Study Objectives

The Davis Amtrak station, a stop on the regional Capital Corridor (CC) line has the third highest passenger usage along the Capitol Corridor and up until early 2020, ridership was increasing. However, the station’s parking lot fills up before 6am on weekday mornings and this poses an access challenge to passengers. City of Davis Transportation staff have planned shared-use mobility programs as a cost-effective solution to make commuting by train easier, more productive, affordable, and travel-time competitive. The objectives of this study are to inform and evaluate the City’s planned programs.

Research Methodology

Due to the COVID-19 pandemic, the City has not yet set a launch date for the programs. However, the potential use of the program was evaluated through a survey conducted in Davis in July 2020. As of early September 2020, 373 individuals had participated in the survey.

The survey asked residents about their travel before and during the COVID-19 pandemic and their travel expectations once COVID-19 is no longer a threat. The three shared use mobility programs that will improve access to the Davis Amtrak station were presented along with questions about how likely participants are to use these programs once they are in place.

Results

Residents are most interested in free access with ridehailing. The majority (nearly 60%) of survey participants reported they were likely or very likely to use a free ridehail program or a free shuttle to downtown. Few participants reported they were likely to use a carpool program.

<table>
<thead>
<tr>
<th>Program</th>
<th>Very likely</th>
<th>Likely</th>
<th>Not apply</th>
<th>Unlikely</th>
<th>Very unlikely</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carpool</td>
<td>11 (4%)</td>
<td>21 (7%)</td>
<td>39 (13%)</td>
<td>64 (21%)</td>
<td>158 (54%)</td>
<td>293</td>
</tr>
<tr>
<td>Ridehail</td>
<td>70 (24%)</td>
<td>107 (37%)</td>
<td>21 (7%)</td>
<td>47 (16%)</td>
<td>44 (15%)</td>
<td>289</td>
</tr>
<tr>
<td>Shuttle</td>
<td>66 (24%)</td>
<td>79 (29%)</td>
<td>13 (5%)</td>
<td>66 (24%)</td>
<td>48 (18%)</td>
<td>272</td>
</tr>
</tbody>
</table>

Table 1. Respondents’ Reported Likelihood of Using Planned and Potential Programs

Travel is expected to return to normal. Approximately 80% of respondents reported that once COVID-19 is no longer a threat their usual mode of transportation will be the same mode they indicated as their usual mode for travel in January 2020. However approximately 60% of these same individuals also reported that they would use the ridehail program for commute or non-commute trips.
The programs may be most important for non-commute trips. Only about 40% of those who use Amtrak in their commutes reported they are likely or very likely to use the ridehail program, though more than 60% of those who hadn’t used Amtrak in their commutes reported they are likely or very likely to use the ridehail program. In addition, among respondents who had considered using or had used Amtrak for some non-commute trips, 62% are likely or very likely to use the ridehail program. Similarly, when asked if the program would increase the use of Amtrak among those who do not commute with Amtrak, 43% reported yes, for non-commute trips, while another 17% reported yes for commute trips.

Income may play a role in the use of the carpool program. Most household characteristics do not show a strong relationship with the reported likelihood of using the programs, however higher proportions of participants from lower income households reported they are likely or very likely to use the carpool program (though still only slightly less than 20% total). Other factors, including the number of household vehicles don’t have a clear relationship to the use of any of the planned programs.

Concerns around COVID-19 is not expected to impact the use of these programs. The survey asked respondents to rate the degree of risk of COVID-19 associated with different activities. Those who reported low risk as well as those who reported very high risk of using the train had higher proportions reporting they would use the ridehail program. The risk of using the train did not have any notable relationship to the anticipated use of the ridehail program.

Policy Implications

The impacts of COVID-19 on the potential use of the programs, once COVID-19 is no longer a threat may be minimal, and a large proportion of participants expect to use the same modes of transportation for commuting as they did prior to the COVID-19 pandemic. However, because COVID-19 has had widespread impacts on travel patterns, and transit operations, the City should take this into account when finalizing the design and launch of the programs.

At the same time, as residents begin to increase travel once COVID-19 is no longer a threat, the City will have an opportunity to facilitate increased use of the train. Through targeted and timely outreach there is potential to reduce VMT to downtown, to alleviate the parking shortages at the station, and increase the number of residents commuting by train rather than personal vehicles.

Outreach may be most effective if it is focused on those not already using Amtrak and the Capitol Corridor. Although 80% of participants reported they will use the same mode as they previously used, once COVID-19 is no longer a threat respondents who do not already use Amtrak for commutes reported they would use Amtrak for commute and non-commute trips when the City’s programs launch.