I-5 MANAGED LANES PROJECT

(RED HILL AVE TO ORANGE / LOS ANGELES COUNTY LINE)

Counties of Orange and Los Angeles, California
Cities Irvine, Tustin, Santa Ana, Orange, Anaheim, Fullerton, Buena Park, La Mirada, and Santa Fe Springs

12-Ora-5 – PM 28.9/44.4, 26.9, 27.9, 28.4
07-LA-5 – PM 0.1, 0.3, 0.6, 1.7
12-Ora-55 – PM 7.4, 8.0, 8.7, 8.9, 9.2, 9.7 9.9, 10.2
12-Ora-57 – PM 11.0, 11.3, 11.9, 12.5, 12.7, 12.9, 13.5
12-Ora-91 – PM 0.4, 0.7, 1.1, 1.3, 1.4, 1.6, 1.8, 2.0, 2.2, 2.6, 2.8, 3.4

EA 12-0Q950

EQUITY STUDY

Prepared for

Caltrans

CALTRANS DISTRICT 12 ORANGE COUNTY

May 2, 2023

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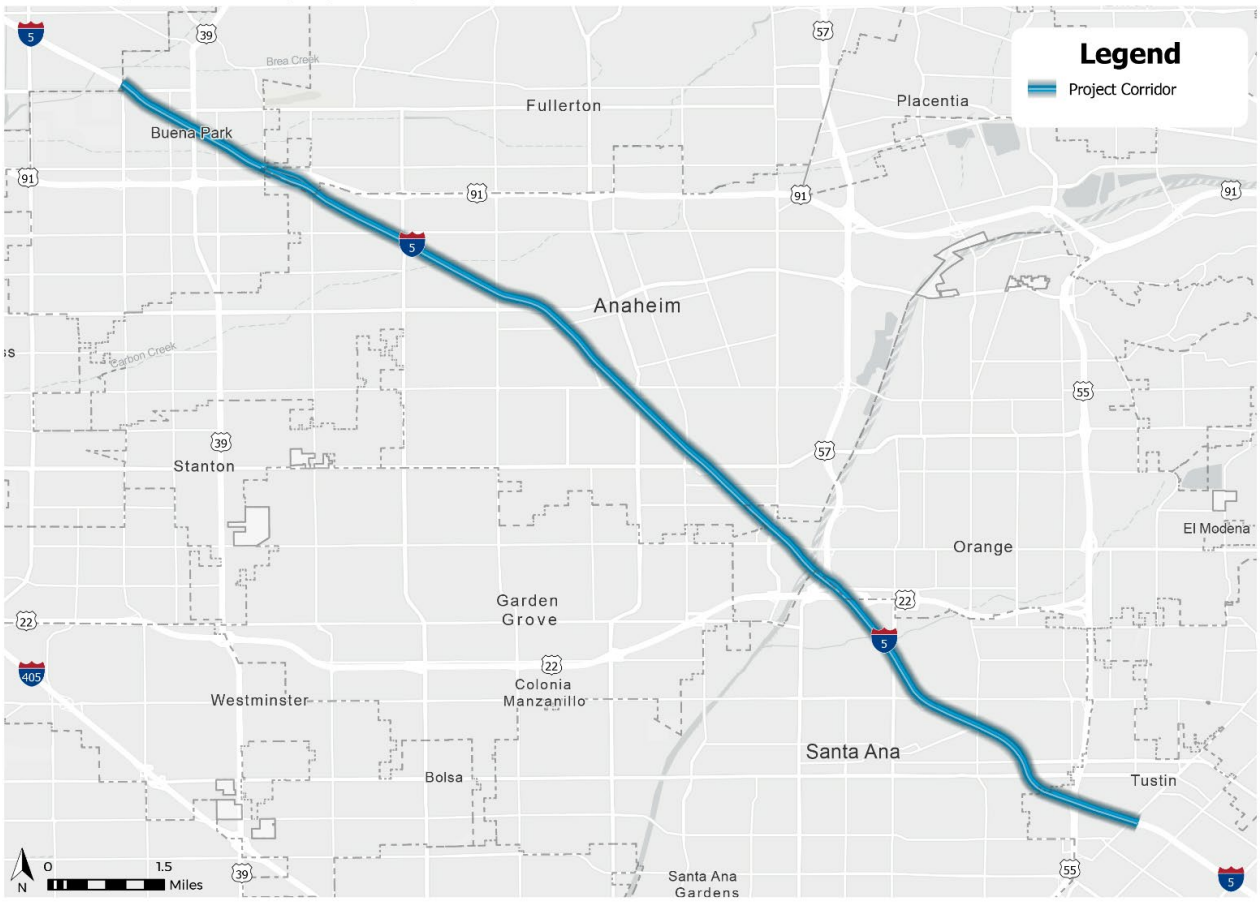
Acronyms and Abbreviations

Abbreviation	Definition
ACS	American Community Survey
AMI	area median income
BRT	bus rapid transit
Caltrans	California Department of Transportation
CDOT	Colorado Department of Transportation
CEQA	California Environmental Quality Act
CES 4.0	CalEnviro Screen 4.0
CHP	California Highway Patrol
CIA	Community Impact Assessment
CMS	Changeable Message Signs
CTIO	Colorado Transportation Investment Office
DMV	California Department of Motor Vehicles
EEAs	Exploratory Equity Actions
EL	express lane
EP	Environmental Phase
FHWA	Federal Highway Administration
FPL	federal poverty level
FT	FasTrak
GES	Globeville and Elyria-Swansea
HOT	high-occupancy toll
HOV	high occupancy vehicle
LEP	Limited English Proficiency
LI	lower income
NEPA	National Environmental Policy Act
NHTS	National Household Travel Survey
OCTA	Orange County Transportation Authority
PoC	people of color
Project	I-5 Managed Lanes project
SB	Senate Bill
SMCEL-JPA	San Mateo County Express Lane Joint Powers Authority
SNAP	Supplemental Nutrition Assistance Program
STEPS	Spatial, Temporal, Economic, Psychological and Social
Study	Equity Study
SWITRS	Statewide Integrated Traffic Records System
UCLA	University of California Los Angeles
UI/UX	User Interface/User Experience
UDP	Urban Displacement Project
USDOT	US Department of Transportation
WSTC	Washington State Transportation Commission

PREFACE

Caltrans District 12 (Caltrans), covering transportation development in Orange County, CA, embarked on the I-5 Managed Lanes project (Project) to explore four (4) alternatives to improve traffic and travel time reliability: leave the corridor as is with a High Occupancy Vehicle (HOV) 2+ lane, increase the occupancy rule from HOV2+ to HOV 3+, a single express lane (EL), or a dual EL. The area of the corridor defined as the project area spans from the Los Angeles County line to the North, to the City of Tustin to the South.

Figure 1 I-5 Managed Lanes Project Corridor



As part of the Environmental Phase (EP) of the Project, Caltrans developed a specific task order to produce an Equity Study (Study), an effort that is not required by the National Environmental Protection Act (NEPA) or the California Environmental Quality Act (CEQA), both of which require specific documentation and processes in the EP. The Study began in Spring 2022 and reached its first milestone in Spring 2023: presenting analysis and Exploratory Equity Actions (EEAs) for public comment with the Draft Environmental Document. The Study explores industry best practices, lived experiences of the community, intentional and unintentional outcomes, and direct benefits to equity communities. The Study culminates in proposed equity programs, policies, and processes called EEAs. EEAs are designed to meet the needs of equity communities: historically underserved, overburdened, and marginalized populations identified based on race, income, car access, housing burden and displacement risk, disproportionate exposure to poor air quality, disproportionate involvement in safety incidents, transit reliance, and limited English.

The EP will produce a Community Impact Assessment (CIA) with a section on environmental justice. The CIA focuses on impacts and mitigations in a narrowly defined project area of 0.5 mile distance from the corridor. To build on this, the Study takes a broader view of equity communities in the region beyond that parameter, as corridor users' origin-destination points are not limited to a 0.5 mile distance, and the infrastructure impacts and equity benefits are applicable beyond this distance.

The pursuit of the Study, particularly as it is not required by NEPA/CEQA, is a reflection of Caltrans commitment to advancing equity in transportation, outlined in the Caltrans Equity Statement, which commits to advancing equity through the lens of People, Programs & Projects, Partnerships and the Planet. The Study also meets the urgency for civic equity spurred by the Executive Order 13985 on Advancing Racial Equity for Underserved Communities through the Federal Government, which importantly calls for "systemic fair, just and impartial treatment" of specific demographics which should be reflected in public decision-making by recognizing and addressing inequities in the status quo. And, the Study is aligned to the US Department of Transportation (US DOT) Equity Action Plan which models specific categories of equitable outcomes for transportation agencies, including Wealth Creation, Power of Community, Interventions, and Expanding Access.

The Study is the first step of an iterative process to achieve equitable outcomes on the Project. While the Study proposes EEAs, the first iteration is not scoped to include an in-depth evaluation of each EEA based on operational, administrative, cost or other feasibility considerations. The high-level considerations discussed in the EEA section is a starting point for further evaluation to shortlist, select, and implement EEAs in future project phases including design (anticipated 2023-2026) and construction (anticipated 2026-2028).

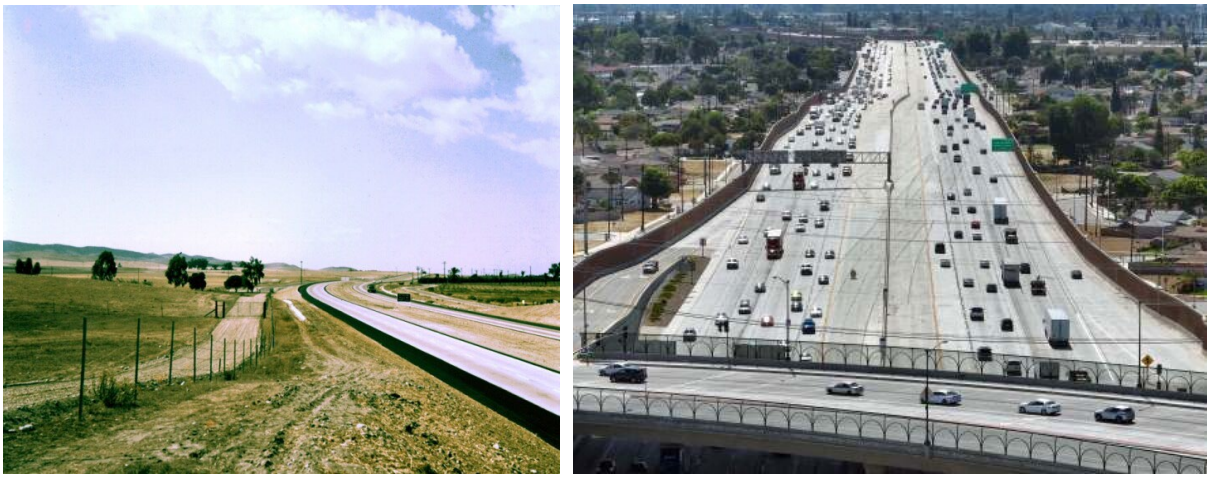
The Study attempts to strike a balance between informing Caltrans decision-makers who have robust technical backgrounds and context, and ensuring the Study is equitably readable and understandable by laypersons to reduce barriers to reviewing the document and responding with feedback during the public comment period in Spring 2023.

EXECUTIVE SUMMARY

HISTORICAL AND LOCAL CONTEXT

The Interstate 5 (I-5), also known as the Santa Ana Freeway, was originally constructed as a four-lane highway over several years in the 1950s and 1960s. At the time, the land use in the area was largely agricultural which reduced the risk of residential displacement that occurs when development is dependent on up-zoning residential land use. The I-5 was widened over the years to over two dozen lanes wide at interchange points. This highway widening did involve a degree of property acquisition and disruptive construction for the community. However, overall, the I-5 does not have a legacy of bifurcating communities of color that other highways do. *Figure 2* below shows the development of I-5 over time.

Figure 2 Pictures of development of the I-5 corridor in Orange County over time.



The Project is not the first EL effort in the region. Recently, the I-405 in Orange County was the site of an EL and highway widening project that was strongly debated by the community. However, it was still approved to proceed in 2018 and is scheduled for construction in late 2023. Experiences like this, where projects advance regardless of community input, can create a lasting public perception of the public agency and project type. The Study was cognizant of this when planning for community involvement, using this context to anticipate and respond to feedback from the community. The business case for the Project and the Study approach were introduced together in community workshops to show the good intentions of this Project.

THE BUSINESS CASE

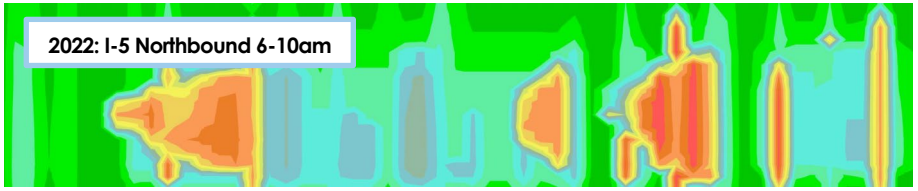
The Project intends to identify the best solution to reduce traffic and improve travel time reliability on the I-5 corridor in Orange County from the Los Angeles County line near Buena Park to the North, to the City of Tustin to the South. The Project is responding to expected increases in traffic and congestion in the project area, particularly during morning and evening peak traffic times (know commonly as “rush hour”). The heat maps below in *Figures 3A-F* visualize traffic patterns over time in 2022, 2035, and 2055, if no intervention is made. The horizontal orientation of the heat map represents the length of the corridor in the project area. The volume of traffic and resulting congestion at different points on the

corridor is indicated by shades of red and orange. Flowing traffic is indicated by shades of blue and green.

TRAFFIC & CONGESTION PATTERNS OVER TIME

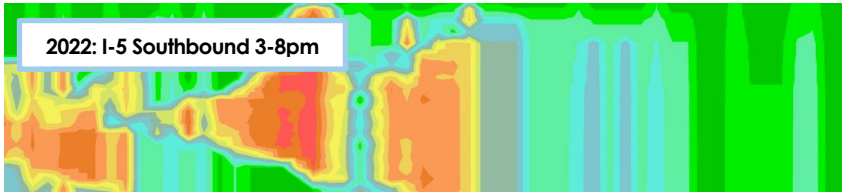
Figures 3A and 3B: Traffic and congestion in 2022 with the current HOV2+ lane.

Morning Commute (Toward Los Angeles)



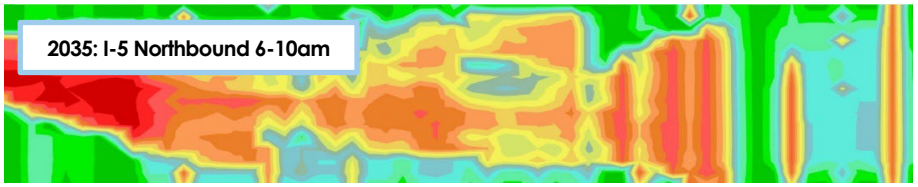
2022: There are moderate traffic and congestion (yellow/orange) at specific points along the corridor, most noticeably from Magnolia St to Lincoln Ave (first orange block), and SR-57 to Grand Ave (third orange block). Depending on their origin-destination, a driver may experience none, some, or all of the congestion points because there are significant stretches of flowing traffic (green/blue) offering fairly efficient travel times.

Evening Commute (Toward Orange County)

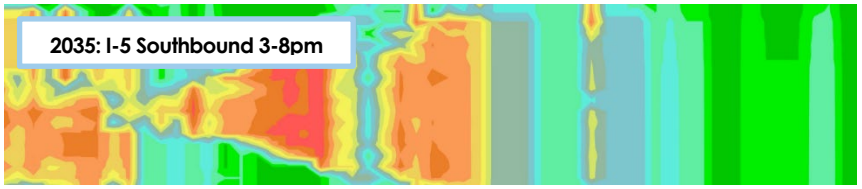


2022: There are more traffic and congestion (yellow/orange) more consistently from the Los Angeles County line (left end) to Harbor Blvd (right end). A driver is likely to experience less favorable travel times entering Orange County in the evening, regardless of their destination. If a driver's destination is south of the congestion, they may experience better traffic and less congestion eventually (green/blue).

Figures 3C and 3D: Traffic and congestion in 2035 with the current HOV2+ lane, no intervention.

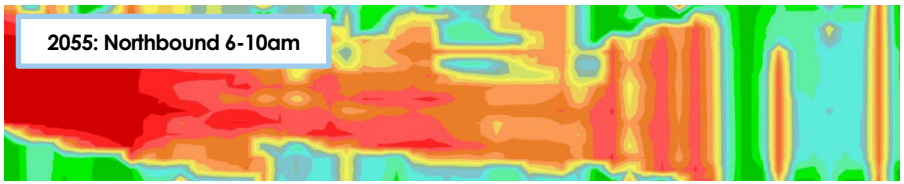


2035: There are worse traffic and congestion conditions than in 2022. Instead of moderate traffic and congestion at specific points, those conditions (red/orange/yellow) become unavoidable because the condition is continuous from Artesia Blvd (left) to Grand Ave (right), resulting in less efficient travel times. There are minimal areas with flowing traffic (green/blue).

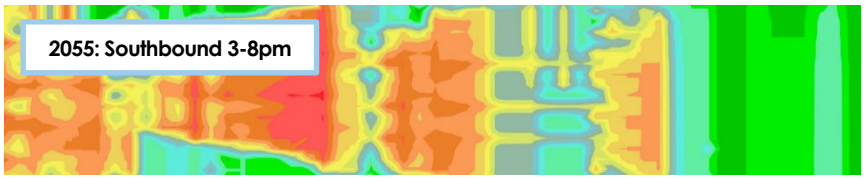


2035: The traffic and congestion conditions are similar to 2022, consistently from the Los Angeles County line (left end) to Harbor Blvd (right end) resulting in less favorable travel times entering Orange County in the evening, regardless of their destination. If a driver's destination is south of the congestion, they may experience better traffic and less congestion eventually (green/blue).

Figures 3E and 3F: Traffic and congestion in 2055 with the current HOV2+ lane, no intervention.



2055: There are worse traffic and congestion conditions than 2022 and 2035, indicated by red areas that were previously orange or yellow. These conditions will be unavoidable because they are continuous from Artesia Blvd (left) to Grand Ave (right), resulting in less efficient travel times. There are minimal areas with flowing traffic (green/blue).



2055: There are worse traffic and congestion conditions than 2022 and 2035, indicated by red areas that were formerly orange or yellow, and extension of the congested area from the Los Angeles County Line (left) to Brookhurst St (right). There are a few breaks with flowing traffic (green/blue), most notably from Ball Rd to Lincoln Ave; but a driver may or may not experience that break in traffic depending on where they enter or exit, resulting in overall less efficient travel times.

The heatmaps above show how conditions worsen *without* intervention. Inversely, the Project also analyzed traffic data to determine how conditions can improve *with* an intervention. The Project considered the following interventions: increasing occupancy to HOV3+, implementing a single EL or dual EL. As show in *Table 1*, each intervention can offer improved travel time savings compared to no intervention (keeping the current HOV2+), indicated by negative numbers

Table 1 Estimated Travel Time Savings (Northbound/Southbound)

Intervention	HOV2+ (As Is)	HOV3+	Single EL	Dual EL
SAVINGS (minutes)	na/na	-1/+4	-2/-2	-3/--5

The background of the business case is foundational to understanding the positive intention to proactively address an impending problem, but also the risk of inequitable access to the benefit of travel time savings by charging for a lane that has always been free to use. That reality informs the question the Study responds to: What are the benefits this Project can offer or incentivize, and how can equity communities be included as beneficiaries?

EQUITY STUDY INTRODUCTION

The Study specifically responds to interventions that include paid use ELs because these options carry the greatest equity risks, and therefore the greatest equity opportunities as well. The process of the one-year Study includes a literature review, data analysis, and public engagement to determine the EEAs it presents. The Study is not intended to identify specific recommendation(s) for Caltrans' adoption, but instead sets the course to help Caltrans understand the breadth and merit of different equity opportunities, and high-level operational, administrative, and cost considerations unique to different EEAs. Additionally, more community engagement and public input is needed to move forward with EEAs Caltrans can confidently know are community supported.

Desired Outcomes

- **Define who equitable outcomes should serve:** It's important to understand how an EL may affect different people differently, and the general scale and location of communities who are more likely to face physical or financial barriers to the intended benefit of improved travel times, or other potential benefits like transit connectivity to corridor-accessible destinations, improved air quality, resiliency through construction, and the opportunity to participate in engagement to inform Project decision-making.
- **Meaningful community involvement:** To build or nurture public confidence, the community needs to feel acknowledged and involved in public projects. This is especially true for equity communities that have historically experienced marginalization or exclusion from civic dialogue. It's invaluable to create opportunities to share and discuss Project and Study analysis and capture the community's vision of equitable access to EL.
- **Consistency with industry case studies and thought leadership:** Several public agencies have pursued similar equity-focused studies for EL projects or other forms of road pricing. Academic researchers and policy organizations have also shaped goals and standards for various forms of road pricing. Insights, best practices, and lessons learned from a sample of industry publications creates a framework for the Study.
- **Consistency with SB 743 guidance:** California Senate Bill 743 (SB 743) challenges transportation infrastructure to improve resiliency to climate change through multimodal connectivity between people and places, encouraging less car trips. The EEAs must serve the goals of SB 743.

- **Identify possible equitable outcomes:** To meet the needs of equity communities most likely to be affected by an EL, a menu of EEAs includes traditional and innovative strategies to respond to their anticipated needs, learned through the literature review, data analysis, and public engagement.

Key Study Outcomes

The Study meets the desired outcomes through a number of key processes and strategies summarized here, with further detail in other sections of the Study. Data analysis established an understanding of equity communities near the project corridor and connecting corridors. Importantly, the Study did not look at individual data points in isolation. Instead, the analysis observed where different data points overlapped because multiple factors can make up the experience of people in equity communities. Maps in The Data section, are designed to tell a data story on the following topics:

- Demographics of Current Carpoolers
- Transit Mobility
- Affordability
- Environmental Exposure and Resiliency
- Public Participation
- Pedestrian and Cyclist Safety

The quantitative data was supplemented with qualitative data for a comprehensive analysis. During the Study, the public was engaged through two (2) community workshops and a community survey. The business case, equity data maps, equity goals, and EEAs were presented to the community for discussion across both workshops. The community survey received 235 responses that filled gaps in quantitative data like trip purpose, common destination types, whether toll costs create economic burden, and perceived barriers to participating in income-based programs. The Community Involvement section includes details on the approach and outcomes of the workshops and survey.

The data and literature review informed Project equity goals defined in the Study, designed to be applicable across the Project lifecycle beyond the current EP. The six (6) equity goals are: Collaborative Engagement, Access to Information, Affordable Express Lanes, Benefits for Transit Users, Equitable Investment of Excess Toll Revenue, and Equitable Toll Enforcement. The first two goals address equity in process while the others focus on equity in outcomes. The equity goals are the framework for the EEAs to ensure equity opportunities respond to identified inequities. *Table 2* below summarizes the EEAs.

Ultimately the Study provided during the EP should be updated through the design and construction phases to assess and refine EEAs, develop a community-informed shortlist of actions for adoption, and form an implementation plan around those actions. In other words, the Study is a living document.

Table 2 Equity Goals & Exploratory Equity Actions

Collaborative Engagement	
Seek Meaningful Input	
1	Income Eligibility Criteria for Income-Based Programs
2	Preferred Equity Actions to Shortlist and Select
3	Identify Potential Barriers to Apply for Income-Based Programs
Community Partnerships	
4	Compensated Community Organization Partnerships
Access to Information	
FasTrak (FT) Transponder Access	
5	Retail Partnerships
Multilingual and Cultural Communication	
6	Print, Digital, In-person
7	Changeable Message Signs (CMS) on Corridor
Affordable Express Lanes	
Toll Credits	
8	One-Time Preloaded Dollar Credit for New FT Users
9	Monthly Autoloaded Dollar Credit for FT Users
Toll Discount	
10	Trip-Based Toll Discount, Regardless of Carpool
11	Ongoing No-Cost Pricing for Carpoolers
12	Flat Rate Toll Pricing
FT Account Accommodations	
13	Reduce or Waive FT Account Minimum Balance Requirement
Benefits for Transit Riders	
Express Lane Bus and Access Opportunities	
14	Explore and Identify Existing Bus Routes to Use Express Lane
15	Explore and Identify New Bus Routes to Use Express Lane
16	Explore Income-based Transit Pass
Equitable Investment of Excess Toll Revenue	
17	SB 743-Based Equity Grant Program for Local City Projects
Equitable Toll Enforcement	
Debt Payment Mitigation Strategies	
18	One-time Balance and Fine Consolidation
19	Payment Plan Program
20	One-time Outstanding Balance Forgiveness Program
Violation Consequence Mitigation Strategies	
21	Assess Reporting to Debt Collection Agencies
22	Assess Reporting to the Department of Motor Vehicles (DMV) for Registration Hold

PART I. INDUSTRY INSIGHT

LITERATURE REVIEW

The Study included a brief literature review of about twenty (20) publications including case studies, academic research, and federal equity guidance. Most of the literature interprets equity as affordability focusing on low-income programs. A secondary focus was community-involvement and approaches to public engagement. Of the literature reviewed, the Study was most informed by the equitable approaches in case studies including San Mateo County US-101 Express Lanes Equity Study (San Mateo County Transportation Authority et al. 2021), Central 70 Globeville and Elyria-Swansea Tolling Equity Program (Colorado Transportation Investment Office 2022), Washington State Transportation Commission Low-Income Toll Program Study for I-405 & SR 167 Express Lanes (WSTC 2021), and Metro Express Lanes Project Low-Income Assessment (LA Metro 2010). In various ways, these case studies explored equity beyond affordable toll, involved the community beyond the limited outreach required by NEPA or CEQA, and/or described a process of identifying, shortlisting, and selecting equity recommendations for implementation.

The academic research was insightful in terms of how to define equity and understand equity communities in the context of express lane projects. For example, *Pricing Roads, Advancing Equity* (TransForm 2019) presented a useful framework delineating between equity processes and outcomes, which is a logic the Study adopted to develop the Project's equity goals. *Guardrails on Priced Lanes: Protecting Equity While Promoting Efficiency* (UCLA 2022) presents a framework to identify the intersection of exposure to the project in terms of travel patterns, and vulnerabilities based on demographics and lifestyle, which informed the Study's approach to equity data analysis beyond income-based data.

These and other influences are discussed below, including some of the limitations of the information available at the time of the literature review.

Key Academic Literature

Pricing Roads, Advancing Equity (TransForm 2021)

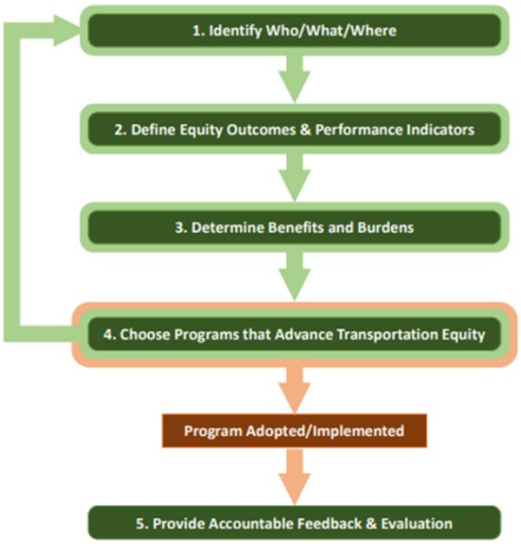
TransForm is a transportation policy non-profit based in the Bay Area, CA. Their literature focuses on lower income users, interpreting equity as affordability for high-occupancy toll (HOT) lanes. It offers a toolkit to help transportation agencies consider equity when implementing road pricing projects. The toolkit was consistently referenced in the case studies examined in the literature review. As seen in the graphic from the report in *Figure 4*, five (5) key steps for implementing an equitable pricing program are identified.

The proposed approach begins with understanding current (in)equities of the transportation system in a project area so decision-makers can consider industry pricing models in local context. The literature proposes that implementing income-eligible subsidies, whether discounts, credits, price caps or toll exemptions, will ensure the full-price toll is only collected from non-low-income users. As a result, toll revenue will be largely supported by those who can afford it. This approach is more equitable than covering transportation infrastructure costs with revenue generated through sales tax which is uniformly applied and regressive for lower income households, TransForm argues.

Another key framework in the toolkit is the distinction between two dimensions of equity: process equity and outcome equity. Process Equity defined by TransForm as a measure of full participation of equity communities in road pricing planning and implementation decision-making. Outcome Equity focuses on the end result and includes measures like access, affordability, community health and other impact considerations. Access, in particular, has layered meaning. Transform defines access in terms of access to transponders, information in non-English languages and accommodations for those without credit cards, bank accounts or smartphones.

The Study leveraged the insight of this publication to frame the Project equity goals and data analysis approach.

Figure 4 Pricing Roads, Advancing Equity steps to achieve equitable road pricing programs.



Social Equity Impacts of Congestion Management Strategies (UC Berkeley 2019)

The Transportation Sustainability Research Center at UC Berkeley conducted twelve (12) interviews with public, private, and non-profit sector experts. The researchers developed an equity framework from interview insights known as STEPS (Spatial, Temporal, Economic, Psychological and Social) to identify if equity barriers are reduced or worsened. The STEPS approach goes beyond need, access, and affordability, to public perception and attitudes towards congestion management projects, like express lanes as described in *Table 3*.

Table 3 STEPS Defined

Term	Definition
Spatial	Travel distance in miles based on origin-destination.
Temporal	Travel time based on origin-destination, traffic, and other factors.
Economic	Direct costs of a trip.
Psychological	Commuters decision-making process about how to make a trip.
Social	Level of social comfort which can be influenced by peers, culture, and resources.

The authors compare the benefits of two pricing models: dynamic pricing and flat rate pricing. Dynamic pricing is a model where the toll costs change throughout the day based on the volume of traffic. For example, toll costs are higher during rush-hour periods when there is more demand for an express lane, and lower during other periods of the day. Flat rate pricing is one fixed cost that doesn't change throughout the day based on traffic conditions. The researchers highlight different equity considerations for each model.

One consideration researchers propose is the privilege of schedule flexibility. Based on their understanding of travel pattern differences based on demographics, people from lower income households, especially women and people of color (PoC), may not have the schedule flexibility to avoid higher toll costs in the dynamic pricing model. Their schedules may require travel at certain times of day, particularly for shift workers or primary caregivers. Researchers continue the discussion on potential impacts of other pricing models on equity communities. Flat rate pricing may be unavoidable for lower income users traveling longer distances from more affordable communities; or inversely, for congestion pricing on streets, lower income users making short trips in cities may end up subsidizing higher income users who travel in from long-distance suburbs using the streets less frequently.

The researchers recommend applying a tiered scale for means-based pricing programs using more than one income threshold for eligibility. They point out that pricing can still be a burden even though research shows lower income users use toll lanes less frequently than their counterparts. Support and utilization of express lanes among low-income users tells a seemingly conflicting story, with high support but low utilization – a phenomena the researchers note cannot be definitively explained based on existing data. Interestingly, the researcher's data sources show a desire for a time-saving trip in managed lanes is consistent across income groups, and lower income riders may be more inclined to carpool which can qualify them for reduced pricing for HOVs.

They also encourage seeking perspective beyond the transportation context to understand the community's outlook on road pricing. Researchers suggest considering other significant local development happening before implementing a toll. Undesired neighborhood changes can color the community's perception of local decision-makers. For example, if other infrastructure or community changes have affected the cost of living, this may influence the public's perspective of toll as another expense impacting their quality of life.

This empathy, in addition to understanding the tradeoffs of pricing approaches, informed the Study's approach to equity community workshops, and the community survey.

Guardrails on Priced Lanes: Protecting Equity While Promoting Efficiency (UCLA 2022)

University of California Los Angeles (UCLA) researchers reviewed equity policies for road pricing focusing on California metropolitan areas most likely to implement road pricing: Los Angeles, San Francisco, the Inland Empire, San Jose, San Diego, and Sacramento. The work covers who is most at-risk to experience inequitable impacts, their ability to change their behavior to avoid those impacts, and what government agencies can do to mitigate impacts.

Using Federal Highway Administration (FHWA) National Household Travel Survey (NHTS) data, the researchers present a theory to understand the impact to communities in the project area based on vulnerability and exposure. Vulnerability is how likely different demographics are to encounter priced roads in their regular travel. Exposure is whether a person travels during peak period, in congestion, on a freeway. The research assumes a scenario of dynamic pricing on highways.

UCLA found that lower-income households have less exposure to toll lanes. However, 13% of California's population is both vulnerable and exposed, and 60% of that subset live in urban areas. Exposed and vulnerable households were more likely to carpool when there is congestion than higher income households. In an urban context, there are likely more transportation options available that could replace a car trip on the freeway than in a suburban context.

Given the dynamic pricing scenario, the researchers emphasize the difference between essential and non-essential trips and who has flexibility in their travel. The research defines essential trips as work,

school, childcare, healthcare, and worship, encouraging exploration of how low-income users are traveling on the corridor and whether those trips have any flexibility to avoid peak travel times and peak toll costs. They theorize it is more likely non-essential trips can be more easily rescheduled or rerouted than essential trips.

In considering a toll subsidy, the researchers draw a comparison to operational challenges of non-transportation subsidy programs such as utility subsidies and the Supplemental Nutrition Assistance Program (SNAP). These programs have "low enrollment, offer insufficient benefits, and can be cumbersome to apply for and administer" – another prompt to understand how low-income commuters utilize the corridor, and whether the benefit of a program is commensurate to the level of difficulty to apply and prove eligibility.

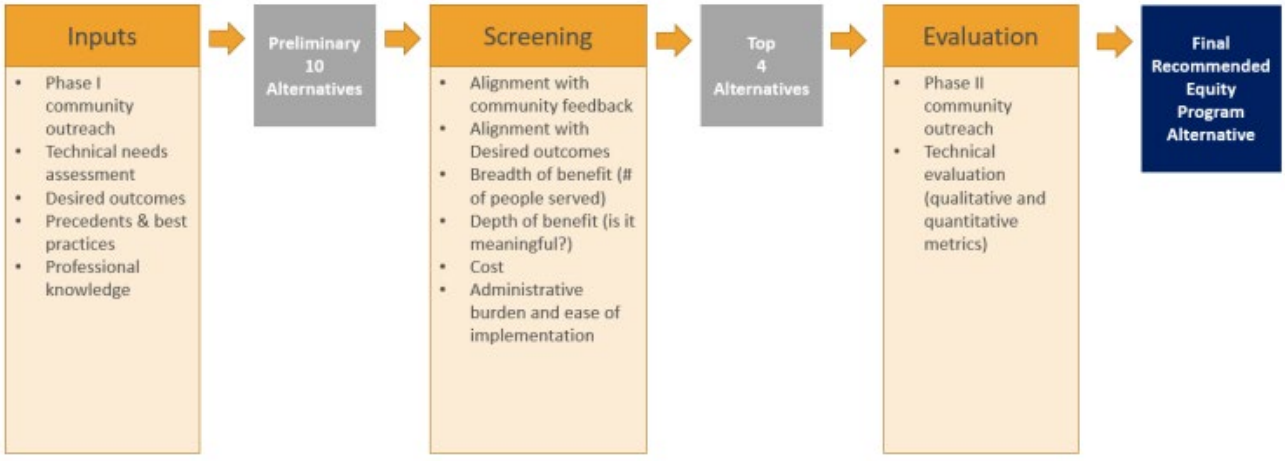
In contrast with other publications from the literature review, this research weighs whether investments from toll revenue mitigate the regressive nature of tolls, stating, "The presence of a progressive effect does not undo the damage of a regressive effect, at least not from the perspective of those hurt by the regressivity. A bus that runs faster does not help a low-income driver forced to pay a toll." This surfaces the need for a two-fold approach to equity programs and policies: 1) direct benefits to equity communities facing tolling, and 2) direct benefits to equity communities' mobility off-highway via toll revenue. In other words, the latter is not used to make up for the implementation of a toll. The study adopts this approach in the EEAs section.

KEY CASE STUDIES

San Mateo County US-101 Express Lanes Equity Study (2021)

The San Mateo County Express Lane Joint Powers Authority (SMCEL-JPA) approved a Pilot Equity Program to invest toll revenue from the new San Mateo US-101 Express Lanes to fund transportation benefits that serve historically underserved communities. This involved a process of technical analysis informed by community input to determine low-income pricing and excess toll revenue investment recommendations, shown in *Figure 5*.

Figure 5 San Mateo US-101 Equity Program Development Process



The process proposed subsidies for low-income tolling and transit passes, establishing eligibility for low-income households throughout San Mateo County that earn 200% or less of the federal poverty level

(FPL). At the time the pilot equity program was adopted in 2021, 200% of the FPL is $53,000 annual household income for a family of four (4). Additionally, place-based mobility improvements were recommended for fifteen (15) specific equity communities identified for demographic and built environment characteristics. Mobility investments for excess toll revenue in these select communities included improved bicycle, pedestrian and transit infrastructure and carpool rewards.

Of these proposals, the final recommendation for the equity pilot program implemented the low-income toll and transit pass subsidies. Place-based improvements did not advance forward for operational and administrative reasons including difficulty identifying a methodology to distribute excess toll revenue equitably across the 15 communities, and high administrative costs to develop and implement a project evaluation and selection process. Also, there was little public interest in carpool rewards.

A key takeaway from the San Mateo case study is that funding estimates for equity programs should be interpreted as a floor rather than a ceiling. The start-up costs and annual funding thereafter should be defined with potential to increase funding for the equity program as demand for lanes grow and other financial commitments such as paying off construction loans are met.

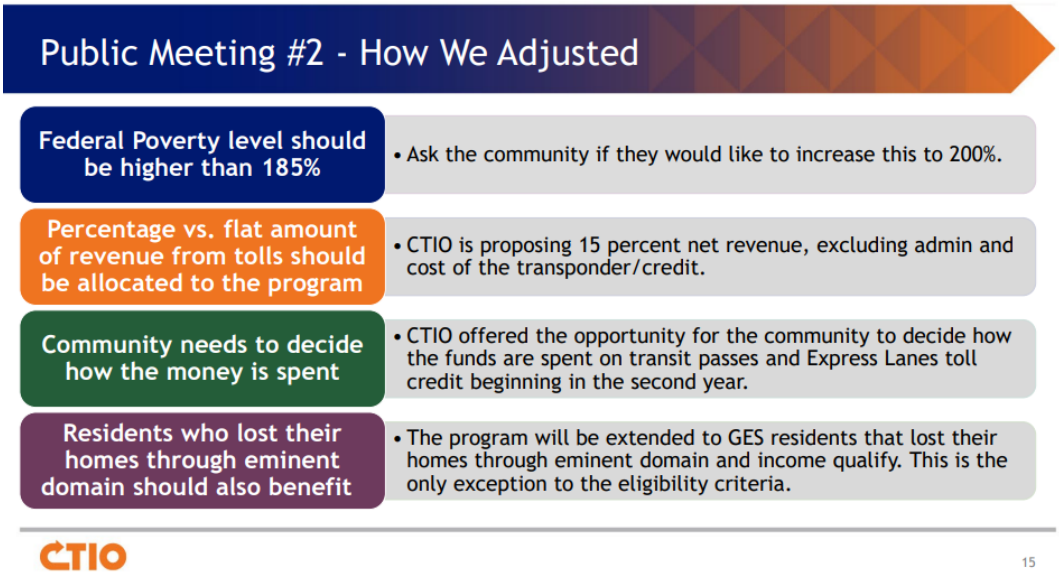
Central 70 Globeville and Elyria-Swansea Tolling Equity Program (2022)

The Colorado Transportation Investment Office (CTIO), a government-owned business within the Colorado Department of Transportation (CDOT) responsible for financing and operating express lanes, studied and implemented an Equity Program to provide discounted access to express lanes for low-income residents of Globeville and Elyria-Swansea (GES) along the Central I-70.

Over the course of a year, the project team interviewed peer agencies with similar programs, held five (5) steering committee meetings, three (3) stakeholder advisory meetings, two (2) public meetings, and published a public survey with 275 respondents. This robust stakeholder and community engagement approach captured lessons learned from the agency perspective, and desired outcomes from the community's perspective.

The community provided feedback on equity program eligibility, program preferences, and voted on how net revenue is allocated after the initial pilot year of the express lanes. The agency highlighted how they meaningfully leveraged this input by adjusting their recommendations in the second public meeting based on input from the first public meeting shown in *Figure 6*.

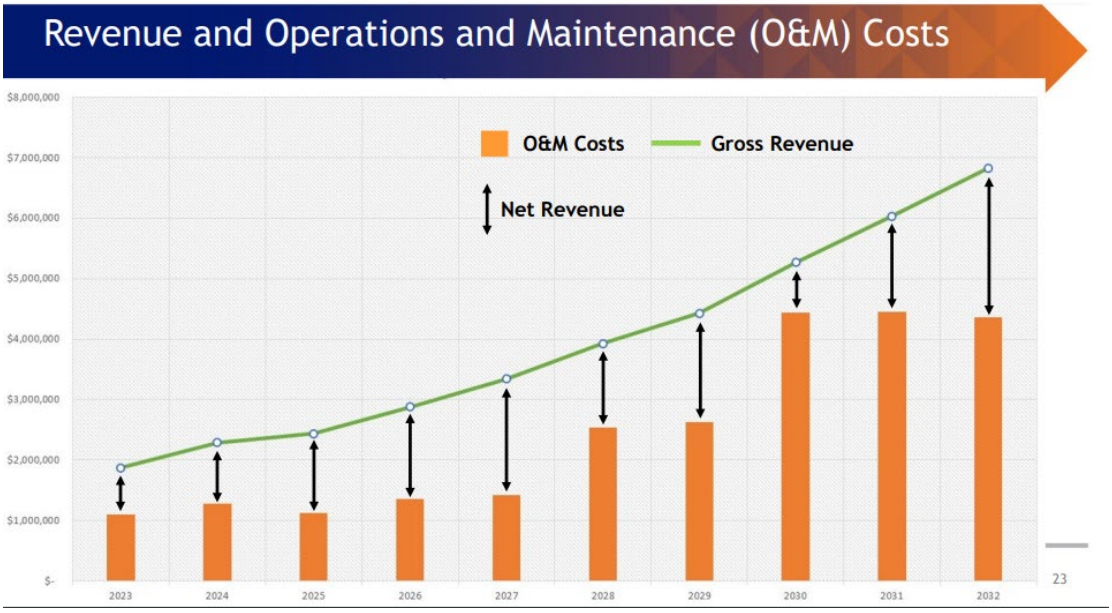
Figure 6 A slide from a CTIO public meeting demonstrating how public input was addressed.



The community voted on the following three equity program options: 1) Identify a popular transportation program in the area with expiring funding and continue to fund it with toll revenue, 2) provide a transponder prepaid with an initial balance, or 3) Combine options 1 and 2. Ultimately, the vote moved forward with option 3. The format was a $100 prepaid transponder balance in year 1 (for low-income users at or below 200% FPL), followed by a commitment to invest 15% of the excess toll revenue in subsequent years based on public input on a choice between funding transit passes, or additional toll credits.

While recognizing the limitation that estimate and actual toll revenue may differ, the agency made a public commitment to invest a specific percentage (15%) of net toll revenue averaged over a ten-year period to sustain transportation equity programs. They estimated gross and net revenue and expenses over foreseeable years, and clearly visualized the data for layperson understanding, shown in *Figure 7*.

Figure 7 A slide from a CTIO public meeting showing projected revenue and operations and maintenance costs.



Key takeaways from peer agency interviews that guided the described process and outcomes were:

- Determine if the goal is to provide a large benefit to a smaller group, or a smaller benefit to a larger group.
- Begin with a pilot program, not a permanent program, to see how people respond.
- Leverage systems already in place by other agencies to cut implementation costs.
- Once recommendations are adopted, develop a robust public information plan for awareness of program details.

Washington State Transportation Commission (WSTC) Low-Income Toll Program Study for I-405 & SR 167 Express Lanes (2021)

The low-income toll program study reviewed the geographies and communities served by existing and planned express lanes projects, and conducted a national survey of income-based programs other toll operators have considered or implemented to improve access for low-income corridor users. The study also discusses solutions for unbanked customers, income eligibility criteria, and the process to screen and select strategies and programs that allow low-income users to derive travel savings and reliability benefits from the express lanes.

Strategy and program concepts were evaluated with a score determined by low to high ranking of five (5) factors: community preference demonstrated through a community survey, level of user benefit for low-income users, operational impact to the agency, estimated program costs, and other feasibility factors. *Figure 8* shows the scorecard for each proposed strategy: a percentage discount, a fixed discount per trip, a fixed toll credit per month, fixed number of free trips, and lower maximum toll.

This detailed evaluation methodology informed the high-level implementation considerations the Study outlines in the profile for each of the EEAs.

Figure 8 WSTC Low-Income Toll Program discount metric and survey results.

Metric Type:		Score	Score Level	Survey Preference	User Benefit	Operational Impact	Other Feasibility	Program Cost
Percentage discount	25%	50%	Medium	Low	Low	Medium	High	Medium
	50%	57%			Medium	Large	High	Medium
	75%	53%			High	Large	High	Large
Fixed discount	Up to $0.50 per trip	58%	Medium	Low	Low	Small	High	Small
	Up to $2.00 per trip	59%			Medium	Small	High	Small
	Up to $5.00 per trip	56%			High	Large	High	Medium
Fixed toll credit	50% of avg.	62%	High	Medium	Medium	Small	High	Small
	100% of avg.	67%			High	Medium	High	Medium
	150% of avg.	63%			High	Large	High	Large
Fixed number of free toll trips	3 per month	64%	High	High	Medium	Small	High	Small
	10 per month	66%			High	Medium	High	Small
	20 per month	66%			High	Large	High	Medium
Lower maximum toll	25% lower	35%	Low	High	Low	Medium	Medium	Medium
	50% lower	30%			Low	Medium	Medium	Medium
	75% Lower	33%			Medium	Large	Medium	Large

WSTC ultimately selected two of the above proposals: 1) fixed monthly toll credit and 2) fixed number of free toll trips per month for low-income commuters at or below the 200% FPL.

Metro Express Lanes Project Low-Income Assessment (2010)

LA Metro managed this assessment which explored opportunities to extend benefits to low-income users of ExpressLanes facilities on the I-10 and I-110, and low-income transit users for (then) planned transit service along the highway corridors. The assessment anticipates low-income ExpressLanes users are more likely to use the lane on an as-needed basis, rather than a regular basis. Recommended income-based toll policies focused on reducing barriers to open and maintain a toll account including waiving account set-up fees, distribution of transponders, flexibility with meeting minimum balance requirements, and flexibility with minimum use charges for low activity accounts. The assessment recommended income eligibility be based on area median income (AMI) instead of the FPL.

Transit users were another beneficiary group identified in the assessment. Transit enhancements were discussed to estimate their impact on transit ridership. Enhancements included service availability, frequency, and bus rapid transit (BRT) development, and station and stop features like parking, bike lockers, and improved security. Toll credits accrued through transit trips were recommended for transit users, meaning the more transit trips they take, the more credits they can earn toward future ExpressLanes trips. The assessment determined that transit infrastructure investments were more valuable investments to transit users than transit subsidies.

Today, LA Metro manages two programs for low-income toll and transit credits, known as the Low-Income Assistance Program and the Transit Rewards Program. The toll credit was ultimately based on the income-eligibility determined by the FPL 200% multiple, rather than AMI. Income-eligible Los

Angeles County residents can receive a one-time $25 toll credit when setting up their FasTrak account. Transponders set up under this program also have their $1 monthly account maintenance fee waived. The Transit Rewards Program provides a $5 credit applied to a transit riders toll account. The transit credit is earned for every sixteen (16) transit trips taken during peak traffic hours, and only applicable to trips on certain routes that align to the I-10 or I-110.

The assessment informed the Study's equity goals which respond to both drivers and transit riders, and demonstrated further analysis as next steps following the Study, like estimating eligible participants and the cost of subsidies.

Literature Review Limitations

The available literature of academic research and case studies revealed some limitations. Some of the academic literature offers conceptual or philosophical guidance on equitable road pricing that has not been implemented in a real-world project. Some of the case studies reviewed discussed the business case and evaluation process for equity strategies and programs, but did not address operational, administrative, cost and other feasibility considerations in the same detail. While the methodology of shortlisting and selection process are described, the case studies are less revealing about navigating challenges with consensus within an agency, between agencies, across communities, or between an agency and the public. Finally, there is more literature available on the process of ideation, shortlisting, and selection, than there is literature on post-implementation discussing planned compared to actual excess toll revenue, program participation or other metrics and lessons learned.

PART II. THE DATA

To understand what communities are most likely to experience disproportionate impacts and inequitable project benefits, the Study mapped quantitative data points to assess demographics and their lived experiences. Instead of looking at one data point in isolation, like income, the Study explores how different data points overlap to tell a data story. For example, drivers from lower income households that own cars have a different experience than low-income households that do not own cars. The former group can benefit from income-based toll pricing, while the other group cannot, and instead would get more value out of an investment of excess toll revenue in subsidized transit passes. The data points used to identify and qualify equity communities are shown in *Table 4.*

Table 4 Data and Sources for Equity Analysis

Data Point	Data Source
Race	American Community Survey (ACS)
Income	American Community Survey (ACS)
Displacement Risk	Urban Displacement Project (UDP)
Car Ownership	American Community Survey (ACS)
Transit Ridership	American Community Survey (ACS)
Limited English Proficiency (LEP)	American Community Survey (ACS)
Air Quality	CalEnviro Screen 4.0 (CES 4.0)
Pedestrian-Vehicle Incidents	Statewide Integrated Traffic Records System (SWITRS)
Cyclist-Vehicle Incidents	Statewide Integrated Traffic Records System (SWITRS)

There are a total of six (6) maps and data stories about equity communities in the area who can be affected by the Project, either as I-5 users or residents near the corridor:

- Demographics of Current Carpoolers
- Transit Mobility
- Affordability
- Environmental Exposure and Resiliency
- Public Participation
- Pedestrian and Cyclists Safety

A written data story is presented before each map explaining how different data points are represented on the map. The map identifies the geography of equity communities relevant to the map topic, and the data story discusses how those communities are likely to be affected by the Project. A map page follows each data story, with different examples on the map magnified to show how data points overlap. The key takeaways from the equity data analysis include:

- Current carpoolers that live near the corridor are largely from lower income, zero-car, and/or LEP households, and will have different inequitable experiences if the current free HOV2+ lane becomes a paid use EL. Those experiences range from affordability to barriers to understanding public information about the Project.
- The highest rates of transit ridership near the corridor in communities with lower income and zero-car households are in areas of Anaheim, Fullerton and Santa Ana. This offers a starting point for Caltrans and Orange County Transportation Authority (OCTA) to explore opportunities for EL bus service that is inclusive of these equity communities.
- There is a consistent pattern of communities along the corridor experiencing economic burden from housing costs. Some communities, particularly in areas of Buena Park, Anaheim, and Santa Ana are at high risk of displacement in addition to the economic burden. For these households, an increase in transportation costs can worsen their economic burden and be a barrier to the intended travel time benefits of the EL.
- Poor air quality does disproportionately impact lower income communities, with a stronger correlation to income than race in the area. But the patterns of poor air quality are inconsistent and do not indicate that I-5 traffic is the predominant source of the poor air quality.
- Several communities along the corridor in Buena Park, Anaheim, Santa Ana, and Tustin, face barriers to participation in Project public engagement opportunities, based on the density of low income, zero-car, or LEP households. Those barriers range from availability and ease of attendance to awareness of engagement events.
- Pedestrian and cyclist safety incidents with vehicles are high in low-income areas and communities of color in Buena Park (pedestrians) and Tustin (cyclists). In Anaheim, there is a cluster of cyclist-vehicle incident areas that do not overlap with income or race. All of these areas warrant public information and traffic calming solutions during the construction period to reduce the likelihood of self-detour traffic onto neighborhood streets parallel to I-5, as drivers may seek to improve their travel time savings in the event of lane closures.

These and other learnings from the equity data analysis informed the Project's equity goals, community survey questions, and EEAs.

DEMOGRAPHICS OF CARPOOLERS

The Project considers changes to an existing free HOV 2+ carpool lane in each direction. Current carpoolers will experience any changes to the lane more immediately than other commuters. The simplest project concept would maintain the lane as a free carpool lane with a 3+ occupancy policy, leaving existing carpoolers seeking an additional rider to be compliant. The project concept proposing the most significant change would transition the free carpool lane to a paid express lane, requiring existing carpoolers to pay for trips that were previously free. The Study seeks to understand the demographics of current carpoolers as they may face these changes and have different resiliency to these changes.

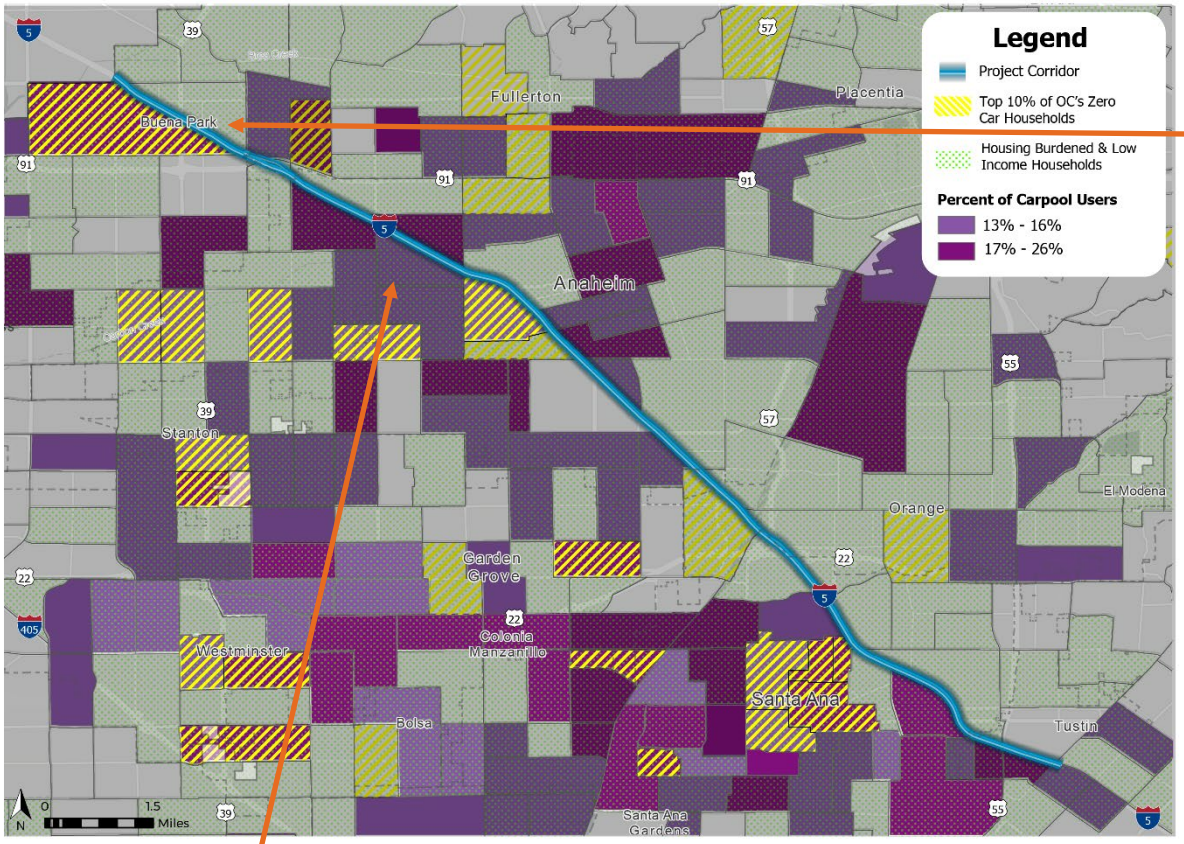
On the following page, *Figure 9* visualizes overlapping data points about the communities that demonstrate the highest volume of carpoolers. There are multiple colors on the map that represent different data points applicable to different communities of carpoolers. ACS data shows current carpoolers indicated by the purple blocks in areas of Buena Park, Santa Ana, Anaheim, and Garden Grove.

Communities in each of those areas have distinct characteristics that are relevant to travel patterns, like income and access to a personal vehicle. Income was derived from US Census data. The black grid over the purple blocks (carpoolers) indicates communities with a high density of lower income households. The data specifically shows households representing the lowest 30% of household income in Orange County. Zero-car household data was sourced from the ACS. If a black grid overlays a purple block, it indicates a community where carpoolers are likely from lower income households. The yellow stripes over the purple blocks (carpoolers) indicate a density of zero-car households. If yellow stripes overlay a purple block, it indicates a community where carpoolers are unlikely to have access to a personal vehicle. If both a black grid (low-income households) and yellow stripes (zero-income households) show over a purple block, it indicates a community where carpoolers are likely to be both income constrained and experiencing limited access to a personal vehicle.

Bear in mind that equity communities are diverse. Not all carpoolers are income constrained. Not all carpoolers are from zero-car households. Either condition individually or together similarly qualify consideration of that community as an equity community for the purposes of this Study. If any community is treated as a monolith, there is a missed opportunity to understand and meet unique needs. For example, carpoolers from low-income households only may own a vehicle and benefit from toll subsidies, while a carpooler from a zero-car household is unlikely to benefit from a toll subsidy.

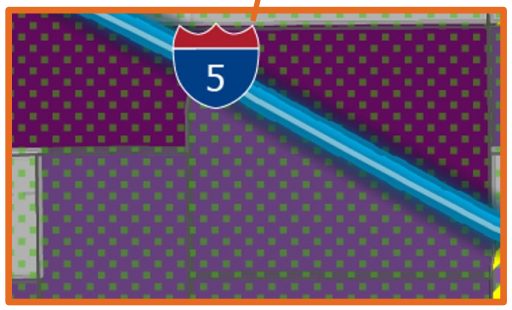
The key takeaways from cross analyzing equity data with carpool travel mode data informed the Project's equity goal of Affordable Access to Express Lanes, Benefits for Transit Users, and Equitable Investment of Excess Toll Revenue.

Figure 9 Take A Closer Look | **Demographics of Carpoolers**



Example A
Communities in Buena Park immediately east of I-5 show a high percentage of carpoolers (dark purple), and a high density of zero car households (yellow stripes). This data illustrates carpoolers who are likely carpooling because they have limited access to a personal vehicle.

Other areas of the map with yellow stripes over purple blocks tell a similar story.



Example B
Communities in Anaheim immediate to I-5 show a high percentage of carpoolers (dark purple), a high density of lower income households (green pattern). This data illustrates carpoolers who are likely carpooling to save on the costs of car ownership and travel expenses. Other areas of the map with a green pattern over purple blocks tell a similar story.

TRANSIT MOBILITY

Drivers are one customer group for an HOV or express lane, transit riders are another. Bus routes can leverage an HOV or express lane to offer transit riders travel time savings. The simplest project concept would maintain the lane as a free carpool lane with a 3+ occupancy policy. In this scenario, carpool lane buses can offer transit riders, in particular those who have limited access to a personal vehicle, travel time savings. However, cost savings related to toll would be irrelevant. The project concept proposing the most significant change would transition the free carpool lane to a paid express lane. In this scenario, express lane buses would allow transit riders to enjoy travel time savings without paying a toll, which is of particular benefit for lower-income and/or zero-car transit riders.

The Study seeks to understand where current transit ridership is prevalent, and whether that transportation mode choice is consistent with equity data points like low-income and zero-car households. This offers a high-level analysis of patterns of transit ridership near the corridor and reliance on transit, which begins to identify markets of opportunity for express lane buses. In Orange County, transit is operated by the OCTA. Collaboration between OCTA and Caltrans is needed to further explore specific origin-destination patterns, service planning, and connectivity to/from equity communities to build a case for express lane bus(es). Therefore, the map in *Figure 10* is not intended as a conclusive market analysis of evaluation of travel demand.

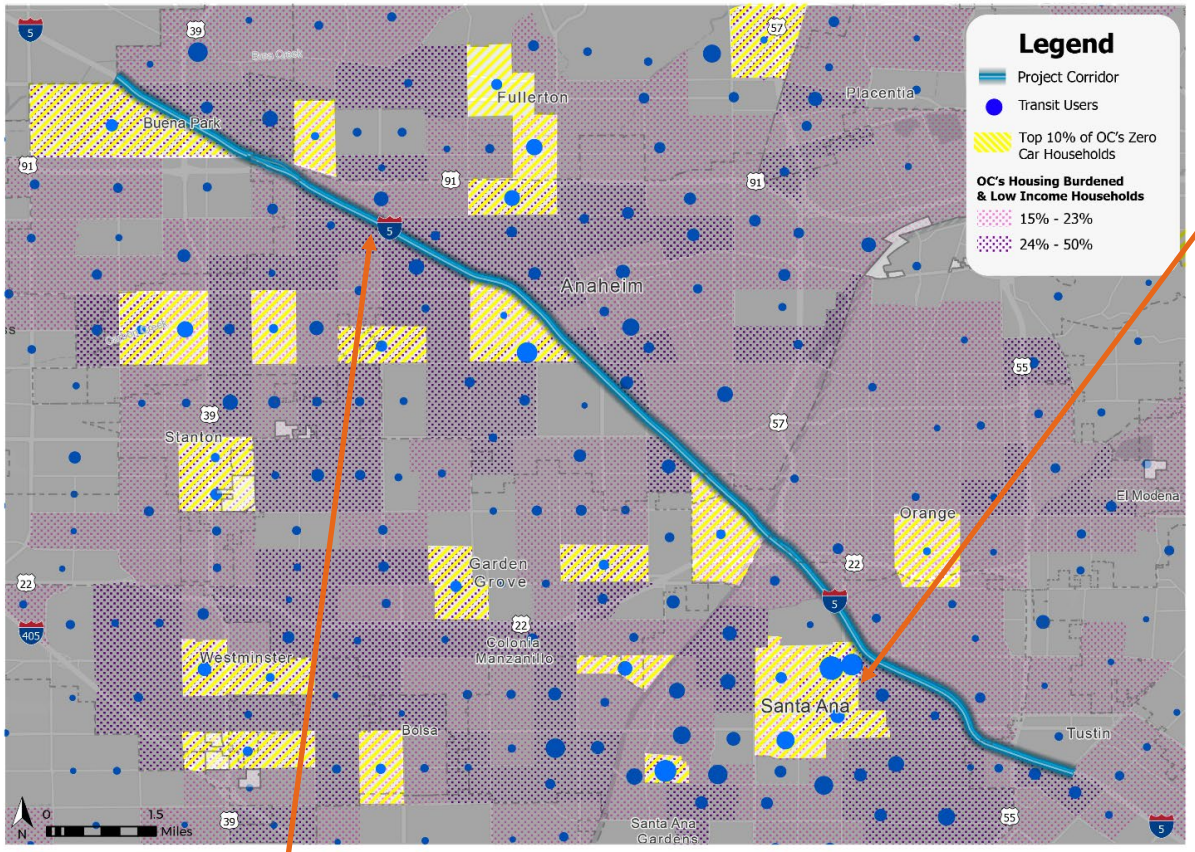
On the following page, *Figure 10* visualizes overlapping data points about the communities that demonstrate a high volume of transit riders. There are multiple colors on the map that represent different data points applicable to different transit rider communities. Generally, areas in Santa Ana, Anaheim, and Fullerton show the most transit ridership near the I-5 corridor.

Communities in each of those areas have distinct characteristics that are relevant to travel patterns, like income (pink/purple pattern) and access to a personal vehicle (yellow). These data points were sourced from the UDP and ACS respectively. Blue dots represent communities of transit riders. The larger the blue dot, the greater the volume of transit riders. If a large blue dot overlaps yellow and the pink/purple pattern, it indicates transit reliance. The map also shows communities with lower-income households that own vehicles and use transit. This is an example of the diversity within equity communities; some will only benefit from EL buses (zero car households), while others can benefit from a toll subsidy or EL buses (lower income households).

It's also important to consider how equity communities are connected to essential destinations, especially if they are transit reliant and don't have the ease of getting in a car and traveling the required distance to fulfill an essential need. This consideration is consistent with multiple sources in the literature review, where essential destinations are defined as work, grocers and fresh food, healthcare, childcare, and more.

The key takeaways from cross analyzing equity data with general transit ridership patterns informed the Project's equity goals of Benefits for Transit Users and Equitable Investment of Excess Toll Revenue, and related Exploratory Equity Actions. It also informed questions asked in the Study's community survey.

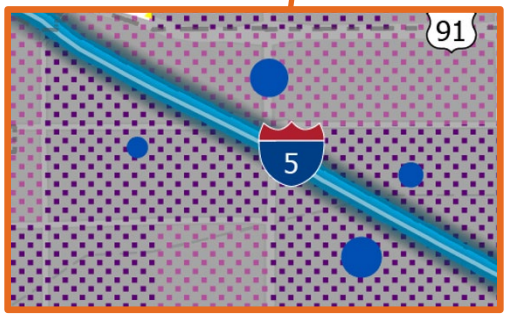
Figure 10 Take A Closer Look | **Transit Mobility Data Story**



Example A

Communities in Santa Ana to the west of I-5 show a density of lower income (pink/purple pattern) and zero-car households (yellow) where there is a high transit ridership (large blue dots). This indicates communities that are more likely to be transit reliant and may benefit from EL buses to their destinations given the communities' proximity to the corridor.

Other areas near I-5 where the pink/purple, yellow, and large blue dots overlap tell a similar story.



Example B

Communities between Buena Park and Anaheim near the I-5 show a density of lower income households (pink/purple pattern). However, these households own cars because there is no yellow (zero car households) represented in this area. These communities may be less transit reliant, and therefore can benefit from toll subsidies or EL buses if they choose to ride transit.

Other areas near I-5 where the pink/purple and large blue dots (*only*) overlap tell a similar story.

AFFORDABILITY

The affordability of a toll can impact whether a driver uses the express lane, uses it in compliance with its payment system, and the frequency of use. The simplest project concept would maintain the lane as a free carpool lane with a HOV3+ occupancy policy, the most affordable option to users. The project concept proposing the most significant change would transition the free carpool lane to a paid express lane. The new cost will be experienced differently by lower income households who may be experiencing other economic burdens that transportation costs compound.

In the scenario of an express lane, the proposed toll pricing model is known as dynamic pricing. Dynamic pricing creates a unique cost per trip based on congestion at the time of the trip and the distance traveled in the express lane. The cost itself, and the variability of that cost, are both considerations for an income-constrained user.

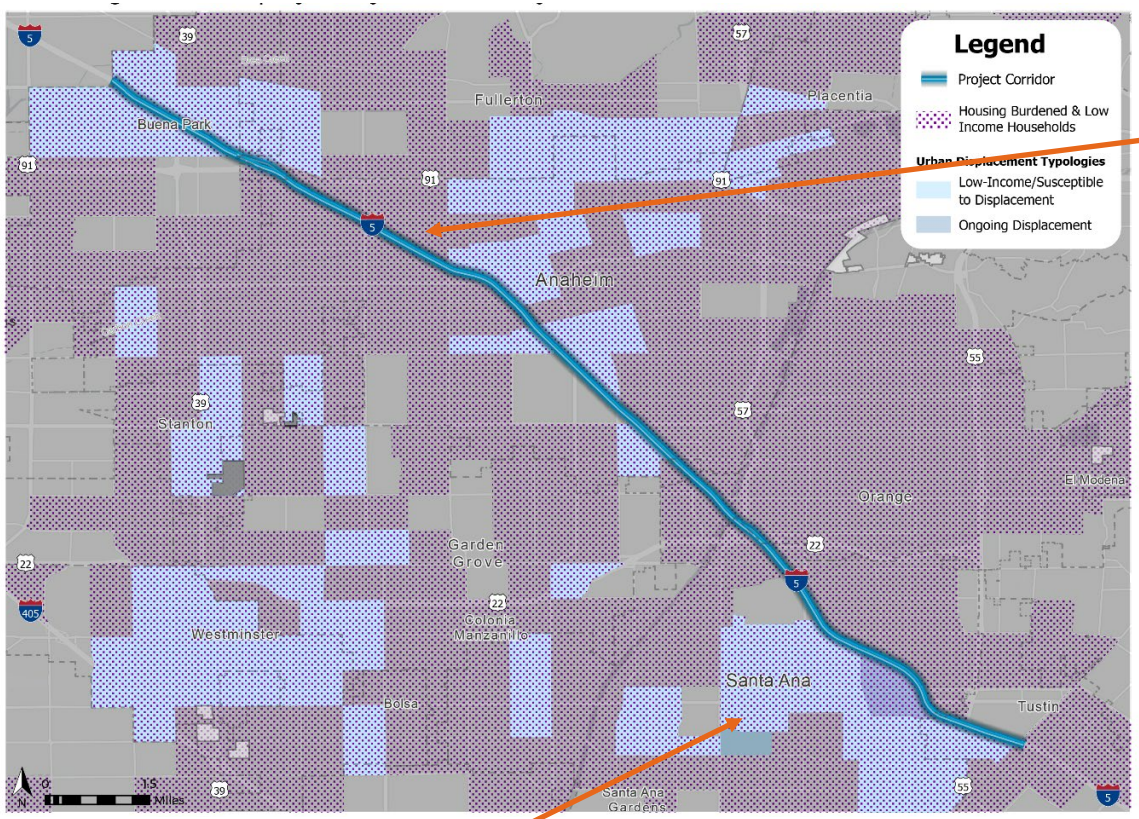
The Study seeks to understand what communities, especially near the I-5 corridor or a connecting corridor, have a density of low-income households or areas of displacement risk, because these communities are experiencing economic burdens that can be compounded by additional transportation costs. In other words, with limited means, transportation costs consume a relatively larger percentage of their monthly income, regardless of the amount of the cost itself.

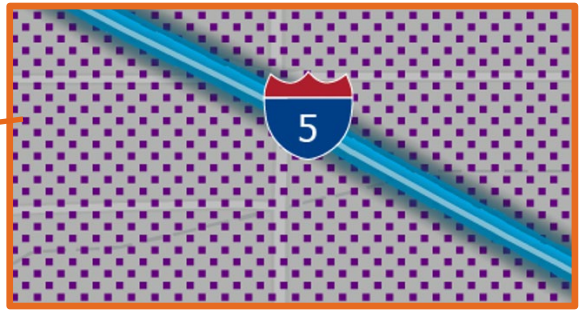
On the following page, *Figure 11* visualizes overlapping data points about communities with low-income households. Generally, there is a continuous pattern showing a density of lower income households immediate to the corridor from Buena Park in the north to Tustin in the South. The purple pattern shows this spread of lower-income households, data sourced from the US Census. Specific communities with lower-income households along the corridor have additional distinct characteristics. UDP is the second data source, which identifies households within 0-50% of the AMI and estimates their probability of displacement based on previous displacement in the area. The blue blocks show places where higher rates of displacement have occurred, indicating a risk of further displacement. If the purple grid overlays blue blocks, as seen in Buena Park, Fullerton, and Santa Ana, it indicates there are remaining low-income households in areas with a risk of future displacement.

UDP is a research and data collaboration between UC Berkeley and the University of Toronto. Their research does not identify specific reasons for displacement in a given area, and UDP acknowledges displacement can be the result of investment and underinvestment. The research is designed to offer insight on patterns of displacement.

The key takeaways from cross analyzing this equity data informed the Project's equity goals of Affordable Express Lanes and Equitable Investment of Excess Toll Revenue, and related EEAs. It also informed questions asked in the community survey about whether toll would be a financial burden in a household.

Figure 11 Take A Closer Look | **Affordability**





Example A
Communities in between Buena Park and Anaheim on both sides of I-5 show a density of lower income households (purple pattern). However, these communities are not in an area experiencing displacement. People in these communities interested in using the express lane can benefit from income-based subsidies.

Other areas of the map with the purple pattern *only* tell a similar story.

Example B
Communities in Santa Ana to the west of I-5 show a density of lower income households (purple pattern) overlapping areas at risk of displacement (blue blocks). People in these communities may be too economically burdened to find the same value in income-based toll subsidies. But excess toll revenue investment in SB-743-aligned multimodal projects and connected land use initiatives can contribute to anti-displacement through plan and policy development.

Other areas of the map with the purple pattern over blue blocks tell a similar story.

ENVIRONMENTAL EXPOSURE AND RESILIENCY

Car emissions affect air quality, although car emissions are one of many contributors. Air quality near highways reflects the concentration of car emissions. Both the simplest project concept, an HOV 3+ carpool lane, and the most significant project concept, an express lane, can encourage carpooling which can reduce the amount of emissions by reducing the number of cars on the road. However, the current air quality along the corridor includes the context of the current HOV 2+ carpool lane.

The Study seeks to understand if low-income households and communities of color are disproportionately exposed to poor air quality which is a historic environmental injustice nationally recognized by the transportation industry. And, these communities may be less resilient to the public health outcomes of exposure to poor air quality, in terms of the means to access healthcare, or the ease of accessing healthcare in their communities. Here, the Study connects natural and built environmental conditions to social impacts. If the analysis revealed disproportionate exposure, the Exploratory Equity Actions would include interventions to address the inequity.

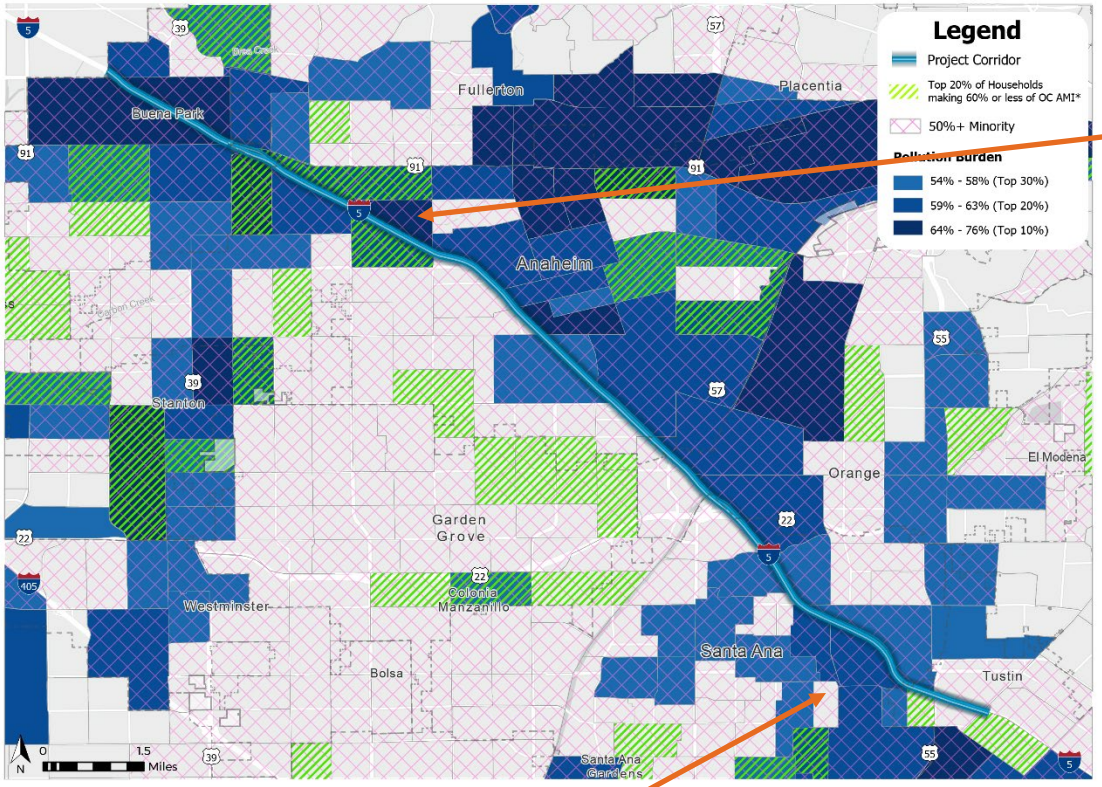
On the following page, *Figure 12* visualizes overlapping data points about communities' exposure and resilience to that exposure. The air pollution and low-income data was sourced from CalEnviroScreen 4.0 (CES 4.0), and AMI was sourced from the ACS. Blue blocks show air quality conditions in areas with a density of households with incomes 200% or less of the FPL. The darker the shade of blue, the worse the air quality is in that area. The green stripes indicate areas where households earn 60% or less of the AMI, a local measurement of low-income. And communities of color are visualized by a pink pattern. If blue blocks (disproportionate exposure based on income) are overlapped by a pink pattern (communities of color), that indicates communities that are the most exposed and the least resilient to the exposure due to income and race. If blue blocks are overlapped by green stripes (60% or less of the AMI), overexposed areas are experiencing income constraints by both federal and local standards.

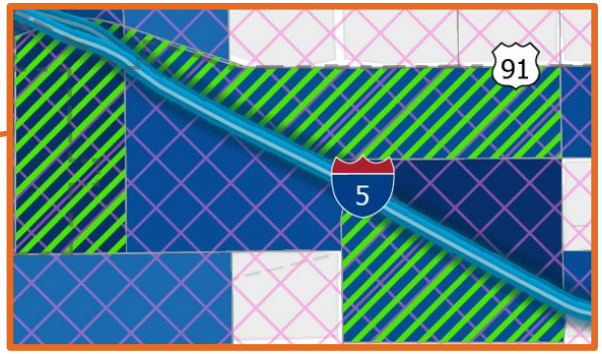
Regionally, there is a stronger correlation between exposure and income, than exposure and race, evident by large areas of the map that show the pink pattern alone *without* overlap with blue blocks. Buena Park and Santa Ana show an overlap of high exposure, low income, and communities of color on both sides of the corridor. This is key because other areas of disproportionate exposure only show on one side of the corridor (e.g. Anaheim), or far from the corridor (e.g. east Fullerton), which indicate sources of pollution other than the highway.

This data story, which doesn't show consistent inequity reasonably attributable to the highway, may be informed by the original alignment of the corridor which leveraged agriculture rather than residential land use areas, compared to other highway projects that bi-furcated residential areas in communities of color.

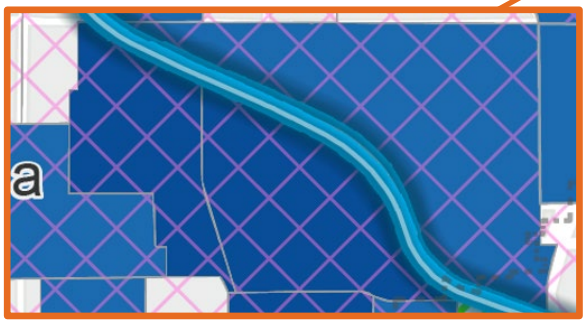
The key takeaways from cross analyzing this equity data did not reveal a distinct inequity to be addressed in the EEAs. However, the cities of Buena Park (worst exposure indicated by darkest blue) and Santa Ana can be engaged for discussion about the proportion of sources contributing to poor air quality in their areas, and what public health resources are available in the affected communities.

Figure 12 Take A Closer Look | **Environmental Exposure and Resiliency**





Example A
Lower income areas based on AMI (green pattern) and communities of color (pink pattern) just south of Buena Park are experiencing high exposure to poor air quality (blue blocks). The blue blocks also reflect households with an income 200% or below based on FPL as calculated in the CES 4.0. This is a different income measurement than AMI. These are indicator households that may have less resiliency to public health outcomes, in terms of affordability and access to healthcare.



Example B
In Santa Ana, communities of color (pink pattern) are experiencing higher exposure (blue blocks). The blue blocks also reflect households with an income 200% or below based on FPL as calculated in the CES 4.0. This is a different income measurement than AMI. These are indicator households that may have less resiliency to public health outcomes, in terms of affordability and access to healthcare.

PUBLIC PARTICIPATION

Public participation is an opportunity for decision-makers to build public confidence by collecting public input to make community-informed project decisions. Likewise, it's an opportunity for communities to learn about public projects and shape their outcomes. This two-way process is especially critical for projects historically known to draw public opposition, like road pricing projects that implement a charge for a trip that has always been free.

On this Project specifically, the Project was not a response to an expressed public need, but was instead initiated by decision-makers based on data that was not available or known to the public before the Project was pursued. When there is a lack of basic shared context between decision-makers and the public, there is a learning curve to bring the public up to speed on Project purpose and need, *before* the public can be expected to contribute meaningful input. This was evidenced in the questions and concerns the community shared at the first Project workshop (see section Community Involvement), seeking proof the project was solving a real problem (traffic congestion) for the right reasons (not using an express lane just to earn additional revenue).

For all of the reasons stated, public participation in Project engagement opportunities is essential. The Study seeks to understand the barriers equity communities may face to participating to inform future engagement plans.

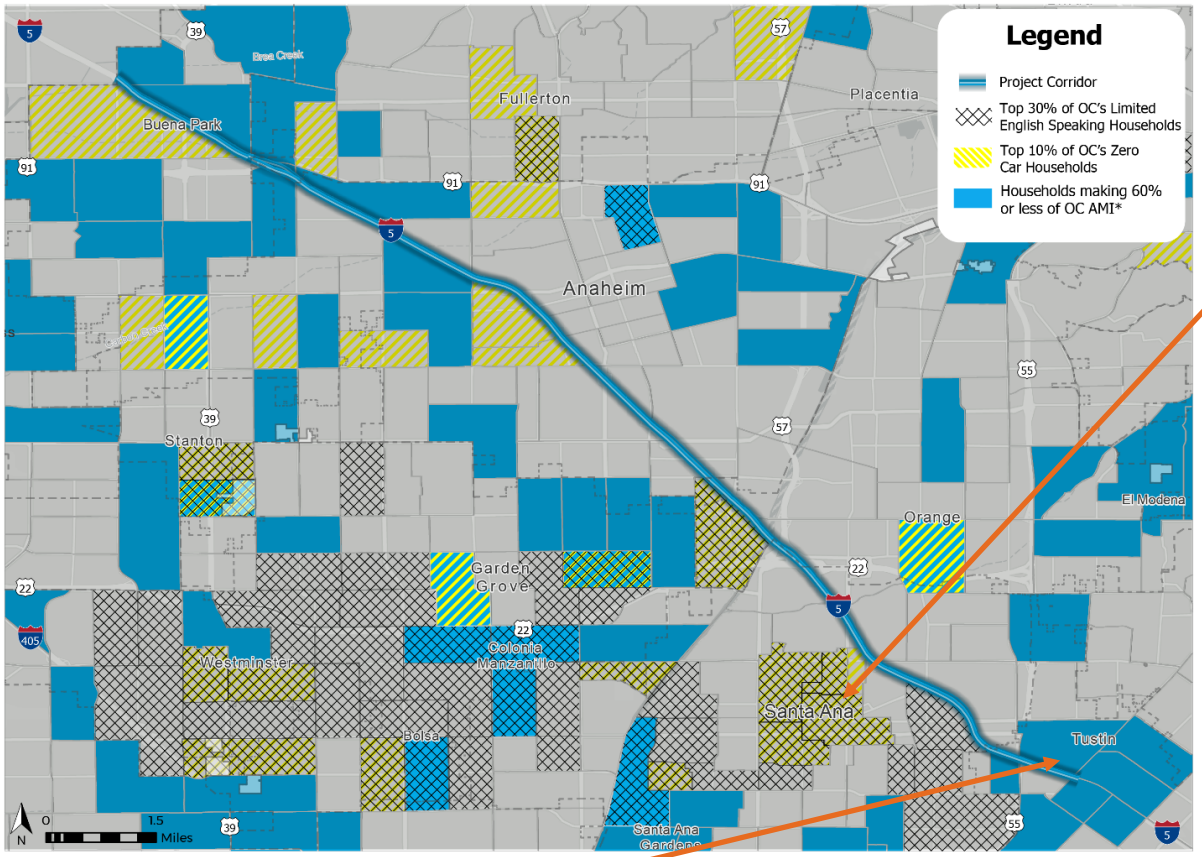
On the following page, *Figure 13* visualizes overlapping data points on a map to show which communities are likely to face these conditions: zero-car households (yellow), lower income households (blue), and limited English households (black pattern). Each of these conditions individually can indicate a barrier faced to public participation. Communities with a higher density of zero car households may be unable to access meeting event venues that are not near transit, or near other destinations they routinely frequent (for example, as described in Community Involvement, Workshop 1 was hosted in the evening at a community center providing afterschool programs immediately next to a grade school).

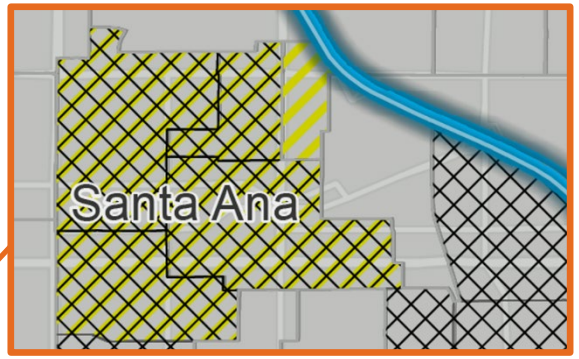
Communities with a higher density of lower income households may have non-traditional work schedules due to shift employment, lack the means for childcare, have a greater likelihood to experience a digital divide, or need an incentive to counter the burdens of participation. Offering flexible scheduling that give ample opportunity to attend, creating a child-friendly meeting environment, bringing mobile technology like i-pads, or providing participation incentives like food or gift cards for essential needs are among the strategies that can be inclusive to lower income participants. And finally, limited English households not only need in-person and written language translation, but may be more comfortable attending if their peers are. This is an opportunity to partner with cultural organizations to plan and promote public engagement, so participation is encouraged by a trusted voice in the community, and there is greater likelihood of familiar faces at the meeting event.

Described above is an example of the diversity within equity communities; some communities or households are experiencing one, some, or all of the barriers described above. This information will be valuable for future Project engagement plans, particularly when coordinating with city and community organization partners to mobilize their constituents to participate, and planning resources to support community engagement.

The key takeaways from cross analyzing this equity data informed the Project's equity goals of Collaborative Engagement and Access to Information, and the corresponding EEAs.

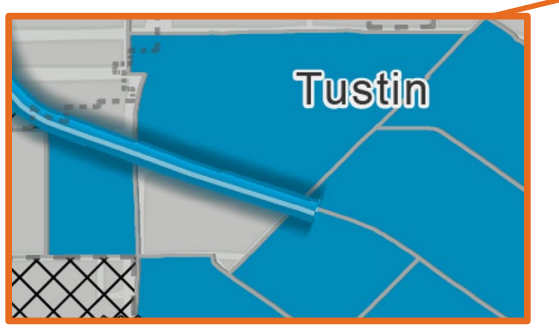
Figure 13 Take A Closer Look | **Public Participation Data Story**





Example A
Communities in Santa Ana west of I-5 show areas of overlap between limited English households (black pattern) and zero car households (yellow stripes). These are two different barriers to public participation in project engagement opportunities that can inform decisions like venue choice and promotion strategies.

Other areas near I-5 where the black pattern and yellow stripes overlap tell a similar story.



Example B
Communities in Tustin near the end of the project area show a high density of lower income households (blue blocks). Lower income communities may face barriers to public participation in project engagement opportunities that can inform decisions like scheduling, providing food or a child-friendly environment, or participation incentives like a grocery gift card.

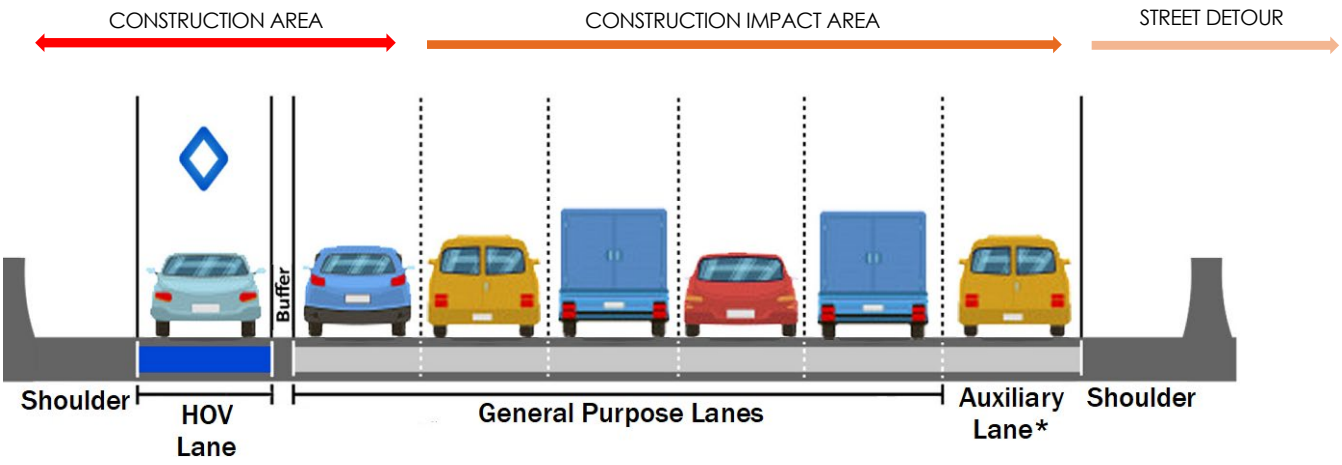
Other areas near I-5 that show blue blocks tell a similar story.

PEDESTRIAN AND CYCLIST SAFETY

An EL, differently from the HOV3+ intervention, will require construction to implement verification technology, stripe the lane, buffer, and entry and exit points, and potentially add an additional lane to the highway in the dual EL scenario. While these changes would occur on the far left of the corridor where the current HOV2+ lane is, construction can create lane closures that impact general purpose lanes as show in *Figure 14*. If the general purpose lanes become more congested during this period, drivers may want to avoid what traffic they can by driving through neighborhood streets parallel to the corridor for part(s) of their trip. This type of self-detour, and effort to optimize travel time, could create or exacerbate neighborhood safety concerns, especially in areas that have a higher rate of pedestrian-vehicle or cyclist-vehicle incidents.

Figure 14 shows the lanes that may be out of use during construction and how that impacts the available lanes, creating more congestion drivers may want to avoid by getting off the freeway to take neighborhood streets.

Figure 14 Potential Construction Impacts



The Study seeks to understand if low-income areas or communities of color are already experiencing a disproportionate rate of incidents in neighborhoods immediate to the corridor where self-detour traffic may occur. This is informed by a national pattern of incidents disproportionately concentrated in areas with these demographics, evidenced most recently by the American Journal of Public Health report *Structural Racism and Pedestrian Safety* (2023) and numerous other publications.

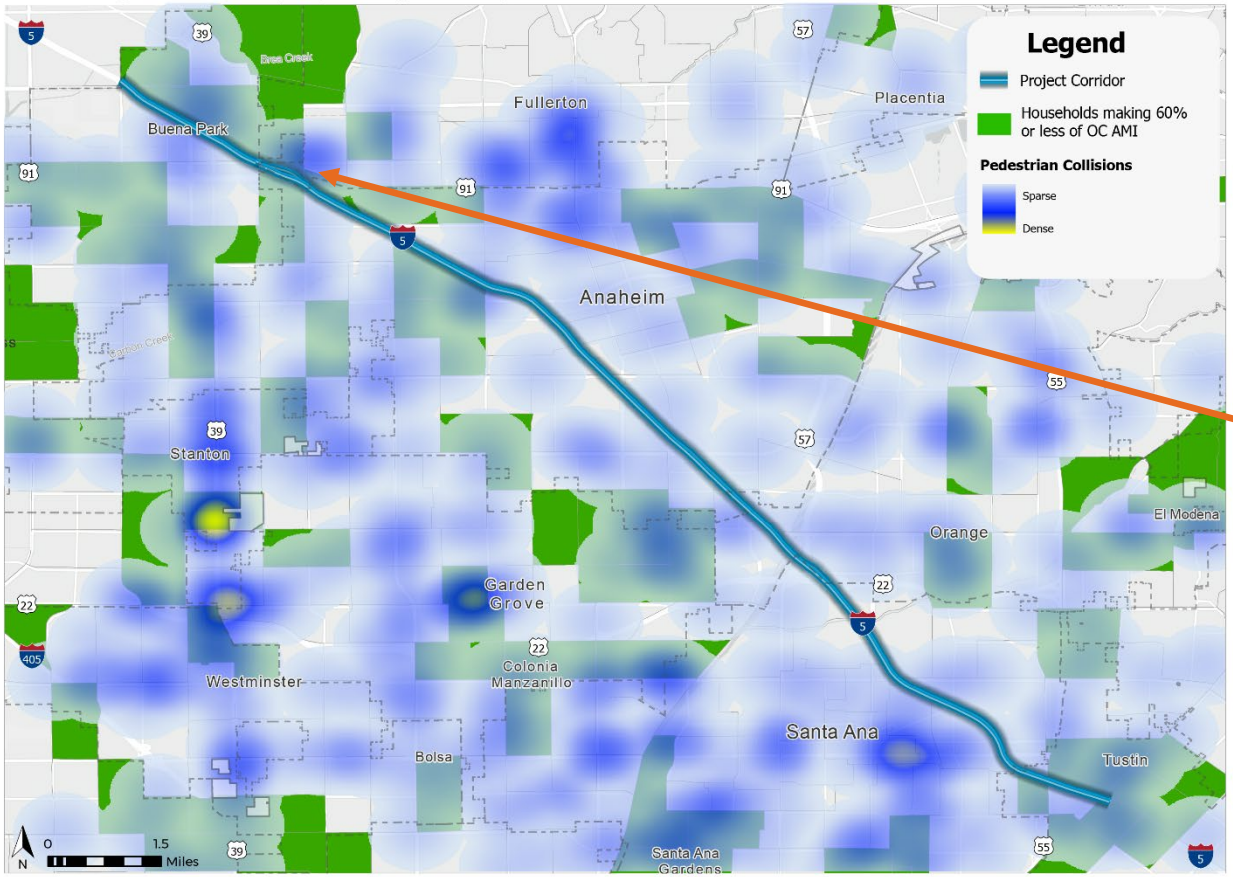
On the following page, *Figure 15A-D* show overlapping data of income (green blocks) and race (pink pattern) with existing high-incident areas for pedestrian (bright blue) and cyclists (bright purple) injuries due to accidents with vehicles. If the data shows a disproportionate pattern, indicated by multiple colors overlapping, particularly immediate to the corridor, public communications or traffic calming solutions could be initiated to reduce the risk added by EL construction. Demographic data was sourced from ACS, incident data from SWITRS, and bike infrastructure data from OCTA.

Overall, the data did not show a pattern of disproportionate pedestrian or cyclist incidents that correlated to income or race in the project area. However, there were places where high incident areas overlapped with low-income areas or communities of color. This was apparent specifically in Buena Park for both pedestrians and cyclists, and specifically for cyclists in areas between Anaheim and Santa Ana, and Tustin. I-5 exits in both directions in these areas may have more risk of self-detour traffic during the construction period which will exacerbate the existing condition.

There were a few areas of safety concerns for cyclists that did not necessarily overlap with income or race. For example, there are few places where bike lanes cross from one side of I-5 to the other where there may be more bike traffic than in other areas: between Buena Park and Anaheim, and Anaheim and Santa Ana.

The key takeaways from cross analyzing this equity data did not reveal a distinct inequity to be addressed in the EEAs, however the data does show areas where safety concerns can be anticipated and addressed in the construction phase of the Project.

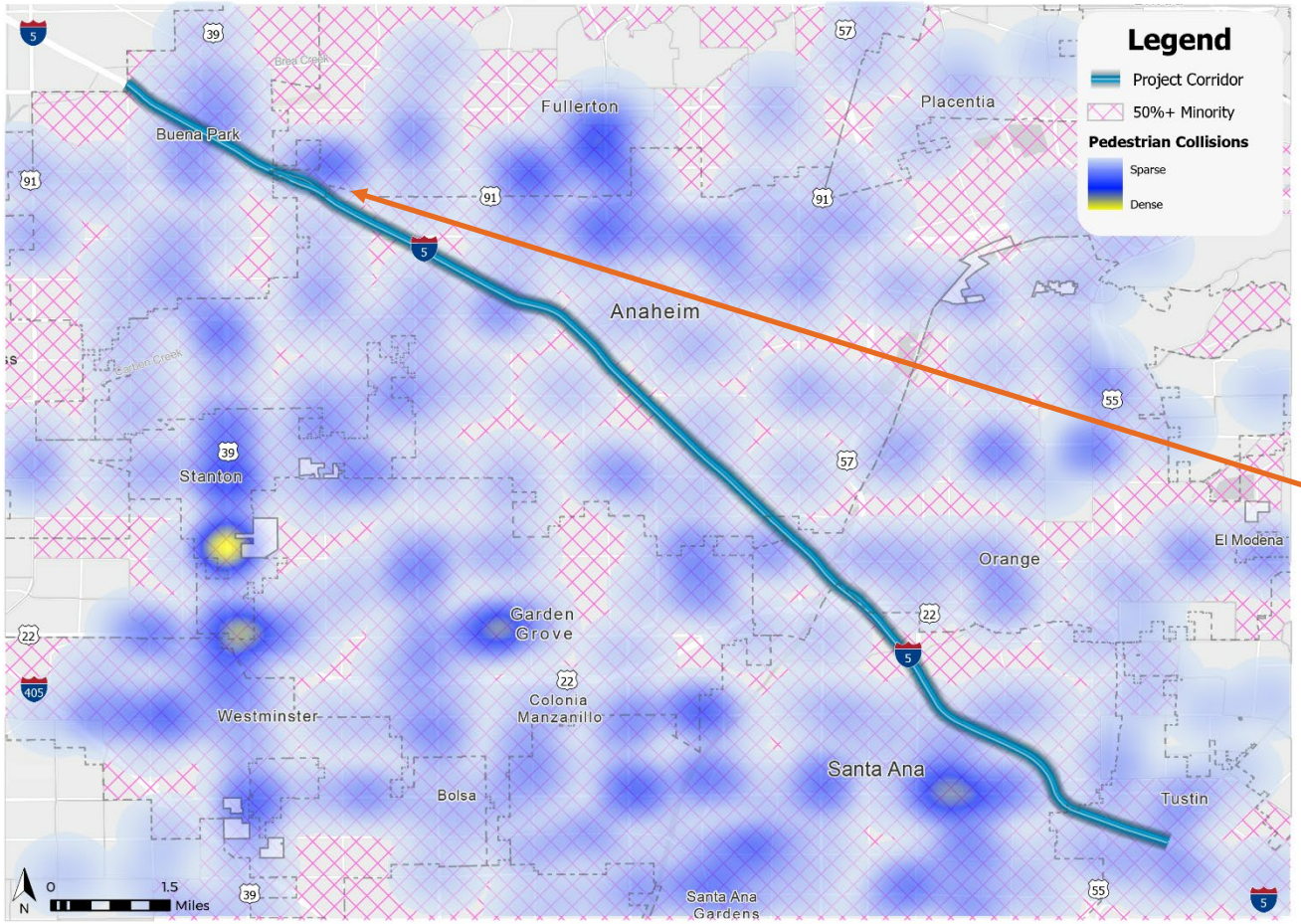
Figure 15A Take A Closer Look | **Pedestrian & Cyclists Safety Data Story (Pedestrian Incidents in Low-Income Areas)**



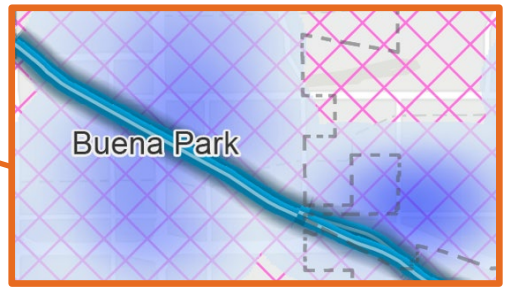
Overall, there is not a pattern of disproportionate occurrence of pedestrian incidents in lower income areas, and few areas of dense incidents (bright blue) immediate to the corridor.

Example A
I-5 exits in both directions in areas of Buena Park and may have self-detour traffic during the construction period that exacerbates existing high incident rates (bright blue) in lower income communities (green) immediate to the corridor.

Figure 15B Take A Closer Look | **Pedestrian & Cyclists Safety Data Story (Pedestrian Incidents in Communities of Color)**

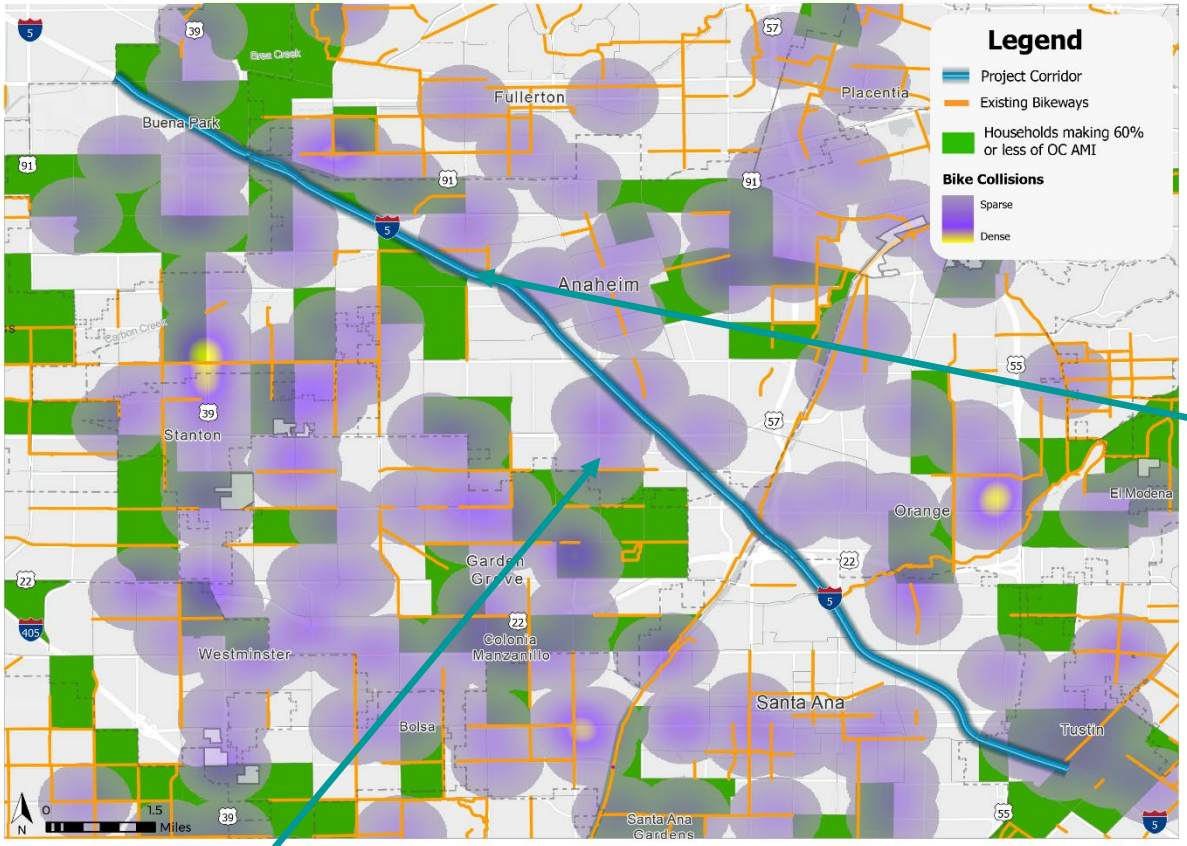


Overall, there is not a pattern of disproportionate occurrence of pedestrian incidents in communities of color, but there are incident areas (bright blue) in communities of color immediate to the corridor.



Example A
I-5 exits in both directions in areas of Buena Park and may have self-detour traffic during the construction period that exacerbates existing high incident rates (bright blue) in communities of color (pink pattern).

Figure 15C Take A Closer Look | **Pedestrian & Cyclists Safety Data Story (Cyclists in Low Income Areas)**



Overall, there is not a pattern of disproportionate occurrence of cyclist incidents in low-income communities, but there are incident areas (bright purple) in lower income communities immediate to the corridor.

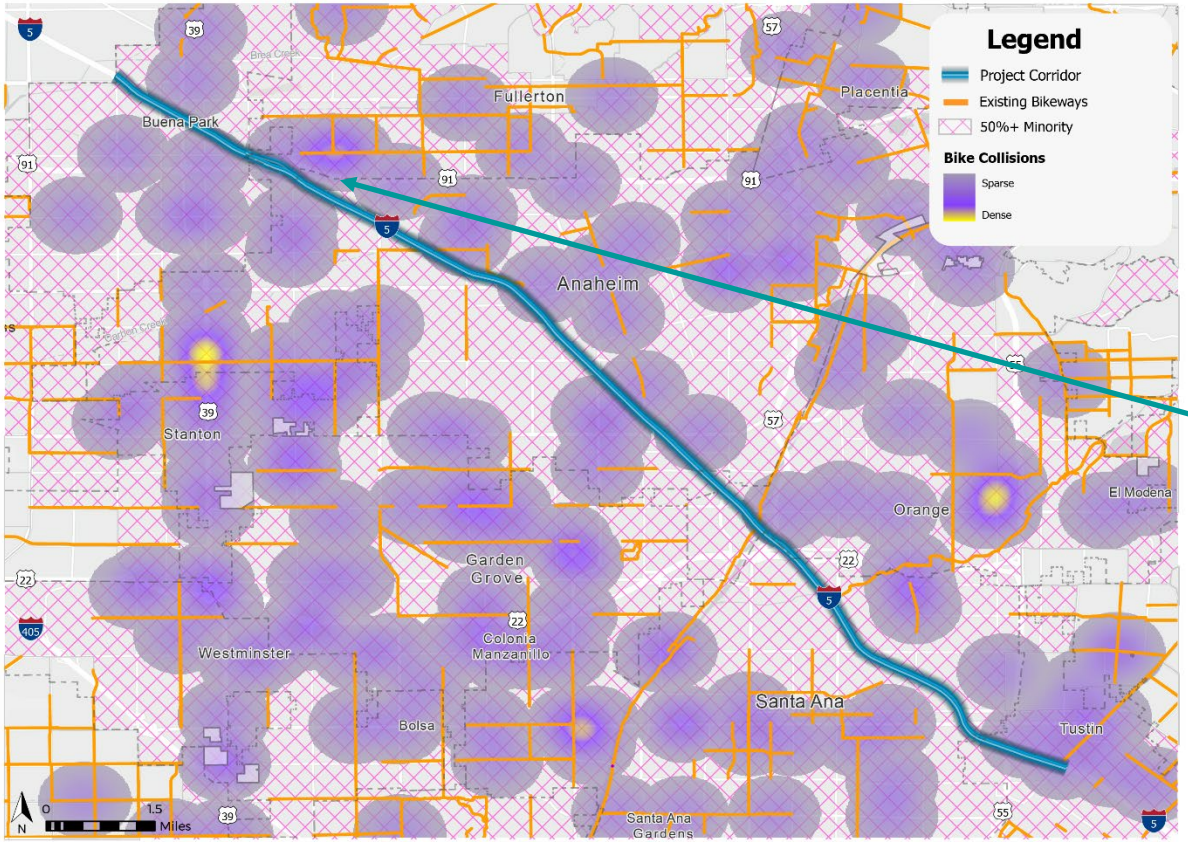
Example A

Northbound I-5 exits in areas of Anaheim and may have self-detour traffic during the construction period that exacerbates existing high incident rates (bright purple) in lower income communities (green). In this example, bike lane infrastructure runs from one side of I-5 to the other which may attract more cyclists in this exit area.

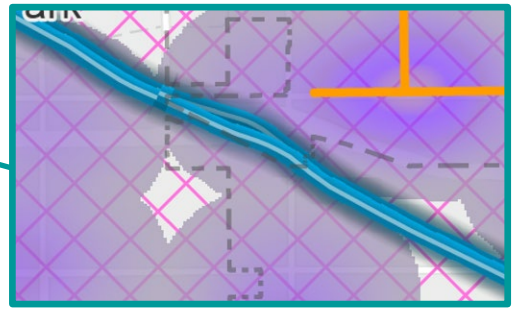
Other areas, like Tustin, where bright purple and green overlap have a similar story.

Example B
I-5 exits in both directions in areas between Anaheim and Santa Ana and may have self-detour traffic during the construction period that exacerbates existing high incident rates (bright purple), although this cluster of incident areas are not in lower income communities.

Figure 15D Take A Closer Look | **Pedestrian & Cyclists Safety Data Story (Cyclists Incidents in Communities of Color)**



Overall, there is not a pattern of disproportionate occurrence of cyclist incidents in communities of color, but there are incident areas (bright purple) in communities of color immediate to the corridor.



Example A

I-5 exits in both directions in areas of Buena Park that may have self-detour traffic during the construction period that exacerbates existing high incident rates (bright purple) in communities of color (pink pattern).

Other areas, like Tustin and Anaheim, where bright purple and the pink pattern overlap immediate to the corridor, have a similar story.

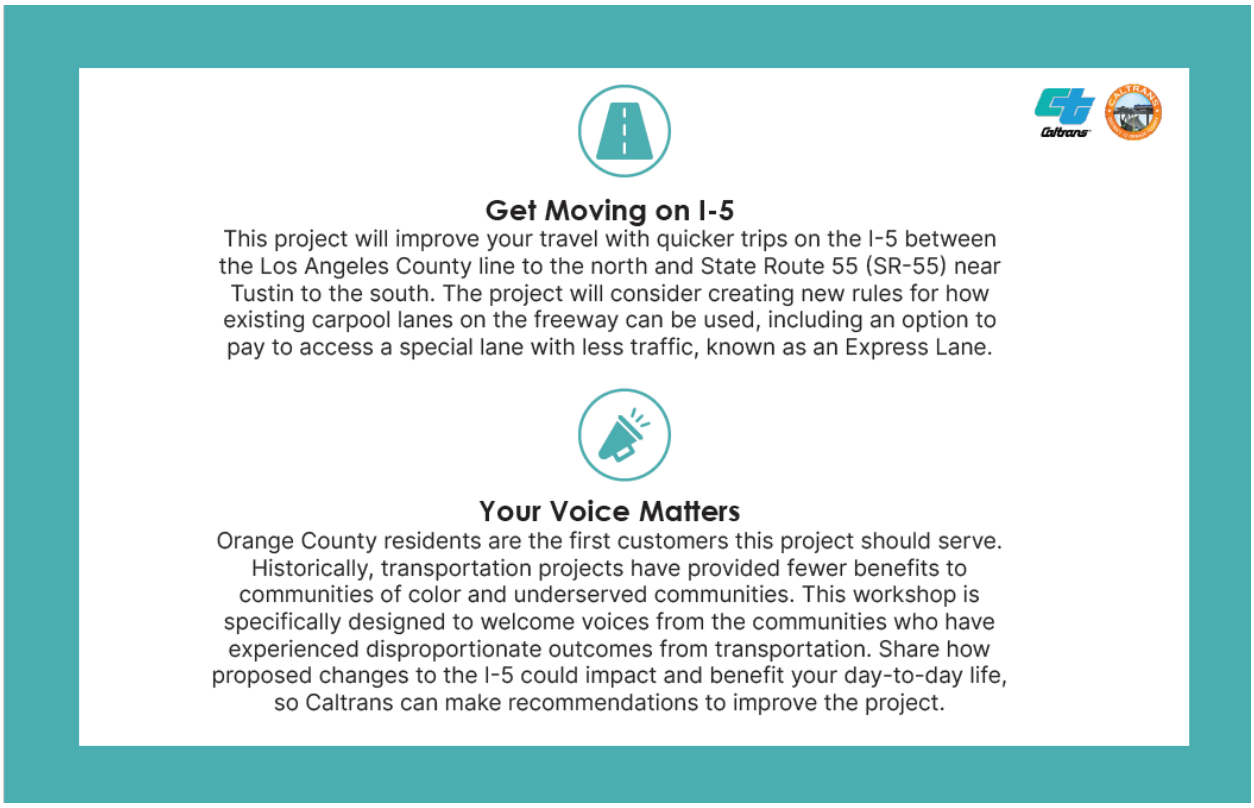
LIMITATIONS

Some data was unavailable for the Orange County region, like the volume and geography of unbanked customers who do not have traditional checking and savings accounts that can be digitally linked to a FasTrak (FT) account. This is one experience within low-income communities that can create a better understanding of the different barriers to accessing an EL. At Project stakeholder meetings during the EP, city staff were invited to share any local data or reports on equity populations at a neighborhood level. No city equity data or reports were shared. This information could further inform Project public engagement plans, or EEAs that require siting decisions like retail locations for FT transponders or stops for potential express lane buses. If these or other data sources become available, the Study can be updated as needed.

PART III. COMMUNITY INVOLVEMENT

The Study involved the community separately from the minimal outreach for scoping and public comment conducted for NEPA/CEQA, including two community workshops and a community survey. The first community workshop was held in October 2022, followed by the community survey open October 2022 through January 2023, then the second community workshop in March 2023. The community workshops had small participation with rich discussion around community concerns, while the survey received 235 participants. Each opportunity to participate in the Project was open to the general public, but directly promoted to equity communities identified in the Public Participation map to ensure their inclusion. For example, *Figure 16* below shows a print and digital post card used to promote the workshops to equity communities.

Figure 16 Front and back of a postcard promoting a community workshop.



EQUITABLE OUTREACH STRATEGIES

Community engagement for the Study used inclusive strategies to increase participation from equity communities in workshops and the community survey.

Workshop Strategies:

- **Venue and Scheduling:** The Study engaged City staff and community organizations that serve equity communities about the day, time, and venue most accessible to their constituents for workshops. Workshop 1 was hosted at one such organization, the Ponderosa Family Resource Center resulting in representative attendance from the Latin(x) community.
- **Event Promotion:** The postcard in *Figure 16* was created in Spanish and Vietnamese and circulated to City staff and community organizations to distribute to equity communities. A stock of print postcards were provided for display to overcome the digital divide, and a digital version was provided for email blasts and social media.
- **Hosting Format:** Workshops were offered in-person and virtually via Zoom to overcome barriers like transportation or childcare that can make in-person attendance challenging, or digital divide barriers like internet in the home or access to devices that can make virtual attendance challenging.
- **Language Interpretation:** Spanish and Vietnamese interpreters were provided at in-person and virtual formats. They were provided the workshop presentation in advance to learn the content and be prepared to facilitate questions and answers from non-English participants.
- **Public Trust:** The in-person event included live documentation of feedback from participants on a white board, and those notes were formalized into a workshop summary for the Project team. This

effort demonstrated the intention to use the feedback to make equity community-informed decisions.

Community Survey Strategies:

- **Survey Promotion:** The survey link was circulated to City staff and community organizations to distribute to equity communities, including brick and mortar organizations that offer access to computer labs, like the Ponderosa Family Resource Center.
- **Duration:** The survey was open for an extended period of four months to allow ample time for promotion to and participation from equity communities.
- **Wording:** Survey questions and answers were intentionally written in plain lay-person language to ensure industry terms or question complexity were not barriers to participation.
- **Equity-based Questions:** The survey included questions about the experience of equity communities like trip purpose, schedule flexibility to avoid peak traffic, economic burden of transportation costs, and willingness and ability to register for income-eligible programs. Optional demographic questions were also included to determine if the sample of survey participants was representative of Orange County.

WORKSHOP 1: APPROACH AND OUTCOMES

Workshop 1 was held on Tuesday, October 4, 2022, from 6-7:30pm at the Ponderosa Park Family Resource Center in Anaheim. The midweek evening scheduling and venue were recommended by city staff and community organizations consulted to advise planning. Workshop 1 introduced the public to the Project with a general overview, and shared preliminary equity data maps, draft equity Project goals, and key case studies for discussion and public input.

The workshop was promoted over a three-week period through targeted outreach and collaboration with city staff from nine (9) corridor cities and twelve (12) community organizations based in equity communities. Outreach to cities and community organizations included emails, phone calls, and attendance to existing meetings to announce and discuss the workshop opportunity. The postcard (see *Figure 16* above) developed to promote the workshop was available in English, Spanish and Vietnamese – the dominant languages spoken in the project area. Digital and print postcards were distributed to city staff to share through their community engagements and email lists, and to community organizations to showcase in their brick-and-mortar facilities and share through their email lists. This approach yielded seven (7) public participants, most of whom were members of a community organization called Madres en Accion.

The workshop was designed as a hybrid event, with two ways to join one workshop: in-person or via Zoom remotely. Offering a choice in the method of attendance was intended to reduce barriers like distance, transportation, and childcare needs. Interpreters were available for Spanish and Vietnamese speakers. In addition to the presentation, interactivity was facilitated by Poll Everywhere and discussion prompts to get feedback on the topics presented. The presenter was agile in moving through slides in a different order than planned based on the concerns expressed by the public. Multiple moderators facilitated conversation while using a writing board to capture themes in feedback, showing real-time documentation to participants. Below is a summary of discussion themes and key points raised by participants.

- **Theme 1: Prove purpose and need.**

  - Workshop participants were interested in seeing evidence that the existing HOV2+ needs a solution at all. And if so, what is the evidence that an EL would help traffic conditions overall, not just in one lane. They were also curious why this particular section of the corridor was selected for this Project.

- **Theme 2: Further explore the root causes of traffic patterns.**
  - Workshop participants expressed concern that local residents are not the only contributors to traffic, siting traffic for events and business. They suggested Caltrans engage large businesses and discuss how they plan to contribute to improving traffic conditions, an idea they coined "business partnerships".
- **Theme 3: Affordability of toll costs and access to toll transponders.**
  - Workshop participants expressed concern about the disproportionate economic impact on multi-generational households with multiple cars and low-income households who have cars out of necessity rather than comfort. In these cases, a toll would be perceived as increasing the cost of car ownership when car ownership is already an economic burden.
  - Workshop participants were curious about pricing models and an estimate of what they should expect to pay per trip. There was consensus that FT transponders have proven difficult to find in their neighborhoods and expressed great interest in case studies where transponders were available at common local retailers. They indicated robust engagement will be critical to making transponders and income-based programs accessible.
- **Theme 4: Project benefits for local communities**
  - Workshop participants were curious what other benefits the Project could provide in addition to travel time benefits that could be experienced by local communities along the corridor.
- **Theme 5: Current and future enforcement of lane use.**
  - Workshop participants were curious about how FT technology provides verification, and whether California Highway Patrol (CHP) plans to enforce EL rules.

The workshop experience exemplified quality over quantity, as all participants were deeply engaged and asking important and valid questions.

COMMUNITY SURVEY: APPROACH AND OUTCOMES

The community survey was first announced at Workshop 1 to continue engaging that established base of participants, and leverage word-of-mouth promotion. The community survey was open for responses for four (4) months from October 2022 – January 2023. The survey was available in a digital format, and promoted through the same network of city staff and community organizations as Workshop 1. This approach yielded 235 survey participants. The survey was designed to fill data gaps in understanding unfilled by traditional data sources used by the Project's Equity Study, Community Impact Assessment and Traffic Study. For example, the survey asked about trip purpose, common destination types, whether toll costs create economic burden, and perceived barriers to participating in income-based programs.

Importantly, the survey participants who answered the optional demographics questions were a demographically representative sample of Orange County which gives confidence that the answers received are less likely to be skewed by overrepresentation of a homogenous group. The survey asked optional questions about race and income demographics. 164 of 235 participants willingly answered. *Table 5* below shows survey demographics relative to Orange County demographics based on Census data.

Table 5 Demographics of Survey Respondents

Race	Survey	County (ACS)	Household Income	Survey	County
LATIN(X)	28%	34%*	UNDER $50,000	21%	24%
ASIAN	15%	22%	$50,000-$100,000	29%	25%
BLACK	4%	2%	OVER $100,000	50%	50%
NATIVE AMERICAN	4%	0.4%			
WHITE	39%	69%			
NO RESPONSE	23%	-			

*The Census uses the term "Hispanic" and identifies it as an ethnicity, while the survey used the more inclusive term "Latin(x)" and simplified the demographic question by identifying it as a race.

The overwhelming majority of 235 survey respondents primarily drive alone (95%) and take an average of 7.8 trips on I-5 in a week. As expected, most of those trips occurred in the mornings 5-9am (62%) and late afternoon 3-6pm (59%). This baseline established that survey participants regularly use the corridor during times known for peak traffic and congestion, and have the personal experience to respond thoughtfully to more in-depth questions.

While most respondents (60%) strongly agree or agree they are interested in a more efficient trip on I-5, a significant number of respondents (40%) were less interested in the idea. Further, the majority of survey respondents selected strongly disagree (63%) that an express lane will deliver a more efficient trip. The pattern of respondents selecting strongly disagree continued with willingness to pay for a more efficient trip (58%), and interest in toll lane access 7 days a week (62%). These responses did not demonstrate public confidence in the efficacy of express lanes as a way to improve traffic and congestion, which echoes the sentiment of Workshop 1 participants.

Trip purpose was important to understanding what destinations require use of the corridor, and whether those destinations are essential as discussed in the Literature Review section. Respondents were able to select multiple responses. Work (81%) and leisure (86%) were the most popular responses. However, the corridor is also used for access to groceries (42%) and healthcare services (33%) which are essential destinations, in addition to work. Most respondents have no schedule flexibility (48%) or limited schedule flexibility (40%) to avoid peak traffic and congestion periods, which increases the likelihood of experiencing travel time delays.

To supplement the income and housing burden quantitative data in the Affordability map in The Data section, the Study wanted to understand whether toll costs would be an economic burden to their household and gauge their interest in common toll subsidy programs like a free transponder, toll credits, and toll discounts. Aware that the significance of these questions would vary based on income status, the Study did a unique analysis of responses from survey participants whose household incomes are $75,000 or less (based on optional survey demographic data), compared to all survey respondents. These questions had five (5) answer options on a Likert scale from strongly agree to strongly disagree. The responses were weighted and averaged for the two groups. *Table 6A-C* below shows the differences in response from lower income participants on income-related challenges and solutions. There is higher agreement that toll is likely or very likely to be an economic burden to lower income households, and higher interest from that group in toll subsidies, with the greatest interest in free transponders (i.e. waived start-up costs) and toll credits.

Table 6A Responses from Lower Income Households on Economic Burden and Subsidy Types

Prompt	Lower Income Response	Other Responses
Toll as economic burden on the household	3.22	2.91
Interest in free transponder	3.00	2.52
Interest in toll credits	2.92	2.53
Interest in toll discounts	2.77	2.48
Transit pass discount (ex. EL buses)	2.95	2.63

The survey also asked if a toll subsidy program were available, how able and willing would the respondent be to complete a registration process and start and maintain a FT account for compliant use of an express lane. Below are the weighted responses for lower income participants and all participants. Most notably, lower income participants are more willing to register for subsidy programs and provide proof of income for eligibility. However, interestingly, lower income participants are consistent with the general population in having less ability and willingness to buy a FT transponder, connect their bank accounts to their FT account, and maintain the required minimum balance in the FT account. In other words, those three things are general pain points with the community regardless of income status.

Table 6B Responses from Lower Income Households on Program Registration and FasTrak Accounts

Prompt	Lower Income Responses	Other Responses
Ability and willingness to register online or by phone	3.11	2.85
Ability and willingness to show proof of income annually	3.00	2.31
Ability and willingness to buy a FT transponder	2.00	2.05
Ability and willingness to maintain FT minimum balance	2.29	2.22
Ability and willingness to connect bank account to FT	2.19	2.19

In addition to asking about traditional toll subsidy types, the survey also asked about the transportation benefits the community would be interested in if there was an opportunity to invest excess toll revenue. Aware the mobility and connectivity needs may be different in equity communities than other communities, the Study did a unique analysis to capture the perspectives of participants who are lower income (LI) and people of color (PoC), two indicators of equity communities outlined in the Preface. Across these two groups, there is a clear preference for bus and rail transit development, while other respondents are just as interested in bus and rail as bike and pedestrian infrastructure.

Table 6C Responses from Lower Income Households and People of Color on Investment of Excess Toll Revenue

Prompt	PoC Responses	LI Responses	Other Responses
Bus and rail transit development	3.39	3.25	3.12
Bike and pedestrian infrastructure development	3.31	3.20	3.12

WORKSHOP 2: APPROACH AND OUTCOMES

Workshop 2 was held on Wednesday, March 1, 2023, from 6-7:00pm virtually via Zoom. The midweek evening scheduling was recommended by city staff and community organizations consulted to advise planning. Workshop 2 reviewed data visualizations in response to the request for evidence of carpool lane degradation from Workshop 1, and a presentation summarizing the Exploratory Equity Actions. The workshop was promoted over a two-week period through targeted outreach and collaboration with city staff from nine (9) corridor cities and twelve (12) community organizations based in equity communities. Outreach to cities and community organizations included emails and phone calls.

There were five (5) attendees, fewer than Workshop 1, which did not include the same participants from Workshop 1. One participant asked a question about impact to properties adjacent to the corridor, as someone who managed a commercial site in the City of Tustin. Caltrans responded that there will be an opportunity for public review of the Environmental Document by June 2023, which will acknowledge impacts, if any, to local properties. The event concluded without further discussion or input from the public.

Both workshops and the community informed and refined the Project's equity goals and EEAs.

PART IV. EXPLORATORY EQUITY ACTIONS

OVERVIEW

This section outlines 22 EEAs for consideration that each present an opportunity to advance the benefits and distribution of benefits to the project equity communities defined in the Equity Data Analysis. The actions are aligned to the six project equity goals explained in the Introduction: Collaborative Engagement, Access to Information, Affordable Express Lanes, Excess Toll Revenue Investment, Benefits for Transit Riders, and Equitable Toll Enforcement. These are a combination of goals related to process equity and outcome equity.

An equity case is made for each action, however further assessment of the exploratory actions is necessary to shortlist and select those that move forward to pilot implementation. Further assessment includes administrative, operational, and cost feasibility, as well as input and support from equity communities on the actions that would bring the greatest value. The action profiles include three elements: Concept Description, Opportunity for Equity, and Considerations for Success. The profiles are designed to offer an informed starting point for further agency discussion and assessment of each action.

The equity actions can stand alone but a suite of actions is encouraged to optimize benefits to equity communities. Cost feasibility is particularly important in understanding which or how many actions can be sustainably funded. And operational and administrative feasibility are important in understanding what policies, processes, and resources are needed to deliver an action. Even if multiple actions are selected to move forward to pilot implementation, they may be launched in a phased approach based on potential excess toll revenue growth over time, time needed for collaboration between Caltrans and key stakeholders, and the observation of lessons learned from one action that may apply to another.

Many of the actions will require income eligibility. Income is a consistent data point that can be verified by a neutral third party to qualify a customer to receive the benefits of a given action. However, this does not mean that low-income households are the only demographic served by the actions. It's important to understand that income is not the only indicator of an equity community, and the actions do and should serve other lived experiences of PoC, zero or limited car households, non-English speakers, and more. The actions also consider general historical context about how some inequities in transportation manifested to interrupt similar thinking on this Project: creation of benefits for some at the cost of others, over and underrepresented voices and the associated patterns of public investment, and technology advancements that create new access issues for equity communities.

Connecting Equity Actions to Emission Reduction

The exploratory equity actions for Affordable Express Lanes, Excess Toll Revenue Investment, and Benefits for Transit Riders are consistent with the guidance of California Senate Bill 743 (SB 743) which challenges transportation infrastructure to develop in ways that improve resiliency to climate change, by creating diversity of options that better connect people and places, and encourage people to take less car trips, and more alternative transportation trips. If infrastructure enhancements can encourage this behavior-change, California can reduce the emissions that contribute to poor air quality and resulting public health concerns.

To serve the goals of SB 743, development of infrastructure and sustained use of infrastructure must both be achieved. In other words, the express lane construction itself is only as good as how well people use it. Creating awareness, access, and desire to use the express lane are key to sustaining the behavior

that can reduce the number of cars on the road and vehicle emissions in the air. The equity actions focus on the awareness, access, and desire elements that will make the infrastructure more successful.

Stakeholder Involvement in Equity Actions

All exploratory equity actions rely in some way on collaboration between Caltrans and other agencies and organizations, which include, but are not limited to, state and local transportation agencies, city jurisdictions, community-based organizations, and media outlets. Although Caltrans initiated the Study, the equity actions resulting from the Study may not be actions Caltrans can single-handedly deliver. Caltrans may play multiple roles in the delivery of selected actions: the lead agency driving implementation, an agency partner contributing thought leadership and resources to a joint plan for implementation, or an influencer engaged in topical dialogues (e.g. conferences, white papers, interagency stakeholder meetings) to champion the need for systemic change.

Equity actions for Collaborative Engagement and Access to Information are an opportunity for Caltrans to lead by developing future scopes, budgets, relationships, and advisory bodies that support meaningful and frequent community engagement and resonating public information. Equity actions for Affordable Express Lanes, Excess Toll Revenue Investment, Benefits for Transit Riders are an opportunity for Caltrans to partner with other agencies, identifying how this Project's equity goals and actions are consistent with other agency's goals and plans, and using that buy-in point to collaborate on assessment and implementation. And equity actions for Equitable Toll Enforcement are an opportunity for Caltrans to influence dialogues on the topic by contributing their awareness of disproportionate impacts equity communities can experience.

Reviewing Equity Actions with Perspective

It's important to be aware of how personal bias can shape understanding and reception of the exploratory equity actions. Personal bias is learned beliefs, opinions, and attitudes based on your experiences, that inform (un)intentional judgements about other people and their experiences, often reinforcing stereotypes or status quo. In professional roles, bias can inform how we interact with others, what advice we consider, how we define success, and more.

There are common fallacies that can be easily automated in thought processes of an individual, group, or organization making systemic decisions. These fallacies can stem from personal biases, especially when personal biases are similar within a group or organization. As you review the equity actions, keep perspective about what is informing your point of view. If you recognize one of the outlined fallacies in your train of thought, acknowledge it. You can capture your original thought, step away, and re-read the actions with fresh eyes and capture a new or different takeaway. You can address it with colleagues in assessment discussions as a check-and-balance measure. You can identify additional data or information you may need to develop a more informed opinion. It is unrealistic to eliminate personal bias as part of human nature, but it is possible to recognize and challenge personal bias.

Below are common fallacies that can foster inequitable, ineffective, and inefficient decision-making.

I don't have this problem, so I don't think it's a big deal for people. Your experiences do not define "normal," and other's experiences are not a deviation from normal. If we believe most people are normal and smaller groups of people deviate from normal, we can easily diminish other's experiences. Consider a stated problem or challenge from the perspective of the equity community.

I haven't seen this done before, so it cannot be done. What you have done or seen done is not the limit of what is possible or worth considering. Status quo is sustained when the same people, approaches,

and resources are applied regardless of the outcomes achieved. This phenomenon can make it challenging to introduce a new idea but does not determine the merit or feasibility of the new idea. Consider the risk-reward; can the perceived risk of trying something different be outweighed by the benefits of equity and public confidence the idea can achieve.

I think the community should like this one, so I don't need to ask them if they do. When you decide what's good for other people, or perceive public engagement as a risk of opposition to your opinion, it erodes public trust by reinforcing power dynamics. People are experts on their own experiences. Educational and professional training doesn't mean you know better what others need. Your interpretation of challenges and solutions should be discussed with the equity communities experiencing them.

As you review the equity actions, keep perspective about what is informing your point of view. If you recognize one of the outlined fallacies in your train of thought, acknowledge it. You can capture your original thought, step away, and re-read the actions with fresh eyes and capture a new or different takeaway. You can address it with colleagues in assessment discussions as a check-and-balance measure. You can identify additional data or information you may need to develop a more informed opinion. It is unrealistic to eliminate personal bias as part of human nature, but it is possible to recognize and challenge personal bias.

Equity Action Profiles

Exploratory equity actions are organized by the project equity goal they serve: Collaborative Engagement, Access to Information, Affordable Express Lanes, Excess Toll Revenue Investment, Benefits for Transit Riders, and Equitable Toll Enforcement. The full matrix can be seen in *Table 7*. Some of these actions are further organized to show variations of a base concept which are identified by alphanumeric numbering. In those cases, if there is interest in the base concept, only some variations would move forward to selection and implementation. Also, equity actions may be applicable to more than one project equity goal which is noted by an asterisk (*).

Each action profile includes three elements: Concept Description, Opportunity for Equity, and Considerations for Success. The latter, Considerations for Success, will surface big-picture and high-level operations, administrative, and cost considerations, but is not intended as a comprehensive assessment of the feasibility of the action. A comprehensive assessment will need to be a next step to follow this initial Study. Instead, the big-picture high-level approach is helpful in identifying both similar and unique considerations for each of the actions so that no individual action is assumed to be unequivocally "easier" or "harder", but simply different from the next with its own merits, challenges, and benefits.

Table 7 Caltrans District 12 I-5 Exploratory Equitable Outcomes Matrix

Guidance to Interpret the Outcomes: *The exploratory equitable outcomes are organized based on the project equity goals presented to and confirmed with the community in the project's October 2022 Equity Community Workshop. The scope of the Equity Study includes identifying equitable outcomes. However, evaluation, short-listing, and selection of recommendations for adoption will be part of future phases of the project. Therefore, the outcomes identified do not assume any particular agency is managing operations and maintenance of an express lane facility; nor a specific estimate of gross or net toll revenue; nor the feasibility or sustainability of any outcome. Explanation of why each outcome is equitable will be part of the written analysis in the Equity Study.*

Legend: ** May be applicable to more than one equity goal. Section will identify which other goals served by the EEA*

EQUITY GOAL 1 **Collaborative Engagement**	EQUITY GOAL 2 **Access to Information**	EQUITY GOAL 3 **Affordable Express Lanes**	EQUITY GOAL 4 **Benefits for Transit Users**	EQUITY GOAL 5 **Excess Revenue Investment**	EQUITY GOAL 6 **Equitable Toll Enforcement**
A.1 Seek Meaningful Input: Income Eligibility Criteria for Income-Based Programs	A Explore Retail Partnerships for Accessible FasTrak Transponders	A.1 Credits: One-Time Preloaded Dollar Credit to Income-Eligible New FasTrak Accounts	A.1 Identify Bus Routes: Explore Existing Bus Routes to use Express Lanes	A SB 743-Based Equity Grant Program for Local City Projects	A.1 Debt Mitigation: One-time Balance and Fine Consolidation for Income-Eligible Drivers
A.2 Seek Meaningful Input: Preferred Equity Actions to Shortlist and Select for Adoption	*B.1 Multilingual and Cultural Communication: Digital, Print, and In-person Distribution	A.2 Credits: Monthly Autoloaded Dollar Credit to Income-Eligible FasTrak Accounts	A.2 Identify Bus Routes: Explore New Bus Routes to use Express Lanes		A.2 Debt Mitigation: Payment Plan Program for Income-Eligible Drivers
A.3 Seek Meaningful Input: Identify Potential Barriers to Applying for Income-Based Programs	B.2 Multilingual and Cultural Communication: Changeable Message Signs on Corridor	B.1 Discounts: Trip-Based Toll Discount for Single Income-Eligible Drivers, Regardless of Carpool	*B Explore Income-Eligible Transit Passes		A.3 Debt Mitigation: One-time Outstanding Balance Forgiveness Program for Income-Eligible Drivers
*B Compensated Community Organization Partnerships		B.2 Discounts: Ongoing No-Cost Pricing Model for Income-Eligible Carpoolers			B.1 Action on Unpaid Balance: Prevent Reporting to Debt Collection Agencies for Income-Eligible Drivers
		C Reduce or Waive FasTrak Account Minimum Balance for Income-Eligible Drivers			B.2 Action on Unpaid Balance: Prevent Reporting to the DMV for Income-Eligible FasTrak Users
		D Flat Rate Toll Pricing for Income-Eligible Drivers			

1 COLLABORATIVE ENGAGEMENT

Goal: Consult and collaborate with equity communities on the selection and prioritization of EEAs through meaningful public engagement.

1 – A.1 | Seek Meaningful Input: Income Eligibility Criteria for Income-Based Programs

Concept Description

The catalogue of EEAs includes several income-based subsidy programs that reduce the cost of traveling in the express lane for income-eligible drivers. Income is a consistent data point that is verifiable by a third party and is regularly used to qualify for social assistance programs like SNAP. An income threshold will need to be defined based on the FPL guidelines, which considers household income (gross earnings) and household size (number of people in residence) to determine poverty status. The guidelines include a multiplier table, a resource that can be used to consider cost of living in how poverty or low-income is defined. The 2023 base FPL is $30,000 for a family of 4, which represents 100% on the table. For example, using the multiplier table, 200% would double the income to $60,000 for a family of 4.

This action proposes engaging equity communities through events and activities to capture their input on the income and household size requirements to be eligible to participate in any income-based subsidy programs that may be selected for implementation. Engagement does not mean asking the community to name an income level at random. Instead, the community can be informed about the FPL tool and be presented a few income-level options with a case for each one. The community would have the opportunity to provide input on what income-level option is inclusive of the most drivers from equity communities. Community events and activities can be specific to this dialogue and may need to be iterative not one-time occurrences.

Opportunity for Equity

One way to build or improve relationships with equity communities is to ensure they feel seen and heard. In other words, talk with them (*What do you think?*), not at them (*Here's what we decided for you*). Given that income-based programs are designed to include them in the benefits of the express lane, they should be consulted to determine if income-level options would allow their families to participate in the programs. The means of engagement can allow or hinder meaningful community input. For example, traditional outreach methods like a mailer, webpage, public meetings, and tabling do not create space for the necessary dialogue about distance to essential destinations that determine mode choice, household transportation costs, and economic burdens in the context of cost of living, land use, and travel patterns in Orange County. Decision-makers will have the opportunity to learn what proportion of monthly income is spent on commute expenses in lower income households. Instead, a community workshop or an interactive activity at an existing community event will give decision-makers the opportunity to learn what proportion of monthly income is spent on commute expenses in lower income households, and other valuable perspectives to move forward with an option that has public support.

To facilitate participation and equitable access, engagement events or activities should be coordinated through community organization partnerships, planned based on community-preferred dates, times, and venue, offer advanced notice of the opportunity to participate, and provide digital, print, and in-person translation of content.

Considerations for Success

This specific discussion topic, income eligibility criteria, is relevant to the agency designing effective and efficient income-based express lane programs. An income requirement that is too low can result in low program participation, meaning the operational and administrative work to implement the program would have a low return on investment. If the income requirement is too high, the pool of participants could be larger and incommensurate with the funds available. Also, the status of low-income can be both actual and perceived. For example, a household may feel economically burdened, but not fall within a suggested income level. The agency needs to understand community's perspective on actual and perceived economic burden.

The agency will need to proactively plan for the type of engagement that will return meaningful input. Proactive planning includes scope, budget, schedule, and talent that are prepared for the coordination, promotion, hosting, and debriefing required for successful engagement. If one of these elements is short-changed, there is an automatic impact to the other elements. For example, if budget is limited or shifts in the course of the project, so too will scope and schedule which can change the quality and quantity of engagement achieved.

The talent, or project team, should define success ahead of engagement events and activities. Metrics of success include total attendance, diversity of attendees, number of attendees who participate, whether input was received, and the occurrence of access issues. Additionally, qualitative success would include the level of public confidence which can be gauged by body language and tone, and comments and input. The project team should discuss their observations in a debrief, along with the quantitative data. Often, equity communities are looking for authenticity, transparency, and respect from government officials or representatives, due to awareness or memories of historic communication gaps and marginalization in civic dialogue. Content should explain complex ideas or processes in plain language, speakers should be as diverse as the community they're engaging, and speakers should listen to understand rather than planning a rebuttal while a question or comment is expressed.

1 A.2 | Seek Meaningful Input: Preferred Equity Actions to Shortlist and Select for Adoption

Concept Description

There are 22 Exploratory Equity Actions. They will not all be pursued. Instead, a shortlist of preferred actions will develop that will lead to selection of action(s) to implement. The process to arrive at action(s) to implement should involve the equity communities the actions are designed to serve. For example, there may be a preference in the type of actions selected for each category, preferences in the order different actions are piloted if limited funding is available, and preferences in the process of applying for income-based programs. This action proposes engaging equity communities through events and activities to capture their input on these details. Engagement does not mean asking the community to randomly pick different equity actions. Instead, the community can be informed of the agency's assessment on feasibility, projections of available funding and program participants, and whether an action can be implemented near-, mid-, or long-term. The community would have the opportunity to use this context and their personal experiences to provide input on which equity actions move forward. Community events and activities can be specific to this dialogue and may need to be iterative not one-time occurrences.

Opportunity for Equity

One way to build or improve relationships with equity communities is to ensure they feel seen and heard. In other words, talk with them (*What do you think?*), not at them (*Here's what we decided for*

you). The means of engagement can allow or hinder meaningful community input. For example, traditional outreach methods like a mailer, webpage, public meetings, and tabling do not create space for the necessary dialogue on process literacy (that is, transparency on the considerations and steps the agency needs to take to realize an equity action), and what the cost-reward is from the community's perspective (that is, whether an equity action with a lower/higher level of effort offers a lower/higher value of benefits). If this engagement is not conducted, and an assumption is made about the value of shortlisted or selected equity actions, that could lead to a public narrative that the project did not yield equitable outcomes.

To facilitate participation and equitable access, engagement events or activities should be coordinated through community organization partnerships, planned based on community-preferred dates, times, and venue, offer advanced notice of the opportunity to participate, and provide digital, print, and in-person translation of content.

Considerations for Success

This specific discussion topic, preferred shortlist and selected equity actions, is relevant to the agency implementing equity actions that will encourage and sustain use of the express lane infrastructure.

For all variations of Seek Meaningful Input, the agency needs to proactively plan, scope, budget, schedule, and talent for successful engagement, and define quantitative and qualitative event and activity metrics of success.

1 – A.3 | Seek Meaningful Input: Identify Potential Barriers to Applying for Income-Based Programs

Concept Description

Income-based programs need to offer user-friendly application processes. Without consideration for user-friendliness, equity communities will not be able to reap the affordability benefits the selected program(s) are designed to provide. Equitable user-friendly considerations include digital access and literacy, language differences, variety of accepted documentation, ease of upload or attachment of documentation, wait time for confirmation of qualification, frequency of re-verification, ease of access to informational and technical support, and more. This action proposes engaging equity communities through events and activities to capture their input on these details, especially for those with experience applying for other social assistance programs. Community events and activities can be specific to this dialogue, and may need to be iterative not one-time occurrences.

Opportunity for Equity

One way to build or improve relationships with equity communities is to ensure they feel seen and heard. In other words, talk with them (*What do you think?*), not at them (*Here's what we decided for you*). While an online application and informational web page are standard, equity communities may need more interactive and innovative approaches to ensure their awareness and participation. For example, tabling at community events with i-pads that allow them to begin registration with basic information and receive a follow up email to complete the application, or information and application sessions hosted at community organizations and public libraries with computer labs, offering floating guides to help one-on-one. Engagement is an opportunity to ask equity communities about their recommendations on how to encourage application participation.

Also, there are technical solutions to be addressed; not just to close the divide of digital access and literacy, but to create a user-friendly process that doesn't overburden the applicant. For example, time

savings may be raised as a specific barrier. Free time comes at a premium when holding multiple jobs, acting as caretakers in multi-generational households, longer travel times from home to essential destinations or zero-car households, and similar experiences. Technical solutions that optimize their time may include the ability to save your place in the application and come back later, a chat feature for quick on-demand answers that don't require excessive reading or research, the ability to upload screenshots versus requiring the original documentation or a third-party submitter (e.g., employer), and the like. Engagement is an opportunity to ask equity communities about their specific barrier concerns and recommendations on interface and process solutions.

Considerations for Success

This specific discussion topic, barriers to applying, is relevant to the agency tailoring User Interface (UI)/User Experience (UX) and informing agency policies and processes for income verification, because often agencies can be more focused on setting the program up and view this as the "win", not realizing program availability and user-friendly access are equally important. To be successful in user-friendliness for equity communities, the agency will need to think beyond what is legally required like ADA accessibility and language translation. Depending on the nature and scale of recommendations from the community, the agency may need to organize technical enhancements into a phased approach where there is a commitment and plan to improve the user experience over time.

For all topics of Seek Meaningful Input, the agency needs to proactively plan scope, budget, schedule, and staff for successful engagement, and define quantitative and qualitative event and activity metrics of success.

1 – B Compensated Community Organization Partnerships*

*This equity action serves two goals: Collaborative Engagement and Access to Information.

Concept Description

Community organizations are critical assets to project teams and serve as a conduit to equity communities and a partner in planning engagement events and activities. Community organizations can include community centers and extracurricular programs, non-profits providing social services or cultural experiences, small business coalitions, places of worship and more. In other words, they don't need to have a transportation planning background; instead, they need to understand the lived experiences in the community, and be a voice and source of information the community trusts. Community organizations bring value to project teams by advising engagement plans, providing spaces to host engagement, and promoting participation in engagement. They also bring insight on public perception and contribute input on decisions that will impact their constituents. This equity action proposes that community organization partnerships be included in future project engagement plans, and that identified partners be compensated with payment for their support and contributions.

Opportunity for Equity

Local community organizations often have deep roots in equity communities and have established mature relationships that project teams would not be able to achieve in the relatively short process of project delivery. A partnership between the organizations and project team enable engagement to be more inclusive, bringing opportunities for project input into the spaces equity communities are most comfortable in and regularly frequent. This method demonstrates an intentional effort to make equity communities feel seen and heard, meeting them where they are. Also, the compensation the organization receives is reinvested in the community through the resources or services the organization provides to equity communities.

Considerations for Success

This specific discussion topic, community organization partnerships, is relevant to the agency achieving more robust community engagement and participation. The agency should maintain its own contact database of community organization partnerships so successful relationships can transcend this project and serve others.

Similar to Seek Meaningful Input actions, the agency will need to proactively plan, scope, budget, schedule, and talent to support identification and inclusion of community organizations in future phases of the project. Community organizations should be compensated as a direct expense paid, not as a contractor through invoicing. This eliminates the barrier of the community organization meeting requirements of contractors that are beyond their resource capabilities, like insurance coverage. The agency should develop a letter of agreement between the agency and the organization that outlines time commitment and expected contributions, how and when payment will be received, and establishes a primary point of contact for both parties.

2 ACCESS TO INFORMATION

Goal: Use diverse means to provide complete access to general project and selected Exploratory Equity Actions information regardless of digital barriers, language differences, or attendance to public meetings.

2 – A | Explore Retail Partnerships for Accessible FasTrak Transponders

Concept Description

Anyone traveling in the express lane is required to have a FT transponder mounted in the car. The transponder allows FT technology to verify car occupancy, and determine the toll cost for your trip based on distance and level of traffic. To help equity communities be compliant with this requirement, this equity action recommends the agency partner with local retailers like grocers, pharmacies, and gas stations to make the transponder available for purchase in places people already frequent. Importantly, the locations of retailers need to be within equity communities for this equity action to create the intended convenience.

Opportunity for Equity

One way inequities persist in transportation is disproportionate access for equity communities. Disproportionate access doesn't necessarily mean no access, but can include tedious workarounds or additional steps others don't have to take. In other words, general information about how to get a transponder isn't particularly helpful if the transponders are not readily available in your neighborhood. Also, local retail workers in equity communities may be more able to communicate in the native non-English languages of their customers, which can be an added comfort in the process of getting a transponder.

Considerations for Success

This action is relevant to the agency being accountable in where and how FT transponders can be procured to ease the transition to a paid lane by ensuring existing carpoolers and other equity community users can be compliant and avoid violations for them and loss of revenue for the agency.

The agency will need to inventory what retail locations are available in equity communities along the corridor, recognizing that some equity communities may have more local chains or small business retailers than big box retailers. A plan will be needed to outline the outreach approach to retailers, the

business proposal they will be presented to encourage their participation, and the process for collecting the required prepaid balance of $25 that is credited as a balance on the FT account. Retailers need to have the capability to process multiple forms of payment including credit, debit, check, and cash. As retail partners confirm their participation as a FT retailer, the agency will need to ensure retail location information is easily available to the public. A web page with an interactive map populated with retail locations should be developed and published, and each of the retailers should be required to promote themselves as a FT retailer on their Google Business Profile, websites, social media, print circulars, and in-store signage.

2 – B.1 | Multilingual and Cultural Communication: Digital, Print, and In-person Distribution*

*This equity action serves two goals: Access to Information and Collaborative Engagement

Concept Description

All project and equity action information should be provided in predominant non-English languages spoken in the area, Spanish and Vietnamese. This includes digital, print, broadcast and in-person translation and interpretation. Also, equity communities resonate with familiar and trusted voices in their communities, whether community organizations, cultural media outlets, or individuals like leaders of neighborhood councils or local personalities. This equity action supports project awareness and, perhaps more importantly, allows non-English communities to engage in dialogue on complex topics beyond conversational English like income eligibility, preferred shortlist and selected equity actions, and barriers to application for income-based programs.

Opportunity for Equity

This equity action fosters inclusivity and representation, particularly for PoC historically marginalized from civic dialogue. Multilingual content can also encourage participation and capture the voice of people whose beliefs, values, opinions, and attitudes have been stereotyped historically.

Considerations for Success

This action is relevant to the agency demonstrating inclusivity beyond translation required by NEPA/CEQA for the minimal outreach it outlines. After the EP, language translation and interpretation should continue. However, inclusion in not just about language, but also understanding what is familiar, preferred, and comfortable to non-White populations. This cultural competency will prompt thought to leverage cultural media outlets, seek the advice and support of informal community leaders, and meaningfully partner with trusted community organizations. NEPA/CEQA does not require this immersion in equity communities.

Similar to the considerations for Collaborative Engagement, the agency will need to proactively plan, scope, budget, schedule, and talent to support multilingual and cultural distribution of information and inclusion. Usually, third-party resources are needed for language translation and interpretation. Budgets need to accommodate this labor expense, and schedules need to allow for their advanced review of English-version content, especially if preparing for live interpretation for a community engagement event where they will traffic questions from non-English participants to moderators. Other direct expenses, like advertising in cultural media and broadcast, should be considered.

2 – B.2 | Multilingual and Cultural Communication: Changeable Message Signs on Corridor

Concept Description

One method of communication that is unique from public information and engagement are changeable message signs (CMS). CMS are hardware found on the highway, or near on and off ramps, that show a brief travel-related message in orange text on a black digital board. CMS offer drivers advanced or immediate notice of things that might impact their trip like detours, safety tips, and more. Weeks ahead of express lanes launch, CMS can be used to notify drivers about construction dates, provide a reminder to get a FT transponder, announce the date the express lanes open, or promote a URL for more information. One message at a time is shown on the CMS. This equity action proposes that messages related to the express lanes be available on the CMS in English, Spanish and Vietnamese. For example, one message will rotate through each language every minute or so. Drivers who regularly use the corridor will have multiple opportunities to see the message in their language.

Opportunity for Equity

One way inequities persist in transportation is disproportionate access for equity communities. Disproportionate access doesn't necessarily mean no access, but can include tedious workarounds or additional steps others don't have to take. As discussed in the Equity Data Analysis section, current carpoolers using the free HOV 2+ lane are predominantly from lower income households, many of which are non-English and/or zero or limited car households. It is a big change for current carpoolers traveling for free to transition traveling at a price. Equity community drivers who do not currently carpool can still benefit from understanding what changes are on the horizon. Multilingual CMS can bring topline information to the diversity of people in the project area in a way that does not put the onus on the individual to seek out information to be prepared for changes. In other words, the CMS asks nothing of the viewer, which is different from other sources of information that have a call to action like survey participation or workshop attendance. If this ease of access to clear information is afforded to English speakers, it should also be afforded to non-English speakers.

Considerations for Success

This action is relevant to the agency filling the gap between translation of some messages on some platforms, but not on others like CMS. As there is no current policy that requires translation on CMS, it is an opportunity to reflect on what motivates language translation: compliance with policy or inclusivity.

The agency should consider if a policy change is needed to implement this equity action, or if the action can be pursued based on merit with an update to formal policy as a parallel, but not prerequisite, effort. There are usually a limited number of characters that can fit in the space of the black board, leading to short and sweet messages. These messages should be easy and affordable to get translated. However, the technical feasibility of Spanish and Vietnamese may be different because Spanish language uses a lettered alphabet, while Vietnamese language uses characters. Should this be a challenge, there is still value in continuing with an English-Spanish message rotation while a technical solution is identified for Vietnamese.

3 AFFORDABLE EXPRESS LANES

Goal: Create more affordable access for income-eligible travelers to the express lane so they experience more efficient trips, especially to essential destinations.

3 – A.1 | Credits: One-Time Preloaded Dollar Credit to Income-Eligible New FasTrak Accounts

Concept Description

A FT account allows automated debit of toll costs from the account's balance when a user travels in the express lane. A FT account is digitally connected to the user's personal bank account, allowing the transfer of funds to pay for toll costs. A one-time preloaded dollar credit offers income eligible new FT users a head start on their FT account balance. The preloaded dollar credit is a flat amount which can be applied to express lane trips before the user's personal money is debited. For example, a $50 toll credit can afford a user multiple express lane trips, lowering the barrier to entry to experience the benefits of the express lane. This option reduces the start-up costs for the income-eligible user, as FT collects an initial balance of $25 per transponder upon the opening of a new FT account.

Opportunity for Equity

As shown in the Equity Communities Data Analysis section, current carpoolers using the free HOV 2+ are predominantly from low-income households. If a free lane becomes a paid express lane, this user group will be the first to experience the impacts. A one-time credit can encourage them to continue their carpool behavior in the new express lane, and avoid the pitfall of technology advancements leaving behind equity communities. In other words, this option can facilitate the transition of current users from the "old" system into the "new" system. Similarly, new prospective users from low-income households who want to enjoy a more efficient trip can start that experience with reduced startup costs. And finally, income is simply the qualifier – it is not the only indicator of equity that is part of the user's lived experience. For example, current carpoolers are also largely from non-English households and the language and cultural differences should inform public engagement and public information strategies.

Considerations for Success

This action is relevant to the agency developing an incentive to encourage new FT users.

Income is a verifiable data point for eligibility to ensure the benefit is exclusive to the people who need it the most. A maximum qualifying income will need to be defined. Using the methodology of the Federal Poverty Level (FPL) guidelines, household income (gross earnings) must be considered in the context of household size (number of people in residence). Most government social programs, like SNAP, use 200% of the FPL as the maximum qualifying household income. For the year of 2023, the 200% income-to-household size range is $29,160 for a single-person household to $60,000 for a 4-person household. In other words, a 3-person household with a total income of $60,000 would not qualify for the one-time preloaded dollar credit if the 200% FPL is used.

The income threshold also allows the administering agency to estimate the number of potential participants in the project area for budgeting purposes. The one-time toll credit will require a funding source, particularly for the first year(s) of the express lane launch. In subsequent years, should excess toll revenue be available, this can potentially become the ongoing funding source for the credit.

The administering agency will need to determine a logic for the credit amount. A lower credit amount (say, $25) can serve more eligible users, than a larger credit amount (say, $50) that will cover more trips per eligible user. In collaboration with the community, the administering agency will need to determine which brings more value. Other considerations are how quickly the credit will be available in the FT account from the point a user's eligibility and FT account are verified; the number of credit recipients per FT account (one account can fund multiple transponders), and the ability to stack this credit with other express lane equity programs that may exist.

And public engagement and public information will be critical for public perception of the administering agency and the equity program options themselves, and participation by income-eligible users.

3 – A.2 | Credits: Monthly Autoloaded Dollar Credit to Income-Eligible FasTrak Accounts

Concept Description

Similar to the one-time credit reducing FT start-up costs, a monthly dollar credit would sustain the boost to an income-eligible user's FT account. As the user makes trips in the express lane, the monthly autoloaded dollar credit is a flat amount that would cover the cost of some of their monthly trips reducing the amount of personal funding they contribute to their account. The monthly credit is a flat amount that will be autoloaded to an eligible user's account each month. For example, if a user's monthly express lane trips amount to $75, a $25 monthly credit would reduce the user's personal contribution to $50 a month. This option also allows an eligible user to experience the benefits of the express lane by reducing the barrier of cost.

Opportunity for Equity

Low-income status is often an ongoing state of quality of life. Other express lanes' income-based programs require income verification annually. So for the duration of at least a year, it is assumed that the low-income status persists. The cadence of the monthly credit can meet this ongoing need, and allow for regular travel on the I-5. The community survey captured demographics of participants showing participation from a demographically representative sample based on the makeup of Orange County. Survey responses to trip purpose and schedule responses show regular travel on the I-5 is overwhelmingly for essential trips, particularly for resources that may not be available where they live: 81% work, 42% groceries, and 33% healthcare. And 48% of these participants identified that they do not have the schedule flexibility to avoid rush hour periods for these trips. In other words, they are making essential trips at times when a more efficient trip will likely require use of the express lane, and are unlikely to have privileges like remote work as an alternative to commuting.

Considerations for Success

This action is relevant to the agency offering ongoing assistance for ongoing participation, which can bring greater value than no participation, and therefore less revenue.

In addition to income, consistent use of the express lane can be another qualifier for this action. If an income-eligible user makes less than a certain number of express lane trips a month for two (2) or more months in a row, that may indicate that their travel behavior no longer represents a consistent or substantial need for the monthly credit. Other terms and conditions can determine whether unused credit rolls over to the next month.

Similar to the one-time credit, income eligibility based on the FPL needs to be determined, funding needs to be identified until potential excess toll revenue becomes available, and the administering agency will need to determine whether a user can stack this discount with other express lane equity programs that may exist. And public engagement and public information will be critical for public perception of the administering agency and the equity program options themselves, and participation by income-eligible users.

3 – B.1 | Discounts: Trip-Based Toll Discount Toll for Single Income-Eligible Drivers, Regardless of Carpool

Concept Description

Express lanes usually charge single drivers a "market rate" toll cost. In other words, people driving alone pay a no-discount, full-cost toll for their trip, usually because they are not carpooling. For this reason, the public has coined the term "Lexus Lane" to refer to this type of express lane user who can simply pay their way to a more efficient trip. An ongoing reduced toll rate for income-eligible drivers applies a subsidy to the market-rate toll cost, regardless of whether the driver is carpooling. The difference between a toll discount and a toll credit is that the discount is triggered on a trip-by-trip basis, not a point in time or increment of time. For example, an income-eligible user may take an express lane trip today as a single driver and receive this trip-based discount. Tomorrow, that same user may be carpooling in the express lane because their schedule aligned with a passenger for that day, and enjoy a different carpool-based discount.

Opportunity for Equity

If upper income single drivers can pay their way to a more efficient trip, lower income single drivers should have the same opportunity when they need it. The community survey establishes that equity community users are traveling for essential trips, and they do not experience the privilege of schedule flexibility to avoid traffic and reduce their need for an express lane trip. To build on that knowledge, equity communities can experience greater consequences and less resiliency for travel time delays. For example, a shift worker is paid by the hour they are present, their timeliness can determine their employment status, particularly for low-skill high turnover roles. Or, someone who does not have a job with a benefits package, and therefore cannot receive paid time off, is under more pressure to make healthcare appointments on time because it may be challenging to reschedule if missed. Both examples represent two identified essential destinations, work and healthcare. In the event carpool formation is not possible on a given day, but the efficient trip is still necessary, the trip-based toll discount for eligible single drivers could make a significant difference for them.

This is also an opportunity to remember income is simply a qualifier, it is not the only indicator of equity that is part of the user's lived experience. For example, someone can be both lower income and a person of color. Historically, people of color experience systems that are designed to benefit some and not others. The "Lexus Lane" phenomenon is one way people with means afford a privilege (an efficient trip as a single driver) people without means need a workaround (in this case a carpool) to achieve.

Considerations for Success

This action is relevant to the agency creating a path for express lane usage when a carpool is not feasible. The income eligible driver can still afford a more efficient trip if needed, and the agency can still make some revenue, as opposed to no revenue, from that trip.

This discount can be made exclusive to eligible users with a FT Flex transponder, and unavailable for those with a standard FT transponder. The FT Flex transponder is a device with buttons that allow the user to indicate their vehicle occupancy: 1, 2, or 3+. By requiring a FT Flex transponder, it may encourage the user to engage in carpool behavior when they can, and potentially reduce the occurrence of taking every trip as a single driver.

Similar to the credit options previously outlined, income eligibility based on the FPL needs to be determined, funding needs to be identified until potential excess toll revenue becomes available, and the administering agency will need to determine whether a user can stack this discount with other

express lane equity programs that may exist. And public engagement and public information will be critical for public perception of the administering agency and the equity program options themselves, and participation by income-eligible users.

3 – B.2 | Discounts: Ongoing No-Cost Pricing Model for Income-Eligible Carpoolers

Concept Description

The existing traditional HOV 2+ lane currently allows people to carpool for free, and the demographics of current carpoolers are largely from lower-income households, some of which are non-English speaking households or zero car households. If an express lane is introduced, people will be charged to carpool in the lane. A no-cost pricing model for income-eligible carpoolers will sustain their current experience in the free HOV 2+ lane. This no-cost methodology would be applied on an ongoing basis, an evergreen discount to eligible carpoolers. Using the FT technology, users who are honestly carpooling and income-eligible can be verified. The traditional express lane carpool discount (universal to all carpoolers, regardless of income) is intended to encourage behavior-change with single drivers: if you adopt this preferred behavior (carpooling) you will be rewarded with a lower toll cost compared to driving alone (no discount). However, current carpoolers have already demonstrated their adoption of carpool behavior. Therefore, introducing a toll charge, even with a traditional carpool discount, may seem punitive not motivating.

Opportunity for Equity

One way inequity can manifest is when benefits for some come at a cost for others. More specifically, when the burdened are equity communities (like the current carpooler demographics). In other words, the movement to encourage carpooling among single drivers should not create a pricing policy that disadvantages current carpoolers, particularly if those carpoolers are carpooling out of necessity (lower income and zero car households) rather than choice. If we think about the commuter as a customer, then current carpoolers are the loyal customer base to retain. Non-income-constrained customers who choose to adopt carpool behavior or use the express lane as single drivers will generate revenue by paying toll charges. Most customers will likely fall into one of these two categories, and that revenue generation can potentially offset no-cost trips from the likely smaller group of income-eligible carpoolers. And that balance can avoid the inequity of benefits for some at a cost for others.

Considerations for Success

This action is relevant to the agency creating an easier transition for existing carpoolers used to carpooling in a free lane, and other income-eligible carpoolers carpooling out of necessity. To avoid the unintentional consequences of a one-size-fits-all toll policy, these user groups receive free toll for carpooling because their carpool behavior is already motivated and sustained, and the toll will not function to achieve those goals.

Similar to the credit and discount options previously outlined, income eligibility based on the FPL needs to be determined, funding needs to be identified until potential excess toll revenue becomes available, and the administering agency will need to determine whether a user can stack this discount with other express lane equity programs that may exist. And public engagement and public information will be critical for public perception of the administering agency and the equity program options themselves, and participation by income-eligible users.

3 – C | Reduce or Waive FasTrak Account Minimum Balance for Income-Eligible Drivers

Concept Description

A FT account will be required of all drivers who use the express lane. $30 is the minimum account balance required to maintain the account. When the account balance reaches this threshold, it is the user's responsibility to replenish funding. With this option, the minimum balance required will be reduced or waived for income-eligible users. For example, let's say a user's account has reached $30 and they add another $20 to maintain their account. In a low-income household, $50 can make a difference between paychecks. If the minimum balance required can be reduced or waived, an income-eligible user would be able to determine if their limited funds are more needed for other bills or essentials, or trips in the express lane.

Opportunity for Equity

It is a common experience for an income-constrained or paycheck-to-paycheck households to have to choose between important expenses. A required minimum balance can create another instance where this difficult choice must be made. Using the example above, one scenario is that $50 could cover the cost of essentials like groceries, gas, prescriptions, and utilities between paychecks. Also, the transfer of funds to satisfy the FT minimum requirement may be a tradeoff with a minimum balance requirement at their financial institution, which may have its own consequences. Regardless of a user's other financial obligations, they may be willing to make non-express lane trips for a period until they are able and comfortable funding express lane trips. Reducing or waiving the FT minimum account balance will make this option available when they need it.

Considerations for Success

This action is relevant to the agency maintaining express lane customers as they go through potential variations in economic burdens and travel patterns, and reserving potential consequences for toll violation, not less than $30 in a FT account.

Similar to the credit and discount options previously outlined, income eligibility based on the FPL needs to be determined, funding needs to be identified until potential excess toll revenue becomes available, and the administering agency will need to determine whether a user can stack this discount with other express lane equity programs that may exist. Unique to this equity option is customer engagement. Even with a waived or reduced minimum balance, the customer should still be notified of a low balance so they can avoid a violation in the express lanes for lack of funds. And public engagement and public information will be critical for public perception of the administering agency and the equity program options themselves, and participation by income-eligible users.

3 – D | Flat Rate Toll Pricing for Income-Eligible Drivers

Concept Description

This project will use dynamic pricing to determine a unique toll charge for different drivers in the express lane, whose trips start and end in different places at different times There are two key factors that determine the no-discount cost of a user's trip: 1) the distance of the trip, and 2) the level of traffic congestion at the time the trip is taken. First, a base cost is determined by the distance of the trip from the point a driver enters and exits the express lane. Second, the express lane will be most in-demand during rush-hour periods when the level of traffic congestion is higher. At these times, a temporary price increase will affect the total toll cost for the trip.

Both methodologies present an equity challenge for those who live further from their destinations (will pay a higher base cost), and do not have the schedule flexibility to change the time of their trip (will pay the temporary high congestion price). This equity option proposes a flat rate to mitigate both methodologies that may have a disproportionate impact on income-eligible users.

Opportunity for Equity

Lower income households are increasingly seeking more affordable housing that can be further from economic hubs where living-wage employment opportunities, quality healthcare, education, and other resources are. When transportation pricing models are distance-based, there is an unintended inequity of charging people with lower incomes the most (more likely to live further from destinations), and people with higher incomes the least (more likely to afford living closer to destinations). If income-eligible users can instead pay a flat rate, their distance from their destination, which may be a matter of necessity, and their indicated lack of schedule flexibility to avoid peak pricing, will have a reduced impact on their travel costs allowing them to still enjoy the benefits of the express lane.

Considerations for Success

This action is relevant to the agency avoiding unintentional consequences of a one-size-fits-all toll policy by considering how trends outside of the project are impacting the project. For example, affordable housing trends and economic development cannot be changed by this project, but do inform the distance between home and essential destinations that impact toll costs for a subset of customers.

Similar to the credit and discount options previously outlined, income eligibility based on the FPL needs to be determined, funding needs to be identified until potential excess toll revenue becomes available, and the administering agency will need to determine whether a user can stack this discount with other express lane equity programs that may exist. Unique to this equity option is ensuring that the flat rate is less than the market rate using the distance-traffic pricing methodology described above. To do this, an average distance and high traffic price will need to be determined as a baseline, to identify a flat rate that is meaningfully less than the “market rate” cost. And public engagement and public information will be critical for public perception of the administering agency and the equity program options themselves, and participation by income-eligible users.

4 BENEFITS FOR TRANSIT RIDERS

Goal: Allow transit-dependent travelers to experience more efficient trips like individual drivers.

4 – A.1 | Identify Bus Routes: Explore Existing Bus Routes to use Express Lane

Concept Description

Personal vehicles are not the only potential users of the express lanes. Buses can also use express lanes, allowing transit-dependent travelers to experience a more efficient trip same as individual drivers. If a bus traveled in the express lane, the transit riders on the bus would not have to pay the toll drivers in personal vehicles pay. This equity action proposes a collaboration with OCTA to identify existing bus routes traveling parallel to the I-5 or on the highway itself, and coordinate a plan for enhanced service by leveraging the express lane.

Opportunity for Equity

Equity communities can include zero or limited car households which may rely on transit or other non-car transportation to get around. In the generally suburban landscape of the project area, there is less density of land use and alternative transportation options that can make the connection between

people and places more car-reliant than an urban landscape. For a transit-dependent rider, buses that only travel on city streets can potentially limit them to local economic opportunities which may be less diverse and lower paying than opportunities in major job hubs that may be further away. If bus routes can leverage the express lane, that time savings can potentially offer a transit-dependent rider better access to economic opportunity.

Considerations for Success

This action is relevant to the agency leveraging the development of new express lane infrastructure to advance discussions about transit infrastructure. When road pricing projects move forward faster than alternative transportation is developed, drivers don't have the diversity of transportation options that make non-car transportation appealing or convenient. This is an opportunity to make parallel progress, so there is an option to avoid toll.

This equity option would require interagency coordination with OCTA to coordinate express lane access and/or support enhanced service. In addition to an existing route's proximity to I-5, ridership demographics and geographic coverage should be assessed to determine if that route does or will continue to service equity communities. For example, if the bus leveraged the express lane, it may no longer make a series of stops on neighborhoods streets. If the stops no longer serviced are in equity communities, then they are unlikely to experience the express lane bus trip because their pick-up/drop-off points are no longer on route.

Another consideration is a potential cost agreement between agencies – while the trip would be toll-free for the transit rider, a user fee from OCTA can be explored. Then, there are physical considerations, like how select on and off ramps can be designed to accommodate buses and vehicles.

And public engagement and public information will be critical for public perception of the administering agency(ies) and the equity actions themselves.

4 – A.2 | Identify Bus Routes: Explore New Bus Routes to use Express Lanes

Concept Description

Similar to the previous equity action, bus service can provide transit-dependent riders a more efficient trip same as individual drivers. In addition to identifying opportunities for existing bus routes to use the express lane, this equity action proposes collaboration with OCTA to identify new bus routes based on unmet or underserved origin-destination demand. This could include routes to economic hubs in corridor cities in Orange County, or bridging hubs in Orange County with those in Los Angeles County.

Opportunity for Equity

Similar to the previous equity action, new bus routes can better connect transit-dependent riders to their destinations in a suburban landscape with less dense land use and transportation options.

Considerations for Success

This action is relevant to the agency leveraging the development of new express lane infrastructure to advance discussions about transit infrastructure. When road pricing projects move forward faster than alternative transportation is developed, drivers don't have the diversity of transportation options that make non-car transportation appealing or convenient. This is an opportunity to make parallel progress, so there is an option to avoid toll.

Unique to this action, identifying new bus routes, is how access to economic opportunity is achieved. For example, pick-up points in equity communities may need to be paired with drop-off points in economic hubs with diverse job types. In other words, if new bus routes are designed for choice riders with white-collar jobs, those bus routes will not meet the needs of equity communities. A parallel consideration is to assess if new bus routes come at the exchange of cancelled bus routes, and who is being served in each scenario. Scheduling and frequency are other opportunities for new bus routes to serve equity communities, assessing travel patterns to identify if there is a demand for non-traditional travel times for people with multiple jobs, essential jobs, or something similar. If the infrastructure and technology of the express lane can provide a more efficient trip, these considerations will ensure transit-dependent riders can experience that benefit.

Similar to the previous equity action, the interagency collaboration should ensure the market of equity communities are being served, ramp designs are bus-friendly, and explore a user fee from OCTA. And public engagement and public information will be critical for public perception of the administering agency and the equity actions themselves.

4 – B | Explore Income-Eligible Transit Passes*

*This equity action serves two goals: Benefits for Transit Riders and Equitable Toll Revenue Investment

Concept Description

If exploration of how bus routes can leverage the express lanes proceed, and those bus routes are designed to include equity communities in their service, then transit riders should have affordable access to the bus to enjoy a more efficient trip. This equity action proposes interagency coordination with OCTA to launch an income-based reduce cost transit pass in preparation for express lane buses. While this pass can be broadly applicable to any OCTA bus route, not necessarily exclusive to express lane bus riders, the opportunity to encourage ridership is consistent with SB 743 if excess toll revenue is invested in this subsidy.

Opportunity for Equity

As previously discussed, people from zero or limited car households are often transit reliant. An affordable transit pass, paired with bus service and frequency that meet their needs, can potentially support upward mobility through access to economic hubs via an express lane bus.

Considerations for Success

This action is relevant to the agency supporting transit affordability in parallel with considering express lane affordability. When express lane buses are launched, the narrative of affordable access to a more efficient trip will be consistent.

OCTA currently offers reduced fare for college students, youth, and senior citizens known as Specialty Passes. In coordination with OCTA, an income-based fare can be added to this suite of Specialty Passes. Income eligibility based on the FPL needs to be determined, and the process of income verification may be able to leverage OCTA's existing processes to verify student enrollment, age, and other qualifiers for the current passes. Excess toll revenue will be one of multiple funding sources for income-based transit passes, not the only source, in order to sustain the offering.

And public engagement and public information will be critical for public perception of the administering agency and the equity program options themselves, and participation by income-eligible users.

5 EXCESS TOLL REVENUE INVESTMENT

Goal: Invest excess toll revenue in transportation and community projects, or related income-based programs, that create benefits specifically for equity communities.

5 – A | SB 743-Based Equity Grant Program for Local City Projects

Concept Description

Senate Bill 743 (SB 743) is a California State policy to address climate change impacts through transportation enhancements. In other words, how can transportation infrastructure provide a diversity of options that encourage people to make less trips in their cars, and more trips using alternative transportation. If this behavior-change can be achieved, California can reduce the emissions that contribute to poor air quality and resulting public health concerns.

The express lane is one way to meet this policy. But excess toll revenue can also be invested in other local transportation projects that are aligned to SB 743. This equity option proposes the agency administering the express lane also develop a local SB 743- inspired Equity Grant Program local cities can apply to for supplemental funding of SB 743-relevant projects that demonstrate how they improve multi-modal connectivity for equity communities. An equity-based grant program is consistent with the framework of federal grant programs like RAISE, Reconnect Communities, Neighborhood Access and Equity, and others. Relevant projects can include bus and rail development, bike and pedestrian infrastructure, transit-oriented development, multi-modal street design, and the like. This is not a statewide grant program; it is a hyper local grant program that is consistent with a state policy.

Opportunity for Equity

Transportation development can often focus on new and emerging markets of choice-users – people who own and prefer to travel in a personal vehicle. This focus can advance projects that bring new transportation development to neighborhoods with choice-users. This includes service, technology, efficiency, and beautification that can be inaccessible to equity communities, who are more likely to be dependent on alternative transportation. Equity communities are more likely to be from zero-car households, multi-generational households with a shared vehicle, live further from their destinations to access more affordable living, and other lived experiences. And historically, public investment patterns have favored communities with political power and representation among decision-makers. Equity communities often do not have political power and representation, and the public investments in their neighborhoods are often not proportionate to their needs. If the grant program provides supplemental funding specifically to projects that illustrate how they are meeting transportation needs in equity communities, and a commitment to robust public engagement in those communities throughout the project, it can level the playing field for equity communities.

Also, while transportation projects that do not directly serve equity communities can still have a positive impact on air quality in the area, public health improvements are a long-range benefit that is intangible to equity communities currently experiencing connectivity challenges. Rather than simply promising a long-range benefit, this equity program can advance projects that can offer more near-term benefits.

Considerations for Success

This action is relevant to the agency using some of the excess toll revenue in a way that has broader and generational community impact, in addition to the individual benefits of Affordable Express Lane actions.

A potential grant program that is funded by excess toll revenue would be most feasible late stage, after the express lane excess toll revenue baseline stabilizes over an extended period. Equity options that directly serve express lane customers should be prioritized for funding, with this option that serves a broader audience a secondary endeavor if funding is available. Funding may be available if excess toll revenue is healthy, or if participation in express lane-specific equity options underperforms estimates. There are significant administrative considerations to set up an equity grant program, the scale of which may be better managed at an agency level, rather than a district level. Doing so could also allow the pooling of excess toll revenue funds from this and other express lanes projects.

To create a framework for the grant program, equity communities will need to be defined by the agency administering the grant program, which can be informed by definitions adopted by US DOT or other authorities. A steering group and selection committee will need to be established to solicit and review city proposals and define the amount of the grant(s) and the number of project(s) to be selected. The steering group and selection committee are not evaluating the purpose and need, scope, schedule, or merit of the transportation project itself. Instead, they are reviewing the equity business case of the project to identify submitted project(s) that best serve local equity communities. The equity grant program is not designed to fully fund any project. Applicants may be required to demonstrate existing funding so that supplemental funding from this grant program is simply advancing the project's ability to realize its equity goals.

Caltrans recently launched a grant program called Highways to Boulevards inspired by federal grant program Reconnecting Communities, to support city and local agencies in serving equity communities disrupted by bifurcating infrastructure. The structure of this grant program can serve as a model to reference in exploring the proposed SB 743-based equity grant program.

6 EQUITABLE TOLL ENFORCEMENT

Goal: To reduce undue consequences on non-compliant income-eligible drivers, and use approaches that create a path from violator to customer.

6 – A.1 | Debt Mitigation: One-time Balance and Fine Consolidation for Income-Eligible Drivers

Concept Description

A FT account allows automated debit of toll costs from the user's balance when they travel in the express lane. A FT account is electronically connected to the user's personal bank account, allowing the transfer of funds to pay for toll costs. In the event a driver does not have a FT account, does not have a transponder in the car, or does not have adequate funds in a FT account, the user will receive a violation invoice, and subsequent penalties and late fees if the invoice goes unpaid. If this occurs repeatedly, a balance can build that the driver may be unable to afford. This equity action proposes an outstanding balance cap for income-eligible drivers that would consolidate their debt to a more manageable amount to repay. For example, if a few invoices and penalties amount to $100, but a driver can demonstrate their low-income status, the cap could consolidate the amount payable to $75.

Opportunity for Equity

Some drivers may be unbanked (they do not have a bank account that can be electronically connected to a FT account), be unable to meet the start-up costs or minimum balance requirement for a FT transponder, or be generally unaware of the verification capabilities or consequences of using the express lane without FT. If an outstanding balance begins and grows, it can quickly become exceedingly

difficult to pay off if the driver is income constrained. A cap allows a more manageable resolution, especially when it's apparent the penalties and late fees are not working as a stick to force payment.

Considerations for Success

This action is relevant to the agency capturing some missed revenue from non-compliant income-eligible users, and providing a resolution that will allow the violator a clean slate to continue trips as a compliant customer.

Similar to other income-based programs, income eligibility will need to be defined based on the FPL. However, in this case, the driver may not be a FT account holder, so their income verification would be triggered by the violations, not done proactively as with the other income-based programs. This still requires the driver to respond to the notifications they've received to initiate the income-verification to qualify for a consolidated balance; but responding may be less intimidating if they know a midway solution is possible. Coordination with FT would include identifying the dollar point at which the customer notifications will include information about the one-time consolidation to income-eligible drivers who can provide required documentation.

This equity action assumes the agency to be an influencer in industry discussions about equitable toll enforcement, if they observe local trends in violations that make the case.

6 – A.2 | Debt Mitigation: Payment Plan Program for Income-Eligible Drivers

Concept Description

Given the functionality of a FT account and the requirement to travel with the transponder in the vehicle previously discussed, this equity action proposes a payment plan for income-eligible drivers who have outstanding balances. Violations and penalty notifications may be less intimidating to respond to if a payment management solution is available.

Opportunity for Equity

Similar to the equity case for the previous action, people from equity communities may not have the resources or information to avoid a violation. A payment plan offers resolution without further burden.

Considerations for Success

This action is relevant to the agency capturing missed revenue from non-compliant income-eligible users, and providing a resolution that will allow the violator a clean slate to continue trips as a compliant customer.

Similar to the previous action, income eligibility will need to be defined based on the FPL and the income verification would be triggered by the violations requiring the driver to respond to the notifications they've received to initiate the income-verification to qualify for a payment plan. Coordination with FT would include identifying the dollar point at which notifications would include information about the payment plan, what percentage of the total balance is due each month, and more.

This equity action assumes the agency to be an influencer in industry discussions about equitable toll enforcement, if they observe local trends in violations that make the case.

6 – A.3 | Debt Mitigation: One-time Outstanding Balance Forgiveness Program for Income-Eligible Drivers

Concept Description

Given the functionality of a FT account and the requirement to travel with the transponder in the vehicle previously discussed, this equity action proposes a balance forgiveness program for income-eligible drivers, allowing them a clean slate to become a compliant FT customer.

Opportunity for Equity

Similar to the equity case for the previous action, people from equity communities may not have the resources or information to avoid a violation. A forgiveness program offers resolution without further burden.

Considerations for Success

This action is relevant to the agency providing a resolution that will allow the violator a clean slate to continue trips as a compliant customer.

Similar to the previous action, income eligibility will need to be defined based on the FPL and the income verification may be triggered by the violations if the driver isn't a FT user already enrolled in an income-based program. The driver still needs to initiate communication to qualify for a payment plan. Coordination with FT would include identifying the dollar range the forgiveness program applies to, and whether the program applies to one transponder balance or an entire account balance (which can host multiple transponders).

This equity action assumes the agency to be an influencer in industry discussions about equitable toll enforcement, if they observe local trends in violations that make the case.

6 – B.1 | Action on Unpaid Balance: Prevent Reporting to Debt Collections Agencies for Income-Eligible Drivers

Concept Description

In the event of prolonged unpaid balances, debts can be reported to a debt collections agency. This reporting can reduce credit scores. This equity action proposes delaying or preventing this reporting to scale consequences for income-eligible drivers.

Opportunity for Equity

Similar to the equity case for the previous action, people from equity communities may not have the resources or information to avoid a violation. Delaying or preventing reporting to debt collections agencies can allow additional opportunity for debt mitigation strategies, rather than creating further burden. For example, credit scores are reviewed when applying for housing. The potential outcomes of this reporting are not commensurate with the original offense of not paying toll, particularly for a lower income driver.

Considerations for Success

This action is relevant to the agency providing a commensurate response to toll violations, and creates a second chance to manage debt payment in-house. A debt collections agency, which may have limited success, will require a percentage of the overall debt as payment for their service.

Similar to the previous action, income eligibility will need to be defined based on the FPL and the income verification may be triggered by the violations if the driver isn't a FT user already enrolled in an income-based program. Coordination with FT would include a database solution to prevent all income-based program enrollees from this consequence track, and process to retroactively identify income-eligible non-FT users before the reporting is triggered.

This equity action assumes the agency to be an influencer in industry discussions about equitable toll enforcement, if they observe local trends in violations that make the case.

6 – B.2 | Action on Unpaid Balance: Prevent Reporting to the DMV for Income-Eligible FasTrak Users

Concept Description

In the event of prolonged unpaid balances, debts can be reported to the California Department of Motor Vehicles (DMV), which initiates a vehicle registration hold. This equity action proposes delaying or preventing this reporting to scale consequences for income-eligible drivers.

Opportunity for Equity

Similar to the equity case for the previous action, people from equity communities may not have the resources or information to avoid a violation. Delaying or preventing reporting to the DMV can allow further efforts at debt mitigation strategies, rather than creating further burden. For example, if a low-income driver cannot pay their FT debt before their registration is due, their registration begins to incur late fees creating an additional debt. If the driver does not have alternative transportation options to essential destinations, they may continue to drive for work and childcare, risking a ticket for outdated registration, creating another debt. The potential outcomes of DMV reporting are not commensurate with the original offense of not paying toll, particularly for a lower income driver.

Considerations for Success

This action is relevant to the agency providing a commensurate response to toll violations, and creates a second chance to manage debt payment in-house.

Similar to the previous action, income eligibility will need to be defined based on the FPL and the income verification may be triggered by the violations if the driver isn't a FT user already enrolled in an income-based program. Coordination with FT would include a database solution to prevent all income-based program enrollees from this consequence track, and process to retroactively identify income-eligible non-FT users before the reporting is triggered.

This equity action assumes the agency to be an influencer in industry discussions about equitable toll enforcement, if they observe local trends in violations that make the case.