse economy, supporting small businesses. Through this element more economic opportunities will be provided in order to support the city.

5. Environmentally Resilient

The fifth vision element aims to address climate change through more sustainable practices. This element promotes methods to support energy efficiency green buildings, and renewable energy sources throughout the city, while also protecting its natural resources.

6. Healthy and Active

The final vision element provides information on the expansion of park, recreation, and healthy food access. By doing this the comprehensive plan will improve both mental and physical health throughout Denver's communities, by promoting more active lifestyles and public health.

The information learned from the Denver Comprehensive Plan 2040 will both reflect and benefit in guiding the decision making process for the revitalization of Denver's Highland Neighborhood.



60 % of Denver's population is white, while 26.7% is Hispanic or Latino. Additionally, the divide between homeowners and renters is almost exactly 50/50.

Precedent Studies: Portland, Oregon

The Portland Healthy Connected Neighborhoods Strategy is one that “aims to accelerate transition to active modes of transportation while revitalizing neighborhoods with benefits for health, affordability, and livability”. As the PortlandPlan discusses, the goal is for 80% of the city’s population to be living in “complete neighborhoods” by 2035.

The Healthy Connected Neighborhoods Strategy was implemented to address two main challenges; population growth and gas emissions.

11.8% increase in population from 2010 to 2020 in Portland.

40% of the city’s total emissions came from transportation.

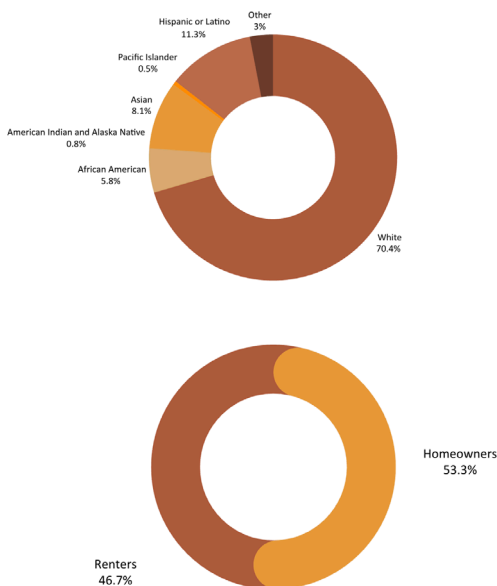
The **Healthy and Connected Neighborhoods Strategy** implemented strategies to accelerate a transition to active modes of transportation.

The **20-Minute Neighborhoods Plan** creates a policy to assess the completeness of neighborhoods in order to analyze their walkability and accessibility.



<https://oregonessential.com/mississippi-avenue-portland/>

The **Mississippi Avenue Neighborhood**, a historic neighborhood in Portland, was one targeted for revitalization. In this neighborhood the public space has been revitalized, improving public spaces while maintaining and renovating historic buildings.



Why is this important for our research?

Looking at Portland's demographics as well as the interventions the city put in place was an important comparison when understanding how to revitalize Highland. The PortlandPlan focused on creating livable neighborhoods, by implementing sustainability and access. Some of the goals of Portland included access to green space, public transportation improvements, and green infrastructure. By addressing the communities exact needs they were able to comprise a plan for the city. The goals addressed by the city of Portland are very similar to those of Denver as well as for the Highland Neighborhood, thus making this an excellent resource.

NEIGHBORHOOD ANALYSIS

Precedent Studies: Highland Neighborhood

Once research was conducted on the City of Denver, it was then narrowed down to the Highland Neighborhood. Highland has undergone a transformation over the past twenty years, as it has continued to blend its historic nature with new additions, for example its commercial area. Highland is a popular residential neighborhood located just northwest of Denver. It's historic district is overflowing with old elegant home of similar architectural character. Its bounds span from West 38th Avenue and Speer Boulevard on the South end. Highland is well known for the Victorian-era architecture and vibrant community.

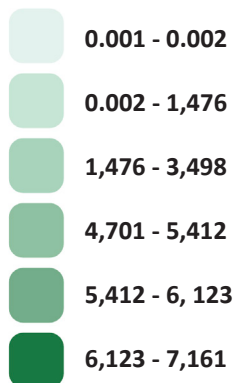
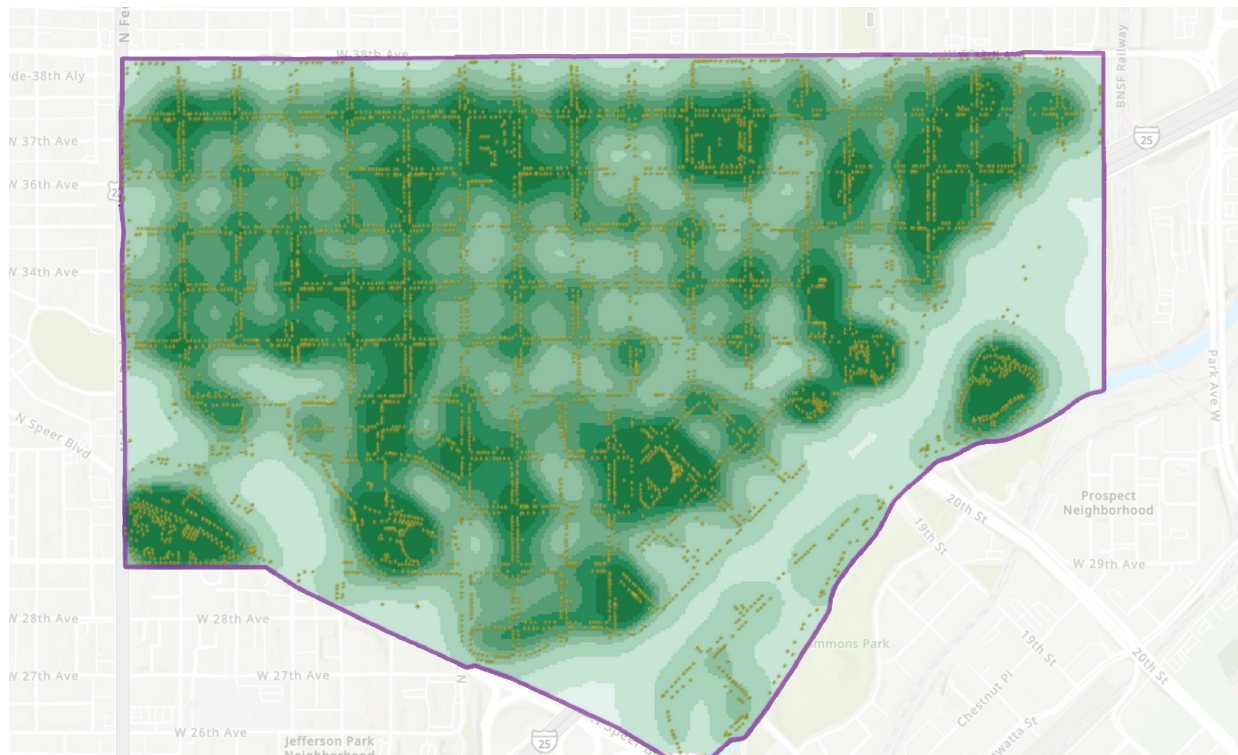
One of Denver Colorado's oldest neighborhoods, Highland is now one of the city's most popular places to live. The neighborhood has a rich history of urban development and cultural shifts since the 19th century. The land was originally home to the Ute, Arapaho and Cheyenne people, following the Pikes Peak Gold Rush Denver began to expand and create a formal settlement in the area.

Highland was formally founded in 1858 by William Larimer and quickly became a desirable subject to Denver residents. The neighborhood's location overlooking the South Platte River and proximity to downtown Denver contributed to its initial success. Following the 1864 Auraria flood, motivation to live in elevated spaces increased the population in the neighborhood. Highland was praised for its cooler temperatures, lower flood risk and cleaner air because of its location relative to the industrial population.

Beginning in the 1990s Highland underwent significant revitalization and development. Due to the historic charm, riverfront access and central location to downtown Denver the area attracted young artists and developers. As this redevelopment accelerated into the 2000s Highlands began to gentrify with the addition of businesses, restaurants and the transformation of public spaces.

Today, Highland is currently home to a little over 10,600 residents and is one of Denver's most desirable neighborhoods with its location, blend of historical and modern commercial areas.





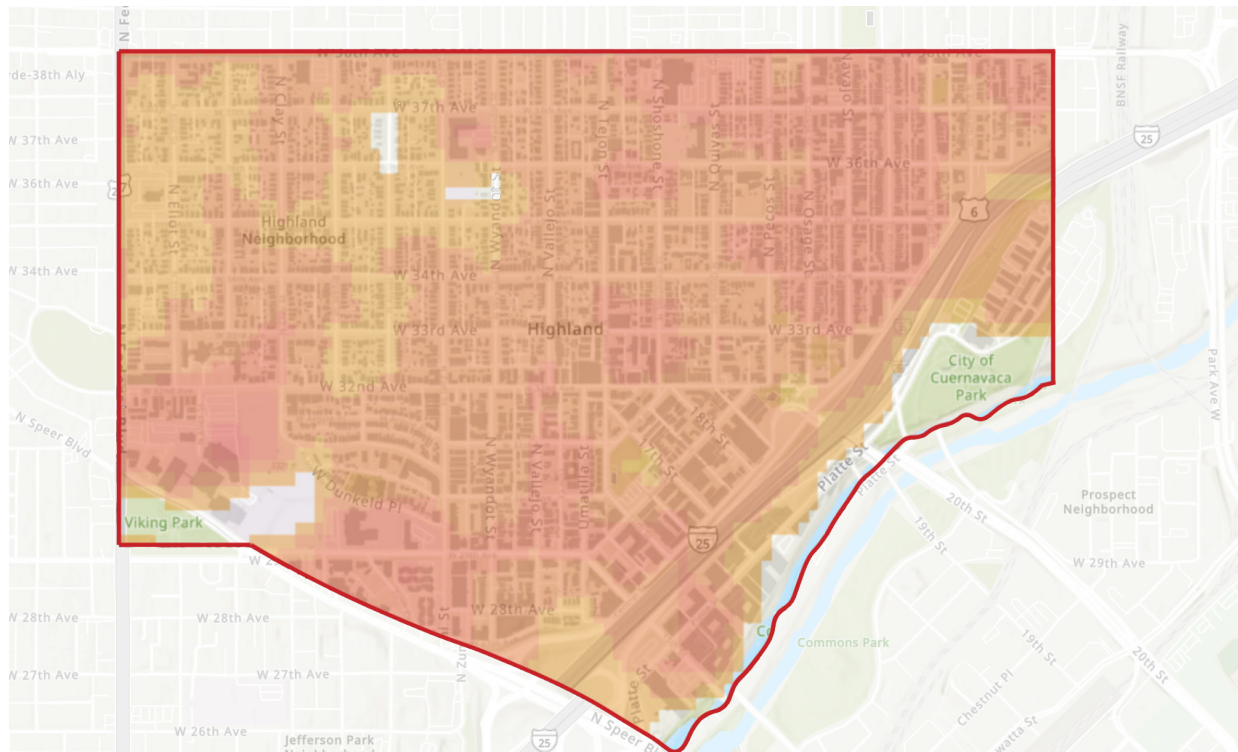
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Tree Density

Highland has a fairly dense tree population around the entire site, especially in areas with greenspace like the nearby parks. In the residential area, which takes up a majority of the neighborhood most of the streets are tree lined with ample access to shade. The tree cover is approximately 25%, which surpasses Denver's goal of 18%. In general, the

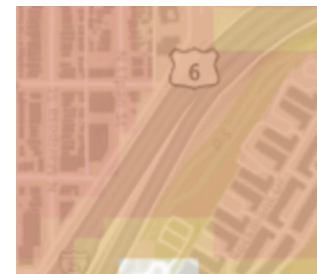
neighborhood's historic development is a factor in the tree canopy as Highland was originally designed with tree-lined streets and green space. Highland Park, just West of the neighborhood's border, was designed with a ring of trees around the perimeter of the park, thus to integrate it into the area.



Scale: 1" = 15,000"



Close to the high school there is a higher risk for urban heat.

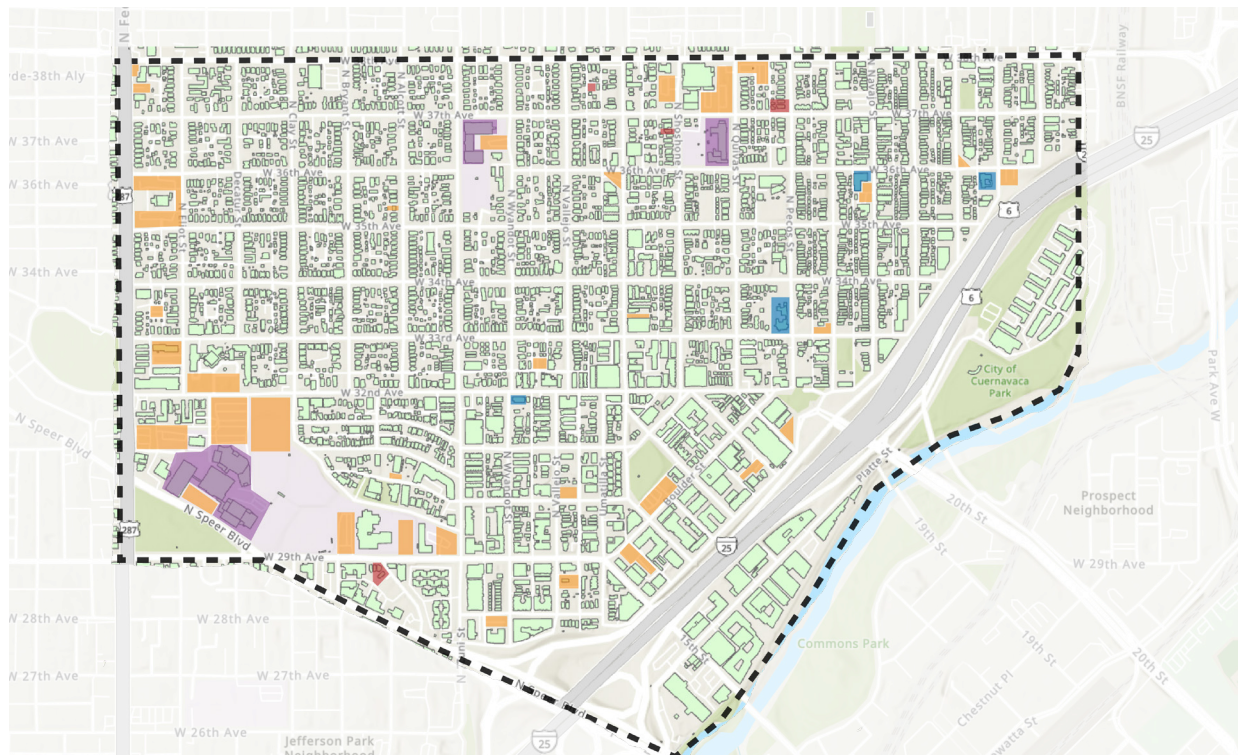


East of the site, close to the nearby park there is a lower urban heat risk.

Urban Heat

Highland is in the northern part of Denver, meaning it experiences impacts of the urban heat island (UHI). There are many factors affecting the UHI effect in Highland including elevated temperatures. Though Highland has some green space, it is not nearly enough to limit the heat in the area especially when combined with the amounts of concrete and

asphalt. This can cause Highland to experience temperatures up to 9°F higher than other neighborhoods in Denver that have more vegetation. Another contributing factor is energy use, for example in homes that use a lot of air conditioning in warmer weathers, as it increases the amount of greenhouse gases emitted, thus increasing temperatures.



- Vacant Lot
- Parking Lot
- Church
- School

Scale: 1" = 15,000"

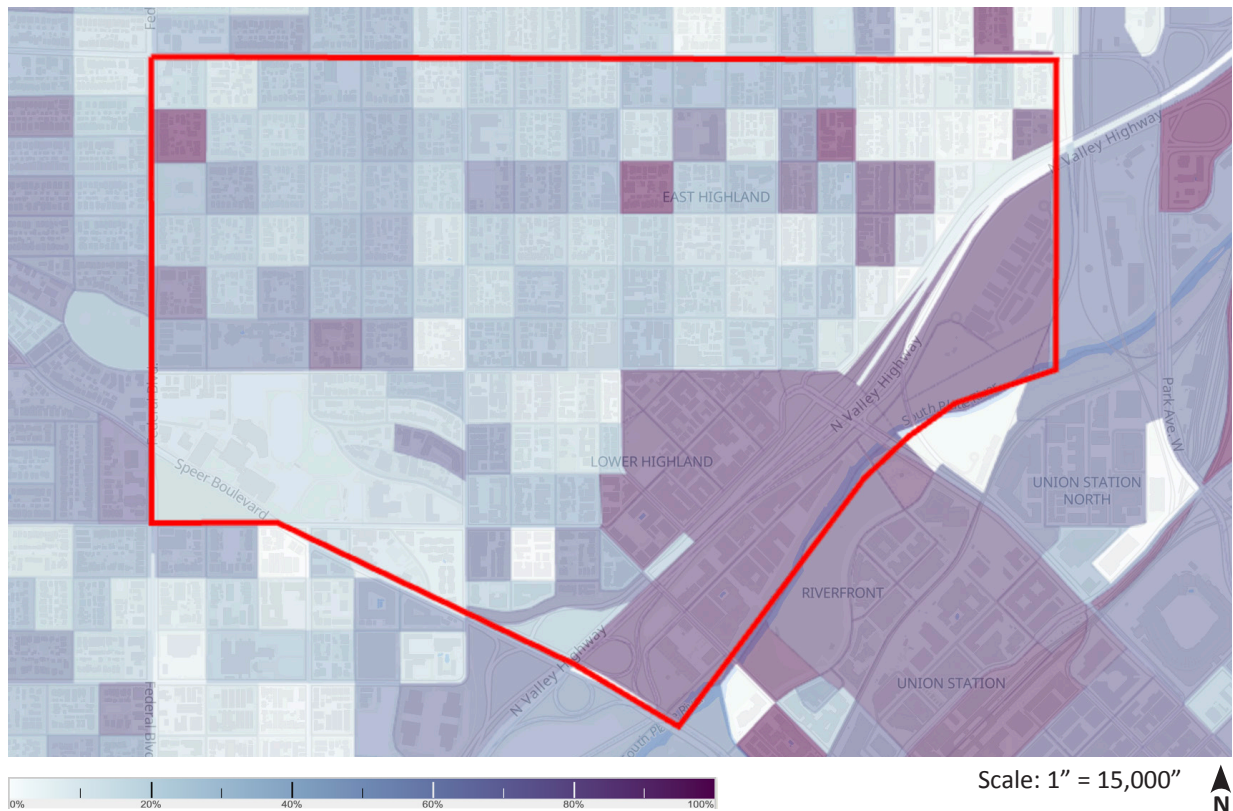


Vacant lots, like this one, will be utilized to develop new residential, commercial, and mixed-use buildings.

Vacant Lots

The opportunity areas map consists of vacant lots, parking lots, churches, and schools. By analyzing these four aspects of Highland it became more clear what areas could be used and what spaces were ideal based on their location. Given that there are three schools in Highland and four churches, by taking advantage of this proximity, there is opportunity for

new development. These developments and their location will benefit in creating a strong foundation for the neighborhood while enhancing community and walkability. Strategic redevelopment of the vacant lots and underused spaces will continue to strengthen Highland's urban fabric while preserving its existing charm



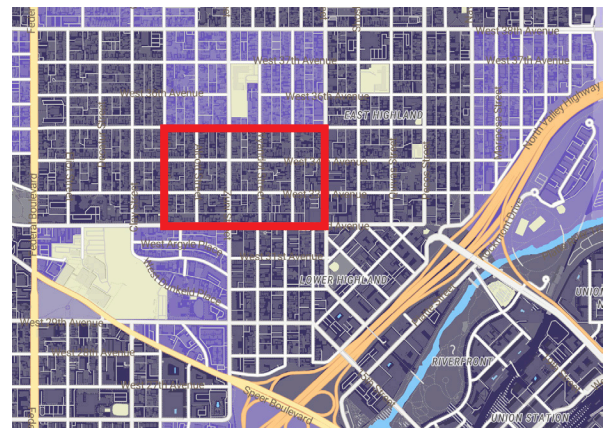
Highland Population: 11,344

Highland Households: 6,528

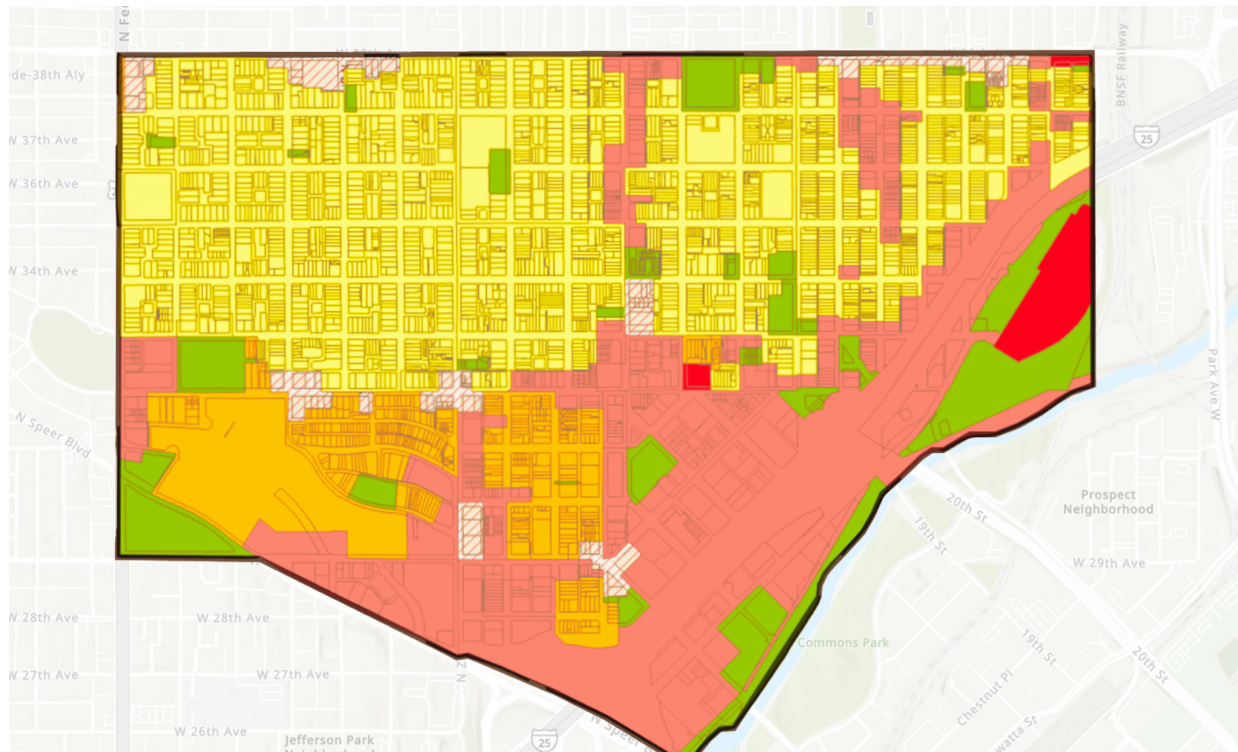
The center of Highland has the highest population density, at 13,480.56.

Population Density

Highland, Denver, has a notably high population density compared to the broader city. With a population of approximately 11,344 residents living within an area of about 1.15 square miles, the neighborhood exhibits a density of around 9,421 people per square mile. This figure is nearly double Denver's average density of 4,673 people per square mile, which underscores Highland's status as one of the city's most densely populated neighbor-



hoods. This elevated population density contributes to a vibrant, walkable community with a mix of historic homes and modern developments. However, it also presents challenges such as increased traffic congestion, limited parking, and potential strain on public services and infrastructure. Balancing growth with the preservation of Highland's unique character remains a key consideration for urban planning in the area.



- Two Unit**
- Multi Unit**
- Residential Office**
- Residential Mixed Use**
- Commercial Corridor**
- Mixed Use**
- Main Street**
- Open Space**

Scale: 1" = 15,000"

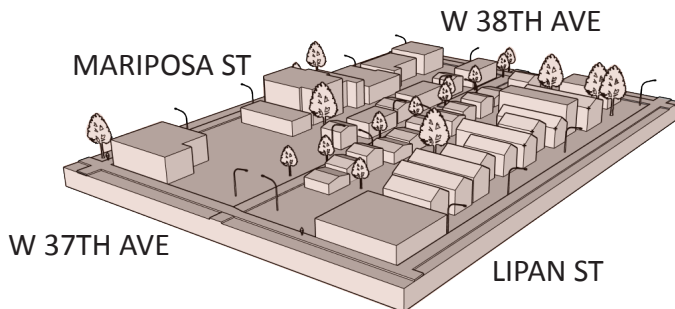


Existing Land Use

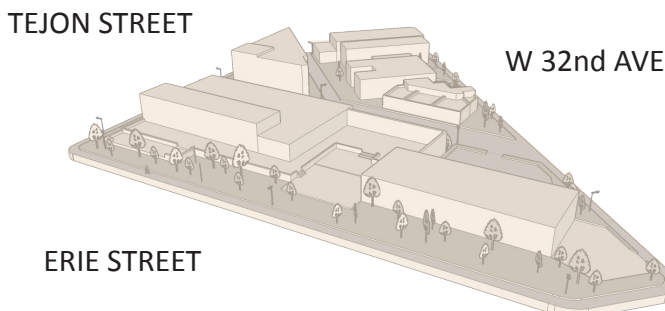
Highland has a diverse mix of land uses, making it a dynamic and varied urban environment. A significant amount of the area is zoned for two unit housing, supporting lower-density housing types, such as duplexes. In addition to this is multi-unit zoning (orange) which supports higher density developments. There is an organized blend of residential office and residential mixed-use developments

which creates opportunities for live-work spaces throughout the community. The open space in Highland offers some recreational areas and parks which benefit the communities quality of life. Overall, Highland has a balanced land use pattern that offers residential character and commercial vibrancy, giving the neighborhood both a variety of opportunities and a well balanced social scene.

Square parcels in Highland are primarily residentially zoned. This makes them ideal for increased density and ADUs.



The rectangular parcels are also primarily residentially zoned. They also have a lot of potential for ADU and increased density, and hold three long connected alleyways for woonerfs.

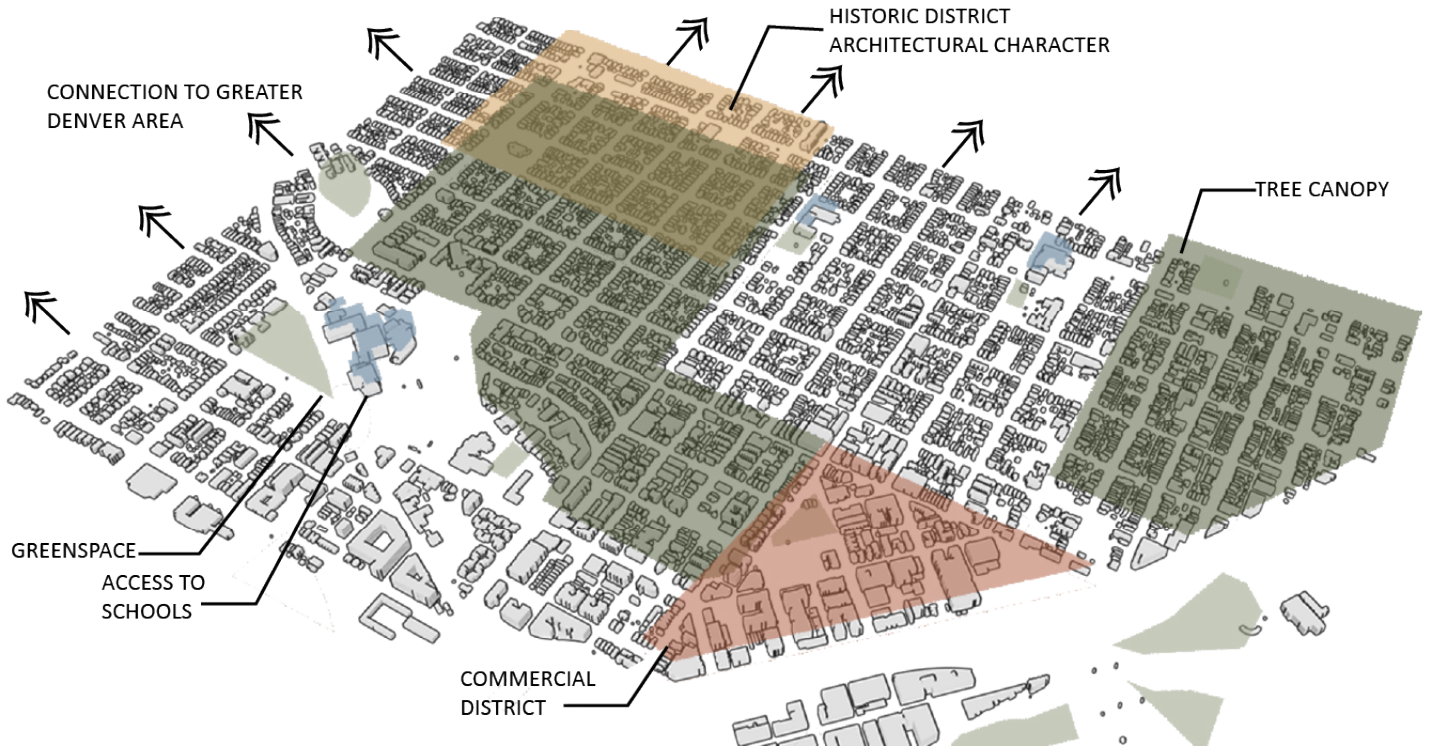


Irregular parcels are where we see more mixed use and commercial zoning. This aids us in understanding the setbacks and height restrictions in these areas.

SWOT ANALYSIS

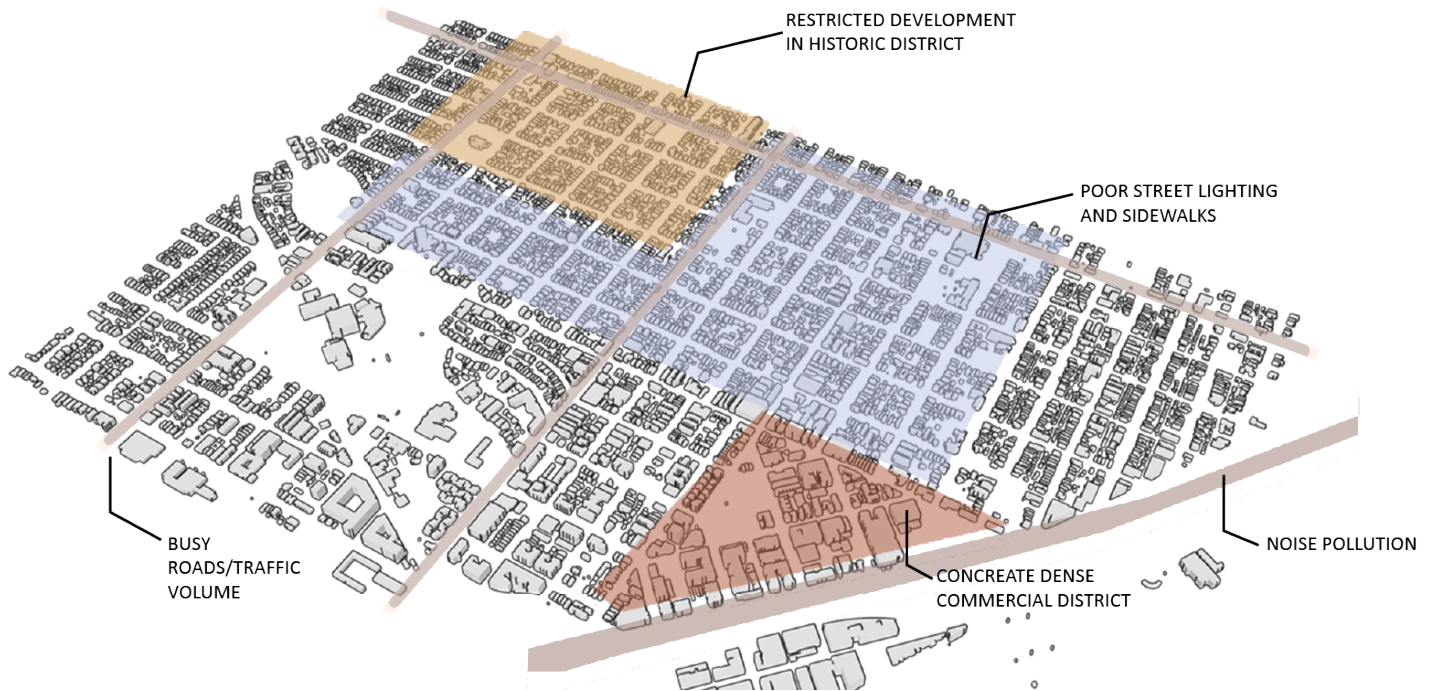
*Understanding how the precedent analysis creates
Strengths, Weaknesses, Opportunities, and Threats.*

Strengths



Highland offers a strong combination of livability, accessibility, and long-term value. The neighborhood has convenient access to several public schools, including Edison Elementary, Skinner Middle School, and North High School, making it attractive to families. It also features a variety of parks and green spaces such as Highland Park, Hirshorn Park, and nearby Sloan's Lake, which support active lifestyles and community engagement. Highland is well-connected to surrounding neighborhoods—Downtown Denver, LoHi, Jefferson Park, and Sunnyside—via main roads like Speer Boulevard and pedestrian-friendly infrastructure like the Highland Bridge. Its commercial corridors, especially in the LoHi area, are home to a dense concentration of restaurants, cafés, boutiques, and small businesses, supporting both economic activity and walkability. The neighborhood's historic architecture, including preserved Victorian and early 20th-century homes, adds to its visual appeal and property value. Additionally, Highland benefits from a mature tree canopy that provides shade, improves air quality, and enhances overall neighborhood character.

Weaknesses



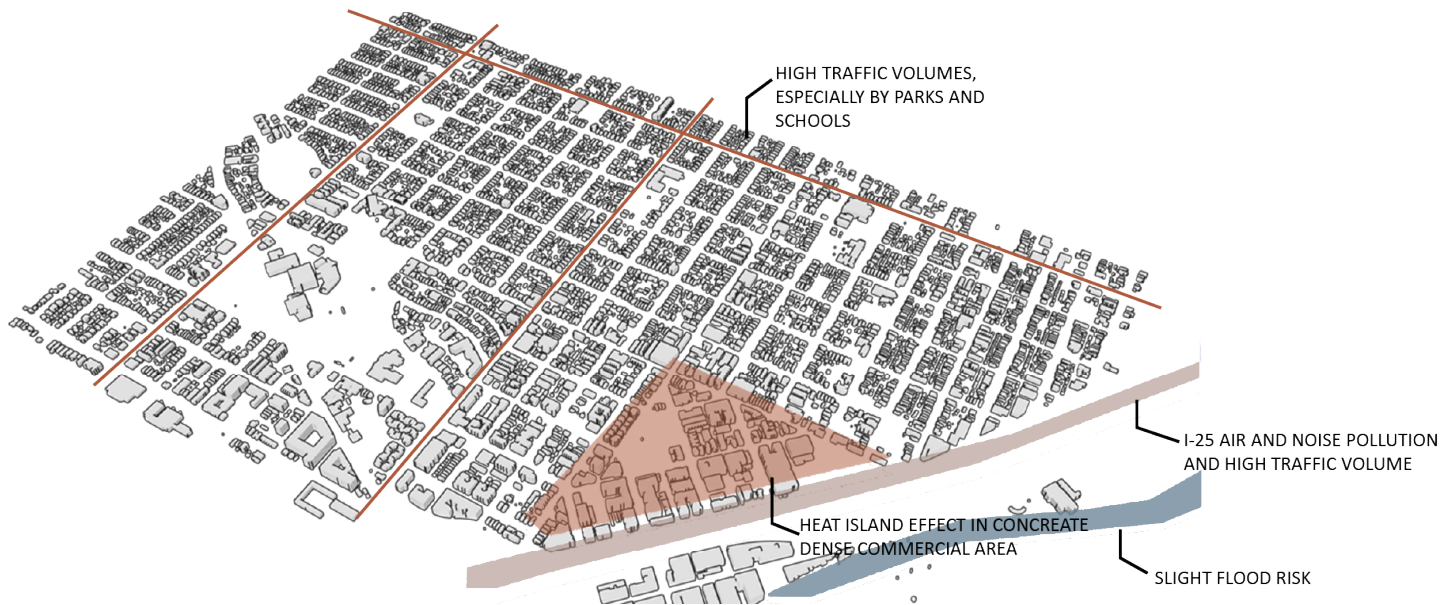
While Highland offers many strengths, it also faces several challenges that impact livability and future development. The neighborhood's historic district status, while preserving architectural character, restricts redevelopment and limits flexibility for new housing or mixed-use projects. In contrast, parts of the commercial district—particularly near major intersections—are heavily built-up with concrete and have limited greenery or pedestrian-friendly design, creating a less inviting environment. Proximity to I-25 brings notable noise pollution, especially for properties located near the highway corridor. Infrastructure in some areas also presents issues, with poor street lighting and aging or narrow sidewalks affecting walkability and nighttime safety. Additionally, major roads like Federal Boulevard and Zuni Street experience high traffic volumes, which can contribute to congestion, safety concerns, and reduced pedestrian comfort.

Opportunities



Highland has several opportunities to enhance livability, sustainability, and economic vitality. Expanding greenspace through community gardens and extending park connections—such as greenbelts or woonerfs—can increase recreational access and support environmental goals. The neighborhood’s alleyways present a unique opportunity for redevelopment into woonerfs or shared streets, creating pedestrian-focused, low-speed community spaces that enhance safety and character. Vacant or underutilized commercial properties, particularly in the concrete-heavy corridors, could be repositioned to attract small businesses and retail, strengthening the neighborhood’s economy. Highland also has the potential to support higher-density housing in targeted areas outside the historic district, especially near transit routes and commercial zones. This could be further supplemented by expanding access to accessory dwelling units (ADUs), which offer more flexible housing options and improve affordability without altering neighborhood character. These initiatives can balance growth with preservation while supporting a more inclusive and resilient community.

Threats



Highland faces several external pressures that could impact quality of life and future growth. Persistent high traffic volumes on major roads like Federal Boulevard and Zuni Street contribute to safety risks, congestion, and reduced walkability, particularly for pedestrians and cyclists. The concrete-heavy sections of the commercial district intensify the urban heat island effect, increasing localized temperatures during warmer months and putting additional strain on infrastructure and public health. Ongoing noise pollution and safety concerns from nearby I-25 remain significant issues, especially for residents living close to the highway, where traffic volume and speed can affect both comfort and property values. If not addressed through thoughtful planning and mitigation, these challenges may limit Highland's ability to grow sustainably while preserving its residential appeal.

FLOWER OF OPPORTUNITY

By analyzing the strengths, weaknesses, opportunities, and threats of Highland, it allowed for a comprehensive flower of opportunity to be comprised. Each of the six categories environment, education, working, health, commerce, and entertainment were used to create ideas of new interventions.





Environment

Woonerfs, community gardens, and new parks create corridors that support biodiversity, reduce heat, and offer safe, walkable streets. A new overpass and underpass across I-25 reconnect the neighborhood to nearby parks. Solar panels, green roofs, and water-retentive roofing improve energy use and climate resilience.



Education

Green spaces near schools and interpretive signage offer hands-on learning opportunities. Community gardens double as educational spaces, fostering sustainability knowledge and engagement for all ages.



Working

Co-working spaces and mixed-use developments support flexible jobs within walking distance of homes. A new transit hub, expanded bus stops, and bike share stations make commuting easier and more sustainable. Street-level workspaces activate common areas and reduce the need for long commutes while enhancing economic vitality.



Health

A new bodega brings healthy food options to the heart of the neighborhood. Small-scale retail integrated near transit hubs supports walkability and local economic growth. Access to fresh produce through gardens and the bodega improves nutrition, while green space supports mental and physical wellness.



Commerce

The addition of a central transit hub and extensive bike shares across residential zones strengthens the link between home and work. Revitalized sidewalks encourage walking, making daily errands and commutes more convenient and community-focused.



Entertainment

Public plazas and pocket parks provide space for play, performance, and gathering, fostering a vibrant and connected neighborhood culture. Designed for live music, art, markets, and festivals, these flexible spaces bring year-round activity to the heart of the neighborhood. daily engagement and creative expression.

URBAN AND ECOLOGICAL PROTOTYPES



Community Gardens

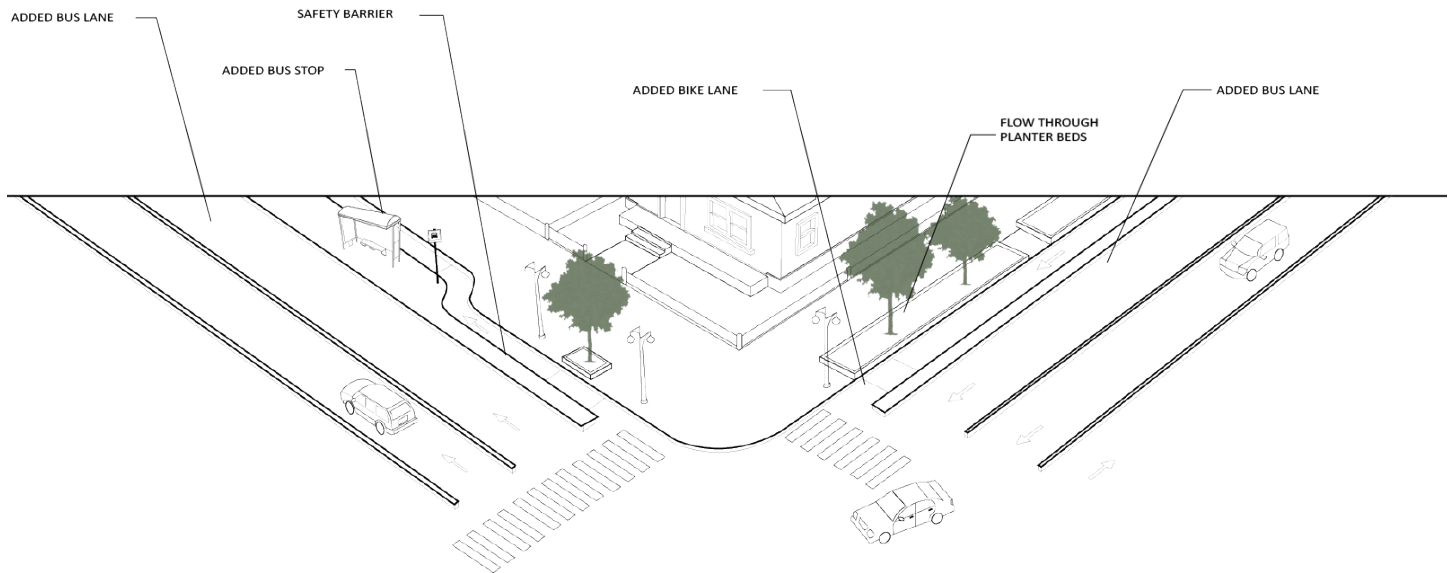
Community gardens in Denver's Highland neighborhood offer a transformative opportunity to revitalize underutilized alleyways into vibrant, productive spaces that foster community connection, environmental stewardship, and local food resilience. Implementing gardens in alleys not only reimagines these often-neglected areas but also addresses urban challenges such as food insecurity, social isolation, and environmental degradation. By converting alleys into green spaces, residents can cultivate fresh produce, reduce urban heat islands, and promote biodiversity. These gardens become communal hubs where

neighbors collaborate, share resources, and build lasting relationships. Globally, similar projects have demonstrated the profound benefits of alleyway gardens. In Manchester, UK, residents transformed a disused alley into a thriving community garden, featuring flowers, herbs, and communal spaces. This grassroots initiative not only beautified the area but also reduced antisocial behavior and fostered a stronger sense of community. In Atlanta, the establishment of over 150 urban gardens has been instrumental in combating food deserts and providing fresh produce to underserved communities. These gardens also serve as educational platforms, teaching urban agriculture and sustainability practices. Implementing community gardens in Highland's alleyways could serve as a model for urban renewal, demonstrating how collaborative efforts can transform neglected spaces into thriving, green sanctuaries that benefit both the environment and the community.



This map shows where community gardens will be implemented.

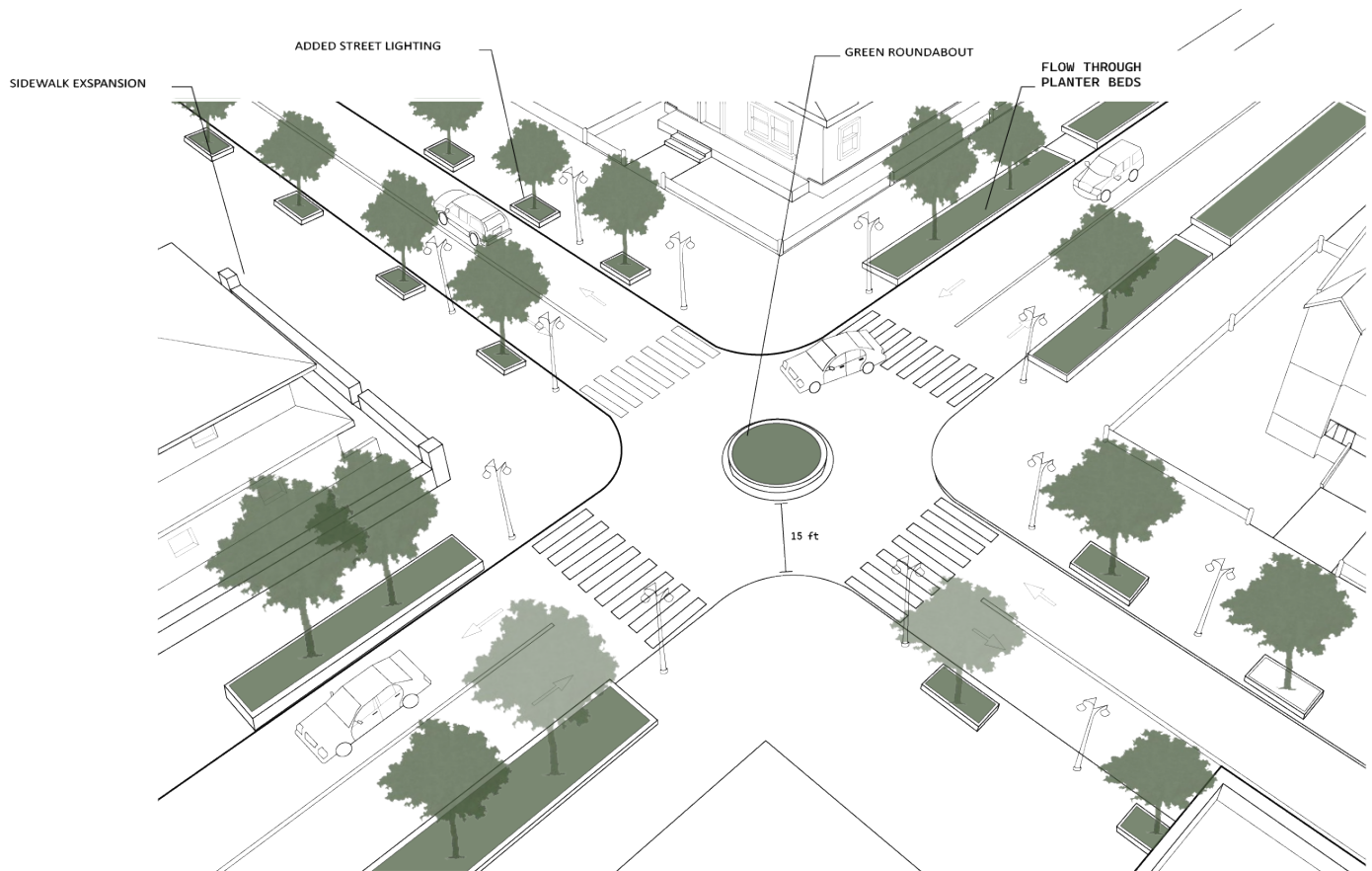
BUS STOP ADDITIONS



As part of Highland’s inclusive mobility vision, we’ve introduced a dedicated bus stop, a protected bike lane with a physical barrier, and a stormwater mitigation planter box. Together, these additions improve both transportation access and urban resilience. The new bus stop supports equitable transit access for residents without cars, while the bike lane barrier ensures safety for

cyclists, encouraging low-carbon commuting. Positioned between the sidewalk and street, the planter box plays a crucial role in managing stormwater runoff. It filters pollutants, prevents street flooding, and adds native greenery to the urban edge. This will protect the environment, promote health, and enhance everyday experiences for Highland residents.

RESIDENTIAL ROUNDABOUTS

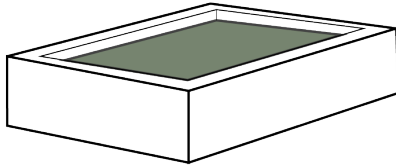


The green roundabouts introduced in Highland calm traffic while bringing nature into the heart of busy intersections. By slowing vehicles and reducing collision points, they create a safer crossing environment for pedestrians and cyclists. Their landscaped centers also support biodiversity, reduce heat, and enhance the aesthetic of the streetscape.

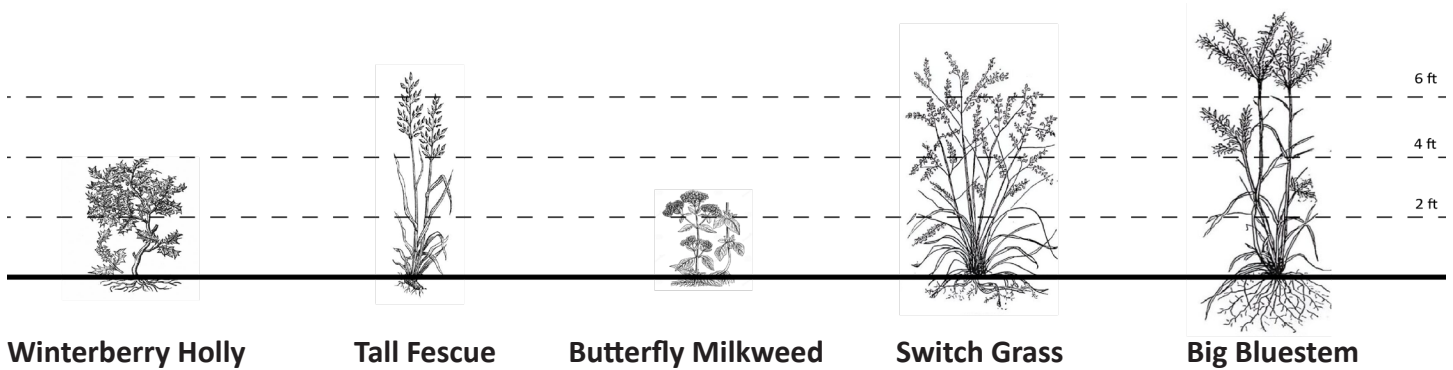
Lining the sidewalks, water mitigation planter beds are strategically placed to manage stormwater. These flow-through systems capture and filter runoff from streets and sidewalks, helping reduce flooding and keeping pollutants out of local waterways. Together, these features form a resilient and sustainable streetscape—one that supports both human movement and ecological health.

SMALL PLANTER BOX

7' x 5'

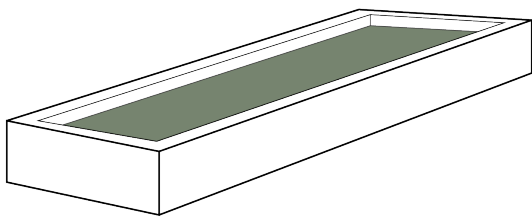


The small planters will offer a range of environmental, aesthetic, and social benefits over all enhancing communities. Their environmental benefits will range from storm water management, to air quality improvement, to urban heat island mitigation.

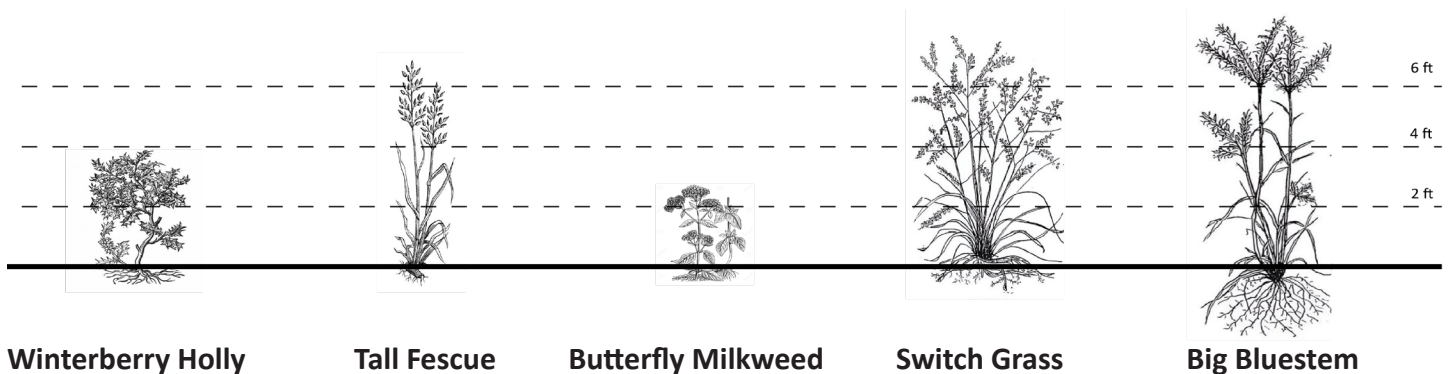


LARGE PLANTER BOX

25' x 5'

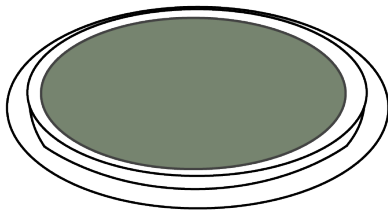


Similar to the small planter boxes, large ones will have the same benefits, but on a wider scale. In addition to their benefits, the sidewalk planter boxes are good addition to promote community engagement within neighborhoods.

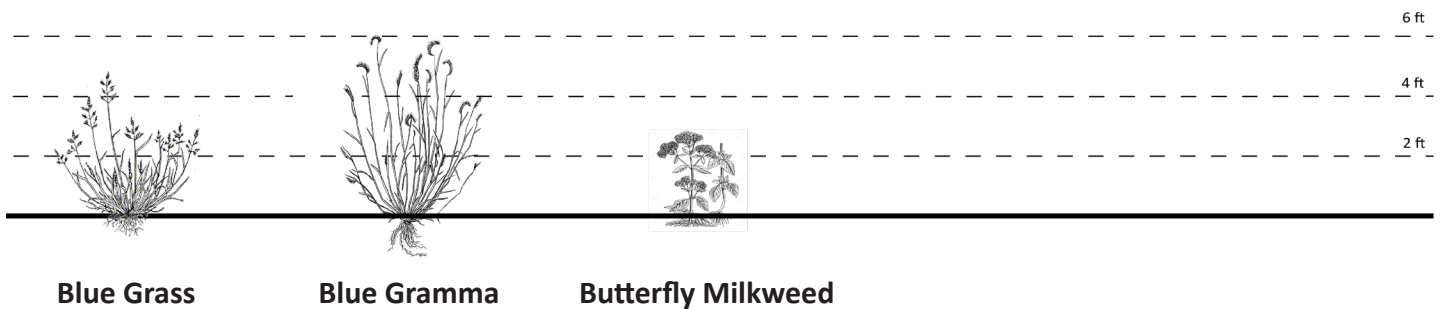


ROUND-ABOUT PLANTERS

16' x 16'



Given Denver's dry climate, having green roundabouts will be beneficial and low maintenance. From their location, they will be exposed to sun and wind which make them a sustainable low maintenance option for Highland.



Plant Typologies

Tall Fescue (*Festuca arundinacea*)

Tall Fescue has a deep root system and can tolerate moisture, making it a good option for planters or rain gardens which can benefit infiltration and erosion. Tall Fescue needs more water than the native grasses, so it is less ideal for a green roundabout.

Winterberry Holly (*Ilex verticillata*)

Winterberry Holly is a shrub that tolerates wet soils and helps with water uptake. This shrub loves moisture, thus making it an ideal candidate for a rain garden or moist planter box. Its branches can grow to be very dense, meaning they need more maintenance than something like Blue Gramma.

Switchgrass (*Panicum virgatum*)

Switchgrass is an adaptable plant that helps with stormwater infiltration. Its roots can be very deep (up to 10 feet), preventing erosion and absorbing runoff. This plant also is low maintenance and can thrive with little care.

Big Bluestem (*Andropogon gerardii*)

Big Bluestem is a tall and sturdy plant which holds soil very well. Its roots improve soil infiltration and stability while also supporting healthy ecosystems.

Blue Gramma (*Bouteloua gracilis*)

Blue Gramma is a drought-tolerant, low-growing plant. These two factors make it very easy to maintain. These plants will be utilized in green roundabouts rather than the planter beds since they thrive more in soils that do not collect large amounts of water. Since they are low growing, this will make them a suitable plant to ensure visibility is not lost for cars.

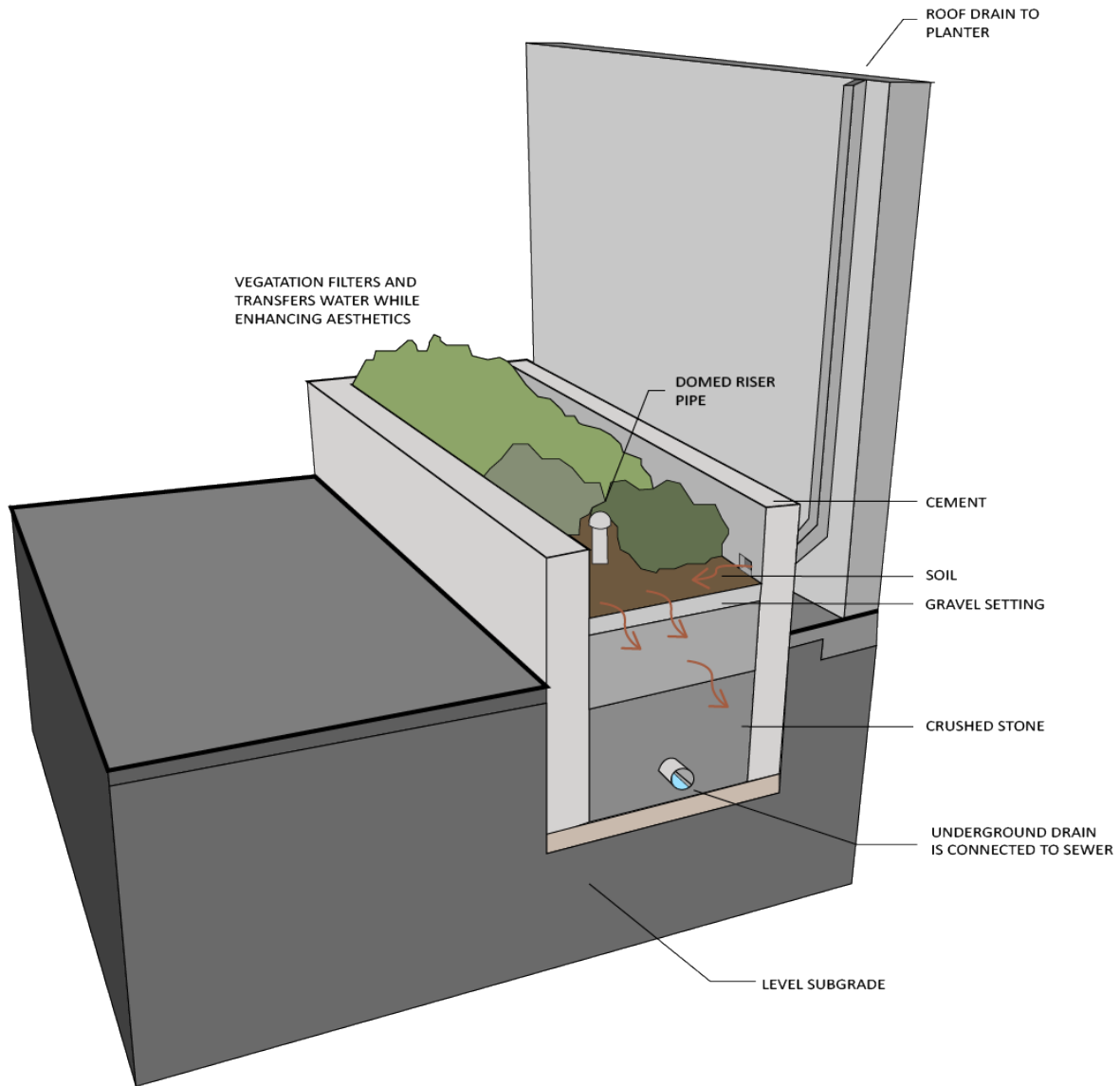
Buffalo Grass (*Bouteloua dactyloides*)

Buffalo Grass tolerates drought and sun exposure well. Since it is a drought-resistant grass with a strong root system it will thrive in a low-water area such as the green roundabouts.

Butterfly Milkweed (*Asclepias tuberosa*)

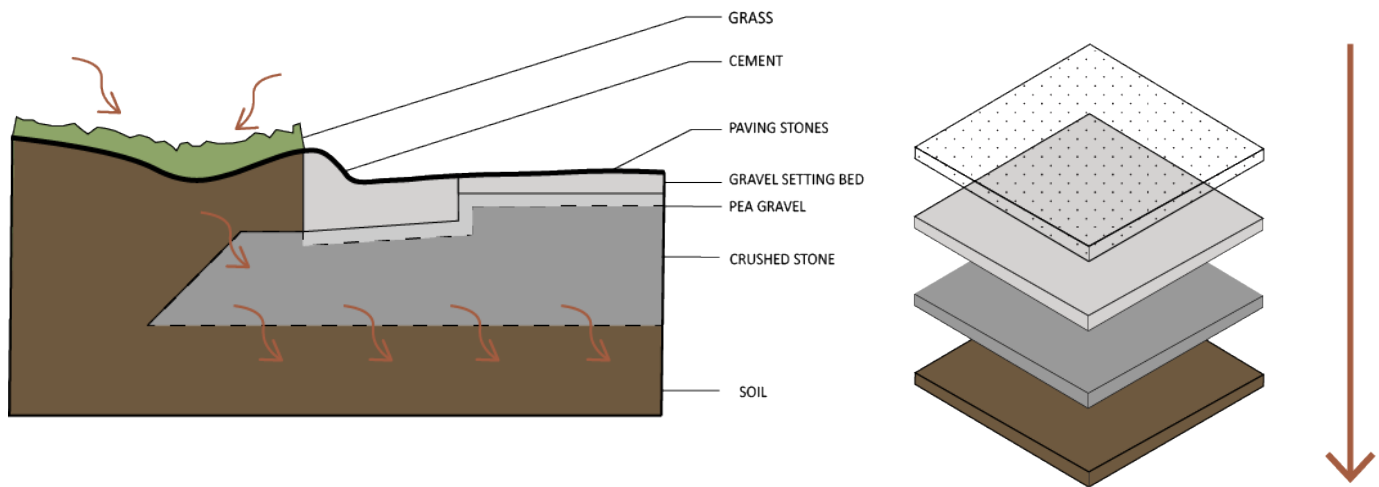
Butterfly Milkweed is also a drought tolerant plant, once it has been established. This plant is more versatile than Blue Gramma or Buffalo Grass and thus can be used in roundabouts as well as planter beds. Though it is drought-tolerant, it can also thrive in well-drained soils such as those in the planters.

BIOSWALES



Both small and large planter boxes will be made to support water management. This form of bioswale are extremely sustainable and a great solution for managing water runoff. Given their design to help absorb and manage water and stormwater runoff, they will help slow down water flow and help it soak into the ground rather than into storm drains. This has many benefits. First, this will allow for water to soak into soil, both benefiting vegetation and preventing

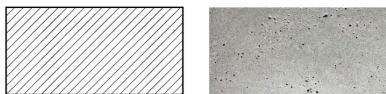
flooding in streets. Second, this will improve water quality, as the water will pick up hazardous material in streets, and once it enters the planters, the water will filter. In addition, this supports the City of Denver's sustainability goals by improving climate resilience, managing water both naturally and sustainably. These planters will enhance the charm of neighborhoods bring greenery to the streets, and improve the pedestrian experience.



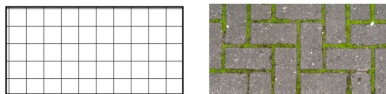
PERMEABLE PAVEMENT

This section shows a sustainable permeable pavement system designed to support drainage and reduce runoff. Rainwater passes through layers of paving stones, gravel, and crushed stone, filtering into the soil below. The system includes a gravel setting bed and pea gravel layer that stabilize the surface

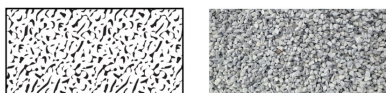
while allowing water to infiltrate. Unlike traditional pavements, this setup reduces pressure on storm drains, minimizes urban flooding, and helps replenish groundwater. It's a key strategy for eco-friendly, resilient neighborhood infrastructure.



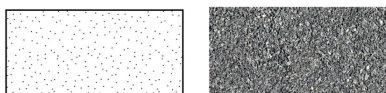
Cement surfaces are solid, durable, and smooth, often used for sidewalks, plazas, and roads. They create a hard, impermeable surface that's long-lasting but can contribute to runoff unless paired with drainage features



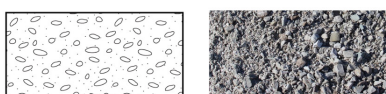
Paving stones are individual pieces (like bricks or tiles) placed in patterns. They allow for small gaps that can improve drainage and offer flexibility in design. Great for plazas, patios, walkways, and areas where aesthetic matters.



Gravel is a collection of small, loose stones that create a permeable, flexible surface. It's often used for driveways, pathways, and informal parking areas. Gravel reduces runoff but needs regular maintenance to stay level.



Pea gravel consists of tiny, smooth, rounded stones about the size of peas. It's ideal for decorative pathways, patios, and garden features. Highly permeable but can shift underfoot without edging to contain it.

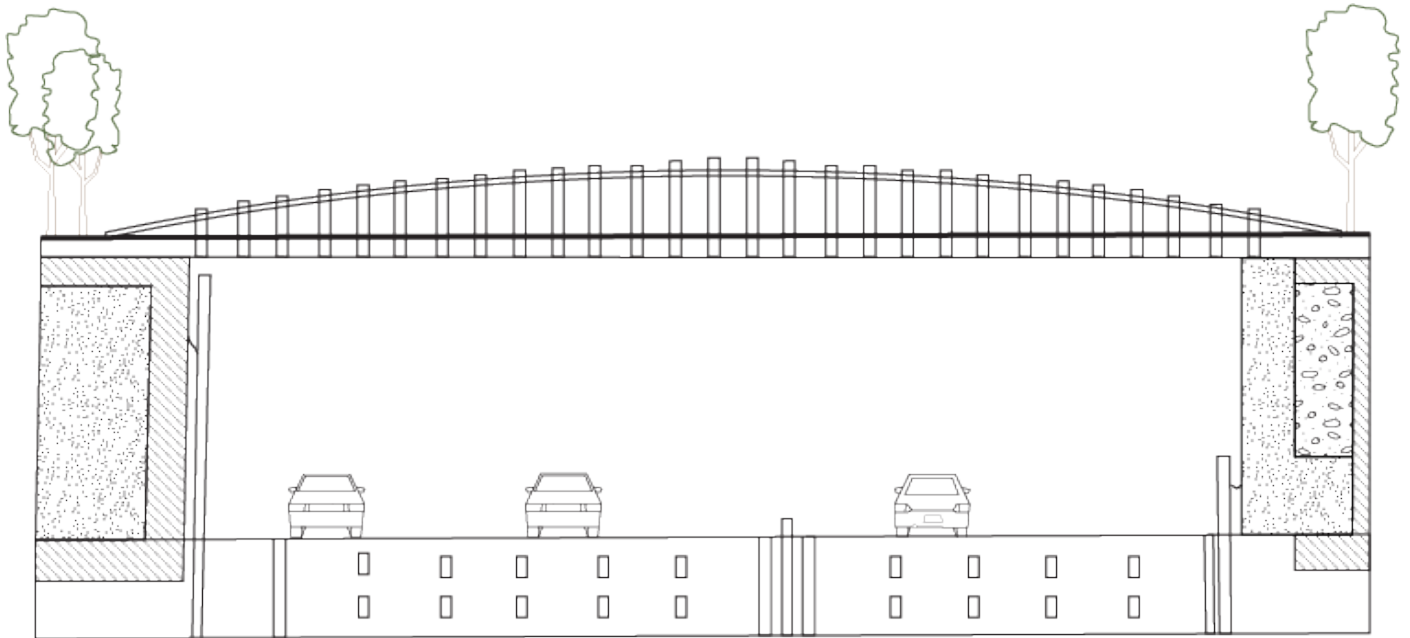


Crushed stone is made from larger, angular rock pieces. It's rougher and compacts better than pea gravel, making it useful for driveways, drainage systems, and structural fill projects where stability is important.

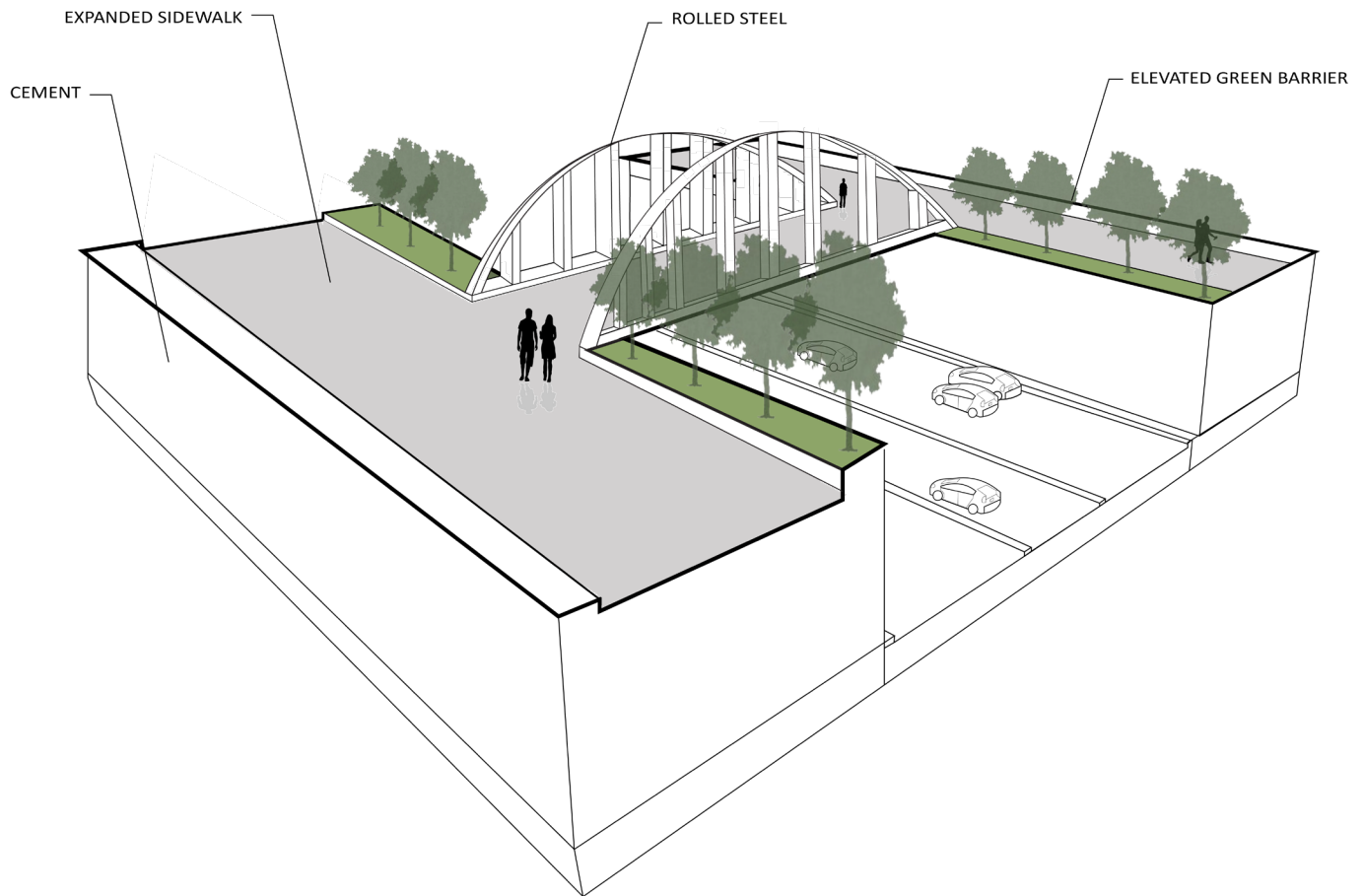


Soil surfaces are natural, highly permeable, and essential for supporting plant growth. While not durable for heavy traffic, soil areas are crucial for stormwater absorption, landscaping, and ecological health.

Overpass Revitalization

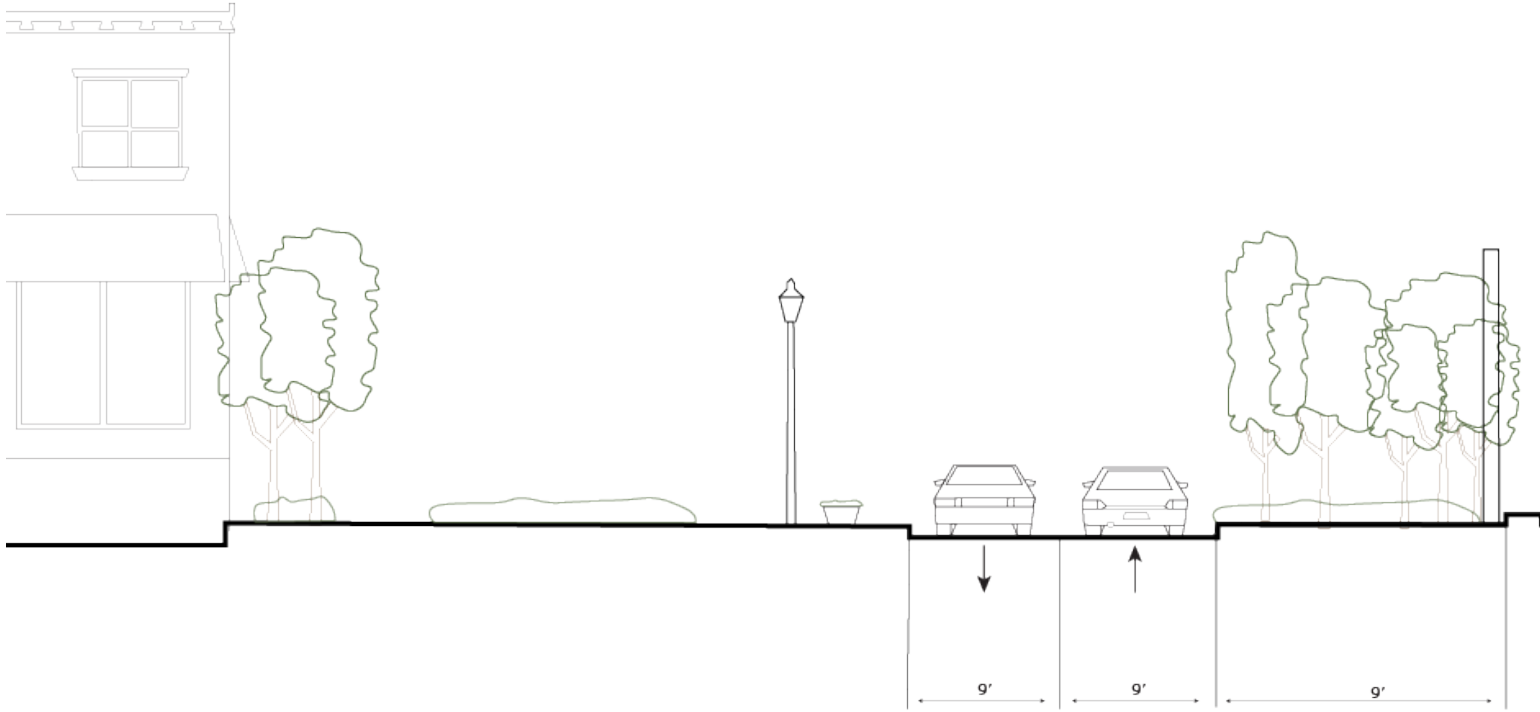


The revitalized overpass across I-25 serves as a vital green infrastructure intervention, reconnecting the Highland neighborhood to the parks and natural spaces located across the highway. The updated design addresses the needs of a multi-modal community, accommodating pedestrians, runners, cyclists, and scooter users with expanded sidewalks and added bike lanes.



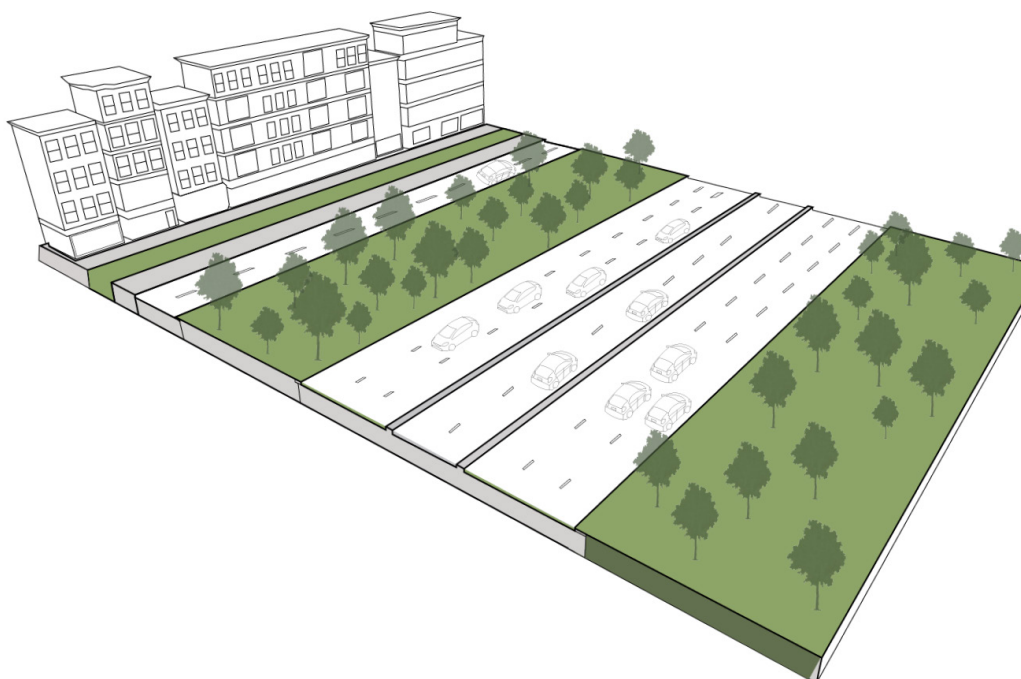
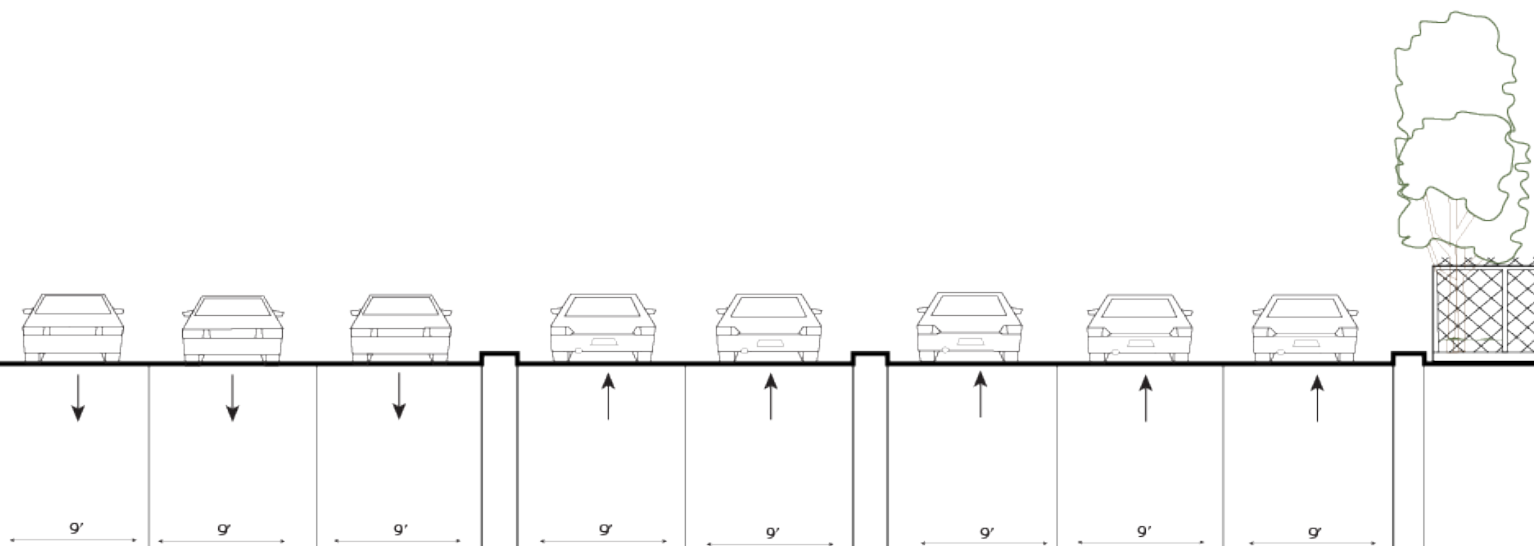
The overpass features elevated green barriers, rolled steel arches, and planted zones, blending ecological design with urban functionality. By prioritizing accessibility and recreation, this structure promotes physical activity, supports mental health, and enhances neighborhood cohesion. The integration of greenery not only improves the aesthetic experience but also reinforces the neighborhood's green initiative, linking built and natural environments in a way that supports sustainability and well-being.

Noise Pollution Barrier

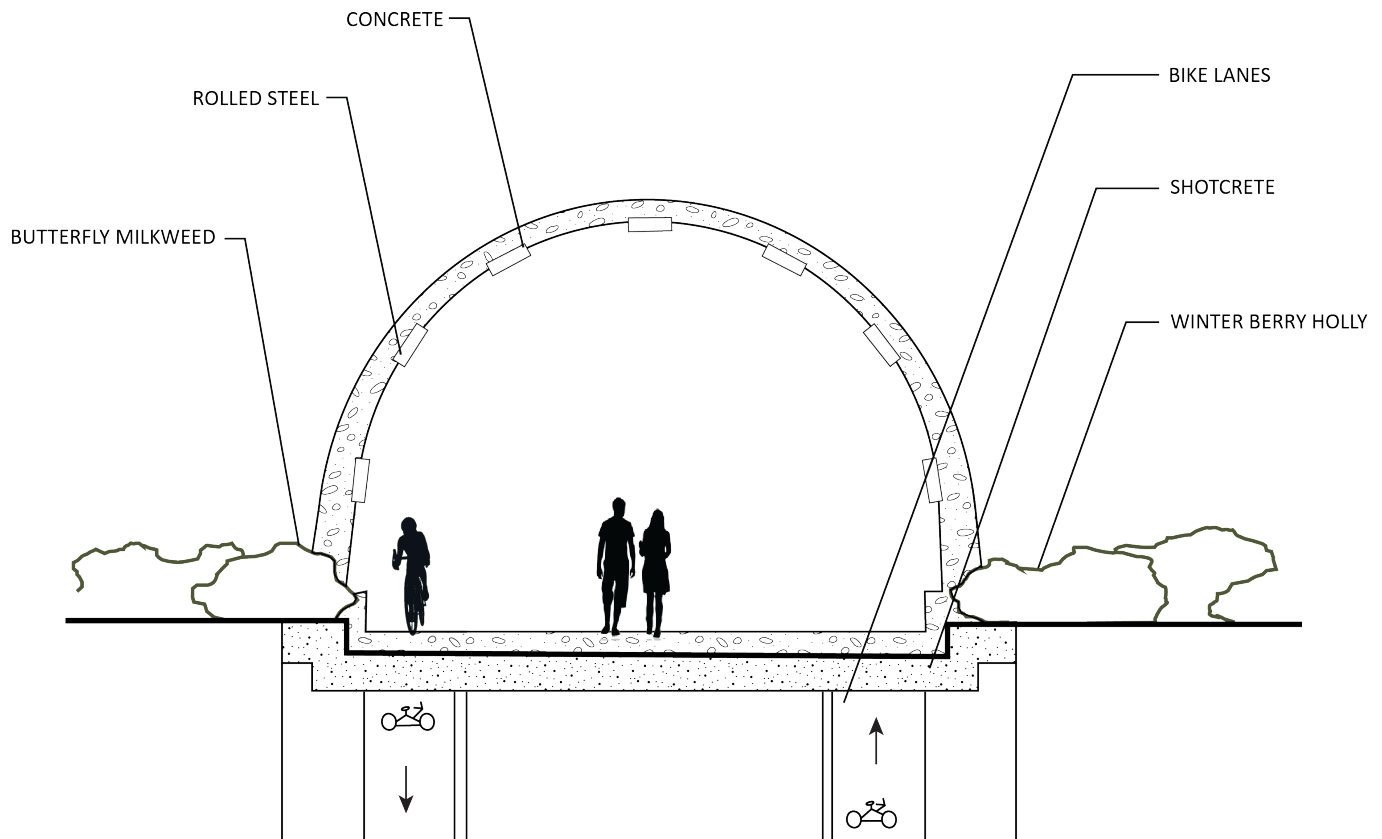


In response to the rising concern of noise pollution in Denver, particularly along major corridors like I-25, our plan introduces a dense vegetated buffer zone between the highway and the Highland neighborhood. This green barrier is strategically designed to absorb and diffuse highway noise, improving the auditory comfort and quality of life for nearby residents. Noise pollution has become one of Denver's most pervasive and overlooked environmental health

threats, with long-term exposure linked to stress, sleep disruption, and cognitive strain. The implementation of this buffer—featuring layered vegetation, berms, and setback space—acts as a natural sound wall, offering both acoustic protection and ecological benefits. Beyond noise reduction, the barrier contributes to the area's green infrastructure network, enhancing biodiversity, offering visual screening, and reinforcing Highland's commitment to sustainable urban living.



Creating a Pedestrian Underpass

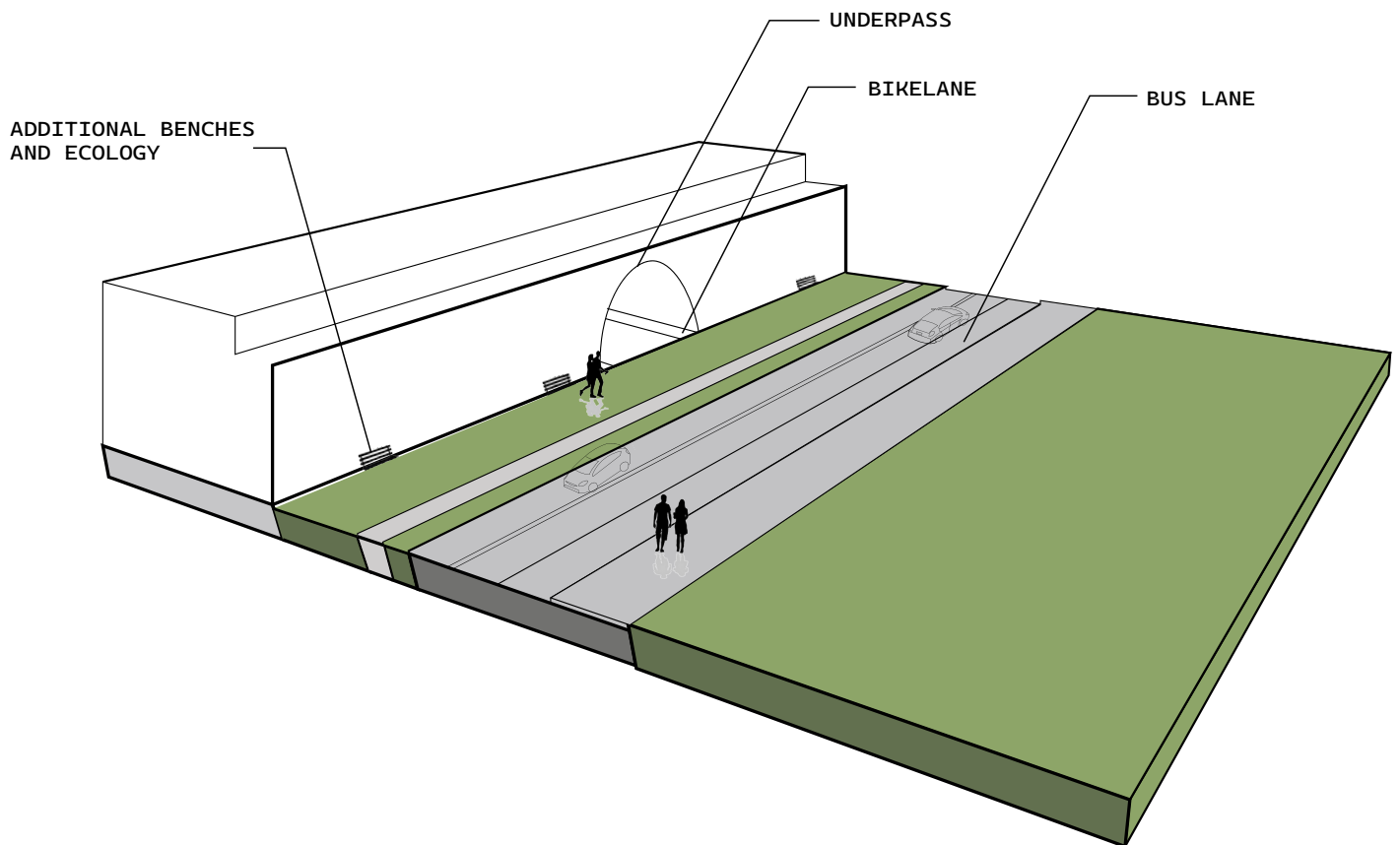


The introduction of an underpass beneath I-25 represents a second major step in reconnecting the Highland neighborhood to the parks and open spaces on the opposite side of the highway. This underpass provides a safe, shaded, and all-weather alternative route for bikers, pedestrians, and transit riders, helping to close critical gaps in neighborhood accessibility. The design includes bike lanes, a dedicated bus

lane, and improved walkability through added seating and green buffers, promoting both comfort and environmental awareness. Green infrastructure, like planted areas and shaded rest spots, encourages ecological diversity while softening the urban environment. These improvements enhance daily mobility for all ages and abilities, ensuring that transit and recreation are equally accessible.



The implemented underpass will benefit the community by providing a mode of connection to Commons Park, which is just East of Highland. This park borders downtown Denver, making it a great option for pedestrian connection.

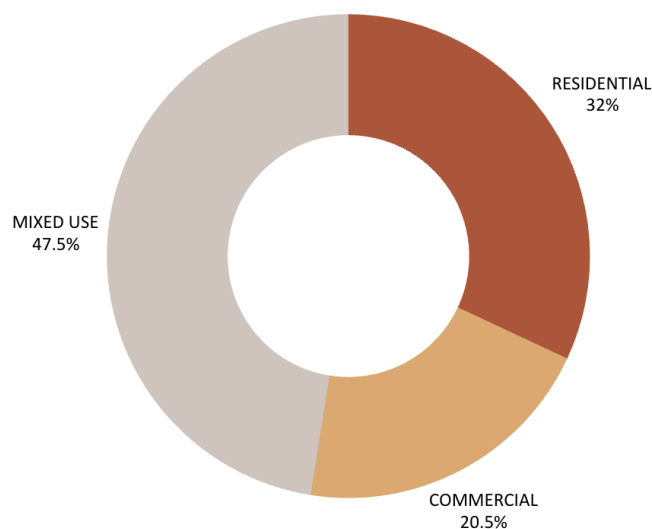




PROPOSED DEVELOPMENT

REDEVELOPMENT PROGRAM

A redevelopment plan for Highland seeks to balance modern urban growth while preserving the historic charm of the neighborhood. In doing so, underutilized areas and vacant spaces were transformed to provide new residential, commercial, and mixed-use opportunities in the neighborhood. A major factor in this process was the implementation of more Accessory Dwelling Units, ADUs. These along with three new larger residential spaces will benefit maximizing density in the neighborhood. Aside from the residential interventions, new buildings such as a grocery store and a market will improve residents access to amenities within their neighborhoods. The implementation of these new developments will revitalize the neighborhood, improving pedestrian access, community engagement, and overall density within Highland.

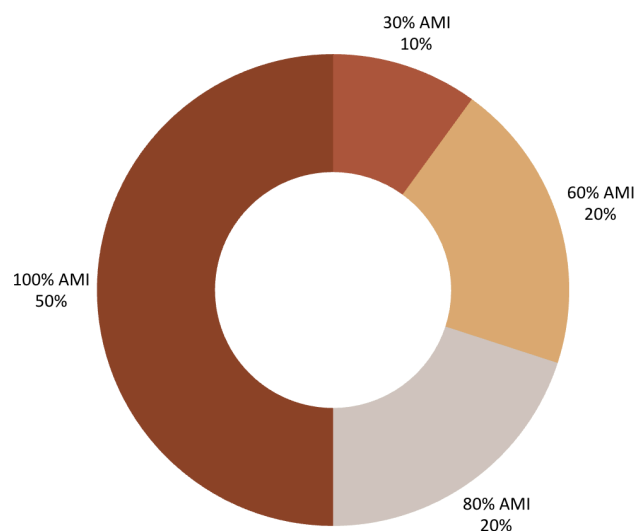


Within the redevelopment, shown to the left is the distribution of added building types in Highland.

Income Level Distribution

AMI %	# of units	% of total units
30%	25	10%
60%	50	20%
80%	50	20%
100%	125	50%

When deciding this redevelopment program, an income level distribution chart was also developed in order to ensure that housing was divided fairly, giving options for residents of all incomes.



NEW HOUSING INVENTORY

3227 Bryant St Denver, CO 80211 United States	506 ft ²	Studio	\$1600/month	0.011/acre
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3353 Zuni St Denver, CO 80211 United States	468 ft ²	Studio	\$1450/month	0.011/acre
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3457 Zuni St Denver, CO 80211 United States	577 ft ²	Studio	\$1600/month	0.013/acre
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3451 Zuni St Denver, CO 80211 United States	577 ft ²	Studio	\$1600/month	0.013/acre
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3445 Zuni St Denver, CO 80211 United States	577 ft ²	Studio	\$1600/month	0.013/acre
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3435 Zuni St Denver, CO 80211 United States	577 ft ²	Studio	\$1600/month	0.013/acre
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3233 Pecos St Denver, CO 80211 United States	758 ft ²	1 bed 1 bath	\$1700/month	0.017/acre
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3219 Osage St Denver, CO 80211 United States	668 ft ²	Studio	\$1500/month	0.015/acre
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3316 Navajo St Denver, CO 80211 United States	758 ft ²	1 bed 1 bath	\$1550/month	0.017/acre
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NEW HOUSING INVENTORY

3336 Navajo St Denver, CO 80211 United States	952 ft ²	2 UNIT 1 bed 1 bath	\$1600/month	0.044/acre
3424 Navajo St Denver, CO 80211 United States	657 ft ²	Studio	\$1400/month	0.015/acre
3420 Osage St Denver, CO 80211 United States	684 ft ²	Studio	\$1400/month	0.015/acre
3519 Osage St Denver, CO 80211 United States	483 ft ²	Studio	\$1250/month	0.011/acre
3614 Pecos St Denver, CO 80211 United States	829 ft ²	1 bed 1 bath	\$1400/month	0.011/acre
3643 Mariposa St Denver, CO 80211 United States	914 ft ²	1 bed 1 bath	\$1400/month	0.021/acre
3729 Mariposa St Denver, CO 80211 United States	716 ft ²	1 bed 1 bath	\$1300/month	0.016/acre
3737 Lipan St Denver, CO 80211 United States	698 ft ²	Studio	\$1300/month	0.016/acre

ADDITIONAL BUILDINGS

The following inventory shows the additional buildings added to the site. These buildings were decided based on the needs of different areas, while understanding what was existing in the neighborhood. These added buildings include multi unit housing to maximize density around Highland as well as a two unit apartment.

2502-2510 W 29th Avenue, Denver, CO 80211	Transit Center	28,000 sq. ft	C-MX-5
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3700 Vallejo Street, Denver, CO 80211	Multi-Unit Housing	4966 sq. ft	U-TU-B
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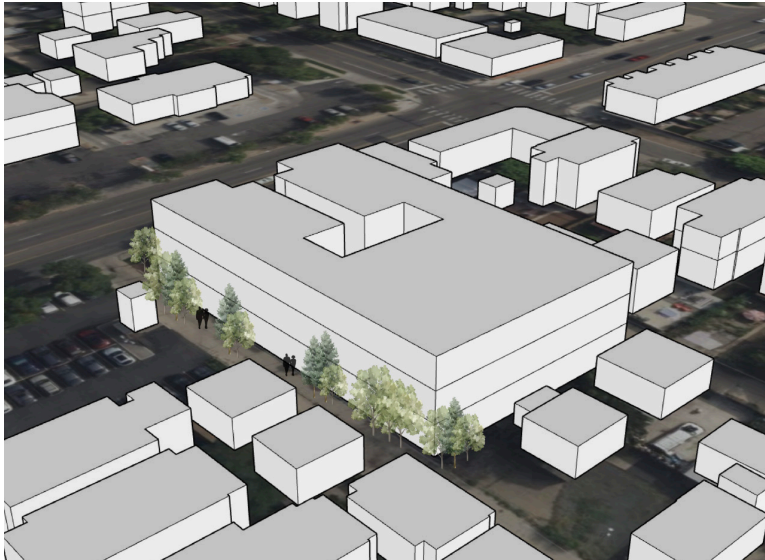
1735 W 37th Avenue, Denver, CO 80211	Multi-Unit Housing	43,374 sq. ft	PUD
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3746 Quivas St, Denver, CO 802011	Grocery Store	7,350 sq. ft	PUD
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1615 Boulder St, Denver, CO 80211	Multi-unit Housing/ Offices	60,834 sq. ft	C-MX-5
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W Douglas Pl, Denver, CO 80211	Market	10,867 sq. ft	U-MX-3
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1643 Boulder St, Denver, CO 80211	Arts Center	23,550 sq. ft	C-MX-5
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MUTLI UNIT HOUSING

1735 W 37th Ave, Denver CO 80211

Total Square Feet: 43,374

Building Footprint: 14,458

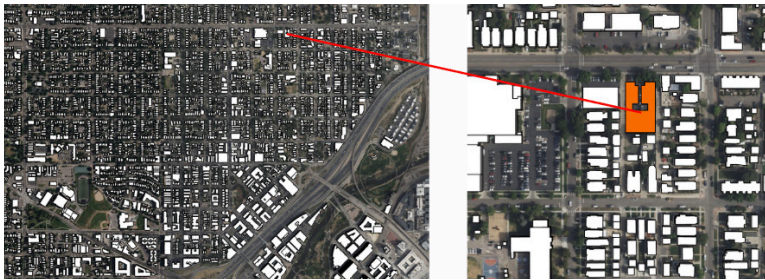
DU/Acre: 19

Parking Removed: 40 spots

Parking Added: 20 spots, garage

Density According to Zoning: PUD, Planned Unit Development, custom zoned to address unique site.

This housing unit will be added in the North-east of Highland. Conveniently located within walking distance to a school and small commercial area which has both restaurants and smaller grocery stores. This multi-unit housing structure will increase density in this area of Highland.



MUTLI UNIT HOUSING

1615 Boulder St, Denver CO 80211

Total Square Feet: 60,834

Building Footprint: 20,278

DU/Acre: 19

Parking Removed: 80 spots

Parking Added: 30 spots, garage

Density According to Zoning: C-MX-5, maximum footprint and setbacks

An additional multi-unit housing structure will be added in Southeast Highland. These apartments are within very close walking distance to the bustling commercial district that Highland upholds. It is also in close proximity to Denver North High School. Both of these factors will provide many benefits for its residents.





ARTS CENTER

1643 Boulder St, Denver CO 80211

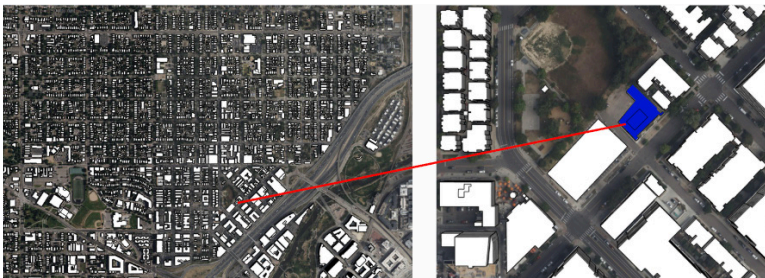
Total Square Feet: 23,550

Building Footprint: 7,850

Parking Added: 20 spots, parking lot

Density According to Zoning: C-MX-3, commercial mixed use, up to 3 stories

To further enhance Highlands community engagement and culture, an arts center will be implemented near the commercial area. Highland, having a strong sense of identity due to the historic district in the Northwest region of the neighborhood, will benefit from this center as it will expand this form of interaction throughout the whole neighborhood.



TRANSIT CENTER

2502-2510 W 29th Ave Denver, CO 80211

Total Square Feet: 28,000

Building Footprint: 14,000

Parking Added: 10, spots

Density According to Zoning: C-MX-5, commercial mixed use, up to 5 stories

Throughout Highland are multiple bus stops and routes, but it is lacking a transit center. To alleviate this, one will be implemented in South Highland. It's location is very close to the high school as well as commercial district, making it an ideal location benefiting the community while also providing an increase in transportation options.





TWO UNIT HOUSING

3700 Vallejo St, Denver CO 80211

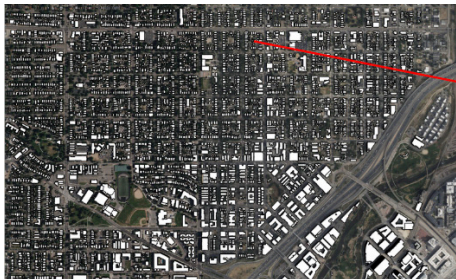
Total Square Feet: 4,966

Building Footprint: 2,483

DU/Acre: 0.23

Parking Added: 4, street

Density According to Zoning: U-TU-B, two unit residential



Surrounded by ADUs and single family housing units will be a two-unit housing structure. This will be a minor addition that will help in maximizing density in Highland. Similar



MARKET

W Douglas Pl, Denver CO 80211

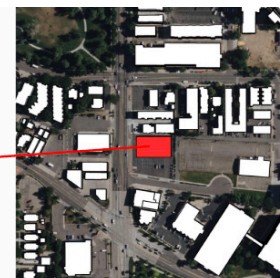
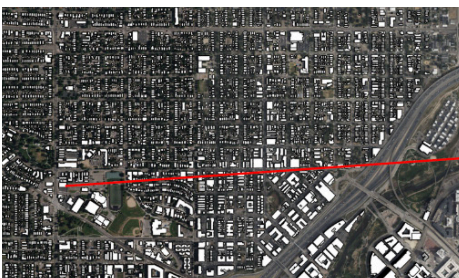
Total Square Feet: 10,867

Building Footprint: 10,867

Parking Removed: 56 spots

Parking Kept: 36 spots, lot

Density According to Zoning: U-MX-3, urban mixed use, up to 3 stories



A small market will be added in close proximity to residential areas of Highland and the high school. This will be beneficial to both students and residents as it will allow for a conveniently located space to purchase food. In addition to this, it will economically benefit the neighborhood



GROCERY STORE

3746 Quivas St, Denver, CO 80211

Total Square Feet: 7,350

Building Footprint: 7,350

Parking Removed: 20 spots

Parking Kept: 20 spots

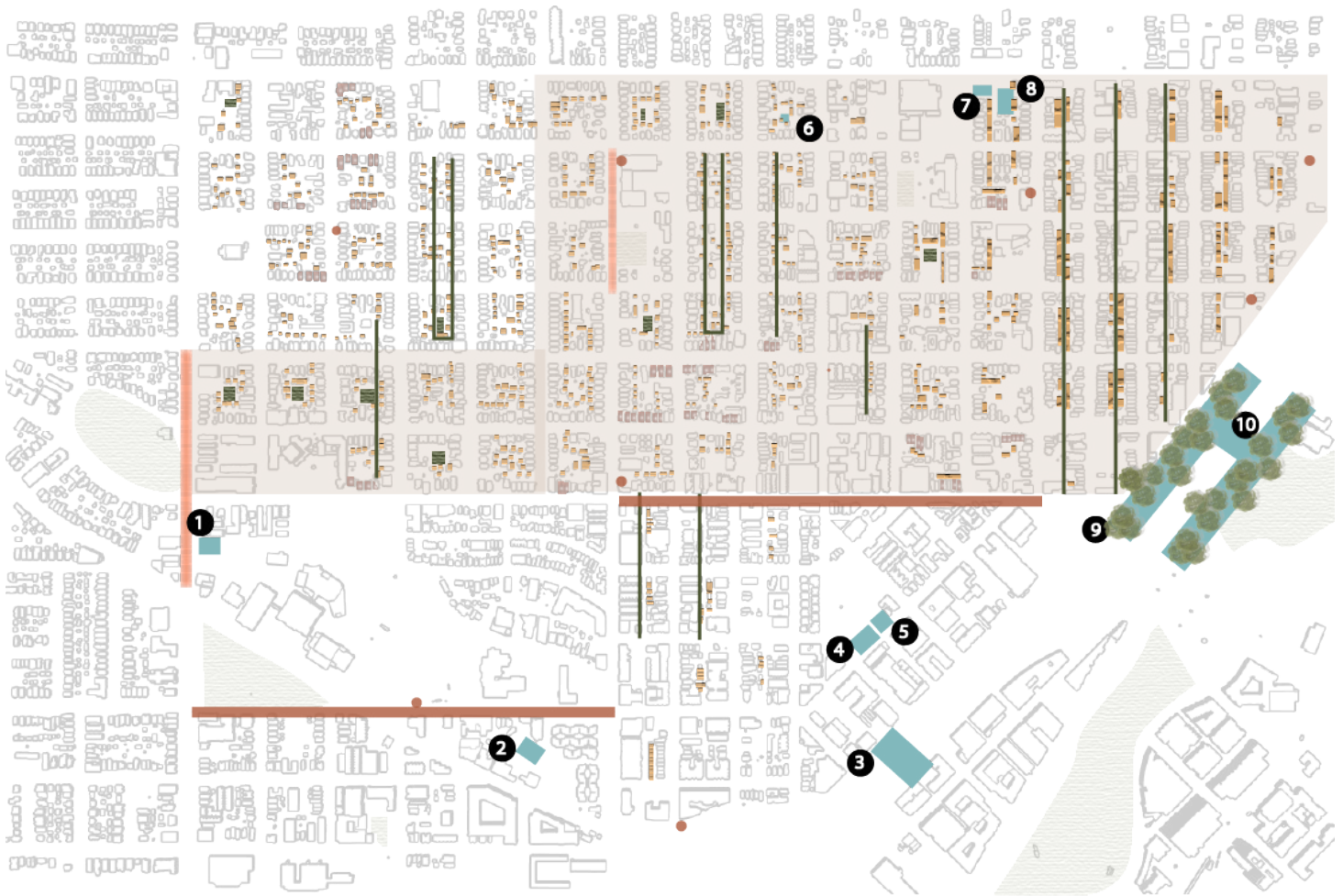
Density According to Zoning: PUD, Planned Unit Development, custom zoned to address unique site.

The final major building implementation will be a grocery store. Adding this will benefit the residential neighborhood by having an option within walking distance of homes. Similar to the market, this will also economically increase revenue within the neighborhood as a whole.



IMPLEMENTATION IN THE DESIGN

Implementing interventions into Highland.



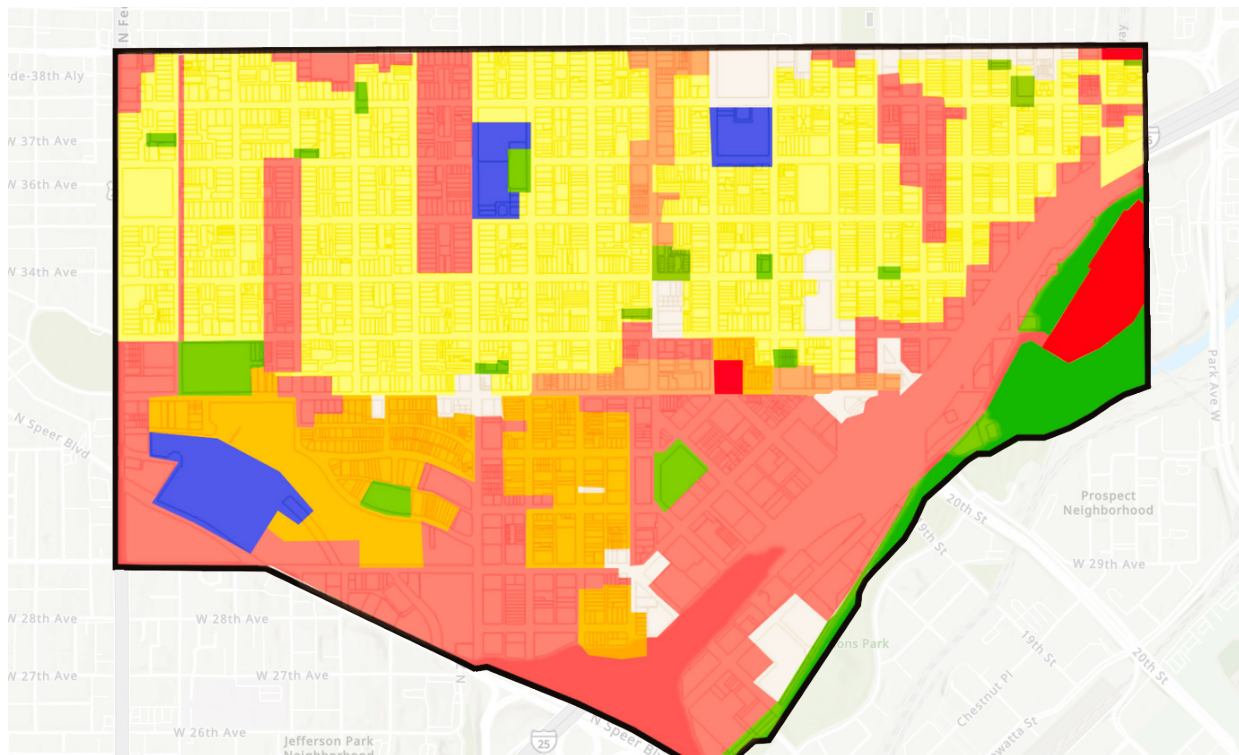
SYMBOLGY

	ADUs		WOONERFS
	COMMUNITY GARDENS		ROAD DIET
	SOLAR PANELS		TRANSIT LINES
	SOUND BARRIER		
	TRANSIT STOPS		
	NEW INFRASTRUCTURE		REVITALIZED SIDEWALK/LIGHT
1	BODEGA	6	TWO UNIT HOUSING
2	TRANSIT CENTER	7	GROCERY STORE
3	REVITALIZED OVERPASS	8	MULTI UNIT HOUSING
4	MULTI UNIT HOUSING	9	SOUND BARRIER
5	ARTS CENTER	10	UNDERPASS

Creating a masterplan for Highland, Denver offers a strategic opportunity to guide thoughtful growth while preserving the neighborhood's historic charm and unique character. A well-crafted masterplan can address key issues like housing diversity, walkability, green space, and infrastructure upgrades, ensuring that development aligns with community values. By engaging residents and stakeholders, the plan can help balance modern needs—like ADUs and alley activation—with long-term sustainability and cultural preservation, ultimately shaping a more inclusive, connected, and resilient Highland.

The plan aims to begin with higher/middle income areas and increase density there first, while implementing more public transportation to support it. Through creating higher density, we will also be generating more tax revenue which can be implemented

in infrastructure upgrades/development and alleyway activation. This plan is curated to use the taxes generated in Highland to improve Highland and safeguard its future path towards revitalization and a healthy development regarding income, community, and sustainability.



- Two Unit
- Multi Unit
- Residential Office
- Residential Mixed Use
- Commercial Corridor
- Mixed Use
- Main Street
- Open Space

- R-5 Public Use
- PUD

Scale: 1" = 15,000"



Proposed Land Use

The zoning of the site is not subject to change in our design, as all added buildings and changes to roadways can exist under the current zoning. After weighing the costs and benefits of changing the zoning, our team found it was best to move forward with our redesign

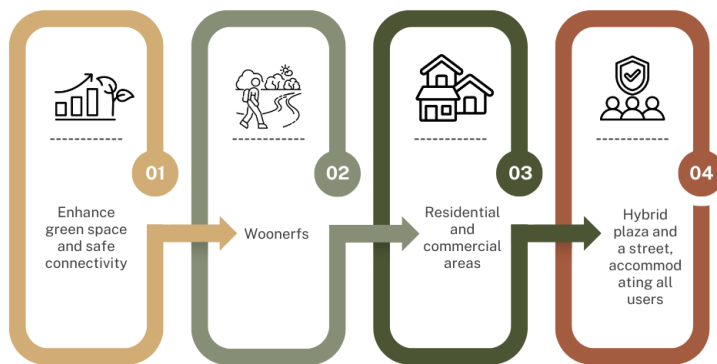
under the current zoning conditions. Rezoning and changing the urban tapestry of current residential areas is not realistic, sustainable, or economic. For these reasons, our team looked to accommodate the current zoning with our redesign.



Woonerfs

In Highland, where walkability and community interaction are highly valued, introducing woonerfs could enhance neighborhood cohesion, reduce traffic-related injuries, and promote sustainable transportation options. By transforming streets into communal spaces, woonerfs align with Denver's goals of increasing tree canopy, improving air quality, and addressing urban heat island effects. Moreover, woonerfs support local businesses by creating inviting environments that attract

foot traffic and encourage outdoor activities. Their flexible design can be integrated into existing urban areas with minimal disruption, making them a practical solution for enhancing urban living in Highland Denver. Incorporating woonerfs into Highland's urban landscape could revitalize public spaces, promote sustainability, and strengthen community ties, contributing to a healthier and more connected neighborhood.



The map above highlights the locations where residential woonerfs will be implemented through connected alleyways.

The woonerf process began with a focus of enhancing green space options within Highland. By deciding to implement woonerfs, the streets of Highland will transform into hybrid streets that will accommodate all users and residents.

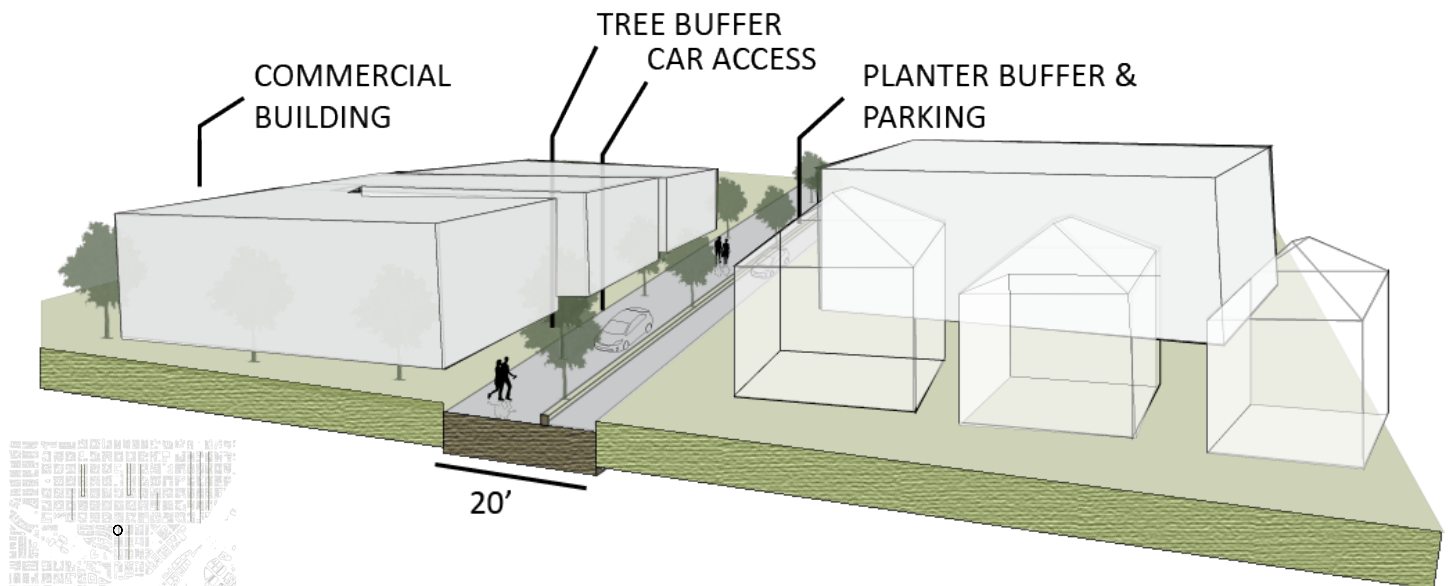
In the Netherlands, woonerfs, residential streets designed to prioritize pedestrians, cyclists, and community life over automobile traffic, have been implemented throughout the country. In a woonerf, vehicles, pedestrians, and cyclists share the same space, with an emphasis on reducing vehicle traffic and creating a safer atmosphere by encouraging social interaction, enhancing walkability, and promoting a sense of community while prioritizing the well-being and safety of pedestrians and cyclists.



A residential woonerf in the Netherlands.

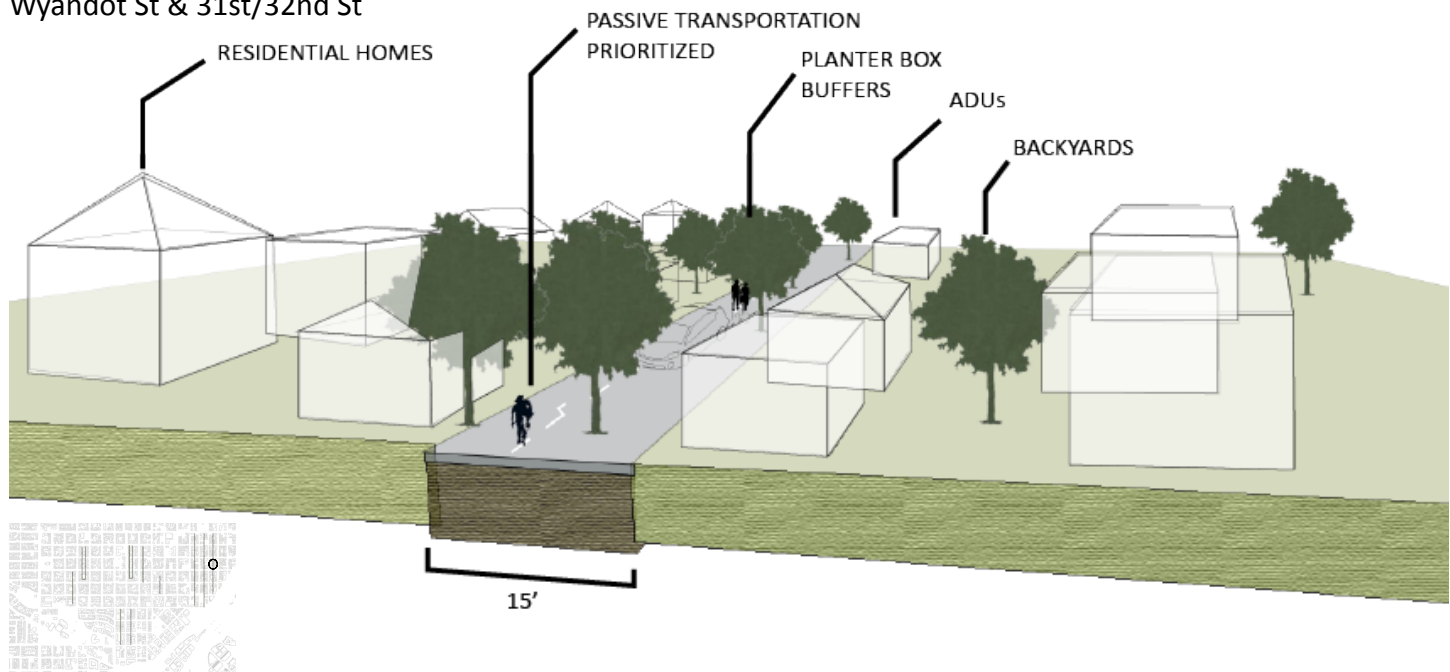
Commercial Woonerf Section

Navajo St & 34th/35th St



Residential Woonerf Section

Wyandot St & 31st/32nd St





This view shows the connectivity the woonerfs provide. The plan is to create a greenbelt through connecting alleyways to generate more community connectivity.

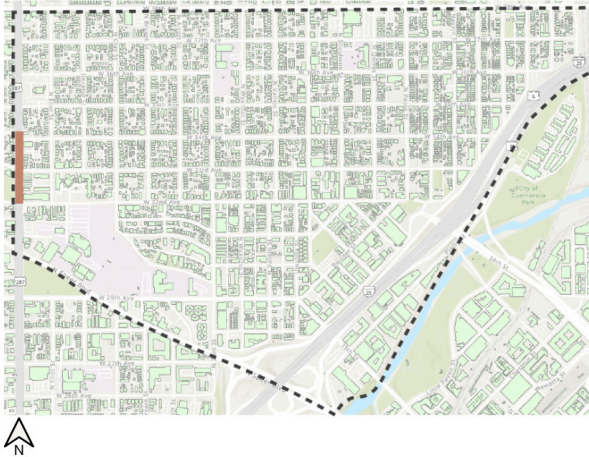


This aerial view of the woonerf shows the prioritization of pedestrian mobility. The alleyway size continues to support necessary vehicular travel, but creates a more desirable human-scaled walkway.

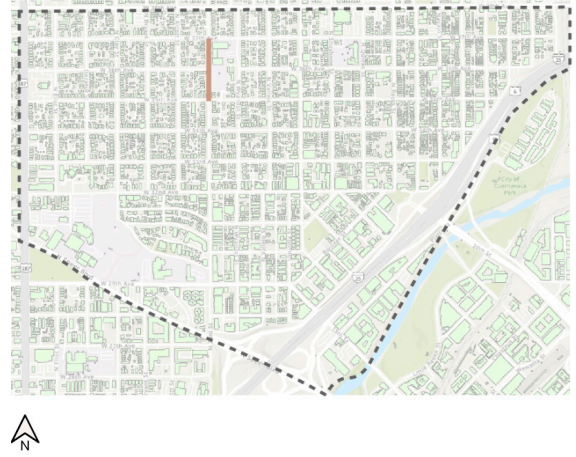


This final perspective shows the revitalization of the pavement. Implementing permeable pavements will provide both sustainability and revitalization.

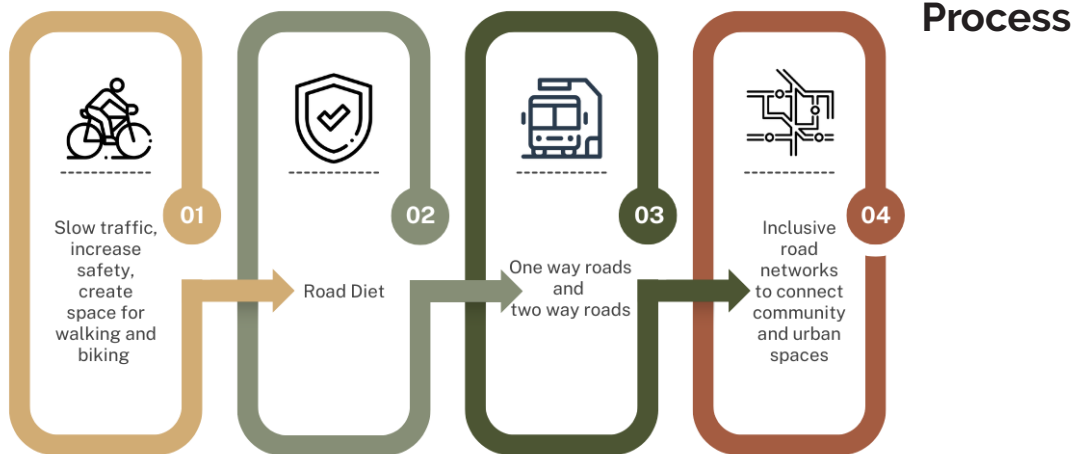
ROAD DIET IMPLEMENTATION



Federal Blvd.
W 33rd Ave
W 32nd Ave



Zuni St.
W 35th Ave
W 37th Ave

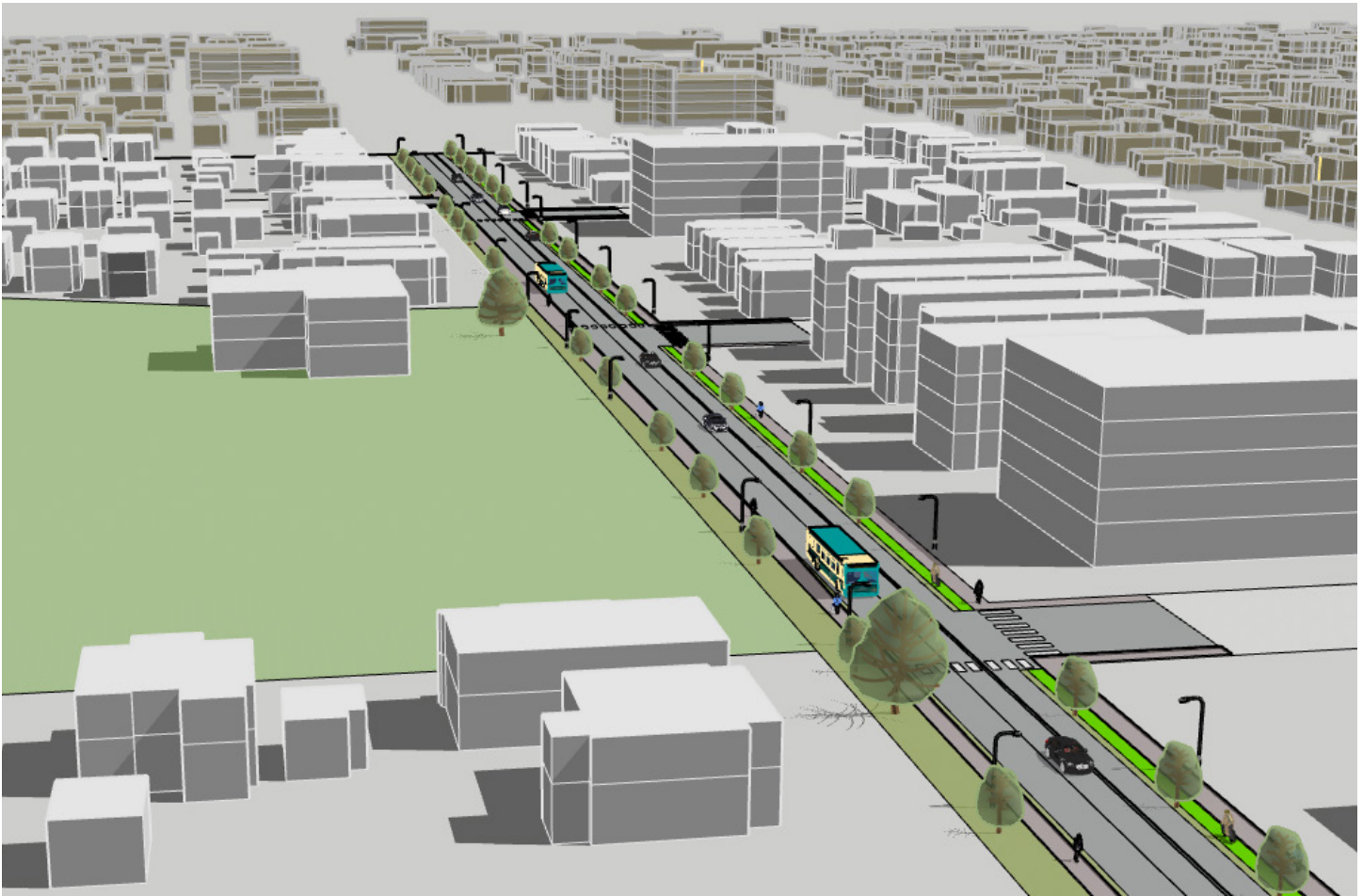


Davis, California, renowned for its commitment to sustainable transportation, offers valuable insights for Highland, Denver, as the neighborhood considers implementing road diets. In 2016, Davis transformed its Fifth Street corridor by reducing lanes and adding bike lanes, resulting in a 243% increase in bicycle traffic without negatively impacting automobile travel times . This approach not only enhanced safety and multimodal connectivity but also demonstrated that reallocation of road space can benefit all users.

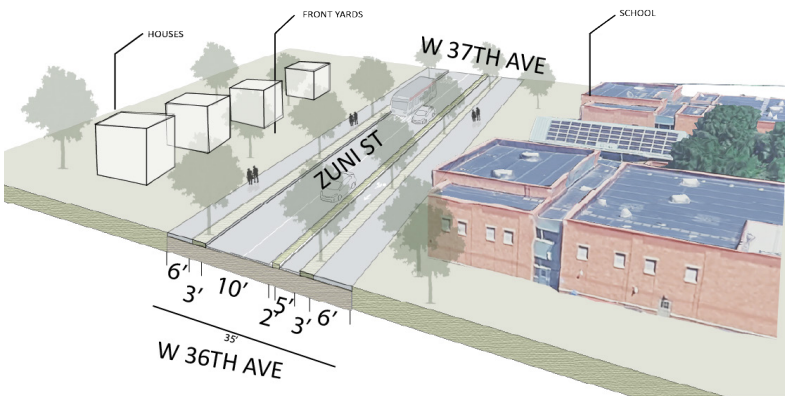
Precedent



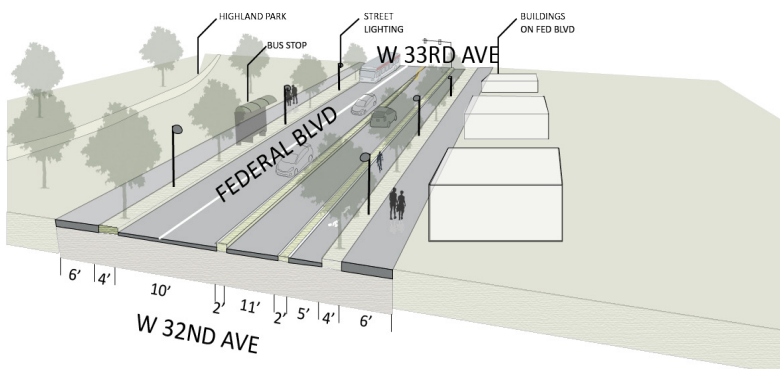
A road diet in Davis, California.

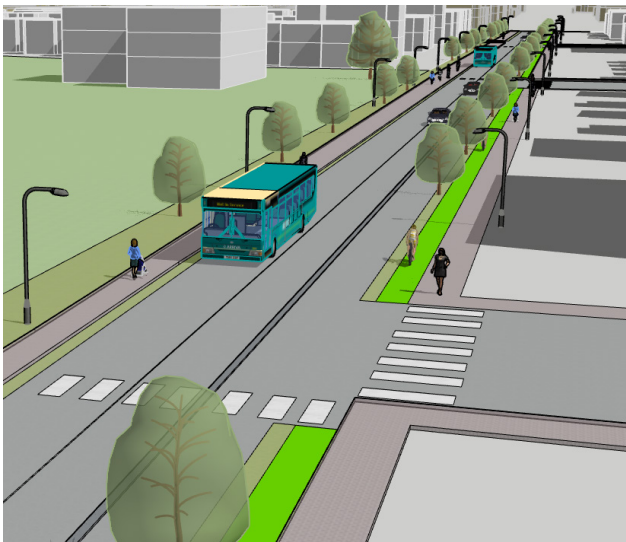


Road diet implementation was chosen on Zuni St because of its proximity to Academia Ana Marie Sandoval. Slowing down traffic on busy Zuni St. is imperative for the safety of students who may walk to class.



Federal Blvd. was chosen for road diet implementation because of its proximity to Highland Park. A focus of this redevelopment is to promote connectivity to green-space. By transforming this current section of a busy road to a more pedestrian safe area, that connection will be created.

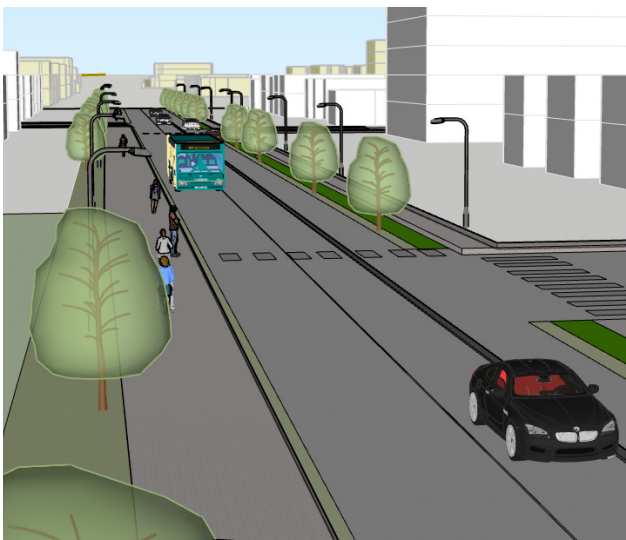




Large sidewalks are featured in the two-way road diet, allowing pedestrians to feel prioritized on the busy street. There are street lights to provide safety and light to the space at night, spaced apart to ensure maximum efficiency while maintaining their purpose of lighting the sidewalks. Street trees provide shade and greenery to a concrete-dense area to make the space feel welcoming and walkable. A bike-only lane runs parallel to the roadways, designed for the maximum amount of pedestrian transit possible.

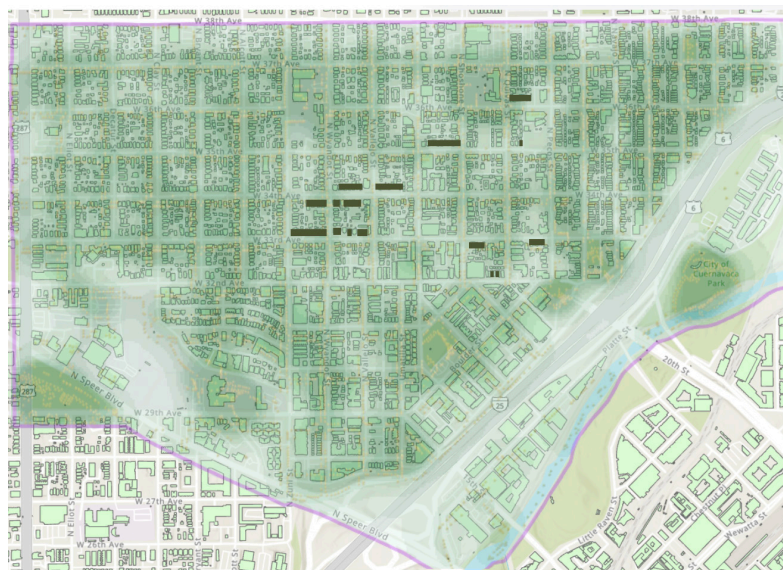


The division of driving lanes is a conscious effort to slow down traffic in the area and create a more pedestrian-friendly approach to a larger roadway while maintaining functionality. The leftmost lane is a bus 'priority' lane so that transit systems can operate smoothly on the large roadway. However, this will not be a bus-only lane to maintain efficiency when dealing with large volumes of traffic. There is a driving lane next to the bus priority lane, and a driving lane for the opposing direction; divided by a median to maintain efficient traffic flow and for safety.

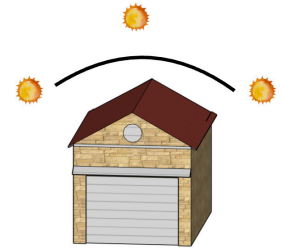


Crosswalks are a key redesign element, providing more frequent and safer opportunities to cross Federal Boulevard. In doing this, the connection of the neighborhood to Highland Park is strengthened, and the walkability not just in the neighborhood boundaries, but also concerning surrounding areas, is prioritized. These crosswalks emphasize human-scale design in an area that has been car-centric and harder for pedestrians to navigate.

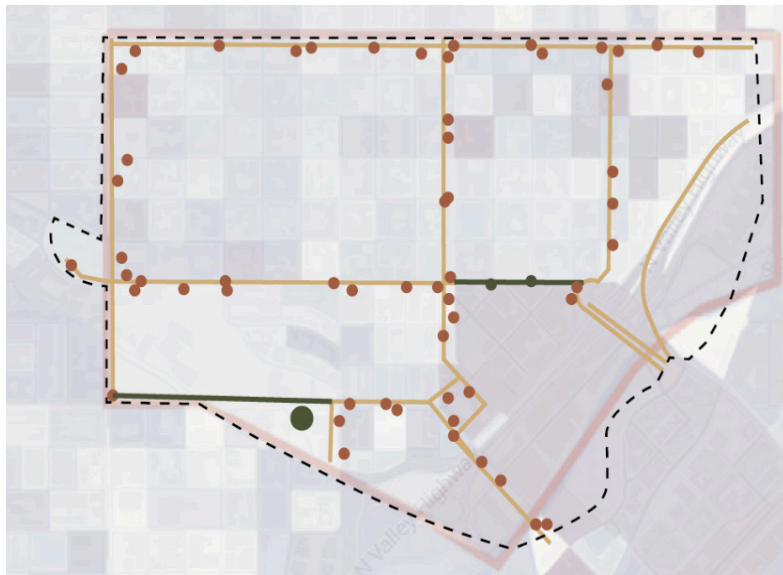
Solar Pannel Incentivization



Our plan to incentivize solar pannels ties into ours and Denvers Sustainability initiatives. The implementation plan was decided by tree density, roof type and natural sun patterns. A few addresses that will be offered the incentivization are 3765 Decatur St, 2345 W 33rd Ave, and 2254 W 34th Ave, along with ~75 others.

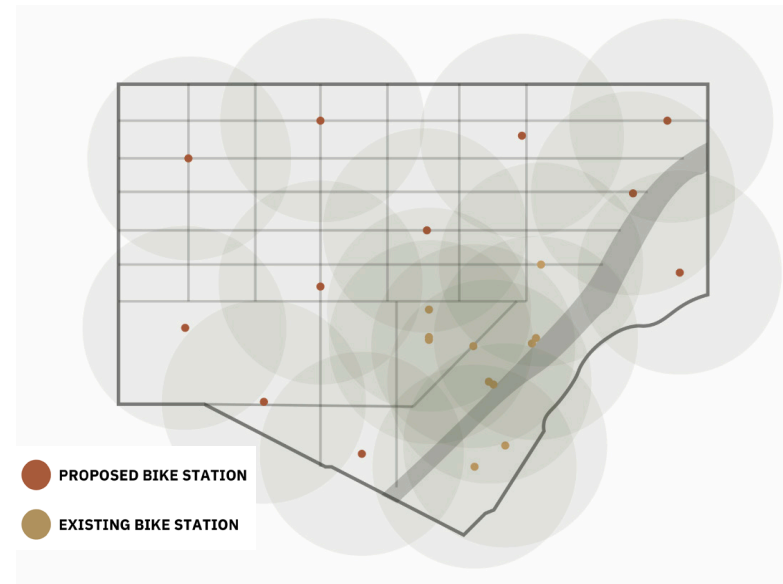


Population Based Transit



Density-based public transportation is about keeping the neighborhood connected while preserving its unique charm. With more people living, working, and exploring the area, having reliable transit options means fewer cars, less traffic, and more space to enjoy the walkable streets and local businesses. It's a way to help. These two new transit lines and two transit stops will support the greatest density areas while preparing highlands for the increased density that will come from the ADUs

Bike Share Additions



Continuing the principles of the 15 minute city, implementing bike shares that bridge that walkability gap is key especially in the residential areas of the site.





PHASE 1 - 3 years (2025)

- | | |
|---|--------------------------------|
| 1 ADU IMPLEMENTATION IN HISTORIC DISTRICT | 5 MULTI UNIT HOUSING |
| 2 ADU IMPLEMENTATION IN MIXED-USE COMMERCIAL DISTRICT | 6 MULTI UNIT HOUSING & OFFICES |
| 3 ROAD DIET ON FEDERAL BLVD & W 33RD/ 32ND AVE | 7 TWO UNIT HOUSING |
| 4 ROAD DIET ON ZUNI ST & W 37TH/ 38TH AVE | 8 PROPOSED BIKE STATION(S) |
| | 9 PROPOSED TRANSIT ROUTE(S) |

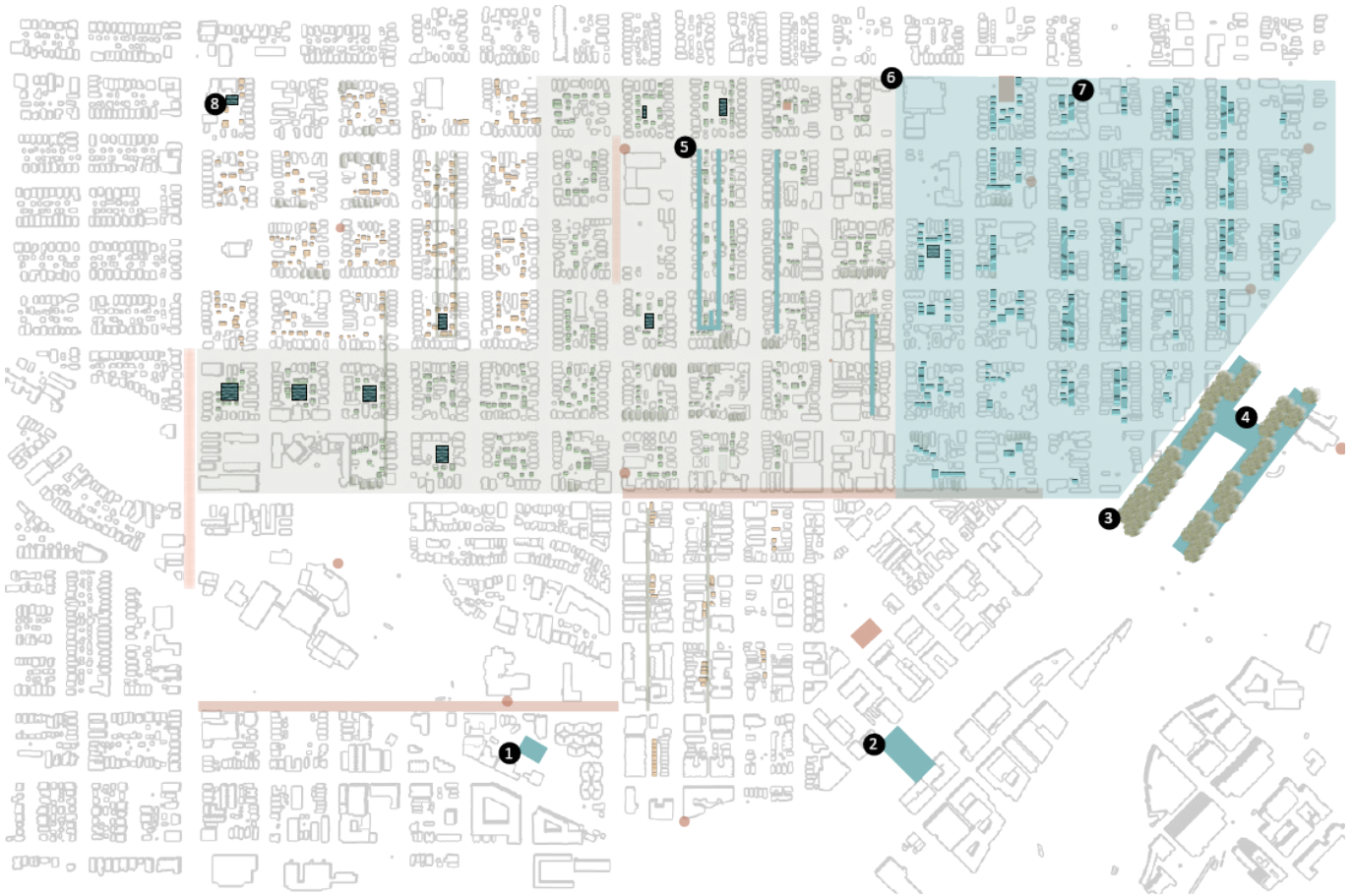
Phase 1 focuses on generating revenue in property taxes from the historic and mixed use commercial district. This will be done through the incentivization of Accessory Dwelling Units (ADUs). New multi-unit housing will also be implemented. To support this increased density, new transit and bike shares will be implemented, along with road diets, which are extremely cost effective. This phase will take 3 years.



PHASE 2 - 3 years (2028)

- | | |
|---|---|
| 1 ADU INCENTIVIZATION BELOW HISTORIC DISTRICT | 6 GENERATED REVENUE SPLIT INTO BETTERING SIDEWALKS/STREET LIGHTING |
| 2 ADU INCENTIVIZATION IN CENTRAL CENTER OF SITE | 7 ADDED BODEGA |
| 3 WOONERF IMPLEMENTATION IN HISTORIC DISTRICT | 8 ADDED ARTS/CULTURAL CENTER |
| 4 WOONERF IMPLEMENTATION IN MIXED-USE COMMERCIAL AREA | 9 ADDED GROCERY STORE |
| 5 INCENTIVIZATION OF SOLAR PANEL(S) IMPLEMENTATION THROUGHOUT SITE | |

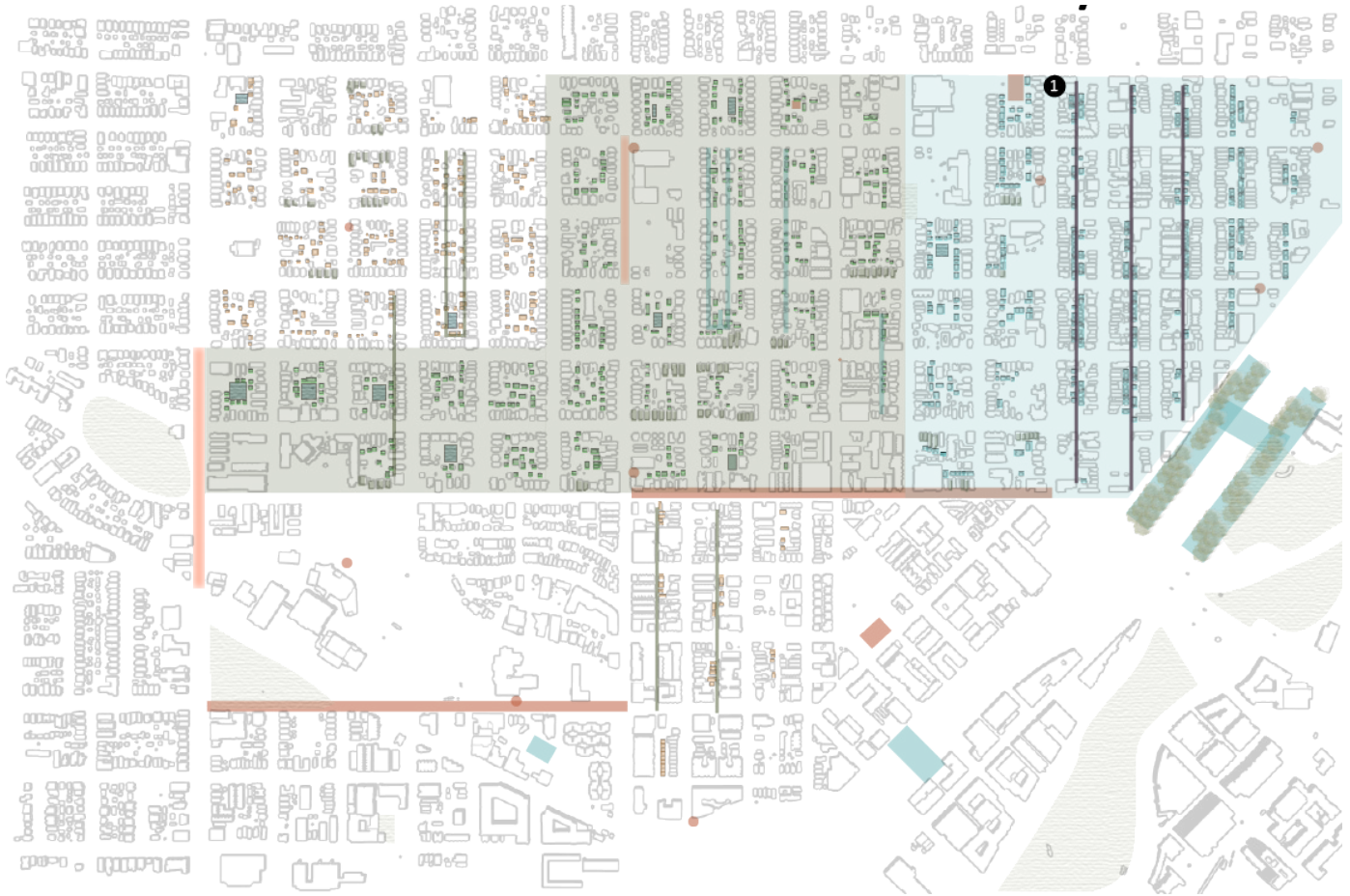
Phase 2 continues to generate revenue and density through the incentivization of ADUs, while also using revenue from property taxes to begin implementing woonerfs in connected alleyways. Additional revenue generated through greater accessibility to the commercial area will be used to improve central street lighting and sidewalks. A new grocery store and bodega will be implemented in underutilized parking lots, continuing the theme of a 15-minute neighborhood and adhering to Denver parking minimums. The final area of emphasis in Phase 2 will be implementing an incentive towards solar panels to increase the sustainability of the neighborhood. This phase will take 3 years.



PHASE 3 - 8 years (2031)

- | | |
|-------------------------------|--|
| 1 NEW TRANSIT CENTER | 5 WOONERFS IN CENTRAL SITE |
| 2 REVITALIZED OVERPASS | 6 SIDEWALK/STREE LIGHT REVITALIZATION ON EAST END |
| 3 SOUND BARRIER | 7 ADU INCENTIVIATION ON EAST END |
| 4 NEW UNDERPASS | 8 COMMUNITY GARDENS |

Phase 3 focuses on larger infrastructure centering around transit and the highway. This includes a new transit center, revitalization of the existing overpass, an additional underpass, and a sound barrier blocking I-25. This will be funded by the additional property taxed from the historical district on the West side of Highland. Woonerfs in the central area of Highland will be implemented and the east sides construction will begin after the incentivization of ADUs in that area. Finally, community gardens will be scattered in back alleys with room to promote sustainability and community. This phase will take 8 years.



PHASE 3.5 - 1 year (2039)

1 WOONERF IMPLEMENTATION ON EAST SIDE

The final phase of implementation uses the revenue generated from the ADUs on the East side of Highland to establish three more woonerfs. This phase will take 1 year





Highland will be a sustainable, green exhibition of Denver. Accessibility, equity, and inclusivity will be at the heart of the city's design. The neighborhood features will be created with all species in mind, human and non-human. As a place that has it all, highland will bridge the gap between nature and humankind through innovation and community.

