

Informing a Pilot: Preparing the Pre-launch Survey for the Davis Amtrak Station Access Program

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Susan Pike, University of California, Davis

Alimurtaza Kothawala, University of California, Davis



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About the Pacific Southwest Region University Transportation Center

The Pacific Southwest Region University Transportation Center (UTC) is the Region 9 University Transportation Center funded under the U.S. Department of Transportation's University Transportation Centers Program. Established in 2016, the Pacific Southwest Region UTC (PSR) is led by the University of Southern California and includes seven partners: Long Beach State University; University of California, Davis; University of California, Irvine; University of California, Los Angeles; University of Hawaii; Northern Arizona University; and Pima Community College.

The Pacific Southwest Region UTC conducts an integrated, multidisciplinary program of research, education, and technology transfer aimed at *improving the mobility of people and goods throughout the region*. Our program is organized around four themes: 1) technology to address transportation problems and improve mobility; 2) improving mobility for vulnerable populations; 3) improving resilience and protecting the environment; and 4) managing mobility in high growth areas.

U.S. Department of Transportation (USDOT) Disclaimer

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Disclosure

Principal Investigator Dr. Susan Pike conducted this research titled, “Davis Amtrak Station Pilot Project Planning: Potential Solutions to the Davis Amtrak Parking and Access Barriers” at University of California, Davis, Institute of Transportation Studies. The research took place from March 2018 to March 2019 and was funded by a grant from the U.S. Department of Transportation in the amount of \$39,984.00. The research was conducted as part of the Pacific Southwest Region University Transportation Center research program.

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Abstract

This study investigates barriers to accessing the Davis Amtrak Station and will inform a pilot program to increase access to the station with on-demand alternatives. The program aims to decrease private vehicle use to access the station and for travel to locations outside of Davis. Currently, the Davis station has the third highest passenger usage along the Capitol Corridor and ridership is increasing, but potential ridership is limited by parking availability. The city has limited interest in or ability to add new parking capacity, however pricing will be introduced to the lot in the future. In addition, the city will introduce a pilot program to support the use of on-demand alternatives and other modes to access the Davis station. The goal of this phase of the study was to develop surveys for Davis residents and current Capital Corridor riders that will assess barriers to use of the station. Such factors likely include limited vehicle and bicycle parking, limited local bus service hours, last mile challenges at the *other* end of the trip, and the convenience of driving for regional travel. The results of this survey will offer insights into the key factors influencing the use of the Capitol Corridor regional rail, and the importance of station access among those factors. Further, this phase of the study will inform the development and implementation of the city's pilot program.

Key Words: new mobility, intermodal transportation, regional transportation, rail access, alternative transportation barriers

Informing a Pilot: Preparing the Pre-launch Survey for the Davis Amtrak Station Access Program

Executive Summary

This report outlines the preparation of a survey that will gather information to present a snapshot of current travel within the City of Davis. The survey preparation comprises the first phase of a longer study that will evaluate the impact of a pilot program of mobility options for the Davis Amtrak station. In this phase we conducted background research and prepared a survey that will gather data on the barriers to using the Davis Amtrak station and provide pre-launch input to pilot programs aimed at improving access to the station as well as the Capitol Corridor regional rail line.

The Davis Amtrak station has the third highest passenger usage along the Capitol Corridor and ridership is increasing. However, the parking lot for passengers fills up before 6am and therefore limits potential ridership. Transportation staff at the city are pursuing shared use mobility options as a cost-effective solution to these issues to make commuting by train easier, more productive, affordable, and travel-time competitive. The pilot programs will begin in the late fall of 2019 and involve two elements; discounted rides with the ridehailing company Lyft, and guaranteed parking for passengers arriving at the station by rideshare with Carzac.

This phase of the research is devoted to developing a survey to be implemented among Davis residents, to explore factors influencing the use of the Amtrak station. In this phase we also explored potential modes of survey implementation. Before the launch of the pilot we will gather information from Davis residents about current travel patterns and their perspectives on the planned programs. Participants will be screened out of the survey if they do not live, work or go to school in Davis; or do not have a commute that takes them through Davis, or live somewhere in Yolo County.

The survey will be implemented in October 2019 and will gather the following information:

- Current travel patterns.
- Travel using the Capitol Corridor including challenges.
- Non-commute trips, and the use of the Capitol Corridor for these trips.
- The planned pilot programs for the City of Davis and the likelihood participants would use them.
- Socio-demographics including age, gender, education, and residential location.

Introduction

The Davis Amtrak station, a stop on the regional Capital Corridor (CC) line (**Figure 1. Route of Capitol Corridor** (source: <https://www.capitolcorridor.org/route-map/>)**Figure 1**), has the third highest passenger usage along the Capitol Corridor and ridership is increasing. However, the station's parking lot fills up before 6am and this poses an access challenge to passengers. Indeed, since the early 2000s, the city has received complaints about getting to the train station. Prior surveys by the city indicate that 50% of those that park at the train station are Davis residents, 15% are Yolo County residents, and 35% are from outside Yolo County (City of Davis unpublished data). Differences in cost are likely the primary reason many travel to the Davis Amtrak station from outside of Yolo County. Both single and multi-ride fares for westbound trips towards San Jose cost, on average, 20% less when travelling from Davis rather than Sacramento. Also, parking in the 142 spaces at the Davis Amtrak Station is free while parking in one of the 300 spaces at the Sacramento station costs \$1 for every 20 min. with a daily maximum of \$10. CC riders may also purchase a monthly parking pass for \$110, but this is still significantly more than parking for free in Davis. Parking garages located near the Sacramento station are priced similarly. This differential between parking prices and trip fares is likely enough incentive to attract riders from the Sacramento area to the Davis Amtrak station.

There are challenges for those using other modes of access as well. Personal observation at the Davis station has revealed that a majority of the 199 available bike racks were occupied by 6 am on the weekday morning observed. As for transit, two bus lines have service to the Amtrak station while 3 others stop nearby. But these services run infrequently during evening hours and service is reduced heavily during the summer.

The city has limited interest or ability in adding new parking capacity to accommodate more cars and is thus planning to introduce pricing in the parking lot in the future. Transportation staff at the city are also pursuing shared use mobility options as a cost-effective solution that will make commuting by train easier, more productive, affordable, and travel-time competitive. The shared-use mobility solutions were developed over several months through in-depth discussions and workshops with transportation professionals from throughout the region, convened by the Sacramento Area Council of Governments.

As of the writing of this report, the planned pilot program will begin in January 2019 and involve two elements; discounted rides with the ridehailing company Lyft, and guaranteed parking for passengers arriving at the station by rideshare with Carzac.

Figure 1. Route of Capitol Corridor (source: <https://www.capitolcorridor.org/route-map/>)



This study has three phases overall, the first of which is the focus of this report, with the second and third phases to be completed in the future. This first phase of the study has two aims. The first aim is to get a snapshot of current travel within the City with a focus on travel to the Davis Amtrak station. The second aim is to refine the program details to ensure it will best serve the needs of the Davis community and improve access to and use of the Capitol Corridor.

In this phase of the study, we will assess the current barriers to use of the Davis Amtrak station and the Capitol Corridor for Davis area residents, and assist the City of Davis in the final design and implementation of their planned pilot program. The City of Davis is not alone in their pursuit of this type of program. There are a number of these partnerships across the U.S. and internationally. The increasingly-popular efforts to develop these types of partnerships throughout the U.S. will benefit from the in-depth research of this study through its contribution to the development and implementation of the Davis pilot program. Likewise, the pilot program in Davis will benefit from our review of the pilot programs that have been implemented in other cities. Unlike other studies that focus on these partnerships that have largely evaluated the experiences of transit agencies, our study investigates how passenger's travel patterns, attitudes, and satisfaction change with the introduction of this pilot program.

This report describes the survey development phase of this study. The survey covers topics specifically related to the planned pilot program, as well as the decision to commute by regional rail more generally. We anticipate that barriers include vehicle and bicycle parking constraints, limited local bus service hours for station access, last mile challenges at the non-Davis end of the trip, travel times and costs, and the convenience of driving for regional travel. The survey will be implemented in November 2019, and the pilot program, which will be refined based on the results of the survey, is expected to be launched in January 2020.

Background

In this study we take an in-depth look at the factors influencing the use of the Capitol Corridor train for travel to and from the City of Davis. The background research for this study covers three inter-related topics. First, since the project involves identifying solutions to increase transit ridership, it is important to situate the problem at hand in this context with a focus on rail transit. Hence, we examine research on the factors that determine transit ridership. Second, the problem is being viewed from the user's standpoint. Understanding what barriers, both perceived and real, may impact transit use will help inform the survey and are therefore reviewed in the second section. Given that limited parking capacity is the probable cause of constrained ridership, potential solutions to (a) address the first-mile access issue as well as (b) alleviate parking demand are reviewed. Since shared mobility is being adopted as a solution, a final section is devoted to shared mobility and how transit-ridehailing partnerships may be employed to solve problems of access and parking.

Factors Affecting Transit Ridership

Some factors that affect transit ridership, such as service frequency and fares, are controlled by transit agencies and can be termed internal factors. Another set of factors that affect transit ridership but are external to the system are summarized by [Taylor and Fink \(2003\)](#) as:

- a. spatial factors like employment, population densities or parking availability at the destination, particularly Central Business Districts;
- b. socio-economic factors of the population in catchment of transit—most importantly education, employment and vehicle ownership; and
- c. other factors like transit subsidies.

These internal and external factors can explain the overall ridership of Capitol Corridor but not why specific individuals do or do not use the Capitol Corridor and more specifically the Davis Amtrak station.

From an individual's perspective, taking transit or not is a transportation mode-choice decision. Factors that affect this choice significantly overlap with the factors that affect ridership since these choices themselves translate to demand at the aggregate level. Whether one takes regional rail to work rather than drive will depend on, among other things: the characteristics of the trip maker—household structure, income, car ownership; characteristics of the journey—

trip purpose, time of day, travel time, monetary costs, connectivity to and from the station at both trip start and end; and certain qualitative aspects of the transit option itself like comfort ([Lindström 2003](#)).

Barriers affecting the use of transit from both user and non-user perspectives are similar but vary among captive and choice riders ([Krizek and El-Geneidy 2007](#)). In general, barriers can be categorized as hard, soft and complementary and can be broadly thought of as barriers to transportation mode shift ([DHC 2003](#)). These are summarized below (Table 1). Two major barriers to transit use are availability of and affection towards alternative modes (often automobile).

Table 1. Barriers to Use of Public Transit (Rail) adapted from [Blainey et al. 2012](#)

Hard barriers	Soft barriers	Complementary (or Lifestyle) barriers
Travel Time	Inaccurate perceptions	Trip chaining
Reliability	Conscious car dependence	Habit
Service Frequency and Timetabling	Convenience and freedom	Individuality
Mode Interchange (with say another BART or a bus)	Lack of control	Age, health and disability
Network limitations	Journey planning requirements	Ethnicity, faith, and culture
Cost	Information provision	Goods and baggage
Ticketing Complexity and Inter-Availability	Station facilities	Locational preferences
Structural Car Dependence – no viable alternative to Car	Cleanliness and maintenance	Influence of employers
Safety	Personal security	Sub-optimal market prices
Land-use patterns (e.g., availability of parking at home)	Staff presence	Weather
Government Policy	Comfort	
Safety	Crowding, other passengers, and the image of public transport	

In addition to barriers related specifically to the use of rail transit, access to the station—both motorized and non-motorized—is also an important factor and in some cases the available options may be a barrier for some potential passengers. Issues related to motorized access to the transit station often pertain to parking availability and pricing, concerns that are common at all transit stations particularly commuter rail, regional rail, and light rail stations.

Parking at Transit

Park-and-ride lots fall into two groups. First, they are an easy means for transit riders to drive to the transit stop where they can get on an efficient, long-distance transit option, whether rail or bus. Another type of park-and-ride lot serves as a place for drivers to convene to form carpools for the remainder of their trip. For the purposes of this report, we refer to the former definition of park-and-ride lots as we are concerned with parking lots at transit hubs like the Davis Amtrak Station.

Although park-and-ride facilities are expected to increase transit ridership, current literature is not clear about its outcomes ([Jacobson and Weinberger 2016](#)). One study suggests that provision of station parking is practical and results in increased patronage ([Duncan 2010](#)). This is in contrast with other studies ([Cervero 2009](#); [Willson and Menotti 2007](#)) that find station-area housing and the local real estate market to be more influential than parking availability. Although the question of how much park-and-ride lots contribute to transit ridership is an important one, transit agencies across the country face a common issue after these park-and-ride facilities are in place—they are almost always full.

Most park-and-ride lots fill up in the early hours as is the case with Davis ([Capitol Corridor website](#)). This essentially puts a cap on how many people can access the transit station, all else—such as vehicle occupancy and the number of drop-off cases—being equal. For example, owing to this early fill-up of parking spaces, (potential) riders of at least 6 trains after 6 am would not be able to park-and-ride in Davis even if they wished. The many solutions deployed for parking issues include adding spaces, charging for parking, and improving access by other modes.

Adding parking spaces often presents cities with financial and spatial constraints and is not always a viable option especially in downtown areas. Another option is to manage demand for parking. This is often achieved through parking pricing. Cases of introducing pricing to parking lots at transit stops have had mixed outcomes, however. Further, pricing has been applied to meet different ends: some agencies use it to control parking demand while others use it to raise revenue or recover facility costs. In the case of BART, the regional rail of San Francisco Bay Area, parking pricing has not discouraged riders from taking transit ([Duncan 2010](#)). In high-density areas, with high utilization rates (90% and above), parking pricing has been found to be an effective strategy for managing parking demand without hurting ridership. However, when parking utilization is less than 90%, parking pricing may further reduce parking and contribute to reductions in ridership ([Coffel et al. 2012](#)).

One common issue that can cause a pricing policy to fail is spillover parking. If alternatives to priced parking are available in the form of unused parking in the vicinity, users might shift to those spots. This occurred in the case of Denver's Regional Transportation District ([Jacobson and Weinberger 2016](#)). Further, factors like trip purpose and the availability of alternative modes and their relative utility will determine the mode choice of the displaced rider i.e., the rider whose parking spot is now charged. In a stated preference study performed at busy park-

and-ride stations in Vancouver, the effect of pricing on mode choice and the decision to park at the park and ride was investigated. Model results showed that pricing parking at most park-and-ride made users made them switch to an alternative form of transit for their entire long-distance commute trip (instead of driving all-way) ([Habib et al. 2013](#)). But the alternative mode adopted by the displaced park and ride users might not always be sustainable; if the alternative transit all the way takes longer or requires additional transfers.

Access to stations can be improved through the provision of bike racks, secure bike lockers, better signage, and safe walking infrastructure. But mode choice is dependent on distance to the station, and walking and cycling are replaced by car or transit when longer distances are involved ([Givoni and Rietveld 2007](#)). Although multimodal integration, for example, bus-rail linkage, can reduce the need to drive, issues of irregular service frequencies (as in Davis), perceptions of bus service, and the burden of transfer, among other factors, pose additional challenges ([Blainey et al. 2012](#)).

While assessing what solutions to address parking shortage, knowledge of the means of transportation to the station can certainly help. System-wide passenger surveys published by Capitol Corridor suggest that 29% of their riders drive alone, a quarter of them are dropped off, 9% use a taxi or ridehailing services like Uber/Lyft, and only 2% carpool to stations. Another 17% use public transit, 15% walk, and 10% bike ([CCJPA 2018](#)). Comparatively, a study of regional rail in the San Francisco Bay Area found that at least 93% of the respondents drove alone to BART (Bay Area Rapid Transit) stations ([Shirgaokar and Deakin 2005](#)).

First and Last Mile Access: The role of transit ridehailing partnerships

A number of transit agencies have recently formed partnerships with ridehailing services with a variety of motivations. These partnerships are typically formed to implement pilot programs that involve connecting to or augmenting public transportation. These programs offer a number of potential public benefits including increased visibility of transit and increased transit ridership, improved access in areas where it is not feasible to provide line-haul transit, such as lower density areas, or areas where passengers face first/last mile challenges. In one of the first partnerships of this kind, the Pinellas Suncoast Transportation Authority who partnered with local taxis as well as Uber to provide first and last mile connections to transit routes. This program has been running since February of 2016 and was expanded to include a program that provides rides for late night workers.

Another example is the City of Summit NJ. Instead of building space for additional parking for regular users of Summit train station, the city opted to subsidize the cost of a ride to and from the station for all parking permit holders. Users pay an equivalent of the parking cost of \$4 per day—\$2 each for the trips to and from the station ([City of Summit 2017](#)). Other examples include BART and MTC's partnership with Scoop, a rideshare company. This program is similar to the one that will be introduced by the City of Davis in that it guarantees parking for passengers using the rideshare application to carpool to the station (McCoy et al. 2018).

These partnerships are still new, and studies like this one will help evaluate the impact of these types of partnerships on travel and transportation systems. Thus far, notable best practices include the “fit” of the program. For example, in dense urban locations fixed route transit services may be best supplemented by on-demand ride services operating late at night, whereas suburban locations are likely to be best served through pilots that improve first- and last-mile connections ([Feigon and Murphy 2018](#)). In line with these early findings, the City of Davis program will be a first- and last-mile program for commuters travelling to the Sacramento area or the Bay Area.

Data Collection and Preparation

There are 3 surveys planned for this study. The first is a pre-launch survey set to be rolled out before the City of Davis’ multi-modal program launch in late fall 2019. This survey is intended for anyone living or working in Davis; or those that have a commute that passes through Davis (and could use the Capitol Corridor train). The results of this survey will provide city transportation planners with important insights about how people access the Davis Amtrak station and capture their thoughts on potential programs that will help improve that access.

The second wave of the survey will be launched about halfway through the duration of the pilot program in early 2020. The second wave of the survey will assess user perception of the implemented programs and will help gauge its effectiveness. The results of this survey will provide feedback to the city and could result in modifications to the program. The last survey will be a post-program survey administered at the end of the pilot program, in fall 2020. In all but the final survey, participants will be asked if they are interested in participating in the subsequent waves; those that do will make up a panel and will provide a means to track individual changes in travel behavior over the duration of the pilot program.

The city’s program will launch in late fall of 2019. The pre-launch survey, originally scheduled for August 2019, was delayed to October 2019 so as to not leave too big a gap in between the survey and the program launch.

Survey Design and Implementation

Most travel surveys are aimed at obtaining information regarding individual and household travel patterns needed for transportation planning and forecasting. Mail and telephone surveys have been the predominant mode of communication and response in travel surveys ([Griffiths et al. 2000](#)). But coverage issues in telephone surveys have multiplied over the years since most U.S. households have unlisted or abandoned their landline numbers ([Dillman et al. 2014](#)). In addition, telephone surveys have the same social desirability and anonymity concerns as in face-to-face interviews.

For mail surveys, coverage bias can be contained by including all residential addresses in a city when sampling, but nonresponse error is still often a problem (Daly et al. 2011). Web questionnaires are relatively cheaper, but the response rates have not matched those of mail or

other survey modes ([Manfreda et al. 2008](#)) and issues of coverage remain. But anonymity concerns are dispensed with and ease of access and flexibility in responding are notable benefits. Owing to the drawbacks of single-mode methods, mixed-mode methods that incorporate two or more methods for communication in the recruitment phase and multiple response channels, can be employed with proven benefits like lower costs, improved timelines, reduced coverage error, and reduce total survey error ([de Leeuw 2005](#)).

Even with mixed methods, a holistic approach to design is crucial to the success of a survey and a limited focus on just a few aspects of costs, benefits, and/or trust, is a major barrier to improving response ([Dillman et al. 2014](#)). Uniform questionnaire design across modes, employing social response concepts, asking about recent experiences, using multiple contacts or reminders, among many other strategies, should come together to avoid a broken experience ([Dillman et al. 2014](#)).

When considering mixed-mode survey design, some questions demand attention:

- Which modes should be used for communication and which ones for response and how?
- Would using different modes of response introduce measurement errors?
- Is it enough to offer a choice of response modes concurrently or should the strategy be more sequential?
- How to account for preferences that people have for different response modes for example, online vs. paper?

Surveys administered online offer some advantages over paper surveys, such as the convenience of digital survey design tools and lower costs per participant. Online surveys also allow for the incorporation of more detailed graphics, easy scrolling, and tailored question and page layouts. UC Davis researchers have free and practically unlimited access to the Qualtrics survey tool which brings down survey development and administration costs significantly. If coverage bias is addressed when recruiting a sample, web surveys offer unmatched advantages over other modes ([Medway and Fulton 2012](#)).

In some cases, a major limitation of online surveys is lack of representativeness owing to the still relatively low share of internet accessible households, but this doesn't hold for Davis. Close to 92% Davis households have a broadband internet connection and 96.6% own a computer ([U.S. Census QuickFacts 2017](#)). Davis residents aged 18+ (who also happen to be the eligible participants for this survey) make up 84% of the population. For adults aged 25 and higher, 97% have at least graduated high school and more than 73% at least have a Bachelor degree ([U.S. Census QuickFacts 2017](#)). Although internet access is not a likely barrier for the target population, there is not an existing sampling frame of web-based contact information for individuals (i.e., a complete list of email addresses for Davis residents). For this reason, participants will be invited to participate through postal mail, but survey will be accessed online; with paper versions available to those who request it.

A random sample of addresses will be drawn from a list of addresses provided by the City of Davis. Residents will be invited to participate with a postcard containing information about how to access the online survey. The survey will also be advertised online through various channels including the City's website, Nextdoor and Facebook. A recent study in West Sacramento and Davis areas that used a similar approach and a \$5 Amazon gift card incentive and achieved a 15% response rate. This straightforward approach saves significant printing costs too. The respondents, should they need a paper survey, will have the option of asking for one by contacting the research team.

While most surveys involve contacting potential participants by mail, phone, or online, onboard transit surveys intercept people when they are using a certain service. Onboard transit surveys are designed to collect data on trip characteristics, demographics, and user experiences and satisfaction (Schaller 2005). In a transit survey involving bus users in San Francisco Bay Area, three modes—paper, a tablet, and online via use of a printed post-card that carried a QR code and a URL to the survey—were used to administer surveys; no incentive was offered for participation (Agrawal et al. 2015). The paper mode was found to be the most preferred by the population surveyed in this study given that it received more responses per approached passenger. Although in terms of completeness and geocode-able addresses reported on survey, the tablet and online modes performed better. In an earlier onboard survey of Amtrak riders in 2012 over a period of 3-days, close to a 50% response rate was achieved through use of paper surveys (Mokhtarian et al. 2013). Since the Amtrak survey is being sent to a sample of Davis addresses, non-residents that also use the Capitol Corridor could be recruited through paper-based intercept surveys at the train station or while onboard the train. Relevant concerns when using paper surveys would be maintaining uniformity of questionnaire design and flow as it relates to the online version of the survey to avoid any measurement errors besides the human error and costs associated with data entry.

Survey

The survey was primarily designed as a web survey using the Qualtrics survey design and management tool. The pre-launch survey is longer than the surveys planned during and at the end of the pilot program will be. We attempted to balance comprehensiveness, length, and respondent burden to maximize the number of complete responses. Questions are designed to gather information about the travel patterns of people who live, work or have a commute that takes them through Davis and could potentially use the Davis Amtrak station and the Capitol Corridor. The barriers section is motivated by the context of research and literature review on the matter (Blainey et al. 2012). A copy of the survey is provided in Appendix A.

The survey begins with an introductory note about the survey purpose, and the online version had the City of Davis and UC Davis logo on the starting page. Participants are screened out of the survey if they do not live, work or go to school in Davis; if they do not have a commute that takes them through Davis; or if they live somewhere in Yolo County.

The first two sections of the survey gather information about participants' current travel patterns. Participants who use the Capitol Corridor are directed to a brief section with questions related to how they get to the train station, any issues they have experienced using the train, and at which stations and times they board and leave the train. The fourth section captures details about a number of non-commute trips, and reasons why the Capitol Corridor may not have been used for these types of trips. The next section asks participants to consider the planned pilot programs for the City of Davis, and the likelihood they would use them. Finally, the last section of the survey asks questions about socio-demographics about participants such as age, gender, education, and residential location. Participants' contact information is requested for participation in a gift card drawing, as well as to be enrolled in a panel study, as this study will include two more waves of surveys.

The pre-launch survey will be administered predominantly online. Survey invitations will be distributed through postal cards that carry a QR code and a web address leading to the survey. Postal cards will be sent to a random sample of Davis households obtained from the city. Some neighborhoods that are known to represent a higher share of Capitol Corridor ridership will be oversampled. A total of 8-12,000 recruitment cards will be sent. It is expected that all survey participants will complete the survey online, but they will have an option to do the survey over the phone. A reminder post card after a week's time from the first mailer will also be sent.

An onboard intercept survey is planned in addition to the distribution via mail. This will target those that use the Capitol Corridor; primarily aimed at riders that are not residents of Davis. One or two weekdays during peak and off-peak hours will be chosen to administer the surveys using the same postcards used in mail surveys. Should the response rate as observed on the Qualtrics platform seem low on the first day, another attempt will be made using paper surveys instead. Surveys will be administered to all passengers boarding the train by staff from UC Davis and possibly CCJPA. These surveys if administered in paper will require participants to fill in the survey during their time on the train and could be dropped into a box near the exit doors or collected in-person by a designated person who will remain onboard the train through the entire journey.

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Weblinks

CCJPA Capitol Corridor On-Board Surveys, December, 1999 through May 2018

<https://images.capitolcorridor.org/wp-content/uploads/2018/08/cc-usage-2018-overview-one-pager.pdf>

Davis Amtrak Station Details <https://www.capitolcorridor.org/stations/davis/>

U.S. Census 2011 Quick Facts

<https://www.census.gov/quickfacts/fact/table/daviscitycalifornia/PST045217>

David MacKenzie <https://faculty.washington.edu/dwhm/2017/04/17/rethinking-the-park-and-ride-for-the-21st-century-part-i/>

Capitol Corridor Schedule https://www.capitolcorridor.org/wp-content/uploads/2018/05/Weekdays_May2018.pdf.pdf

City of Summit <https://www.cityofsummit.org/formcenter/parking-services-8/summit-ridesharing-program-52>

ACS 2017 1-year estimate for C08006 Sex of Workers By Means of Transportation to Work:

https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_17_1Y_R_C08006&prodType=table

Data Management

Products of Research

This phase of the research largely involved a literature review of topics relevant to the planned Davis Amtrak Access program; work in the areas of travel behavior, transit use, park and ride, partnerships between transit providers and ridehailing companies; and survey design and administration. The main product of this study thus far is the survey to be implemented in September 2019. The survey is included as Appendix A – City of Davis Amtrak Access Survey.

Data Format and Content

The data used in this study so far consists of literature on the topics noted above; this is summarized in the narrative text of this report.

Data Access and Sharing

The data, as summarized in this report, will be available to the general public via this document.

Reuse and Redistribution

There are no restrictions to sharing and distributing this report and the bibliographic data contained within.

Appendix

Appendix A – City of Davis Amtrak Access Survey

Start of Block: Introduction

Q1.1 Welcome to City of Davis Amtrak Station Access Survey!

This survey is intended for anyone living in, working in, or commuting through Davis, CA.

The results of this survey will provide city transportation planners with important insights about how people like you get to the Davis Amtrak station. Your input will inform programs set to launch this fall that will improve access to the station. Please take 10-15 minutes to complete this survey. Your responses are very important to us!

Participating in this survey is voluntary, and all responses are completely confidential. The results will only be published in the aggregate without connection to any individual. You must be at least 18 years old to complete this survey.

As a small thank you for your participation, you will be entered into a drawing for one of 10 \$25 Visa gift cards! If you are unable to complete the survey but would like to be included in the drawing, please email Dr. Susan Pike at scpike@ucdavis.edu to be entered.

Thanks for participating!

Susan Pike PhD, Researcher, Institute of Transportation Studies (scpike@ucdavis.edu)
Brian Abbanat, Senior Transportation Planner, City of Davis (BAbbanat@cityofdavis.org)

End of Block: Introduction

Start of Block: Screening Questions

Q2.1 We will start with a few questions about where you live and work.

Do you live, work or go to school in the City of Davis? (check all that apply)

- I live in the City of Davis
- I work in the City of Davis
- I go to school in the City of Davis

Display This Question:

If If We will start with a few questions about where you live and work. Do you live, work or go to school in the City of Davis? (check all that apply) q://QID427/SelectedChoicesCount Is Less Than 1

Q2.2 Does your regular commute to work or school go through Davis? In other words, could you use the Davis Amtrak station and take the Capitol Corridor for part of your commute to work or school?

- Yes, my regular commute goes through Davis.
- No, my regular commute does not go through Davis.

Display This Question:

If We will start with a few questions about where you live and work. Do you live, work or go to school in the City of Davis? (check all that apply) q://QID427/SelectedChoicesCount Is Less Than 1

And Does your regular commute to work or school go through Davis? In other words, could you use the D... = No, my regular commute does not go through Davis.

Q2.3 Do you live elsewhere in Yolo County (outside of Davis)?

- Yes, I live in Yolo County, outside of Davis
- No, I do not live in Yolo county

Display This Question:

If Does your regular commute to work or school go through Davis? In other words, could you use the D... = No, my regular commute does not go through Davis.

And We will start with a few questions about where you live and work. Do you live, work or go to school in the City of Davis? (check all that apply) q://QID427/SelectedChoicesCount Is Less Than 1

And Do you live elsewhere in Yolo County (outside of Davis)? = No, I do not live in Yolo county

Q2.4

Thank you for your interest in this survey! This study aims to address factors impacting the use of the Davis Amtrak station, however based on your answers to these first few questions, it appears that you don't have any travel for which you might use the Davis Amtrak station or the Capitol Corridor. We do not need any additional information from you at this time. You are still eligible to enter into our gift card drawing.

Please contact Susan Pike at scpike@ucdavis.edu if you would like more information about this survey or our gift card drawing.

Skip To: End of Survey If Thank you for your interest in this survey! This study aims to address factors impacting the use...() Is Displayed

End of Block: Screening Questions

Start of Block: Section 3 - Available Transportation Modes

Q3.1 Next, we have a few questions about the transportation options available to you for your regular commute to work or school. For these questions think about your usual commute. If you sometimes commute to other locations, we'll ask you about that later.

Q3.2 Which of the following transportation options are available to you for getting to work or school, whether or not you use them? (check all that apply)

- Walk
- Skate or skateboard
- Bike
- Electric bike
- Bikeshare - for example Jump Bikes
- Motorcycle or scooter
- Drive alone in a car (or other vehicle)
- Carpool or vanpool with others also going to your (or a nearby) destination (either as driver or passenger)
- Get a ride (someone drops you off and continues on elsewhere)
- Bus
- Train or light rail
- Taxi, Uber, Lyft or other ride services
- Other (please write in) _____

Q3.3 Do you currently have a driver's license?

- Yes
- No

Q3.4 During a typical week, how many days do you go to work or school?

- Less than once a week
- 1 day per week
- 2 days per week
- 3 days per week
- 4 days per week
- 5 days per week
- 6 days per week
- 7 days per week

Q3.5 What means of transportation do you usually use to travel to work or school? (If you use more than one mode of transportation, please select the one you usually use for *most of the distance*).

- Walk
- Skate or skateboard
- Bike
- Electric bike
- Bikeshare - for example Jump Bikes
- Motorcycle or scooter
- Drive alone in a car (or other vehicle)
- Carpool or vanpool with others also going to your (or a nearby) destination (either as driver or passenger)
- Get a ride (someone drops you off and continues on elsewhere)
- Bus
- Train or light rail
- Taxi, Uber, Lyft or other ride services
- Other: _____

End of Block: Section 3 - Available Transportation Modes

Start of Block: Section 4 - Travel Modes Last Week

Q4.1 Next, let's consider your travel to work or school, specifically for last week.

Q4.2 On what days last week did you travel to work or school?

- None
- Monday
- Tuesday
- Wednesday
- Thursday
- Friday
- Saturday
- Sunday

Display This Question:

If If On what days last week did you travel to work or school? q://QID364/SelectedChoicesCount Is Greater Than or Equal to 1

And On what days last week did you travel to work or school? != None

Q4.3 **First think back to the entire week.** Please tell us **all** the different means of transportation you used at some point on your way to school or work, from the moment you left home to when you arrived at your school or work location -- even if it was just for part of the way -- on any day last week. (check all that apply)

- Walk
- Skate or skateboard
- Bike
- Electric bike
- Bikeshare - for example Jump Bikes
- Motorcycle or scooter
- Drive alone in a car (or other vehicle)
- Carpool or vanpool with others also going to your (or a nearby) destination (either as driver or passenger)
- Get a ride (someone drops you off and continues on elsewhere)
- Bus
- Train or light rail
- Taxi, Uber, Lyft or other ride services
- Other: _____

Carry Forward Selected Choices from "On what days last week did you travel to work or school?"

Carry Forward Selected Choices from "First think back to the entire week. Please tell us all the different means of transportation you used at some point on your way to school or work, from the moment you left home to when you arrived at your school or work location—even if it was just for part of the way—on any day last week. (check all that apply)"

Q4.4 Next, consider each day specifically. Select the means of transportation you used on your way to work or school each day. (If you used more than one means, select whatever you used for most of the distance.)

	Walk	Skate or skateboard	Bike	Electric bike	Bikeshare - for example Jump Bikes	Motorcycle or scooter	Drive alone in a car (or other vehicle)	Carpool or vanpool with others also going to your (or a nearby) destination (either as driver or passenger)	Get a ride (someone drops you off and continues on elsewhere)	Bus	Train or light rail	Taxi, Uber, Lyft or other ride services	Other:
None	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Monday	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tuesday	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wednesday	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Thursday	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Friday	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Saturday	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sunday	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Display This Question:

If First think back to the entire week. Please tell us all the different means of transportation you... = Train or light rail

Or Next, consider each day specifically. Select the means of transportation you used on your way to... [Train or light rail] (Count) >= 1

Q4.5 Which train service(s) did you use on your way to work or school last week? (check all that apply)

- Amtrak Capitol Corridor
- Bay Area Rapid Transit (BART)
- Sacramento Regional Transit (Sac RT)
- Other: _____

Display This Question:

If Which of the following transportation options are available to you for getting to work or school,... = Train or light rail

And What means of transportation do you usually use to travel to work or school? (If you use more tha... != Train or light rail

And First think back to the entire week. Please tell us all the different means of transportation you... != Train or light rail

And Next, consider each day specifically. Select the means of transportation you used on your way to... != Train or light rail

Q4.6 Compared to $\{Q3.5/ChoiceGroup/SelectedChoices\}$ for your commute, **taking the train would be...**

	1	2	3	4	5	
Faster	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Slower
Convenient	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Inconvenient
Productive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Unproductive
Comfortable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Uncomfortable
Safe	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Unsafe
Flexible	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Inflexible
Relaxing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Stressful
Environmentally friendly	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Not environmentally friendly
Pleasant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Unpleasant
Social	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Anti-social

End of Block: Section 4 - Travel Modes Last Week

Start of Block: Section 5 - Capitol Corridor Commute

Display This Question:

If Next, consider each day specifically. Select the means of transportation you used on your way to... [Train or light rail] (Count) >= 1

Or First think back to the entire week. Please tell us all the different means of transportation you... = Train or light rail

Q5.1 In this section we'll ask you about your commutes using the Amtrak Capitol Corridor.

Display This Question:

If First think back to the entire week. Please tell us all the different means of transportation you... = Train or light rail

Or Next, consider each day specifically. Select the means of transportation you used on your way to... [Train or light rail] (Count) >= 1

Q5.2 On the days last week that you used the Capitol Corridor, at what station and at what time did you **get on** the train?

(If you got on the train at different times on different days, please select the *time that you most often got on the train.*)

Boarding station

Time of boarding

▼ Roseville (through bus) ... Fairfield-Vacaville ~ 10:45:00 AM

Display This Question:

If First think back to the entire week. Please tell us all the different means of transportation you... = Train or light rail

Or Next, consider each day specifically. Select the means of transportation you used on your way to... [Train or light rail] (Count) >= 1

Q5.3 On the days last week that you used the Capitol Corridor, what means of transportation did you use to travel between your home and the station? (If you used different means of transportation on different days, please select the means of transportation you *usually* used to get to the station.)

- Walk
- Skate or skateboard
- Bike
- Electric bike
- Bikeshare - for example Jump Bikes
- Motorcycle or scooter
- Drive alone in a car (or other vehicle)
- Carpool or vanpool with others also going to your (or a nearby) destination (either as driver or passenger)
- Get a ride (someone drops you off and continues on elsewhere)
- Bus
- Light rail or regional transit (i.e., SacRT or BART)
- Taxi, Uber, Lyft or other ride services
- Other: _____

Display This Question:

If First think back to the entire week. Please tell us all the different means of transportation you... = Train or light rail

Or Next, consider each day specifically. Select the means of transportation you used on your way to... [Train or light rail] (Count) >= 1

Q5.4 On the days last week that you used the Capitol Corridor, at what station did you **get off** the train? ((If you got off the train at different stations on different days, please select the *station that you most often got off* the train.)

Alighting Station

▼ San Jose ... Roseville (through-bus) ~ 10:00:00 PM

Display This Question:

If First think back to the entire week. Please tell us all the different means of transportation you... = Train or light rail

Or Next, consider each day specifically. Select the means of transportation you used on your way to... [Train or light rail] (Count) >= 1

Q5.5 On the days last week that you used the Capitol Corridor, what means of transportation did you use to travel between the station and your final destination (If you used different means of transportation on different days, please select the means of transportation you *usually* used to travel from the station to work or school.)

- Walk
- Skate or skateboard
- Bike
- Electric bike
- Bikeshare - for example Jump Bikes
- Motorcycle or scooter
- Drive alone in a car (or other vehicle)
- Carpool or vanpool with others also going to your (or a nearby) destination (either as driver or passenger)
- Get a ride (someone drops you off and continues on elsewhere)
- Bus
- Light rail or regional transit (i.e., SacRT or BART)
- Taxi, Uber, Lyft or other ride services
- Other: _____

Display This Question:

If First think back to the entire week. Please tell us all the different means of transportation you... = Train or light rail

Or Next, consider each day specifically. Select the means of transportation you used on your way to... [Train or light rail] (Count) >= 1

Q5.6 Last week, you commuted using the Capitol Corridor on some days, but not others. Which of the following caused you to not use the Capitol Corridor on those days? Select all that apply, even if they are appropriate for different days.

- I worked at home.
- I worked in a different location.
- I worked out of town.
- I had a different schedule.
- I did not work that day.
- I needed a vehicle during the day.
- I needed a vehicle before or after work.
- My usual means of getting to the station was not available.
- Other (please write in) _____

Display This Question:

If First think back to the entire week. Please tell us all the different means of transportation you... = Train or light rail

Or What means of transportation do you usually use to travel to work or school? (If you use more tha... = Train or light rail

Or Next, consider each day specifically. Select the means of transportation you used on your way to... [Train or light rail] (Count) >= 1

Q5.7 Compared to driving for my commute, **taking the train is...**

	1	2	3	4	5	
Faster	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Slower
Convenient	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Inconvenient
Productive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Unproductive
Comfortable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Uncomfortable
Safe	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Unsafe
Flexible	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Inflexible
Relaxing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Stressful
Environmentally friendly	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Not environmentally friendly
Pleasant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Unpleasant
Social	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Anti-social

Display This Question:

If First think back to the entire week. Please tell us all the different means of transportation you... = Train or light rail

Or Next, consider each day specifically. Select the means of transportation you used on your way to... [Train or light rail] (Count) >= 1

Q5.8 Now, think back to the past month. When using the Capitol Corridor for commuting **in the past month**, how often did you experience any of the following?

	Never	One time	A few (2-3) times	Several (4-5) times	More than 5 times
I couldn't find car parking at the station.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I couldn't find bicycle parking at the station.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I missed the train due to parking my car off-site.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I missed the train due to parking my bike off-site.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My train was late.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I had difficulty finding a seat on the train.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My train was delayed en route.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My train was cancelled.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other (please write in)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Display This Question:

If First think back to the entire week. Please tell us all the different means of transportation you... = Train or light rail

Or Next, consider each day specifically. Select the means of transportation you used on your way to... [Train or light rail] (Count) >= 1

Q5.9 Use the space below to tell us anything else about your commutes to or from the Davis Amtrak station on the Capitol Corridor.

End of Block: Section 5 - Capitol Corridor Commute

Start of Block: Section 6 - Recreational / Non-commute Travel

Q6.2 In this section, we will ask you about your travel outside of Davis, to locations that might be reached using the Davis Amtrak station and the Capitol Corridor train.

Think about your travel last week, for social or recreational activities **and non-commute trips for work or school, such as for a special event, meeting, or class**. How often did you make trips with the following purposes to locations outside of Davis?

	None	One time	2-3 times	4 or more times
Work or school (non-commute)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dining	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Social	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Recreational	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Entertainment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Personal business	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Shopping	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Vacation travel (including travel to airports)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Carry Forward Unselected Choices from " In this section, we will ask you about your travel outside of Davis, to locations that might be reached using the Davis Amtrak station and the Capitol Corridor train. Think about your travel last week, for social or recreational activities and non-commute trips for work or school, such as for a special event, meeting, or class. How often did you make trips with the following purposes to locations outside of Davis? "

Q6.3 Thinking of **your most recent trip outside of Davis** for each of the purposes you noted above, which means of transportation did you use? (If you used more than one means of transportation, please select the one you used for *most of the distance*.)

	Bike, electric bike or bikeshare	Motorcycle or scooter	Drive alone, carpool or get a ride	Bus	Capitol Corridor train	Taxi, Uber, Lyft, or other ride services
Work or school (non-commute)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dining	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Social	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Recreational	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Entertainment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Personal business	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Shopping	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Vacation travel (including travel to airports)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Display This Question: If Thinking of your most recent trip outside of Davis for each of the purposes you noted above, whic... [Capitol Corridor train] (Count) = 0

Q6.4 For any of the non-commute trips you made last week, did you consider using the Capitol Corridor train?

- Yes
- No

Display This Question:

If Thinking of your most recent trip outside of Davis for each of the purposes you noted above, whic... [Capitol Corridor train] (Count) = 0

Q6.5 For your non-commute trips last week to places outside of Davis, why didn't you use the Capitol Corridor train? (check all that apply)

- I didn't make any recent non-commute trips outside of Davis
- The Davis Amtrak station is too far from my home
- The nearest station was too far from my final destination
- I do not like the train
- The train doesn't go to the city, town, or area I was going to
- My schedule did not match the train schedule
- The train takes too much time
- I went to multiple destinations
- The train is too expensive
- I would have had to make a transfer to BART, or another local transit system
- Other (please write in) _____

End of Block: Section 6 - Recreational / Non-commute Travel

Start of Block: Section 7 - Amtrak Access Programs

Q7.1 Later this fall, the City of Davis will introduce programs designed to make it easier to get to and from the Davis Amtrak station and downtown Davis. For each of these programs, described below, tell us how likely you would be to use them.

Q7.2 Carpool program with guaranteed parking: drivers and passengers are matched for carpools based on time and geographic location, and will have **guaranteed parking at the Davis Amtrak station.**

How likely are you to use a **carpool program with guaranteed parking?**

- Very likely
- Likely
- Not sure
- Unlikely
- Very unlikely

Q71 If a **carpool program with guaranteed parking** were introduced in Davis would you be more likely to use the Davis Amtrak station and the Capitol Corridor?

- No, even with a carpool program with guaranteed parking I would not use the Davis Amtrak station more often.
- Yes, with a carpool program with guaranteed parking I would use the Davis Amtrak station more often for my **regular commute.**
- Yes, with a carpool program with guaranteed parking I would use the Davis Amtrak station more often for **non-commute trips.**

Q7.3 Free on-demand ride service: using an app-based ride service such as **Uber or Lyft**, passengers will ride for **free to or from the Davis Amtrak station.**

How likely are you to use a **free on-demand ride service?**

- Very likely
- Likely
- Not sure
- Unlikely
- Very unlikely

Q72 If a **free on-demand ride service** were introduced in Davis would you be more likely to use the Davis Amtrak station and the Capitol Corridor?

- No, even with a free on-demand ride service with I would not use the Davis Amtrak station more often.
- Yes, with a free on-demand ride service I would use the Davis Amtrak station more often for my **regular commute**.
- Yes, with a free on-demand ride service I would use the Davis Amtrak station more often for **non-commute trips**.

Q7.4 **Free downtown shuttle:** Davis residents could **connect to downtown and the Amtrak station for free**, with flexible schedules and routes.

How likely are you to use a **free downtown shuttle**?

- Very likely
- Likely
- Not sure
- Unlikely
- Very unlikely

Q7.5 For the programs you may use, how often would you use them?

	Less than once a month	About once a month	About once a week	2-3 times a week	4 or more times a week
<p><i>Carpool program with guaranteed parking: drivers and passengers are matched for carpools based on... = Very likely</i> Or <i>Carpool program with guaranteed parking: drivers and passengers are matched for carpools based on... = Likely</i></p> <p>Carpool program with guaranteed parking</p>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<p><i>Free on-demand ride service: using an app-based ride service such as Uber or Lyft, passengers will... = Very likely</i> Or <i>Free on-demand ride service: using an app-based ride service such as Uber or Lyft, passengers will... = Likely</i></p> <p>Free on-demand ride service</p>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<p><i>Free downtown shuttle: Davis residents could connect to downtown and the Amtrak station for free... = Very likely</i> Or <i>Free downtown shuttle: Davis residents could connect to downtown and the Amtrak station for free... = Likely</i></p> <p>Free downtown shuttle</p>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q7.6 Is there anything else you would like the City to consider when planning programs such as those described above?

End of Block: Section 7 - Amtrak Access Programs

Start of Block: Section 8 - Attitudes and Opinions

Q8.1 In this section we ask you about your opinions about some transportation topics. There are no right or wrong answers; select the answer that best describes your own thoughts.

Q8.2 Please indicate your agreement with the following statements. There are no right or wrong answers.

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
The social environment of my current commute is pleasant.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would like my commute to take less time.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My commute is convenient for me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would like my commute to be more comfortable.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My commute is a useful transition between home and the rest of my day.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I do not have any other commute options.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Many people I know commute by bike.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q8.3 Please indicate your level of agreement with the following statements. There are no right or wrong answers.

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
I like driving a car.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My schedule makes it hard for me to use public transportation.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I like riding a bicycle.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I try to limit my driving as much as possible.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I need my car to do many of my daily activities.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I try to make good use of the time I spend commuting.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q8.4 Please indicate your level of agreement with the following statements. There are no right or wrong answers.

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
I prefer to be a driver rather than a passenger.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Travel time is generally wasted time.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I like using public transit.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I need my car to carry items I cannot transport by other means.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am committed to an environmentally-friendly lifestyle.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The Capitol Corridor train is popular among people I know.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Section 8 - Attitudes and Opinions

Start of Block: Section 9 - Demographic Characteristics

Q9.1 This section asks a few more questions about you. We use this information to help understand travel choices and how the people taking the survey might represent the Davis community and surrounding areas, as a whole. Your answers are confidential and will not be used for any other purposes.

Q9.2 In what year were you born?

Q9.3 What is the highest level of education you have completed?

- No formal education
- Grade school or junior high school
- High school diploma or equivalent
- Associates degree or technical school certificates
- Current undergraduate student
- Four-year bachelor's degree
- Current graduate student
- Graduate degree(s)

Display This Question:

*If What is the highest level of education you have completed? != Current undergraduate student
And What is the highest level of education you have completed? != Current graduate student*

Q9.4 Which of the following options best describes your current employment?

- Management or administrative
- Professional or technical
- University faculty or staff
- Clerical and administrative support
- Services or repair
- Sales or marketing
- Production/construction or crafts
- Education (K-12)
- Other (please write in) _____

Q9.5 Which of the following most closely resembles your work schedule?

- Part time (less than 35 hours per week)
- Conventional full time
- Alternative or variable full time
- Other (please write in) _____

Q9.6 Type an address, cross street, or drag the marker to your work or nearest intersection to your work. (This information will only be used to look at general travel patterns, and will not be used for any other purposes)

Q9.7 What type of housing do you live in?

- Stand alone house
- Attached home/duplex/townhouse
- Apartment or condo
- Dormitory or group housing
- Accessory dwelling unit (i.e., “granny flat” or an “in-law unit”)
- Mobile home
- Other (please write in) _____

Q9.8 Type an address, cross street, or drag the marker to your home or nearest intersection to your home. (This information will only be used to look at general travel patterns, and will not be used for any other purposes)

Q9.9 Do you live alone or with other people?

- I live alone
- I live with roommate(s), housemate(s), or in a dorm
- I live with family, a partner, or others with whom I share some income -- *we'll call them your household*

Display This Question:

If Do you live alone or with other people? = I live with family, a partner, or others with whom I share some income -- *we'll call them your household*

Q9.10 If you live with family, a partner, or others with whom you share some income, please indicate how many OTHER members of your household are in each age category.

- Age less than 6 _____
- Age 6-15 _____
- Age 16-17 _____
- Age 18-25 _____
- Age 26-65 _____
- Age 66 or older _____

Q9.11 How many operational motor vehicles (cars, trucks, motorcycles, etc.) are owned by you or other members of your household? (*Remember, your household includes you and the people you share income with, and **does not include roommates or housemates** with whom you don't share income*).

- none
- 1
- 2
- 3
- 4 or more

Q9.12 Which of the following categories contains your approximate annual household income before taxes? (*Remember, your household includes you and the people you share income with, and **does not include roommates or housemates** with whom you don't share income*).

- Less than \$25,000
- \$25,000 to \$49,999
- \$50,000 to \$74,999
- \$75,000 to \$99,999
- \$100,000 to \$149,999
- \$150,000 or more

Q9.13 With what category do you most closely identify?

- Female
- Male
- Not listed (please write in) _____
- Decline to answer

Q9.14 Please tell us which race/ethnicity best describes you (select all that apply):

- Asian/Pacific Islander/Native Hawaiian
- Black/African American
- Hispanic/Latino
- Native American
- White/Caucasian
- Other (please write in): _____

End of Block: Section 9 - Demographic Characteristics

Start of Block: Section 10 - Follow up



Q10.1 Can we contact you....

	Yes	No
If you win one of the gift cards?	<input type="radio"/>	<input type="radio"/>
If we have questions about your survey responses?	<input type="radio"/>	<input type="radio"/>
To invite you to participate in a follow-up survey about the Davis Amtrak station programs?	<input type="radio"/>	<input type="radio"/>

Display This Question:
 If Can we contact you.... [Yes] (Count) >= 1

Q10.2 Please provide us with your preferred means of contact:

- Name _____
- Email address _____
- Phone number _____
- Mailing Address _____

Q10.3 Is there anything else you would like to tell us about transportation in the City of Davis, or the Davis Amtrak station and Capitol Corridor train?

We welcome any additional comments in the space below.

Skip To: End of Survey If Is there anything else you would like to tell us about transportation in the City of Davis, or th... =

End of Block: Section 10 - Follow up