

Claremont Colleges

Scholarship @ Claremont

Pomona Senior Theses

Pomona Student Scholarship

2020

Finding and Fighting for a Future of Bicycles in Boise, Idaho

Kyle Lenhart-Wees

Follow this and additional works at: https://scholarship.claremont.edu/pomona_theses

Recommended Citation

Lenhart-Wees, Kyle, "Finding and Fighting for a Future of Bicycles in Boise, Idaho" (2020). *Pomona Senior Theses*. 211.

https://scholarship.claremont.edu/pomona_theses/211

This Open Access Senior Thesis is brought to you for free and open access by the Pomona Student Scholarship at Scholarship @ Claremont. It has been accepted for inclusion in Pomona Senior Theses by an authorized administrator of Scholarship @ Claremont. For more information, please contact scholarship@cuc.claremont.edu.

Finding and Fighting for a Future of Bicycles in Boise, Idaho

Written By: Kyle Lenhart-Wees

In partial fulfillment of a Bachelor of Arts Degree in
Environmental Analysis: Sustainability in the Built Environment
Pomona College, Claremont, California
Fall 2019

Readers:
Char Miller
Susan Phillips

Acknowledgements

I would like to thank my readers Char Miller and Susan Phillips for helping me through my writing, even when I felt completely lost. The support and encouragement was always appreciated in my moments of stress

I would like to thank the Pomona EA department and the Scripps European Union Center for funding my summer research in Berlin.

Thank you to Brooke Greene and Dave Fotsch for kindly allowing me to interview them. The information they provided shaped my thinking on this topic.

I would like to thank my writing partner Ally, for keeping me on task as much as she could.

And lastly I would like to thank my parents and sisters for allowing me to call them whenever I needed assurance. Their love and support helped me through the difficult year. I love you all so much.

Table of Contents

Abstract	3
Introduction	4
These Streets.....	10
Building Better Bicycle Communities	39
Activism and Bicycles	57
Conclusion.....	69
Bibliography.....	71

Abstract

This thesis will explore Boise, Idaho as a real-world case study of the car dominated American cities, and the potential to enact a large-scale shift to alternative forms of transportation.

Examining the complexities of inter-governmental and communal-governmental relationships to better understand the history and current state of infrastructure and alternative transit facilities in Boise and theorizing a best path forward. The thesis will also delve into bicycle activists' groups operating in Boise, to assess their goals and methods of reaching those goals.

Introduction

I am not a “tattoo person”. I don’t have any tattoos on my body, and I’ve always had a little old grandma in me, incapable of understanding why anyone would go and permanently mark their body with ink. So, I was very surprised and slightly confused when my eldest sister came home one day and showed off the new tattoo on her ankle. It was an outline of Idaho with a heart placed over Boise, the place I have called home for my entire life. “Whatever” I thought, she is a young twenty-year-old, who am I to understand her motivations. To my continued bewilderment though, my second sister, a few years later, got her very own Idaho tattoo on her ankle. This time the icon of Boise was a pine tree. Looking for an explanation as to why, I’ve come up with a few. Obviously, the shape of Idaho is one of, if not *the* greatest of the 50 states. Having the state of where you reside, tattooed on your body might be advantageous if you suffer from amnesia in a different state. Ankles have always looked a little bald to me, so why not cover them up a bit. Despite my best efforts, though I could not think of a satisfying reason for someone to mark their body with a picture of Boise.

It was not until recently that I came to recognize the greatness of Boise and its potential for the future. The community is friendly and welcoming. As a child I can remember getting stuck in the checkout lines at the grocery store because my mom just had to finish the story, she was telling the cashier, and to my surprise, they were happy to listen. People care about each other here. Moreover, our nature is gorgeous, with the beautiful mountains watching over the city day and night. With a river to float and the forest to explore, it really is a spectacular place to live, which must be why so many people are moving here.

Some context: Boise is the state capital of Idaho. A state in the inland northwest, east of Washington and Oregon. Boise is a city in Ada County, in the southwest corner of the state. Boise is also the most populous city in Idaho at over 220,000 people. The current mayor of Boise, Dave Bieter made it his goal to make Boise the most livable city when he assumed office in 2003 and that message was broadcast far and wide. Boise has been one of the fastest growing places in the country for the past decade. From 2010 to 2019, the Boise metropolitan area's population has increased by 18.5 percent. This influx of people has some significant implications for Boise and the existing residents. Specifically, on rising housing prices and worsening traffic. Throughout my life I have witnessed our streets become ever wider in an attempt to accommodate the growing number of cars, despite the increase in infrastructure, the problems have only compounded. Business as usual is no longer satisfactory and traditional American approaches for dealing with growth will not work. Automobiles are not the vehicle of Boise's future if it wants to have a sustainable and resilient community going forward. With my eye towards environmentalism and a vested interest in making my city the best it can be, I write this thesis, with the hope that it can provide a little bit of guidance for the future.

The Right to the City, Transportation Justice and Cycling

For decades American cities have been shaped by the automobile. More than that, our entire society and culture has been reconfigured for the domination of the car. If bicycling and other forms of alternative transit assume a larger role in the transit ecosystem of cities, they can help alleviate the externalities that are present in car dominated cultures. Scholarship on the right to the city as well as the evolving thoughts on transportation justice and cycling have all broadly informed my approach towards the topic of bicycles in Boise, particularly regarding the activists groups.

The right to the city was first laid out by Henri Lefebvre and then expanded upon by David Harvey. Lefebvre reframes many of the human rights expressed in modern sources, such as the UN Declaration of Human Rights in the context of the city. Ultimately asserting the superiority of these rights “to freedom, to individualization in socialization, to habitat and to inhabit. The right to the oeuvre, to participation and appropriation” (Lefebvre 1996) must have over private property. Harvey speaks to how those rights are achieved couched in a Marxist view of class struggle.

Those that now have the rights will not surrender them willingly: ‘Between equal rights, force decides’. This does not necessarily mean violence (though, sadly, it often comes down to that). But it does mean the mobilization of sufficient power through political organization or in the streets if necessary to change things (Harvey 2003).

Using this framework, I will attempt to analyze the actions, taken by bicycle activists groups in Boise to push their goals. And how their grassroots organizing has been effective in claiming the right to the city for an expanding base of residents.

Purcell, a professor of urban democracy, argues that that modern interpretations of Lefebvre’s right to the city have deviated from his original intent and see the right as an end in and of itself, rather than as a means to an end. It is a right that is intimately tied to the state and therefore dependent upon the state’s existence. Purcell writes that Lefebvre’s real intention is a “Marxism that rejects the state... and that comes to understand itself as more than anything a democratic project, as a struggle by people to shake off the control of capital and the state in order to manage their affairs for themselves” (2014). Furthering this line of argument, individuals should not feel

limited to forms of activism and resistance that are authorized by the state. In the case of local bicycle groups, they are occasionally working in direct opposition to the interest of many other actors, including the state.

Accessing this right to the city is not universal as might be showcased in an ideal world.

Impediments, such as unequal access to adequate transportation, means results in disparities between individuals in cities. These disparities are exacerbated in societies with an assumption of high mobility (Kenyon, Lyons and Rafferty 2002). Cass, Shove and Urry introduce the idea that to better understand how people experience injustice, it must be first understood which networks are meaningful to these individuals. Social exclusion is thereby dynamic and specific to the particular circumstances of an individual's mobility and access (2005).

Their framing of transportation justice overlaps with Schwannen and Banister exploration of a Rawlsian and CA view of transport disadvantage. Freedom of choice and agency complicates ideas of accessibility, and so an evaluative framework working to address these transport injustices needs to “acknowledge the diversity of people’s needs and constraints when they make their transport decisions” (Periera, Schwanen and Bannister 2016).

Cars not only pervade our cities on an infrastructural level, but they have also attached themselves to the psyche of cities and their citizenry. Barriers to alternative forms of transit include a lack of infrastructural support of the mode, but also manifest as opposition from individuals that view cars as the accepted and traditional way of being. To persuade these voices to accept alternative transit requires a general cultural shift (Blickstein 2010).

A study run by Taylor and Hall managed to get young people to reimagine what their home could look like and ways to access cultural assets by exploring the potential for bicycles having a bigger role in the city. Some young people became passionate enough to make their voices heard in city planning sessions and community meetings. These results were achieved with little guidance from study designers and organizing the youth to ride their bicycles and map the city. The simple act of riding a bicycle helped to empower a generation to take an active interest in shaping their city (2013).

Empowering people to claim their rights to the city are not limited only to formal situations with an instructor and pupils. Constantini explores the function of white bicycle memorials in a city. The bicycle takes the place of “the absent, ruined bodies of cyclists” and “influence perceptions about cycling safety, cycling-based legislation, and road infrastructure” (2017) Blau and Besel describe the value of a “performance on behalf of the environment.” One such performance, is the San Jose Bike Party, which has no explicit environmental or urban reform message, but still builds community and engages participants in the social construction of the urban environment. Easing people into accepting alternatives to automobile transportation. Many of the actions of bicycle groups in Boise operate in this realm of performance, and as a curator for other citizens to perform for the benefit of bicycles. Indirect action on these issues can still effect change through subtle intrusions into public perception, and may not face the same backlash of more direct methods (2014).

The literature clearly shows how the right to the city is unequally accessible to residents, especially in car dominated cities, but also details how this reality is assessed and resisted

through alternative transit and bicycles. More examination is required in regards to interplay between bicycle activist organizations, local authorities and communal perceptions of mobility. This thesis will work to serve that need. This thesis will explore Boise, Idaho as a real-world case study of the car dominated American cities, and the potential to enact a large-scale shift to alternative forms of transportation. Examining the complexities of inter-governmental and communal-governmental relationships to better understand the history and current state of infrastructure and alternative transit facilities in Boise and theorizing a best path forward. The thesis will also delve into bicycle activists' groups operating in Boise, to assess their goals and methods of reaching those goals. After spending this time researching the way forward, I wouldn't be too shocked if I soon found myself following in my sister's tattooed footsteps, but with a small bicycle over Boise.

Chapter 1: These Streets.

Boise is an American city through and through. Meaning it was developed with great consideration for car users and little else. There is no more emblematic American city than Los Angeles, with its hundreds of miles of freeways. L.A. traffic is ubiquitously known for being terrible. People around the country might get frustrated when they get into a traffic jam, but still whisper a little thanks “at least I’m not in L.A.” The sad reality is, that if cities continue relying on cars as the dominant form of transit, traffic will always get worse. Boise, Idaho is no exception.

To understand where Boise is now, we have to understand its history. It’s natural for European cities, which were largely founded long before the invention of the car, to have street layouts, that are favorable to a variety of non-automobile traffic. Streets accommodated the typical transportation of the time, which was limited to walking or riding. On average American cities are much newer, and therefore built for the contemporaneous vogue forms of transportation. This partially explains why American cities are far more convenient for cars than their European counterparts. But cities like Los Angeles and Boise both existed before the invention of the car, so what explains their bias for cars?

Like Los Angeles, Boise also had a prominent electric streetcar system that transported residents. Starting in 1890, streetcars gave Boise residents a simple and reliable option for getting around in the city. The rail network soon expanded, enabling passengers to ride into Boise from across

Ada county. Development in the city was greatly determined by this streetcar network. Occasionally new track would be built into existing neighborhoods, but more often new residential sectors popped up wherever the track was laid. Ticket prices ranged depending on the distance the passenger was traveling, but the tickets were never the primary source of income for the operating companies. They made most of their income off of providing freight for the orchards and fields growing produce along the rail. This transit system was very popular for over 40 years, but eventually the economics and particularly the automobile caught up with it. Banishing it to obscurity (“Trolley” 2018). When cars became affordable to the average American, the freedom of mobility attracted some customers away from larger transit systems such as trains. This undermined the economic viability of these commuter trains resulting in further divesting and ultimately the collapse of the entire company. The people reliant upon the trains for transportation were forced to search for other options, even if they did not want to start driving a car.

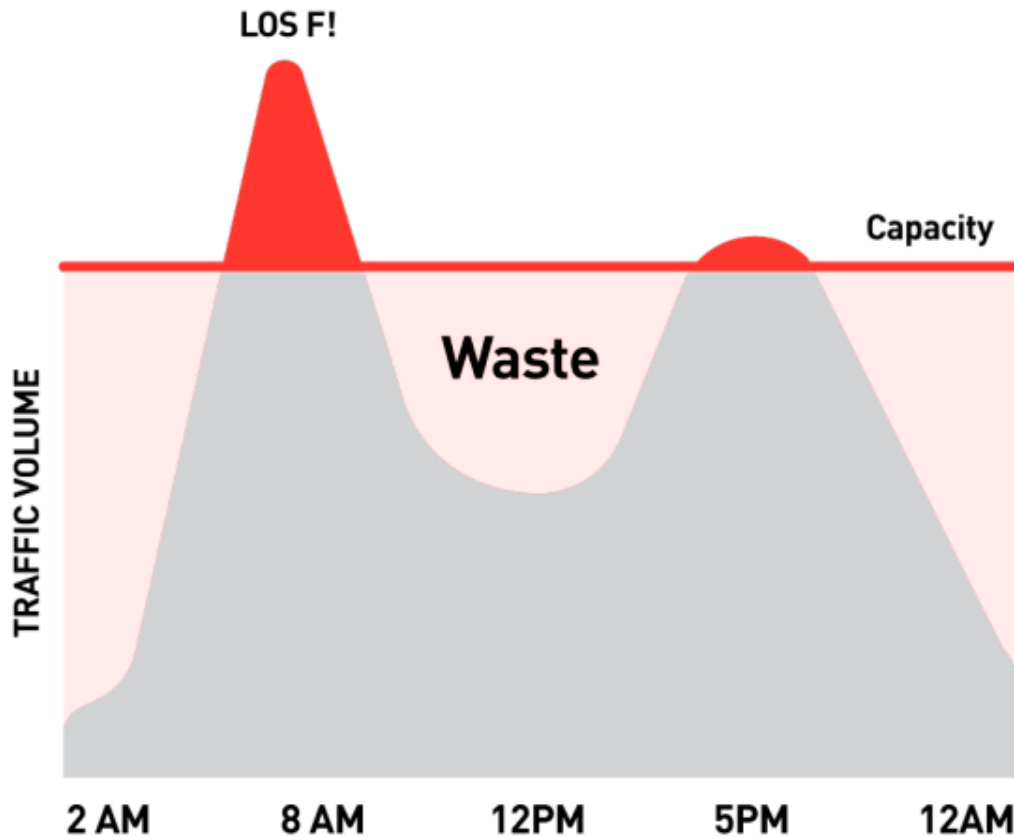
It is important to note that the populations of these two cities, Boise and L.A. were much smaller than they are today; at the invention of Ford's Model T in 1913 Boise’s population was about seventeen thousand, and L.A.’s less than a tenth of its 2019 population at three hundred thousand (“Boise”). This means that despite having established a form of mass transit early on their histories, the cities were still relatively young and grew much more in the following years.

The Car Feedback Loop

As cars became more affordable, more and more people began owning one. With the increased freedom to go wherever there is road, new development became increasingly less dense. After

world war two a housing boom began, and the predominant type of housing was the suburb. These houses are spacious, have yards and removed from the presumed hustle and bustle of city life. It is inefficient to have public transit frequent areas of suburbs like this so more people became reliant on cars. This in turn encourages more people to buy cars to be able to attend to the things they have to do in everyday life. Car ownership spiked over the last few decades, with more than twenty percent of American households without a car in 1960 to today, where less than nine percent of households are carless. The default position of planners is to maximize the efficiency of travel for cars, they

It is worth looking at how we got to where we are today. What were the conditions and mindsets that built our roads and neighborhoods as they are. On a macro level, we can identify the car as the culprit. The car has been a staple of the American identity for decades now, and we have crafted our whole society around it. Focusing in on road policy, we can see how the preference for cars were perpetuated. Though things are starting to change now, addressing street issues through a holistic approach, historically highway departments evaluated roads on simplistic metrics, such as level of service, or LOS. The LOS metric looks at the flow of vehicular traffic and delay times during peak traffic hours. The worse the delay times, the worse grade the road would receive. The simplistic solution to correct a bad grade under this metric is to increase the street's traffic capacity. Optimizing roads for this metric means that roads need more lanes, the lanes should be wider and speed limits should go up. And that has been the traditional way of viewing roads in Boise and across the US.



Mapping of LOS over time (*Boise Transport 2016*)

Historically, roads have served many more purposes than just as a funnel for cars. Streets transport people, but they used to be places to socialize, relax and just exist. The current LOS metric does not include a way to evaluate the many other services and responsibilities of a street, such as accessibility, pedestrian experience, stormwater treatment and facilitating commerce to name a few. Therefore, when the government solely uses this metric to evaluate roads, it leads to an undervaluing of streets that serve these other needs well. This explains why if you walk along a street in Boise, you will likely not encounter another pedestrian. The massive slabs of pavement are intimidating and even dangerous to cross for some pedestrians and are not welcoming to community in the same ways as in pre-car-dominance days.

Another important consequence of using this metric is that streets are consistency under capacity when it's not a peak travel time. Traffic is heaviest in the morning and in the evening as people are coming and going to work. It is common to see these large roads designed for one small part of the day, completely barren at the off times, and thus all of the space reserved for cars is going to waste. See the graphic above for an illustration of how streets are wasteful. The space could instead be allocated to community resources such as parks, shops or residencies.

Not only does the peak LOS metric produce wasteful streets, but it also contributes to a phenomenon called induced demand. Induced demand is the concept that an increase in roadway capacity actually generates an increase in traffic. When transportation planners are trying to solve the issue of congestion through road expansions, they may very well be creating more issues for themselves in a couple years. To make sure we shape our streets to accommodate other forms of transit and best serve the community in the face of continued growth and climate change, we need better metrics for evaluating our roads. The easiest change to make would be to measure the LOS over multiple hours instead of just at the peak. If this new rating was enacted with no other changes, it would produce streets that might be more congested during rush hour, but would be far less wasteful during the off hours. The key is to get people out of their cars and into other forms of transportation that are more space efficient.

To enact meaningful change, priorities for development have to change, luckily for Boise, it appears they slowly are. The city of Boise in last few years has proposed considering several new evaluation standards that prioritizes more than just cars. Their suggestions would greatly

increase the amount of information and detail collected than the typical traffic survey, going beyond looking at just the number of cars and beginning to record consistently the percentage of cars that only have a single occupant, and to compare the number of travelers moved per the street surface's area (essentially measuring the density of travelers). Other additions include keeping track of the mode share by income, gender and age, which gives indicators whether or not the streets are serving all types of people.

Now that the city recognizes that noncar traffic is important too, they are proposing metrics they need to make sure that streets facilitate these alternative modes of transportation. Some of their suggestions include recording miles of traffic-appropriate bike lanes, counts of pedestrians and cyclists and number of bus stops with shelters. Safety is also a big factor that is not considered in detail when constructing a street. Collision rates, perception of danger and number of annual fatalities of cyclists and pedestrians all provide an indication for how safe these roads are, which in turn is a determining factor in rates of bicycling and walking.

In Boise's plan for integrating transportation with land use developments, *Boise in Motion*, the planners added another dynamic to their evaluation. Suggesting a street is a part of the character of the neighborhood, so to that end they should be evaluated for how they contribute or detract from the neighborhood's vibrancy. They suggest this vibrancy can be tracked and evaluated through stationary activity counts, crime rates, changes in retail sales and attendance at public events like festivals and farmers markets. Having an evaluative category such as "Character of the neighborhood" marks a stark departure from the cars-at-all costs mindset. It is still awkward to create quantitative measures for a category that is clearly better suited for a qualitative

assessment. Fitting this square peg through the circular hole speaks to the broader problem of how our society has come to approach issues, such as transportation. They have cut out the human elements from the equation, because humans are a grey zone, they are fluid and immeasurable. Despite former evaluations not taking these variables under account, it definitely has had an effect on the communities that these streets run through.

All these measurements are far more complicated than the traditional model, but designing for an entire community instead of just a motorized vehicle is a harder task and requires more sophistication. The focus on the granular is one key step that will help propagate an overhaul of the entire design of Boise's transportation ecosystem. In the long run abiding by these metrics will produce much more sustainable streets and stronger communities.

Who owns the Roads?

One of the simplest ways to signal that bicycling is welcome in the community is to have infrastructure facilitates a safe and pleasing ride experience. Since the city is indicating that they want to change how the roads are managed, it's natural to assume that the changes would just be implemented. Despite the "government" purportedly having control over the roads, it has proven difficult to resolve disagreements over responsibilities, jurisdictions, priorities and funding, ultimately slowing progress for alternative transportation. This is especially true for the case in Boise, where the city does not own or control any of the streets running through the city.

The Ada County Highway District

The Ada County Highway District (ACHD) is responsible for all short- and long-term planning, construction, operation and maintenance of public roadways across the entire county. A county which includes the two largest cities in Idaho, Boise and Meridian, meaning they have outsized power and the final say on what the streets in Boise look like. The Ada County Highway District is not only the largest highway district in the state of Idaho but also in the entire nation. The ACHD was formed in 1972 out of frustration that Idaho's State Senators felt when they gathered in Boise from across the state and experienced atrocious road conditions. Despite traveling to the state capital, the road conditions were relatively poor and had potholes consistently left untouched for unreasonable amounts of time in some areas. The legislators' solution was to pool the entire Ada County's resources and efforts to maintain the roads, there by eliminating the issues that fell through the cracks while during the piecemeal approach of each city controlling their own roadways (*Fiscal 2018*).

The ACHD was created to provide continuity and consistency to road policy across Ada County. Since each city has its own priorities, certain issues tend to fall to the bottom of the agenda when they do not have as much influence on their constituents. This is likely why the road conditions were so poor prior to the conception of the ACHD, because maintaining the streets on the edge of their city or even in the unincorporated areas of the county were not of particular interest to the city and possibly out of their jurisdiction. Now with one body controlling the area there are no out of jurisdiction areas or a lack of mutually intelligible design within the cities (*Fiscal 2018*).

The problem with providing consistency across the county, is that individual city's priorities get overlooked. A bicycle revolution has the greatest chance of working in Boise, due to it being the densest of the cities. But what works for Boise, may not work for the other Ada County cities, but to keep a consistent approach to designing streets, there is a one size fits all solution.

The ACHD and Bikes

Since the ACHD has control over the streets, that also means they have control over the bike lanes. Since its inception in the seventies, the highway district has intermittently released plans that reflect an evaluation of residents' transportation needs and wants, the prevailing thoughts on urban development and local politics.

Historic Bike Plans of Boise

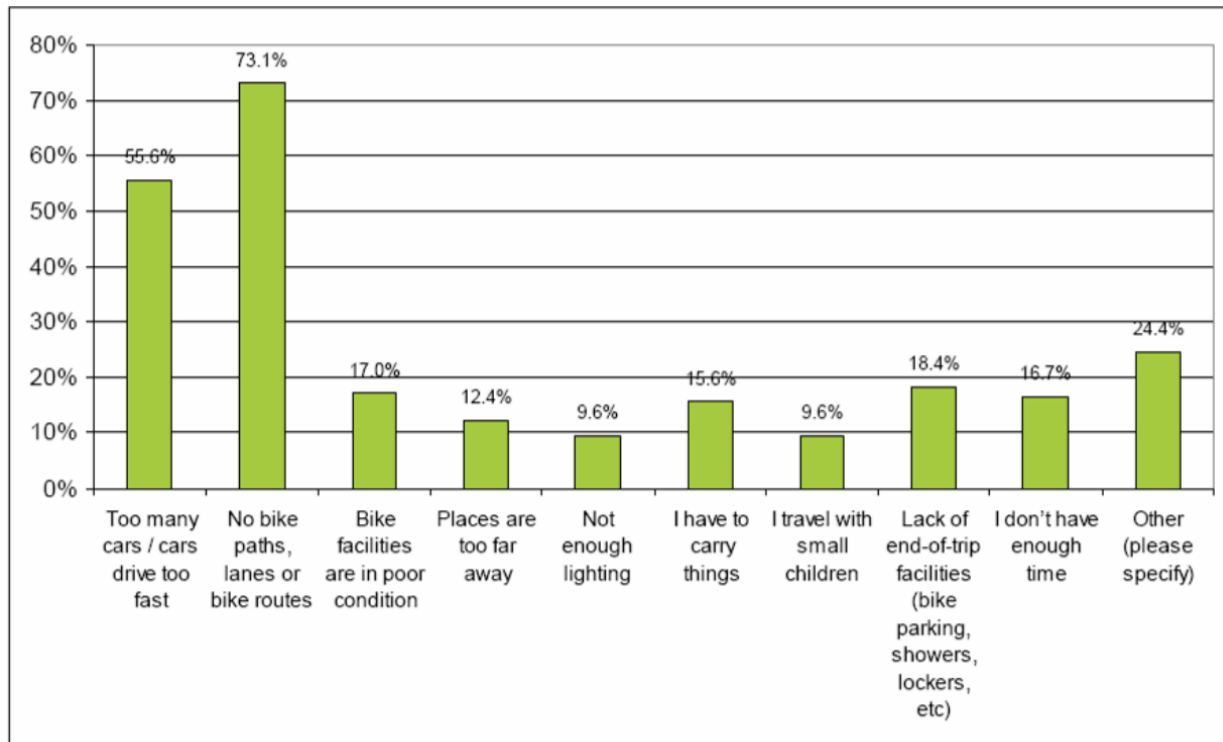
February 14, 1979, in the Boise State University school newspaper the Arbiter, an article on a new bicycle ordinance was published. The ordinance detailed new rules for riders, including required equipment for riding. The new rule also required that bicyclists in the bike lane could only ride with traffic. Up until this new ordinance, it was common practice to only have a single bike lane on a street, meaning the bicyclists were forced to ride in both directions. As evidenced here, Boise has had bike lanes for many decades, but that does not mean that the city has always understood how to create a safe environment for cyclists, or that the city was interested in giving them equal priority as cars. In the same article the author writes "Most people at the meeting felt riding a bike in Boise was not a pleasant experience. For a Sunday excursion the Greenbelt bike

paths will do, but for serious cross-town transportation the bicyclist must rely on his courage and imagination” (O’Brian 1979). Despite 40 years elapsing, the same quote could just as easily be pulled from a Boise newspaper today.

In 1993, the ACHD released the *Ridge-to-Rivers Pathway Plan: a Call to Action*. The plan envisions a world full of possibilities for pedestrians and bicyclists, who will safely and easily be able to recreate or commute to work. “Everyone moves safely and efficiently using their choice of non-motorized travel. Workers enjoy uncongested commutes; children ride bicycles and walk safely to school and between neighborhoods without relying on rides from their parents.” At the time of the report, there was a total of twenty-six miles of bike lanes, so securing this envisioned world was a tall order (*Ridge 1993*). A lot of emphasis in the plan was put on developing the off street pathways. One of Boise’s claims to fame is a scenic outdoor path that follows the path of the river called the Boise Greenbelt. It is frequented by many pedestrians and bikers everyday, and an aim of this plan was to expand the greenbelt and create more similar outdoor paths. It was this type of planning that has made Boise one of the best places for outdoor adventure. It is telling that while the plan sets out ambitious plans for bikeways both on and off the streets, it is really only the off the street pathways that are extensively built. It is in the realm outside of the car that bicycles are allowed to exist.

More than fifteen years later in 2009, the ACHD releases the new *Roadways to Bikeways Plan* (*Roadways*). As the name suggests, there is a renewed vigor for improving the on-street bike network. An object of the new plan was to provide “a bicycle facility within a quarter-mile from 95 percent of all the residents in Ada County.” This plan put forth a comprehensive look at

existing states of the transportation network and works to distill the reasons preventing people from biking, by gathering information at public forums and through surveys. The plan then uses this information to propose changes that are best suited to address those issues and create bicycling transportation network that is useful for everyone (*Roadways 2009*).



This graph shows the problems with the existing bicycle network as identified by the participants (*Roadways 2009*)

Progress was made in the years following the 1993 *Ridge-to-River* plan, which can be seen with the number of on-street bike lanes increased from twenty-six to ninety-five miles. Besides an increase in the number of bike lanes, this new plan represents a recognition on a governmental level that Boise and Ada County would benefit from more cycling. The plan also shows the ACHD is applying its evolving perspective how streets should be used and improving

understanding of the forces, emotional, physical, social and financial that encourage or discourage people from getting on their bikes when they leave the house. In the same year as the release of this plan in 2009, the ACHD officially adopts a policy of complete streets. “A ‘complete’ street addresses the needs of all users Motorists, pedestrians, bicyclists and transit riders of all ages and abilities can be safely accommodated within the overall street network.” This policy change along with the plan has mandated that whenever construction is done to an existing street or a new street is built, the ACHD must consider the impact of the design on all road users (*RESOLUTION 2009*). It has resulted in a spike in the number of on-street bike lanes, with over three hundred and thirty miles accounted for in 2015.

Roadways to Bikeways (2018 - present)

In its responsibilities to manage the roadways, the Highway District formed a bicycle advisory committee to develop a modern plan for how to make Boise the best bicycle city it can be. The committee is composed of residents from all across Ada County that are invested in bicycles. In 2018 this committee released an update to the 2009 *Roadways to Bikeways Plan*. It was not a large-scale replacement of the plan, like how *Roadways* replaced the earlier *Ridge-to-Rivers* plan. Whereas the original 2009 plan was a long document, nearly 300 pages with information on a broad range of issues, the recent addendum is a more more manageable 33 pages that narrows the focus (*Roadways 2018*). In the words of Brooke Green, the ACHD project manager for this plan and Go-to for anything ACHD bicycle related, this update is the so-called master plan for how to implement the lofty vision of bicycle connectivity throughout the county. As the most recently released document on the topic, this addendum represents the current outwardly projected perspective of the ACHD towards bicycles.

Just as many of these governmental documents begins with a statement of goals, so to does this plan. These goals are quite modest in their ask and seem reasonable for a growing metropolitan area to have. The goals are to complete and maintain a bike network which maximizes safety and connectivity and contributes to the viability of bicycling as a reliable transportation option for Ada County residents. Following the goals are the objectives to implement the planned bicycle network. The ACHD will promote awareness of existing bike routes and encourage their use. And they will facilitate coordination and cooperation among local jurisdictions in implementing the *Roadways to Bikeways Plan* recommendations (*Roadways* 2018).

The accessibility and safety of the bike network determine whether or not people use the bike infrastructure. This plan distinguishes itself from its predecessors with its focus on ensuring that the county's bike infrastructure works for people of *all ages and abilities*. This phrase "all ages and abilities" appears numerous times in the new 33-page document, but only once in the 2009 version. It is indicative that prior to now, there was little consideration for how a variety of people actually felt while using the bike infrastructure. The ACHD either presumed a model biker (fit, young and male) when designing or more likely, never thought about the actual potential users.

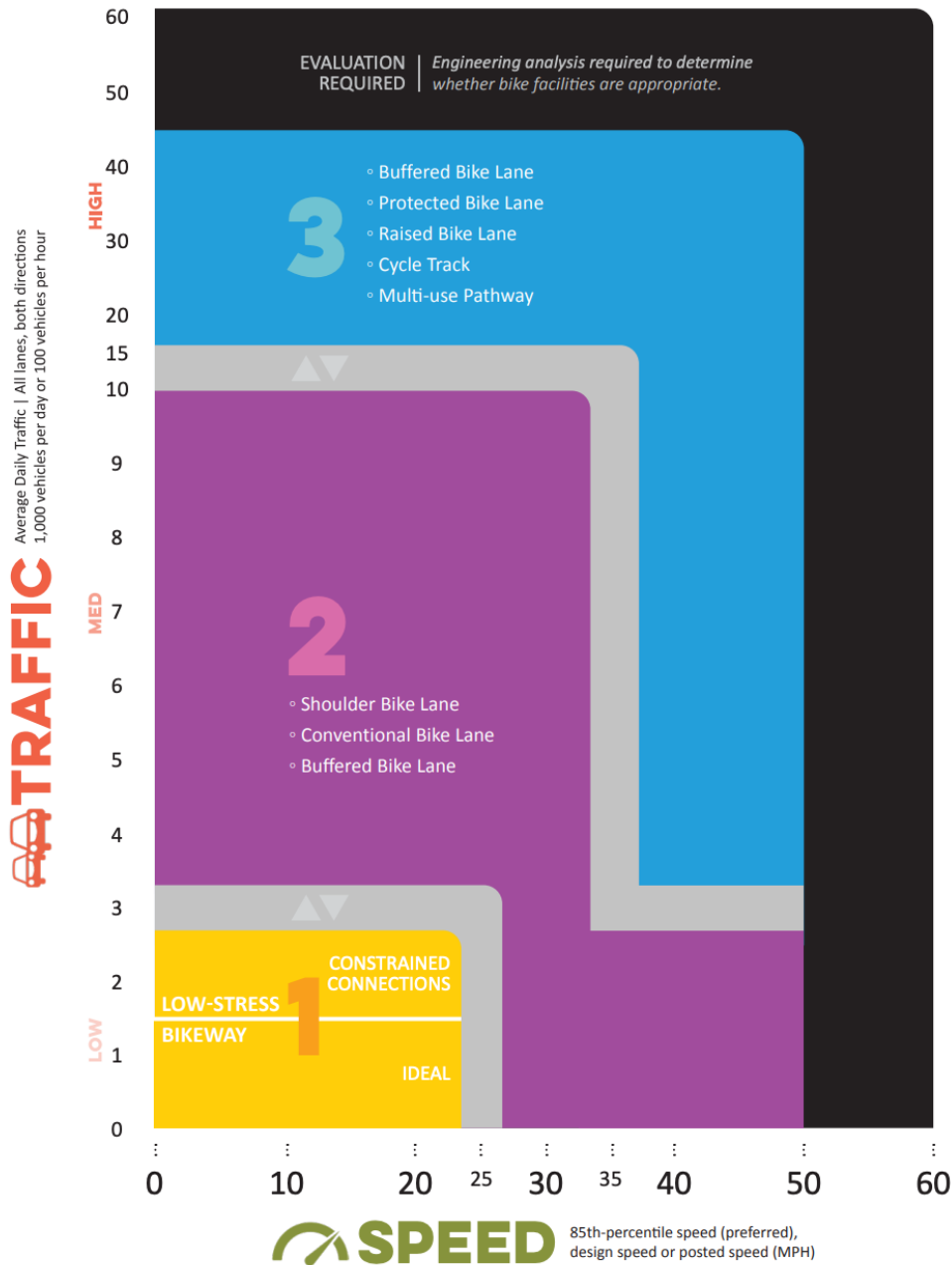
This plan is comprehensive, but it is not radical. There is no demand for bicycles to take over the roads, or to lessen the importance of cars. It is instead a modest proposal to improve the safety of and access to bike facilities. It is immediately apparent from some of the wording used in the plan, that Boise is a long way off from transforming into a bicycle super city, considering the

current state of infrastructure and incrementalist approach of the governmental agency. The plan just hopes to make bicycling a viable form of transit in the city. Nothing could be more modest than that.

In order to better understand the ACHD perspective on bicycles, I conducted an interview with the senior transportation planner at the highway district and head of bicycle and pedestrian projects, Brooke Green. When asked about the *Roadways* addendum, Green immediately pointed to the Bike Facility Matrix (Shown Below) as the most important addition. This matrix indicates what level of bike facility is required for a section of road based on the traffic volumes and the speed of the traffic. The old approach to bike lanes was simple: if two white lines are painted on the road, the bikes will come. In spite of how proudly the ACHD and other agencies in charge of roads might advertise the growing number of miles of bike lanes, this growth did not always translate directly to more bicyclists on the road. The old approach of just throwing money at the problem rather than looking at the actual factors that encourage people to get out of their cars and onto bikes is only now starting to change, as seen with this inclusion of the matrix. One such factor is the perceived safety and comfort the bicyclists feels while using the infrastructure; the matrix directly addresses this need, with three levels of infrastructure and a consistent framework establishing when each level should be used (*Roadways* 2018).

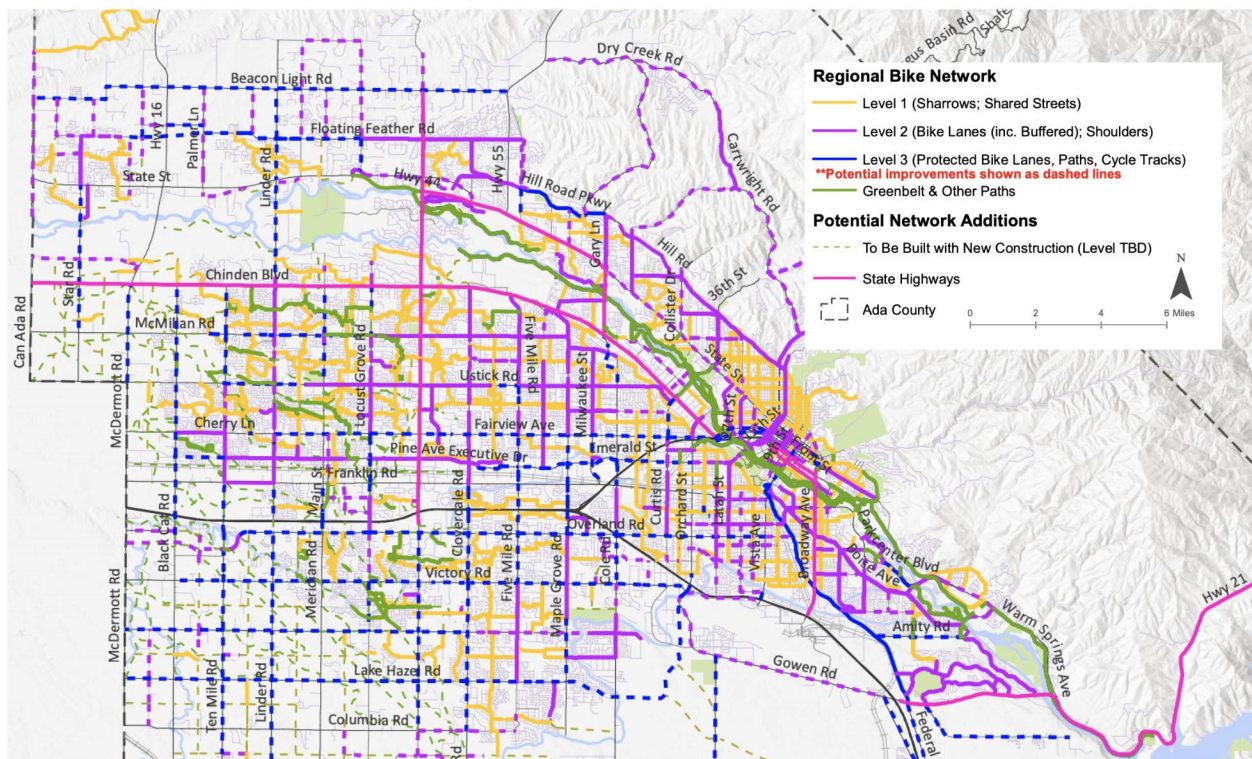


Bike Facility Matrix

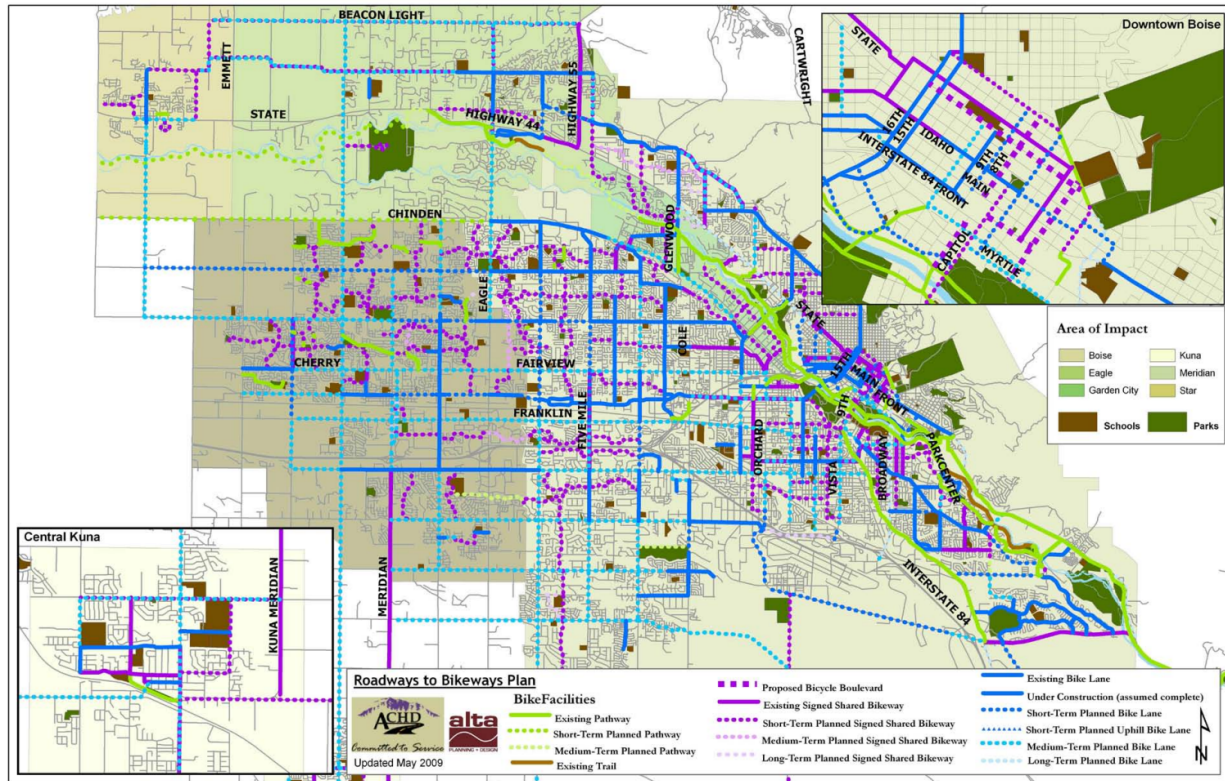


(Roadways 2018)

The advisory committee used this newly established matrix along with the gathered traffic data to create a new bike path map. This map not only includes the existing bike lanes, but also shows an ambitious plan for new bike paths and which level of facility is recommended by the matrix. Compared to the same maps given in the 2009 initial release, these new maps envision an even larger network of on- and off-street bike paths. But what is more impressive is the commitment it will take to actualize all of these higher level bike facilities. While expanding the network even further could be seen as an expected incremental step taken with the release of a new bike master plan, the inclusion of protected bike lanes and similarly involved infrastructure projects signals a significant shift towards a more bike-friendly city. Just a decade earlier, there was not a single mention of protected bike lanes in the plan, and now they are viewed as a necessity.



Existing and Planned Bike Network Map (*Roadways 2018*)



Existing and Planned Bike Network Map (*Roadways 2009*)

Implementation Plan or Plan to Implement

Intrigued by the sheer number of planned changes displayed on the maps, I asked Green about the timeline for the bike paths outlined in the plan. She admitted that these maps were definitely optimistic in nature and the 130 bikeway additions required to fill out the existing network likely would not be implemented within a decade or longer, given monetary constraints and other projects taking priority. Despite initially describing this addendum as a “How-To implement plan” it is not *the* implementation plan. Green is currently working on the implementation plan that will create a priorities list of these bike infrastructure projects, which will be released in

October or November of 2020. Her evaluation will take into account the cost, technical value and timeline of implementation of each of these projects (Lenhart-Wees 2019).

Included with the new matrix was also a list of prioritization criteria, that allows the ACHD to assess the technical value of individual projects. Each project can receive a maximum of 65 points, depending on the benefits it provides in five different areas. It is clear from these categories that the plan attempts to address the worst transportation inequalities in Ada County first. The last evaluative category “Demographic Data”, gives a max of five points for projects that serve transportation disadvantaged groups, as noted in the census. Groups such as those over the age of 65, under 18, living in poverty, without access to a vehicle and disabled are all prioritized. Demographic Data is the only category with five points, the other four all have a total of 15 available (*Roadways* 2018). The addition of this category signals that the ACHD is aware that different communities have different degrees of access to transportation but the disparity in points makes the consideration appear as almost an afterthought.

Lefebvre’s right to the city extends to include rights to civic engagement, education, nutrition and many more things, but in order to take advantage of these rights, they need to have access to the places that provide such goods and services. Two other categories included in the technical evaluation help serve these needs of the community. New projects that help connect residents to civic facilities like libraries and parks, schools, transportation hubs and commercial sectors also receive points. While these projects may not necessarily target specific disadvantaged communities, they do raise the overall access to the necessary resources for a healthy life.

Beyond what is laid out in the *Roadways* addendum, the implementation of the ambitious bike network is broken down into three phases, with an increasing level of commitment required between phases. The first phase described by Green is the “low hanging fruit” which is primarily focused on improving signage in neighborhoods. This means painting more sharrows on the roads, putting up wayfinding signage and getting people acquainted with the branding so that they come to expect bikes on these roads and change their habits accordingly. These projects will contribute to the Low-Stress Bicycle Network that the city is trying to build out, these are the yellow paths on the bike map shown earlier.

Phase two includes projects where new crossing signals need to be constructed. The need for new equipment adds costs to these projects and thereby lowering the priority of the project. The third and final phase tackles projects that require a substantial amount of planning, evaluating and construction, which naturally makes the projects the costliest. All of the level three bike lanes fall under this phase. In general from Green’s description, it appears that cost is a highly determinative variable for when these projects get implemented, more so than any technical ranking it received in from the prioritization criteria.

Despite the initial read of the 2018 update as an indication of a potential paradigm shift for how the Ada County Highway District sees and treats bicycles, it appears the agency is actually not as committed as expected. The *Roadway* addendum is clearly a creation of the more ambitious and bicycle oriented individuals on the committee that drafted the plan, and not representative of the more traditionally minded ACHD. There is no sense of urgency, no appreciation for the bold moves that need to be made.

Metrics for Progress

In the update to the *Roadways to Bikeways Plan*, the ACHD included a section establishing an annual status report that will be released to show how the highway district is doing in its mission to make a bikeable Boise. In this planned status report, there are seven metrics by which to evaluate progress. The first category is funding, which explains the dedicated budget for bicycle projects as well as what that budget is as a percentage of the total budget. This is a way to evaluate if the ACHD is actually putting its money where its mouth is. The second category illustrates how effective this budget has been at building out the bike network. The first metric is how many miles of each level of bike facility exist, as well as the increase in number of miles from the inception of this new plan. They also plan on giving the percentage of the planned network that is built up to the point of the report's release. Not only is it important that the ACHD release these numbers for the sake of transparency, but the general public and bicycle activists especially need to also be aware of these numbers so that they can hold the ACHD accountable. If there is no movement in improving the bike infrastructure, there will not be any movement in rates of bicycling.

When the car gained dominance in our society, it greatly contributed to the alteration of many aspects of Americans lives, including the way they work. There are expectations of punctuality, appearance, hygiene and status at work and elsewhere in life. People wake up, they shower, drive their car to the office and step out ready to work. The rigidity of this system is not accommodating to new manners of living that might result in these expectations being violated. For example, after biking to work, the biker will likely be sweaty and need to shower and change

clothes to be presentable for work. This is an inconvenience and inefficiency that is strongly discouraged by the system and requires individuals to burden themselves when breaking from the norm. To counteract the force of orthodoxy, a cultural change must take place. The ACHD has taken on a small role in instituting some part of that cultural change. The status report has a section titled Outreach Efforts, which focuses on educating people about the changes being done. When citizens are not aware of how the bike infrastructure has been improved, it takes longer for these new investments to be used to full effect. Making sure people are using the bike lanes where the county has invested money will create a feedback effect where the district can see that they're efforts are actually making an impact.

The status report wants to count the number of distributed printed bike plans, the number of informational events and other educational programs as a means of quantifying their success in this area. As the saying goes, knowing is half the battle. Beyond informing people, the ACHD also reaches out to employers, encouraging them to accommodate bikers and commuters using alternative transit. These new efforts to increase bicycling commuting pair well with another ACHD program, Commuteride, which encourages employers to take advantage of tax advantages offered by the state and nation to decrease the number of people commuting alone by car. Since work is such a large part of American's daily lives, making a shift in people's transportation choices for going to work, could influence their transportation choices in other parts of their lives.



Bicycle Program

2018 STATUS REPORT



*COMPLETED BY ACHD COMMUTERIDE TO DISCUSS TRANSPORTATION OPTIONS

Roadways Addendum Status Report (Roadways 2018)

Public Perception and the ACHD perspective

The new *Roadways* addendum does not advocate for a transportation revolution, replacing all cars with bikes, but it is a strong plan that if implemented, could really increase rates of bicycling in Boise. For the first time in Boise’s history, the city has a transportation plan that recognizes the potentially diverse ridership for bike and designed for them. The plan envisions a bike network with real connectivity, addresses transportation inequities and constructs traffic-appropriate infrastructure. The question is now how committed the Ada County Highway District is to implementing the plan. That depends on an array of variables, the latitude ACHD feels it has with the public to try new things, outside pressure advocating for their interests and the commissioners on the ACHD board.

The highway district has faced criticism on all sides including from within the ACHD, the Ada County city governments and directly from the highway district's constituents. As a result, the agency is image conscious and actively works to improve its perception within the community. In the financial budget letter that the ACHD releases yearly, the ACHD director, Bruce Wong, begins with a letter to his constituents. In this letter, Wong stresses several times that the highway district is and has for the organization's existence providing quality roads at a cheap cost to residents. Referencing the ACHD's high ranking amongst various other agencies in charge of roads to boost their own reputation (*Fiscal 2018*). He signs off his budgetary letter writing:

This spending plan reflects our unwavering commitment to meet our customer's needs through innovation and fiscal responsibility so we can continue to give our customers the best road infrastructure in Idaho, enhance commerce, and to validate the trust that voters gave more than four decades ago. (*Fiscal 2018*)

Wong refers to the people he represents, as his customers, indicating a frame of mind that is highly cost conscious. He may prioritize saving money over investing in unproven projects like higher level bike infrastructure. It also potentially speaks to how he views the ACHD, closer to a business than as a government agency, providing services for people. This assertion is supported by Wong's continuous emphasis on saving the taxpayers money and encouraging private investment. "[The ACHD keeps] taxes and fees as low as possible to meet our customers' growing needs. It's a tall order – a challenge I am pleased to say ACHD met in 2018 in spite of the historic construction efforts" (*Fiscal 2018*).

This message of success that the ACHD broadcasts contrasts with voices speaking out from the community as well the consistent complaints that come from the City of Boise government.

Looking at reviews online it is clear that many people are willing to express their discontent with how the ACHD handles some of their maintenance and construction projects. One snarky resident wrote: “They should call a real city and learn how to build a 500 foot section of road in less than a year.” Another local resident writes “[The ACHD has a] lack of concern for overdue projects. Every project they start leads to delays in traffic and they run several weeks if not months late” (“Ada” 2019). A cluster of poor reviews come from 2 years ago when the area experienced a particularly bad snow storm. The 50 year storm event left the agency scrambling for enough snow plows, ultimately leading to people blocked inside their neighborhoods for days.

The ACHD has a mediocre 2.3 rating on Google Reviews with fifty reviews posted for the agency. That is a fair amount of engagement online for a governmental agency and a lot of the comments are critical. I believe this creates an atmosphere at the highway department that discourages taking risks and trying new things. I am not implying the ACHD would lead a bicycle revolution normally, but a government agency that is viewed so unfavorably and facing repudiation from its constituents, will never take bold action. Supporting alternative forms of transit will be disruptive to some people’s lives and would instigate strong push back, so an agency like the ACHD would have to feel confident in its position to take such a stand.

The president of the ACHD commissioners, Rebecca Arnold during her last election in 2016 was asked a question about her transportation philosophy and whether or not she supported traditional approaches of optimizing roads for cars or supported building for alternative transportation modes. She responded with:

I don't think it's one or the other...It would be wonderful if more people rode bikes, but I think you can't force that.

I do not think you can socially engineer people out of their cars. What I think will happen if you take that approach and try to make it so difficult to drive that people won't drive, they'll just go elsewhere. And it will hurt the businesses Downtown. (Berg 2016)

Her response is in line with the other commissioners that were elected that year. They attribute the low rates of cycling and walking solely to personal choice. Baker, another ACHD commissioner says that since ninety-five percent of the population uses cars, it would be a waste of money to invest in infrastructure that supports cycling and walking. What the commissioners fail to recognize, is that it is precisely the lack of funding of that type of facilities that have depressed the rates of alternative transportation so low. Arnold's claim that you cannot socially engineer people out of their cars is disputable (Loukopoulos 2005), but it is provable that improving access to bike networks and appealing walkways increases the usage of the transportation networks. Even their own bike plan *Roadways to Bikeways* that both of these commissioners signed off on, recognize the connection between access to bike facilities and the rate of usage of those facilities.

Butting Heads: Boise and the ACHD

The Ada County Highway District is a governmental agency led by elected officials. Five commissioners, each representing a district in Ada County, lead the agency, approve or veto all official policies and projects and appoint a director of the ACHD. The democratic configuration of this government body ostensibly ensures that citizens' voices are heard on transportation decisions. Candidates running for the commissionership run on their transportation policy vision for the county, and when elected, may take that vision as a mandate. The problem is in the American voting system, local elections already have depressed voter turnout as compared to national elections and residents often are not as knowledgeable on the specific issues, despite the more direct impact these votes can have on their lives. Voting for the mayor is one thing, but this system requires residents understand the dynamics of road jurisdiction, which is convoluted as well as transportation policy, which is opaque to the average citizen. Citizens will then vote for a candidate they have likely never heard of before election day. This is the process that decide how the streets of Boise look and by extension, the entire city. Incumbents have staying power and car centric ideas have inertia to keep them in place. In order for action to occur on a governmental level, the populace must understand the conditions of the city and make their voices heard. They must push and keep on pushing to bring about real change.

When the ACHD was created, it stripped the cities of the right to control their own roads directly, a situation that makes Boise and all of Ada County rather unique. Boise is only one of six cities that are within Ada county's boundaries; the combined population of the other five cities is equivalent to Boise's population. While Boise has the loudest voice in the room, the

room still has five other voices, reducing its power to implement the city's priorities. Boise as the largest and most dense of the Ada County cities is in the best position to support bicycling and other forms of alternative transit. Boise city officials such as the mayor and city councillors have signalled their desire to increase ridership on the public bus system and to spark more pedestrians and bicyclists to take to the streets. But because the streets and cycling infrastructure are not under their control, they are unable to push unilaterally for alternative transit.

2019 is an election year in Boise that will see half of the city council seats as well as the mayor's position up for grabs. Boise is facing an unprecedented level of growth and change which has spurred a number of people to stand up and preach their solutions for what ails the city. One candidate running for mayor, Wayne Richey has the amusing message to make Boise "one of the least desirable places to live" (Prentice 2019) Despite the abnormal message, the desire to address Boise's problems are genuine and his diagnosis of the underlying causes are in fact similar to the other more mainstream campaigns, though not with the same outlandish flair. This growth coming from outside Boise manifests problems that every resident feels. In the decade from 2009 to 2019, the median home price in Ada County increase by one-hundred-and-two percent. Many people's property tax bill mirrors that increase, occasionally forcing people to move as they cannot afford the higher tax (Harding 2019). The main interstate that people commute on has seen a twenty percent increase in car traffic in the last five years (Goree 2019). Several candidates are directly touting their experience in the field of transportation and planning in order to sell their candidacy. The candidates include Rebecca Arnold a current commissioner of the ACHD, Meredith Stead, a city of Boise Planning and Zoning commissioner and Jimmy Hallyburton, a community leader that started a bicycle nonprofit in Boise.

While participating in a 2019 mayoral election forum, the candidates were allotted 10 seconds to respond to the question, “If you were King or Queen what would you do?” The incumbent mayor of Boise, David Bieter seemed very sure in his answer, saying simply “Get rid of ACHD and get our roads back” (Staff 2019). Because the ACHD has the ultimate control over all things streets, it leaves city representatives often feeling like their priorities are being skipped over in favor of less impactful street improvements. Therefore, he advocates for Boise to regain control over its streets once again by dissolving the ACHD. Which is possible under Idaho code title 40, chapter 14 subsection 18, as long as at least 10 percent of the electorate in each of the ACHD commissioners’ subdistricts sign a petition calling for the dissolution, then the issue will be put on the next general election ballot for the electorate to vote on (*TITLE 40*).

ACHD commissioners are not always the staunchest of defenders of the agency they lead. The commissioners are often conciliatory toward Boise arguments about not getting what they want. Current commissioner Sara Baker during a controversial road maintenance project in 2005 said "The highway district has made it clear through their absolute arrogance that they're not going to listen to people. That's something this community needs to discuss, what is the value of ACHD" (Hem 2005)? In 2005, Baker was not yet a commissioner, but was previously a Boise City Councilor.

When asked, a representative of the ACHD admitted that Boise *may* be able to fund more of their own projects if they had control of their own roadways but expresses doubt that they would overall be as effective as the mayor would like to claim (Lenhart-Wees 2019). Others raise

doubts about individual city departments ability to handle the streets at transition points between cities or incorporated and unincorporated areas since cities have neither the obligation nor the jurisdiction to make changes outside of their city. For instance would Garden City (A small city entirely contained within the boundaries of Boise) pay half the cost of the Boise River bridges which are used mostly by Boise residents on both sides of Garden City? They worry that if the ACHD were to dissolve, the conditions that afflicted Idaho roads prior to the formation of the ACHD would eventually return as the cities held a self-focused approach (“Bieter” 2007).

While some in Boise may feel like dissolving the ACHD is the right way forward for the city, there is a different sentiment on a larger Idaho scale. The petition for dissolution used to only require 25 signatures to trigger action, but the state legislature implemented the more rigorous 10 percent rule after a Boise community leader tried to dissolve the ACHD in 2002. And in the 2019 legislative session, Idaho’s house majority leader introduced a new bill to recast each of Idaho’s highway districts in the image of the ACHD (Russell 2019). Emphasizing saving taxpayers’ money under this model.

Because it appears that Boise is unlikely to gain control over its own streets anytime soon and since it is proven that the city is receiving equitable amount of funding for its streets, the best way forward may simply be to form a better relationship between Boise’s city government and the highway district. Many of the candidates running for office this year do not go as far as Mayor Bieter in calling for the dissolution of the highway district, but settle to more effectively advocate for Boise’s transportation needs through improved relations with the Ada County Highway District.

Chapter 2: Building Better Bicycle Communities

An extensive bike network with traffic appropriate bike lanes connecting bikers from their homes to their jobs would be a vast improvement to the system Boise currently has. Previous studies indicate that building such a bike network would greatly increase ridership, shifting people from their cars to bikes for a variety of reasons. Whether an individual wants to get to work or go to a nearby park, it is the quality of infrastructure influences their choice of transit. Just as the automobile shaped society, allowing for its dominance, for bikes to truly take hold in the city, the city must be reformed around the bicycle. Shops, housing and recreation all have to be accommodating to cyclists, for the larger shifts in culture to occur. This development is guided by the city through zoning codes, tax incentives and the like. Whereas the roads are ACHD's domain, the buildings that surround them under the control of Boise. Shaping development is the realm where the city can have its largest impact in reducing the harmful impact of cars and increasing ridership of alternative forms of transit.

Growth equals opportunity

Boise is a rapidly growing city. The population of the greater metropolitan area has increased by almost 20 percent in the last decade. Boise's job market has increased by 3.6 percent, more than double the national average job growth ("Economy" 2019). As outlined earlier, this growth has created growing pains for the city and will spur large changes. This growth is an opportunity to embrace change and to reshape the city in a way the benefits existing and future residents. Boise expects it will need at least 20,000 new households in the next 20 years to accommodate the

growing population (“Keep” 2019b). Along with these new homes, new restaurants, grocery stores, gyms and much more will also be built for the new residents. Development should be guided by place making planning and transit-oriented development (TOD). This will give more transportation options to residents and allow car-optional lifestyles to become a reality for Boise residents.

There are approximately 25 jobs for every household in the downtown area. The downtown ratio dwarfs the Boise average of 1.52 jobs for every household. This imbalance between jobs and housing translates into more traffic and longer commute times. Job rich areas with inadequate housing stock forces people to travel longer distances to get to work (Sultana 2013). Zooming out from Boise, the surrounding cities all have lower job-to-housing ratios (Meridian is .9, Eagle is .79, Kuna is .41 and Star is .26). The growth in the Boise metropolitan areas is disproportionately occurring in these surrounding cities, while the jobs are concentrated in Boise proper. Wealthier transplants to the Boise are drawn to the city of Eagle, where their money can easily purchase a nice, spacious suburban house. Poorer residents are pushed out of Boise by high housing prices and high property taxes and forced to live in cities like Kuna and Star where property values are much lower. Both sides of the wealth spectrum are located farther away from the jobs and other community resources including entertainment and commercial sectors. Because the car is currently the only consistent and viable transportation option in the Boise area, many of these residents become single occupant car commuters that clog up the streets during rush hour. This system disadvantages poorer communities, who must dedicate a significant part of their income towards owning and maintaining a car. It is in all residents’ best interest to change the system.

The challenge is keeping people close to their jobs or shifting their choice of transportation. This is where TOD can greatly benefit a city like Boise. Public transit does not serve the public as well, if the population sprawls across a wide area. Low ridership in non-dense areas makes public transit appear cost inefficient and decreases support for public transit (Curtis 2008). This can tarnish the reputation of public transit and obscure the future viability even when circumstances become more conducive to mass transit. This has already happened to a certain extent in Boise. The ACHD's Rebecca Arnold while running for mayor in 2019 "described Valley Regional Transit's bus system as broken. She said the city should focus on rebuilding a better system, instead of dedicating more and more general fund dollars to it before reform" (Carmel 2019). Arnold, while cynical of mass transit, is not entirely wrong. Boise needs to shift its density and transportation access points to really make public transit options viable.

Infill and densification are complex processes that are prone to complications. Local residents often receive new infill projects poorly, citing a disruption of neighborhood character, daily routine and established aesthetics (Vallance, Perkins and Moore 2005). Infill that attempts to contribute to transit-oriented development faces even more complications as TOD requires many different component parts to interface properly. It is this complicated relationship between transit system, access routes and housing that allows TOD to achieve location efficiency and serve a community well, but it also raises the bar for the infill project that much more (Belzer and Autler 2002). Farris argues for "encouraging higher density quality development on open peripheral land" in addition to inner city infill as the majority of development will be on this peripheral land (2010). Part of the solution to Boise transportation issue is to densify existing neighborhoods

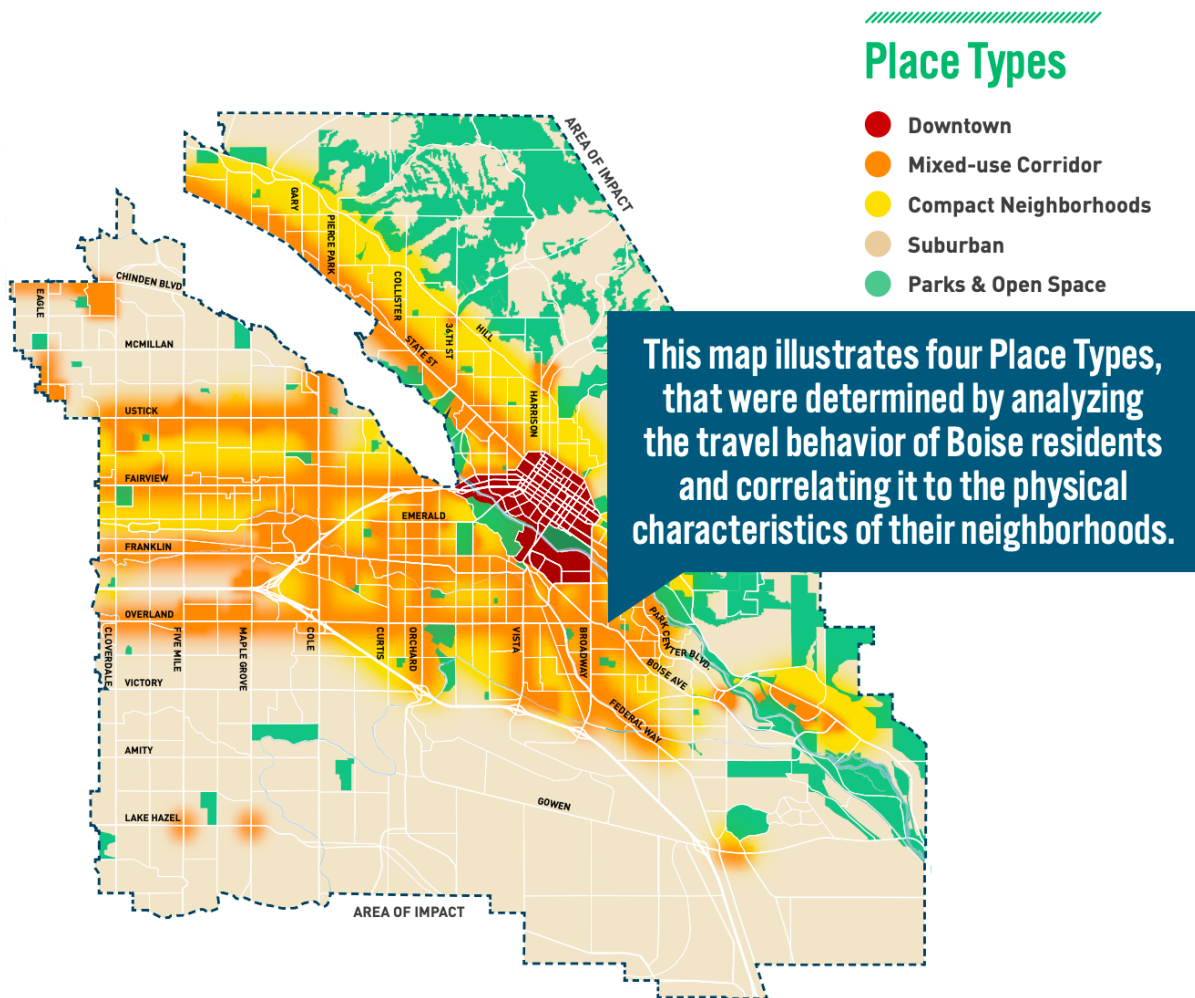
while being mindful of community desires, and to focus on density for future new development. For the best results, Boise needs to work with its surrounding cities, all of which are less dense.

According to (Dittmar and Ohland) two essentials of transit-oriented development are active, walkable streets and building intensity and scale (2004). Every trip begins and ends by walking, so maximize access of community resources for pedestrians. That means building those resources in dense mixed-use areas and in a manner that invites more people to walk into and use the space. Boise wants to combine these principles and make bus stops hubs of communal activity, resulting in engaging neighborhoods, where residents do not feel they have to travel far to live their normal lives. If a resident of a neighborhood could easily get their cup of coffee in the morning, drop off their kids at school and daycare, go grocery shopping and get on a bus to work, all within an easily walkable or bikeable distance, many people would not need a car. Many would choose to live without a car. That is the benefit of place making and transit-oriented development (Gulati 2019).

Understanding the Parts of Boise

Boise has a bold vision for how it will look in the future. This vision is laid out in the Transportation Action Plan (TAP) released in 2016 as well as in the *Keep Boise Moving* (KBP) Transportation Strategy Workbook release in 2019. These documents draw heavily from TOD ideas and function as a blueprint for how Boise can best integrate land use and transportation design to make a more vibrant, safe and livable city. First step is to recognize that the city of Boise is not a uniform entity, it has areas with different densities and usages. To best assess the way forward in transportation planning, Boise has mapped out the city into four different

categories and have evaluated them individually in order to find the best strategy towards transforming the city into its ideal form. These four categories are listed as: downtown, mixed-use corridors, compact neighborhoods and suburbs.



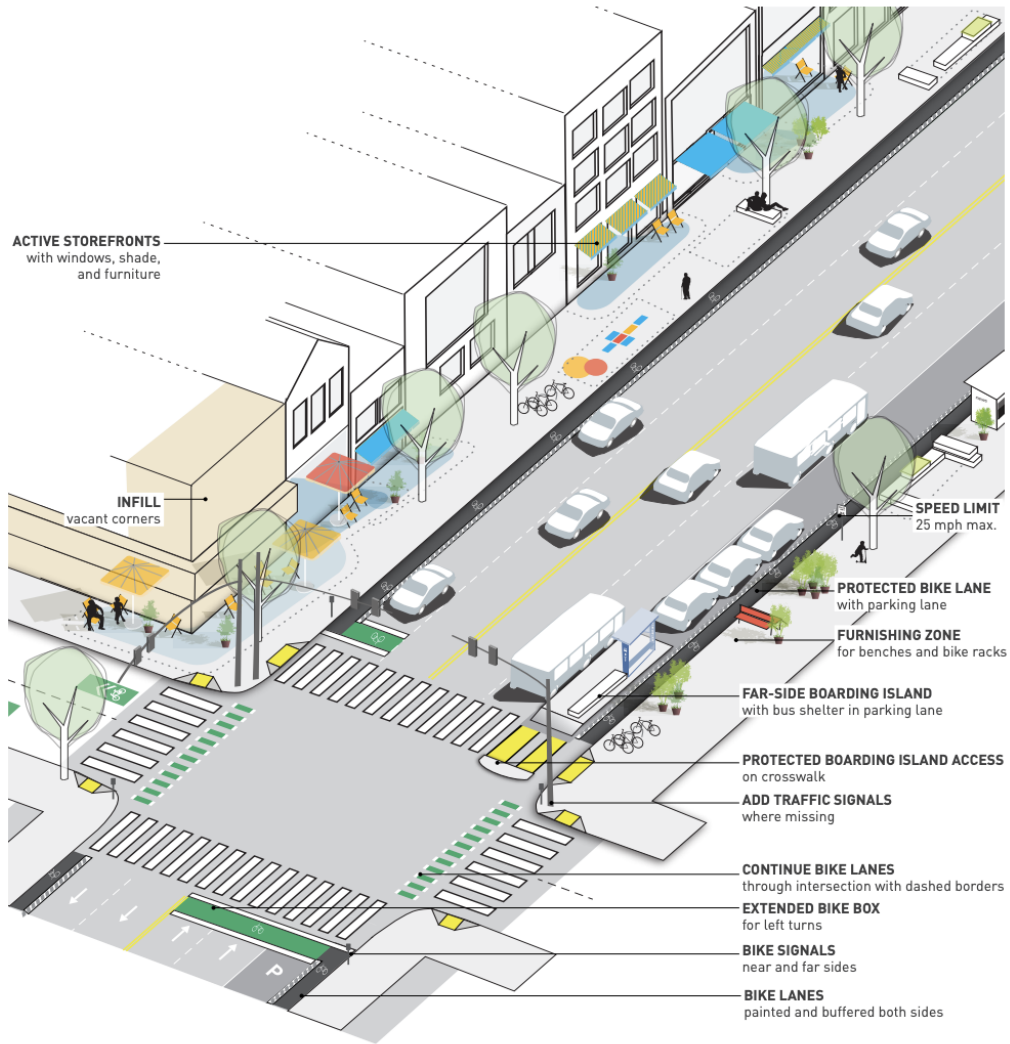
Maps of Boise (*Boise Transport* 2016)

Downtown

The downtown area is both a cultural center, with a vibrant space for recreation and relaxation as well as an economic hub. Many of the streets there are one-way, streamlining traffic through the city center. The mode share of downtown breaks down as such: 61 percent of trips are taken in a

car, 24 percent of trips are walked and 6 percent biked. The majority of trips are taken in a car, but that is not surprising for an American city. The optimistic numbers are actually seen in the walking and biking percents. Downtown has the highest rates for both modes of transportation out all other Boise areas. This can be attributed to downtown's density and buildings that engage directly with pedestrians by building close to the street. Restaurants and stores extend their business onto the sidewalk, making an inviting space for people walking by.

A retired resident living in downtown spoke about the current conditions saying "A major factor in our choice to move to Downtown Boise was to be able to do most of our transportation on foot and on bicycle. Since we've lived here, we've been able to accomplish that" (*Boise Transport* 2016). Downtown has the greatest potential to be the least car dependent part of the city, since it is already very walkable and bikeable, but there is always room for improvement. TAP presents a broad vision for a future downtown landscape by focusing on infill development, cultivating a friendly atmosphere on roadways and walkways, limiting speed limits and implementing comprehensive bike facilities. The plan wants downtown to have a continuous feel that is inviting and rewarding, uninterrupted by empty lots. Boise has identified the success of existing downtown businesses and want to encourage the practice of having engaging storefronts, windows giving a look to the inside and a furnished exterior providing shade, shrubbery and seats for customers. This is where Boise can have its largest impact, through zoning and essentially mandating engaging storefronts.



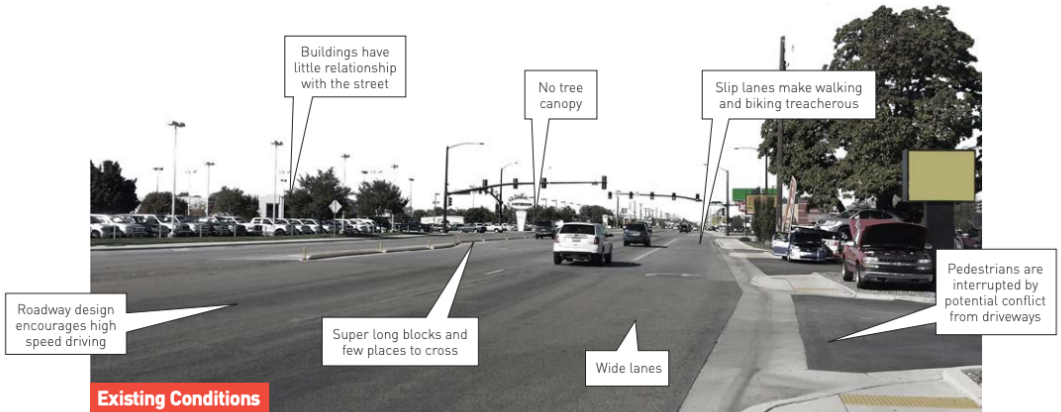
An Illustrative Example of Downtown (*Boise Transport 2016*)

In downtown many of the changes needed to encourage bicycling and walking are not under the direct control of the city, since they require street alterations. Still the city advocates for returning some streets to two-way traffic, narrowing the lanes and lowering speed limits. It also wants quality bike facilities on the streets with either buffered or protected bike lanes. At intersections it proposes broad adoption of bike boxes and bike lanes that extend across the

intersection. All of these suggestions are given over to the ACHD for them to implement on their own timeline.

Mixed-Use Corridors

Outside of the downtown area, the city and the ACHD share the responsibility for facilitating biking more equally. Mixed-Use corridors are currently characterized by roadway arterials that transport large amounts of traffic at fast speeds. Businesses are located on either side of the road, but recessed behind large parking lots. These two factors combine to create an environment completely dominated by cars and unappealing and unsafe to pedestrians and cyclists. These mixed-use corridors have great potential to be spaces friendly to alternative transit. Because these areas are mixed use commercial and residential areas, much can be learned from the success of the downtown area, it just requires more planning and construction. The businesses in this area have many driveways that cut through pedestrian pathways and large parking lots discouraging pedestrian access to the businesses. Placing parking lots behind the business instead of in front and consolidating access roads would be great improvements to developments. Bring engaging storefronts in conversation with the street through infill development and reworking existing parking lots to make spacious sidewalks and public plazas comfortable pedestrian spaces would signal further that other forms of transportation are welcome in these places than just automobiles.



Existing

and Proposed Conditions for Boise’s Mixed Use Corridors. (*Boise Transport 2016*)

Infrastructurally, Boise asks that the ACHD build raised bike lanes and far side bus stops along these corridors. They also want traffic calming measures and other design elements that make the street more pedestrian friendly such as planted medians in the street and frequent street

crossings. These infrastructural features will provide residents the needed accessibility to these newly inviting spaces created under Boise guidance.

Compact Neighborhoods and Suburbs

The mixed-use corridors transition into the compact neighborhoods and beyond that the suburbs of Boise. These sectors have more households than jobs per acre and are dominated by the car. Almost 90 percent of trips are taken in a car here. In the eyes of Boise, the suburbs are to a certain extent, too far gone to remedy their car dependence. Some minor improvements can be made to roads, such as painting sharrows on streets, establishing a low stress bike network and adding extra protection like bollards to existing bike lanes on roads with high speeds. In general though, long distances between destinations make non-automobile traffic impractical. Boise's focus should be on promoting ridesharing to reduce the number of car trips and promote and develop park and ride programs. These kinds of suburban neighborhoods are well established and cannot be easily reshaped to a model that serves primarily walk-on patrons. In low density areas, TOD has experimented with establishing park and ride facilities which try to substitute public transit for part of the trip. If these mixed transit alternatives are competitive in cost and commute times, it could be a viable alternative to solely car-based commuting (Curtis 2008). Another benefit is that the park and ride facilities can be converted into more traditional pedestrian and cycling oriented infrastructure if the area becomes denser over time. The last lesson Boise should learn from this analysis is to discontinue the widespread development of these low-density suburban neighborhoods.

Investing in Public Transit: Boise vs Idaho

According to a study by the Brookings Institution in 2011, the Boise-Nampa metropolitan area ranks No. 22 out of the top 100 metropolitan areas in the percentage of jobs that are within 45 minutes of public transportation. But, when it comes to the frequency of public transportation, Boise ranks No. 90. While there is opportunity for public transportation to thrive, the frequency of service may be detracting from that success (Dalme 2010)

For a bicycle revolution to occur in Boise, public transit also has to be supported. Public transit is the linchpin that allows for transit-oriented development and densification of Boise that makes bicycling practical. Currently Boise only has a bus system run by Valley Regional Transit (VRT) that services Boise and surrounding cities. The three main bus lines run downtown to where most jobs are, and yet buses account for .7 percent of the mode share in Boise. This is much smaller than comparable US cities (The rates in Reno, Spokane and Portland are 2.4, 4.0 and 12.3 respectively) (“Keep” 2019b). It is not surprising to find that funding for public transit is also much lower than comparable cities. The per capita contribution to VRT is only \$28 dollars, while the average for Boise’s peer cities is \$141.

Despite the fact that the VRT bus system services much of Ada County, Boise pays for 87 percent of VRT’s local budget. Boise is not as willing to increase funding for public transit if it feels like it is disproportionately carrying the burden (“Keep” 2019b). More important to the discussion though, is where does the funding come from. The money from VRT completely comes from Ada County property taxes, and each jurisdiction decides how much of these taxes it sends towards VRT. The incumbent mayor of Boise, Dave Bieter claims “I’ve never found a

vibrant (transit) system that is completely dependent on the property taxes. There's just too many competing interests." Vying interests will always result in a transit system that is underfunded, and so the mayor and many other local leaders push for other revenue sources to fund mass transit projects (Carmel 2019b).

Idaho has a reputation for being standoffish with the federal government. Its strong independent character values state's rights and resents the national government getting involved in its affairs. But this defense of local rights ends at the state level. Despite numerous requests from city officials, the state of Idaho refuses to allow Boise and other Idaho cities the right to a local taxing option. Boise has pushed for a local tax option for years as a means to invest in public transportation, to no avail. The city especially needs this revenue option because Idaho does not have a dedicated state-wide fund for public transit. And so Boise is left with no options to invest in new transportation infrastructure. This situation is unlikely to change until the state legislature become more amenable to local voices.

Bus Bike Synergy

If public transit does receive more funding, there are key ways that the current system could be improved to increase ridership. A major step is to improve the existing bus infrastructure. Many bus stops are just a small sign on a post, may or may not have a bench. Full shelters are even more rare. Currently it is easy to overlook these places and that has an effect on public perception of the transit system. If transit stops are perceived as comfortable, safe and clean it leads to overall satisfaction and attractiveness of public transit (Islam 2014). Reinventing the image of the bus stop also provides the opportunity to make the station a hub of community, reinforcing TOD ideals.

Valley Region Transit occasionally uses public-private partnerships to increase access to their bus network. Similar to park and ride programs, VRT partnered with Lyft so people could combine their ride hailing service with public transit. Anyone within a 2 mile radius of a participating bus stop can call a ride from Lyft to or from the bus stop for only 2 dollars. Valley Regional Transit will pay for the rest of the trip, up to 6 dollars. This partnership helps people complete the so called “last mile” of their trip; the last mile refers to this distance that people need to travel before they can use public transportation. A good public transportation has set travel routes and a good system will have broad connectivity, but the rider must first get to the transit connection point. A partnership such as this is one strategy that helps people, but bicycles could just as easily fulfill that need for some people. 2 miles on a bike is not far, a car should not be required to traverse this.

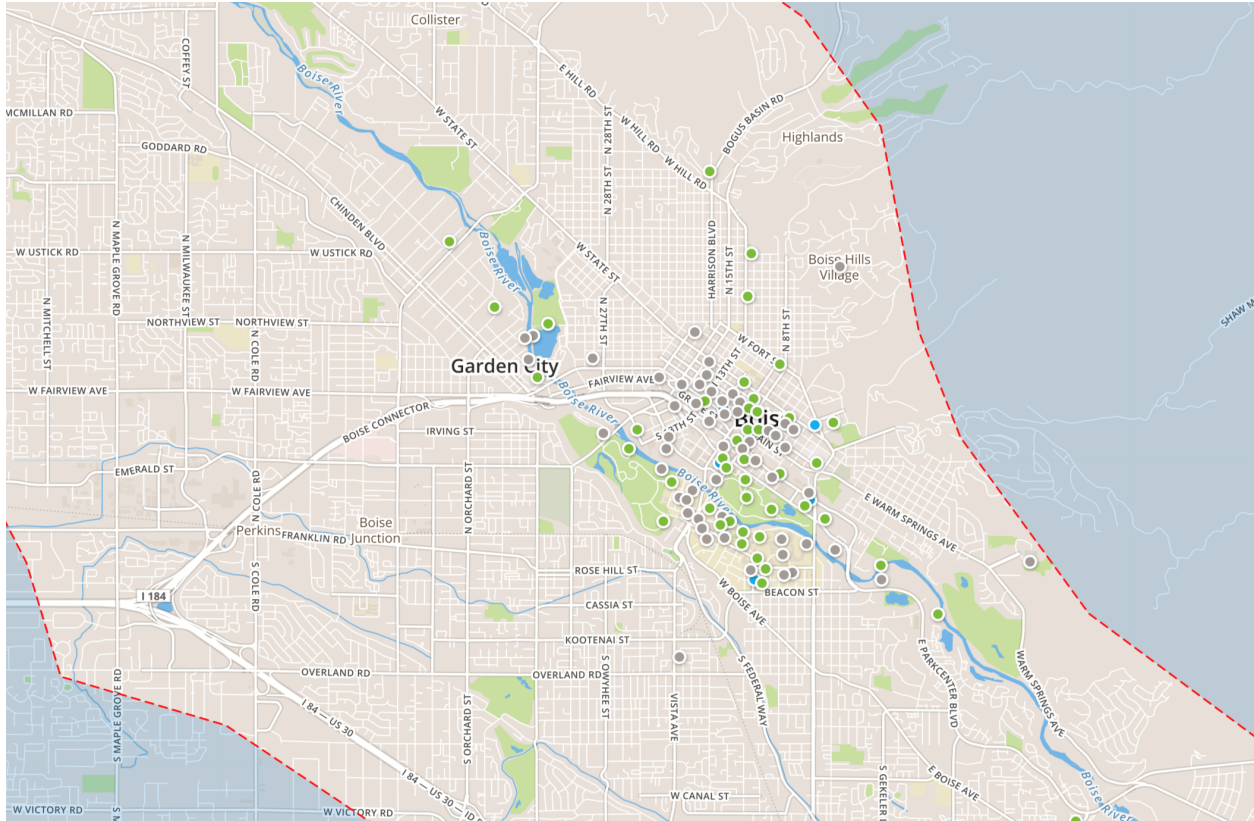
Europe offers some important lessons about the symbiotic relationship between bikes and busses. While I was researching bicycling in Berlin Germany, it was apparent how public transportation was integrated with bicycling. Berlin has a logical public transportation system, organized into 3 concentric zones originating from downtown Berlin. Trains in zone A cycle every 5 minutes. In zone B the trains cycle every 15; and farthest from the center, every 30 minutes. I stayed on the very outskirts of the transit system, technically not even in the state of Berlin any more. Even there, far from Berlin’s center people did not rely solely on cars. Directly outside the transit stop there were hundreds of parking spaces available for bikes. Each morning those parking spaces would fill up as people headed to work in Berlin. People would ride their bikes to the train station from their house and park it there for the day until they got back from work or running

their errands. And this was in a tiny town on the outskirts of Berlin. The bicycle parking inside Berlin dwarfed the outer stations.

Singleton and Clifton while examining multimodal transit both at the national level and local level in Portland, Oregon, found a synergistic relationship between public transit and bicycle ridership. Increases in one transportation form are correlated to increases in the other (2014). In Boise's case, we may not have an established train line like Berlin, but the bus system can function in a similar way. If bike parking, which is sorely lacking in Boise, was more readily available at these bus stops, particularly along the priority routes into downtown, it would help integrate the two transportation forms.

Boise GreenBikes: Bike Share in Boise

Valley Regional Transit in addition to their bus service also manages a bike share program for Boise residents called Boise GreenBikes (BGB). BGB is currently the only bike share program in Boise, and its area of operation is limited to densest areas of the city. Primarily operating around Boise State University and the rest of the downtown area. Historically bike sharing has been implemented in cities to “increase cycle usage, improve the first mile/last mile connection to other modes of transit, and lessen the environmental impacts of our transport activities” (DeMaio 2009). BGB goals were similar; “Boise GreenBike provides people who live in, work in or visit Boise with a new mobility option. It's a convenient and healthy way of getting from one place to another, all without contributing to traffic congestion or air pollution” (*Boise Green* 2019).



Area of operation for Boise GreenBike (*Boise Green 2019*)

As it operates currently, BGB is not the ultimate last mile transportation option. In 2018 BGB averaged 97 trips per day, and that was a new record for the organization. With slightly over 100 bikes in circulation, the BGB does not generate a massive ridership. The director of the program admits that the bikes are mostly used recreationally and he is content with that. BGB is still providing a service to the community, helping to connect people to the city they are in.

More typical bike share programs have their share of problems as last mile options, due to the unequal demand for specific locations, especially during peak travel times. The disparity in demand over the course of use results in some stations that are over capacity with bikes and others that are under capacity. To be an effective and reliable transit option, the service provider

must act to balance out the stations (Contardo 2012). This requires far more effort and management than BGB is currently handling. If Boise develops its public transportation infrastructure further and bus ridership expands and if BGB wants to take on the last mile role, the organization will have to make some large changes to keep up with demand and commuters' needs.

To dock or not to dock

To date the big bike share companies like ofo, lime and JUMP have chosen not to start up in Boise. Typically the appeal of these companies bikes are that they are dockless, meaning riders do not have to bring the bike back to specific locations. That said, the director of Boise GreenBikes says he is prepared for the introduction of the dockless bikes. While the GreenBike bike system is dockless capable, and has been since its first hit the streets in 2015, the company discourages riders from parking their bikes in areas outside of their dock stations through an extra \$2 fee. The primary reason for this is the extra security afforded the bikes. Each bike has its own locking mechanism that prevents the rear tire from rotating, thereby greatly reducing the usability of the bike. Still, these locked bikes have become the target of vandalism, occasionally being thrown in dumpsters, tossed in the river or put in a tree. The docking stations provide an extra layer of security by having a structure that is attached to the pavement or concrete that can latch onto the bikes, making them immovable. To unlock the bike, users simply have to open the BGB app, find the bike you want to use and enter a code. Whereas in completely dockless models, bike populations are constantly migrating according to the last user's whim, the GreenBike stations give users a consistent location to look for a bike. Another advantage of the docked model for the city, is that it does not have to deal with the potential clutter of bikes left

directly in pedestrian paths. A problem that has plagued most cities that have let dockless companies onto their streets.

Bicycling Stigma

While Boise appeals to many people for its easy access to the outdoors, and a favorite pastime of Boiseans is mountain biking, biking within the city proper is still not universally accepted.

Bikers face an array of accusations from some Boise residents saying they have little regard for traffic laws and that they are moochers, since they do not pay for the roads. Other complaints include that bike facilities are too expensive to fund and that roads are meant for cars (Gibson 2018). Variations of these remarks can be consistently heard at community transit meetings and are prominent enough to have a dedicated ACHD page to refuting their claims. While some bicyclists break the traffic laws, so too do car drivers, arguably at even higher rates (Marshall 2017). For the most part the roads are funded through property taxes so if bikers own a house, they are definitely paying for the roads. That point is doubly ignorant since in Boise, the vast majority of bikers also own a car.

Jonas Larsen, a professor of mobility and urban studies explored what makes Copenhagen a pro-cycling city. He writes:

The municipality tries to recruit cyclists by providing the ‘materials’ – especially bike lanes – that can make cycling safe, fast and mainstream, and a realistic alternative to

motorized commuting for the wider population. Cycling is portrayed as ‘normal’ and part of the overall transport system (Larsen 2016)

It is precisely because of the fact that Boiseans do not consistently see bikers on the road that contributes to their antibike hysteria. The best way to push back against bicycling stigma is to improve bicycling facilities, make neighborhoods relational to humans rather than cars and ultimately increase ridership. The other benefits that come from cities decreasing their reliance on cars would also benefit the image of biking in the public's eye. Air quality in Boise suffers from cars and traffic, while bikes emit nothing. Boise air quality would improve if there was a significant shift in mode share. The roads would also become cheaper to maintain if biking was mainstreamed. Bicycle infrastructure requires much less money to build and maintain than car infrastructure that services the same number of people (Flusche 2012).

Chapter 3: Activism and Bicycles

Climate change is one of, if not the most important issue in politics for younger generations (“Which” 2019). The effect of climate change looms over my generation and shapes the way we approach the world. Since personal vehicles account for nearly 20 percent of US emissions (“Car” 2014), reducing car usage is vital to combating climate change. This is what initially attracted me to bicycles. They are an emission less means of transporting people, much better for the climate than cars. Initially I assumed other advocates of bicycling would have the same reasoning, but I soon realized that bicycling appeals to people for a large variety of reasons. The voices that advocate the loudest for better bicycling infrastructure speak about transportation justice, connection to community, freedom and access to both urban and natural realms. Of course, it is an environmentally friendly form of transportation, but that comes second in people’s reasoning for loving bikes. Looking at how prominent local bicycle organizations operate allow us to better understand how cycling is a part of life in Boise. The bike groups are avenues for to find traction with Boise residents for a broader bicycle revolution message.

It takes more than simply building bike lanes to get people genuinely motivated to take up, and become interested in, cycling, and this is largely beyond physical planning. Of equal importance are practices-as-performances by devoted and vocal practitioners that may be attracted to cycling for very different reasons (Larsen 2016)

Local Bicycle Organizations

There are a number of bicycle organization working within Boise and Southwestern Idaho, representing, building and supporting all things bicycles. To evaluate the bicycle activist community in Boise, we will be analyzing four prominent organizations: the Boise Bicycle Project (BBP), Treasure Valley Cycling Association (TVCA), Boise GreenBikes (BGB) and South-Western Idaho Mountain Biking Alliance (SWIMBA). Some organizations focus on advocating for specific governmental policy, some concentrate on education and others target community building. Regardless of their specific focus or interest, each group is powered by a grassroots movement, which when their power is harnessed properly can be influential in spurring a reconfiguration of society to be more accepting of bicycles and alternative transit. Th

Education

The Treasure Valley Cycling Alliance is dedicated to creating a transit environment that is safe for all ages and abilities to bicycle for transportation or fun. The organization targets three groups with education programs to achieve this vision for a better bicycling world: Riders, Motorists and Stakeholders. Cyclists regardless of age can benefit from bicycle education and improve their safety while riding. This is partially due to the fact that riding a bicycle does not require special training, as is obligatory for driving a car. This creates the possibility of a knowledge and skills gap for cyclists, potentially raising their risk of injury while cycling (Ayres 2006). This gap can be rectified through educational programs such as those offered by TVCA.

Specifically, for kids, education programs have proven effective in raising their confidence while riding a bike and creating overall more positive attitudes towards cycling. Education has transferable positive effects that are not always anticipated in the original design of the

educational program. For instance, bicycle education that targets children also has the extra result of influencing the parent's perspective on and habits around bicycles (Lierop 2016). And cyclists that receive extra training also become better drivers around cyclists. The benefits of education can be great.

The South Western Idaho Mountain Biking Association is a popular organization in Idaho that works to improve access to outdoor recreation for Idahoans, specifically by maintaining and creating new mountain biking trails. They also hold classes to train riders the basics of mountain biking, allowing them to try their hand at the sport. This education strengthens the existing bond that Boiseans already have with the outdoors and encourages them to ride more. Those who bicycle in one setting, commuting or recreational are more likely to use a bicycle for all purposes (Sener, Eluru, and Bhat 2009). Therefore, by instilling interest and educating Boiseans on mountain biking, SWIMBA is furthering the cause of biking in general.

The Boise Bicycle Project also has its own educational program and subsequent impact on the Boise community. BBP is a 501c3 non-profit bike co-op and shop founded in 2007 by Jimmy Hallyburton, due to an urge to address both transit inequity and to try to instigate social change for the Boise community. The organization's mission statement is "[to function] as a bicycle recycling center as well as an educational workspace in a diverse and non-threatening atmosphere. Through education and access to affordable refurbished bicycles BBP strives to build a stronger bicycling community" (Hallyburton 2019). They have pursued this mission restlessly since then, giving away thousands of bikes to children and adults in need as well as providing a space for the Boise community to affordably purchase and fix their bikes.

Whereas in a traditional bike shop people might drop off their bikes at a shop and return once it has been repaired, the BBP shop works differently. They believe in empowering people by teaching them the mechanical skills to fix their own bikes. For a flat rate of \$12 per hour, the customer can access a large work area with many tools and equipment capable of fixing most issues. If the customer does not know how to fix their own problems, they are paired with a mechanic, who helps and teaches the person how to repair the bike. If money is an issue, the shop has a work trade program where volunteering for an hour gives you one hour of store credit in the repair shop. In 2018 112 individuals repaired their bicycles through Work Trade. Meaning there are 112 people, regardless of their financial situation, that can more confidently handle their own bicycle. This autonomy prepares society for a broader shift away from auto dependence towards bicycles.

Visibility and Representation

A major way that each of these bicycle organizations operate is to provide spaces for bicyclists to be seen as bicyclists. Much of this is through large events, parades and festivals. TVCA puts on an annual Bike week encouraging people to commute to work by bike and to enjoy the pleasures of life that are accessible by bike, such as mountain biking and bike camping. Boise GreenBikes hosts two large events, Cranksgiving and the GreenBike race. Cranksgiving is a food drive event to supply hungry families with a nice meal for Thanksgiving. Described as being part-bike ride, part-food drive and part-scavenger hunt, it is the world's largest mounted food drive. It occurs nationwide, but is independently organized by local organizations to benefit local nonprofits. Boise GreenBike sponsors the Cranksgiving that occurs in Boise. Turning the event into a

competition between teams to see who can collect the supplies for a Thanksgiving meal fastest. GreenBike allows each of the registered participants four hours credit on their bikes so that they can complete the tasks using the GreenBikes for free. In 2016, the first year of Boise Cranksgiving, GreenBike managed to assemble 16 food boxes to deliver to Ada County families in need. That number more than doubled in the second year with 36 boxes (“Boise Green” 2019).

Cranksgiving positions cyclists as contributing members of their community and always striving to improve themselves. While the cyclists ride around on the GreenBikes simultaneously promoting a communal resource that is good for both the rider and the environment, they are also improving the reputation of the abstract cyclist figure in the mind of Boiseans (Harris 2019). The GreenBike race connects bicycling to a semi- prestigious and popular event in Boise. For over 30 years ASWD Twilight Criterium has brought world class cycling downtown Boise. A criterium is a bike race consisting of several laps around a closed loop. Professional bike teams compete against each other to achieve the best time, ultimately bringing in over 20,000 spectators and giving Boise residents a full weekend to look at professional bicyclists from around the nation. In 2015 Dave Fotsch, director of Boise GreenBike partnered up with the ASWD to add one more race to the schedule, the Boise Celebrity GreenBike Race. This race got local Boise “celebrities” (local news anchors and community figures) to hop on the Boise GreenBikes, creating a fun atmosphere of over the top trash talking. This race helped to bring attention to the newly started bikeshare program in Boise. In 2019 the annual race was altered so that any Boise resident could compete. “While the race has had its share of celebrities, it has always been more about fun than famous people” says Fotsch. Instead of winning just bragging rights, the top three finishes would be awarded a cash prize, which would then go to the charity of the rider’s choice. The original

plan was to award a total of \$1,800 to charity, but through the generosity of other sponsors and matching donations a total of \$10,310 was donated to nonprofit organizations from Boise. BGB maximizes its social capital to benefit the Boise community.

Celebrations of Bikes and Bicycling

Distinguished social performances for bicycles, such as Critical Mass (CM) utilized the power of numbers to generate new levels of visibility for cyclists. The act of claiming space for bicycles and intentionally excluding cars from that space resonated with activists and regular citizens alike, furthering the interests of bikers (Blickstein 2001). When participants in Critical Mass were asked what they thought the purpose of CM was, early in their involvement, the majority responded “to increase visibility of bicyclists on the road.” But as participation in CM continued, the participants’ perceptions would evolve. Critical Mass became a discussion on broader transportation policy, public spaces uses, global environmental issues and critiques of capitalism (Blickstein 2001). The successful performance transcends the most obvious implications and becomes more nuanced and farther reaching.

Boise hosts a summer bicycle festival in Boise is functions in a similar way to the early Critical Mass Performances by providing visibility and space to cyclists. Tour de Fat was a festival put on by the craft brewing company New Belgium Brewing Co (NBB). New Belgium started the festival in 2000 first bringing the festival to six cities across the United States, celebrating, “great beer, good people, and humankind’s most wonderful invention – the bicycle!” The festival was also a means to raise money for local bike organizations. While entry into the festival was free, donations were encouraged and would go to the bike organizations after the expenses for the

festival were paid. Boise participated in the festival early on, starting in 2001 and it proved so popular that they made it an annual festival. Each year people dressed in bizarre and entertaining costumes would flood the streets, riding their bicycles with pride as a part of a bike parade, after which, they would attend the festival. It was a blast until 2017, when New Belgium Brewing company made some changes in the interest of shoring up financial concerns. Instead of free admission, NBB began charging a \$25 entry fee. They also expanded the festival to 33 cities after focusing on only 9 the year before. Another big change was the focus of the festival, no longer bike centered as it had been for 17 years prior. A full page ad in the local Idaho newspaper spoke of the event as “Beer, music and friends” (Dalme 2010) conspicuously missing any mention of bikes. Boise was one of only 3 cities out the 33 cities that held a bike parade. Attendance greatly suffered as did the level of donations Idaho bike groups received. In 2016, when the event was held in the traditional fashion, 12,000 people rode their bikes in the Boise parade, and NBB raised over \$63,000 for bicycle nonprofits. In 2017, only 5,000 people participated in the bike parade, only 1,500 people showed up to the festival itself and they raised less than \$20,000 for the nonprofits.

Low attendance and public backlash were clear signs that the changes made to the festival were not popular and were not a way forward for Tour de Fat. Looking back at CM we can potentially identify what went wrong. “Critical Mass relies primarily on the visible presence of groups of bicyclists in city streets, a highly localized event” (Blickstein 2001). Tour de Fat turned away from the base that had supported it for years, bicycle groups. NBB also standardized the event, reducing the local character and it instantly experienced problems. So, after the failure in 2017, NBB announced that they would learn from their mistakes and bring back the familiar festival

that everyone missed. But later in 2018 it was announced that in fact, the brewing company would not be returning to Boise. Instead opting to help kickoff a new, more local bike festival in the city through a small financial grant.

Boise Goathead Fest

The new Boise Goathead Festival (BGF) stepped in to fill the hole left by Tour de Fat. First held in the summer of 2018, BGF was a synthesis of the fun activities that took place during the Tour de Fat with a local focus on Boise culture and community activism. Borrowing from the traditions of the previous festival, Goathead Fest included a bike parade with attendees often dressed in crazy, creative and cool costumes as they roll through downtown Boise. This time though, the costumes often had a goathead motif.

The name for the festival, despite how it sounds, does not revolve around the heads of farm animals. For Boiseans, goatheads refer to an invasive plant species also known as Puncture Vine that has infested large areas of our city and produces a prickly seed pod. When this seedpod dries out, it terrorizes any and all who move through the area. Shoes and dog's paws are always one unfortunate step away from a painful stab and most pertinent to this topic, goatheads are renowned for puncturing bike tires. So, a primary objective of this festival was to help rid the city of this noxious weed. To achieve this objective, the organizers started a competition in Boise to see who could collect the most goatheads during a two-month period before the festival. Calling upon the community to volunteer their time to dig up any goatheads before they sprouted seeds and spread. For every 30 pounds of goatheads they brought in, participants would earn a beer or ice cream token redeemable at the new festival.

In 2018, BBP collected almost 4,000 pounds of goatheads and raise \$25,000 for local bicycling nonprofits. Already in the first year the Goathead festival brought in more money than the final year of Tour de Fat. BBP also decided to expand the number of nonprofits taking part in the festival. Whereas during the Tour de Fat days, only three bike organizations were given donations, SWIMBA, TVCA and BBP, this new festival kept all of the past recipients, while also bringing in the Idaho Walk Bike Alliance, Idaho Interscholastic Cycling league, Dirt Dolls, and the Land Trust of the Treasure Valley.

The Boise Goathead Festival is a vehicle to describe the character of Boise's bicycle activist groups. First, the organizations are formed of the local Boise community and want to give back to it. They do this by creating a fun, cultural experience that adds to the vibrancy of the neighborhood. As well as by literally cleaning up the streets with the removal of a noxious weed. Second, the organizations are complementary, working together to pushed by a vision of better bicycling communities, despite different backgrounds. Third, they are ambitious. For the second year of BGF, BBP challenged themselves to collect 8,000 pounds of goatheads, double the previous year's goal. And Fourth, they are effective. Since the first Goathead Festival, BBP has seen a huge reduction in the number of goatheads. BGF may become so successful that they will be unable to find more goatheads to pull up for the competition in a few years.

Bikes and Politics

The Boise GreenBikes bike share program is an intriguing case of bicycle activism that was seen as valuable to the city and therefore was integrated into the government's transit service. The

history of bike share in Boise Idaho dates back to the 1990s, when Boise residents placed yellow painted bicycles around town with no locks on them. The idea was that residents could come across a yellow bike, pick it up and ride it to their desired location and leave it there for another random citizen to use at a later time. There was a contingent of people in Boise, as well as in several other American cities that rebuffed the obsession with private property and the greedy pursuit of profit in society. This radically free bike share program was a form of resistance to that ideology and provided a service for the community. Mirroring the rights laid out by Lefebvre in his right to the city. The origins of this program actually start in the Netherlands, but instead of yellow, the bikes there were painted completely white. After these Dutch activists released 50 white bikes onto the streets, they quickly faced the reality of human behavior. The bikes began disappearing from the streets or were left broken and unusable. The Yellow Bikes of Boise met a similar fate. Dave Fotsch, an original advocate and founder of Boise's Yellow Bikes described the situation. "It quickly began to look like each homeless person in Boise had their own new yellow bike and there were no more left for the rest of the public." While homelessness is a social concern, it was not the issue that the yellow bike program was trying to solve. Originally envisioned as a youth diversion program, the lack of funding for the program and the apparent difficulties facing the vision led promptly to the program's obsolescence.

Fotsch returned to the idea of bike share more than a decade later with Boise GreenBikes. While working at an Idaho public health agency in 2011, Fotsch came across several papers detailing the health benefits of bike share programs in their communities. It inspired Fotsch to get the ball rolling for Boise's own bike share program. Dave received encouragement from his director to continue researching the project, its feasibility and its effects on the community. After securing

some federal grant money to purchase the bikes and docking stations, as well as sponsors to run the program, the project eventually developed into today's Boise GreenBikes, underneath the umbrella of the Valley Regional Transit.

BGB is evidence of the power of bicycle activism and the persuasive facts that a bicycle society would be much healthier, more resilient and more sustainable than the current car dominated model. The BGB program began with just a couple of activists fighting to secure more rights to the city. Today's political landscape and line up of bicycle activists should be very encouraging then. The groups are much more organized than decades ago and have a large base of grassroots supporters. The organizations have new technology connecting them to vast amounts of information as well as like-minded supporters than ever before. There is great potential for the groups to push for change.

Boise may have just experienced what that push for change looks like during the 2019 city council election. Jimmy Hallyburton the founder and director of Boise Bicycle Project, ran for and won a seat on the city council. There are several parallels between Hallyburton and Luud Schimmelpennink of the Provo movement during the 1960s in Amsterdam. Schimmelpennink helped start the White Bikes in Amsterdam, and quickly rose to prominence as a part of the Provo counterculture movement, calling for radical structural change to society.

Schimmelpennink did not prove especially productive while in government, but his election signaled a significant desire for change existed from within the populace. Hallyburton did not run on an especially radical agenda, but he did run as a community leader and someone deeply involved in listening to the concerns and desires of Boise residents. "As a City Council Member,

Jimmy plans to use that same collaborative approach and coalition building with nonprofit and the community to take on some of Boise's toughest issues" (Hallyburton 2019). A future of bicycle activist groups and governmental candidates like Jimmy could prove to be the impetus Boise needs to have its bicycle revolution.

Today's urban realities call for a different form of organizing and lobbying, namely, social networks of concerned citizens and with the local authorities that are entrusted with the bulk of transport and environmental planning. Planning is too important to be left to planners—especially those who do not ride bikes (Batterbury 2003).

Conclusion

Boise, Idaho has a lot of potential to be a livable, sustainable and resilient city but to do that, it must first rid itself of the car dominated planning for the future. In the midst of the climate crisis, it not only makes sense in terms of survival, but it would also strengthen communal bonds of our town and improve the mental and physical health of our citizens. Building this ideal city is not a simple achievement but it starts with a few key steps.

The state of Idaho must end its hypocritical policy of preventing local taxation options, which would allow Boise to invest in the infrastructure that it needs in this growing world. Idaho now has one of the most attractive places to live in Boise, and it should stop hamstringing its efforts to better itself. Providing a reliably, frequent and convenient transportation infrastructure would lessen the burden of cars on the streets. A better public transit system would also facilitate a higher rate of bicycling as the bicycles often fill the last mile needs of commuters.

The optimal scenario for Boise would be to regain control over its own streets again. That way it could more smoothly integrate their zoning and building plans with the street functionality. But barring the dissolution of the ACHD, it is time to stop villainizing the ACHD and start working more cooperatively. The ACHD is not any closer to being abolished today than it was back in 2005, especially because the state has made it harder to pursue dissolution.

Not only must our streets change, but so too must our buildings. Rather than having our buildings positioned behind large parking lots, they should be built close to the street, where they are on a smaller scale, in relation to the street and invite pedestrians in. Place making strategies and transit-oriented developments are necessities if Boise wants to increase ridership on alternative transit.

Advocates of bikes are already doing a great job. I anticipate participation with these groups continues to grow as more Boiseans start seeing the benefits of bicycles. This will create a positive feedback where the increased action of bicycle groups will promote bicycle-oriented growth in the city, bring out more bicyclists and thereby more members of these organizations. Biking has to be seen in the eyes of the community as a core part of their character, that is the best way to push the government to continue to invest in bicycle infrastructure projects. The bicycle activists' groups are in the best position to push these interests.

Works Cited

“Ada County Highway District Reviews.” *Google Search*, Google, 2019,
www.google.com/search?sxsrf=ACYBGNSN6U_3tnMfiFtUWpyLU0mikYm-tg%3A1572212861076&ei=fRC2XeWkBI_1-gT3kbfAQ&q=ada%2Bcounty%2Bhighway%2Bdistrict&oq=Ada%2Bcounty%2Bhighway%2B&gs_l=psy-ab.3.0.35i39j0i9.3179.6176..7138...0.1..0.84.1351.19....3..0....1..gws-wiz.....0i71j0i67j0i131j0i20i263.fHQOoSNXbmo#lrd=0x54aef8b5df9ea437:0xea666e8fec5aab49,1,,

Ayres, T. J. “Prospects for Bicycle Safety Education.” *PsycEXTRA Dataset*, 2006,
doi:10.1037/e577712012-069.

Batterbury, Simon. “Environmental Activism and Social Networks: Campaigning for Bicycles and Alternative Transport in West London.” *The ANNALS of the American Academy of Political and Social Science*, vol. 590, no. 1, 2003, pp. 150–169.,
doi:10.1177/0002716203256903.

“Beer News: Tour De Fat.” *Realbeer.com*, Real Beer Media, 22 Aug. 2000,
www.realbeer.com/news/articles/news-001342.php.

Belzer, Dena, and Gerald Autler. *TRANSIT ORIENTED DEVELOPMENT: MOVING FROM RHETORIC TO REALITY*. The Brookings Institution Center on Urban and

Metropolitan Policy and The Great American Station Foundation, June 2002, www.china-up.com:8080/international/case/case/810.pdf.

Berg, Sven. "ACHD Challengers Call for More Acquiescent Board." *Idahostatesman*, Idaho Statesman, 21 Oct. 2016, www.idahostatesman.com/news/local/article109608107.html.

Besel, Richard D., and Jnan A. Blau. *Performance on Behalf of the Environment*. Lexington Books, 2014.

"Bieter Wants Control of ACHD." *Boise Guardian*, Boise Guardian, 9 Mar. 2007, boiseguardian.com/2007/03/08/bieter-wants-control-of-achd/.

Blanchard, Nicole. "Goatheads Have Long Been a Thorn in Boise's Side. Are Festival Collection Efforts Helping?" *Local*, Idaho Statesman, 25 July 2019, www.idahostatesman.com/news/local/article233109825.html.

Blickstein, Susan G. "Automobility and the Politics of Bicycling in New York City." *International Journal of Urban and Regional Research*, vol. 34, no. 4, 2010, pp. 886–905., doi:10.1111/j.1468-2427.2010.00914.x.

Blickstein, Susan, and Susan Hanson. "Critical Mass: Forging a Politics of Sustainable Mobility in the Information Age." *Transportation*, vol. 28, 2001.

"Boise City, Idaho Population 2019." *Boise City, Idaho Population 2019 (Demographics, Maps, Graphs)*, World Population Review, worldpopulationreview.com/us-cities/boise-population/.

“Boise Green Bike.” *Boise Green Bike*, Valley Region Transit, 2019,
boise.greenbike.com/.

Boise Transport Action Plan. City of Boise, Apr. 2016,
www.cityofboise.org/media/3143/boisetap.pdf.

Car Emissions and Global Warming. Union of Concerned Scientists, 2014,
www.ucsusa.org/resources/car-emissions-global-warming.

Carmel, Margaret. *ACHD Commission President Seeking Lower Property Taxes, Changes to Main Library Project in Bid for Mayor*. Idaho Press, 14 Sept. 2019,
www.idahopress.com/news/local/achd-commission-president-seeking-lower-property-taxes-changes-to-main/article_58f54a46-caf0-55fc-9932-210fca452cc0.html.

Carmel, Margaret. “Boise Set to Increase Public Transit Funding with New Funding Formula.” *Idaho Press*, Idaho Press, 17 Apr. 2019, www.idahopress.com/news/local/boise-set-to-increase-public-transit-funding-with-new-funding/article_8a904bae-3c36-5048-99e4-c64554790bb6.html.

Cass, Noel, et al. “Social Exclusion, Mobility and Access.” *The Sociological Review*, vol. 53, no. 3, 2005, pp. 539–555., doi:10.1111/j.1467-954x.2005.00565.x.

“Communities in Motion 2040.” *Regional Long-Range Transportation Plan Ada and Canyon Counties, Idaho*, Community Planning Association of Southwest Idaho, July 2014,
www.compassidaho.org/documents/prodserv/CIM2040/final/Final_CIM2040_Interactive.pdf.

Contardo, Claudio, et al. *Balancing a Dynamic Public Bike Sharing System*. CIRRELT, Mar. 2012, www.cirrelt.ca/DocumentsTravail/CIRRELT-2012-09.pdf.

Costantini, Nicole M. "Bikes and Bodies: Ghost Bike Memorials as Performances of Mourning, Warning, and Protest." *Text and Performance Quarterly*, vol. 39, no. 1, 2017, pp. 22–36., doi:10.1080/10462937.2019.1576919.

Curtis, Carey. "Evolution of the Transit-Oriented Development Model for Low-Density Cities: A Case Study of Perth's New Railway Corridor." *Planning Practice and Research*, vol. 23, no. 3, 2008, pp. 285–302., doi:10.1080/02697450802423559.

DalEY, Amber. *Boise Goathead Fest 2019: Pull Weeds, Ride Bikes, Give Back*. Idaho Press, 31 July 2019, www.idahopress.com/outdoors/boise-goathead-fest-pull-weeds-ride-bikes-give-back/article_7cb0f4c9-4f93-5a4f-959c-787e5fc44136.html.

Dalme, Justin. "Road to Nowhere." *Boise Weekly*, Boise Weekly, Sept. 2010.

Day, Don. "'T' For Transit: Decision Made on Boise Streetcar; inside the Push to Make It a Reality." *BoiseDev*, Idaho Press, 28 Dec. 2016, boisedev.com/news/2016/12/28/boise-streetcar-downtown-circulator-train-transit.

Deeds, Michael. "Hate on New Tour De Fat If You Must, but If You Love Boise, You'll Still Ride." *Words & Deeds*, Idaho Statesman, 11 Aug. 2011, issuu.com/idahostatesman/docs/0811_scene_24p.

Deeds, Michael. "Think Idaho Has a Crazy Number of Breweries for Its Size? Here's How We Rank." *Words & Deeds*, Idaho Statesman, 8 Nov. 2019,

www.idahostatesman.com/entertainment/ent-columns-blogs/words-deeds/article237159309.html.

Deeds, Michael. "Tour De Fat to Abandon Boise after Promising to 'Bring Back the Best Possible Event'." *Words & Deeds*, Idaho Statesman, 20 Apr. 2018, www.idahostatesman.com/entertainment/ent-columns-blogs/words-deeds/article209434349.html.

Demaio, Paul. "Bike-Sharing: History, Impacts, Models of Provision, and Future." *Journal of Public Transportation*, vol. 12, no. 4, 2009, pp. 41–56., doi:10.5038/2375-0901.12.4.3.

Dittmar, Hank, and Gloria Ohland. *The New Transit Town: Best Practices in Transit-Oriented Development*. Island Press, 2004.

Duranton, Gilles, and Matthew A Turner. "The Fundamental Law of Road Congestion: Evidence from US Cities." *American Economic Review*, vol. 101, no. 6, Oct. 2011, pubs.aeaweb.org/doi/pdfplus/10.1257/aer.101.6.2616.

"Economy in Boise Idaho." *Boise, Idaho Economy*, BestPlaces, www.bestplaces.net/economy/city/idaho/boise.

Farris, J. Terrence. "The Barriers to Using Urban Infill Development to Achieve Smart Growth." *Housing Policy Debate*, vol. 12, no. 1, 2010, pp. 1–30., doi:10.1080/10511482.2001.9521395.

Fiscal Year 2019 Annual Budget. Ada County Highway District , Aug. 2018, www.achdidaho.org/Documents/Budget/2019Budget/FY2019BudgetFull.pdf.

Flusche, Darren. "The Economic Benefits of Bicycle Infrastructure." *Advocacy Advance*, Advocacy Advance, July 2012, www.advocacyadvance.org/the-economic-benefits-of-bicycle-infrastructure/.

Gibson, Cynthia. "Why Do Cyclists Break the Law in Idaho? To Be Safe." *Idahostatesman*, Idaho Statesman, 4 Jan. 2018, www.idahostatesman.com/opinion/article192948329.html.

Goree, Alexis. "Traffic in the Treasure Valley Has 'Definitely Gotten Worse' as Volume Increases." *KBOI*, KBOI, 6 May 2019, idahonews.com/news/local/traffic-in-the-treasure-valley-has-definitely-gotten-worse-as-volume-increases.

Gulati, Nidhi. *How a Humble Bus Stop Can Anchor a Whole Neighborhood*. Project for Public Spaces, Sept. 2019, www.pps.org/article/how-a-humble-bus-stop-can-anchor-a-whole-neighborhood.

Gulati, Nidhi. "How a Humble Bus Stop Can Anchor a Whole Neighborhood." *Streets and Transportation*, Project for Public Spaces, 6 Sept. 2019, www.pps.org/article/how-a-humble-bus-stop-can-anchor-a-whole-neighborhood.

Hallyburton, Jimmy. *BBP 2018 Annual Report*. Boise Bicycle Project, 2019, static1.squarespace.com/static/5b74633270e802635e5372e6/t/5c59b91d71c10b703486fc1f/1549383984069/2018+Annual+Report+Small.pdf.

Harding, Hayley. "Seniors Face Hard Realities as Ada County Property Taxes Rise. 'I Resent Being Forced out'." *Idahostatesman*, Idaho Statesman, 11 Aug. 2019, www.idahostatesman.com/news/local/community/boise/article232986907.html.

Harris, Shelbie. “BIRD IS THE WORD: About 600 Turkeys Still Needed for Annual Cranksgiving Event.” *Idaho State Journal*, 14 Nov. 2019, www.idahostatejournal.com/news/local/bird-is-the-word-about-turkeys-still-needed-for-annual/article_68770840-178e-58a1-a066-f95b9ce7ac3c.html.

Harvey, David. “The Right to the City.” *International Journal of Urban and Regional Research*, vol. 27, no. 4, 2003, pp. 939–941., doi:10.1111/j.0309-1317.2003.00492.x.

Hem, Brad. “ Council OKs Study to Form a City-Run Street Department.” *News Clipping*, Idaho Transportation Department, Dec. 2005, testapps.itd.idaho.gov/Apps/MediaManagerMVC/NewsClipping.aspx/Preview/12900.

“History.” *CCDC Boise*, Capital City Development Corporation , ccdcboise.com/the-agency/history/.

Home Prices and Values. Zillow, 2019, www.zillow.com/id/home-values/.

“How Bicycling Connects Us at the Speed of Discovery.” Performance by Jimmy Hallyburton, *YouTube*, TEDxBoise, 17 June 2017, www.youtube.com/watch?v=yDubr-RjlCE&t=7s.

Islam, Rabuil, and Mohammed Chowdhury. “Measuring Customer 's Satisfaction on Bus Transportation.” *American Journal of Economics and Business Administration* , vol. 6, no. 1, 2014, pp. 34–41.

“Keep Boise Moving.” *City of Boise*, City of Boise, 2019, www.cityofboise.org/programs/keep-boise-moving/.

“Keep Boise Moving.” *Transportation Strategy*, City of Boise, 23 June 2019,
www.cityofboise.org/media/8082/moveourpeople-sessions1-2-lowresolution.pdf.

Kenyon, Susan, et al. “Transport and Social Exclusion: Investigating the Possibility of Promoting Inclusion through Virtual Mobility.” *Journal of Transport Geography*, vol. 10, no. 3, 2002, pp. 207–219., doi:10.1016/s0966-6923(02)00012-1.

Larsen, Jonas. “The Making of a pro-Cycling City: Social Practices and Bicycle Mobilities.” *Environment and Planning A*, vol. 49, no. 4, 2016, pp. 876–892., doi:10.1177/0308518x16682732.

Lefebvre, Henri. *The Right to the City*. 1996, theanarchistlibrary.org/library/henri-lefebvre-right-to-the-city.lt.pdf.

Lenhart-Wees, Kyle, and Brooke Green. “ACHD and Bicycles.” Oct. 2019.

Lierop, Dea Van, et al. “Bicycle Education for Children: Evaluation of a Program in Montreal, Quebec, Canada.” *Transportation Research Record: Journal of the Transportation Research Board*, vol. 2587, no. 1, 2016, pp. 23–33., doi:10.3141/2587-04.

Loukopoulos, Peter. “Future Urban Sustainable Mobility: Implementing and Understanding the Impacts of Policies Designed to Reduce Private Automobile Usage.” *Göteborg University*, 2005, gupea.ub.gu.se/bitstream/2077/44/1/Loukopoulos_05.pdf.

Marshall, Wesley E, et al. “Scofflaw Bicycling: Illegal but Rational.” *Journal of Transport and Land Use*, vol. 10, no. 1, 2017, doi:10.5198/jtlu.2017.871.

O'Brien, Kathleen. "Boise's Bicycle Ordinance May Change." *The University Arbiter*, 14 Feb. 1979.

Pereira, Rafael Henrique Moreas, et al. "Distributive Justice and Equity in Transportation." 2016, doi:10.31235/osf.io/9hhf7.

Prentice, George. "Boise Mayoral Candidate Conversations 2019: Wayne Richey." *Boise State Public Radio*, 2019, www.boisestatepublicradio.org/post/boise-mayoral-candidate-conversations-2019-wayne-richey#stream/0.

Purcell, Mark. "Possible Worlds: Henri Lefebvre and the Right to the City." *Journal of Urban Affairs*, vol. 36, no. 1, 2014, pp. 141–154., doi:10.1111/juaf.12034.

RESOLUTION NUMBER 895. Ada County Highway District , 2009,
www.achdidaho.org/Documents/Projects/Complete_Streets_Policy_Resolution-895.pdf.

Ridge-to-Rivers Pathway Plan. Ada Planning Association, 1993,
[scholarsbank.uoregon.edu/xmlui/bitstream/handle/1794/10116/HE5738_A3A33_1993.pdf?](http://scholarsbank.uoregon.edu/xmlui/bitstream/handle/1794/10116/HE5738_A3A33_1993.pdf?sequence=1)
sequence=1.

ROADWAY TO BIKEWAYS PLAN (2018 Addendum). Ada County Highway District ,
2018, www.achdidaho.org/Documents/Projects/BikeMasterPlan_Final.pdf.

Roadways to Bikeways Plan. Ada County Highway District , May 2009,
www.achdidaho.org/Documents/Projects/811_Final_Adopted_5.27.09.pdf.

Russell, Betsy. "Bill Would Bring ACHD Model to Every Idaho County." *Idaho Press*, Idaho Press, Mar. 2019, www.idahopress.com/news/local/bill-would-bring-achd-model-to-every-idaho-county/article_96be4d7e-4c15-5abe-8232-cee34454c1e1.html.

Schmitt, Angie. *The Science Is Clear: More Highways Equals More Traffic. Why Are DOTs Still Ignoring It?* Streetsblog USA, 21 June 2017, usa.streetsblog.org/2017/06/21/the-science-is-clear-more-highways-equals-more-traffic-why-are-dots-still-ignoring-it/.

Sener, Ipek, et al. "Who Are Bicyclists? Why and How Much Are They Bicycling?" *Journal of Transportation Research Board*, vol. 2134, no. 1, 2009.

Singleton, Patrick A., and Kelly J. Clifton. "Exploring Synergy in Bicycle and Transit Use." *Transportation Research Record: Journal of the Transportation Research Board*, vol. 2417, no. 1, 2014, pp. 92–102., doi:10.3141/2417-10.

Staff. "Boise Mayoral Candidates Face off, Answer Questions at Election Forum." *KTVB*, KTVB, 23 Oct. 2019, www.ktvb.com/article/news/politics/elections/boise-mayor-candidates-public-forum-live-streamed/277-86851b73-283c-4421-9de9-4285c27b0f0d.

Sultana, Selima. *Job/Housing Imbalance and Commuting Time in the Atlanta Metropolitan Area: Exploration of Causes of Longer Commuting Time*. Urban Geography, 2013, www.tandfonline.com/doi/pdf/10.2747/0272-3638.23.8.728?needAccess=true.

Taylor, Katie Headrick, and Rogers Hall. "Counter-Mapping the Neighborhood on Bicycles: Mobilizing Youth to Reimagine the City." *Technology, Knowledge and Learning*, vol. 18, no. 1-2, 2013, pp. 65–93., doi:10.1007/s10758-013-9201-5.

TITLE 40 HIGHWAYS AND BRIDGES. Idaho State Legislature,
legislature.idaho.gov/statutesrules/idstat/Title40/T40CH14/SECT40-1418/.

“Tour De Fat.” *New Belgium Brewing*, New Belgium Brewing, 2019,
www.newbelgium.com/events/tour-de-fat/.

“Trolley Town.” *Idaho History and Politics*, Center for Idaho History and Politics, 17 Oct.
2018, www.boisestate.edu/sps-cihp/trolley-town/.

Vallance, Suzanne, et al. “The Results of Making a City More Compact: Neighbours' Interpretation of Urban Infill.” *Environment and Planning B: Planning and Design*, vol. 32, no. 5, 2005, pp. 715–733., doi:10.1068/b31157.

“Which Issues Matter the Most to Millennials?” *UpToUs*, UpToUs, 7 Mar. 2019,
www.itsuptous.org/blog/which-issues-matter-most-millennials.

Zatkulak, Karen. “Creators of Boise Green Bike Project Hope for Success.” *Local*, KTVB, 31 Mar. 2015, www.ktvb.com/article/news/local/creators-of-boise-green-bike-project-hope-for-success/416466823.