Practicum Final Report:

Research in the Transportation Sector Regarding VMT Reduction Strategies in Flagstaff's Peer Cities

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VMT Reduction Strategies in Flagstaff's Peer Cities

Abstract

The purpose of this report is to provide Flagstaff with research regarding alternate strategies to reduce vehicle miles traveled (VMT) in the transportation sector. The research conducted is a compilation and synthesis of methods documented in plans published by 17 of Flagstaff's peer cities. These documents include but are not limited to; climate action plans, transportation plans, comprehensive plans; in addition, a primary data collection process was undertaken by interviewing planning officials in the peer cities to gain further insights regarding the measurement and implementation of these identified methods. Results from this analysis suggest that while each city has many transportation-related goals that may purposefully or inadvertently reduce VMT, there is very little in place to measure or evaluate their success. Findings from this research were then compared to planning efforts currently pursued by the City of Flagstaff. From this comparison it is found that Flagstaff's priorities mostly align with those of its peer cities, sharing four of the strategies: incentive programs, reducing VMT, road diets, and building dense, but like its peer cities is lacking implementation.

Introduction

The Flagstaff City Council declared a climate emergency in June of 2020, as current climate change is happening at a faster rate than any recorded in history. The City of Flagstaff created the Carbon Neutrality Plan (CNP) to update the 2018 Flagstaff Climate Action and Adaptation Plan (CAAP) and as a guide to respond to the climate emergency. The 2018 CAAP was prepared over a year and a half and was the first community-wide climate plan in Arizona. At the time it aligned with the best available science that formed the Paris Climate Agreement, unfortunately one month before its adoption the Intergovernmental Panel on Climate Change (IPCC) published a report of a global warming of 1.5 degrees Celsius or 2.7 degrees Fahrenheit, which led to the drafting of the CNP: Flagstaff's internal effort to restore safe climate by achieving carbon neutrality by 2030, also known as net-zero community greenhouse gas emissions which will be a collaborative effort (City of Flagstaff, 2021).

The new Flagstaff CNP includes four goals within the transportation section; the first includes holding VMT in the community to 2019 levels, which is a 17% reduction from business-as-usual projections in VMT growth; the second goal is a focus on reaching 54% of all trips taken by biking, walking, or taking the bus; goal three includes reaching 34% of all work commute trips taken by biking, walking, or taking the bus, and lastly the fourth goal reduces vulnerability of new developments for fire and flooding, by encouraging development to locate in areas of lower vulnerability (City of Flagstaff,

2021). On the topic of decreasing dependence on cars there are six strategies in the 2021 CNP: the first strategy includes the encouragement of vibrancy, appropriate density, and attainability in existing neighborhoods, so that more residents live within walking distance of their daily needs; the second strategy focuses on creating inclusive networks for walking and biking that are continuous, attractive, safe, comprehensive, and convenient for people of all ages; strategy three encourages Flagstaff residents and visitors to walk, bike, roll and take the bus; strategy four includes the transformation of transportation policies and planning to incorporate greenhouse gas emissions analysis and reduce dependence on driving; the fifth strategy centers on investing in comprehensive and equitable transit, and finally the sixth strategy proactively invests to protect Flagstaff's clean air status (City of Flagstaff, 2021).

In this report I compile strategies regarding the transportation sector which are projected or proven to reduce greenhouse gas emissions by reducing travel demand and VMT for the city of Flagstaff, using the documents offered by Flagstaff's 17 peer cities. With interest in how cities are framing these propositions to achieve the desired outcomes and any metrics and performance standards with which to evaluate successful outcomes.

In the methodology section of this report, I explain how I conducted my research, found these relative documents, how I located a contact with which to communicate and the interview process that followed. The report follows with a thorough review of our peer city documents, their goals and in some case the methods in which they hope to get there taken from the transportation sector of their active documents. This is followed by an analysis which gives us more insight into the most popular goals amongst all 17 peer cities. Then I have included interviews with stakeholders from several peer cities from which we gain further insights regarding the measurement and implementation of these identified methods. This leads us to a review of what Flagstaff is and isn't doing and an analysis against our peer cities strategies, and recommendations based on the information discussed. All of Flagstaff's peer cities

are at various stages of creating and implementing these plans, strategies, and goals with seven cities having a new climate-based document in or since 2020.

Methodology

My research began with locating planning documents with transportation-related strategies which are projected or proven to reduce VMT for all 17 of Flagstaff's peer cities (Map 1). The city of Flagstaff has seventeen peer cities as listed on its Active Transportation/FUTS Master plan from February of 2019, chosen for their similarities to Flagstaff; These cities must be in the western United States, be free-standing geographically, the population be between 25,000 and 110,000, and home to a large public university with an enrollment of at least 10,000 students (City of Flagstaff, 2019).

Map 1: Visual representation of Flagstaff and its peer cities

The planning documents were found through an extensive city website search; not all peer cities have a CAAP and therefore the search included transportation system plans, comprehensive plans, general plans, staff reports, climate action plan updates, and any documents that included terms related to the transportation sector. I then completed an analysis on all remaining documents. I created an excel spreadsheet with a compilation tab which included each peer city, each document I was able to find relative to that city, the year in which it was created, and where it was found. I read through the transportation section in each document and related goals for each city, from here each city received its own tab on my spreadsheet where I copied what I believe to be the goals which could directly or indirectly reduce VMT. As I read through each city plan, I noted these relevant strategies on the compilation page of my excel spreadsheet, where I would quickly be able to see which goals were most favorable amongst our peer cities. I compiled what I believe to be the most useful recommendations used to reduce VMT.

Now that I had a greater understanding of what our peer cities were actively working on, I went back to the same area of each website where I found the relative documents and searched for a contact for whom to connect with. In some case there was a name given as the direct contact for the Climate Action Plan (CAP) or draft, on several occasions I had to choose a name from a directory. I wasn't always successful in my first attempt to reach out and several respondents did respond and kindly forwarded my outreach to the appropriate party. I was able to get responses from 13 of 17 cities overall (Table 1). I first reached out in May of 2022 and followed up on all cities where I had not received a response several times throughout the months that followed.

Bellingham, WA	Response Received	Job Title of Respondent
Bellingham, WA	Yes	Transportation Planner
Bend, OR	Yes	Senior Planner
Boulder, CO	Yes	Principal Planner
Bozeman, MT	Yes	TDM Coordinator
Chico, CA	No	N/A
Corvallis, OR	Yes	Active Transportation Program Specialist
Davis, CA	Yes	Sustainability Coordinator
Greeley, CO	No	N/A
Laramie, WY	Yes	Principal Planner
Las Cruces, NM	No	N/A
Logan, UT	Yes	Senior Planner
Missoula, MT	Yes	Senior Planner
Moscow, ID	Yes	Planning Manager
Pocatello, ID	Yes	Director
Pullman, WA	No	N/A
San Luis Obispo, CA	Yes	Active Transportation Manager
Santa Cruz, CA	Yes	Sustainability and Climate Action Manager

Table 1: A representation of the responses received from peer city officials

While I was able to find projected strategies for each peer city, I struggled to find metrics and performance standards with which to evaluate the success of these strategies. I had the opportunity to speak with Jenny Neiman the Climate Program Manager at the City of Flagstaff and she mentioned that Flagstaff has always planned for their VMT to grow, this has always been the assumption, and building the infrastructure to accompany this growth has always been the plan. Jenny raised the question "what if it doesn't (grow)"? Jenny mentioned the Lone Tree Overpass project as an example of the City of Flagstaff building for more traffic rather than not (J. Niemann, personal communications, August 18, 2022). The Lone Tree Overpass project is a roadway connection extending Lone Tree Road between Butler to the south and Route 66 to the north (City of Flagstaff, 2022).

Leading me to ask each of our peer cities the following questions to gain more insight into existing results:

1) Have you implemented anything to reduce VMT?

2) If yes, what, and how is success being measured?

From these 13 responses, six peer city planning officials provided supporting documentation regarding what I had collected from their planning documents during my initial analysis, except for Boulder who provided two strategies not listed in their documents, one of which has measurable results. I stopped collecting data on August 10th, 2022, however, received one late response from Davis, California on October 2nd, 2022. I made the decision to include the information received from Davis as well as their brand-new CAP draft in my research. 2022 was a busy year for climate action planning in the West. The documents I am referencing regarding the city of Flagstaff are the 2019 Active Transportation FUTS Master Plan, the 2018 Climate Adaptation and Action Plan and the Flagstaff Carbon Neutrality Plan from June 2021.

Reviewed Plans

Bellingham, Washington

Bellingham has two active documents: the 2016 Comprehensive Plan (CP) and the 2018 Climate Protection Action Plan (CPAP). While the CPAP focuses its transportation measures almost entirely on their municipal fleet, there are three measures regarding city employee commuting; the first is the Commute Trip Reduction (CTR) program where employees can earn rewards when they make trips by walking, biking, riding the bus or carpooling via the Whatcom Smart Trips program, 350 employees have participated since 2006; the second is a focus on the reduction in employee commute miles, and lastly to provide free bus passes to city employees (City of Bellingham, 2018).

The Bellingham 2016 CP includes six goals and coordinating policies in the scope of transportation and land use; the first is to limit urban sprawl by linking land use and transportation planning by continuing to develop and implement plans, programs, and regulations that incentivize infill and emphasize multimodal transportation in urban villages; the second goal focuses on providing safe,

well-connected, and sustainable mobility options for all of it users; goal three focuses on an increase in infrastructure for bicycles, pedestrian, and on-single occupancy vehicle modes of transportation; the fourth goal centers on the reduction of dependence on single-occupancy vehicles; the fifth goal is focused on the maintenance and improvement of streets, trails, and other infrastructure, and finally to ensure that social equity needs are addressed in all transportation projects (City of Bellingham, 2016).

Bend, Oregon

In the City of Bend there are three active documents: the 2016 Integrated Land Use and Transportation Plan (ILUTP), the 2019 Community Climate Action Plan (CCAP) and the 2020 Transportation System Plan (TSP). Both the CCAP and TSP include goals that are all-encompassing city-wide goals rather than based on transportation, and for this reason are not listed here. The proposed strategies in the ILUTP are broken up into four categories. In the category of land use the proposed measures are: i) Increasing residential densities and establishing minimum residential densities within one quarter mile of transit lines, major regional employment areas, and major regional retail shopping areas, ii) Increasing allowed densities in new commercial office and retail developments in designated community centers; the proposed measures regarding Transportation Demand Management (TDM) are: i) A new policy is proposed that will address the direction and intent for increasing the use of Transportation System Management (TSM) in appropriate areas of the city. The intent is to create an incentives approach to TDM and focus on businesses and institutions with 50+ employees and/or students and/or specific geographic areas such as downtown, ii) The city is currently in the process of updating regulations for master plans for large institutional uses. As part of that update, the city will incorporate requirements for TDM measures that will apply to all new institutional master plans including OSU's cascades campus, iii) The city is also committed to conducting an analysis of parking management and pricing options. Depending on the outcomes of the parking study, the city may have

additional policies and commitments relating to parking practices and policies that are tied to VMT reductions; Regarding the category of transit the measures include: i) Enhance transit priority corridors in the opportunity areas through a combination of land use codes and transportation enhancements that support increased transit use, ii) Propose new and enhanced transit funding, iii) Include transit policies and enhancements when conducting transportation and land use planning studies within identified opportunity areas, and finally the measure regarding roadway improvement is: i) The city has been implementing selective road diets consisting of lane removal or narrowing in areas where specific safety issues related to lane configuration have been identified through the city wise Safety Implementation Project (SIP) (City of Bend, 2016).

Boulder, Colorado

Boulder has an active 2009 CAP and a 2019 Transportation Master Plan (TMP) which lists Boulder's policies for a complete transportation system. Boulder is a national leader in clean transportation and sustainable development, the strategies it has included in its 2019 CAP regarding transportation are to increase the percentage of trips made by transit, bike, and walking, and to encourage the use of low-emission vehicles (City of Boulder, 2009).

Bozeman, Montana

The City of Bozeman has one active document: the 2020 CAP which includes three solutions regarding transportation; solution J is centered on shifting travel modes away from single-occupancy vehicles and growing the percentage of community members who use transit, walk, bike, carpool, and avoiding or consolidating vehicle trips. Bozeman understands that building high-quality, accessible infrastructure is a primary means of encouraging active forms of transportation; solution K is focused on a decrease in direct vehicle emissions by transitioning to and promoting more efficient vehicles that use alternative fuels (e.g., electric vehicles); the focus of solution L is to improve air travel efficiency, by offering alternatives to traditional air travel which could include shared rides and vehicles, shuttles and

buses, and rail transportation, as well as technology improvements to enhance fuel efficiency of air fleets (City of Bozeman, 2020).

Chico, California

Chico has one active document: the CAP Final Draft from 2021 which includes five transportation measures; the first measure has an emphasis on the improvement of active transportation infrastructure to achieve greater than 6% bicycle mode share by 2030 and 12% bicycle mode share by 2045, the city plans to provide safe, low stress and convenient biking and pedestrian infrastructure; the second measure involves the improvement of the Electric Vehicle (EV) infrastructure to achieve greater than 23% EV share of car registrations by 2030, and 90% by 2045. While Chico cannot require its residents to buy EVs, this measure will ensure the supporting infrastructure is present to begin removing barriers to EV adoption. Chico has set a goal to add 942 new chargers in the city by 2030; measure three improves upon the shared mobility and transit programs, the city is working to identify partnerships with shared rideable companies (e.g., e-bike share) to bring these services to Chico. Unfortunately, the city does not have jurisdiction over public transit and must instead work in collaboration with its partners to expand service lines, increase route speeds, and reduce wait times; measure four is a focus on the implementation of parking and curb management procedures that support the overall transportation strategy, such as increasing parking costs in downtown areas during times of high usage and special events, and finally the fifth measure supports implementation of the city's General Plan (GP) that promotes sustainable infill development and mixed-use development in new growth areas to reduce VMT (City of Chico, 2021).

Corvallis, California

The City of Corvallis has two active documents: the 2016 CAP and the Transportation System Plan (TSP) effective January 1, 2019. The TSP in Corvallis has four broad goals, which include objectives

that coordinate directly with the strategies as written in the CAP, this is also where we found the objective to specifically reduce VMT. The first action in the Corvallis CAP is regarding land use and the increase of transit-oriented, walkable, node-oriented, mixed-use development that includes housing and services; the second action has a focus on the reduction of VMT and single occupancy vehicle trips and ownership; action three centers on TSM and the reduction of idling and congestion; action four is a focus on expanding the network of bike and pedestrian corridors and enhancing visual and physical safety protection measures; action five includes the promotion of policies at the local, state, and federal level that implement carbon-based fees or taxes; the sixth action is an emphasis on electric and lower carbon fueled vehicles, and to accelerate this transition; the seventh action is regarding TDM and is a plan to develop land use and transportation system alternatives that will reduce long-term Greenhouse Gas (GHG) emissions, and finally increasing the Corvallis Transit Systems (CTS) is the eighth action (City of Corvallis, 2016).

Davis, California

Davis has one document: the 2020-2040 CAP Draft which was released for a two month public review period in 2022 and combines transportation and land use with five goals in this category; the first is a focus on the adoption of zero emissions vehicles and equipment to reduce fossil fuel use with the electric vehicle charging plan and decarbonizing the municipal fleet; the second goal increases the number of opportunities for active mobility in the community with first mile/last mile transportation, electric micro mobility vehicles and pedestrian and bicycle safety; goal three is a focus on strengthening the transit service within Davis and among regional neighbors by expanding public transit and strengthening the regional transit system; goal four is a reduction of single occupant vehicle use with downtown parking improvements, and finally the fifth goal expands on opportunities for local housing development to balance local employment opportunities with sustainable housing (City of Davis, 2022).

Greeley, Colorado

The City of Greeley has two active documents: the Imagine Greeley Comprehensive Plan (IGCP) adopted in February of 2018 and the 2035 Comprehensive Transportation Plan (CTP) adopted in May 2011. There are three goals regarding transportation in the 2018 IGCP; to develop and maintain an accessible, integrated, safe, and efficient transportation system; to provide residents with a range of transportation choices and options, and lastly to ensure that land use and transportation decisions, strategies, and investments are coordinated and complementary. There are too many objectives within each of these goals to list here (City of Greeley, 2018).

Laramie, Wyoming

There is one active document for the City of Laramie: the CP from 2007, making it the oldest plan we analyzed. Regarding public transportation there are nine goals: 1) Follow goals and action statements regarding restructuring the planned unit development standards to provide incentives for neighborhoods that integrate appropriately designed and scaled mixed uses; 2) Prepare a transit study to evaluate the current performance of the fixed route and establish service performance standards. Potential new routes, coordination opportunities, feasibility of commuter routes, fuel alternatives, vehicle types and specifications, infrastructure improvements, future funding, revenue options, and funding strategies should also be examined; 3) Continue to support the Public Assisted Transportation System (PATS) fixed route service currently operated by the Eppson Center for Seniors; 4) Develop and execute an advertising, marketing, and education campaign to inform the public as to the public transportation services and schedules available in Laramie; 5) Facilitate meetings and cooperation between the city, the Eppson Center, the University, Laramie County Community College (LCCC), the Wyoming Department of Transportation (WYDOT), and other area transportation providers to identify opportunities for coordination of service as well as other issues such as longer times, more routes, fees, joint maintenance, and driver training; 6) Coordinate with the University and the Eppson Center shuttle and transit service providers to identify locations for construction of street and curb side improvements.

7) Prepare guidelines for pedestrian access to transit stop locations; 8) Within future street improvement projects along bus routes, incorporate design provisions relating to sidewalks, curb cuts, handicap accessibility, non-slip surfaces, marked, signed and/or signaled pedestrian crossings and installation of pedestrian actuated traffic signals; 9) Evaluate potential locations for the installation of bus pull-out bays, which are specially constructed areas separate from the street travel lanes providing for passenger boarding and alighting (City of Laramie, 2007).

Regarding non-motorized transportation systems there are fourteen goals: 1) Update the current trail plan to include the recommended new and extended trails as identified; 2) Stripe, re-stripe, sign and maintain streets designated as bike lanes; 3) Establish requirements within the subdivision regulations pertaining to the location of sidewalks and boulevards within the right-of-way; 4) Amend the subdivision regulations to include a requirement for sidewalks to be installed on both sides of all arterial, collector, and local streets; 5) Perform a condition inventory of sidewalks/bike lanes/trails to assess condition and maintenance requirements, especially in areas with high pedestrian traffic; 6) Amend the subdivision regulations to require public access easements every 800 feet, or portion thereof and at the end of cul-de-sacs where there are continuous rows of homes abutting trails or collector and arterial roads; 7) Make use of the current access easements located along Spring Creek Drive to improve access to the proposed trail along the creek; 8) Implement pedestrian safety improvements within neighborhoods through updates in code. Areas to include are schools, parks, and churches with improvements like signage and raised crosswalks; 9) Perform a barrier analysis to identify significant barriers for safe and convenient use of the pedestrian infrastructure system; 10) Consideration must be given to a wide, protected pedestrian way on a new viaduct bridge no matter the location; 11) Include requirements within the subdivision regulations as to the installation of bicycle racks at all commercial developments over 5,000 square feet of gross floor area and for businesses employing more than 10 persons; 12) Continue maintenance and use of the Garfield Street Footbridge as a bike and pedestrian

bridge which connects the west side of Laramie to the east side of Laramie; 13) Consider maintenance and necessary reconstruction of the Clark Street Bridge for ongoing use as a pedestrian and bicycle cross-over of the railroad between Laramie and West Laramie; 14) Research the available sources of funds relating to railroad crossing safety as well as pedestrian, bicycle, and other transportation improvements (City of Laramie, 2007).

Las Cruces, New Mexico

The City of Las Cruces has two active documents: the Active Transportation Plan (ATP) from 2018 and the CAP from 2020. Based on public and stakeholder feedback five goals were developed for the ATP; to improve safety for people who walk, bike, or roll in Las Cruces by building pedestrian and bicycle friendly streets, while accommodating all, including more vulnerable populations; creating a well-connected, comfortable, and attractive bicycle network by creating high-comfort bikeways, improving the surface and markings of existing bike lanes and trails, and filling in gaps in the bike network; creating a complete, comfortable, and attractive pedestrian network by enhancing pedestrian accessibility to transit services, and retrofitting, or expanding existing sidewalks; increasing bicycle and pedestrian access to key destinations by creating a citywide wayfinding signages system, and finally embracing bicycling and walking as ways of transportation, recreation, and healthy living in Las Cruces by increasing the number of Las Crucens who bike or walk (City of Las Cruces, 2018).

There is only one goal in the 2020 Las Cruces CAP which is to reduce community-wide emissions by 44 percent by 2050 through increased use of public transit, electric vehicles, and planning and development practices. There are four targets included by which to reach this goal; to increase the use of public transportation to 15 percent by 2030 and 35 percent by 2050 by establishing dedicated funding courses for public transportation, building transit-oriented development, and reducing transit fares for income qualified populations; a focus on increasing public use of alternative modes of transportation to 12 percent by 2030 and 40 percent by 2050 by expanding multimodal connectivity, accelerating

development of walkable/bikeable networks, and offering bikes/scooter share programs; building supportive relationships between transportation and local growth by prioritizing development which enhances walkability and use of public transit by utilizing infill areas and compact communities, and lastly an increase in EV adoption to 20 percent by 2030 and 70 percent by 2050 by increasing the presence of electric vehicle chargers, transitioning municipal fleet, providing incentives on low-emitting ride share vehicles, transitioning school buses to alternative energy sources and promoting expansion of EVs in communities (City of Las Cruces, 2020).

Logan, Utah

Logan has two active documents: a GP whose incorporation date I was unable to locate and the Surface Transportation Plan (STP) from 2011. These two plans share four transportation goals; promoting transportation safety and functionality; merging transportation character with the built environment; expanding transportation options, and lastly increasing acceptance of walking, mass transit and bike riding as a satisfactory means of transportation (City of Logan, 2011).

Missoula, Montana

The City of Missoula has one active document: the 2015 CAP Version 1, which includes three goals in the transportation section; the first is a focus on reducing VMT by working with key community entities to establish a benchmark for VMT in Missoula, setting reduction goals for VMT, and launching a community wide education program to work towards those goals; the second goal is to enhance expansive, accessible, and affordable public transit by working to expand services and accessibility of fare free Mountain Line and University of Montana bus services, and lastly goal three involves developing safe, comprehensive transportation infrastructure by working with smart growth efforts, and encouraging transit-oriented corridor development (Cilimburg, A., et al., 2015).

Moscow, Idaho

In Moscow, the April 2022 CAP Draft has only two strategies in the transportation section of the plan; reducing VMT, and on-road electric vehicle adoption, however, the actions for reducing VMT in Moscow expand on this strategy as follows *"greenhouse gas emissions in the transportation sector are tied directly to vehicle miles traveled within the city. Reducing vehicles traveling on our streets will decrease emissions. Increased access to public transit (through expansion of available service), transportation incentives, increasing walkability, promotion of infill and mixed-use development to reduce vehicle dependence, and citizen outreach are all potential actions to be taken. Reducing urban sprawl through changes to zoning code."* and "*to support active transportation methods and to increase access and safety for those choosing these methods. Expansion upon work that is already underway will help to further reduce greenhouse gas emissions. Implementation of a bike-sharing or scooter-sharing program would increase use of the city's extensive, and ever-growing, pathway network and reduce vehicle traffic. These options are also ideal for the student population who may or may not have a vehicle at their disposal. However, it is important to note that these options have limitations. For example, scooters or bikes might not be suitable for a trip to the grocery store due to lack of storage capacity. In this case, an electric car sharing program and coordinated home delivery services may also be beneficial*" (Cooper, K., 2022).

Pocatello, Idaho

In Pocatello, there is one active document: the CP, updated in 2015. Th CP includes four goals regarding transportation; the first is to develop and maintain a coordinated and balanced transportation system that provides a variety of choices among transportation modes, including automobile, public transit, air, bicycle, and pedestrian; the second goal includes leveraging existing infrastructure to minimize public investment needed by promoting infill and mixed-use developments, to moderate the demand for expanded facilities; goal three focuses on transportation impacts and costs through land use

strategies involving well connected street networks by reviewing and enhancing development codes to support the greater infill and mixed-use development, and lastly goal four is to facilitate regional economic development and support local industry (City of Pocatello, 2015).

Pullman, Washington

The City of Pullman has one active document: the 2021 CP, which includes four goals related to transportation and land use: the first is to provide a safe and reliable multi-modal highway and county road network; the second goal focuses on providing safe and accessible non-motorized routes such as bicycle paths and trails; goal three encourages land use types, mixes, and densities that promote efficient multi-modal transportation systems, and lastly goal four supports public transportation options that are available to populations in need (City of Pullman, 2021).

San Luis Obispo, California

San Luis Obispo has one active document: the 2012 CAP, which includes nine strategies within its transportation and land use section: strategy one is focused on the continuation of maintenance and expanding transit services utilizing best practices in planning and management; the second strategy involves the promotion of Clean Air Vehicles (CAV) and expanding the network of electric car charging stations and car-sharing parking spaces; the third strategy is centered on increasing the percentage of non-recreational trips that are made by bicycle; strategy four is to modify the general plan policies to support a balanced, multimodal transportation network, and complete streets; the fifth strategy is focused on land use diversity and density, by encouraging compact urban forma and mixed-use developments; the sixth strategy includes motivating downtown visitors to park once and walk or ride to multiple destinations or use transit to get to and from downtown; strategy seven focuses on reducing VMT and associated GHG emissions by further reducing parking requirements for land uses that share the same parking lot; the eighth strategy calls for a reduction in the need for commuting by increasing

local housing options for workers in the community that include variety in location, type, size, tenure, and style of dwellings, and finally the city plans to focus on education by increasing community awareness of transit options and established pedestrian and bicycle infrastructure, as well as informing residents and businesses about available incentives (Community Development Department, 2012).

Santa Cruz, California

The City of Santa Cruz has one active document: the 2030 CAP, which includes seven measures within the transportation and land use section and mentions the implementation measures to achieve these goals; the first measure involves active transportation (walking and biking) that achieves 23% bicycle mode share by 2030 and 30% by 2035 with active transportation planning, rail trail access, bicycle parking infrastructure, bike share, and efficient and equitable land use; measure number two focuses on public transportation that achieves 8% public transportation mode share by 2030 and 12% public transportation share by 2035 with rapid bus transit corridors. The second measure also includes public transportation prioritization, employer led transportation incentives, free public transit, and public transportation electrification; the third measure is centered on discouraging driving single-occupancy passenger vehicles by using local gasoline, diesel registration taxes, and transportation taxes. This measure also includes off-street parking requirements, limiting single-passenger vehicle parking, adjustable parking rates, parking maximums, and parking solutions for tourism; the fourth measure involves increasing passenger electric vehicle adoption to 35% mode share by 2030 and 40% by 2035 with at least 1,247 public electric vehicle chargers, new development charging station requirements, income tiered residential EV charger incentive plans, and car share; measure number five calls for the increase of commercial EV adoption to 25% by 2030 and 35% by 2035 with commercial vehicle fleet incentives, a commercial vehicle electrification feasibility study and commercial EV loading zone access; the sixth measure is to decarbonize 50% of off-road equipment by 2030 and 75% by 2035 with equitable

off-road electrification, off-road decarbonization funding, zero-emissions off-road equipment transition and banning gas powered small off-road engines, and finally the seventh measure advocates for remote work policy and infrastructure (City of Santa Cruz, 2022).

Identified Common Strategies

All of Flagstaff's peer cities included transportation strategies focused on the increased adoption of bicycling, walking and public transit, and improvements in the general infrastructure to facilitate increased mode adoption.

Density

The most popular goal was to create dense, mixed-use, compact, urban communities with 11 peer cities listing it in their plans: Bellingham, Bend, Chico, Corvallis, Davis, Laramie, Las Cruces, Pocatello, Pullman, San Luis Obispo, and Santa Cruz. Dense, mixed-use development can reduce the distance traveled for jobs, goods, and services, which can lower VMT and transportation related GHG emissions. In Davis their CAP Draft highlighted the importance of implementing incentive options to increase housing construction in the city, including high-density, mixed-use, transit-oriented, and affordable options (City of Davis, 2022). While Santa Cruz stresses concentrating the most intensive growth in transit corridors and central areas of the city to promote walking and biking to nearby jobs, entertainment, goods, services, and public transportation (City of Santa Cruz, 2022). For the purpose of this paper my research was strictly regarding the transportation sector, however, in most cases this category was paired with land use. I did not seek out strategies in the land use category. It is possible that the remaining six cities not mentioned here had similar goals in an area of their plans outside of my scope of research.

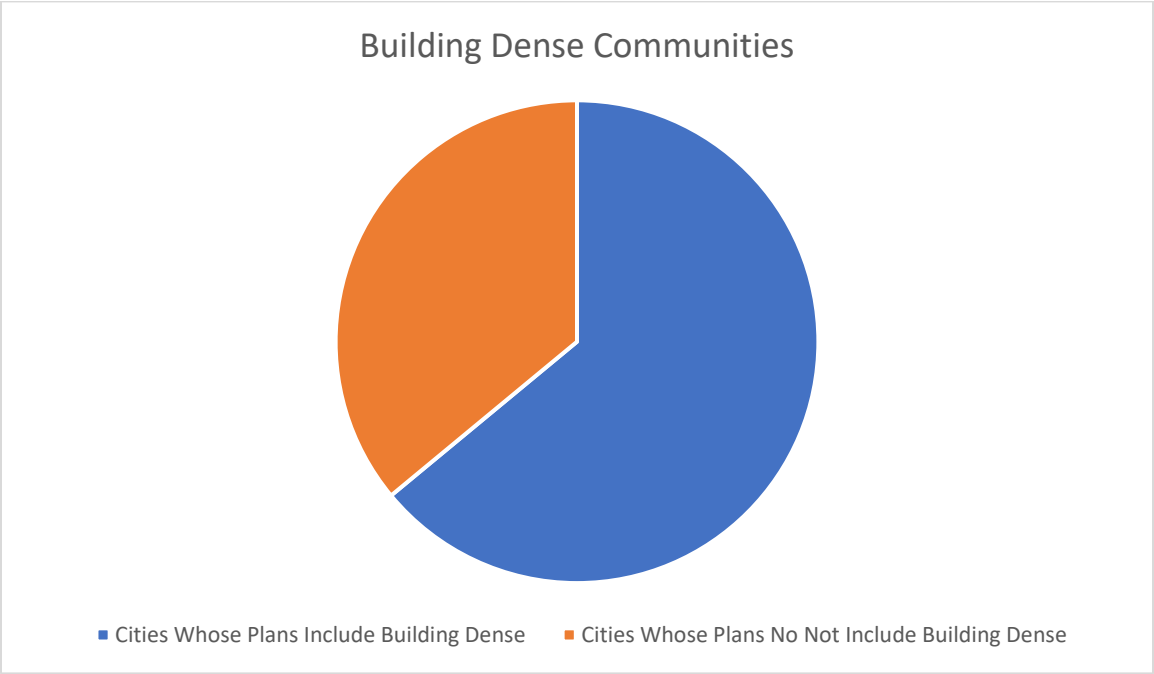

Figure 1: Distribution of peer cities who plan to builder denser

Incentive Programs

Similar incentive program goals exist in the following peer cities: Bellingham, Bend, Boulder, Bozeman, Corvallis, Greeley, Moscow, San Luis Obispo, and Santa Cruz. In most of these cities the goals are geared towards providing incentives for city employees, and educational facilities to use alternative transportation. It appears the City of Bozeman is leading the pack here, in addition to already providing free public transportation, the city is asking for large businesses to also provide financial incentives for their employees when they choose to use the free transit system. The City of Moscow makes a good point here about the cost of transportation being a deterrent. The Moscow strategy includes the development of an alternative transportation incentive for employees, and it lists the reason behind this goal as: "*money was the number one answer when employees were asked via survey what would persuade them to consider an alternative form of transportation"* (Cooper, K., 2022). Santa Cruz had a slightly different approach by leaving responsibility for the incentive program entirely to the employers, but also requiring them to subsidize (City of Santa Cruz, 2022).

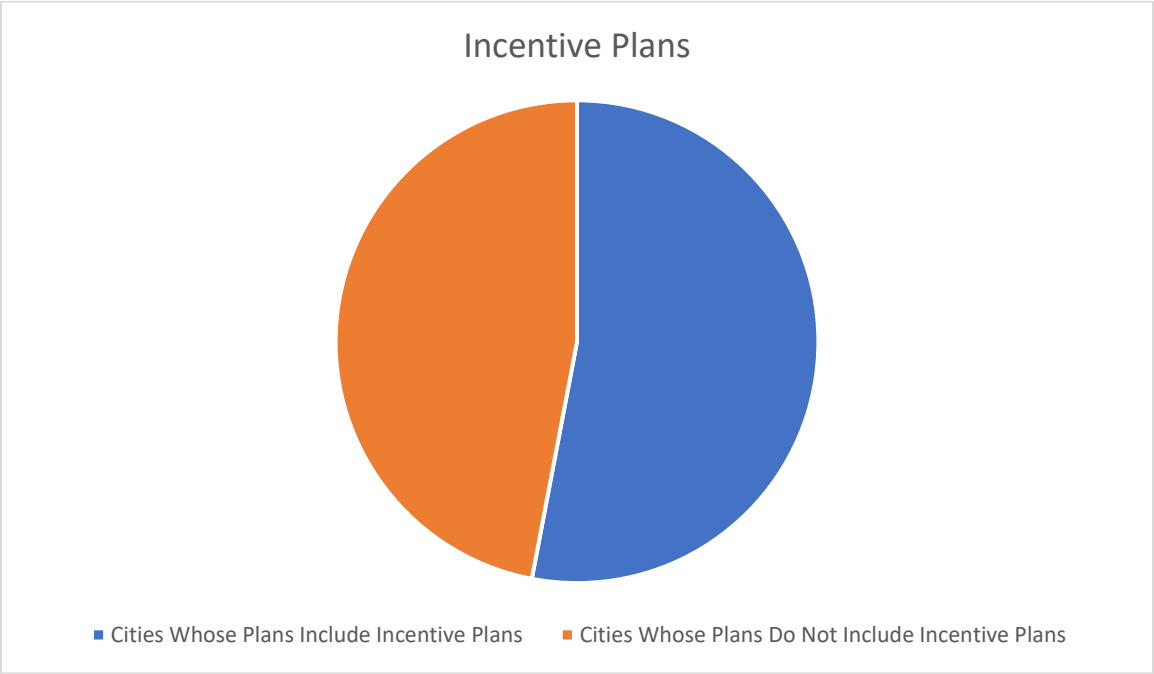

Figure 2: Distribution of peer cities with incentive plans

Free or Discounted Public Transportation

It is mentioned in Bozeman's first solution J that public transportation in Bozeman is free, there are seven additional cities which mention or already incorporate free or reduced bus transportation: Bellingham, Corvallis, Davis, Las Cruces, Missoula, San Luis Obispo, and Santa Cruz. In Bellingham, free quarterly bus passes are available to employees who commit to riding the bus to work on a regular basis. When the program in Bellingham started in 2008, 155 employees signed up for bus passes. Whatcom Transit Authority (WTA) ridership data showed a 51% increase in transit ridership for city employees over the five-month trial period (City of Bellingham, 2018). The action in Davis mentions subsidizing public transit so it is free for all to use, as well as promoting the expansion of public transit routes and increased operation frequency (City of Davis, 2022). San Luis Obispo already has free or discounted bus passes in place for the for residents who work in the downtown core, seniors, and students (Community Development Department, 2012) and similarly Santa Cruz advocates for metro to fund and implement a free public transit pilot program for students, foster youth, and unhoused youth

in the city (City of Santa Cruz, 2022). Offering free or reduced cost transportation is a popular strategy with eight peer cities including it in their documents; with most having an emphasis to provide transit to underserved communities. Rather in Boulder the idea is to provide reduced cost transportation for all members of larger communities, educational facilities, and employers and this has proven to work in the reduction of VMT.

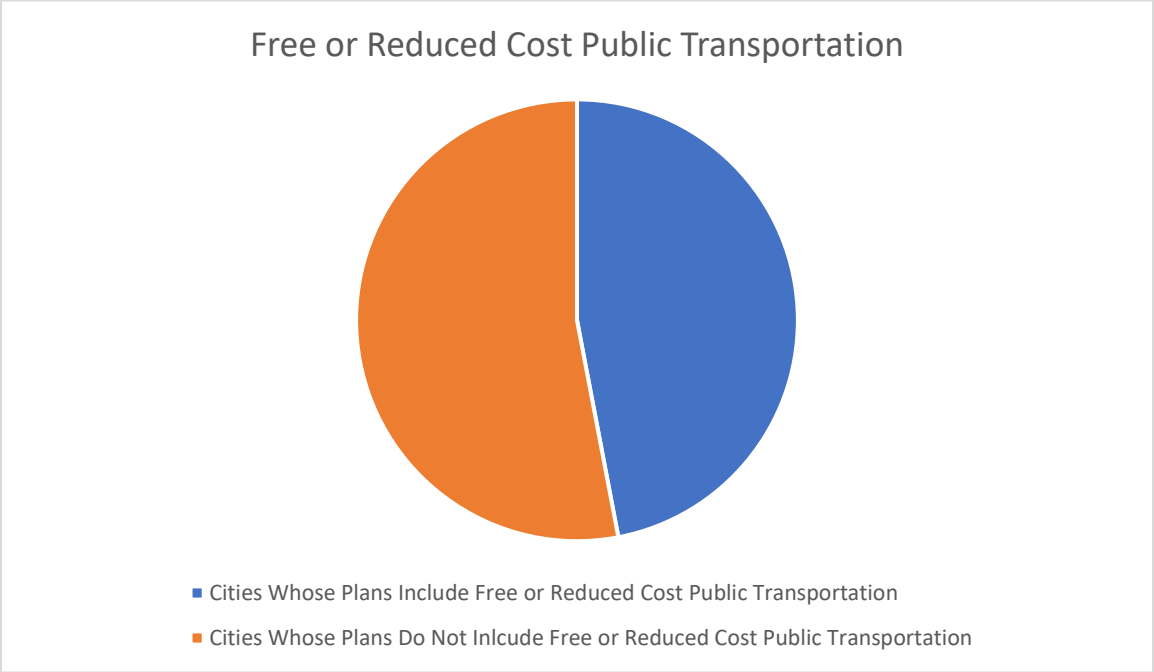

Figure 3: Distribution of peer cities with free or reduced cost public transportation

Reduce Vehicle Miles Traveled

There are six cities which directly mention the reduction of VMT as a goal, those are: Boulder, Chico, Corvallis, Missoula, Moscow, and San Luis Obispo. With it being the topic of this research, it was important to include how many cities had this specific goal in their documents. Both San Luis Obispo and Santa Cruz included an approach to reducing VMT and associated GHG emissions using parking; San Luis Obispo suggests further reducing parking requirements for land uses that share the same parking lot, and the City of Santa Cruz believes that businesses that have different peak hour parking usage can satisfy their parking needs, while consuming less land, by sharing lot space, leading to a reduction in

parking spaces, which can reduce VMT if alternative modes of transportation are easy and accessible (Community Development Department, 2012).

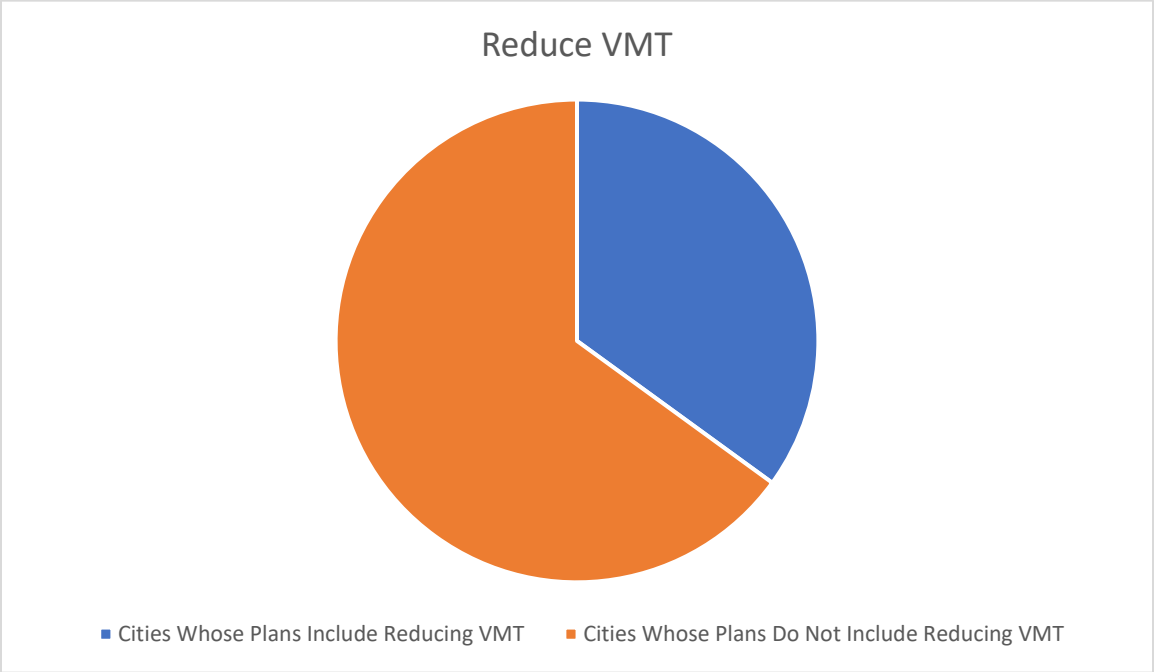

Figure 4: Distribution of peer cities with VMT reduction

Road Diets

Road diets are designed to accommodate all users by removing vehicle lanes to create space for wider sidewalks and bicycle lanes promoting alternative modes of transportation and increasing safety. Road diets came up only three times in our peer cities documents; mentioned by Chris Comeau from Bellingham who states that road diets have been popular in the City of Bellingham, in Bend, and in Davis where the action highlights the importance of implementing roadway and bikeway infrastructure improvements such as road diets, narrowing pedestrian crossing distances, and increasing safety for pedestrians and bicycles (City of Davis, 2022).

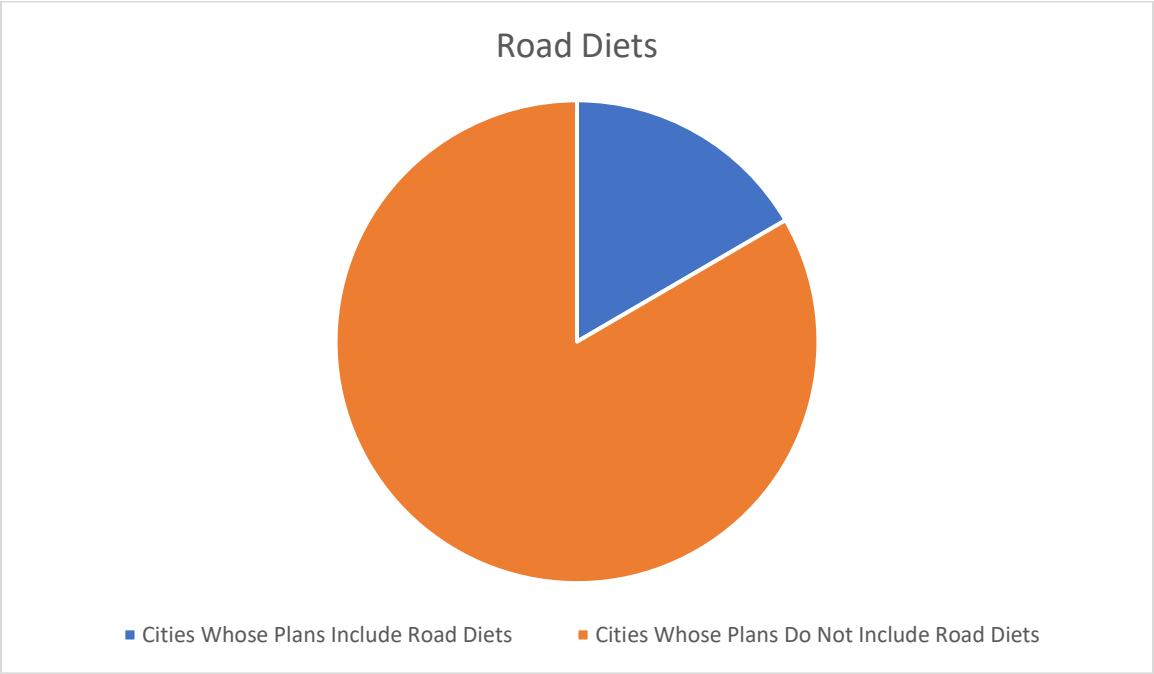

Figure 5: Distribution of peer cities with road diets

Work From Home Programs

Honorable mention to Santa Cruz for being the only city to promote a work from home program to reduce VMT. The City of Santa Cruz believes that remote work programs can reduce commute and business trips, leading to decreased GHG emissions and improved air quality. The city plans to work with its larger employers to support remote work programs that also address equity issues such as internet access, and they are going above and beyond to participate in regional advocacy for development of a statewide telework policy (City of Santa Cruz, 2022).

Stakeholder Interviews

I reached out to all 17 of Flagstaff's peer cities with the same two questions listed again here, I received responses from 13 of them:

1) Have you implemented anything to reduce VMT?

2) If yes, what, and how is success being measured?

From those 13 responses 6 provided thorough replies, those cities are: Bellingham, Bend, Boulder, Bozeman, Corvallis, and Moscow. These responses provided supporting documentation regarding what I had collected from the peer city documents during my analysis, expanded on what they are doing, offered information regarding current challenges, as well as their opinions on what they believe is and is not working, and most importantly insight into any metrics with which to evaluate successful outcomes. Boulder was the only city who provided two strategies that were not included in their documents, one of those also proven successful in reducing VMT with measurable results. Those 6 responses are detailed below.

Responses Regarding Question One

I had the opportunity to speak with Chris Comeau, transportation planner in Bellingham Washington, also a fellow lumberjack and graduate from NAU with his degree in planning. He spoke confidently of a few different programs that should positively impact the reduction of VMT in Bellingham these include Urban Villages: compact, high-density, mixed use, master planned areas with complete sidewalks, bikeways and multiple trails and served by high-frequency transit from the regional transit provider, and the Urban Village Tax Increment Financing (TIF) Reduction Program an economic incentive for high density development (C. Comeau, personal communication, May 22, 2022).

Furthermore, from my conversation with Chris, I learned that there are currently seven urban villages in the Bellingham area, these urban villages are where they expect one-third of the future population to live. Bellingham has raised parking fees to promote other forms of transportation. Chris is a believer in their free transit system, which is also a goal listed in the cities 2018 CAP. Chris also mentions that road diets have been popular amongst the city by turning streets into walkways and eliminating streets altogether.

I was able to speak with BreAnne Gale, senior planner from the city of Bend. She informed me that they are currently without a transportation expert due to a recent retirement, and she did her best to answer my questions herself. In response to whether the city has implemented anything to reduce VMT she responded yes, Bend has adopted land use and transportation plans and policies which aim to reduce or maintain the VMT per capita which is a requirement in the state of Oregon. These are based on the 2010 baseline of 9.47 VMT per capita per day even as the city grows outward which results in the longest trips. BreAnne believes that the most impactful VMT reduction tool has been through land use planning focused on infill and designation of high opportunity areas to accommodate growth in areas already served by transit and near urban amenities (B. Gale, personal communication, July 5, 2022).

I spoke with Chris Hagelin, principal planner of Boulder, Colorado. Chris spoke of two programs he is fond of currently implemented at the city of Boulder to help with the reduction of VMT: EcoPass which is a severally discounted unlimited annual bus pass program for large groups, and a trip tracker for K through eight children who receive incentives for riding their bikes and walking to school. Included in the Business EcoPass are not only the local bus line, but also express buses, regional buses, Skyride service to and from Denver international airport, the N to Eldora Mountain ski resort, all community transit network busses, all call and ride services, and Boulder is working on bringing more bus lines to even more recreation. Parking meters in the city of Boulder bring 1.2 million dollars into the city every year, and this money is used to pay for EcoPasses for all downtown and university hill area employees. For companies who do not fall within this geographical area and with more than eleven employees the city will rebate 50% of their first-year contract and 25% of their second year EcoPass contract. There are also rebates available for smaller sized companies. The cost of an annual EcoPass for a city employee is $140. This program is not just for businesses; Colorado University Boulder (CU), the largest university in the area, includes the EcoPass in their tuition, and currently over fifty neighborhoods participate, this accounts for 7,000 households. The Neighborhood EcoPass has a slightly larger transport scope and

offers a 50% subsidy for year one, and 33-39% subsidy for renewing neighborhoods EcoPass contract. The pass is about $200 for an entire household, compared to one year of local bus passes priced at $1,368 and regional bus passes priced at $2,400 (Public Works-Transportation & Mobility Department).

The K through 8 Trip Tracker is a cash out for kids' program, paying children with coupons for either walking or riding a bicycle to get to school. These coupons are currently accepted at over fifty businesses in Boulder, and $15,000 worth of tokens are given out per year on average. Businesses can subsidize these costs (C. Hagelin, personal communications, May 19, 2022).

When I spoke with Candace Mastel, the transportation demand management coordinator at the City of Bozeman, in response to my question whether the city has implemented anything to reduce VMT she stated: that most if not all the city's long-term plans and policies support a reduction in VMT, as well as making the community more bikeable and walkable. The city of Bozeman is currently working on altering their Planned Unit Development (PUD) code to promote transportation as part of an incentive to receive relaxations in development by building enhanced facilities and connecting to existing facilities. She listed her current challenges as a lack of connectivity within the current system, lack of adequate routes, and frequent stops. Also, the ability for rural communities to reduce VMT because of the lack of density, and the spatial relationship between people and the places they need to go, and free parking offered in the downtown area. Even those living in denser areas are not encouraged to use alternative modes of transportation because it is affordable or free. "As long as it is easier to use a car, 90% of people will choose the car" (C. Mastel, personal communications, July 5, 2022).

I had the opportunity to speak with the active transportation program specialist for the City of Corvallis: Josh Capps another Northern Arizona Lumberjack and in response to my question regarding whether the city has implemented anything to reduce VMT he said that they have not focused campaigns specifically on reducing VMT and that the efforts are mostly project based on reducing the amount of small, short trips. At the Corvallis campaigns core is the infrastructure such as neighborhood

bikeways, quick build pop up solutions such as curb extensions, and mini traffic circles and green bike lanes (J. Capps, personal communications, May 9, 2022).

I was able to speak with Mike Ray: the planning manager at the City of Moscow and in response to my question regarding whether the city has implemented anything to reduce VMT; he said that the city does not have a formal program to reduce VMT, however, is focused on the complete streets approach by providing multi-modal transportation infrastructure. He boasted of the cities success of being ranked in the top 1% of communities in the U.S. for bicycle commuters and for having a high number of pedestrian commuters. The City of Moscow is also focused on promoting higher density infill development that is closer to their employment centers and integrating lower impact commercial uses near residential neighborhoods. He briefly mentioned that they also offer free fixed-route public transit service (M. Ray, personal communications, May 10, 2022).

Responses Regarding Question Two

Unfortunately, when I spoke with Chris from Bellingham Washington, he did mention there was nothing in place to directly measure the impact of the city's strategies on the reduction of VMT, however, the city is working on trying to collect more quality data and seeing evidence of a winning formula regarding density by the increase in permits. The City of Bend also does not have any means of measurement for success regarding the reduction of VMT "We are currently in the process of developing an ongoing performance monitoring program that would potentially be able to monitor this on a more regular basis" (B. Gale, personal communication, July 5, 2022).

Differently than our other peer cities Boulder has been able to measure the success of one of the strategies mentioned above, specifically regarding the EcoPass Chris said that there has been a 55% GHG reduction and a 45% reduction in VMT for families who participate in the EcoPass program (C. Hagelin, personal communications, May 19, 2022). This comes from decades of info from people with

the EcoPass. The way Boulder collects this data is with two different surveys every three years, doing so they can collect a significant sample. On the EcoPass website it mentions that employer participants are required to distribute before and after transportation surveys to employees to participate in reimbursement. This program increases access to transit, lowers single occupant vehicle use, and saves money. Community residents with a pass-in-hand drive less which results in less congestion and pollution in the Boulder community (Public Works-Transportation & Mobility Department).

In response to my question regarding the measurement of the reduction of VMT, Candace Mastel from the City of Bozeman said that a metric has not been established, but that her concerns lie with the ability for the city to provide the facilities rather than continuously measuring the current impact. She firmly believes that if you build transportation facilities people will use them, and her goals in her new role are "to build the facilities in order to see a reduction and offer people a safe, convenient and maintained alternative" (C. Mastel, personal communications, July 5, 2022). Corvallis is not measuring or focused on measuring the reduction of VMT as a primary mechanism (J. Capps, personal communications, May 9, 2022). The remaining peer cities also did not have any means of measuring the reduction of VMT at the time of this report.

Lessons for Flagstaff

Here findings from this research will be compared to planning efforts currently pursued by the City of Flagstaff. On the topic of density Flagstaff has a similar strategy in the 2018 CAAP, it highlights the importance of vibrant and affordable neighborhoods and infill development to enable residents to easily walk, bus, or bicycle to meet basic daily needs, and decreasing the distance needed to drive to reach services, schools, parks, and businesses (City of Flagstaff, 2018). I believe that Flagstaff has work to do in its execution of infill development. While the Village at Aspen Place community located at the Lone Tree at Butler intersection fixed upon the Whole Foods and REI development is a successful

example of providing a dense, mixed-use community. It cannot be said for several other similar developments throughout Flagstaff, an example is The Standard at Flagstaff. This community was built in an area that is not pedestrian or bicycle friendly and is not surrounded by business that would promote walkability. The City of Flagstaff should also stop building outside of the city limits in areas that are not serviced by public transportation, and do not offer amenities: such as the Presidio in the Pines development, which has no recreation path connecting it to town, or connection to public transportation, promoting single occupant vehicle use. Regarding these communities which have already been built, a recommendation would be the use of share micro mobility options (e.g., bikeshare, scooters) as mentioned by Davis who would like to increase the opportunity for active mobility in the community with electric micro mobility vehicles. Flagstaff like many of its peer cities included both land use and transportation in the same section within their 2018 CAAP.

Flagstaff also includes an action regarding incentive plans like its peer cities in the 2018 CAAP, it focuses on providing employee benefits for those who commute by foot, transit, bicycle, or carpooling (City of Flagstaff, 2018). It is unclear if this goal is regarding only city employees to receive benefits from the city or if this would be something left up to employers in the City of Flagstaff to implement like in Santa Cruz, there is also no mention of subsidizing the costs with doing so. Flagstaff does not have any strategies regarding free or severely discounted public transportation for any part of the community, including underserved communities like eight of its peer cities do. A recommendation for Flagstaff would be to focus on expanding and providing reliable public transportation with more frequent service and stops, as Candace Mastel the transportation demand management coordinator from Bozeman said, if you build transportation facilities people will use them. The second recommendation to piggyback off the first is to offer either free or severely discounted use of public transportation. I believe that Boulder offers a wonderful service in the EcoPass. It would be beneficial to Flagstaff, if similarly, to Boulder the city grew its services with partnerships to more recreation and included services to Snowbowl and even

services to Sky Harbor Phoenix's international airport on a single bus pass. It would also be a great benefit for the NAU community to including an annual bus pass for all local NAU students in their yearly tuition costs like the EcoPass does for CU Boulder.

On the topic of road diets, there is an action in the 2021 Flagstaff CNP that is like those from our peer cities, which focuses on converting appropriate streets to multi-modal and complete streets through road diets, and the redistribution of the available space to accommodate more users and better reflect climate priorities (City of Flagstaff, 2021). The recommendation for the City of Flagstaff would be to incorporate road diets on current roadways as well as those yet to be built, such as taking this into consideration regarding the new Lone Tree overpass project. This project passed with proposition 420 and is still in its design phase. The overpass is being built for the purpose of creating a north-south connection near downtown, reducing congestion on Milton, San Francisco, and Beavers Streets, and improving mobility through the city amongst other reasons (City of Flagstaff, 2022). Flagstaff has a lot of opportunity to create walkable neighborhoods throughout the city, but they must choose the correct areas in which to do so. Widening sidewalks along one side of the road into recreational paths and minimizing on street parking to the other side of the street with decorative perpendicular medians would reduce parking even further, while providing additional shade for cool corridors and a safety barrier from the road.

In the Flagstaff 2021 CNP there is a policy change regarding the direct reduction of VMT, like its peer cities strategies it includes a shift in city transportation policies to actively manage transportation demand and reduce vehicle miles traveled by reducing parking requirements in new apartment buildings (City of Flagstaff, 2021). Like both San Luis Obispo and Santa Cruz parking reductions seem to be a key in the successful reduction of VMT. Flagstaff should consider raising their downtown parking prices. There is no mention of support for a work from home program, or telecommuting infrastructure in the Flagstaff documents.

Conclusion

VMT Reduction Strategies in Flagstaff's Peer Cities

This research includes strategies which may directly or indirectly reduce VMT from the transportation sector of all 17 of Flagstaff peer cities documents. With interest from the City of Flagstaff planning staff in how cities are framing these propositions to achieve the desired outcomes and any metrics with which to evaluate successful outcomes. Action was needed per the report published by the IPCC of a global warming of 1.5 degrees Celsius or 2.7 degrees Fahrenheit, leading to the creation of the 2021 Flagstaff CNP, which will be crucial to Flagstaff achieving its climate goals (City of Flagstaff, 2021). Also leading to this research which provides the City of Flagstaff with further options and recommendations with which to reach its climate goals.

While Flagstaff's planning documents just like its peer cities state the importance of reduction in VMT, Flagstaff seems to be building for more traffic rather than not as Jenny Niemann mentions, and as is proven in the current plans for the Lone Tree overpass project. Also, there is no current means to measure the success of all the aforementioned strategies in either Flagstaff or its peer cities with the exception of Boulder who was able to collect decades of information from its successful EcoPass program, a similar program is recommended as a future action in Flagstaff. I would recommend if someone were to continue this research to dig deeper into the land use sector, while transportation was often combined with land use, it wasn't always. With building dense, mixed- use, compact, urban communities being the most popular goal amongst Flagstaff's peer cities, and it being a land use goal. There may also be means for measurement already implemented for land use methods such as something as simple as number of permits pulled as mentioned by Chris Comeau from Bellingham.

References

Bend Community Climate Action Plan Climate Mitigation Strategies and Actions: 2020-2025. City of Bend. (2019, December 4). https://www.bendoregon.gov/home/showpublisheddocument/52799/637856320279630000

Bend Integrated Land Use and Transportation Plan. City of Bend. (2016, July 19). https://www.bendoregon.gov/home/showpublisheddocument/31914/636540231393770000

Boulder Transportation Master Plan 2019. City of Boulder. (2019). https://bouldercolorado.gov/media/1045/download?inline=

Bozeman Climate Plan 2020. City of Bozeman. (2020). https://www.bozeman.net/home/showpublisheddocument/11000/637469011742370000

Chapter 8: Transportation. City of Laramie. (2007, June 5). https://www.cityoflaramie.org/DocumentCenter/View/449/Chapter-8---Transportation?bidId=

City of Bellingham Washington 2016 Comprehensive Plan. City of Bellingham. (2016, November 14). https://cob.org/wp-content/uploads/2016-comprehensive-plan.pdf

City of Bellingham Climate Protection Action Plan. City of Bellingham. (2018). https://cob.org/wp-content/uploads/Climate-Protection-Action-Plan-2018-Update.pdf

City of Chico, California Climate Action Plan Update. City of Chico. (2021).

https://chico.ca.us/sites/main/files/file-attachments/chico-cap-update_final-draft-complete.pdf?1655413766

City of Davis 2020-2040 Climate Action and Adaption Plan. City of Davis. (2022, August 8). https://www.cityofdavis.org/home/showpublisheddocument/17851/637961803439530000

City of Flagstaff Active Transportation/FUTS Master Plans. City of Flagstaff. (2019, February).

City of Flagstaff. (2022). *FAQs.* The Lone Tree Overpass Project. https://lonetreeoverpass.org/faqs/default.aspx

City of Las Cruces Climate Action Plan. City of Las Cruces. (2020, July). https://www.las-cruces.org/DocumentCenter/View/6289/LC-Climate-Action-Plan-Report-July-2020-PDF

City of Logan Surface Transportation Master Plan. City of Logan. (2011, June). https://cms9files.revize.com/loganut/document_center/Public%20Works/Engineer/Bookmarked%20Document%20081611.pdf

City of Pocatello Comprehensive Plan 2015 Update. City of Pocatello. (2015, March 5). https://www.pocatello.us/DocumentCenter/View/376/Comprehensive-Plan-2015-Update-PDF

City of San Luis Obispo Climate Action Plan. Community Development Department. (2012, August). https://www.slocity.org/home/showdocument?id=4086

City of Santa Cruz 2030 Climate Action Plan. City of Santa Cruz. (2022, September). https://www.cityofsantacruz.com/home/showpublisheddocument/90696/637983259409670000

Climate Action Plan 2022. Cooper, K. (2022, October 4).

https://www.ci.moscow.id.us/DocumentCenter/View/24259/Climate-Action-Plan-Adopted

Community Guide to Boulder's Climate Action Plan. City of Boulder. (2009, October).

https://missionzero.io/wp-content/uploads/2022/03/community-guide-boulders-climate-action-plan.pdf

Comprehensive Plan. City of Pullman. (2021, September).

https://go.boarddocs.com/wa/pullman/Board.nsf/files/C9CU477A2CEF/$file/Resolution%20No.%20R-51-21%20-%20A%20RESOLUTION%20APPROVING%20THE%20COMPREHENSIVE%20PLAN%20DATED%20SEPTEMBER%202021%20AS%20THE%20OFFICIAL%20COMP%20PLAN%20FOR%20THE%20CITY%20OF%20PULLMAN.pdf

Corvallis Climate Action Plan. City of Corvallis. (2016, December).

https://archives.corvallisoregon.gov/public/ElectronicFile.aspx?dbid=0&docid=920368

Corvallis Transportation System Plan. City of Corvallis. (2019, January 1).

https://archives.corvallisoregon.gov/public/ElectronicFile.aspx?dbid=0&docid=1394706

Flagstaff Climate Action and Adaptation Plan Strategies and Actions. City of Flagstaff. (2018, November).

https://www.flagstaff.az.gov/DocumentCenter/View/59412/Flagstaff-Climate-Action-and-Adaptation-Plan_Nov-2018_Strategies-and-Actions

Greeley 2035 Comprehensive Transportation Plan. City of Greeley. (2011, May 3).

https://greeleygov.com/docs/default-source/Public-Works/Transportation/greeley-2035-comprehensive-transportation-plan.pdf

Imagine Greeley Comprehensive Plan. City of Greeley. (2018, February 6).

https://greeleygov.com/docs/default-source/community-development/long-range-planning/imagine-greeley/imagine_greeley_comprehensive_plan_adopted_02-06-2018.pdf

Las Cruces Active Transportation Plan. City of Las Cruces. (2018, October 15).

https://www.las-cruces.org/DocumentCenter/View/1217/Active-Transportation-Plan-PDF

Logan General Plan. City of Logan.

https://cms9files.revize.com/loganut/document_center/Planning%20Zoning/LoganGenPlan%20v20%20low%20for%20web.pdf

Missoula Community Climate Smart Action Plan v1.0. Cilimburg, A., Jones, C., Schenk, B., & Lauer, C. (2015, July).

http://www.ci.missoula.mt.us/DocumentCenter/View/31466/MissoulaCommunity_ClimateSmartActionPlan_v1-0?bidId=

Public Works-Transportation & Mobility Department. *EcoPass Program.* City of Boulder.

https://bouldercolorado.gov/services/ecopass-program

The Flagstaff Carbon Neutrality Plan. The City of Flagstaff. (2021, June).

https://www.flagstaff.az.gov/DocumentCenter/View/66105/Flagstaff-Carbon-Neutrality-Plan_for-adoption_6-15-21?bidId=

Transportation System Plan. City of Bend. (2020).

https://www.bendoregon.gov/home/showpublisheddocument/47764/637381859539770000