

NORTH BOISE NEIGHBORHOOD BICYCLE AND PEDESTRIAN PLAN

September 2016

Prepared for:

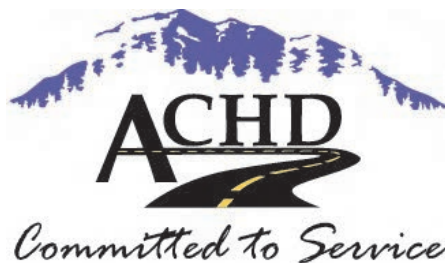
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North Boise Neighborhood Bicycle and Pedestrian Plan

Boise, Idaho

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Project No. 19880.0

September 2016

Adopted by ACHD Commission: September 28, 2016

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ACKNOWLEDGEMENTS

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INTRODUCTION

The North Boise Neighborhood Bicycle and Pedestrian Plan guides the future development and enhancement of bicycling and walking within the North Boise Neighborhood study area, as defined by the Ada County Highway District (ACHD) and shown in Figure 2. Specifically, the plan focuses on improvements to the existing pedestrian and bicycle facilities with the intent to make bicycling and walking comfortable, efficient, and convenient forms of transportation for residents of, and visitors to, this area. To achieve this goal, the plan's recommendations will be focused on meeting the following objectives:



Parks Are a Popular Attractor in North Boise

- People can conveniently walk or bike to their destinations in the neighborhood area and connect to routes across the study area's borders
- People of all age groups and abilities feel comfortable walking and bicycling
- Improved mobility for people with physical limitations
- Increased attractiveness to visitors to bike or walk between destinations in the neighborhood

This plan was developed with extensive input from neighborhood residents and stakeholders. Figure 1 illustrates the project process, including agency review, public involvement, and elected officials meetings. The plan includes specific implementable recommendations for new walking and bicycling infrastructure.

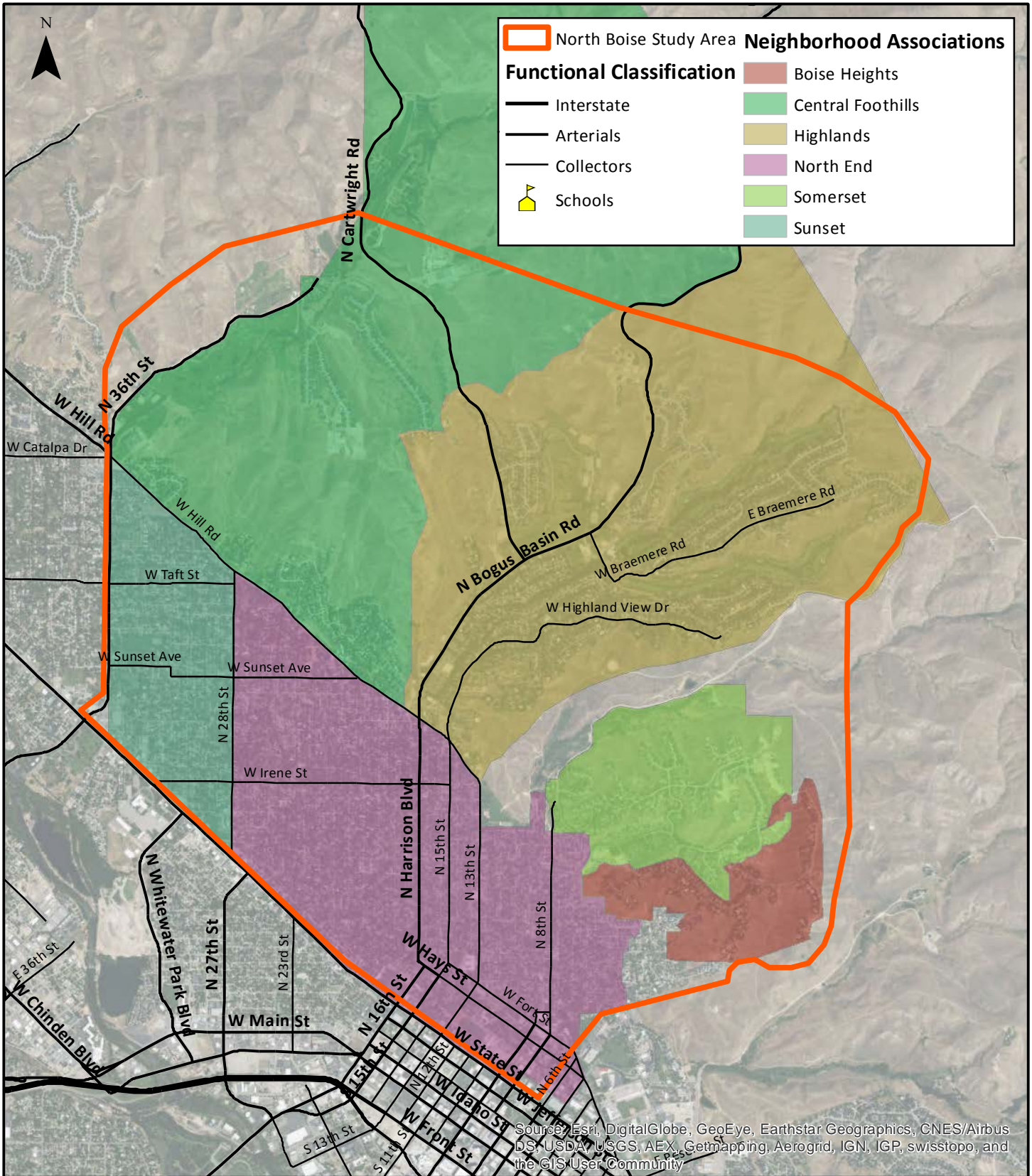


Figure 1 Project Process

PLANNING AREA

This plan focuses on the study area boundary shown in Figure 2. The study area consists of six different neighborhood associations as defined by the City of Boise: North End, Sunset, Highlands, Boise Heights, Central Foothills, and Somerset. Boundaries of the neighborhood associations are also illustrated in Figure 2.

The planning area covers approximately 8 square miles and is bounded by the foothills to the north and downtown Boise to the south. There are 10 public and private schools and over 250 acres of parks in the study area, as well as several commercial attractors, including grocery stores, shops, and bars/restaurants. The Sunset and North End neighborhoods are relatively flat and generally have a built-out grid network of local streets, with a few collectors and arterial roads. The Boise Heights, Central Foothills, Highlands, and Somerset neighborhoods are located in the foothills and, as a result, most of their streets include at least some vertical grade, with some streets being relatively steep. Due to this topography, the street networks in these neighborhoods are not as connected as they are in the North End and Sunset neighborhoods.



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community



Study Area
Boise, ID

Figure
2

HOW CITIZENS CAN USE THIS PLAN

North Boise residents, this is *your* plan for how ACHD, the City of Boise, and the Boise School District will improve walking and bicycling in *your* neighborhood. It summarizes what projects are planned for the area and their relative priority. If you see issues related to walking or bicycling in your neighborhood, please check this plan to see if there is a project planned for the area. Don't see a plan that addresses your issue? Have comments or questions about the projects in this plan? Please contact ACHD to learn more or to discuss how the plan might be updated to reflect changing conditions.

HOW ACHD AND THE CITY USE THIS PLAN

This plan serves as a blueprint for how ACHD and the City will work together to improve walking and bicycling in North Boise. As funding becomes available, projects from this plan will be built according to their priority order in this plan; though exceptions may be made where specific opportunities arise to implement a lower priority project (e.g., as part of a separate roadway project already planned for the street) or where changed circumstances result in a different priority level for a project.

EXISTING PLAN AND POLICY REVIEW

This plan builds on the previous work completed for existing plans and policies that directly affect the North Boise area. These other plans provide a foundation for the goals and objectives of this plan, while this plan provides more specific details for how the larger vision for bicycling and walking in Ada County and the City of Boise can be implemented in the North Boise area.

Table 1 summarizes the existing plans and policies reviewed for the North Boise Neighborhood Bicycle and Pedestrian Plan and their relevance to this effort.

Table 1 Relevant Existing Plans and Policies Reviewed

Plan/Policy	Relevancy to North Boise Neighborhood Bicycle and Pedestrian Plan
Boise Transportation Action Plan (2016) - Draft	This plan outlines the City's vision for transportation, including new connections and prioritization criteria. This plan is not yet adopted.
36 th Street/Hill Road intersection final design (Built)	A roundabout was recently constructed at this intersection, along with new sidewalks, crossings, and bike lanes.
Veterans Memorial Parkway/State Street Intersection Concept Design (2013)	Intersection concept adopted in 2013 is undergoing final design and will provide walking and bicycling infrastructure at the intersection.
Other Neighborhood Bicycle and Pedestrian Plans (2012-15)	The five previous neighborhood plans provide a template that this plan is based on. The Northwest Boise Plan shares a boundary with this plan and projects will be coordinated across the two plans.
State Street Transit and Traffic Operational Plan (2011)	This plan identifies roadway and land-use projects and policies along State Street, which is the southern boundary of the North Boise neighborhood study area.
Blueprint Boise (2011)	Boise's comprehensive plan defines specific policies for the North Boise area related to land-use and connectivity, among other areas.
City of Boise Comprehensive Parks and Recreation Plan (2011)	Provides guiding policies and recommendations for existing and new parks in the North Boise neighborhood area.
ACHD Complete Streets Policy (2009)	Provides a guiding principle for this plan that the transportation system should allow people of all ages and abilities to travel safely and independently.
Roadways to Bikeways (2009)	The county-wide bicycle master plan contains recommendations for bike lanes and routes within the North Boise neighborhood study area.
Pedestrian-Bicycle Transition Plan (2005)	The sidewalk inventory from this plan, and updates to it, are the starting point for identifying gaps in the existing walking network.
Ada County Ridge-to-Rivers Pathway Plan (1993)	The county-wide on-street and off-street pathway plan includes potential connections between the street network, the Greenbelt, and the Foothills trail system. This plan is currently undergoing an update.

EXISTING CONDITIONS AND DEMOGRAPHICS

The following sections discuss the existing and previously planned walking and bicycling infrastructure, as well as key destinations (e.g. schools, grocery stores, restaurants) within the study area. In addition, a brief discussion of existing demographics for the study area is included.

SIDEWALKS

ACHD maintains an inventory of sidewalks in a GIS database. This inventory, along with relevant planned projects from ACHD's 2016-2020 Integrated Five-Year Work Plan (IFYWP) and Draft 2017-2021 IFYWP, are shown in Figure 3.

According to this inventory, there are approximately 105 miles of sidewalk within the study area. This results in approximately 70% of all roads in the study area having sidewalk on at least one side of the road. However, most of the sidewalks in the study area are located in the North End neighborhood, south of Irene Street and east of N 28th Street. The sidewalk coverage in the North End neighborhood is approximately 90% of all roads, while it is about 25% in the rest of the North Boise study area.

Two areas within the study area are designated for Safe Sidewalk Program Improvements, an initiative set to maintain the existing sidewalk network and bring existing facilities into compliance with the Americans with Disabilities Act (ADA). Sidewalks are also planned for construction along the north side of Heron Street from 13th Street to 9th Street and on Bogus Basin Road north of Curling Drive.



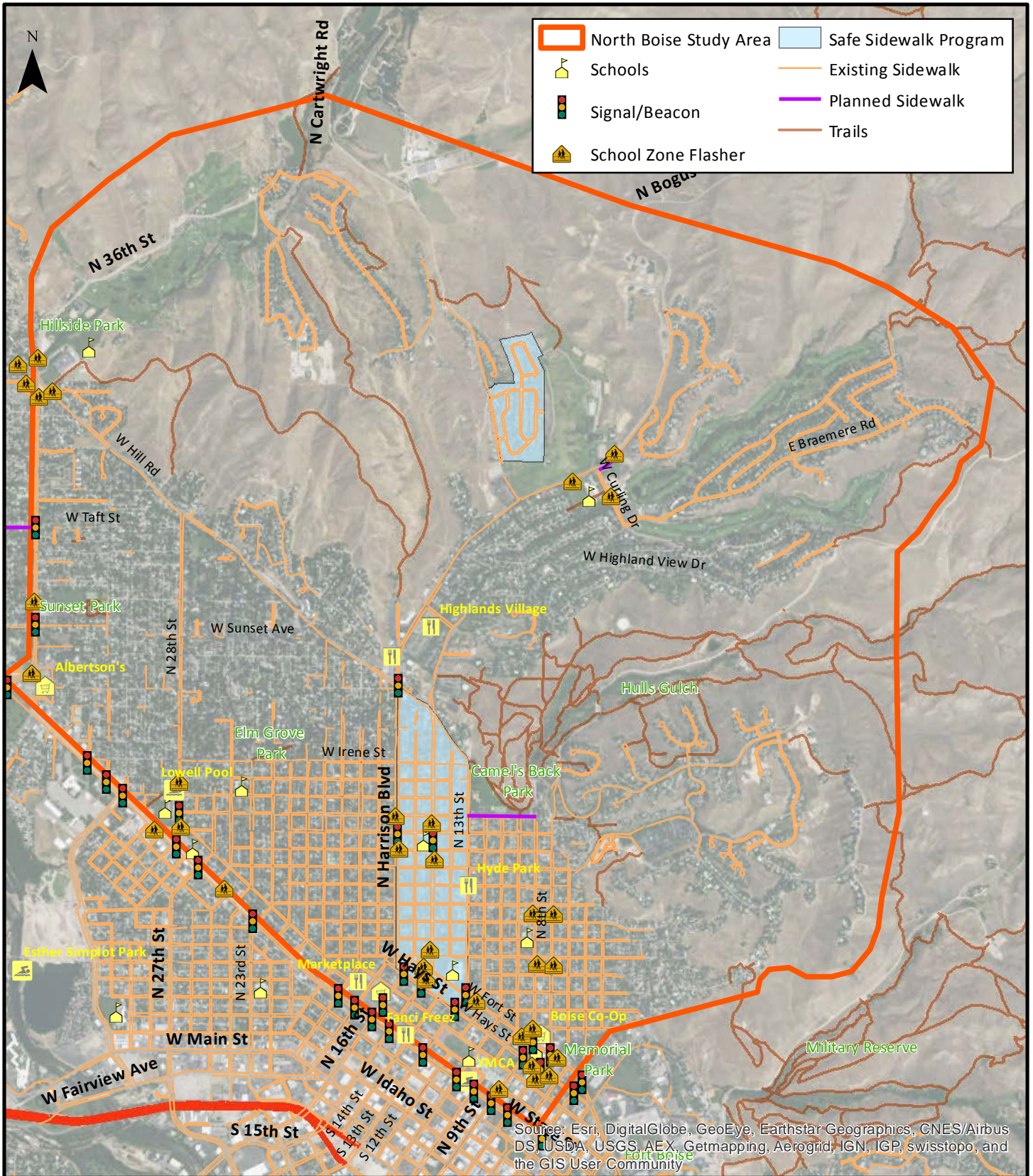
Many Local Streets Outside the North End Neighborhood Do Not Have Sidewalks

PEDESTRIAN CROSSINGS AND SCHOOL ZONES



Pedestrian Signal at Washington Elementary

Figure 3 also identifies the locations of signalized pedestrian crossings, including standard traffic signals, pedestrian signals, and pedestrian hybrid beacons (aka HAWKS), and school zone flashers. Signals are generally concentrated on State Street, Fort Street, Hays Street, and 36th Street. Pedestrian signals and pedestrian hybrid beacons can be found near Washington and Lowell elementary schools. Rectangular rapid flash beacons (RRFBs) were recently installed near Hillside Junior High at the 36th Street/Hill Road/Catalpa Drive roundabout.



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community



**Existing and Previously
Planned Walkways
Boise, ID**

**Figure
3**

There is a pedestrian hybrid beacon on Harrison Boulevard at Lemp Street on the walking route to Washington Elementary School, too.

BICYCLING AND PATHWAY NETWORK

There are just over 8.5 miles of designated bikeways within the study area, as shown in Figure 4. These bikeways include:

- Bike lanes (approximately 5.0 miles) – provide a designated exclusive space for people bicycling in a painted lane.
- Bike routes (approximately 3.5 miles) – roadways where people driving and bicycling share the same space. These are designated through the use of signs and/or pavement markings and usually have low-to-moderate motor vehicle volumes and speeds.

There are no shared-use paths maintained by ACHD within the study area, though there are several off-road trails that are part of the Ridge-to-Rivers trail system.

In addition to the designated routes described above and shown in Figure 4, the study area south of Hill Road includes a gridded network of local streets. These streets generally have low motor vehicle volumes and 20 miles-per-hour (MPH) speed limits, making them relatively comfortable bicycling routes so long as appropriate crossing treatments are provided across collector and arterial roadways.



Low Volume, Low Speed Local Streets can be Comfortable Bike Routes

ACHD’s Roadways to Bikeways plan includes future shared bike routes along several streets in the Sunset and North End neighborhoods, as shown in Figure 4. The plan does not include any new bike lanes or shared-use paths in the study area.

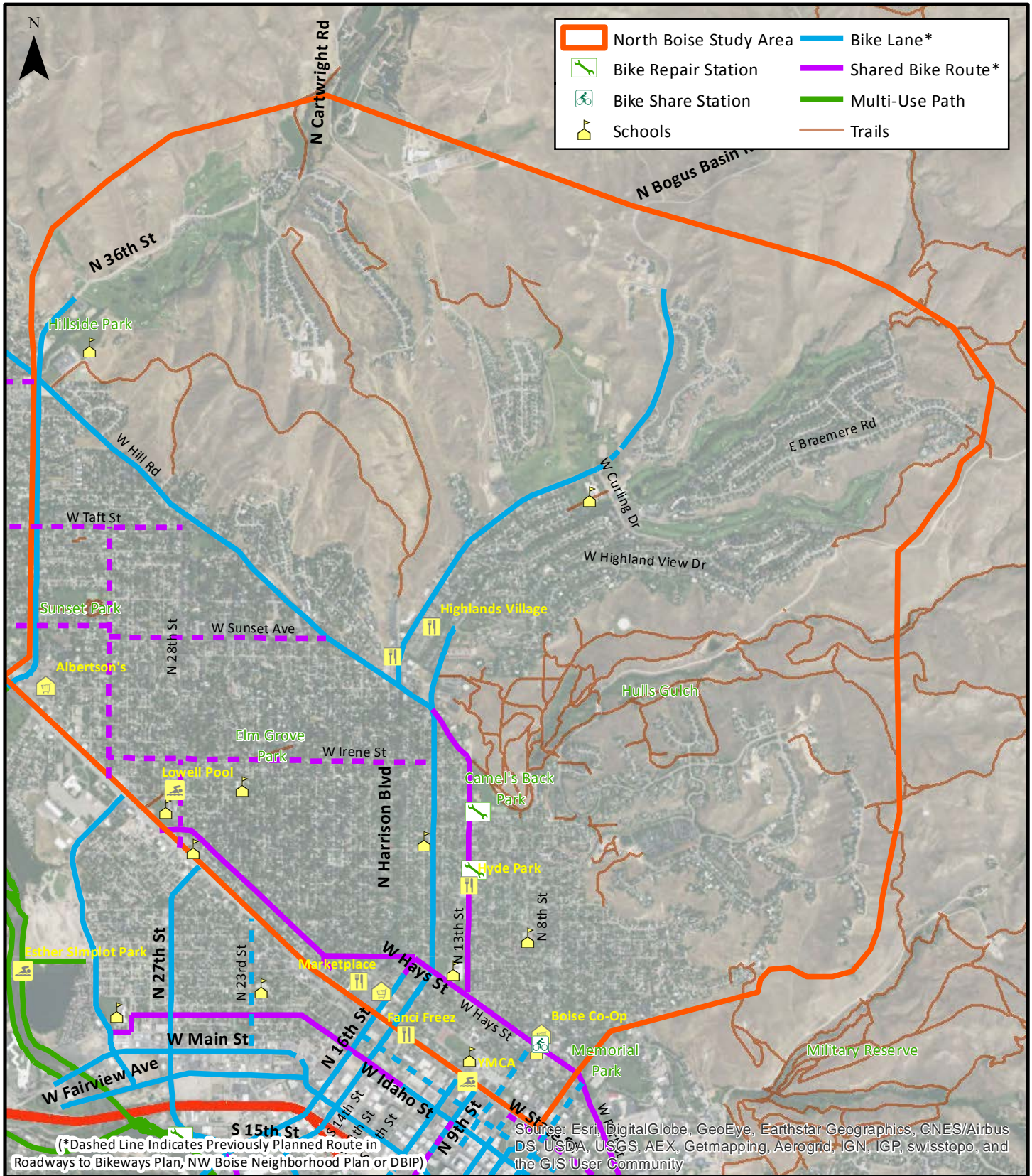


Boise GreenBike station at the Boise Co-Op

There are also two bike repair stations and one Boise GreenBike bike share station in the study area.

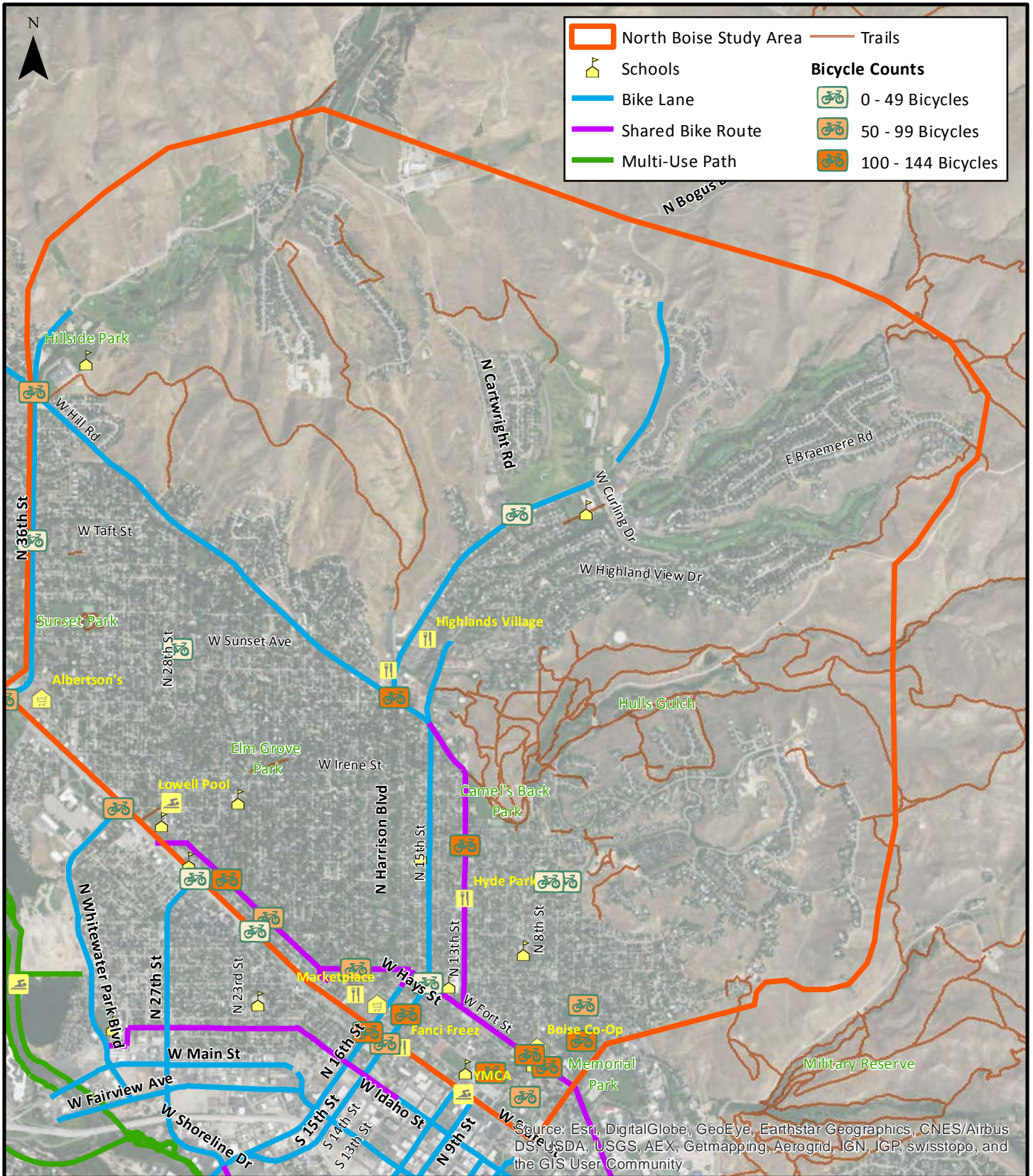
Bicycle Counts

ACHD and the Treasure Valley Cycling Alliance (TVCA) collect 2-hour bicycle counts at various locations around Ada County. Figure 5 illustrates the location of these counts within the North Boise neighborhood area and approximately how many bicycles were counted on average during a 2-hour weekday p.m. peak period (4:00 - 6:00 p.m.).



Existing and Previously Planned Bikeways Boise, ID

Figure 4



**Weekday PM Peak Hour
Bicycle Counts (2-Hour)
Boise, ID**

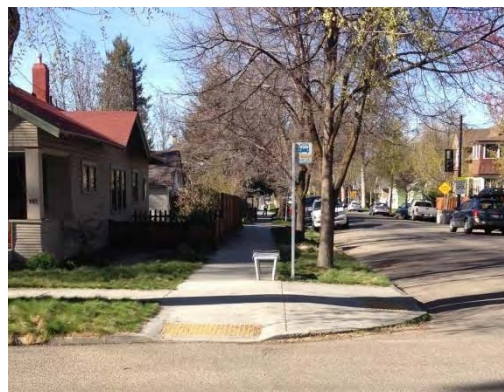
**Figure
5**

The highest counts are concentrated in the southeast corner of the study area on Fort Street, 16th Street and 13th Street. These streets have bike lanes or are designated bike routes and are located near downtown Boise and commercial areas near State Street. Relatively high counts have also been observed near Hyde Park and at the Hill Road/Bogus Basin Road intersection.

Bicycle counts tend to be lower further into the residential areas where designated bike routes do not exist and there are fewer, if any, commercial destinations.

Transit Facilities

Valley Ride bus routes 9, 9x, 10, and 14 all serve this study area. Each of these routes provides access from the planning area to downtown Boise. Providing comfortable walking and bicycling routes to these stops will improve transit accessibility in the neighborhoods.



Benches are Located at Some Transit Stops

DEMOGRAPHICS

Year 2015 population and employment estimates are provided by the Community Planning Association of Southwest Idaho (COMPASS).

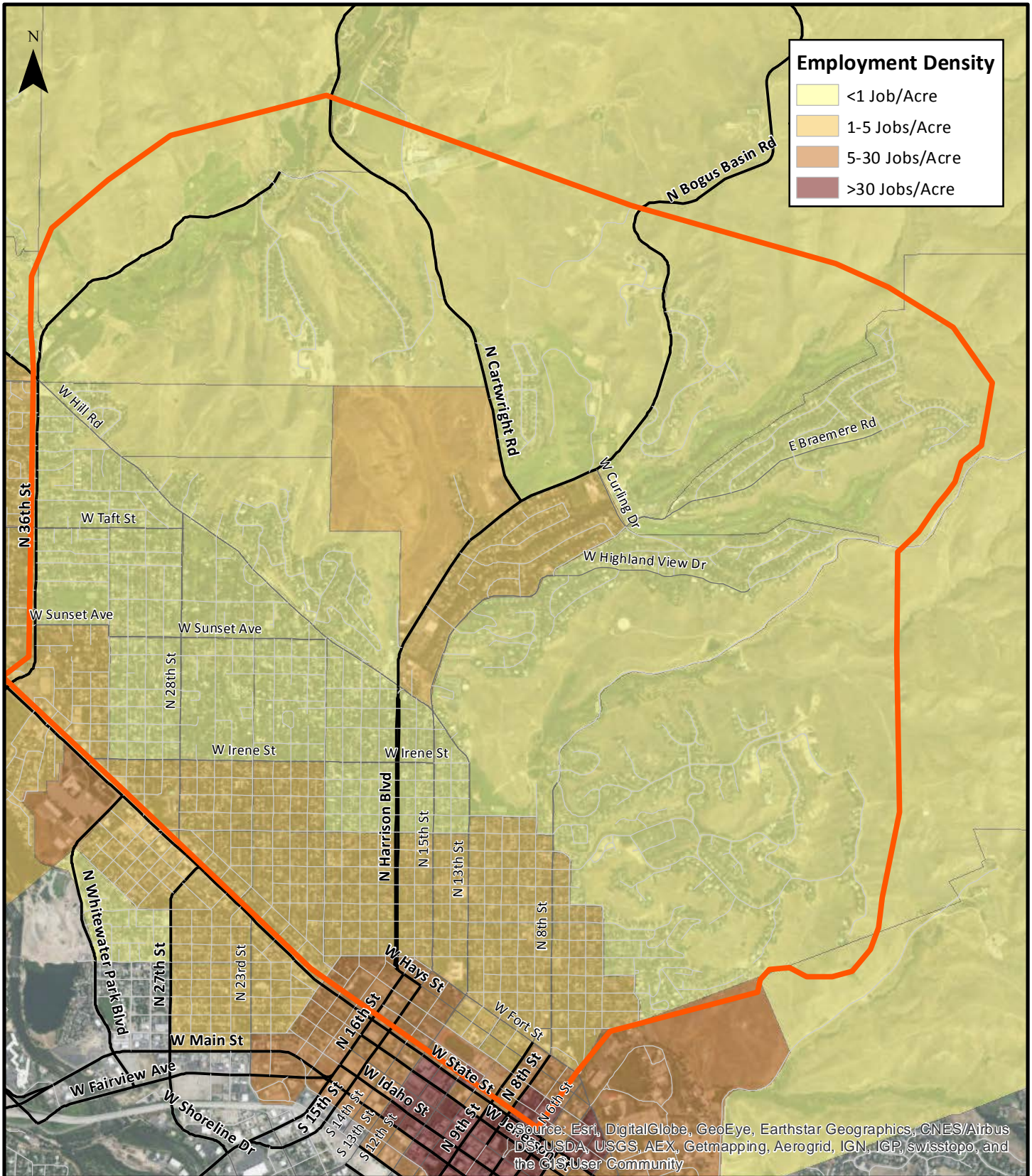
Population

COMPASS estimates there are approximately 29,000 people living in the study area today. Figure 6 shows the existing population density by traffic analysis zone from the COMPASS regional travel demand model. Most of the study area is denser than the city-wide average of about 5.0 persons per acre. One of the densest residential areas in Boise, the North End neighborhood includes several sections that are more than double this average.

Employment

Most of the study area is zoned as residential. However, there are several commercial properties, which provide employment, shopping, and dining opportunities within the neighborhood. These uses are highlighted on Figures 3 through 5. Figure 7 illustrates the existing employment density.

Generally, most employment within the study area is located along or near the State Street corridor; though there are other areas to the north, including Hyde Park and the southern end of Bogus Basin Road. There are significant employment areas adjacent to the study area, including Downtown Boise and the Veteran's Affairs offices and medical center.



Employment Density

- <1 Job/Acre
- 1-5 Jobs/Acre
- 5-30 Jobs/Acre
- >30 Jobs/Acre



**2015 Employment Density
by COMPASS TAZ
Boise, ID**

**Figure
7**

NEEDS ANALYSIS

To better define the needs for pedestrians and bicyclists in the North Boise study area, this Plan analyzes pedestrian and bicycle attractors, barriers, and, most importantly, issues identified by citizens who walk and bike in the study area. The public involvement comments received during this Plan's development provided many new ideas for improvements to the neighborhood's walking and bicycling network.

PEDESTRIAN AND BICYCLE ATTRACTORS

It is important to prioritize projects that provide connections to popular destinations because they tend to attract more bicycling and walking than other areas. Examples of places people commonly walk and bike to include schools, parks, shopping centers, trailheads, transit stops, and restaurants. Figure 8 and Figure 9 show key known attractors in



Grocery Stores are Important Destinations

In addition to attractors in the North Boise neighborhood area, there are popular destinations adjacent to the study area. Downtown Boise is located south of the study area and is a common destination for people to walk and bike to. It is separated from the study area by State Street. Another attractor outside the study area is the recently built Boise River Park, located southwest of the study area. It will soon be augmented by Esther Simplot Park. This area also provides access to the Greenbelt, providing connectivity to destinations along the river, like Ann Morrison Park and the Boise Zoo, among other locations.

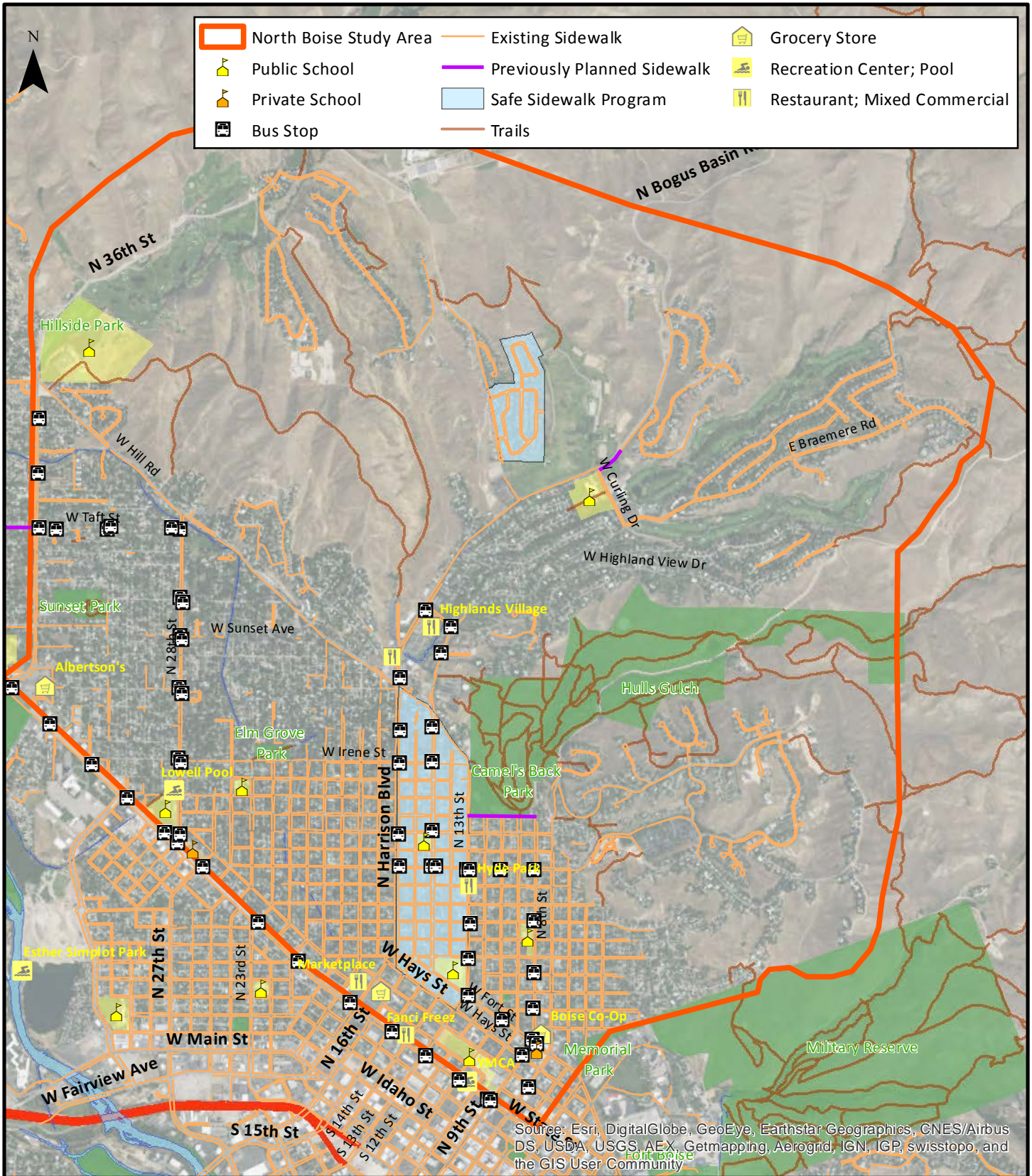


Full Bike Rack at North Junior High

the North Boise study area overlaid with the existing walking and bicycling networks, respectively. Many popular destinations are located along the State Street corridor (e.g., Albertsons, Marketplace retail center, Fanci Freez, and the YMCA). Further, Hyde Park and Camel's Back Park are regional destinations attracting people from all over North Boise and beyond. While many of the regional trips to the area are made by motor vehicle, many people who drive to the area bring their bikes or walk between their destinations once they have parked their car.

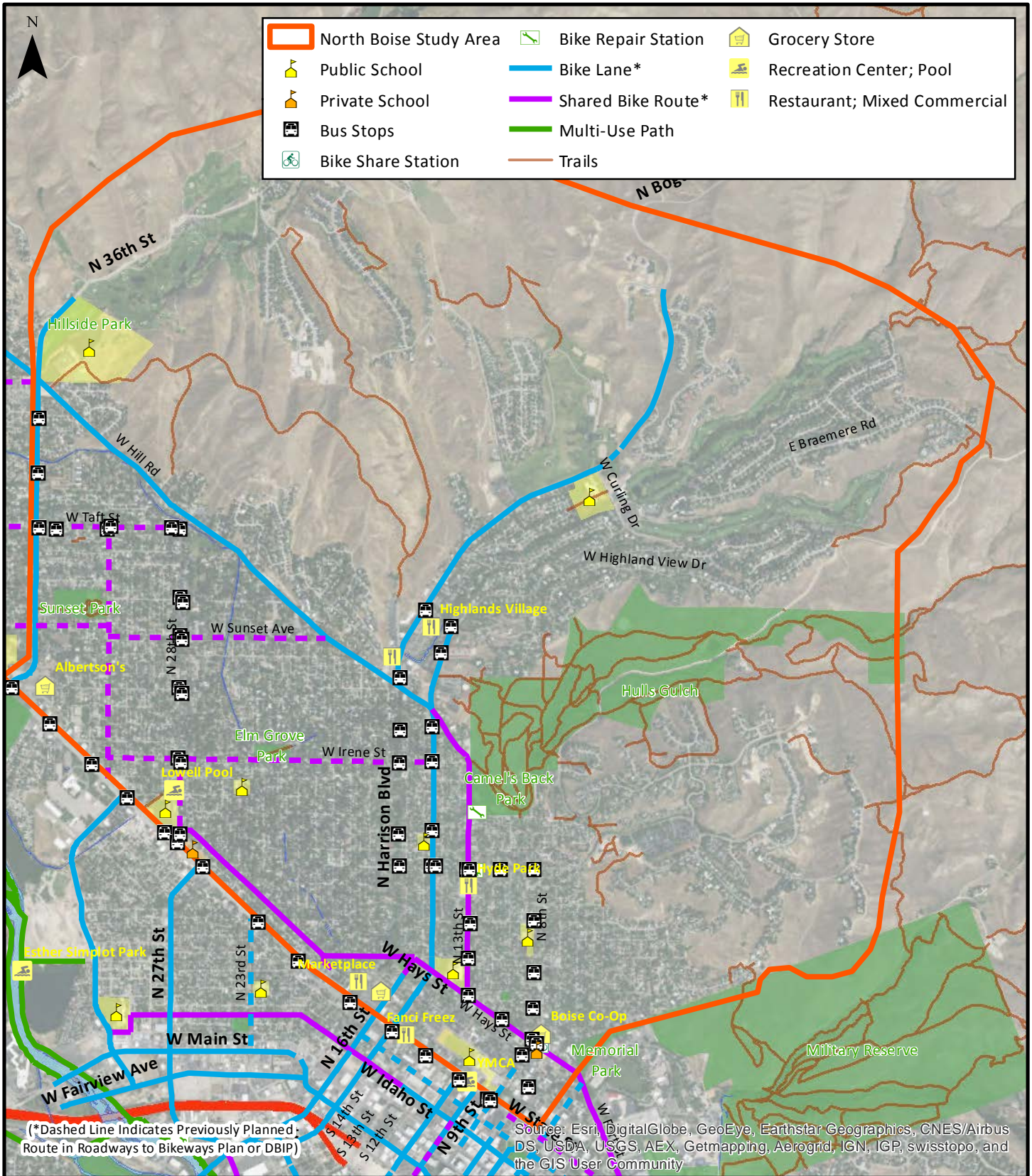


The Pool at Lowell Elementary School is a Popular Summertime Destination



Existing and Previously Planned Walkways and Attractors
Boise, ID

Figure 8



Existing and Previously Planned Bikeways and Attractors Boise, ID

Figure 9

PEDESTRIAN/BICYCLE CRASHES

Reported crashes involving people walking and bicycling in the study area were examined for the last five years for which data was available (2010-14). There were 21 reported crashes involving a person walking and 63 reported crashes involving a person bicycling over this five year period. These crashes are shown by their severity and mode involved in Figure 10. For the purposes of this figure, severe crashes are defined as Fatal or Injury A (incapacitating injury) crashes, while the other crashes include Injury B and C crashes. Generally, crashes are concentrated in areas where bicycle (see Figure 5) and motor vehicle volumes are highest in the study area (i.e., along State Street, Fort Street, Hays Street, and 8th and 9th Streets between Fort Street and State Street). This finding supports prioritizing projects where exposure is highest in the study area.

In examining the location of the most severe crashes, it appears that these crashes are concentrated around roadways with speed limits of 30 MPH or higher. This trend is most pronounced along State Street, which also has multiple lanes of motor vehicle traffic. Roadways with speed limits of 30 MPH or higher may benefit from additional crossing treatments to improve the visibility of people crossing the road and improve how often people driving yield to people crossing. Further engineering analysis of any potential crossing will be required before a new crossing is installed.

BARRIERS TO BICYCLING AND WALKING

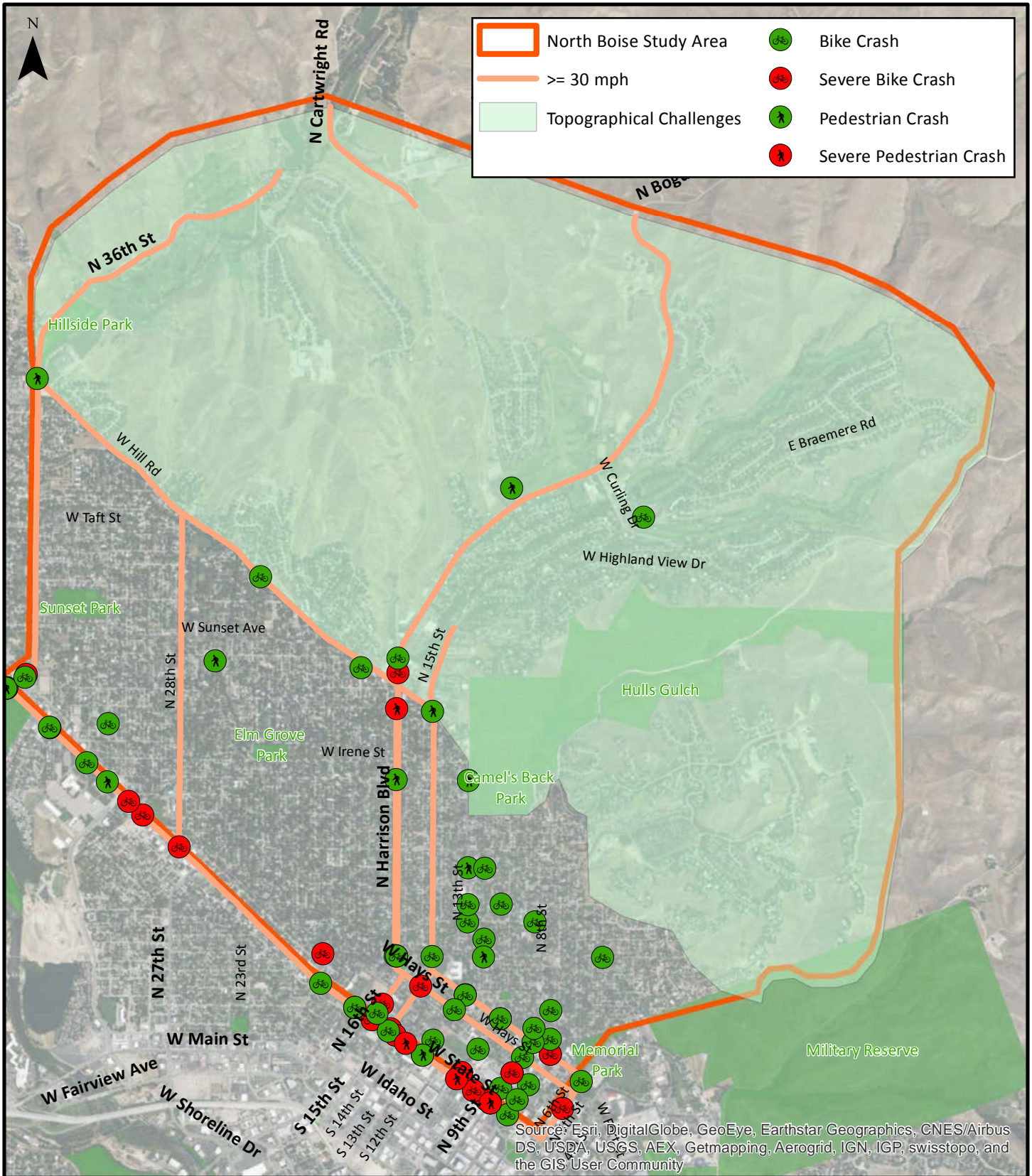
In identifying and prioritizing walking and bicycling projects, it is important to understand what barriers, in addition to the gaps in the sidewalk and bikeway networks, may be preventing bicycling and walking. These could include roadways that are difficult to cross or uncomfortable to walk or bike on, steep grades or cliffs, bodies of water, or railroads. Potential barriers to bicycling and walking in the North Boise neighborhood area are described in three parts: 1) roadways with speeds above 30 MPH; 2) topography; and 3) roadways that may be stressful to bicycle on for the average person.



Foothills Topography Can Be a Barrier to Bicycling for Some

Roadways with Speeds of 30 MPH or Above

While most of the roadways within the study area have relatively low traffic volumes (i.e., under 4,000 vehicles per day) and speeds (i.e., under 30 MPH), there are a few roadways with speed limits of 30 MPH or above in the study area, particularly in the North End and Sunset neighborhoods. These roadways are shown in Figure 10 and include State Street, Hill Road, Bogus Basin Road, 36th Street, 28th Street, Harrison Boulevard, 15th Street, Fort Street, Hays Street, and sections of 16th Street and 6th Street south of Fort Street. These roadways may be difficult to cross in certain cases and crashes along



**Bicycle and Pedestrian
Barriers and Crashes
Boise, ID**

**Figure
10**

them are more likely to result in severe injuries, as was described in the preceding section. Some of these roadways may also be uncomfortable to bicycle on, as discussed in a following section.

Topography

Topographical challenges can include: 1) cliffs or steep grades that prevent connections being made, thus requiring out-of-direction travel that may make a trip too long to be convenient for walking or bicycling; or 2) steep grades that may be too physically demanding for some people to walk or bicycle up or that may make some people feel uncomfortable bicycling down.

Topography can be a barrier to walking and bicycling in the areas shown in Figure 10, including the Central Foothills, Highlands, Boise Heights, and Somerset neighborhoods, which are primarily built in the Foothills.

Stressful Streets for Bicycling

To further analyze how well the existing network provides for people of all comfort levels to bicycle, the arterial and collector roadways, along with existing designated bike routes, in the North Boise study area were analyzed using the Bicycle Level of Traffic Stress (LTS) methodology developed by the Mineta Transportation Institute¹. The Bicycle LTS methodology defines criteria to assess how stressful a street may feel for a person bicycling and what type of person may feel comfortable bicycling on the street. The criteria are primarily based on the following:

- Whether a bicycle lane (with or without on-street parking) is provided and how wide it is
- The number of motor vehicle lanes on the road (*surrogate for traffic volume*)
- The prevailing speed or posted speed limit of the road

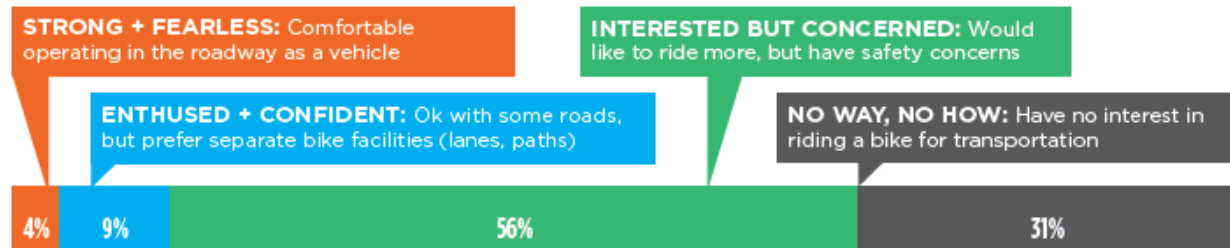
These criteria are used to classify roadways into one of four stress levels described in Table 2. Note that topography is not considered, since the methodology is meant to assess the level of stress someone may feel as a result of motor vehicle traffic on the road.

Table 2 LTS Categories

LTS Level	Description
1	Suitable for most people, including children whom are comfortable bicycling across intersections
2	Comfortable for most adults
3	Suitable for confident adult riders who are bicycling today on these roads
4	Likely only the most confident bicyclists will ride on roads at this LTS

¹ *Low-Stress Bicycling and Network Connectivity*. Mineta Transportation Institute. May 2012.

Bicycle routes with a LTS of 1 or 2 hold the greatest potential for attracting a greater number of people, as they appeal to a much wider range of the population, commonly referred to as “Interested, but Concerned” about bicycling (see graphic below).



Individuals Classified as “Interested, but Concerned” About Bicycling Make Up Over Half of the Population

Source: Dill, J. and N. McNeil. “Four Types of Cyclists?” *Transportation Research Record: Journal of the Transportation Research Board*, No. 2387.1 (2013), pp. 129-138.

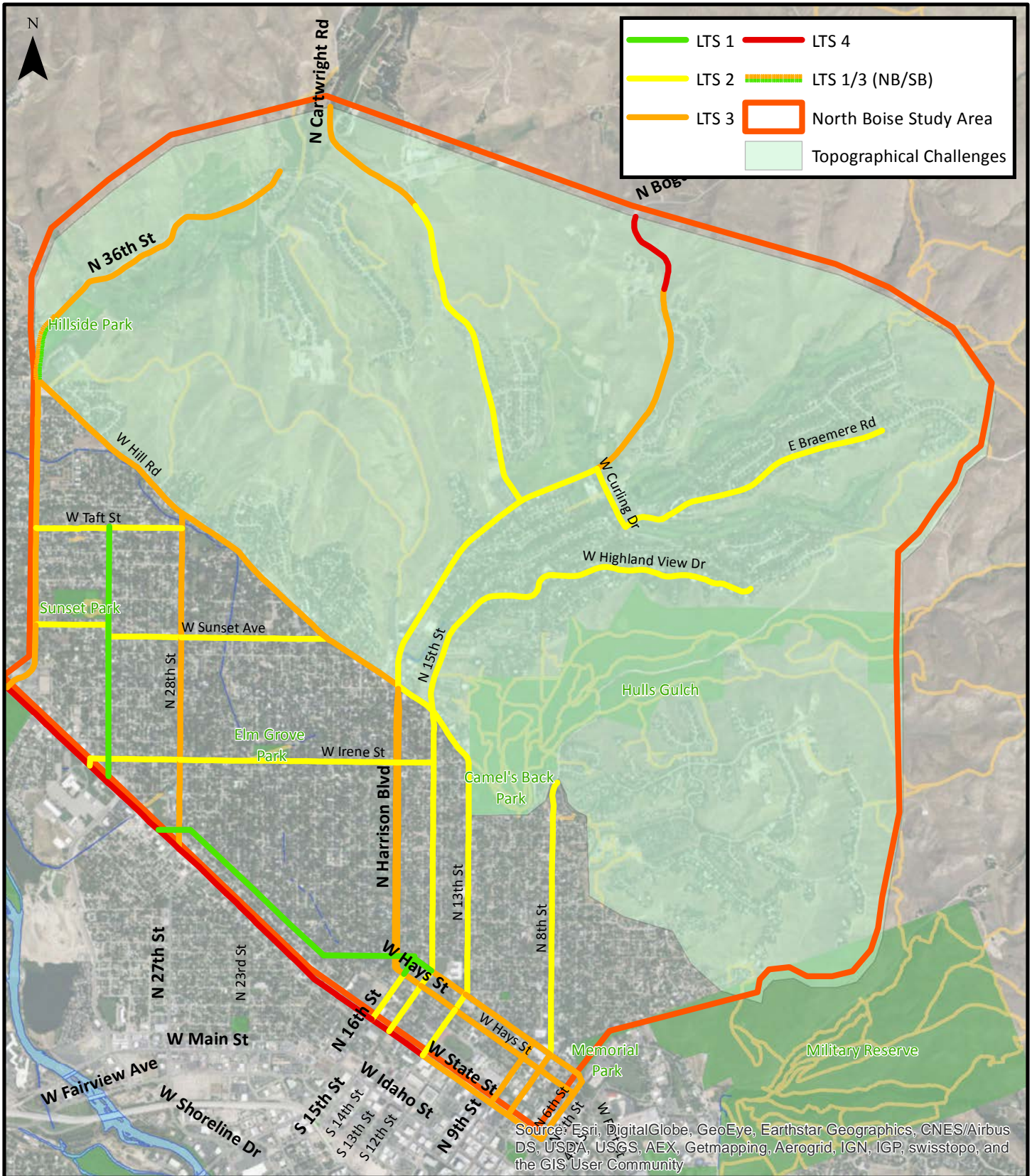
Figure 11 shows the results of the LTS analysis for arterial and collector roadways and previously planned bike routes from *Roadways to Bikeways* and the *Downtown Boise Implementation Plan*. The results shown in the figure have been adjusted by the project team in certain cases to better reflect existing motor vehicle traffic volumes on a roadway (e.g., 36th Street is classified as an LTS 3, despite meeting the criteria for LTS 2, because its traffic volumes are around 10,000 vehicles per day). While not explicitly analyzed, local roadways are generally LTS 1, except major road crossings. Even without bike lanes, many of the collector roadways in the study area are likely comfortable for most adults to ride on, suggesting that bike route treatments are likely sufficient to optimize them for bicycling.



Adding a Buffer to a Bike Lane Can Help Create a Low-Stress Bike Route

There are also a few roads in the study area with an LTS of 3 or 4, indicating they are likely only comfortable for more confident riders. These roads generally have speed limits of 30 MPH or greater and do not have bike lanes. For these roadways to be comfortable for a wider range of users, bike lanes of appropriate width would need to be added or motor vehicle traffic slowed to 25 MPH or slower. Providing alternative routes on parallel lower speed roadways may also be an option for these routes.

Finally, it should be noted that this analysis is based on observed speeds whenever possible. When such data is not available, then the posted speed limit is used. Streets where the LTS may be higher than shown on Figure 11 include 13th Street south of Fort Street and Bogus Basin Road.



**Bicycle Level of Traffic Stress
Analysis Results
Boise, ID**

**Figure
11**

The results of this analysis were used to identify projects that could reduce the level of traffic stress to 1 or 2 on streets where it is higher. If the potential treatments necessary to accomplish this goal are undesirable (e.g., due to costs or effects on other modes of transportation), then alternative parallel routes were considered. On streets that are currently a LTS 2 or better, projects were considered that could optimize those streets as bicycle routes (e.g., wayfinding, traffic calming or diversion, enhanced crossings at major roadways).

PUBLIC INVOLVEMENT

Public comments for this Plan came from multiple sources: 1) an online interactive map, which allowed citizens to leave comments from April 11 to May 13, 2016; 2) a public open house held on April 26th in the Boise Senior Center in the North End; 3) e-mails sent directly to ACHD; 4) a workshop with North Junior High students; 5) small group meetings and outreach completed for five specific projects in July 2016 (see the Projects section for more additional information about these meetings); and 6) comments received on the draft plan.



North Junior High Students Provided Comments on Walking and Bicycling in Their Neighborhood

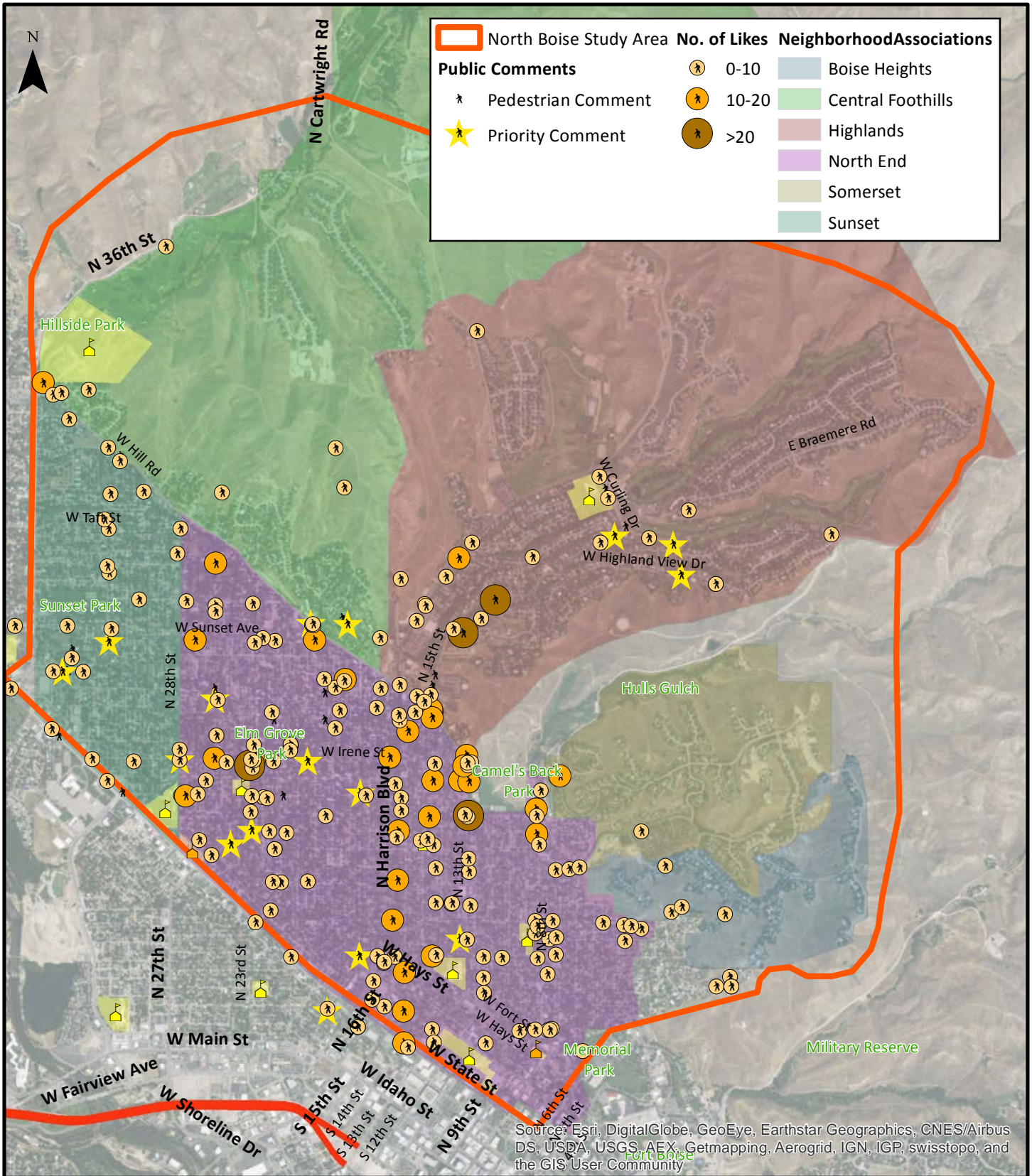
The open house was held from 5:30 p.m. to 6:30 p.m. and included three different neighborhood stations to allow residents from the neighborhoods to participate equally. Feedback from the meeting was collected through comments placed on three roll plot maps of the study area. The comments were numbered and corresponded to a written comment left by the resident. In addition, each attendee was given one “top priority” project, represented by a numbered gold star, to be placed on the map at the location of their highest priority concern or comment.

A total of 615 comments were received from the interactive map, open house, and other forums during this time period. The locations of the comments received are shown in Figures 12-14. Comments were spread throughout the study area. Generally, people requested projects related to:

- Crossings
- Sidewalks
- Bike lanes
- Traffic calming

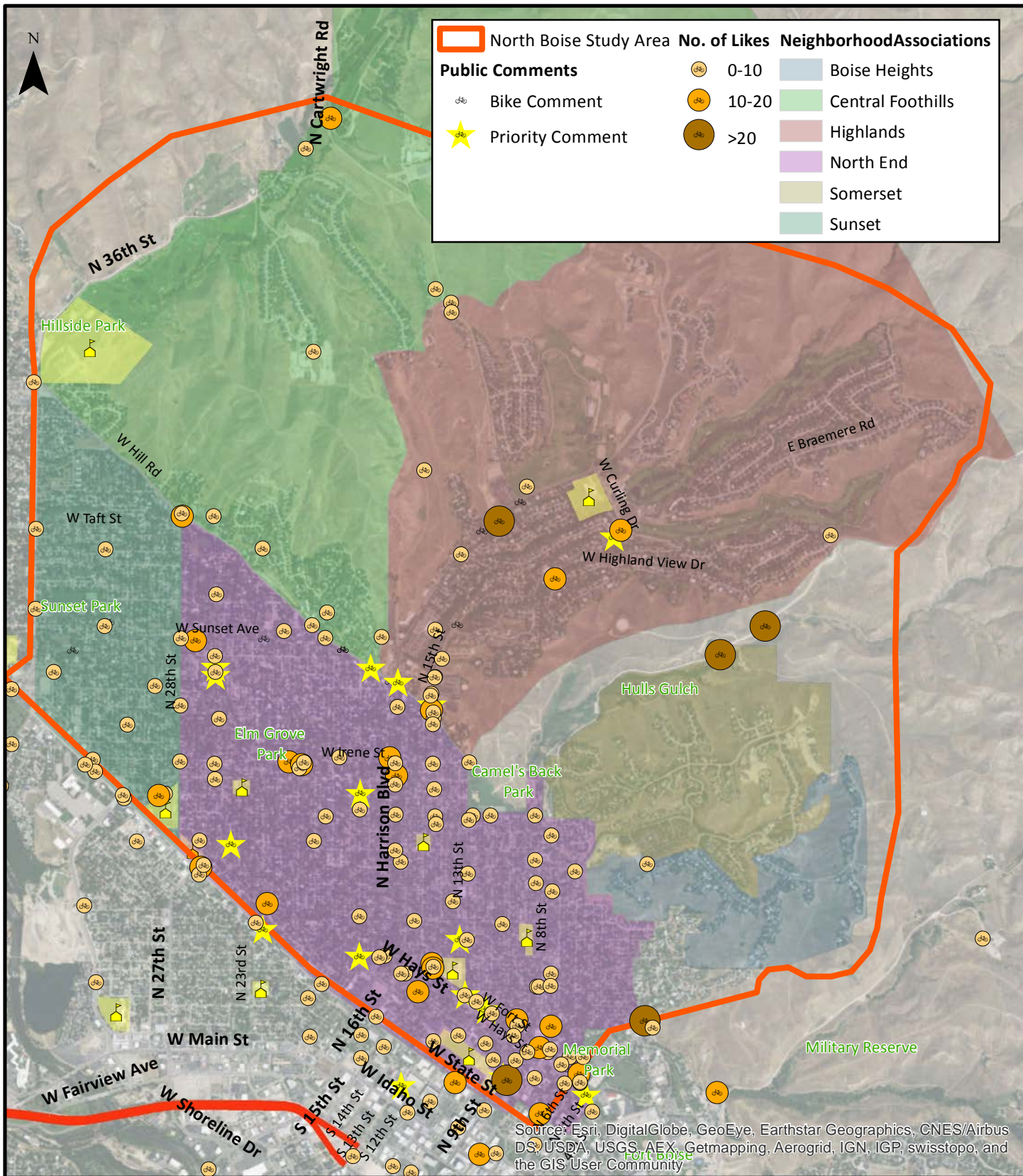


Advertisements for the Open House Were Placed Throughout the Neighborhood



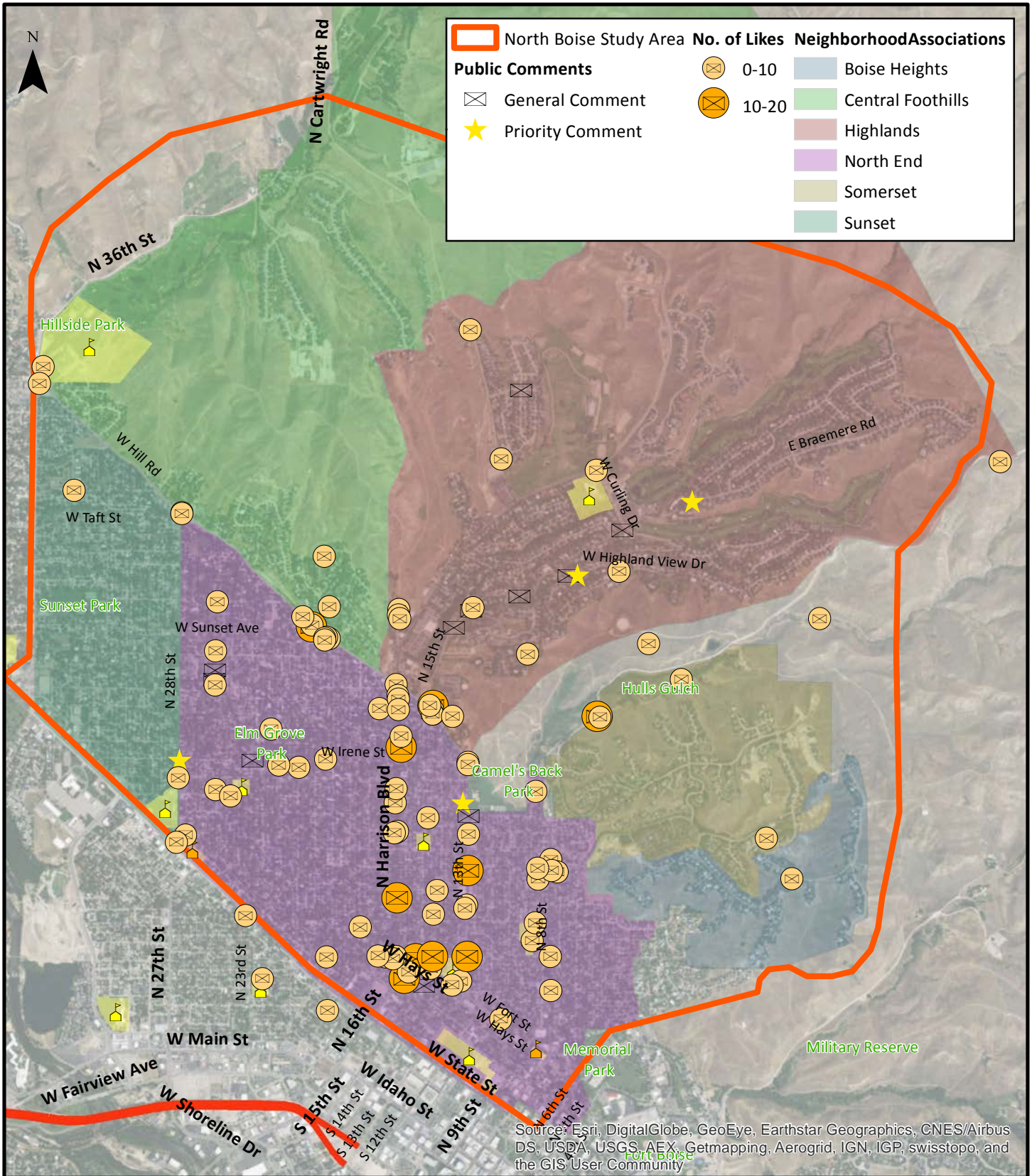
Walking Related Public Involvement Comments
Boise, ID

Figure 12



Bicycling Related Public Involvement Comments
Boise, ID

Figure 13



**General Public
Involvement Comments
Boise, ID**

**Figure
14**

Table 3 below illustrates the types of comments received throughout the public involvement process. Comments were divided into three categories: Bicycling, Walking, and Other. However, a number of comments addressed both bicycling and walking facilities. These comments were categorized as “Both” and are included on both Figure 12 and Figure 13. Figure 14 includes all of the “Other” comments. Most of these 124 other comments were related to intersections, maintenance, speed limits, or safety.



North Boise Residents and Project Team Members in Discussion at the Open House

Table 3 Public Comment by Category

Type of Comment	# of Public Comments Received (%)
Bicycling	218 (35%)
Walking	250 (41%)
Both	23 (4%)
Other	124 (20%)
Total	615 (100%)

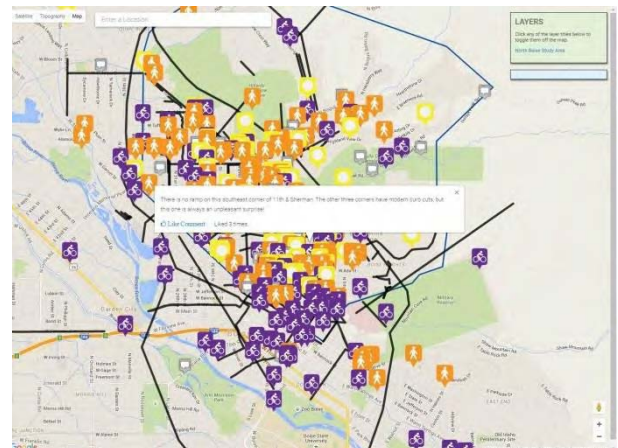
Comments related to walking made up almost half (41%) of the comments received. Most of these included requests for sidewalks or crossings at major intersections or roadways. Bicycling comments were the second most popular (35%) and included requests for bike lanes or traffic calming to reduce the speed of vehicles traveling along existing bike routes.

Table 4 summarizes the number of comments made by neighborhood boundary and the overall study area boundary.

Table 4 Public Comment by Neighborhood

Comment Location	# of Public Comments Received
Boise Heights	4 (<1%)
Central Foothills	29 (5%)
Highlands	80 (13%)
North End	324 (53%)
Somerset	7 (<1%)
Sunset	48 (8%)
Multiple Neighborhoods	31 (8%)
Total Comments In Study Area	523 (85%)
Comments Out of Study Area	92 (15%)

Approximately 15% of the comments received were made outside of the study area. Many of these comments were addressing access to/from the study area, primarily connections to the greenbelt and downtown Boise. Approximately 80% of comments made within the study area boundary were located in a specific neighborhood. Comments were received from every neighborhood; however, over half of the comments (53% of total) were located in the North End neighborhood, which is the largest neighborhood in the study area.



Over 500 Comments Were Received Through the Online Map

Several ‘themes’ were also identified throughout the public involvement process. These included:

- Boise Heights, Somerset, and Highlands neighborhoods:
 - Sidewalks and traffic calming on collector streets and local streets that connect to the lower neighborhoods (e.g., Highland View Drive, Braemere Road, Crestline Drive, Boise Hills Drive)
- Central Foothills neighborhood
 - Improved crossings of Hill Road
 - Sidewalk on the north side of Hill Road

- North End and Sunset neighborhoods
 - Traffic calming on several north-south streets (i.e., 32nd Street, 28th Street, Harrison Boulevard, 15th Street, 13th Street, 9th Street, 8th Street), especially near parks and schools
 - Sidewalks and traffic calming on 26th Street
 - Bike lanes on Fort Street
 - Sidewalks on Irene Street and Sunset Avenue

PROJECTS

The projects contained in this plan were developed following the needs analysis and collection of public comments. When implemented, these projects will provide a comprehensive walking and bicycling network that provides comfortable and convenient travel options within and through the North Boise study area. This chapter describes the treatment options that were considered and the prioritized set of projects.

PROJECT SELECTION PROCESS

Figure 15 below illustrates the process used to develop the final list of prioritized projects, presented later in this section.



Figure 15 Project Identification and Prioritization Process

An initial draft project list was developed based on public feedback and the analyses described in the previous section. This draft list was further refined through review by ACHD, City of Boise, and Boise School District staff, field review by the consultant team, and small group outreach conducted for five projects. The final project list was developed and then prioritized using a combination of technical criteria and agency/elected officials input. This process is described in greater detail in the following sections.

Draft Project List with Recommended Treatments

Review of the 615 comments received identified over 130 potential projects to improve walking and bicycling conditions throughout the study area for further analysis, as described in the following sections.

Sidewalk Gaps

There are sidewalk gaps on several streets in the study area. The Needs Analysis prioritized identifying projects for sidewalk gaps on collector-level and above streets. Requests made through the public involvement process were relied on for identifying projects for local streets. Filling in the gaps on many of these streets will have impacts to trees, irrigation ditches, and/or how people use the property

today. Given this, projects are not identified for all local streets with sidewalk gaps. It is expected that gaps in the local sidewalk system not addressed in this plan will be completed as new development, or redevelopment, occurs on these streets, as required by the City of Boise, or by requests made by area residents to ACHD.



Potential Tree and Utility Pole Conflicts in Possible Sidewalk Location

Field Review

A field review was completed for each project on the draft project list in order to identify potential obstacles to implementation, including roadside obstructions (e.g., trees, fences, utility poles), potential for property impacts, and presence of curb and gutter. Information gathered from the field review was used to modify project recommendations, identify considerations for project implementation, and to assist in prioritization.

Small Group Meetings

Five potential projects were identified for additional outreach because of their potential to be considered high priority projects while also possibly affecting the character of the roadway:

- Taft Street – 28th Street to 36th Street (Sidewalks, Bike Route)
- 10th Street – State Street to Heron Street (Enhanced Bike Route)
- 26th Street – Hazel Street to Hill Road (Sidewalks, Bike Route)
- Sunset Avenue – 20th Street to 32nd Street (Sidewalks, Bike Route)
 - A pathway connecting Anderson Street and 34th Street on unopened right-of-way was added to this meeting
- Irene Street – 32nd Street to 28th Street (Sidewalks)
 - No meeting was held for this project, but door hangers advertising the project and encouraging residents to submit comments were delivered to each residence along the road.



Popsicles & Sidewalks

JULY 18, 2016 • 6-7 P.M.
in front of the residence at 2108 26th Street

In April ACHD hosted the North Boise Neighborhood Bicycle and Pedestrian Plan open house and online commenting map to gather feedback from North Boise residents about what they thought should be done to improve walking and biking in the North Boise Area.

26th Street, between Hazel Street and Hill Road, was one of the streets identified by the community as desirable for sidewalks and traffic calming. Before including 26th Street in the Plan, we want to know what you and your neighbors, who would be directly impacted by a future project, think.

Join us for popsicles to learn more about what a future project could look like and possible impacts, and tell us whether you think this project should be included in the final plan.

Questions?

Brooke Green, ACHD Sr. Transportation Planner
208-387-6318 | projects@achdidaho.org

Small Group Meeting Postcard

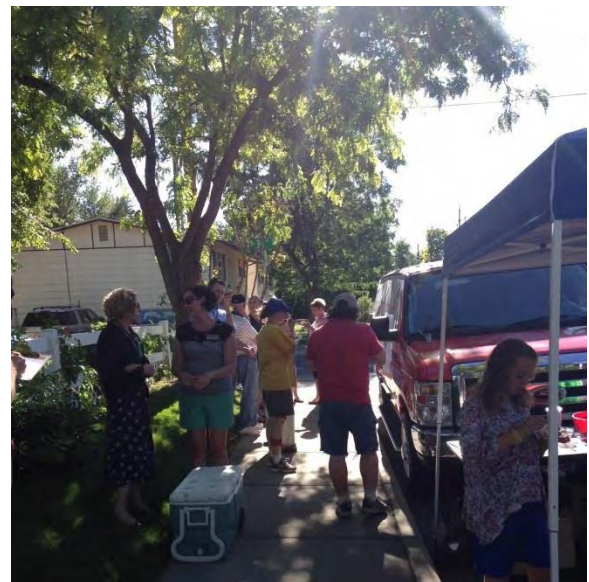
The purpose of these meetings was to gather feedback from the property owners and residents who would be directly affected by the proposed project. The meetings were held in the neighborhood where the project is located, and when possible on the street the project was proposed for.

The small group meetings were advertised through door hangers left on each residence along the subject street and postcards sent to all property owners along the street. Summertime treats (i.e., popsicles and ice cream) were provided to further entice attendees. The meetings were held July 13 (Taft Street), 14 (10th Street), 18 (26th Street), and 19 (Sunset Avenue).

Each meeting lasted one hour and consisted of displays taped to an ACHD Commuteride van, comment forms for people to fill out, and staff from ACHD, City of Boise, and the consultant team available to answer questions.



Roll Plot and Informational Boards Provided at the Neighborhood Meeting on 26th Street



Neighborhood Residents Reviewing Recommended Project for Taft Street

The meetings attracted a number of residents and over 130 comments were received in total. Not everyone who attended provided a comment so overall attendance was higher and also included several families with children in tow for the ice cream and popsicles. Figure 16 summarizes the responses received indicating whether attendees did or did not agree with adding the subject project to the plan. According to ACHD staff, one call was received in support of the Irene Street project in response to the door hangers.

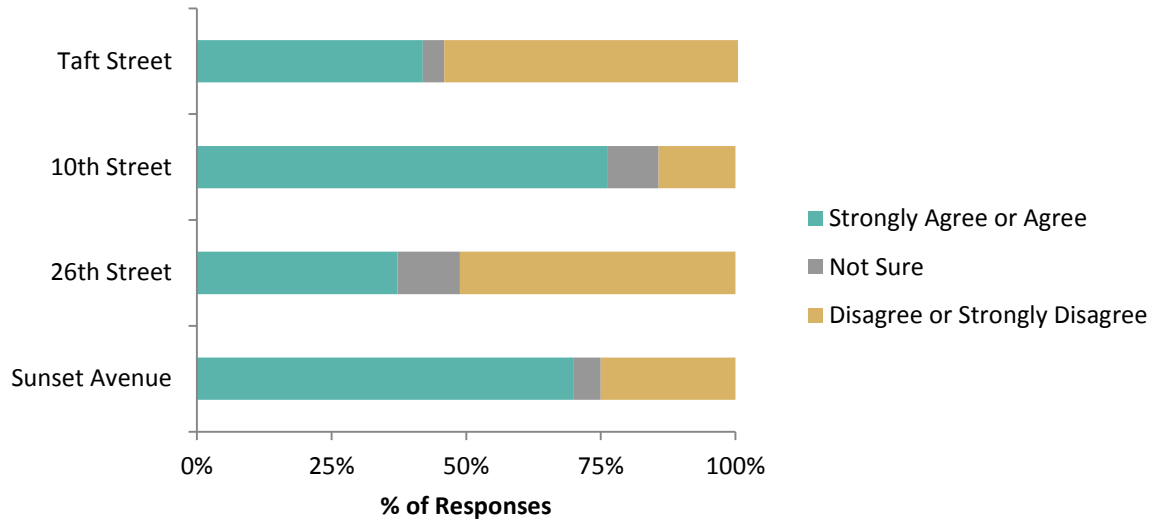


Figure 16 Level of Agreement/Disagreement with Adding Projects to Plan

Following these meetings, the following decision was made for each project by the agency review and the ACHD Commission:

- Taft Street – Sidewalk project removed from the project list.
- 10th Street – Bikeway project remained on the project list.
- 26th Street – Sidewalk project removed from the project list.
- Sunset Avenue – Sidewalk and pathway projects both remained on the project list.
- Irene Street – Sidewalk project remained on the project list.

The feedback collected from the meetings is included in Appendix “A.”

There was some support from residents along both Taft Street and 26th Street for sidewalks on these streets. Taft Street, in particular, provides important connections, including to 36th Street, which connects to Taft Elementary School, Hillside Junior High School, and the commercial area at the Hill Road/36th Street intersection, and the Collister Library. These projects could be reconsidered at a later date when this plan is updated or if they are requested again by area residents. Further outreach to the surrounding residents should be completed if either one of these projects are reconsidered.

TREATMENT OPTIONS





The potential projects generally fell into one of the following categories:







- New or enhanced bikeway (e.g., providing marked bike lanes, creating bike routes on low volume roadways)
- Providing traffic calming measures





- Completing gaps in the sidewalk network
- Installing new or enhancing existing crossings with bulb-outs, rectangular rapid flash beacons (RRFBs), and/or other advanced crossing signalization

Table 5 lists the treatments considered for the study area. Not all of these project types are found in the final project list, but they were all considered at some point in defining the planned projects. Appendix “B” contains more information on these treatments.

Table 5 Treatments Considered for This Plan

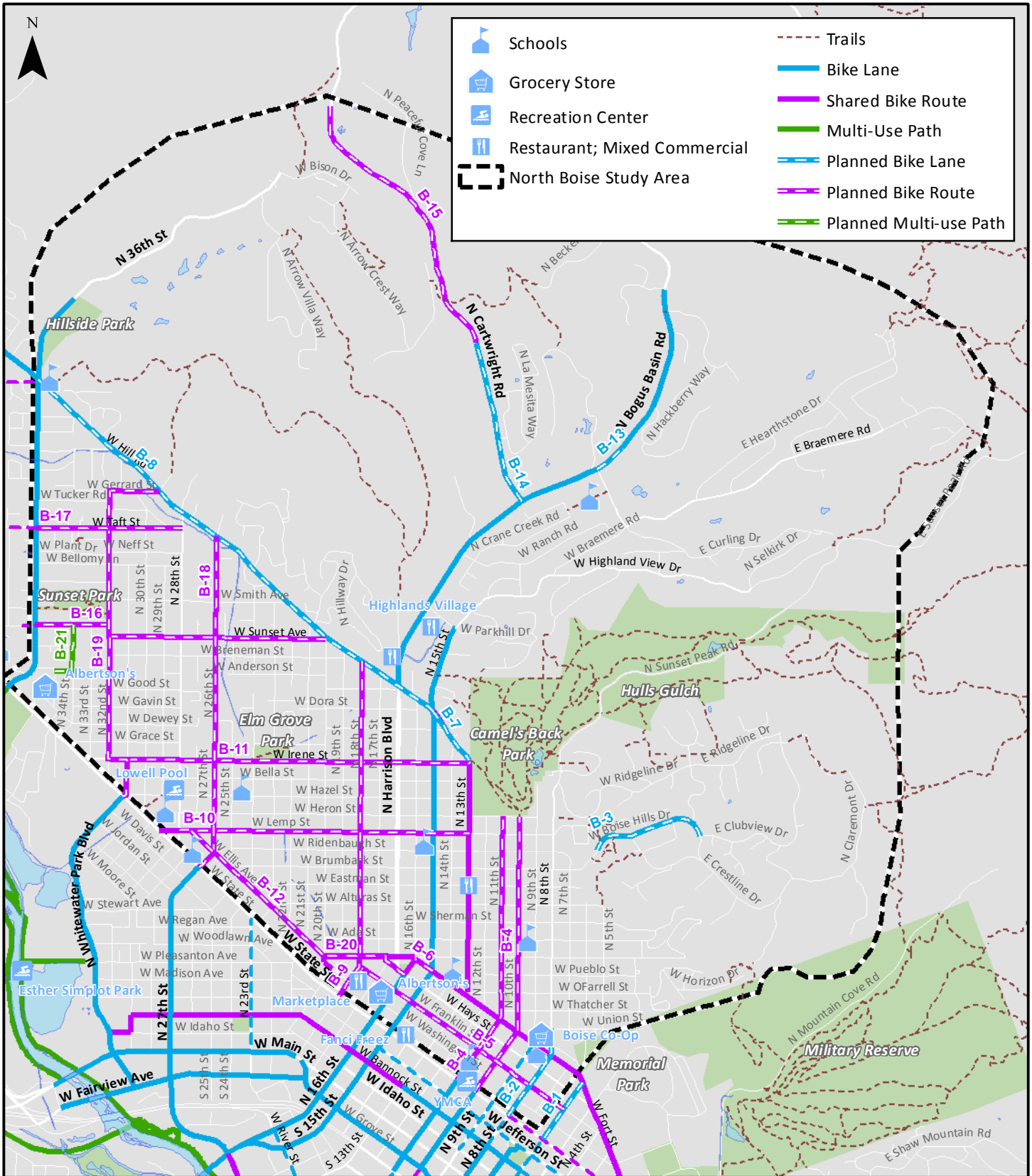
Project Type	Description	Example Photo
Bicycle Projects		
Multi-Use Path	Multi-use paths are paved, bi-directional, trails away from roadways that can serve both pedestrians and bicyclists. In some situations, shared-use paths are recommended by widening existing sidewalks. Signage and/or pavement markings should be included in all projects to ensure clear direction on usage for pedestrians and bicyclists.	
Protected Bike Lane	The area of roadway designated for non-motorized bicycle use, separated from vehicles by a buffer area. Buffer area can be pavement markings or a physical barrier, such as candlesticks or planters. May allow one-way or two-way travel.	
Buffered Bike Lane	Buffered bicycle lanes are on-street lanes that include an additional striped buffer of typically 2-3 feet between the bicycle lane and the vehicle travel lane and/or between the bicycle lane and the vehicle parking lane. Protected bicycle lanes are similar but use a physical barrier, such as planters or posts, in place of the painted buffer.	
Standard Bike Lane	The area of roadway designated for non-motorized bicycle use, separated from vehicles by pavement markings.	

Project Type	Description	Example Photo
Shared Bike Route	Usually designated by signage and potentially ‘sharrow’ markings. These routes may also feature enhanced crossings at major intersection.	
Enhanced Bike Route/Bike Boulevard	Enhanced bike routes, also called bicycle boulevards, are similar to shared bike routes (described above). They may also include traffic calming and/or diversion (see photo at right) along the route in order to prioritize through bicycle travel while discouraging cut-through traffic.	
Pedestrian Projects		
Multi-Use Path	Multi-use paths are paved, bi-directional, trails away from roadways that can serve both pedestrians and bicyclists. In some situations, shared-use paths are recommended by widening existing sidewalks. Signage and/or pavement markings should be included in all projects to ensure clear direction on usage for pedestrians and bicyclists.	
Sidewalk (Attached or Detached)	Sidewalks may be directly adjacent to the edge of the roadway (attached) or separated by a buffer space (landscaping, hardscape, drainage area, etc.).	
Crossing Treatments		
Pedestrian Hybrid Beacon	Pedestrian activated beacon, unlit when not in use, begins with a yellow light alerting drivers to slow, and then a solid red light requiring drivers to stop while pedestrians have the right-of-way to cross the street.	
Rectangular Rapid Flashing Beacon (RRFB)	Signs with a pedestrian-activated “strobe-light” flashing pattern that attracts attention and notifies motorists that pedestrians are crossing.	

Project Type	Description	Example Photo
Crossing Island (Pedestrian Refuge)	Provides a protected area in the middle of a crosswalk for pedestrians to stop while crossing street.	
Bulb-Out/Curb Extension	An extension of the curb or the sidewalk into the street, usually at an intersection, that narrows the road, inhibits fast turns, and shortens the crossing distance for pedestrians.	
High Visibility Crosswalk	Clear, reflective roadway markings and devices at intersections on priority pedestrian links, located only where motorists should expect pedestrians with sufficient sight distance and reaction time.	
Leading Pedestrian Interval (LPI)	Allows the pedestrian phase (crossing phase) to begin before the vehicle phase at a signalized approach in order to allow pedestrians to begin their crossing sooner.	

RECOMMENDED PROJECTS

The draft project list was revised based on the field review, small group meetings, comments from the public on the first draft of this plan, and feedback from ACHD, City of Boise, and Boise School District staff. The resulting final project list is shown in Figure 17, Figure 18, and Figure 19 for walking, bicycling, and crossing projects, respectively. A list of projects by type can be found in Appendix “C” and more detailed sub-area figures showing the planned projects can be found in Appendix “D.”



**Existing Bikeways and
Planned Bikeway Projects
Boise, ID**

**Figure
18**

Most of the projects included one or more of the following:

- Providing marked bike lanes
- Creating bike routes on low volume roadways
- Providing traffic calming measures, such as speed bumps
- Completing gaps in the sidewalk network
- Improving crossings with bulb-outs, raised crossings, RRFBS, and/or other advanced crossing signalization

School Area Projects

The project list was compared against the walking routes to all public elementary (i.e., Highlands, Longfellow, Lowell, Taft, and Washington) and junior high (i.e., North and Hillside) schools (walking routes to all schools were also accounted for in the project prioritization process). Based on the walking routes provided by the Boise School District, included here as Appendix “E,” sidewalks already exist, or are now planned, on most streets designated as walking routes to these schools, except for Taft Elementary. There are not sidewalks on a few of the streets designated as walking routes to Taft Elementary (i.e., Plant Drive, Bellomy Lane, and Hansen Avenue), nor were sidewalks requested on these streets during the public commenting period. Therefore, a project (S-49) was added to the project list, which involves reviewing these routes and adding sidewalks, or other types of walkways, where feasible.

Enhanced Bike Routes

There are two enhanced bike route (sometimes referred to as “Bike Boulevard”) projects in the final planned project list (i.e., 10th Street or 11th Street from Franklin Street to Heron Street and 18th Street from State Street to Hill Road). These routes would include standard bike route treatments (i.e., sharrows, wayfinding signs), and they could also include traffic calming and/or diversion (see photo at right) along the route in order to prioritize through bicycle travel while discouraging cut-through traffic. These features could also be used to enhance other planned bike routes in this plan or others around Ada County.



Example Traffic Diverter

As previously noted, meeting attendees generally supported such treatments on 10th Street (project B-4). Since this meeting, additional feedback obtained through the public review process has led to the addition of 11th Street as an alternate to 10th Street, since it provides a connection to the Greenbelt via the Pioneer Pathway.

Interim Installation

While these types of bike routes exist in several cities, including Salt Lake City, Portland, and Tucson, there is not one in the Treasure Valley. Therefore, it may make sense to complete the first installation on an interim basis and make adjustments as necessary before completing the final installation. Interim installation measures could include painting sharrows, instead of using thermoplastic, and using candlesticks instead of concrete to form the traffic diverters. Once these measures have been installed, adjustments can be made on-the-fly, if necessary, and then after they have been left in place for an adequate time period (i.e., 6 months to a year), final implementation could occur, if the project is still supported by the public and agency partners.

Traffic Calming Projects

North Boise residents submitted a number of traffic calming related comments during the public involvement process. Seven projects were specifically identified as traffic calming projects in the draft project list and many other projects had elements of traffic calming included (e.g. bulb-outs for enhanced crossing projects, traffic calming as part of a shared bike route). The seven locations where traffic calming was the only identified project included:

- 8th Street – Union Street to Ridgeline Drive
- 9th Street – Fort Street to Heron Street
- 12th Street – Fort Street to Ada Street
- 15th Street – Fort Street to Hill Road
- 28th Street – State Street to Bella Street
- Fort Street – 15th Street to 6th Street
- Bella Street – 32nd Street to 28th Street

The purpose of this plan is to address walking and bicycling facilities and enhancements. Therefore, these projects were not included in the final list of prioritized projects. ACHD currently has a process in place for evaluating the need for traffic calming measures (see Section 5100 of the Policy Manual) and is already reviewing many of these requests (e.g., 28th Street is currently in the draft 2017-2012 IFYWP).

Bicycle Parking

This plan is focused on walking and bicycling routes. In addition to providing comfortable, low stress bicycling routes, it is important to provide adequate bicycle parking at destinations.



**Bikes Locked to Trees in Hyde Park
Are a Common Sight on Evenings and
Weekends**

Within the North Boise Neighborhood area, one location identified where increased bicycle parking would be helpful is Hyde Park. Currently, the existing bicycle parking fills up and people must lock their bikes to other objects, such as trees, during many evenings and weekends. The City of Boise should work with local business owners to identify how and where additional bicycle parking can be provided in this area (e.g., additional racks on side streets, replacing an on-street parking space with a bike corral).

IMPLEMENTATION AND FUNDING

This neighborhood plan, and others like it, is used by ACHD and the City of Boise to aid in the identification and prioritization of projects that can improve walking and bicycling conditions. Projects are also identified every year through ACHD’s official request program that gives the Cities and school districts the opportunity to submit a prioritized request list of projects each year. All of these projects are then scored and prioritized by ACHD. The list of requests is greater than the funding available for projects; therefore, careful consideration is required to determine which projects receive funding. In general, projects on busy streets, near schools, parks, libraries or other pedestrian and bicycle attractors are prioritized the highest (the full ACHD prioritization system can be found in Appendix “F”).

PRIORITIZED PROJECTS

Projects were prioritized in a two-part process. First, projects were scored using the technical criteria in from ACHD’s Community Program Prioritization process. As part of the Community Program’s prioritization process, a set of programming criteria are also applied that relate to partner agency requests and funding availability. This will occur once these projects are part of an adopted plan and requested by the City or school district. ACHD’s technical criteria do not directly apply to crossing or bikeway projects, so those criteria were modified for this project. For a list of the criteria applied, refer to Appendix “F.”

This initial prioritization was reviewed with ACHD and City staff. Based on their feedback, the prioritization was refined and presented to the public. Feedback received from area residents during the public comment period was then used to further refine the prioritized projects into the final list shown in Table 6. Projects were prioritized as either being in the Integrated Five Year Work Program (IFYWP) or High, Medium, or Low priority. The projects and their priority designation are shown in Figure 20, Figure 21, and Figure 22. Detailed sub-area maps of the prioritized projects are included in Appendix “D.” More information on the connections made by sidewalk projects can be found in Appendix “G.”

Table 6 Prioritized Projects

Project ID	Name	Description
Projects programmed in Current (2016-20) or Draft (2017-21) Integrated Five-Year Work Plan		
C-18	HERON ST AND 09TH ST	Enhanced crossing (e.g., bulb-outs).
C-19	HERON ST AND 10TH ST	Enhanced crossing (e.g., bulb-outs, markings).
C-20	HERON ST AND 11TH ST	Enhanced crossing (e.g., bulb-outs).
C-21	HERON ST AND 12TH ST	Enhanced crossing (e.g., bulb-outs, markings).
C-42	FORT ST AND 14TH ST	Enhanced crossing (e.g., bulb-outs, RRFB).
C-69	STATE ST AND 35TH ST OR 34TH ST	Crossing to be located 35th St or 34th St. ACHD is currently investigating crossing.
S-9	HERON ST, 13TH ST / 09TH ST	Add detached pathway.
S-24	BOGUS BASIN RD, CURLING DR / 450' N/O CURLING DR	Add sidewalk.
High Priority Projects		
B-3	BOISE HILLS DR, 700' E/O 7TH ST / CLUBVIEW DR	Bike lane to be added as part of FY 2016 chipsealing.
B-4	10TH ST OR 11TH ST, STATE ST / HERON ST	Create bike route on 10 th Street or 11 th Street from State Street to Camel's Back Park to provide parallel route to 9th St. Consider using sharrows/wayfinding, traffic diversion, and enhanced crossings at Hays and Fort. Further coordination with Boise High School will be required to determine final route alignment near the school.
B-5	FRANKLIN ST, 18TH ST / 06TH ST	Designate as a bike route to parallel Fort St. Consider using sharrows/wayfinding, traffic calming, and crossings at 16th St, 15th St, 13th St, 9th St, 8th St, and 6th St.
B-9	18TH ST, STATE ST / HILL RD	Create bike route to parallel Harrison Boulevard. Consider using sharrows/wayfinding, traffic calming/diversion, and crossing at Hill Road. 17th St may be an alternate.
B-16	SUNSET AVE, 36TH ST / HILL RD	Implement bike route planned in Roadways to Bikeways. Consider using sharrows/wayfinding (esp. at 32nd Street), traffic calming, and crossings at 28th St and 36th St.
B-18	26TH ST, STATE ST / HILL RD	Designate as a bike route connecting West End to North End. Consider traffic calming measures (speed humps currently being considered by ACHD), sharrows/wayfinding, traffic diversion and crossing at Hill Rd.
B-21	34TH ST, ANDERSON ST / SUNSET AVE	Construct pathway from Anderson St to 34th St, bike route on 34th to Sunset Ave.
C-1	WASHINGTON ST AND 09TH ST	Improve existing crossing (e.g., bulb-outs, RRFBs). ACHD currently considering RRFB.

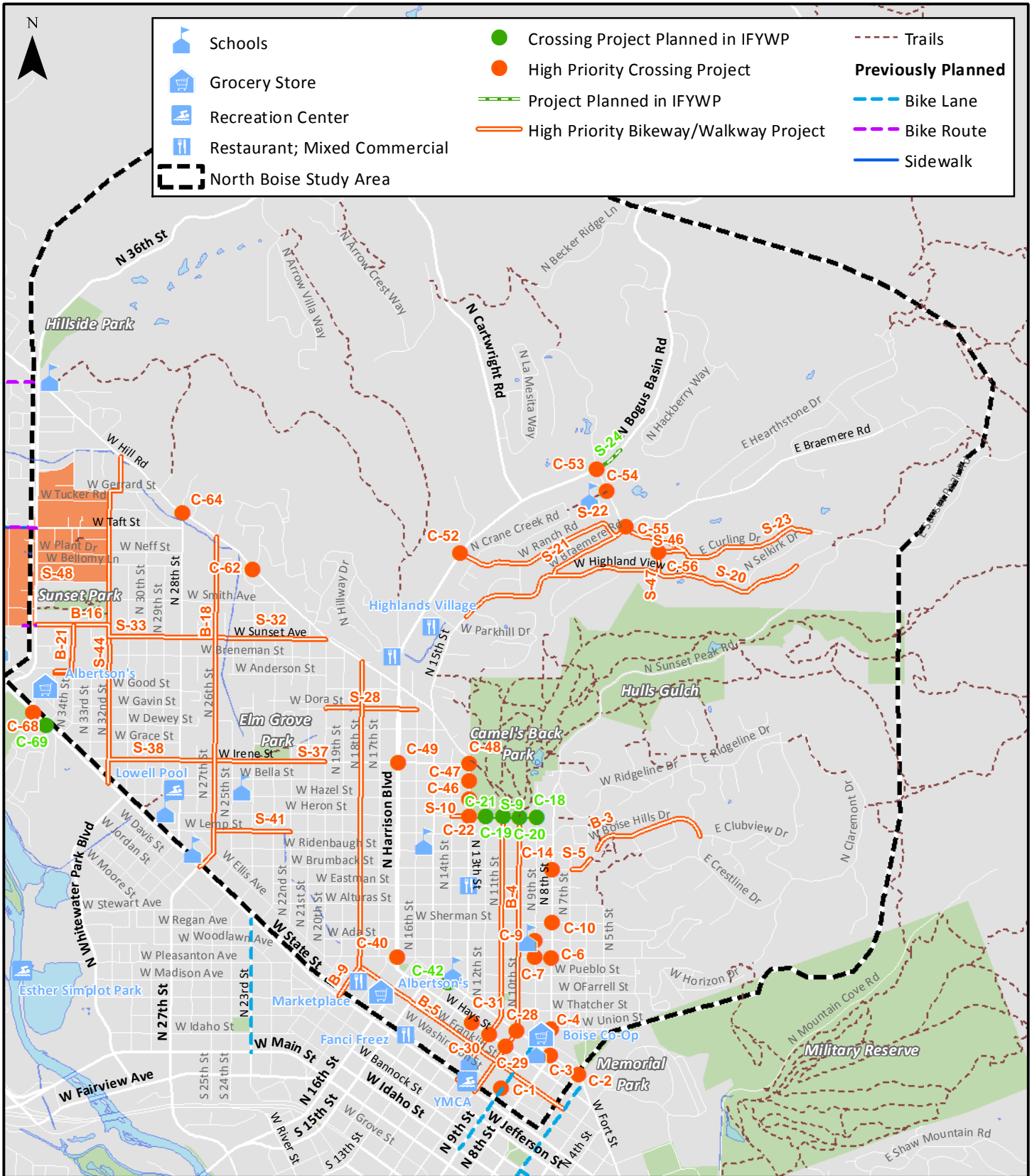
Project ID	Name	Description
C-2	FORT ST AND 06TH ST	Enhanced crossing here or widen sidewalk to provide biking connection to signal.
C-3	FORT ST AND 08TH ST	Consider adding a leading pedestrian interval for north side crossing.
C-4	UNION ST AND 08TH ST	Improve existing crosswalk (e.g., bulb-outs, RRFB).
C-6	RESSEGUIE ST AND 08TH ST	Improve existing crossing (e.g., bulb-outs, raised crossing).
C-7	RESSEGUIE ST AND 09TH ST	Enhanced crossing (e.g., bulb-outs, markings).
C-9	ADA ST AND 09TH ST	Improve existing crossing (e.g., RRFBs). Road crown may preclude bulb-outs.
C-10	SHERMAN ST AND 08TH ST	Enhanced crossing (e.g., bulb-outs).
C-14	BRUMBACK ST AND 08TH ST	Enhanced crossing (e.g., bulb-outs, markings).
C-22	HERON ST AND 13TH ST	Enhanced crossing (e.g., bulb-outs).
C-28	FORT ST AND 10TH ST	Enhanced crossing (e.g., bulb-outs, RRFB).
C-29	HAYS ST AND 10TH ST	Improve existing crossing (e.g., bulb-outs, RRFBs). ACHD currently considering RRFB.
C-30	HAYS ST AND 11TH ST	Enhanced crossing (e.g., bulb-outs, RRFBs). ACHD currently considering RRFBs.
C-31	HAYS ST AND 12TH ST	Enhanced crossing (e.g., bulb-outs, RRFBs). ACHD currently considering RRFBs.
C-40	RESSEGUIE ST AND HARRISON BLVD	Enhanced crossing (e.g. bulb-outs, RRFB).
C-46	HAZEL ST AND 13TH ST	Enhanced crossing (e.g., RRFB, bulb-outs, markings). ACHD currently considering RRFB.
C-47	BELLA ST AND 13TH ST	Enhanced crossing (e.g., ramps, bulb-outs).
C-48	IRENE ST AND 13TH ST	Enhanced crossing (e.g., RRFB, bulb-outs, markings). Sight distance needs to be evaluated.
C-49	IRENE ST AND HARRISON BLVD	Enhanced crossing (e.g., RRFB).
C-52	RANCH RD AND BOGUS BASIN RD	Enhanced crossing (e.g., RRFB).
C-53	CURLING DR AND BOGUS BASIN RD	To be implemented by the Highlands Traffic Calming project. In-pavement pedestrian sign for crosswalk.
C-54	CURLING DR AND HIGHLANDS ELEMENTARY	To be implemented by the Highlands Traffic Calming project. Assess protected crosswalk treatment in front of school.
C-55	CURLING DR AND BRAEMERE RD	To be implemented by the Highlands Traffic Calming project. Install stop signs at Braemere, with pedestrian ramps and crosswalk.
C-56	CASHMERE RD AND WHIDDEN	To be implemented by the Highlands Traffic Calming project. Crosswalk on west leg of intersection.
C-62	HILL RD AND COMPASS DR	New crossing to be installed with development.
C-64	HILL RD AND 28TH ST	Consider reinstalling crosswalk.
C-68	STATE ST AND CLOVER DR	Install crossing as planned in State Street/VMP Design.

Project ID	Name	Description
S-5	BOISE HILLS DR, 07TH ST / MESA GRANDE LN	Add sidewalk.
S-10	HERON ST, 14TH ST / 13TH ST	Add sidewalk.
S-20	HIGHLAND VIEW DR, 300' N/O PARKHILL RD / 900' N/O SELKIRK DR	Extruded curb protected path to be added by Highlands Traffic Calming Project.
S-21	BRAEMERE RD, HIGHLAND VIEW DR / CURLING DR	Candle protected walkway between Curling and Ranch to be added by Highlands Traffic Calming Project.
S-22	RANCH RD, BOGUS BASIN RD / BRAEMERE RD	Add sidewalk.
S-23	CURLING DR, BRAEMERE RD / SELKIRK DR	Candle protected walkway between Braemere and Cashmere to be added by Highlands Traffic Calming Project.
S-28	DORA ST, 20TH ST / 16TH ST	Add sidewalk.
S-32	SUNSET ST, 28TH ST / 20TH ST	Fill-in gaps in existing sidewalk network.
S-33	SUNSET ST, 32ND ST / 28TH ST	Fill-in gaps in existing sidewalk network.
S-37	IRENE ST, 28TH ST / 20TH ST	Fill-in gaps in existing sidewalk network.
S-38	IRENE ST, 32ND ST / 28TH ST	Add sidewalk.
S-41	LEMP ST, 26TH ST / 22ND ST	Add sidewalk.
S-44	32ND ST, STATE ST / HILL RD	Add sidewalk.
S-46	CASHMERE RD, WHIDDEN ST / CURLING DR	Highlands Traffic Calming Project to stripe 6' path on north side of road.
S-47	WHIDDEN ST, HIGHLAND VIEW DR / CASHMERE RD	Highlands Traffic Calming Project to stripe 6' path on west side of road.
S-48	TAFT ELEMENTARY WALKING ROUTES	Review designated walking routes to Taft Elementary School and determine where sidewalks should be added.
Medium Priority Projects		
B-1	06TH ST, STATE ST / FORT ST	Implement bike lane planned in Roadways to Bikeways (will require removing parking or motor vehicle lane). Configuration needs to be coordinated with 5th St and ongoing 5th/6th two-way conversion effort.
B-2	08TH ST, STATE ST / UNION ST	Either add bike lane to continue treatment recommended in DBIP (will require removing parking or motor vehicle lane) or consider traffic calming to ensure vehicle speeds are 20 MPH. Further study is needed to determine the final configuration.
B-6	FORT ST, 16TH ST / 15TH ST	Use sharrows and wayfinding signs to link SB bike lanes on 15th & 16th.
B-8	HILL RD, 36TH ST / N BOGUS BASIN RD	Convert existing bike lane to buffered bike lane. Consider adding protection at and near curves to prevent motor vehicles drifting into the lane. Public outreach will be needed before this is implemented.

Project ID	Name	Description
B-11	IRENE ST, 32ND ST / 13TH ST	Implement bike route planned in Roadways to Bikeways. Consider using sharrows/wayfinding, traffic calming, and crossings at 15th St and Harrison Blvd.
B-13	BOGUS BASIN RD, CURLING DR / 375' N/O CURLING DR	Fill in bike lane gap.
B-14	CARTWRIGHT RD, BOGUS BASIN RD / BLUE WING PL	Dedicated bike lane.
B-17	TAFT ST, 36TH ST / 28TH ST	Implement bike route planned in Roadways to Bikeways. Consider using sharrows/wayfinding, traffic calming, and crossing at 36th St.
B-20	RESSEGUIE/HAYS ST, 20TH ST / 16TH ST	Connect bikeways using sharrows and wayfinding signs.
C-5	UNION ST AND 09TH ST	Enhanced crossing (e.g., bulb-outs).
C-8	ADA ST AND 08TH ST	Improve existing crossing (e.g., bulb-outs).
C-11	SHERMAN ST AND 09TH ST	Improve existing crossing (e.g., RRFBs). Road crown may preclude bulb-outs.
C-12	SHERMAN ST AND 11TH ST	Add curb ramps in SE quadrant .
C-13	BRUMBACK ST AND 07TH ST	Enhanced crossing (e.g., bulb-outs, markings).
C-15	BRUMBACK AND 09TH ST	Enhanced crossing (e.g. markings, bulb-outs). Road crown may preclude bulb-outs.
C-16	LEMP ST AND 08TH ST	Enhanced crossing (e.g. markings, bulb-outs).
C-17	LEMP ST AND 09TH ST	Enhanced crossing (e.g. markings, bulb-outs). Road crown may preclude bulb-outs.
C-23	BRUMBACK ST AND 13TH ST	Bulb-out on north side.
C-25	ADA ST AND 13TH ST	Enhanced crossing (e.g., bulb-outs).
C-26	RESSEGUIE ST AND 13TH ST	Enhanced crossing (e.g., bulb-outs).
C-27	FORT ST AND 13TH ST	Alter signal timing to reduce conflicts between turning vehicles and people crossing (e.g. protected left-turn or scramble phasing).
C-32	FRANKLIN ST AND 13TH ST	Enhanced crossing (e.g., bulb-outs, RRFBs).
C-33	WASHINGTON ST AND 13TH ST	Enhanced crossing (e.g., bulb-outs, RRFBs).
C-34	STATE ST AND 14TH ST	Enhanced crossing (e.g., bulb outs, refuge, RRFB, PHB, Signal).
C-36	HAYS ST AND 16TH ST	Consider leading pedestrian interval on south side (would also allow people biking to get across to bike lane).
C-37	HAYS ST AND 14TH ST	Enhanced crossing (e.g., bulb-outs, RRFBs). ACHD currently considering RRFBs.
C-39	RESSEGUIE ST AND 17TH ST	Enhanced crossings to connect 17th (e.g., ramps, bulb-outs, markings, raised crossing).
C-41	RESSEGUIE ST AND 15TH ST	Improve existing crossing (e.g., RRFB) and consider protecting bike lane. ACHD currently considering RRFB.

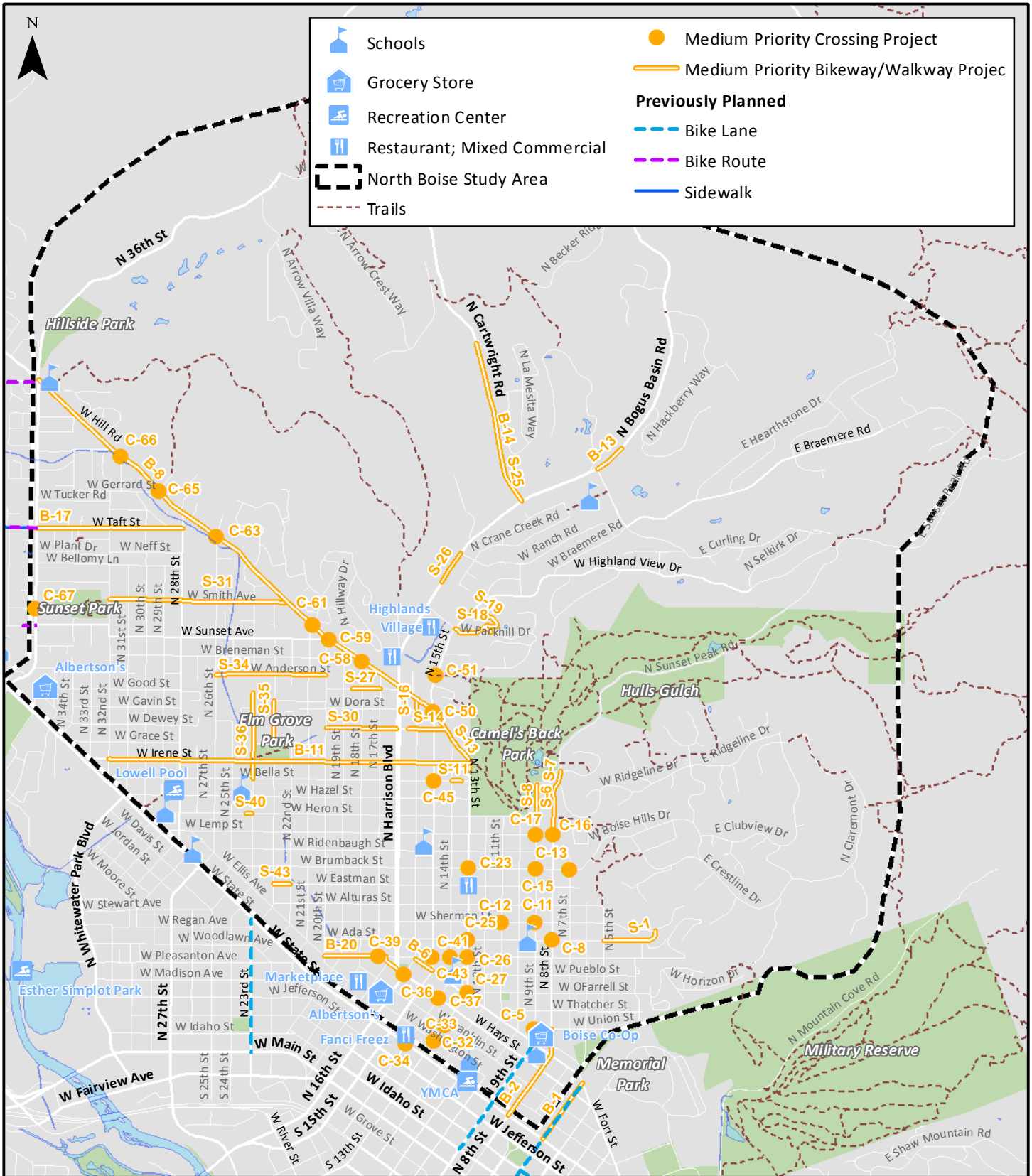
Project ID	Name	Description
C-43	RESSEGUIE ST AND 14TH ST	Improve existing crossing (e.g., bulb-outs).
C-45	BELLA ST AND 15TH ST	Enhanced crossing (e.g., bulb-outs, markings).
C-50	HILL RD AND 15TH ST	Tighten up crossing distances or add in median refuge islands.
C-51	15TH ST TRAIL AND 15TH ST	Enhanced crossing (e.g., RRFB).
C-58	HILL RD AND 18TH ST	Enhanced crossing (e.g., markings, RRFB).
C-59	HILL RD AND HILL TERRACE LN	Enhanced crossing (e.g. markings, RRFB).
C-61	HILL RD AND LANCASTER	Enhanced crossing (e.g., RRFB). ACHD currently considering RRFB.
C-63	HILL RD AND 26TH ST	Enhanced crossing (e.g. markings, RRFB).
C-65	HILL RD AND GERRARD ST	Consider adding a crossing. Request previously denied due to lack of ADA facilities.
C-66	HILL RD AND 32ND ST	Enhanced crossing (e.g. markings, RRFB).
C-67	BURKE ST AND 36TH ST	Enhanced crossing across from Sunset Park (e.g., markings, RRFB).
S-1	ADA ST, 5TH ST / SHERMAN ST	Fill-in gaps in sidewalk network.
S-6	08TH ST, LEMP ST / RIDGELINE DR	Fill-in gaps in existing sidewalk network.
S-7	08TH ST, RIDGELINE DR / SANDSTONE CT	Add sidewalk.
S-8	09TH ST, HERON ST / TRAILHEAD	Add sidewalk.
S-11	BELLA ST, 14TH ST / 125' W/O 13TH ST	Add sidewalk.
S-13	HILL RD, 16TH ST / 13TH ST	Add sidewalk; there is already sidewalk on south side.
S-14	DEWEY ST, 175' E/O HARRISON BLVD / HILL RD	Add sidewalk.
S-16	16TH ST, DORA ST / HILL RD	Add sidewalk.
S-18	PARKHILL DR, HIGHLAND VIEW DR / 150' E/O HARRISON HILLS DR	Add sidewalk.
S-19	HARRISON HILLS DR, HIGHLAND VIEW DR / PARKHILL DR	Add sidewalk.
S-25	CARTWRIGHT RD, 550' N/O BOGUS BASIN RD / 400' S/O BACALAR ST	Add sidewalk.
S-26	BOGUS BASIN RD, 500' N/O PARKHILL DR / RANCH RD	Add sidewalk.
S-27	GOOD ST, 150' E/O 19TH ST / 17TH ST	Add sidewalk.
S-30	DEWEY ST, 20TH ST / HARRISON BLVD	Add sidewalk.
S-31	SMITH AVE, 32ND ST / HILL RD	Add sidewalk.
S-34	ANDERSON ST, 26TH ST / 20TH ST	Add sidewalk.
S-35	23RD ST, GRACE ST / DORA LN	Fill-in gaps in existing sidewalk network.
S-36	24TH ST, BELLA ST / DEAD END	Add sidewalk.
S-40	HERON ST, 175' W/O 24TH ST / 24TH ST	Add sidewalk.
S-43	EASTMAN ST, 23RD ST / 22ND ST	Add sidewalk.

Project ID	Name	Description
Low Priority Projects		
B-7	HILL RD, 15TH ST / 13TH ST	Extend bike lanes on Hill Road to 13th Street. Consider traffic calming measures, especially if bike lanes are not added.
B-10	LEMP ST, 28TH ST / 13TH ST	Create bike route. Consider using sharrows/wayfinding, traffic calming, and crossings at 28th St, 26th St, 15th St, and 13th St.
B-12	ELLIS AVE, LEMP ST / 18TH ST	Upgrade bike route with additional features (e.g., wayfinding/sharrows, traffic diversion).
B-15	CARTWRIGHT RD, BLUE WING PL / EDGE OF STUDY AREA	Increase shoulder width.
B-19	31ST ST/32ND ST/GERRARD ST, STATE ST / HILL RD	Implement bike route planned in Roadways to Bikeways connecting Whitewater Park Blvd to Hill Rd across from trailhead. Consider using sharrows/wayfinding (esp. when it changes streets), traffic calming, and crossing at Hill Rd.
C-24	ALTURAS ST AND 13TH ST	Bulb-out on south side.
C-35	WASHINGTON ST AND 15TH ST	Enhanced crossing (e.g., bulb outs, refuge, RRFB, PHB, Signal).
C-38	175' S/O FRANKLIN ST AND 17TH ST	Enhanced crossing (e.g., bulb-outs).
C-44	HERON ST AND 15TH ST	Enhanced crossing (e.g., RRFB).
C-57	HILL RD AND BOGUS BASIN RD	Consider adding a leading pedestrian interval on the north and south sides of the intersection.
C-60	SUNSET AVE AND 20TH ST	Evaluate restricting access to reduce conflicts (i.e. right-in/right-out onto Sunset).
S-2	SHERMAN ST, 05TH ST / ADA ST	Add sidewalk on north side; there is already sidewalk on south side.
S-3	CRESTLINE DR, VILLAGE LN / CRESTLINE TRAILHEAD	Add sidewalk.
S-4	BOISE HILLS DR, CRESTLINE DR / CLUBVIEW DR	Add sidewalk.
S-12	IRENE ST, 15TH ST / 13TH ST	Add sidewalk.
S-15	16TH ST, 100' S/O DORA ST / DORA ST	Add sidewalk.
S-17	15TH ST, 300' N/O HILL RD / 50' N/O CAMEL BACK LN	Add sidewalk.
S-29	19TH ST, DORA ST / HILL RD	Fill-in gaps in existing sidewalk network.
S-39	HAZEL ST, 23RD ST / 22ND ST	Add sidewalk.
S-42	RIDENBAUGH ST, 24TH ST / 22ND ST	Add sidewalk.
S-45	NEFF ST, 32ND ST / 28TH ST	Add sidewalk.



**High Priority Walking,
Bicycling, and Crossing Projects
Boise, ID**

**Figure
20**



Medium Priority Walking, Bicycling, and Crossing Projects
Boise, ID

Figure 21

As shown in Figure 23, over 40% of all projects are in the Medium priority tier, while over 35% are in the High priority tier, and about 15% are in the Low priority tier. Approximately 6% of the planned projects are already programmed in the IFYWP.

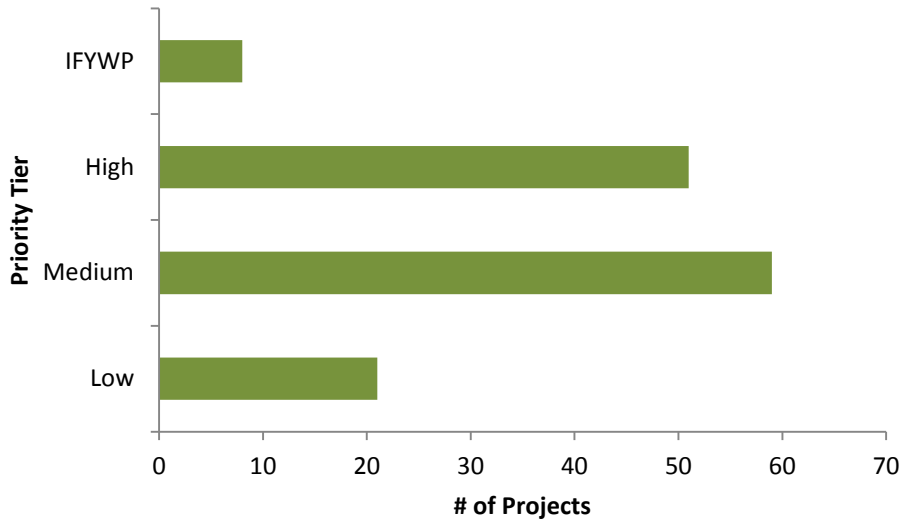


Figure 23 Number of Projects by Priority Tier

Highlands Area Traffic Calming Projects

Several projects in the Highlands neighborhood were identified through a separate process related to a private development that occurred while this plan was being developed. These projects are expected to be implemented in the near-term; many through measures that can be quickly implemented (e.g., candlestick protected or striped walkways). Projects from the Highlands Traffic Calming project are included in this plan in the High priority tier.

FUNDING

Once projects are identified to move forward they can receive funding through various sources. One of the main purposes of this Plan is to direct available funding for pedestrian and bicycle projects in the North Boise study area. Funding for projects will be drawn from:

ACHD Community Programs

The primary funding source for the projects identified in this Plan will be ACHD’s Community Programs. This program is a dedicated local funding source for pedestrian and bicycle projects across Ada County. Funds for Community Programs projects come from ACHD’s capital budget and vehicle registration fees with a total funding level of approximately four million dollars per year. The funding breakdown is summarized as follows:

- A target of 5% of ACHD's Capital Budget (\$2 - \$2.5 million/year)
- Vehicle Registration Fees (~\$2.5 million/year)

Projects funded through Community Programs generally do not require a match from the neighborhood for funding.

Other Funding

Beyond ACHD's Community Programs, walking and bicycling facilities can receive funding through federal grants, local grants, and other local sources. In general, these funding sources do not provide 100% funding for a proposed project, but the funds can be used to leverage ACHD's Community Programs funds and accelerate a project. New walkways, bikeways, and crossings can also be constructed in conjunction with other ACHD Capital Projects, such as roadway widening and maintenance projects. ACHD Community Program funds are generally not used to pay for improvements to the pedestrian and bicycle network included with other ACHD projects.

Project Cost and Timing

ACHD has realized through experience that sidewalk retrofit projects and bicycle projects requiring road widening can vary widely in cost and that seemingly simple projects may require costly and complex drainage solutions. Every year ACHD performs a detailed review of potential projects known as scoping. During the scoping process each potential project receives specific attention and the scoping team makes recommendations for the type of facility that best fits the situation. The team also develops a cost estimate to be used for programming the project into ACHD's Five Year Work Plan and budget.

Projects such as new striping (shared lane markings), signage, and some ADA improvements do not require the scoping process described above. It is ACHD's intent to integrate these simpler projects into normal business practices for completion. For example, if a roadway is recommended for shared lane markings in this Plan and ACHD is chip-sealing or resurfacing that roadway the new painting scheme would be included in the maintenance project. In some areas where no maintenance project is scheduled in the short term, ACHD will proactively install new bike facilities as funds are available.