DOWNTOWN BOISE IMPLEMENTATION PLAN
August 2013
INTRODUCTION

The Downtown Boise Implementation Plan (DBIP) is a joint effort between the Ada County Highway District (ACHD), City of Boise, and Capitol City Development Corporation (CCDC) to establish a blueprint for the implementation of transportation and streetscape improvements within the Downtown Boise core (study area shown in Figure 1). Downtown Boise is an employment and commercial hub for the Treasure Valley containing approximately 32,000 jobs. Between workers, residents, and visitors, what happens in Downtown Boise impacts a large portion of the Ada County population. With a significant amount of required street maintenance overlays, planned streetscape improvements, planned utility upgrades, and the desire for an enhanced bicycle and circulation network, the DBIP effort was undertaken to create a coordination plan so that the planned activities within the next five to seven years can:

- Be completed in coordination to minimize impacts for businesses and travelers,
- Get the most return possible out of mobilizing efforts,
- Shorten the timeframe in which all envisioned downtown projects are brought to fruition, and
- Be sequenced in a logical and effective manner that maintains circulation and access within downtown.

The DBIP effort also included close collaboration with the Downtown Boise Association and Valley Regional Transit along with robust public outreach and involvement activities to hear from and incorporate the ideas and desires of downtown business owners, residents, workers, and visitors.

This report summarizes the key outcomes from the DBIP effort which are:

- A compilation of currently planned overlay and maintenance work, intersection improvements, streetscape and sidewalk improvements, key planned developments, and utility improvements within the downtown core;
- A refined downtown bicycle plan for improvements to the bicycle facilities, networks, and routes within the downtown core;
- Recommendations for the conversion of existing one-way streets to two-way traffic flow;
- A sequencing guidebook for the next five to seven years that identifies work to be done, sequence of work, and how to coordinate efforts between agencies; and
- An interactive GIS database that is a consolidated location for all project information and allows users to query information by location to examine what projects are associated with it and near its vicinity, to outline all projects identified within a certain timeframe, and to establish if there are additional parallel efforts to be undertaken (such as water or sewer lines).

This document provides an overview of the DBIP development and summarizes the key findings and outcomes. It is organized in the following sections:

- Process – Discussion of the development of the DBIP,
- Public Involvement – Details regarding the public outreach and involvement which shaped the decisions and guidance for improvements within downtown Boise,
- Outcomes – Recommendations based on feedback collected from the public and decisions made by the Project Management Team (PMT),
- Sequencing & Coordination – The sequencing of projects implementation within downtown between 2014 and 2019,
- GIS Tool – Details of the geodatabase developed during the course of the project as well as its capabilities and applications, and
- Additional Considerations – Planned coordination efforts as well as areas for additional investigation.
STUDY AREA
Downtown Boise Implementation Plan

Source: ACHD GIS Database; ACHD Five-Year Work Plan; ITD Projects; CCDC Downtown Boise Two-Way Conversion Study; CCDC Streetscape Project Listings
**Process**

The DBIP was initiated by ACHD. Both the City of Boise and CCDC were collaborators in the effort given their interests and work within downtown Boise. The plan covers the downtown core area between Broadway Street-Avenue B and 16th Street and to the east and west and between State Street and the Boise River north and south. Again, the study area map is provided in Figure 1.

**Project Management Team**

The DBIP effort was overseen by a Project Management Team (PMT). The PMT was comprised of representatives from:

- ACHD Planning & Projects,
- ACHD Traffic Engineering,
- ACHD Development Services,
- ACHD Pavement Maintenance,
- City of Boise,
- Capital City Development Corporation,
- Downtown Boise Association, and
- Valley Regional Transit.

The PMT was responsible for providing current plans and needs within the study area, reviewing technical analysis, reviewing public input and comment, and developing recommendations.

**Public Involvement**

In addition to the coordination and collaboration between the various agencies on the PMT, the DBIP process also included extensive public outreach and involvement activities. These activities included two Public Open Houses, a project web site, web-based interactive commenting abilities, and a Stakeholder Workshop for businesses, utility providers, developers, and other parties directly influencing or impacted by work in the downtown core. Additional details on the public outreach and involvement activities are provided in the next section of this report.

**DBIP Development**

The development of the DBIP recommendations and this final plan followed the process summarized in Exhibit 1. The project started with compiling existing conditions and current plans for the study area. This included reviewing and incorporating previous work that has been completed for improvements to the downtown bicycle network (ACHD’s Roadways to Bikeways Plan, counts and information from the Ada County Bicycle Alliance) and on two-way street conversions (CCDC’s Two-Way Conversion Study). The stakeholder and public outreach helped identify other needs and concerns not already included in previous study. All this information was then compiled and reviewed to create specific recommendations for the bicycle network, two-way street conversions, and other transportation enhancements. The public was provided the opportunity to review and comment on the draft recommendations. Finally, the recommendations were confirmed, a detailed sequencing and phasing plan was developed for project implementation over the next five to seven years.

Exhibit 1: DBIP Process
Outreach to partnering agency staff, downtown stakeholders, and the general public was a key component of the DBIP effort. Given the broad nature all who travel, work, and live in downtown Boise, outreach to these groups was an important element of developing the plan recommendations. This outreach included specific meetings, a project web site, interactive web-based commenting, and project information and mailers.

As part of the meeting, stakeholders identified what they considered important elements of developing the plan recommendations. This included the expectation of commonly used bike routes, and it reinforces the expectations of commonly used bike routes.

Stakeholders were also asked to identify ideas to help implementation and coordination of downtown projects. Through this exercise, stakeholders recommended:

- Improving disclosure and availability of information,
- Improving disclosure and communication with who owns various rights-of-way in downtown,
- Providing guidance for the contacts needed for work downtown,
- Developing “joint trench notification” system for alleys with a 30-day notice,
- Creation of a centralized information system including private interests,
- Semi-annual coordination meetings with agencies, utility providers, event coordinators, and emergency service providers,
- Increasing the allowable construction time windows in downtown so work can be completed in a shorter number of days and,
- Maintaining the database established as part of this effort current and available to stakeholders.

Each station allowed for citizens to provide comments referenced by numbered dots on either an aerial map poster or through an interactive website. Public input comment sheets were provided to citizens at the meeting and could also be accessed via a survey on line for two weeks following the meeting. Based on the meeting sign in sheet, a total of 103 people attended the second open house and a total of 309 different comments or items of input were received either at the meeting or in the weeks following.

BICYCLE IMPROVEMENTS

The public meeting provided the opportunity for citizens to locate and comment on bicycle-specific concerns they have within downtown. Citizens were also able to provide information regarding their preferred bike routes and connections within the study area. Input was gathered on the type of trips made by cyclists, which improvements participants would like to see, and what deterrents cyclists have to riding downtown. The feedback indicated that the bicycle network in downtown should be developed to accommodate and provide appropriate facilities for a diverse range of bicycle users and levels of rider capability (from confident and experienced frequent adult riders to more recreational and infrequent riders and families).

The most desired type of bicycle improvements indicated by people who provided input were designated bike routes on lower traffic streets. The least commonly selected improvement, wayfinding, may be attributed to the participants who took the survey (i.e., people who are already familiar with the downtown area). The input also indicated that the most evident deterrent to bicycling within downtown is the volume and/or speed of vehicular traffic in the downtown area. To encourage bicycling within downtown, addressing this issue (such as designating lower volume streets as bike routes or providing separated bicycle facilities on high volume roads) should be considered. Specific input received on downtown bicycle improvements can be found in Appendix A to this report as part of the detailed Public Open House #1 summary.

The Open House also provided a “Show Us Your Preferred Bike Routes” activity that allowed participants to use yarn to show continuous bike routes used on an aerial map poster. This information was then coded in geographic information system (GIS) database on a block-by-block basis to determine the most heavily used routes. This information is detailed in Figure 2. What is evident from this activity is the emphasis of main corridors, notably that 8th Street and 10th Street serve as the primary north-south corridors and the use of Warm Springs Avenue as the main access to downtown from the east. While Figure 2 does not detail the full reality of heavily used biking routes, it reinforces the expectations of commonly used bike routes.
Source: Downtown Boise Implementation Plan Open House, February 13, 2013

Number of Routes

1  2  3  4  5  6  7  8  9

Study Area

PREFERRED BICYCLE ROUTES

INTERACTIVE OPEN HOUSE EXERCISE

Downtown Boise Implementation Plan

Figure 2
The Open House asked citizens to locate and comment on the possibility of converting existing one-way streets to two-way traffic flow within downtown. This station also provided citizens the opportunity to comment on the potential use of mini-roundabouts as intersection treatments within downtown.

The majority of input was in favor of using mini-roundabouts where appropriate for traffic control, traffic calming, and to enhance the character of downtown. The input also showed generally positive support for the conversion of existing one-way streets to two-way traffic flow. The main reasons for this support were derived from the idea that circulation and navigation would be simplified downtown and that the elimination of one-way streets would be beneficial for businesses.

Several comments on the two-way conversion mentioned that the current configuration (the combination of one-way and two-way streets) is confusing and difficult to navigate and, therefore, any conversions should be done to simplify the system. Those who opposed changing existing one-way streets primarily stated the expense of the conversion being wasteful (particularly since people remembered when the streets were converted from two-way to one-way) and that traffic would increase substantially on those streets. Participants were also asked to prioritize which streets they thought should be the priorities for converting to two-way traffic (based on those initially screened in the previous Downtown Two-way Conversion Study). The results to this question indicated that 13th Street was the street the most respondents felt should be the priority for two-way traffic conversion (for better connectivity between the I-184 connector and the North End neighborhoods).

**ROADWAY IMPROVEMENTS & GENERAL AREAS OF CONCERN**

Finally, the first open house provided opportunity for citizens to locate and comment on general roadway projects and areas of concerns regarding transportation within downtown Boise. They were asked to identify their top concern with transportation construction in the downtown area. The most frequent response to this question was closure of streets/travel lanes identifying that vehicular navigation and mobility were viewed as the greatest detriment during construction downtown. This suggests that coordination of project phasing should emphasize maintaining traffic flow and route options (if possible). When prompted about the highest priority (i.e., where focus and funding should be prioritized) for downtown projects the most common responses were:

- Improving traffic flow,
- Implementing improvements to bicycle facilities, and;
- Beautification and enhancement projects.

**PUBLIC OPEN HOUSE #2**

A second public open house was held on June 6th, 2013 as another opportunity for citizens to provide input on the DBIP. At the meeting, citizens were presented with information related to the plan through four information stations:

- Project Introduction (purpose, outcomes, schedule),
- Bicycle Facilities Concepts,
- Two-Way Conversion Concepts, and
- Project Implementation Concepts.

Again, each station allowed for citizens to provide comments referenced by numbered dots on either an aerial map poster or through an interactive website. Public input comment sheets were provided to citizens at the meeting and could also be accessed via a survey on line for two weeks following the meeting. Based on the meeting sign in sheet, a total of 72 people attended the second open house and a total of 117 comments were received either at the meeting or in the weeks following. The following sections summarize comments received from written comments, map comments, and the general comment survey.

**BICYCLE NETWORK IMPROVEMENTS**

The open house and comment surveys provided the opportunity for citizens to comment on the recommended bicycle network and bicycle users’ map. The bicycle network map showed the draft recommendations for bicycle improvements in downtown based on the comments from the first open house and the PMT’s recommendations. The “Bicycle Users’ Map” was a new graphic, intended to help people plan a bike route through downtown based on their biking comfort, that was presented to get feedback regarding the map’s relevance and if the presentation was understandable.

The following notes summarized the general feedback for the bicycle network and bicycle users’ map:

- The majority of respondents agreed with the proposed bicycle network or agreed with the network with the exception of the resulting parking impacts at one or two locations,
- The addition of bicycle lanes on 5th Street, 6th Street, and Broadway-Avenue B were indicated as the improvements that most respondents felt were most important,
- Most respondents indicated that the Bicycle User’s Map was clear and useful in planning a bicycle route, and
- To support the bicycle network, additional public bicycle parking was the amenity most respondents would like to see.

**TWO-WAY STREET CONVERSIONS & MINI ROUNDBOATS**

The open house also provided the opportunity for citizens to comment on the draft recommendations for two-way street conversions and mini-roundabout locations in downtown Boise. Approximately 50% of the respondents were in favor of the proposed two-way street conversions with another 20% in favor of the conversions with the exception of removing all parking on certain blocks of Jefferson Street. Related to mini roundabouts, almost 60% of the respondents agreed with the proposed mini roundabout locations.

**PARKING REMOVAL**

Finally, the open house also provided the opportunity for citizens to comment on the potential locations where on-street parking would need to be removed to accommodate the two-way conversion or the addition of bike lanes. The respondents identified a primary concern with the potential parking removal on Jefferson Street. To address this concern, additional options (such as maintaining parking on one side of the street) were evaluated for Jefferson Street and an additional outreach meeting for the residents and businesses along Jefferson was held.

Appendix B to this report provides the detailed summary of Public Open House #2. The input received from all of these outreach efforts was incorporated in the project team’s discussions and evaluation of improvements and priorities. The resultant outcomes and recommendations for the DBIP are presented in the next section.
RECOMMENDATIONS & OUTCOMES

The resultant recommendations for the DBIP, have been developed based on input and comment from stakeholders and the public and the PNT’s evaluation. The guiding principals in developing the DBIP recommendations have been:

- Coordinating public works and investments to the greatest extent practicable to minimize impacts to the public, gain efficiencies in the expenditure of public funds, and create opportunities not gained through unilateral efforts;
- Expanding and improving the bicycle network, through improved connections between downtown and surrounding areas, expansion of both exclusive and shared facilities, and upgrade existing facilities where feasible; and
- Improving access, simplify the road network, and increase route options for road users by expanding the two-way network wherever feasible.

The planned projects are primarily a combination of ACHD, CCDC, and ITD construction or maintenance projects within the existing right-of-way. The bicycle network, two-way street conversions, and the intersection improvements were derived from both public opinion captured during the public involvement process and the evaluations and discussions within the Project Management Team.

CURRENTLY PLANNED PROJECTS

The current projects planned within the downtown study area mostly refer to planned roadway maintenance and streetscape projects. Roadway maintenance projects (e.g. overlays and rebuilds) are scheduled within ACHD’s Five-Year Workplan and ITD’s Idaho Transportation Investment Program (ITIP). A summary of these projects as part of the DBIP are shown in Figure 3.

Currently planned streetscape (sidewalk, landscaping, street lighting) projects within downtown are managed by CCDC and are summarized in Figure 4.

DOWNTOWN BICYCLE NETWORK

The downtown bicycle network created as part of the DBIP is a refinement to the downtown Boise component of the 2009 Roadways to Bikeways Plan adopted by ACHD. The refined network for the downtown was developed to establish a comprehensive and connected bicycle system within downtown as well as appropriate connections to that system from areas outside of downtown. The plan identifies east/west and north/south bicycle routes as well as other connections and supporting infrastructure for bicyclists.

In creating the recommended downtown bicycle network it was recognized that not all roadways need to serve all types of cyclists or need to have physical bike lanes. There are many ways to accommodate cyclists in addition to bike lanes and the most appropriate treatments will depend on the specific roadway context and traffic volumes. There may be roadways on which vehicles are prioritized and may only be comfortable to confident and assertive cyclists (such as 9th Street, Front Street, and Myrtle Street). This is acceptable as long as there are reasonable parallel routes that provide all cyclists with connectivity to complete a comprehensive bicycle network. The key bicycle routes established as part of the DBIP are listed in Table 1.

### Table 1. Key Bicycle Routes

<table>
<thead>
<tr>
<th>MAJOR EAST/WEST BICYCLE ROUTES</th>
<th>MAJOR NORTH/SOUTH BICYCLE ROUTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>▪ Jefferson Street – provides key east-west connectivity east of Broadway-Avenue B and west of 16th Street (which Bannock does not)</td>
<td>▪ Broadway Avenue/Avenue B</td>
</tr>
<tr>
<td>▪ Main Street/Idaho Street Couplet</td>
<td>▪ 3rd Street</td>
</tr>
<tr>
<td>▪ Grove Street</td>
<td>▪ 5th Street/6th Street Couplet</td>
</tr>
<tr>
<td>▪ River Street</td>
<td>▪ 8th Street</td>
</tr>
<tr>
<td>▪ Capitol Boulevard (northbound between the Capitol Boulevard Bridge and Grove Street)</td>
<td>▪ 11th Street – provides key north-south connectivity north of State Street and south of Front Street/Myrtle (which 10th Street does not)</td>
</tr>
<tr>
<td>▪ 10th Street – connects to Grove Street where possible</td>
<td>▪ 15th/16th Street Couplet</td>
</tr>
</tbody>
</table>

Some of the major components of the bicycle network within the downtown core include:

- Installing two-way bike lanes along the full extents of Jefferson Street,
- Installing a one-way bike lane couplet on 6th Street (southbound) and 5th Street (northbound),
- Installing bike lanes on Avenue B and Broadway from Jefferson Street to south of the Broadway Bridge,
- Providing a northbound bike lane on Capitol Boulevard between the Capitol Boulevard Bridge and Grove Street (where cyclists can use the signalized crossing to connect to either the Grove Street, if they need to travel east-west, or 8th Street, if they need to travel north-south, bike routes),
- North of Grove Street, providing exclusive bicycle lanes becomes more challenging at this time and would require transition treatments with the right-turn trap lane at Main Street. Continue the bike lanes north of Main Street would also require impacts to either the existing loading zone (on the west side of Capitol) or on-street parking (on the east side of Capitol) between Main Street and Idaho Street. These considerations can be reviewed in more detail if it is desired to extend the bicycle lane in the future. Even in the near-term, cyclists can continue on Capitol north of Grove Street if desired and shared-lane markings will provided to indicated to drivers that they are to share the travel lane with bicycles when present.
- Converting 10th Street to shared lanes and establishing 11th Street as the more favorable north-south bike route,

- Developing 3rd Street as a bicycle boulevard,
- Providing double sharrow markings along the Main Street/Idaho Street couplet on the outer lanes, and
- Upgrading the existing bike lanes along 15th Street and 16th Street to accommodate full width bike lanes and parking.

The proposed downtown bicycle network is shown in Figure 5. In addition to the planned network, Figure 5 shows several facilities (detailed as “Shared Space”) which are intended to note areas within downtown that will serve both bicycles and pedestrians. These areas include:

- the Greenbelt,
- the Grove Plaza,
- the Boise High School pedestrian/bike path,
- the pathway connection between 3rd Street and the Greenbelt,
- the proposed connection between the south of 5th Street and Julia Davis Park, and
- the proposed Pioneer Pathway.
ROAD/INTERSECTION WORK
(2014 - 2018)
Downtown Boise Implementation Plan

Source: ACHD GIS Database; ACHD Five-Year Work Plan; ITD Projects; CCDC Downtown Boise Two-Way Conversion Study; CCDC Streetscape Project Listings
Downtown Boise Implementation Plan

Source: ACHD GIS Database; ACHD Five-Year Work Plan; ITD Projects; CCDC Downtown Boise Two-Way Conversion Study; CCDC Streetscape Project Listings
DOWNTOWN BICYCLE NETWORK

Downtown Boise Implementation Plan

Recommended Improvements
Existing Bike Facilities
Other

Bike Lane
Bike Route/Shared Route
Contraflow Bike Lane
Improve Existing Bike Lane
Convert to Shared Route

Planned Connection
Shared Space
Study Area
Multi-Use Path

Source: ACHD GIS Database; ACHD Five-Year Work Plan; ITD Projects; CCDC Downtown Boise Two-Way Conversion Study; CCDC Streetscape Project Listings

Figure 5
RECOMMENDED TWO-WAY STREET CONVERSIONS

Two-way Conversion
Study Area

Source: ACHD GIS Database; ACHD Five-Year Work Plan; ITD Projects; CCDC Downtown Boise Two-Way Conversion Study; CCDC Streetscape Project Listings

Figure 6
TWO-WAY STREET CONVERSIONS

The current street network in downtown has been criticized as confusing due to the combination of one-way and two-way streets, and more specifically only certain blocks being one-way. The DBIP sought to identify which existing one-way streets would help improve wayfinding and traffic circulation without compromising mobility or intersection traffic operations. Based on the evaluation completed and input received, the following streets have been designated for the one-way to two-way conversion:

- 3rd Street (State Street to Main Street)
- 4th Street (State Street to Main Street)
- 8th Street (Jefferson to Bannock Street)
  - Note that in addition to enhancing vehicular circulation, the conversion of this section of 8th Street allows for bike lanes to be provided in both directions (northbound and southbound) to connect the new Jefferson Street bike facilities with the heavily utilized 8th Street bicycle corridor.
- Converting this block to two-way travel may require reconfiguration of the signal at the 8th Street/Bannock Street intersection and the alignment of southbound 8th Street will have to be maintained through that intersection. However, providing bike lanes in the same direction of travel as vehicles is a preferred solution to a contraflow bike lane given the potential conflicts of that lane with on-street parking.
- 11th Street (State Street to Main Street)
- 12th Street (State Street to Front Street)
- 13th Street (State Street to Main Street)
- 14th Street (State Street to Main Street)
- Jefferson Street (1st Street to 16th Street)

The proposed two-way conversions are shown in Figure 6. Detailed geometric conceptual layouts of these streets in two-way configuration are provided in Appendix D to this report.

TWO-WAY CONVERSION OF 13TH STREET

The recommended two-way conversion of 13th Street was only reached after careful consideration between the impacts and benefits that were expected to result. Given its connection to I-184 (the Connector) and to residential areas within the North End, the impact to traffic operations and traffic routing was evaluated in detail including simulation modeling of traffic operations along 13th Street if it were converted to two-way operation. The results of this detailed evaluation indicated that the conversion of 13th Street to two-way operations would not result in any significant impacts to traffic operations provided certain intersection and signal timing improvements were included. From a purely traffic operations perspective, there is no presiding argument for or against the conversion of 13th Street to two-way traffic flow. No significant traffic operational impacts were identified but neither were any significantly traffic operational benefits. There may be other traffic operational benefits that will be seen in the network if 13th Street is converted (such as a relief to existing traffic congestion on southbound 9th Street at Front Street) but those were not specifically reviewed in this analysis.

Considering no significant operational impacts were identified for converting 13th Street, the project team reviewed other considerations with the conversion besides just traffic operations. These considerations give both pros and cons for the two-way conversion. To inform the decision process, Table 2 lists these other factors for consideration.

Table 2 – Other Considerations for 13th Street Two-Way Conversion

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>There are no significant impacts to traffic operations</td>
<td>Will require the removal of on-street parking between Jefferson Street and Idaho Street (on the west side) and between Idaho Street and Main Street (on the east side) to accommodate needed turn lanes</td>
</tr>
<tr>
<td>Conversion will improve overall connectivity within this portion of the downtown network</td>
<td>There is limited curb to curb width, so, while two-way flow will accommodate cyclists in the regular travel lane, there is not enough space to provide exclusive bike lanes while maintaining on-street parking</td>
</tr>
<tr>
<td>Conversion will provide a simpler, less confusing environment since the full extents of 13th Street will be two-way</td>
<td>Will require the construction of an exclusive southbound right turn lane at Front Street</td>
</tr>
<tr>
<td>Conversion will provide another continuous north/south route through downtown and to access key destinations (such as the Connector)</td>
<td>There will likely be restrictions on left-turns on to 13th Street from westbound State Street during the PM peak period since an exclusive left-turn lane cannot be provided</td>
</tr>
</tbody>
</table>

Based on balancing all these considerations and the significant public support for the conversion of 13th Street, the project team ended with a recommendation to include the conversion of 13th Street as a project within the DBIP. The detailed assessment of the 13th Street two-way conversion is provided as Appendix E to this report.

Proposed bicycle improvements and two-way conversions will require the removal of some street parking on 5th, 13th, 15th and Jefferson Streets. ACHD and the City of Boise will continue to work with affected parties on solutions to mitigate parking impacts in these areas.
INTERSECTION IMPROVEMENTS

With the implementation of all the previous projects mentioned, the intersections affected by each will require attention to accommodate these changes. Many will involve minor changes such as changes to signing or pavement markings, however some of the more major improvements involve signal installation or conversion to a mini-roundabout. Candidate mini-round about locations were initially determined from intersection volumes and lane configurations. A field investigation of the mini-roundabout candidate locations was conducted to identify potential parking impacts as well as other challenges or considerations for their implementation. The candidate mini-roundabout locations and findings from the field review are shown in Table 3.

The intersection at 3rd Street/Bannock Street is anticipated to be the first conversion to a mini-roundabout in 2014. This project to serve as a pilot test for how drivers and cyclists will interact with the new intersection. Intersection improvements are further detailed in the Sequencing & Coordination Section and in Appendix D.

Table 3 – Candidate Mini-roundabout Locations

<table>
<thead>
<tr>
<th>Intersection</th>
<th>On-Street Parking Impacts</th>
<th>Other Considerations/ Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>3rd Street/ Jefferson Street</td>
<td>- Loss of 8 to 10 parking spaces (approximately 2-3 on each leg for increased width, splitter islands, and pedestrian ramps)</td>
<td>- Current intersection diagonal width is only 59’ - Roundabout implementation would require curb adjustments to provide enough width for an 80’ inscribed circle</td>
</tr>
<tr>
<td>3rd Street/ Bannock Street</td>
<td>- Loss of 4 parking spaces (1-2 on each leg for splitter islands and pedestrian ramps)</td>
<td>- May require tree removal on SE, SW, and NE corners for pedestrian ramps - Tree removal could be mitigated with adjustments to crosswalk placement - Current diagonal intersection width is approximately 83’ (mini-roundabout would fit within this area without additional width needed)</td>
</tr>
<tr>
<td>10th Street/ Grove Street</td>
<td>- Loss of 6 parking spaces (1-2 on each leg for splitter island and pedestrian ramps)</td>
<td>- There are opportunities for access modifications on the east leg to minimize on street parking loss and improve circulation - Current diagonal intersection width is approximately 84’ (mini-roundabout would fit within this area without additional width needed)</td>
</tr>
<tr>
<td>11th Street/ Grove Street</td>
<td>- Loss of 4 parking spaces (1-2 on the north, south, and west legs for splitter island and pedestrian ramps)</td>
<td>- Current westbound right-turn lane (from Grove to 11th) would not be needed with a mini-roundabout and could be replaced with 2 on-street parking spaces</td>
</tr>
<tr>
<td>12th Street/ Grove Street</td>
<td>- Loss of 6 to 7 parking spaces (1-2 on each leg for splitter island and pedestrian ramps)</td>
<td>- Potential lamp post impacts on NW corner - West side of 12th Street (Grove Street to Front Street) curb to be examined for setback</td>
</tr>
<tr>
<td>14th Street/ Grove Street</td>
<td>- Loss of 6 to 7 parking spaces (1-2 on each leg for splitter islands and pedestrian ramps)</td>
<td>- Driveway challenges at 5W, 5E, and NE corners (will require further examination to ensure parking circulation and access is maintained)</td>
</tr>
</tbody>
</table>

SEQUENCING & COORDINATION

Proper coordination and sequencing of the projects identified becomes the principal guidance of this effort. Downtown Boise was examined on a block by block basis to combine projects from different agencies to be worked on during the same construction period. This coordination aimed to bring together planned roadwork and maintenance schedules from ACHD, streetscape projects from CCDC, and utility work within the right-of-way. With those projects serving as a base, elements of the bicycle network and two-way conversions would occur on those same blocks. All of the projects identified in the DBIP are planned to be completed between ACHD’s Fiscal Year 2014 and 2019. Sequencing was planned based on logical implementation of projects, identified priority needs, minimizing disruptions and impacts on an area basis, and funding availability and allocation. Key considerations in developing the sequencing plan were:

- Completing work on Capitol Boulevard prior to the Broadway Bridge improvement project so that both river crossings would not be under construction at the same time,
- Having fewer overall downtown roadway projects occurring in 2015 when the Broadway Bridge improvement project is underway,
- Holding improvements and maintenance work on Broadway-Avenue B until 2016 after the Broadway Bridge project is completed (it is recommended this be reviewed again once it is determined if the Broadway Bridge project will fully close the bridge or if traffic will be maintained across the bridge during construction),
- Completing projects associated with areas of CCDC streetscape improvements prior to 2017 (CCDC’s central district sunset), and
- Focusing work on State Street later within the five to seven-year time period once two-way conversions and other circulation improvements have been completed.

The identified sequencing of projects is summarized in Figures 7 through 11 with each graphic highlighting a year of projects within the downtown study area. Figure 12 shows and details the parking impacts anticipated as a result of the projects shown in Figures 7 through 11. Cost estimates for the ACHD portion of the work outlined over the five to seven year implementation period is provided in Appendix F.
DOWNTOWN PROJECT SEQUENCING
2014 PROJECTS
Downtown Boise Implementation Plan

Road Work/Maintenance
Intersection Improvement
Streetscape
Study Area
Two-way Conversion

ROADWAY IMPROVEMENTS
M - Mini-roundabout
G - Signal Installation/Modification
SSL - Signing/Striping/Lighting

BIKE IMPROVEMENTS
BL - Install Bike Lanes
SL - Install Shared Lane Markings
CBL - Install Contraflow Bike Lane
IBL - Install Improved Bike Lane
CSL - Convert to Shared Lane Markings

Source: ACHD GIS Database; ACHD Five-Year Work Plan; ITD Projects; CCDC Downtown Boise Two-Way Conversion Study; CCDC Streetscape Project Listings

August 2013

Downtown Boise Implementation Plan

Figure 7
Downtown Boise Implementation Plan

Source: ACHD GIS Database; ACHD Five-Year Work Plan; ITD Projects; CCDC Downtown Boise Two-Way Conversion Study; CCDC Streetscape Project Listings

Figure 8

DOWNTOWN PROJECT
SEQUENCING
2015 PROJECTS
Downtown Boise Implementation Plan

ROADWAY IMPROVEMENTS
M - Mini-roundabout
G - Signal Installation/Modification
SSL - Signing/Striping/Lighting

BIKE IMPROVEMENTS
BL - Install Bike Lanes
SL - Install Shared Lane Markings
CBL - Install Contraflow Bike Lane
IBL - Install Improved Bike Lane
CSL - Convert to Shared Lane Markings

Road Work/Maintenance
Intersection Improvement
Streetscape
Study Area
Two-way Conversion

Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, and the GIS User Community

August 2013
Figure 9

DOWNTOWN PROJECT
SEQUENCING
2016 PROJECTS
Downtown Boise Implementation Plan

ROADWAY IMPROVEMENTS
M - Mini-roundabout
G - Signal Installation/Modification
SSL - Sign/Striping/Lighting

BIKE IMPROVEMENTS
BL - Install Bike Lanes
SL - Install Shared Lane Markings
CBL - Install Contraflow Bike Lane
IBL - Install Improved Bike Lane
CSL - Convert to Shared Lane Markings

Road Work/Maintenance - Intersection Improvement
Streetscape - Study Area
Two-way Conversion

Source: ACHD GIS Database; ACHD Five-Year Work Plan; ITD Projects; CCDC Downtown Boise Two-Way Conversion Study; CCDC Streetscape Project Listings
DOWNTOWN PROJECT SEQUENCING 2017 PROJECTS
Downtown Boise Implementation Plan

ROADWAY IMPROVEMENTS
M - Mini-roundabout
G - Signal Installation/Modification
SSL - Signing/Striping/Lighting

BIKE IMPROVEMENTS
BL - Install Bike Lanes
SL - Install Shared Lane Markings
CBL - Install Contraflow Bike Lane
IBL - Install Improved Bike Lane
CSL - Convert to Shared Lane Markings

Source: ACHD GIS Database; ACHD Five-Year Work Plan; ITD Projects; CCDC Downtown Boise Two-Way Conversion Study; CCDC Streetscape Project Listings
**DOWNTOWN PROJECT SEQUENCING**

2018 PROJECTS

Downtown Boise Implementation Plan

Source: ACHD GIS Database; ACHD Five-Year Work Plan; ITD Projects; CCDC Downtown Boise Two-Way Conversion Study; CCDC Streetscape Project Listings
# Parking Impacts

## Parking Impacts

<table>
<thead>
<tr>
<th>Street</th>
<th>From</th>
<th>To</th>
<th>Block Side</th>
<th>No. Spaces</th>
<th>Space Type(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5th Myrtle</td>
<td>Broad</td>
<td>east</td>
<td>12</td>
<td>time-limited</td>
<td></td>
</tr>
<tr>
<td>5th Broad</td>
<td>Front</td>
<td>east</td>
<td>8</td>
<td>unlimited</td>
<td></td>
</tr>
<tr>
<td>5th Front</td>
<td>Grove</td>
<td>east</td>
<td>9</td>
<td>metered (+loading zone)</td>
<td></td>
</tr>
<tr>
<td>5th Grove</td>
<td>Main</td>
<td>east</td>
<td>7</td>
<td>metered (+loading zone)</td>
<td></td>
</tr>
<tr>
<td>5th Main</td>
<td>Idaho</td>
<td>east</td>
<td>9</td>
<td>metered</td>
<td></td>
</tr>
<tr>
<td>5th Idaho</td>
<td>Bannock</td>
<td>east</td>
<td>10</td>
<td>metered</td>
<td></td>
</tr>
<tr>
<td>5th Bannock</td>
<td>Jefferson</td>
<td>east</td>
<td>5</td>
<td>metered</td>
<td></td>
</tr>
<tr>
<td>13th Main</td>
<td>Idaho</td>
<td>east</td>
<td>7</td>
<td>time-limited</td>
<td></td>
</tr>
<tr>
<td>13th Idaho</td>
<td>Bannock</td>
<td>west</td>
<td>8</td>
<td>unlimited (+loading zone)</td>
<td></td>
</tr>
<tr>
<td>13th Bannock</td>
<td>Jefferson</td>
<td>west</td>
<td>3</td>
<td>unlimited (time-limited)</td>
<td></td>
</tr>
<tr>
<td>15th Bannock</td>
<td>Jefferson</td>
<td>east</td>
<td>7</td>
<td>unlimited</td>
<td></td>
</tr>
<tr>
<td>15th Jefferson</td>
<td>State</td>
<td>east</td>
<td>4</td>
<td>unlimited</td>
<td></td>
</tr>
<tr>
<td>Jefferson 8</td>
<td>1st</td>
<td>north</td>
<td>19</td>
<td>time-limited</td>
<td></td>
</tr>
<tr>
<td>Jefferson 8</td>
<td>1st</td>
<td>south</td>
<td>3</td>
<td>unlimited</td>
<td></td>
</tr>
<tr>
<td>Jefferson 1</td>
<td>2nd</td>
<td>north</td>
<td>12</td>
<td>time-limited</td>
<td></td>
</tr>
<tr>
<td>Jefferson 2nd</td>
<td>3rd</td>
<td>north</td>
<td>12</td>
<td>time-limited</td>
<td></td>
</tr>
<tr>
<td>Jefferson 3rd</td>
<td>4th</td>
<td>north</td>
<td>13</td>
<td>unlimited</td>
<td></td>
</tr>
<tr>
<td>Jefferson 5th</td>
<td>6th</td>
<td>north</td>
<td>12</td>
<td>metered</td>
<td></td>
</tr>
<tr>
<td>Jefferson 6th</td>
<td>Capitol</td>
<td>north</td>
<td>8</td>
<td>metered</td>
<td></td>
</tr>
<tr>
<td>Jefferson 14th</td>
<td>15th</td>
<td>north</td>
<td>13</td>
<td>unlimited</td>
<td></td>
</tr>
<tr>
<td>Jefferson 15th</td>
<td>16th</td>
<td>north</td>
<td>11</td>
<td>unlimited</td>
<td></td>
</tr>
</tbody>
</table>

**Total Spaces**: 192

---

### On-Street Parking Impacts

- **Due to bike lanes**
- **Due to two-way street conversion**
- **Mini roundabout locations**

---

**PARKING IMPACTS DUE TO TWO-WAY STREET CONVERSIONS AND BIKE LANES**

Downtown Boise Implementation Plan

---

**Figure 12**

---

Source: ACHD GIS Database, ACHD Five-Year Work Plan, ITD Projects, CCDC Downtown Boise Two-Way Conversion Study
COORDINATION OPTIONS

There are several coordination options that exist for project implementation where multiple agencies are involved. Of the recommendations in this plan, the most common coordination will be between ACHD and CCDC on roadways where both streetscape and other improvements are planned. In these situations, the following coordination options exist:

- Keep ACHD and CCDC projects separate (i.e., have different contacts) but ensure work is coordinated through collaboration and oversight

  - In this example, ACHD would have a contract for the street maintenance or roadway improvement work and CCDC would have a contract for the streetscape improvement work and the two project managers would work collaborative to integrate the work.

- Have one agency oversee all of the work (i.e., have it occur under one contract) with the other agency serving as a project team member and with a cost sharing agreement in place

  - In this example, either ACHD or CCDC would have the contract for the entire scope of work (street maintenance, roadway improvements, and streetscape) and would oversee all the work under that contact. There would be a cost sharing agreement in place for the other agency to contribute the costs for their portion of the work and they would be closely involved with the day-to-day project proceedings as a project team member.

The best option for coordination will be determined on a project-by-project basis depending on the scope of the work, the breakdown of work between agencies, and staff resources and availability.

DBIP GIS TOOL

As part of the work previously presented, the DBIP produced a GIS (geographic information system) geodatabase. This geodatabase serves as a compilation of geographically accurate information that:

- serves as a consolidated location for all project information, can be used as a mapping tool
- organizes downtown into block lengths and allows relationships to be determined, and,
- allows users to query information for a particular street extent and see what projects are associated with it, all projects that are programmed, or all projects identified within a certain time frame; and shows all projects identified for parallel efforts (such as water or sewer lines).

All figures shown in this document were created with this GIS tool.

The geodatabase can be used to superimpose information on a map to simultaneously show projects and their relationship to other projects and other aspects of the downtown environment. The content of this geodatabase includes:

- ACHD/ITD Projects (2013-2018),
  - Planned roadway maintenance
  - Planned intersection improvements
- CCDC Projects (2013-2018),
- Existing/proposed bicycle facilities,
- Two-way street conversions,
- Major downtown events,
- Major land use and development projects,
- Parking facilities,
- Parks,
- Land uses and zoning,
- Roadway block information,
- Transit stops and routes,
- Major utilities, and
- Public feedback from the public involvement process.

The geodatabase contains all data presented in this document and is further detailed in Appendix G. The value and usefulness of this geodatabase is dependent upon keeping the information within it up to date as projects are completed and as new projects are identified over time.
FINAL CONSIDERATIONS

The recommendations and sequencing included in the DBIP were based on the best information available at the time of plan creation and possible within the project’s budget and timeframe. It is expected that the recommendations here may evolve over the five-year horizon as projects come on line, if new projects develop, or if funding opportunities change.

In addition, there are other on-going activities or items raised through this process that could not be addressed within the plan’s timeframe and scope that may influence, add to, or modify the recommendations that have been developed to this point. These include:

- Implementing wayfinding and signage along with the implementation of the downtown bicycle network,
- Reviewing existing traffic signal progression and traffic signal timing plans within downtown Boise for opportunities to slow traffic and lower the progression speeds (potentially down to 20 miles per hour) on certain roadways where bicycles and multi-modal travel is encouraged, especially on Main Street and Idaho Street,
- Further evaluation of parking impacts associated with two-way street and bicycle network recommendations and working the affected parties on parking management solutions (e.g. Jefferson Street),
- Evaluating further two-way conversion and/or additional bicycle improvements on particular routes (such as Idaho and Main Streets) (on-going as part of the City of Boise’s commissioned work with consultant Jeff Speck), and
- Identifying opportunities for Low Impact Development (LID) stormwater treatments with future downtown project implementation which will result with coordination and consolidation of work. These opportunities may present themselves with the overlap of major efforts between ACHD and CCDC such as the work proposed on State Street.