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Wayfinding in Boise

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WAYFINDING IN BOISE

Department of
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Executive Summary

This document reviews the strengths, weaknesses, opportunities, and threats of wayfinding within the Boise and downtown areas. This project was done in coordination with the City of Boise Parks & Recreation (Boise P&R) Department as an in-class Service Learning component of the Community and Regional Planning course "CRP 503 Plan Making and Implementation" at Boise State University.

The purpose of this project is to develop a quality set of findings and recommendations that adhere to accepted planning processes and sound methodology. The goal from the onset is to develop content that is broad-based, all-inclusive, and will be helpful to Boise P&R in the future development of a detailed wayfinding plan.

This document identifies major destinations in the city and recommends designated routes to reach these destinations. Recommendations are also made in regards to the location and design of signage, the potential uses of technology within a wayfinding system, and the next steps to take in working toward the implementation of a wayfinding system.

This project referenced and incorporated wayfinding-related work already done by Boise P&R. This included what they see as their key assets, most popular recreation destinations, and typical park -user demographics. Incorporating existing plans allows for a better understanding of what had been considered by Boise P&R as well as what had worked and not worked in regards to wayfinding efforts in the past. While wayfinding can be designed for and used by major transit such as automobiles, this project sets out to focus on non-motorized users such as pedestrians and cyclists. Further consideration could be given to identify ways to improve wayfinding on a larger scale within the city to assist motorists.

One of the major findings of this project indicates that early and consistent communication among various stakeholders would be essential to developing a successful wayfinding system. Multiple agencies should have roles in the design and implementation. It is important that these organizations feel they have a place at the table to discuss their ideas and opinions.

The Boise downtown area is in need of an integrated wayfinding system. This project is a step forward in the development of a successful wayfinding system in the City of Boise.

Acknowledgements

We, the students of the Plan Making and Implementation (CRP503) course of the 2012 Fall Semester at Boise State University, would like to thank our professor, Dr. Thomas Wuerzer, for providing academic guidance, and theoretical and practical support throughout this project. His willingness to motivate and challenge us contributed tremendously to our project.

We are especially thankful to Cheyne Weston and Maria Minnicucci of the Boise Parks & Recreation Department for investing time at the beginning of this project to "set the stage" and parameters for this wayfinding project. Without their enthusiasm to allow students the opportunity to participate in the Parks & Recreation wayfinding planning efforts, this learning opportunity would not have been possible.

We also appreciate the time, expertise and advice provided by the four professionals who were interviewed in the early stages of this wayfinding project. These experts in their respective fields include John Bertram of PlanMakers (planning consultant), Dave Gordon of Ridge to Rivers, Kâren Sander of the Downtown Boise Association and Dr. Jaap Vos of Boise State University's Department of Community and Regional Planning. These experts provided unique insights into past and present wayfinding efforts in the city that contributed to our team's understanding of the challenges and opportunities for a Boise Parks & Recreation wayfinding system.

Finally, we would like to thank the Service Learning Center (SLC) of Boise State University for providing us with the concept of service-learning and integrating into CRP503.

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1.0 Introduction

The Boise State University Department of Community and Regional Planning Department has taken on the task to provide an in-depth analysis about wayfinding for the City of Boise Parks and Recreation Department (Boise P&R) as part of the Plan Making and Implementation course. Within the Introduction section of this report, we intend to provide the reader with:

- background and origination of the project proposal
- a clear purpose and vision, and appropriate geographic scope based on needs of visitors and tourists

The Methodology and Resources section will provide an overview of the different tools the project team used to assess the existing Boise P&R system and the wayfinding resources used to make recommendations for a future and expanded wayfinding system.

From the resources and literature review, we devise a wayfinding strategy based on destinations, routes, and communications strategies. Within this section we will provide the reader with observations and recommendations catered towards Boise P&R as well as address other points of interest for the downtown area. Finally, we will provide recommendations and suggested next steps.

We devise a wayfinding strategy based on destinations, routes, and communications strategies

Proposal

In August of 2012, Boise P&R approached the Plan Making and Implementation class to research wayfinding in Boise. On September 4th, Cheyne Weston and Maria Minnicucci of Boise P&R met with members of the class and discussed their idea. Cheyne and Maria gave a very broad overview of what work had been accomplished so far and their vision of wayfinding in Boise, including ideas for signage, routes, and different forms of technology that could be used. The guidelines for the project were not strict. The class' responsibility was to create a plan that would best fit into the vision of Boise P&R, while encouraging the use of community assets and amenities.

The Boise State University Plan Making and Implementation class took on the project as a Student Service Learning Project. The purpose of the course is to establish knowledge about the theory and practice of plan making, strategic planning, strategic management, and project implementation. With oversight of Boise State University Community and Regional Planning faculty, the class worked on this project throughout the fall semester of 2012.

1.1 Background

Crowded into bustling spaces, they share the richness and diversity of human experience as well as its challenges. In these spaces people may "find their way" in the existential sense, but they also become overwhelmed or disoriented if they physically lose their way. Wayfinding design provides guidance and the means to help people feel at ease in their surroundings. - David Gibson

Defining Wayfinding

Wayfinding is the process of navigating physical space and getting from one destination to another (VanderKlipp, 2006). With existing familiarity of a place, it is easy to find one's way to their selected destination, but for those unfamiliar with the area, finding their way can prove to be overwhelming and challenging. Wayfinding provides guidance for those looking to orient themselves in a particular unknown setting while boosting connectivity between different destinations. Without wayfinding, a user has a fragmented experience as they try to navigate unfamiliar territory, exacerbating circulation problems while also lengthening the user's trip.

The History of Wayfinding

The use of wayfinding systems has been around since before the rise of the urban centers. Romedi Passini has looked at earlier wayfinding methods stating "What did the first signs look like? Broken branches on the hunting paths of prehistoric man? Piles of rocks guiding nomadic tribes to their next camp? Maybe even earlier than that – claw marks on tree bark, or scent messages, the keys for which have been lost long ago (Morville, 2005)." Wayfinding techniques have only become more advanced as urban centers appeared. As cities became increasingly large and more complex, the need for better wayfinding systems became more crucial to make more sense of the chaotic urban landscape. Despite the importance of wayfinding in both cities and buildings, it did not become a specialized profession until the 20th century. In particular, the 1970's saw an increased interest in providing public information systems, such as wayfinding, to enhance the sense of community in an area (Gibson, 2009). Although wayfinding efforts have focused primarily on signage, technology plays a large role in the future developments of wayfinding techniques.

The Wayfinding Process

The process of wayfinding is centered on linking five physical elements: **paths, edges, districts, landmarks, and nodes** (Hirtle, 2011). Paths can be a defined circulation route such as a sidewalk or hiking trail. Following a path is generally simple and user-friendly, but complications can arise when it comes to finding access to and knowing when to turn off the path. Edges are zones of transition where one area ends and another begins. In Boise, an example of this would be the buffer zone along the Boise River Greenbelt that separates the Greenbelt from more developed areas such as the Boise State University campus or the Library!. These can be easier areas to navigate if specific boundaries can be established. Within the edges lie districts, regions with a particular character that are set apart from other regions. Oftentimes wayfinding signage will differ depending on the district so as to maintain the unique character. Landmarks are objects that identify a place and make it easily recognizable. These can range from geographical features to structures and buildings. And the last element is nodes. Nodes are points of intersection and they play the most crucial part in wayfinding since nodes are where most navigational decisions are made. By linking these five elements together, wayfinding can provide a smoother experience in reaching target destinations (Universal Design New York, 2012).

Wayfinding provides cues which help users find their way intuitively and be able to break down a complex area into comprehensible parts. For a wayfinding approach to be effective, it must take into consideration the client organization involved, the audience whom it wishes to reach, and the environment in which the system is to be carried out. It takes these variables into consideration and imposes them on the factors that influence a user's wayfinding ability. This includes the user's cognitive map of the area (mental map generated overtime) and their individual strategies and differences (Hirtle, 2011). Because the ultimate goal of wayfinding is to help users understand how to get to their chosen destination, the wayfinding system should be simple and clear enough that first time visitors can easily navigate the area without instructions from someone already familiar with the area or wayfinding system. Critical part of being user-friendly is finding the right balance between providing too much information and not enough. In providing too much information, the relevant message is lost and the potential signage clutter can be visually unappealing.

Wayfinding Benefits for Boise

The benefits of wayfinding are not limited just to first time visitors of a city or place. Frequently, residents find themselves taking less efficient routes or even become lost the moment they are leaving familiar areas. In addition to guidance and directions, wayfinding also opens up a window of opportunity for further exploring a city's assets. For example, the Boise's

Anne Frank Human Rights Memorial is located alongside the Boise River Greenbelt, but if Greenbelt users are unaware of the proximity to the memorial when passing on the Greenbelt, they may never plan to visit it. If, in this example, signage would indicate the memorial and its proximity, users would be more likely to take a small detour to visit the memorial. An additional point of consideration is how users travel, whether it is walking, biking, driving, or some other mobility form.

Wayfinding techniques should address its different audiences appropriately with information and visual aids. For example, someone in a car traveling faster would generally require large text signs to reach their destination. Pedestrian and bike traffic on the other hand can use maps or auditory stations since they are able to stop and are not limited to travel on roads.

Hierarchy of Wayfinding Systems

It can be useful to view wayfinding as a hierarchy of geographic scales. At the smallest level it is a single property, or even a single building, that contains a mix of destinations. Convention centers, airports, sports stadiums and large urban parks are examples of this small scale of wayfinding. The next geographic scale is represented by a neighborhood, district or possibly a "family" of properties under the ownership or management of a company or public agency. As an example, this service-learning project within the Plan Making and Implementation class of Boise State University's Community and Regional Planning department, would fall into this category as it focuses on wayfinding among public park assets within the downtown area that are owned and maintained by Boise P&R .The third scale is a city-wide wayfinding plan intended to guide travelers already in a city to major public and private destinations, cultural districts, shopping areas, transit stops and similar locations. Finally, wayfinding can be applied at the regional level covering two or more jurisdictions that are typically connected by or share a transportation asset (e.g. sea port, federal interstate) or natural asset (e.g. watershed, air shed, aquifer).

Wayfinding Techniques

When thinking about wayfinding, signage is usually the first thing that comes to mind, but wayfinding can involve all of the senses, whether that is the standard visual signage, auditory guidance, the differing textures of paths, or even smells (Universal Design New York, 2012). The most widely used wayfinding approaches involve signage. These visual aids can be maps, images, text, iconic statues, or even color-coding. Auditory guidance can be anything from self-guided tours using headsets to information kiosks with voice recordings available to provide information. Other wayfinding techniques include the differing textures of paths or even smell, such as noting the scent of a particular bakery or floral shop. With the increasing use of smart phones, there are also many new technological approaches to wayfinding. Some examples include the use of phones to access directions through websites or the use of phone applications (apps) that range from simple directions to real-time directions that also provide additional information about sites along the way.

The main vision of this project is to help people in all stages of life find their way with easier navigation, making it more accessible to get from one place to another and identify points of interest.

Primary Goal of Wayfinding

It is important to remember that wayfinding must serve the primary goal of reducing confusion in navigation and should remain simple and user friendly. Furthermore, wayfinding systems are also beneficial in that they improve route circulation since users are easily guided to their next destination rather than having to stop and ask for directions or even guess their way to their destination. Good wayfinding systems are "responsible for enhancing how a space- whether public, commercial, or private- is experienced by finding order in chaos without destroying character" (Gibson, 2009). Out of the chaos of the city, a user is able to find their way and not simply reach their destination, but also experience a more pleasant journey.

1.2 Vision and Purpose

Our vision for this project is to collaborate with Boise P&R to identify the strengths, weakness, opportunities and threats of wayfinding in the Boise downtown and surrounding areas. Improving wayfinding in the Boise area will lead to better connectivity for pedestrians and bikes. Proper wayfinding will lead to greater accessibility to areas such as the Boise River Greenbelt, parks, and downtown areas. The main vision of this project is to help people in all stages of life find their way with easier navigation, making it more accessible to get from one place to another and identify points of interest.

The purpose of this project is to identify existing wayfinding efforts as well as what can be done to improve them. This document will address resources we have identified as well as tools and details for a future wayfinding plan, with particular focus on Boise P&R assets.

We will use sample situations to describe wayfinding issues from different perspectives. For example, we will present challenges and opportunities of wayfinding from the point of view of families, elderly, younger user-groups, etc. to reflect different user groups with various needs and in different stages of life. This will allow us to identify the best possible solutions to create proper wayfinding, identify destinations and allow people to get from one place to another and easily find the identified destination.

We reviewed the existing master plan of Boise P&R. This allowed us to identify what is currently being researched and used for future wayfinding planning. We strived to form our conclusions in a manner that is befitting of Boise P&R's mission "to enhance Boise's quality of life by working in partnership with the community to foster and support citizen well-being and healthy community environments" (Boise Parks and Recreation Mission Statement).

1.3 Scope and Boundaries

The scope of this wayfinding project is to define its geographic boundaries, recommend wayfinding strategies, and identify its stakeholders and users. This project will also make observations and recommendations that will assist Boise P&R to develop a formal wayfinding plan.

Geographic Scope

The geographic scope of this project is limited to a manageable scale that will enable Boise P&R to phase in an immediate wayfinding plan. Wayfinding routes and sign placement recommendations will be limited to the downtown core area as shown in Figure 1. State Street is determined to be the northern boundary due to the division between the North End neighborhoods and downtown land uses. The east and west are bounded by 16th Street and Broadway Avenue. These streets were both determined to be the farthest reasonable distance that pedestrians would be willing to walk from the center of downtown. The southern boundary is defined by Ann Morrison Park and Boise State University. Ann Morrison Park is bounded by the natural geography of the bench and Boise State University is the farthest southeast location that is reasonably walkable from downtown. Important major destinations that fall outside of this area will also be identified and analyzed during this project.

Figure 1: Geographic Scope of the Wayfinding project.
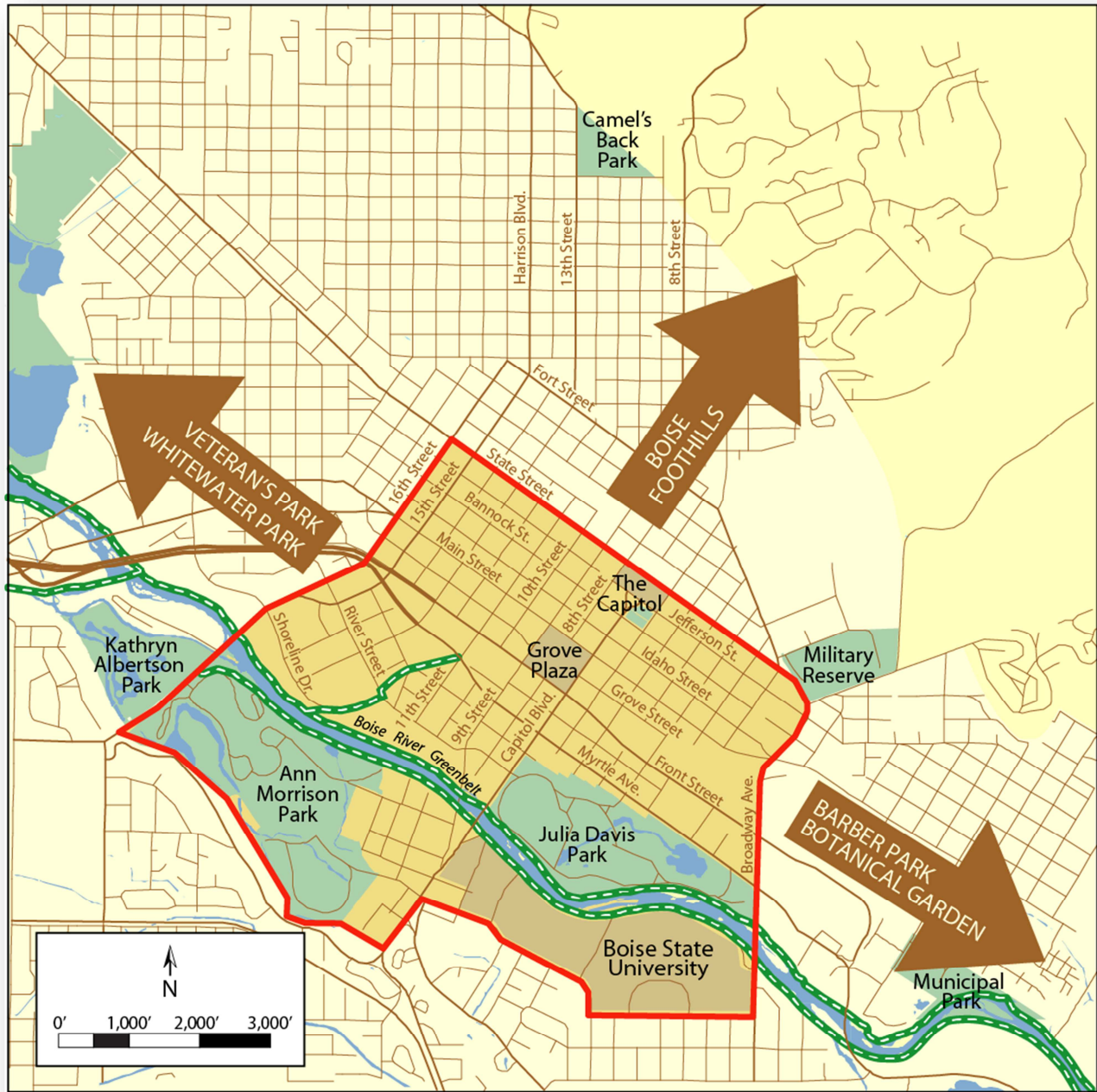
Wayfinding Strategies

The deliverables for this wayfinding project will be recommending destinations and the routes that optimally connect these destinations. We will also suggest communication strategies to convey these destinations and routes to the user. These strategies will include signage, printed materials, landmark usage, and technology options.

<u>Destinations</u>

For the purpose of this project, destination emphasis is placed on major park assets as well as a few key city assets.

- *Boise River Greenbelt* - The Boise River Greenbelt is a major pedestrian and bicycle thoroughfare through Boise. The Greenbelt is a desirable destination for users as well as a key connector for many other downtown destinations. It is essential that this thoroughfare be recognized as such and be equipped with signage pointing out proximities to destinations and noted exits to reach such destinations. After meeting with Boise P&R, an approach to view the Greenbelt as a major east/west corridor or "spine" made it clear to position wayfinding kiosks and signage directing pedestrians and bicyclists north and south of the Greenbelt. Boise P&R and the Ada County Highway District (ACHD) have currently identified some of these north/south decision points at bridges that cross the Boise River. As evident on the map and verified by our walking tour, some of these crossings already contain some basic wayfinding signage.

- *Boise Foothills* - The Boise Foothills are also a major asset for both residents and tourists. Trail heads and adjacent parks, such as Camel's Back Park, are major destinations for recreational activities. Although this asset falls outside of our geographic scope we will address the Boise Foothills in our wayfinding strategy due to its significant impact on Boise P&R.

- *Major Parks* - Walkable downtown parks are valuable assets to the city of Boise. Wayfinding signage will give direction to these parks via routes that are valuable to city stakeholders. Many of the major parks also provide walkable and bikeable paths that will be included as wayfinding routes for this project.

- *Other City Assets* - Because of the significance of certain city infrastructure, such as the museums, memorial sites, and other appreciated destinations, these locations will also be discussed throughout this project.

<u>Routes</u>

Wayfinding routes will be identified that efficiently access Boise's assets and avoid sign clutter. Although numerous routes may allow for many visits to many locations, the signage needed to accommodate many routes could overload the senses and actually create an unawareness of wayfinding signage. This then could lead to wayfinding confusion. The least number of routes will be identified that satisfy the most wayfinding needs.

Communication Strategies

Wayfinding communication strategies will be suggested as a means to effectively connect destinations and routes to a diversity of users and also provide the user with means of utilizing the recommended routes. The following topics will be discussed:

- Signage
- Landmarks, Symbology and Street Marking
- Printed Material
- Technology

Stakeholders

Stakeholders for this project are people and agencies that would benefit or be affected by a Boise wayfinding plan, agencies that have the aspiration to prepare a Boise wayfinding plan, agencies that have a legal stand in the wayfinding plan implementation processes, and users of street signage.

Multimodal Users

Our wayfinding recommendations are intended for local and visiting non-motorized users such as pedestrians and cyclists. Although automobile and transit signage is necessary for city-wide wayfinding, we will recommend routes and signage that will have a pathway, sidewalk and inner plaza perspective. Transit and automobiles will only be mentioned for arriving to and departing from parking locations within the downtown area and used for long distance destinations outside the area of implementation.
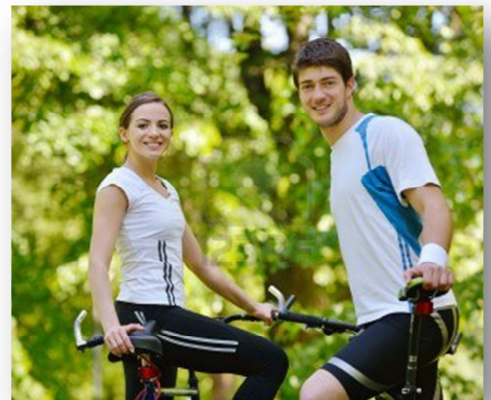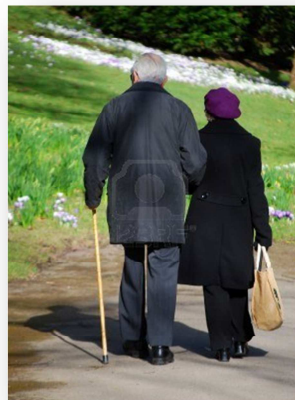
2.0 Methodology & Resources

2.1 Project Methodology

We took several steps in developing the plan outline. Our tasks were used in helping us better understand the current situation of wayfinding in Boise, develop a literary review of current plans nationally, analyze the opportunities and challenges to wayfinding in Boise, and to develop concrete recommendations for Boise P&R with the intent that the department will move forward with a wayfinding implementation strategy.

In Class Brainstorming

Our process began with in-class discussions. Time was allotted weekly for our team to give continuous updates on the project and make decisions on how to move forward. Early in the project, brainstorming consisted generally on what wayfinding is, consideration of who the users are, what assets comprise the Boise P&R, and what challenges the department may face in implementing a plan. As our project progressed, our discussions covered issues concerning specific signage, routes, locations, destinations, and implementation strategies.

Visioning Process

Our team performed a visioning process, which helped us formulate a future goal for wayfinding in Boise. This process involved a team discussion on what we as community members would like to see from a wayfinding plan for Boise. We started with keywords that suggested our overall impressions of what a successful wayfinding plan would look like and used those keywords to form a mission statement.

Walking Tour

One of the initial but most important tasks that our team performed was two walking tours through the downtown area. These walking tours helped to visually collect information where wayfinding techniques being currently used in our scope of area lack. We used this time to initially brainstorm routes and decide on where destinations and hubs of activity are located.

Literature Review

Our team performed a review on local plans that concern the vision and goals of Boise P&R. This process helped us better understand how to align our wayfinding recommendations with existing resources and strategies.

In order to gain an understanding of wayfinding practices beyond Boise, we researched projects that have taken place nationally. These plans and implementation strategies helped our team develop a basic structure for our plan and provided new and innovative ideas to include in our recommendations. A list of plans that were considered can be found in Appendix B.

Interviews

To include more experience and input from the community, we performed several interviews with various professionals in planning, Boise P&R, and business development. These interviews provided a layer of community understanding as our team moved forward. The interviews also lead to a desire for more collaboration in order to implement the project. See Appendix A for a list of who we interviewed throughout the process.

SWOT Analysis

The class performed a Strength, Weakness, Opportunities, and Threats (SWOT) analysis on the assets and amenities involved with Boise P&R. This analysis was performed midway through the project, and allowed the team to take a step back and look at the project on a more comprehensive level. Our SWOT analysis is reflected in the OBSERVATIONS AND ANALYSIS category in each section throughout the document.

	STRENGTHS	WEAKNESSES
INTERNAL	- Open space - Health - Recreation—human and animal - Recreational activities - Public agency - Education/Awareness - Wildlife/Conservation - Buildings - Revenue generation	- Public agency - Transportation—internal - Safety/Security - Foothills - Existing wayfinding/Geographic scope - Wayfinding—transportation mode
	OPPORTUNITIES	**THREATS**
EXTERNAL	- Open Space - Health - Recreation—human and animal - Recreational activities - Transportation—internal - Education/Awareness - Public and private events - Public image/Beautification - Buildings - Foothills - Wayfinding—possible connectivity - Wayfinding—destination awareness	- Recreation—human and animal - Recreational activities - Transportation—external - Public events - Safety/Security - Wildlife/Conservation - Foothills - Wayfinding—transportation mode

2.2 Project Resources

Establishing a better wayfinding system in Boise would be in line with the city vision laid out in Blueprint Boise, the city's comprehensive plan adopted in 2011. One of the key objectives in Blueprint Boise is to "establish a strong linkage between land use, transportation and urban design" (City of Boise, 2011). Blueprint Boise acknowledges that this requires a high level of coordination between agencies in order for this to be successful. Specific themes mentioned in the plan are creating a more connected community and promoting active and healthy lifestyles. Blueprint Boise's recommendations are to encourage greater pedestrian and bicycle use by expanding non-motorized transportation paths and finding new ways to further connect the Boise community both technically and socially.

Furthermore, Blueprint Boise cites that it will continue to work in conjunction with the Ada County Ridge-to-Rivers Pathway Plan, which focuses on improving pathways for pedestrians, cyclists, people with disabilities, and other types of pathway users in Ada County. In line with the goals of the Ridge-to-Rivers Pathway Plan, Blueprint Boise aims to improve connections between the city's parks, neighborhoods, and open public spaces by focusing on improving on-street pathway systems, multiple-use path systems, and multiple-use trail systems that serve commuters and recreational enthusiasts. An improved wayfinding system would potentially allow for more use of the pathways and open public spaces and make transportation in these areas more user-friendly. Such a system would improve the connectivity of the different locales throughout the city while also promoting healthier methods of transportation.

Concurrent Wayfinding Efforts & Destinations

There is currently a wayfinding program proposal underway within Downtown Boise, led by Capital City Development Corporation (CCDC) and Downtown Boise Association (DBA), framed as an economic development tool for the area. Downtown possesses plentiful arts, historic buildings, retail, dining, nightlife, and special event facilities, though little navigation exists. Presently, there are two wayfinding kiosks in the 8th Street Cultural District, sponsored by Boise City Arts and History Department; these are assets to the district. As Boise P&R and Downtown Boise are in the initial phases of wayfinding solutions, both groups share common interests.

Another wayfinding initiative is underway at Ada County Highway District, focusing on bicycle wayfinding signage. This project is centered on the bicycle mode only but ACHD has developed a sign template and identified a hierarchy of sign locations throughout their public right-of-way system. As of the writing of this report installation of these signs can be seen throughout Boise.

RECOMMENDATIONS FOR BOISE P&R

- *Increased Agency Coordination*: As noted above, there are at least two other concurrent wayfinding initiatives within Boise City – DBA/CCDC's plan for downtown and ACHD's wayfinding map for bikers. Beyond these organized efforts there are many others with vested interests and who may benefit from a city-wide wayfinding plan. While Boise P&R could develop and implement a wayfinding plan for its facilities alone, our team recommends an integrated and coordinated approach. This seems especially important along the Greenbelt and at major park borders that interface with adjacent businesses and ACHD's right-of-way. This would not preclude, of course, Boise P&R from developing its own unique branding or sign identification used inside a park.

- *Maximize User Surveys*: Quality and highly effective wayfinding systems meet the needs of a broad cross-section of users. To better inform Boise P&R of the needs of visitors, park patrons, the business community and others, a survey targeted to key destinations, alternative modes of transportation, parking and other wayfinding elements could provide useful background data in developing a master wayfinding plan. We believe this would give decision-makers an in-depth insight on what users of the Greenbelt and other park amenities need or think about the demands for wayfinding.

3.0 Wayfinding Strategy

As noted in the Executive Summary, the intent of this document is not to create an actual wayfinding plan but to provide a "big-picture" perspective of wayfinding as it pertains to Boise P&R assets in the downtown area. A detailed wayfinding plan that is built on citizen and park user participation, wayfinding best practices, and is integrated with other Boise wayfinding initiatives is the logical next step for the department. Our project team wanted to include findings and recommendations that are easily transferable to a future plan and specific to the existing Boise P&R system.

This section transitions from the more theoretical background and study methodology sections above to site-specific observations and analysis. It is comprised of three main sub-sections: **Destinations, Routes, and Wayfinding Communication**. Destinations examine both City of Boise and private amenities that are primary attractions and generate high volumes of pedestrian and bicycle activity. The Routes section looks at both existing and future pathways to reach those destinations. The last section intends to address the many different facets of how key destinations and routes to those destinations are communicated to the public. Finally, to help visualize how a Boise P&R wayfinding system either promotes or discourages public use, three wayfinding persona stories are included in the Routes section.

Our project team wanted to include findings and recommendations that are easily transferable to a future plan and specific to the existing Boise P&R system.

3.1 Wayfinding Destinations

From our team's initial meeting with Boise P&R, several destinations fell outside the boundary/scope of their owned and managed property. One particular destination was The Grove, thus our group efforts to study and walk routes between downtown destinations and the Boise River Greenbelt was an important part of the project's process.

The expert interviews provided further clarification and aided our understanding of visitor and tourist destinations within our geographic scope, and led us to consider how different modes of transportation would arrive to these destinations.

The unique destinations of Boise P&R provide a multitude of benefits including recreation, transportation infrastructure (pathways and greenbelt), and a variety of facilities. As the concern for Boise P&R is to ensure that these destinations are easily located for visitors and tourists via wayfinding, Downtown Boise also shares this need. The project team focused on the following destinations in determining the strategy of signs and major routes:

Ann Morrison Park (Boise P&R)

Basque Block

Boise Art Museum

Boise River Greenbelt (Boise P&R)

Boise State University

Capitol Building

City Hall

Cultural District - BoDo & 8th Street Marketplace

Discovery Center of Idaho

Fort Boise Community Center

Military Reserve (Boise P&R)

Grove Plaza

Idaho Anne Frank Human Rights Memorial (Boise P&R)

Idaho Black History Museum

Idaho Historical Museum

Julia Davis Park (Boise P&R)

Kathryn Albertson Park (Boise P&R)

Library!

Zoo Boise

OBSERVATIONS AND SWOT ANALYSIS

The identification of and directing users to these various destinations from the Greenbelt is a minor and almost non-existent element of the existing system. Some destinations exist on the mileage marker maps, but a user must stop and take time to examine the map in order to find them. This is a greater detriment to bicyclists and skateboarders than to pedestrians, though an improvement that would benefit all users. Providing directional and wayfinding signs at key intersections to primary destinations along the Greenbelt that are large enough to see and easy to follow would enhance this facility for many users.

A Boise River Greenbelt survey conducted by Boise State and Boise P&R in 2012 indicated a high percentage of people use the Greenbelt for commuting from home to place of employment. For this population, there is presumably less need for destination-type signs.

Additionally, many recreationalists, especially those traveling longer distances will not rely upon destination signs to the same degree that visitors or new residents. For this reason and others, it is important to locate destination-oriented signs at multiple locations, targeting visitors and new residents.

A detailed wayfinding plan will want to examine the full array of Boise P&R destinations, not only the major destinations listed above, to determine how best to incorporate them into a wayfinding communication strategy. The project team identified these other key park and non-park assets within or near the downtown study area that could be incorporated into wayfinding signs, brochures or other methods:

Barber Park	Municipal Park
Boise Depot	Park Center Park
Botanical Gardens	Pioneer Cemetery Penitentiary
Camel's Back Park	Quarry View Park
Capitol Park	Quinn's Pond
CW Moore Park	Ray Neef River Recreation Park
Foothills Learning Center	Rhodes Park
Hulls Gulch Reserve	Table Rock & Castle Rock Reserve
Marianne Williams Park	Veteran's Pond
Memorial Park	Veteran's Memorial State Park
MK Nature Center	Warm Springs Golf Course

RECOMMENDATIONS FOR BOISE P&R

We recommend an inclusionary process of engaging and collaborating with general citizenry, underrepresented individuals/classes, and other relevant stakeholder groups regarding destinations within the geographic scope. The emphasis on public participation presented in this analysis is consistent with strategic wayfinding plans throughout the country, as identified in our literature review. Our project team focused efforts on internal research and expert conversations in the public or private sector.

3.2 Wayfinding Routes

Wayfinding routes for this project are existing corridors within and beyond Boise P&R property that have three distinctive features: they connect Boise P&R assets to each other as well as to other popular community destinations, they are accessible to all, and they present the pedestrian or bicyclist with a safe, aesthetically-pleasing path with the least amount of

vehicular crossings. A wayfinding route is distinguished from a trail or pathway thus it may incorporate sidewalks or bike lanes along public streets as well. A benefit to designating or recommending routes in a wayfinding plan is that the route incorporates informational and directional signs and kiosks. It may not necessarily be the most direct or efficient path because its intent is to inform, educate, offer opportunities as well as a pleasant sensory experience. By design, our team did not identify all or best alternative routes; this would be woven into a future detailed wayfinding plan. Our intension is to demonstrate, with existing geography and infrastructure, how a route could complement the Boise P&R system and show how wayfinding can interface with the entire transportation system.

Multimodal Users

The effectiveness and user-friendliness of wayfinding routes is improved by specifying the mode of transportation that delivers the user to their destination. Our analysis determines that concentrating wayfinding to pedestrian and bicycle users is the most applicable for Boise P&R users. Specifically, we are focusing on the pedestrian experience based on an individual(s) with little, if any, prior knowledge of Boise's downtown geographic area.

Parking

Since most tourists and visitors outside a five to ten mile distance from downtown will drive to their primary destination and then walk to additional destinations, routes are within close proximity to automobile parking. In the

Scenario 1: Family Day Trip

It is a nice spring day and a family from Meridian decides to come in to Boise to see some of the sights. Their general plan is to start at the Discovery Center, since the mornings are still cool, do some shopping and eat lunch in the downtown area, and then visit the zoo in the afternoon. As a family with several kids including one in a stroller, their concerns are safety, distance and ease of path use.

Coming in to Boise, nothing indicates where the Discovery Center is, but they looked up directions ahead of time. After spending some time at the Discovery Center, it is time to go downtown for some shopping and food. The drive would take around five minutes, however, this would not include the time to load and unload the kids and stroller from the car, find parking, and then walking from the parking spot to downtown. From there, the family does some shopping and finds a place to sit down and eat. After finishing up their activities in the downtown area, it is time to go back to the car and carry on to the zoo. The drive is still about five minutes, but time is lost in loading up the car and having to go off the direct path by finding parking. Once in the car, they head over to Zoo Boise for the rest of the afternoon.

If they were to walk, it would take approximately ten minutes. Since it is a family with small kids and a baby in a stroller, we can assume it will take a couple minutes more time to reach downtown since they will walk at a slower pace. While it might seem to take more time to walk, in the end, it could actually save time in this case since they don't lose time loading up the car and finding parking. The same goes for the trip from downtown to Zoo Boise. If choosing to walk, there will be some walking along and crossing of several high-traffic and wide streets which might deter the family from walking.

Whether making the trip on foot or in a car, there is very limited signage to indicate any of the destinations. The only two pre-dominant signs that help orient users are the two Wayfinder: Downtown Boise maps that are located in the Cultural District, both of which are oriented in a confusing direction. These maps provide an overview of downtown and a few outlying areas including the zoo. The Discovery Center is not listed on the map at all. On this route, the only way users would be able to find their way to destinations without prior knowledge would be to get directions ahead of time or ask for directions along the way.

instance of parking and walking from City of Boise parks, many free parking facilities exist for access to the Boise River Greenbelt path system. Locations include Ann Morrison Park, Julia Davis Park, Municipal Park, and Veterans Memorial Park.

Transit

We have been mindful to note route choices that coincide with the availability of transit stops within close proximity and will recommend signage at major transit stops and the newly proposed transit center in downtown Boise.

Scenario Routes and Current Challenges

Since it is not possible to identify or anticipate the needs of every potential user of the Boise P&R system we built on the concept of scenario-based planning where multiple alternatives are examined versus planning around a single potential outcome. While surveys and statistical sampling certainly aid in designing a quality wayfinding network, the size and diversity of the population are too large to customize the system down to the individual level. Our team "navigated" through the system from the perspective of three different users or personalities and created three varied scenarios to reflect those personalities (Scenarios 1-3).

As described in Section 2.1, viewing wayfinding through the lens of a family, senior citizen and recreational visitor highlighted some critical needs of these user

Scenario 2: Senior Citizen Morning

An elderly man wants to spend his morning at the Boise Arts Museum, the Boise Library!, and Ann Morrison Park to pass. He might come into town either driving by himself, using public transit, or being dropped off. As a senior citizen, he is concerned about walking on easy paths as well as walking shorter distances.

He starts off at the Boise Arts Museum to see the newest exhibit before deciding to stop by the library to read one of the newspapers and check out a book. Because the weather is nice, he decides to read his book at Ann Morrison park on one of the benches. He knows that Ann Morrison is on the South side of the river and more to the West. As he leaves the library, he continues South on Capitol Boulevard, crossing over the river. From there, there is no clear signage indicating how to get on the Greenbelt trail (see image …). He cuts through a private lawn to get on the Greenbelt trail that has no clearly marked or easy access from this point. Once on the Greenbelt, he continues West to the park and find a place to read for a while. On his return trip, he follows the same route to get back to the North side of Capitol Boulevard from where he will return home.

How could his trip have been better? There certainly is a more scenic route that he could have taken. For example, if he had accessed the Greenbelt on the North side of the river and crossed over the 8th Street Pedestrian Bridge, he would have avoided the high-traffic Capitol Boulevard crossing and enjoyed a more scenic experience. It is also easier to access the Greenbelt after crossing the 8th Street Pedestrian Bridge than Capitol Boulevard. Either way, by taking either bridge to access the Southside of the Greenbelt, he will not accidentally pass up Ann Morrison Park. Also, by taking the 8th Street Pedestrian Bridge, he would have passed by the Idaho Anne Frank Human Rights Memorial, which he would have otherwise missed unless he spotted it on one of the Boise Parks and Rec Greenbelt maps.

Whether or not the elderly man chooses to take the Capitol Boulevard Bridge or the 8th Street Pedestrian Bridge, the signage is very poor between the three destinations. The Boise Arts Museum and the Boise Library! stand out, but there is no signage directing users to the Idaho Anne Frank Human Rights Memorial. Also, if one choses to take the Capitol Boulevard option, the only sign is a sign that says Boise River that is oriented along the flow of traffic. That means that simply walking along the sidewalk, one must nearly step into the street to properly read the sign. There are no indications of which direction to take to arrive at Ann Morrison Park. While getting to the Greenbelt can generally be pretty intuitive, knowing where to get off the Greenbelt to reach your next destination is not.

groups. The intention of this story-telling method is not to limit or sStereotypical users, but to demonstrate the mobility needs and challenges faced by a specific segment of the population. Clearly, many different stories could be told. Yet many of the obstacles and opportunities presented for these three demographic profiles cross-over and apply to all potential Boise P&R customers.

OBSERVATIONS AND SWOT ANALYSIS

The City of Boise has many valued assets and many options for accessibility; though it lacks defined routes to travel in between them, aside from the Boise River Greenbelt. Many possibilities are present for designated routes within the Boise P&R system. Most destinations that we are considering in our scope are north of the greenbelt. Moving from west to east, major routes branching off the greenbelt include:

- *Americana Boulevard* offers access downtown via River Street or the Linen District. It also provides access to west downtown via Grove Street.

- The newly created *Pioneer Corridor* offers direct access from the greenbelt at the Ann Morrison Park Bridge, continuing to Myrtle Street and Jack's Urban Meeting Place (JUMP), with future purpose to connect to The Grove Plaza.

- *8th Street* is a direct link to BoDo (The Cultural District) and The Grove Plaza.

- *Capitol Boulevard*. provides access to Julia Davis Park and its many amenities, continuing on to downtown.

Scenario 3: Recreational Visit

A couple from out of town is visiting a friend that lives in the Boise area for the weekend. They plan on staying with their friend and seeing some of the standard Boise sights with her, but would also like to fit in a couple of recreational activities. Their friend mentioned the new Boise River Park for whitewater sports enthusiasts as well as the Foothills, so the couple brings their kayaks and bikes with them.

The couple arrived early afternoon on Friday and decides to scout out the whitewater park. Their friend took off the afternoon, so they all ride their bikes from the hosts' house in the North End to the Boise River Park by taking the Greenbelt. The three of them check out the whitewater park for a while before taking the Greenbelt and going into downtown to find a restaurant for dinner. On Saturday afternoon, the couple decides to go back to the whitewater park so they drive out that way with their kayaks and directions in hand. Sunday morning starts off with brunch, so the couple and their friend all bike to downtown. From there, they walk around downtown a bit before heading over to Camel's Back Park to access the Ridge to Rivers trail system in the foothills.

While this weekend trip went quite smoothly because of their friend's assistance, if they had come in from out of town without a friend to help guide them, it would have been much more difficult to plan. First off, on the first night, their friend guided them to the Boise River Park on the Greenbelt. If they had arrived into town and were staying somewhere downtown, there is no clear signage indicating access points to the Greenbelt. The only directions are to head south until you have to cross a river. Also, with current Greenbelt signage, there is no indication of the whitewater park on the Greenbelt map. On their return trip, there is no signage indicating where to turn off the Greenbelt to get to downtown. On Sunday, the group biked into downtown for brunch and some exploring. Furthermore, from downtown, there is no clear indication of how to get to the foothills. While it is easy to see them as a geographic feature, there is no mention of how to get to any of the main trailheads on any of the maps. One would have to check on a Ridge to Rivers map or website ahead of time if they even knew the organization existed. Coming in from out of town, their best resources would be to either visit the visitor information center on The Grove, which has limited signage to help users actually find the office or ask at a hotel information desk.

- *Friendship Bridge* connects Boise State University to Julia Davis Park.

- *Broadway Boulevard Bridge* offers access from Boise State University to Julia Davis Park, grocery stores, St. Luke's Hospital, Fort Boise, and to the Military Reserve.

- The *East Park Center Footbridge* (from Park Center Boulevard) provides access to the MK Nature Center, Warm Springs Golf Course, Idaho Penitentiary, Idaho Botanical Gardens, Table Rock, Marianne Williams Park, and Barber Park.

Accessibility Challenge

One example of an existing route challenge to both of the access-challenged or disabled personalities is the Greenbelt access located on the east side of 9th Street on the south side of the Boise River. Access to the Greenbelt at this location is limited to a staircase or walking down a fairly steep incline on grass. There is no ramp. This is an attractive location with nearby parking that could provide access to a greater number of users if some type of ADA access was constructed.

**RECOMMENDATIONS FOR BOISE P&R**

Define Wayfinding Routes

Designated routes intelligently direct users through downtown with intention and purpose. This system will maximize the exposure to key destinations and attractions that may be otherwise hidden from the public eye. Showing routes on maps and channeling funds and improvements to defined routes can attract users and even become an economic development tool for private destinations. It is recommended that the routes shown in Figure 2 be utilized by the Boise P&R to help create this type of impact and incentive. We believe these routes to be optimal corridors for both Boise P&R and their users.

We evaluated many streets and pathways throughout the downtown area for this optimal impact. There were a few locations of consideration that are not included in our final recommended routes:

- The 8th and 9th Street corridors between Main Street and State Street are not recommended for Boise P&R because these are retail areas that fall outside of the scope of a Boise P&R wayfinding plan.

- The Fort Boise Military Reserve does not have a designated route due to the distance from the downtown inner core area and other park assets. This destination will mostly be accessed via automobile or bicycle.

- The Broadway Avenue corridor was also not included due to the lack of pedestrian usage at this time. It is determined to be a more auto-centric location. Future opportunities may change the dynamics of this area, in which a wayfinding route would need to be added.

Figure 2: Potential routes for a P&R wayfinding system
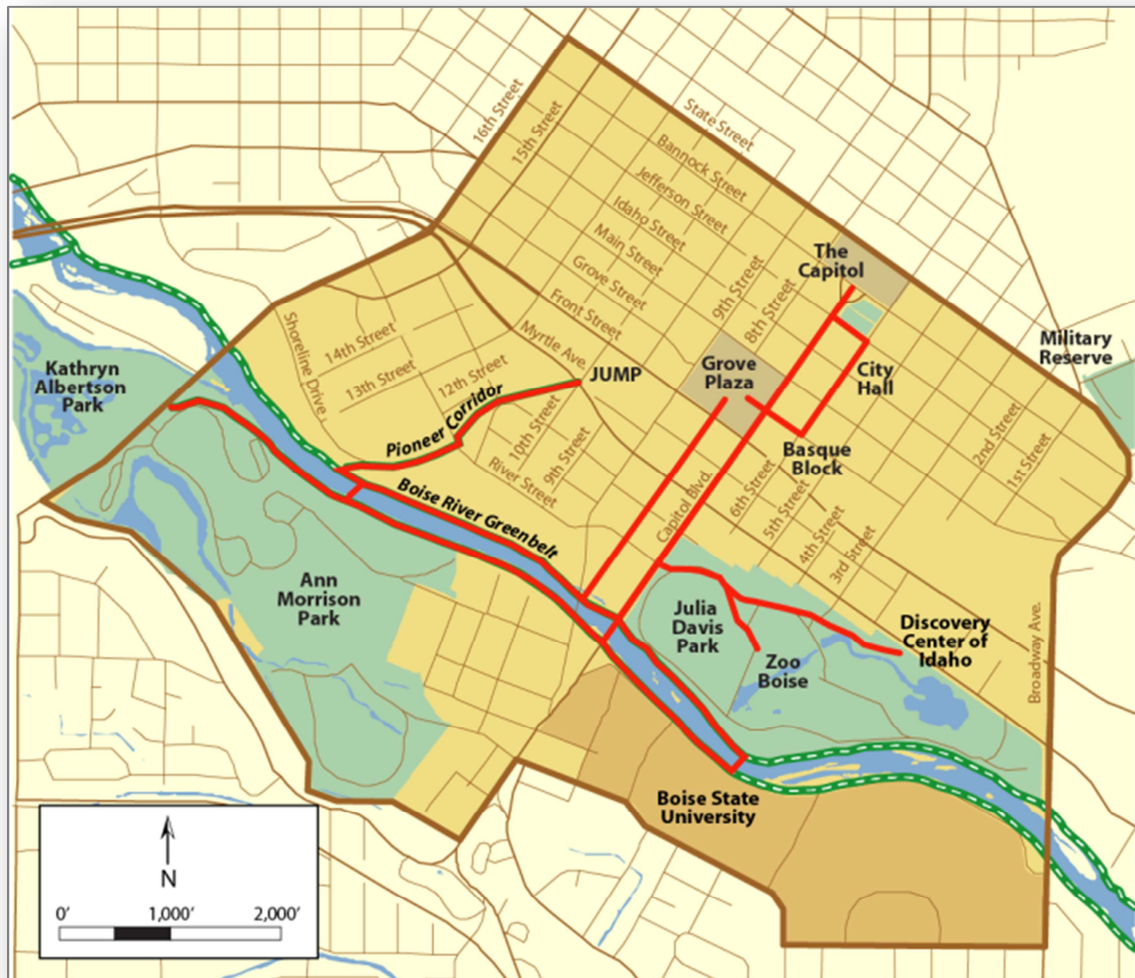
ADA Audit

It is also recommended that an ADA Audit be conducted by an independent party of all accessibility issues to and on the Greenbelt. Such audits can often be funded through federal grants and would provide a baseline from which to rank future ADA improvements within the wayfinding system.

Safety

As Boise P&R moves forward with more detailed wayfinding route selection, law enforcement, BSU security and similar agencies should be an integral part of determining those routes. If users do not feel safe both en-route and at their final destination, one of the fundamental goals of wayfinding - public safety - has potentially been compromised. Historic crime locations, public complaints, areas of poor lighting and hazardous intersections are examples of the types of data and input law enforcement can provide.

3.3 Wayfinding Communication

If you have ever been lost, you understand the importance and significant role of clear, accessible and timely signs, symbols or other types of communication that point the way to a desired destination. A good plan, interesting routes or fun destinations are meaningless if you

Boise P&R customers are people in motion

do not know they exist or do not know how to reach them. This is the raison d'etre of wayfinding – communicating the presence of and way to various destinations, events and assets within a place. But what are the most effective ways to communicate these messages? Boise P&R customers are people in motion.

Communicating to people in motion requires knowing this audience, including when they access certain features of the park system and the most effective form of communication to be used at certain times of the day in specific locations.

Another term often used interchangeably with wayfinding is *Environmental Graphic Design*. The Society for Environmental Graphic Design defines it this way:

> *"Environmental Graphic Design embraces many design disciplines including graphic, architectural, interior, landscape, and industrial design, all concerned with the visual aspects of wayfinding, communicating identity and information, and shaping the idea of place."*

As this definition makes clear, wayfinding communication is not only about signs. It incorporates many types and methods of communication and is far more than a sign plan. While signage is probably the most well known of these communication forms, it is by no means the only form that needs to be considered in a wayfinding plan.

Clearly, physical signs play a central role in letting people know about key destinations, routes and approximate distances along the way. But physical signs can also be a deterrent or obstacle to the very end-goal they try to achieve. As one wayfinding expert was recently quoted in

Atlantic magazine, "Paris and a lot of the main cities of the world have all sorts of visual cues that just get you where you want to be almost intuitively. I do signage and wayfinding, but the less signs one needs the better" (Badger, 2012).

This section on wayfinding communication addresses both sides of this dilemma. It suggests a hierarchy of signs that Boise P&R could consider in designing the physical signage. But it goes on to examine other forms of communication such as landmarks, printed material and tools of modern technology. This full spectrum of communication must be a part of any effective wayfinding strategy.

Wayfinding System & Signage

Signs of many types and functions often comprise the largest financial investment and demand the highest planning detail of any element in a wayfinding system. Being the most visible and public element of wayfinding, it is important to create a simple and clear sign plan and strategy that achieves the goal of assisting, not frustrating or confusing, the reader. Sign design is outside the scope of our team's project, but we did conceptualize a basic sign typology and hierarchy that could be used by Boise P&R within the regional parks and along the Boise River Greenbelt. It is comprised of three levels - **hub, kiosk and directional sign** - each sign serving a discrete purpose within the whole wayfinding system. Below is a description of each sign type with an associated explanation of its function, scale and location.

Hub (Main Wayfinding Station)
Function & Scale: Hubs provide general orientation to a large area through both narrative and mapping. Hubs incorporate technology and serve as a resource for multiple destinations and/or agencies in the downtown core.

Locations: Four potential hub locations are labeled on the Wayfinding Strategy Map in Figure 3.

These locations were selected based on the following criteria:
- **Accessibility by all transportation modes**. Since hub stations contain the largest volume of information of all sign types, they are meant to communicate to a broad audience and are not targeting any single user group. Hub locations need to be in prominent spots and easily accessed from main parking lots. The recommended

locations aim for high-volume pedestrian traffic with existing vehicle parking areas and greenbelt access.

Figure 3: Potential Placement of Hubs
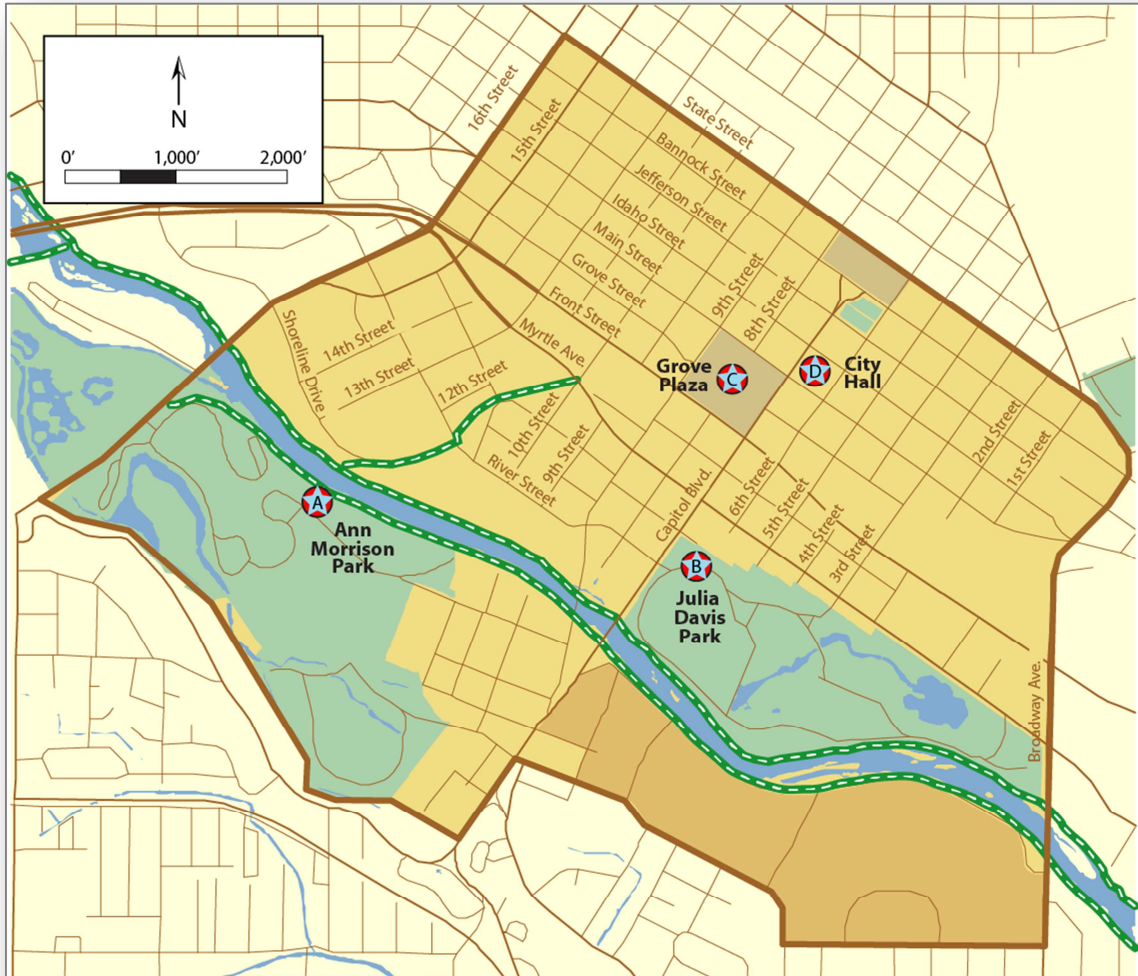
- **Sufficient open space to accommodate a hub station**. The hubs must be large enough to draw the attention of system users from hundreds of feet away and be sited in a space with sufficient room for multiple viewers. As such, the ideal location will be open, inviting, and free of other types of signage.

- **Significant population density**. Hub stations serve a diversity of user and audience needs, including local and regional event announcements, emergency or hazard notices, system-wide maps, parking locations, etc. Because of the diversity of information being communicated, they need to be located where there are high volumes of traffic and travelers.

Kiosk (Mid-Scale Orientation Information)

Function & Scale: Kiosks are a mid-scale navigational tool. They address local parks, internal park destinations, and non-park destinations that can be easily accessed by foot or bicycle.

Locations: Seventeen potential kiosk locations are identified on the Wayfinding Strategy Map in Figure 4.

Figure 4: Additional placement of Kiosks (Wayfinding Strategy Map)

These locations were selected based on the following criteria:

- **Strategic downtown locations**. Potential kiosk sites were selected based on their high-visibility and frequency of visits within the city. Several of the locations are not located on Boise P&R property and would require property owner consent before construction. The purpose of these non-park locations is to direct users to nearby parks, greenbelt, or foothills access points. Other locations, such as the future JUMP building between Myrtle and Front Streets, are on designated wayfinding routes and/or ACHD bike lanes that have a direct connection to Boise P&R assets.

Directional Sign (Small-Scale Orientation Information)

Function & Scope: Directional signs are small in scale and provide specific directions. They serve as a resource for en-route navigation. These signs may also incorporate symbols, arrows, and other artistic features to help create continuity between the hubs and kiosks. Directional signs often include distance markers and distance to an upcoming destination.

Locations: The Wayfinding Strategy Map in Figure 4 does not identify any directional sign locations. These locations will be identified after the hub and kiosk locations are selected and additional research is completed.

The table below provides a summary of the hub, kiosk and directional signs and their various functions, scope and location considerations for future placement and construction of the signs:

WAYFINDING SIGN TYPOLOGY			
Sign Type	Function	Scope of Content	Location/Number
Hub	• General orientation to City-wide uses • Integrates technology • Easy access by all modes of transport	Large-scale: • Downtown • Variety of destinations & attractions	• Highly centralized • Near parking • 4+ hubs
Kiosk	• General orientation to Boise P&R uses • Minimal to no technology • Accessible primarily by pedestrians	Mid-scale: • Park-wide • Major attractions within park	• Key intersections within or near park • Easy access by foot or bicycle • 16+ kiosks
Directional	Specific directions No technology	Small-scale: • Nearby and/or immediate • Vicinity destinations	• Frequent placement within parks and Greenbelt • Number to be determined

Wayfinding Landmarks and Symbology

Landmarks and symbols play an essential role in wayfinding. Landmarks are often how we become acquainted with a new place and how we connect to and identify with a city. These are
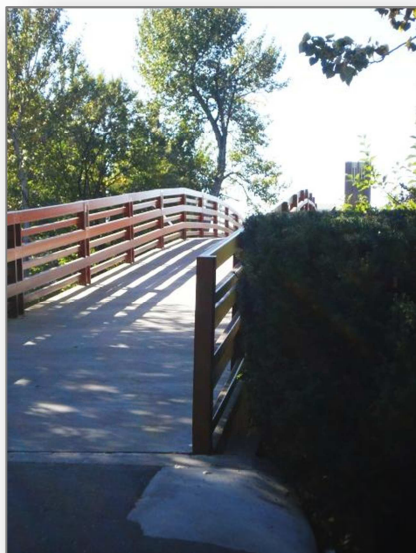
the timeless and easily recognizable assets that help to define the unique nature of a place. And they often have nothing to do with signs. One example is the Friendship Bridge in Julia Davis Park that is iconic and recognized by many users. While signage can play a role in identifying the bridge or even routes to the bridge, it is the landmark itself that serves as the main tool in communicating a place or destination. This aspect of wayfinding goes beyond signage to take full advantage of more universal and recognizable themes that characterize a place.

Besides incorporating landmarks, the use of symbols is another frequently used tool in effective wayfinding plans. Cities such as New Orleans, LA, Raleigh, NC and Miami, FL have made effective use of symbols in their wayfinding plans. A key

benefit of symbols is their universality and being able to easily communicate across cultural and language barriers. For example, pictographs such as a fish guiding the way to a river or a mountain scene leading to hiking opportunities in the foothills. They are easily recognized and, when repeatedly used throughout the wayfinding network, can help to create a brand and sense of place. They have a decorative and artistic value that, when designed well, can contribute far more than their face value cost.

Wayfinding Print Materials

The purpose of having wayfinding print materials is to offer information that is easily accessed and mobile. Print materials are often the first contact area that visitors to a city may receive concerning wayfinding. Visitors may find print materials online, or at a kiosk or hub. The advantage to print materials is the ability for visitors to carry the materials with them, making the materials a constant source of information. Because of this, thought must be given to the types of print materials distributed, the use of the materials, and the access points for the materials.

Types of print materials

There are several types of materials that can be printed including maps, brochures, and flyers. It is helpful to provide copies of several different types of materials to fit into the needs of different visitors and residents. Print materials are meant to catch the eye, so it is important that great thought be put into the design of each type of print material. The layout should have plenty of information but not overwhelm, and should be a visual representation that is pleasing to look at.

Uses of print materials

To consider the different uses of print materials, it is helpful to consider who will be accessing them. Print materials are normally used by visitors to a city to access specific districts within a city, different services, and special assets. It is important to have different print materials to suit different uses.

Access to print materials

The first access point to print materials will likely be through websites such as http://www.boise.org/ . Print materials should be easily downloaded from the website so that visitors and residents can print them. Physical access points that should be considered include hubs, kiosks, local hotels, visitor centers, City Hall, and highly frequented central areas such as the Grove and BODO. One consideration to take is the possibility to collaborate with other agencies and organizations such as the Downtown Business District and the Boise City Arts and History Department. These collaborations can cut down on costs for print materials and provide a more collective form of information for visitors and residents.

Wayfinding Technology

Technology is transforming how we explore our cities. Websites, GPS, and smartphone applications (apps) not only help us reach our destination, but offer a more enriching experience in reaching that destination. Wayfinding no longer needs to be limited to just getting from point A to point B. Visitors and local residents can benefit from the choices of information along the way. Fastest routes, scenic routes, cultural routes, or shopping routes can be suggested along with historical context, public restrooms locations and places for a cool drink.

Websites

Websites have been in place for some time providing information on public transit, hotels, events and vacation mapping. It is common for websites to have hyperlinks to other mapping websites such as Google Maps.

Digital Applications ("Apps")

Through smartphones and their GPS capabilities, the City of Boise, can offer on-site wayfinding guidance even beyond website planning. Owners of smartphones now have a personal wayfinding device. Technology should not replace paper maps and signage, but it can be a significant enhancement to any wayfinding plan. According to the Pew Research Center's Internet & American Life Project (2012), almost half of American adults -- 45% -- own smartphones. Many cities throughout the world are taking advantage of these numbers by pushing the boundaries of wayfinding through smartphone wayfinding apps. Below is a sampling of apps that add value to their communities:

WalkBrighton: This is a pedestrian wayfinding app developed for the city of Brighton, England. It was intended to create a more maneuverable pedestrian experience in this large urban environment. They included pedestrian crossings, railings, ramps and footpaths along with retails businesses and public services that are not on typical automobile-based maps. They use 3D illustrations to identify key landmarks to make the app very user-friendly. It also includes time circles that show how long a typical walk would take to reach a point of interest from the user's current location. This app is part of the city's overall wayfinding plan which also includes signage, printed maps, and downloadable maps with consistent branding, language and mapping aesthetics.

(*http://www.walkbrighton.com*)

Amsterdam Mobile Guide: This app pro-vides users with images and descrip-tions of Amsterdam's most pop-u-lar attrac-tions, includ-ing restau-rants and bars, sights, hotels, shops

and much more. The Ams-ter-dam Mobile Guide high-lights the very best Ams-ter-dam has to offer, which helps trav-el-ers dis-cover local favorites while allow-ing trav-el-ers to con-tact any venue by phone, email or web-site directly from the application. (*http://hollandmirror.com/iphone*)

Nearest Tube: This is one of the first aug-mented real-ity (AR) apps avail-able. "Augmented reality" uses the display of digital information as an overlay on top of real-time imagery. Just as early wayfinding apps utilized GPS and the compass to provide location awareness, AR applications are utilizing the smartphone camera to provide a more natural user experience. The smartphone is pointed into the envi-ron-ment and the app will direct you to the near-est tube sta-tion. (http://www.acrossair.com/apps_nearesttube.htm)

MyNav: This is another AR app that was developed with pedestrians in mind. Users can browse or search a destination directory and generate a map that shows the shortest path to destinations from their current location. The app then shifts into AR mode, pointing to the user's destination as overlayed on the smartphone's camera.

MyNav overlays directional arrows that point right or left and the distance to the destination over the "live" view of the environment on the smartphone camera's viewfinder screen. The user holds the phone vertically and orients to face the direction of their destination and walks toward it, much like a hiker following his compass. (*http://www.winfieldco.com*)
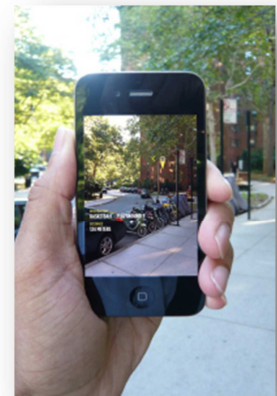
Streetmuseum: The Museum of London got creative and used AR technology to overlay photographic collections onto real-time views via smartphones. This app uses an interactive Google Map with locations identified that the user can select and view a translucent image over the current street scene. With the many downtown historical photos of Boise, this type of app would enrich any wayfinding system. (*http://www.museumoflondon.org.uk/Resources/app/you-are-here-app/noflash/no-flash.html*)

Wayfinder NYC: This app gives you the option of printing a list of the nearest subway stations, viewing a map, or viewing a live camera with directional arrows overlaid onto the camera

view showing the path to take. Subway stations can also be selected to display walking directions. *(http://www.wayfindermobile.com)*

Digital Signage

Digital signage is another technological option for better wayfinding in Boise. Digital signs allow for touch points and can provide information in multiple languages. A network of signs and their content can be controlled from one location. This eliminates the large amount of manual work needed to update static signs. You can post temporary event wayfinding data also. One major drawback to this technology would be the need for shelter and electricity.

QR Codes

A city wayfinding web app or website can be accessed through the internet before the user arrives in downtown or through a QR Code "Quick Response Code" located in various places throughout downtown. A QR Code is

similar to a barcode that enables a smartphone user to scan the code and be automatically routed to the city's wayfinding website or app. QR Codes can also be linked to a location to track where the user is located through a smartphone's GPS capabilities. This will enable the app to direct the user to their desired destination. QR Codes can also be customized to give a more marketable look for the City of Boise (Figure 2). The QR Codes can be located on city signage and at the destination locations.

Challenges

Although modern technology can be seen as an enhancement to traditional wayfinding, there are many issues that must be addressed before taking this step.

- Vandalism should be considered when using physical QR Codes. Any tampering with the graphics could prevent it from working or possibly misdirect the user.

- It is important that physical signage, maps, and brochures be available for those that do not have the ability to access the internet. Smartphones also run out of power or break. Users cannot be left stranded. Technology should be used to supplement traditional wayfinding methods, not to replace it.

- Consumers can be very demanding. Unless the technology used is efficient and well maintained it would not be worth the effort. Receiving bad reviews and no recommendations can be detrimental to the entire wayfinding system.

OBSERVATIONS AND SWOT ANALYSIS

The observations and analysis for Section 3.3, Wayfinding Communication, contains four different sub-sections - General, Signage, Print Material Locations, and Technology.

General

Many downtown parks and non-parks destinations complement each other. Both the downtown business community and Parks and Recreation desire to improve wayfinding for economic, recreational, cultural, and educational purposes.

Figure 5
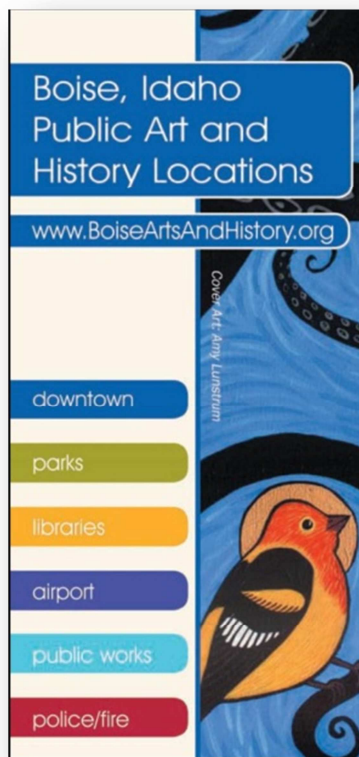
For example, the Boise City Department of Arts and History has produced a brochure titled, *Public Art and History Locations* (Figure 5) including downtown, parks, libraries, the airport, public works, police, and fire. The subjects are weaved together in a creative manner to encourage exploring the benefits of multiple destinations. It is apparent that destinations for visitors and tourists are woven among BSU, the Greenbelt, downtown parks, and periphery destinations, such as the foothills. The focus of finding any destination requires continuity, consistency, and predictability in the wayfinding brand that Boise P&R and CCDC/DBA adopt.

Signage

The Boise River Greenbelt maps and mile marker signs meet a critical need within the Boise P&R system today. They provide general orientation to a large geographic area and help the reader to quickly identify their geographic location. They are referenced to the pathway mile markers - a feature which should be retained. Possible future improvements and/or replacements to these signs should include proper orientation and increased font size for easy identification.

Another observation of the existing sign system is that there are several key intersections and Boise River Greenbelt access points that provide no signs, symbols or directions of any kind. For example, when approaching the Greenbelt west of 9th Street and south of River Street, a user must already know which direction to turn or must have a map in order to reach Ann Morrison Park. At "decision points" such as this on the Greenbelt, particularly in stretches of the pathway that are between major destinations, installing directional signs that identify which direction to turn for such destinations would enhance the system.

Print Material Locations

Concierge Corner and Visitor Services
Operated by Boise Centre and staffed by volunteers, located in the Grove Plaza, open Monday through Friday 10 a.m. to 4 p.m. and on special occasions.

Boise P&R Administration Building
At north entrance of Ann Morrison Park, has Parks and Recreation related brochures and guides.

Boise City Department of Arts and History
Two publications are printed, a Walking Tour Guide and a Cultural Resource Guide. Distributed at the Boise Airport, Boise hotels and downtown cultural kiosks (8th & Idaho, Broad & 8th, Anne Frank Memorial kiosk and outside front entrance of City Hall).

Boise Weekly & Downtown Boise Association
Boise Weekly often includes maps and listings for First Thursday, as well DBA distributes First Thursday brochures (with map) at various downtown locations.

Boise Convention and Visitors Center at Owyhee Plaza
Provides maps and guides. In 2010, an issue with the Greater Boise Auditorium District in 2010 and the Visitors and Convention Bureau led to the closing of two Visitor Centers (KTVB, 2012). Currently, the Owyhee Plaza donates space for the Visitors Center.

Technology

There are a variety of websites that are currently online that provide valuable information regarding Boise destinations and maps directing people to those destinations. These are a tremendous benefit to residents and tourists when preparing to navigate the city. Once the user is on the street, although, there is no information at the street level that directs them to useful online websites or aps. Even with street signage, many people rely on their smartphones and choose to trust online information over street signs. Pedestrians and bicyclists navigate various city and independent websites to try and find a map that best fits their needs at that time. This is very time consuming and many times unsuccessful.

Boise P&R Website

The Boise P&R website is an incredible resource for wayfinding. Its website allows users to find park destinations through the following categories:

- Activities, Classes & Sports
- Reserve Park Sites
- Parks and Locations

The Parks and Locations page contains a park map for every city park, and all rules, regulations, and options for uses and facilities.

Other Websites
- Ridges to Rivers Hikes and Guides:
     http://www.ridgetorivers.org/hikes-rides/
- Boise Department of Arts and History - Tours and Maps:
     http://www.boiseartsandhistory.org/public-art/tours-maps/
- Downtown Boise Association:
     http://www.downtownboise.org/index.cfm/getting_around/map_of_downtown
- Concierge Corner and Visitor Services, Operated by Boise Centre:
     http://boisecentre.com/experience-boise/boise-attractions
- Boise.org Free Visitors Guide:
      http://www.boise.org/FreeVisitorGuide.aspx
- Department of Commerce - Southwest Idaho:
     http://www.visitidaho.org/regions/southwestern/

RECOMMENDATIONS TO BOISE P&R

General

Since visitors and users of the wayfinding system will be referencing the system as a whole and not distinguish between, for example, Boise City, ACHD or DBA wayfinding signs, it is essential that there is early and regular communication among the various players. Interviews conducted by our team in preparation for this document made evident that while there is strong consensus about the need for wayfinding and some communication has taken place, there is also a need to elevate the level of coordination and planning to a higher level to ensure the success of any future wayfinding strategy.

Signage

Potential Gateways

Many communities use gateway signs and symbols at entryways and along high-volume corridors as part of their wayfinding network. Many gateways also serve as landmarks in a

community. A local example is the archway sign along Capitol Boulevard designating the entrance to Julia Davis Park. Gateways are not a sign or communication method addressed in this document, in part because they are most often used in vehicular-oriented wayfinding as compared with pedestrian or bicycle modes. However, we do recommend Parks and Recreation consider incorporating gateway signs, icons or similar landmark-type communication into a future wayfinding plan.

Use of Universal Symbols and Colors

The most effective wayfinding systems are simple to use and require minimal time to read and follow. One way to accomplish this is through the use of universally-recognized symbols and design. Examples include the capital letter "P" to designate "Parking," the use of the color green for general public signs and the color red for emergency or first aid resources. Creativity should be fostered and incorporated into wayfinding signs, but efforts should be made to ensure that signs are consistent and clear.

Portable Signs

This wayfinding strategy is focused on the design and function of permanent signs and technology for Boise P&R. Yet we recognize the department sponsors and/or hosts numerous events throughout any given year. Many of these events draw thousands of people. In addition to the permanent hub and kiosk stations, there may also be a role for the use of temporary or portable wayfinding signs that complement the permanent system. This may also provide a less expensive and interim method of wayfinding as funding for the permanent system is identified.

Future Consideration

The project team examined the possibility of locating a hub in the vicinity of Broadway Avenue and the Greenbelt or Broadway and Myrtle since Broadway is classified as an arterial and is an entryway to both Boise State and the city. Having a hub on the eastern end of Julia Davis Park seemed to make sense. However, since there is no significant parking in this end of the park, limited special events, and lower levels of pedestrian activity, we chose not to locate a hub station in this area. However, the City of Boise may want to consider contacting private landowners adjacent to Julia Davis where there is more commercial and retail activity in the future.

Printed Material Locations

Boise P&R should coordinate with the physical locations above and other partners, letting them know the benefits of their website and produce a one page flyer directing visitors and tourist to their website.

A wayfinding app can provide destinations and routes to get there as well as interesting and helpful information along the way.

Technology

Boise P&R should continue to promote its website. The wayfinding plan they adopt should provide an integral link to the website and its many resources available for users to find maps, directions, uses and more.

Wayfinding Website

A wayfinding website should be the first effort made towards a more technical wayfinding system. The Boise P&R current website can dedicate a specific wayfinding section that gets marketed as such and provide maps, directions, uses and more. This website address can be placed on the physical wayfinding kiosks, hubs and other printed publications. Users with access to the internet through personal computers or smartphones can access the website when or if needed.

<u>Wayfinding App</u>

A city wayfinding app is the future of wayfinding. This effort should include various stakeholders, but can be initiated by one agency. A wayfinding app can provide destinations and routes to get there as well as interesting and helpful information along the way. A comprehensive app can be categorized by need such as *retail wayfinding*, *entertainment wayfinding*, *recreational wayfinding*, or *family wayfinding*. This will allow all merchants and public agencies to benefit economically and users to be satisfied with their journey through Boise. Apps also solve many of the physical limitations of street signage such as language and maintenance.

<u>QR Codes</u>

We recommend that these codes be constructed so that they can easily be removed and replaced as needed. Temporary QR Codes can also be used if an inexpensive method of construction and placement is found. This could be useful for wayfinding for unique city events.

Technical wayfinding is being used by more cities every year. Smartphone users will be expecting wayfinding technology to be used in larger and more progressive cities. Wayfinding websites, apps, and on-street app access is good customer service.

4.0 Next Steps

4.1 Phases

To allow for a more feasible implementation process, it is recommended that Boise P&R divide the wayfinding process into phases. A suggested phasing structure can be as follows:

Phase I: City Analysis

This phase is for data collecting, public input, BSU wayfinding observations and recommendations, evaluation of assets, evaluation of potential routes, discussions of visions and goals.

Phase II: Stakeholder Input & Agency Coordination

It would be in the best interest of the City of Boise for Boise P&R to establish a network of other agencies that share similar wayfinding interests. Facilitated meetings should be conducted to open dialogue and discuss the concurrent initiatives, various interests, strategies and goals. This phase could also incorporate the stakeholder survey noted in Section 2.2.

Phase III: Contract Assistance

Through Requests for Proposals, a contractor can use their professional expertise to verify the most efficient routes between Boise P&R assets and the highest and best placement of wayfinding signs and gateway locations. A professional wayfinding organization will also design all levels of hubs, kiosks, and signage.

Phase IV: Infrastructure

Legal issues will need to be resolved before any actual sign fabrication or installation be done. Websites will need to be created that support the wayfinding plan. Technology would need to be developed. Sign design proposals will need to be agreed upon. Artists will need to be brought on board if needed. Installation resources will need to be established. Resources will need to be allocated for maintenance and infrastructure updates, including the ADA accessibility improvements.

Phase V: Implementation

All local artistic input will be needed. Signs will need to be fabricated and installed.

Phase VI: Maintenance and Updates

Maintenance to signage must be a priority. Dilapidated signage in the downtown area will reflect poorly on the image of the city. Changes are inevitable. New assets will be added to the

city or they can be removed. Website data will need to be current. Website technology can also change more often because of the ease to make changes.

4.2 Legal Issues

There are many legal components to a wayfinding plan. Multiple public agencies and private companies will need to be consulted before any one agency moves forward with a wayfinding plan. A proactive approach to find win-win situations will help mitigate difficult situations.

Right-of-Way

As the public agency with jurisdiction and maintenance responsibility for all public rights-of-way, including sidewalks and access easements along public streets, ACHD must be consulted during the design and placement of all wayfinding signs in or near their right-of-way. If any signs are adjacent to a state highway, the Idaho Transportation Department may also be involved. Approval of all signage on ACHD property must be obtained.

Non-P&R Sign Placement

Any hubs, kiosks or signs place on non-Parks and Rec land must reach a legal agreement with the property owner.

Conflicting Interests

Wayfinding signage is of interest for any private business or public entity. Routes and destinations need to be established with caution so as not to give an unfair preference and create conflict.

Americans with Disabilities Act

Any portion of the wayfinding plan funded with federal dollars will need to comply with ADA standards.

4.3 Funding

There are various ways to obtain funding and reduce costs for a wayfinding plan. Any wayfinding plan should ensure an efficient sign placement strategy. Only a minimum number of the more costly hubs should be created and installed. Signs can also be attached to existing poles and infrastructure rather than creating a new independent sign. There are private foundations, federal grants, as potential local initiatives to help provide funds. A wayfinding plan should be a positively viewed project that should have support from the community.

4.5 Evaluation Feedback

Any successful plan must include the evaluation of feedback. This feedback must also have an established channel to create helpful change. It would be helpful to have an annual evaluation of the plan to ensure that appropriate changes are made and concerns of stakeholders are addressed.

Public participation should be part of the initial planning process through surveys, public announcements, or online dialogue. Once the plan is implemented, a channel of communication needs to be established so that appropriate suggestions and comments can be documented and remedied. Success of the project should also be noted so that the wayfinding scope can grow in a positive and productive manner.

5.0 Conclusion

Conclusions of this project indicate that the Boise downtown area is in need of a structured wayfinding system. There are areas of opportunity to work toward the development of a wayfinding system in Boise.

One of the major findings of this project indicates that early and regular communication among various stakeholders would be essential to the success of a wayfinding system. It is important that these organizations feel they have a place at the table to discuss their ideas and opinions.

It is also important to remember that the recommendations of this document are intended to benefit non-motorized users, such as pedestrians and bicyclists. Future consideration could be given to the benefits of a larger scale wayfinding plan for automobile users. However this would require further research and funding.

Signage location and design is something that will also require further exploration. Professional experts may need to assist in identifying proper signage location. As well, a design team may need to be consulted in regards to the final design of the signs to ensure they are aesthetically pleasing and effective in their design and purpose.

The use of technology within the wayfinding system is extremely important. Research indicates that 45% of adult Americans have a smartphone. More individuals are using technology, social media, and other websites to gather information they are seeking. The use of QR codes, smartphone apps, social media, and websites will be very beneficial to creating a successful wayfinding system.

In regards to the next steps to take toward implementing a wayfinding system, it is important to remember that the phases discussed within this document are intended to represent a suggested phase system. These phases can be altered or removed and other phases can be added if more work needs to be accomplished. In regards to funding as mentioned in the document there are private foundations, federal grants, as well as potential local initiatives to help provide funds. A wayfinding plan should be a positively viewed project that should have support from the community. However temporary or portable signage could be considered as a form of wayfinding until more funding becomes available.

The City of Boise is in need of a wayfinding system and there are numerous opportunities that indicate that the city is capable of designing and implementing a system. A successful wayfinding system will benefit multiple stakeholders and be appreciated by its users.

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Appendix A -Professional Interviews

Expert	Organization	Interviewers	Date of Interview/ Conversation
Kâren Sander	Downtown Boise Association	Bradley Clark Cherilyn Blender	October 31, 2012
Dave Gordon	Ridge to Rivers	Alisha Pena	November 6, 2012
Dr. Jaap Vos	Boise State University Department of Community & Regional Planning	Alisha Pena	November 9, 2012
John Bertram	Planmakers	Paul Morrow	November, 11 2012
Cheyne Weston	Boise P&R	Paul Morrow Breland Draper	October 17, 2012

Appendix B-Sample Wayfinding Plans

Community	Website
Renton, WA	http://www.renton.gov/wayfinding
Philadelphia, PA	http://www.centercityphila.org/about/Publications.php
Georgetown, TX	http://files.georgetown.org/wayfinding-and-signage-master-plan/
The Delaware & Lehigh National Heritage Corridor	http://www.delawareandlehigh.org/images/library/Landmark-Towns.pdf
Louisville, KY	http://www.louisvilleky.gov/MetroParks/planninganddesign/signage_wayfinding.htm
Washington Park Arboretum	http://depts.washington.edu/uwbg/docs/finaliwplan.pdf
Miami Dade County Park and Recreation Department	http://www.miamidade.gov/image/library/wayfinding_plan.pdf

Appendix C-Photo Sources

Pg #	Source	Retrieval Date
2	Alisha Pena	
3	Alisha Pena	
4	Alisha Pena	
9	http://www.123rf.com/photo_1623356_family-walking-with-child-in-stroller.html	December 15, 2012
9	http://www.123rf.com/photo_3218490_elderly-couple-walking-in-country-lane-in-grassington-yorkshire.html	December 15, 2012
9	http://www.123rf.com/photo_14739319_happy-couple-riding-bicycle-outdoors-health-lifestyle-fun-love-romance-concept.html	December 27, 2012
10	Alisha Pena	
12	Alisha Pena	
13	Paul Morrow	November 5, 2012
15	Alisha Pena	
23	http://coolboom.net/architecture/st-pauls-information-kiosk-by-make-architects	December 10, 2012
25	http://odlcd.com/Article/TheApplicationvalueo_1.html	December 10, 2012
26	Alisha Pena	
26	Thomas Wuerzer	
27	Alisha Pena	
29	www.walkbrighton.com	October 25, 2012
30	http://www.winfieldco.com	November 3, 2012
30	http://www.museumoflondon.org.uk/Resources/app/you-are-here-app/noflash/no-flash.html	November 3, 2012
31	http://www.fourwindsinteractive.com/digital-signage-gallery.htm	November 28, 2012
31	http://www.customqrcodes.com/custom-qr-codes-gallery	November 12, 2012
33	Alisha Pena	
35	Alisha Pena	

Appendix D-Contacts

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