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Tolling for Tomorrow: Road Pricing as a Climate Strategy in California

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Tolling for Tomorrow:

Road Pricing as a Climate Strategy in California

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Client: California Air Resources Board

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Disclaimer

This report was prepared in partial fulfillment of the requirements for the Master in Urban and Regional Planning degree in the Department of Urban Planning at the University of California, Los Angeles. It was prepared at the direction of the Department and of the California Air Resources Board as a planning client. The views expressed herein are those of the author and not those of the Department; the UCLA Luskin School of Public Affairs; UCLA as a whole; or the client.



Tolling for Tomorrow: Road Pricing as a Climate Strategy in California

UCLA Institute of Transportation Studies

A comprehensive project submitted in partial satisfaction of the requirements for the degree
Master of Urban and Regional Planning.

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Executive Summary

California has set the goal of being carbon neutral by 2045 to prevent the worst impacts of climate change. Transportation continues to be the largest source of greenhouse gas emissions in the state and even with a shift to zero-emission vehicles, the path to climate neutrality requires a reduction in per-capita Vehicle Miles Traveled (VMT). The California Air Resources Board (CARB) has set ambitious targets to reduce VMT by 25% by 2030 and 30% by 2045, as outlined in its Scoping Plan. To meet these goals, various road pricing strategies have been proposed and are being implemented across the state.

Road pricing involves charging drivers for the use of road infrastructure to manage traffic flow, reduce VMT, and generate revenue for transportation investments. Various forms of road pricing, such as highway tolling, cordon fees, and parking fees, are used to achieve these objectives. This report investigates the benefits and costs of road pricing in California, focusing on the policy pairings that can maximize these benefits. My research aims to develop a comprehensive understanding of what road pricing can and cannot achieve, and how different projects align with the state's goals of reducing VMT and greenhouse gas emissions.

This project required information from two main sources: a series of informational interviews with staff working on road pricing at the local, regional, and state levels and research of case studies. For the interview component of this research, a qualitative approach was employed to gather insights from government officials at various levels. I conducted 14 interviews over Zoom: 8 were with city- and MPO-level staff, 5 were with staff at state agencies, and one was with a federal policy advocate. Case studies were selected based on projects discussed by interviewees and identified through online research. I chose to research the oldest managed lanes in California (the SR-91 Express Lanes in Riverside County), the newest lanes in the state (projects in San Mateo and Orange County), and a cordon pricing idea under study (LA Metro Traffic Reduction Study).

Key findings from the interviews indicate general agreement on the potential of road pricing to reduce traffic congestion along specific corridors and generate revenue. However, differences emerged between state and local agency responses, particularly regarding project success metrics, equity impacts, and revenue allocation. Case studies demonstrated the effectiveness of road pricing in reducing congestion and generating revenue but also highlighted challenges in equity and public acceptance.

It is clear that road pricing is an important tool in the toolbox of planners seeking to maximize the efficiency of our existing transportation infrastructure. This report recommends the following three policy actions for state and local officials to maximize the potential benefits of road pricing in the state of California:

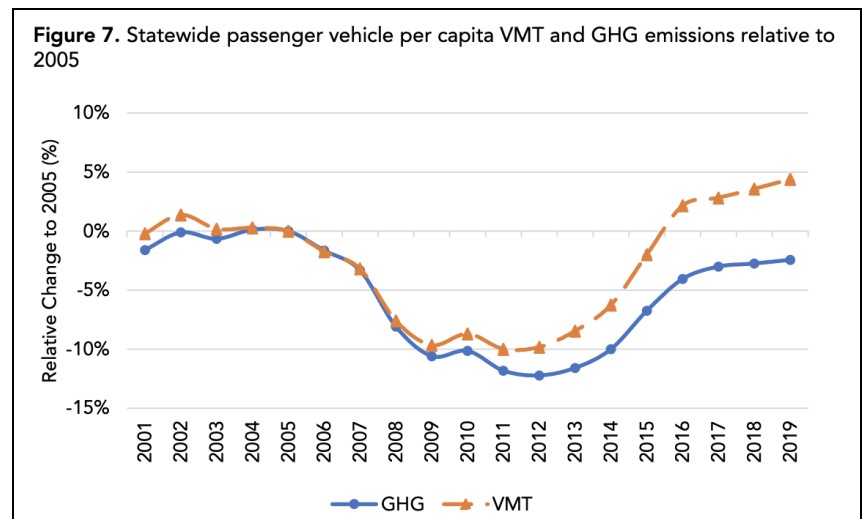
1. **Price Existing Lane Capacity** to maximize the benefits of road pricing and increase the efficiency of our existing highway network.
2. **Increase Government Transparency** with clear messaging on the need for road pricing, the benefits it can provide, and how money will be reinvested.
3. **Invest in Alternatives** to car travel, by prioritizing excess toll revenue for investments in local streets, public transit, and low-income household assistance through programs like Universal Mobility Wallets.

The state of California has offered many carrots over the years for drivers to reduce their impacts: better transit, carpool incentives, etc. These strategies have not worked, however, as per capita VMT continues to increase. Road pricing represents a promising strategy for addressing the complex challenges facing transportation systems, including congestion, emissions, and funding shortfalls. By charging users for the direct costs of road use, pricing mechanisms can incentivize more efficient and sustainable travel behaviors, manage demand for limited road capacity, and generate revenue for transportation investments. To meet the challenge for our time and confront climate change, we need to start tolling today for tomorrow's transportation future.

Introduction

California has set the goal of being carbon neutral by 2045 to prevent the worst impacts of climate change. Transportation continues to be the largest source of greenhouse gas emissions in the state (California Air Resources Board), and even with a shift to zero-emission vehicles, the path to climate neutrality requires a reduction in per-capita Vehicle Miles Traveled (VMT). In recognition of this, the state's multifaceted climate agenda, encapsulated in its Scoping Plan (California Air Resources Board, 2022), sets a clear trajectory for reduction, aiming for a 25% reduction in Vehicle Miles Traveled (VMT) by 2030 and 30% by 2045. Spearheaded by the California Air Resources Board (CARB), these goals have set a path for California to reach its climate goals, and communities across the state are implementing plans to meet their target.

SB375, a cornerstone of California's sustainability framework, links land use and transportation planning to combat climate change. It mandates the creation of Sustainable Community Strategies (SCS) by all Metropolitan Planning Organizations (MPOs), which integrate transportation and housing policies to meet regional GHG reduction targets. When looking at these SCS' across California's diverse regions, one strategy that features prominently in regional plans is road pricing. Each SCS includes some combination of highway tolling, road user charges, cordon fees, and parking fees to meet their SB375 goal. However, the actual implementation of these pricing strategies raises fundamental questions regarding their efficacy and equity impacts, and not all strategies are created equally. For example, many MPOs have plans to introduce highway tolling by building an additional highway lane and tolling it - this would help them relieve congestion, but research on induced demand shows that added capacity increases VMT, which does not meet the goals of SB375. As CARB's recent progress report on the implementation of SB 375 indicates, individuals are driving more miles per day than ever before, and California is not on track to meet its associated climate goals under SB 375 (California Air Resources Board, 2023). This tension between proposed implementation plans and state goals could result in badly designed pricing strategies that collectively undermine California's objectives more than they advance those objectives.



Source: Appendix A of SB150 Report

Research Question

In light of these considerations, this paper aims to delve into the nuanced landscape of road pricing in California, and answer the question: what are the benefits and disbenefits of road pricing, and what policy pairings can be used to maximize the benefits of pricing? I am interested in developing a common understanding of what roadway pricing can and cannot do, and the role it can play in helping California meet its GHG and VMT reduction goals. The research includes a comprehensive literature review, a series of practitioner interviews across the state, and case studies to examine the current state of road pricing conversations in California. In this report, I will highlight the benefits of road pricing and the costs of pricing, as well as offer potential policy pairings to craft a pricing policy that is equitable, politically feasible, and meets state GHG and VMT reduction goals.

Background

What is road pricing? Road pricing refers to the practice of charging drivers for the use of road infrastructure, typically with the aim of managing traffic flow, reducing VMT, and generating revenue for transportation investments. It involves implementing various pricing mechanisms that can vary based on factors such as time of day, vehicle type, and distance traveled. These mechanisms include tolls, fees, or charges imposed on drivers either directly at the point of use or through electronic systems. By pricing road usage, policymakers seek to incentivize more efficient travel behavior by shifting driving patterns to off-peak hours, prompting drivers to consider alternative transport modes, and maintaining smooth traffic flows along a corridor. Pricing also generates excess revenue, which can address existing funding challenges in transportation infrastructure.

In California, road pricing takes various forms, each tailored to specific objectives and contexts. **High-Occupancy Toll (HOT)** lanes, sometimes referred to as express lanes, designate certain lanes on highways for use by vehicles with multiple occupants or those willing to pay a toll, providing an option for faster, less congested travel. **All-lane tolling** systems encompass tolls imposed on all lanes of a particular roadway, ensuring access to improved traffic flow for all users. **Cordon pricing** involves charging vehicles for entering or driving within a specific area, typically a congested urban center, with the aim of reducing traffic congestion and emissions in densely populated areas.

Why is the state pursuing pricing? The pursuit of road pricing in California is driven by several factors, including escalating congestion, increasing traffic volumes, and increasing per-capita vehicle miles traveled (VMT). With a growing population and economy, congestion has become a significant issue in major metropolitan areas and suburbs, leading to longer commute times, air quality concerns, and inefficient usage of existing road infrastructure (Wachs et al., 2020). Additionally, traditional sources of transportation funding, such as gas taxes, are declining due to factors like more fuel-efficient vehicles and the increasing numbers of electric

vehicles on the road. The gas tax in California has not kept pace with inflation or the rising costs of maintaining and expanding transportation infrastructure. The state's gas tax rate has remained relatively stagnant for years, failing to account for the increasing costs associated with road maintenance, repair, and construction. As a result, the purchasing power of the gas tax revenue has diminished over time, exacerbating funding challenges for transportation projects and maintenance efforts statewide (Zhao et al., 2015). Additionally, revenue from cap and trade programs, while continuing to grow through 2030, faces a gradual decline over time, necessitating alternative funding mechanisms such as road pricing to sustain transportation investments and address critical infrastructure needs (California Air Resources Board, n.d.). Road pricing offers a means to manage demand, fund transportation projects, and address environmental and equity considerations.

Congestion, traffic, and VMT trends: As mentioned above, traffic congestion in California has been a persistent challenge. The state's reliance on automobiles as the primary mode of transportation has contributed to increasing levels of congestion and per-capita VMT, leading to negative impacts on air quality and quality of life. Moreover, trends in VMT continue to rise, reflecting patterns of sprawl, suburbanization, and reliance on single-occupancy vehicles as the best way to get around. The state has invested billions to try and get people out of their vehicles and onto public transit, but transit systems experienced declines in ridership throughout the 2010s (Taylor et al., 2020). Addressing these trends requires innovative strategies, like road pricing, to truly incentivize different choices for personal transportation.

Which agencies are involved in pricing? Road pricing in California involves coordination among various agencies at the local, regional, and state levels. At the local and county levels, government and planning departments play a crucial role in devising pricing projects, managing transportation infrastructure, and addressing community needs. Regional Metropolitan Planning Organizations (MPOs) serve as the entities responsible for regional transportation planning and funding allocation within specific regions. State agencies such as the California Air Resources Board (CARB), the California Department of Transportation (CALTRANS), and the California Transportation Commission (CTC) oversee broader transportation policies, funding allocation, and regulatory frameworks related to road pricing and transportation planning. A successful road pricing program requires collaborative efforts among all of these agencies.

Literature Review

Roadway pricing, in its various forms, involves charging users for their use of roads, highways, and other transportation infrastructure based on factors such as time of day, location, or distance traveled. While the implementation of pricing mechanisms presents an unparalleled opportunity to reshape our transportation systems, it also raises complex questions about their potential impact on VMT reduction, the equitable distribution of costs and benefits, and their political feasibility. This literature review aims to provide a comprehensive analysis of existing research, exploring the relationships between roadway pricing, VMT, equity, and political feasibility. For the purposes of this review, roadway pricing encompasses congestion pricing programs, cordon pricing programs, and road tolling programs (like HOT lanes on highways). By examining the body of literature on this subject, we can gain insights into the opportunities and constraints that policymakers face in adopting and implementing roadway pricing schemes in various contexts.

Road Pricing and VMT: One of the central themes that permeates the literature, and has existed for many years, is the necessity for road pricing to help manage traffic congestion and ever-increasing VMT. Taylor and Norton (2009) emphasize the fundamental need for road pricing to counteract the inefficiencies that arise when roads remain underpriced or even free to use during periods of high demand. Hymel (2009) found that high levels of traffic congestion dampen employment growth, further highlighting the importance of traffic mitigation measures. Krol (2016) and Kuehn (2009) shed light on the stark disparity between transportation-related revenues and costs, advocating for road pricing as an important mechanism to bridge this widening financial gap. It has been apparent that the transportation system is in need of change, and road pricing is increasingly perceived as an important tool to address these mounting challenges.

The second theme revolves around the discernible impacts of road pricing on traffic congestion and vehicle miles traveled. Li and Hensher's (2012) review of congestion pricing studies highlights its potential to drive behavioral change, with observable shifts in departure times, mode choice, and even work locations. This review helps show that congestion pricing schemes do work, though congestion pricing is a very specific and localized form of road pricing. This approach is supported by Kockelman and Kalmanje (2005), who suggest that road pricing can alleviate congestion by varying tolls according to externalities. An excellent review of the various proposed mechanisms of road pricing can be found in Lindsey (2006), which finds that all economists agree that pricing should happen, though there is much disagreement on how to implement it. An important note about pricing and VMT: if a road pricing project requires a new lane of additional capacity to be built, it will incite a phenomenon called "induced demand". In fact, any approach that leads to increased vehicle flows and increased travel speeds can result in induced demand, road pricing schemes included. Research shows that expanded roadway capacity results in more drivers taking that newer, faster road, and the research from Volker et

al. (2020) shows that the effects of induced demand are regularly undercounted in the environmental impact analysis in California.

Road Pricing and Equity Considerations: Economists, planners, and social scientists have all contributed research that underscores the importance of equity concerns in the context of congestion pricing. Taylor and Norton (2009) discuss how different interests define equity in transportation finance, leading to varying notions of fairness. Krol (2016) argues that congestion pricing might appear regressive, but these concerns are often misinformed, as free roads also impose costs on all drivers. The work of Manville and Goldman (2017) further challenges the assumption that free roads benefit low-income individuals and highlights that congestion pricing can actually compensate those negatively affected. Taylor (2002) takes a more balanced approach to describing how pricing and equity outcomes are related, advocating for pricing roads and redistributing revenue to assist low-income individuals, drawing parallels to user fees for essential services.

Beyond the theory of pricing, the literature also offers various strategies to address equity concerns when designing pricing programs. Taylor and Kalauskas (2010) discuss the importance of building support from the public, interest groups, and influential constituencies as a means to mitigate equity concerns and ensure that a variety of perspectives are included. Levinson et al. (2010) emphasize the role of mechanism design, including revenue recycling and tax cuts, to ensure that road pricing remains equitable. Li and Hensher (2012) recommend designing congestion pricing schemes based on behavioral insights from both stated preference studies and real-world market evidence, as these often have different results.

Studies by Schweitzer and Taylor (2008) and Kuehn (2009) discuss the distribution of benefits from highway pricing programs and how they can be used to mitigate disproportionate impacts. They illustrate that alternative revenue-generating schemes, such as sales taxes, may redistribute costs in ways that affect different income groups, and do nothing to address the externalities of driving. This helps support the argument that roadway pricing would ultimately benefit society more than allowing free road use.

Road Pricing and Political Feasibility: Public acceptance and political feasibility are central issues in the implementation of road pricing - one could argue they are the most important, because they are the difference between keeping pricing as a theory or making it a reality. King, Manville, and Shoup (2007) propose a unique approach to garner political support by redistributing toll revenue to cities hosting tolled freeways. This topic is revisited by Manville (2019), and furthers the argument by showing that local politicians could argue for the benefits of road pricing. Some studies, such as Ren and Huang (2020), explore the importance of ensuring that more than half of the commuters support or benefit from a pricing scheme for it to be considered politically feasible. The research also indicates that the support for such schemes is related to familiarity with the concept of congestion pricing.

Li and Hensher (2012) bridge the gap between stated preference studies and real-world market evidence, demonstrating that real-world findings align well with the more theoretical political work. The literature highlights the importance of understanding traveler behavior and the potential changes in departure times, mode choice, and residential or work locations in response to congestion pricing. It is important to note here that there is little available research on the actual implementation of roadway pricing schemes, particularly in the United States. State Departments of Transportation have added HOT lanes, which experience initial political pushback and then acceptance; congestion/cordon pricing has not been successfully implemented in a U.S. context, although New York City recently announced they will begin a program. Cordon pricing has been implemented in a few cities around the world in the past decade, and a thorough overview of the programs in London, Stockholm, and Milan can be found in Croci (2016). The review found that the programs were effective in achieving their goals of reducing traffic and its related externalities in the urban core, and also required consistent communication to the public, which supports the theoretical articles from above.

Discussion: Road pricing has emerged as an essential solution to address the escalating problem of traffic congestion and the financial complexities of transportation infrastructure. Declines in gas tax revenues, increasing costs of infrastructure maintenance and construction, and the slow recovery of transit (and farebox revenue) all contribute to a bleak fiscal future of our transportation system. Local governments are actively looking at pricing to meet these needs and understanding the interplay between the themes of VMT, equity, and political feasibility is essential for the successful implementation of road pricing. Careful mechanism design, robust public engagement, and political backing are vital components in ensuring the successful integration of road pricing into local and state programs. While this work has been largely theoretical over the last 50 years, the renewed focus of governments to reduce VMT and tackle the externalities of driving will provide more real-life examples of how these programs can help achieve these goals.

Data and Methodology

This project required information from two main sources: a series of informational interviews with staff working on road pricing at the local, regional, and state levels and research of case studies. For the interview component of this research, a qualitative approach was employed to gather insights from government officials at various levels. I conducted 14 interviews over Zoom: 8 were with city- and MPO-level staff, 5 were with staff at state agencies, and one was with a federal policy advocate. A list of interviewees and a copy of the interview questions can be found in Appendix A. These interviews were conducted anonymously to encourage candid responses and ensure the confidentiality of participants. Notes from the interviews were synthesized to identify broad trends and themes across the responses, with particular attention paid to the commonalities and differences in perspectives.

Case studies were selected based on projects discussed by interviewees and identified through online research. I chose to research the oldest managed lanes in California (the SR-91 Express Lanes in Riverside County), the newest lanes in the state (projects in San Mateo and Orange County), and a cordon pricing idea under study (LA Metro Traffic Reduction Study). Each case study provides information into specific road pricing initiatives, including their objectives, implementation strategies, outcomes, and challenges faced. Online research supplemented information provided by interviewees.

It is important to note the limitations of this research methodology. The sample size for interviews was relatively small, and the findings were not intended to be generalizable or statistically significant. Rather, the aim was to provide qualitative insights and examples to enrich the understanding of the current state of thinking around road pricing in California. The case studies selected may not have represented all relevant projects, and the analysis focused on providing project-specific insights rather than broad generalizations.

Analysis and Findings

Interview Trends and Findings

The following tables present a summary of my interview findings, organized around 5 key questions: what problems are being solved with pricing, what are the benefits of pricing, what are the costs of pricing, what metrics are tracked in projects, and what is the political environment surrounding pricing projects. A major finding from my interviews was that respondents at a horizontal level (across state-level staff, for example) were often in agreement in most responses, but vertically (at the MPO level vs. state-level) respondents often had different answers. To show this finding most clearly, the tables are structured to show areas of agreement across all respondents for each question, then themes from state and local/regional respondents that differ.

Areas of Agreement: As expected, key areas of alignment emerged around the potential for road pricing to reduce traffic congestion, contribute to state goals of reducing VMT and GHG levels, and generate revenue to help fund transportation infrastructure projects. Many respondents expressed concern about the impacts that road pricing would have on lower-income drivers. Metrics of success for projects were often viewed in terms of revenue, with a good project being able to provide a steady revenue stream that paid for the costs of the corridor. Interestingly, there was also significant alignment around the political environment questions, as everyone could agree that the idea of road pricing is quite unpopular, though necessary to meet local and state goals.

Areas of Difference: Some key differences among respondents emerged for each question. Local and regional agencies were less likely to discuss their road pricing programs in terms of reducing VMT, either by discouraging auto use or encouraging transit use. There were general disagreements about how excess revenue from pricing projects should be spent, with some projects investing money back into improving the highway and adjacent roads, some projects investing funds into alternatives to driving (e.g. transit improvements), and others creating programs for low-income households to receive transportation benefits like FasTrak credits or free transit passes. Project success was also viewed very differently among agencies, with state-level staff wanting to see progress towards VMT and GHG reduction goals, and local agencies wanting operational performance and travel time reliability for the project corridor. These competing goals were reflected in many of the responses around political environment questions, as it was emphasized that state-level staff need to be more clear about pricing goals while local-level staff need to be transparent around project processes and revenue for their constituents.

The following tables provide more in-depth analysis of these findings and themes. The themes presented below are reflective of the responses received during the interviews and are not

reflective of my views as author. The section concludes with a final list of topics and comments that fall under “miscellaneous”, as they did not fall neatly under a single question but are interesting.

What problem(s) are you trying to solve with pricing?	
<p>Areas of Agreement:</p> <p><i>VMT and GHG Reduction:</i> Both levels are focused on reducing VMT to mitigate GHG emissions. Road pricing aims to make the true cost of driving more apparent to users, encouraging behavioral changes such as carpooling, shorter trips, and adopting alternative modes of transportation. It is recognized that reducing VMT requires coordinated efforts in land use and transportation planning to promote more sustainable travel patterns.</p> <p><i>Improving Corridor Performance and Managing Congestion:</i> Road pricing projects seek to improve the performance of corridors, enhance goods movement, and alleviate congestion through more efficient use of road space. There is particular focus on smoothing out peak demand during “rush hour”.</p>	
State	Local/Regional
<p><i>Revenue Generation for Transit and Infrastructure:</i> While some stakeholders are content with revenue-neutral policies, others aim to generate additional revenue through road pricing to fund transit and other infrastructure projects.</p> <p><i>Consistent Implementation Across the State:</i> There is a desire for road pricing policies to be implemented consistently across the state, aligning with broader climate, transportation, and public health goals set by the state government and agencies like CALSTA.</p> <p><i>Equity and Non-Regressive Pricing:</i> There is an emphasis on ensuring that road pricing initiatives are implemented in an equitable and non-regressive manner, considering the impact on different socio-economic groups.</p>	<p><i>Revenue Neutrality and Financial Management:</i> While road pricing is not primarily intended as a revenue-generating source, any net revenue generated can be reinvested in transportation infrastructure and services. The objective is to ensure revenue neutrality, especially considering the potential decline in gas tax funds and the need for sustainable funding mechanisms.</p> <p><i>Improving Travel Time Reliability:</i> Reliable travel times are crucial for economic prosperity and mobility within the region. Road pricing helps improve travel time reliability along a corridor by managing traffic flow through dynamic pricing and maintaining certain speeds in the Express Lane.</p> <p><i>Equity and Social Goals:</i> Some agencies had equity goals as part of their road pricing projects, either through providing discounts</p>

	for low-income drivers or prioritizing excess revenue for transit investments. A majority of projects did not.
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What are the benefits of road pricing?	
<p>Areas of Agreement:</p> <p><i>Mode-Shift and Sustainable Transportation:</i> By implementing road pricing, there's an expectation of encouraging mode-shift towards more sustainable transportation options such as carpooling, vanpooling, and the use of transit services.</p> <p><i>Congestion Reduction:</i> Road pricing is expected to significantly reduce congestion along corridors, leading to more predictable and reliable travel times for commuters.</p>	
State	Local/Regional
<p><i>Reduced Vehicle Miles Traveled (VMT):</i> One of the primary objectives of road pricing is to reduce VMT, leading to less traffic congestion and improved air quality.</p> <p><i>Revenue Generation:</i> Road pricing initiatives are expected to generate revenue, which can be used to fund sustainable transportation infrastructure.</p>	<p><i>Improvements in Travel Time and Reliability:</i> Road pricing can lead to better performance and reliability of the transportation system, thereby enhancing the overall travel experience for commuters.</p> <p><i>Revenue Generation:</i> While not the primary objective, road pricing may generate revenue that can be reinvested into transportation infrastructure, transit services, and other mobility initiatives. Many programs limit the spending of excess revenue to improvements along the priced corridor.</p> <p><i>Equity Considerations:</i> For some implementers, road pricing initiatives may also address equity concerns by reinvesting revenue into equitable outcomes by providing discounts or exemptions for low-income drivers.</p>

What are the costs of pricing?	
<p>Areas of Agreement:</p> <p><i>Equity Concerns:</i> The pricing structure must be designed to have the outcome be non-regressive and equitable, considering the impact on different socio-economic groups. There are concerns about how to provide discounts for low-income households and how to ensure fairness across different regions.</p>	
State	Local/Regional
<p><i>Induced Vehicle Miles Traveled (VMT):</i> There is a concern that road pricing could inadvertently induce more VMT if not implemented thoughtfully, potentially exacerbating traffic congestion and environmental impacts. This is particularly true of pricing new lanes.</p> <p><i>Loss of "Free" Choices:</i> Some individuals may perceive the introduction of road pricing as the loss of a previously "free" choice, which could lead to discontent among drivers. This is particularly true of people who believe their tax dollars should be enough charge for roadway infrastructure.</p> <p><i>Transparency and Expenditure Priorities:</i> There is a need for transparency regarding how road pricing revenues will be used and what transportation priorities will be funded. Funding of sustainable transportation, like transit and active transportation, should be prioritized, as opposed to highway widenings and updates.</p>	<p><i>Diversion to Local Streets:</i> There's a risk that road pricing could lead to traffic diversion to local streets, which may increase congestion and safety concerns in surrounding neighborhoods.</p> <p><i>Public Perception and Acceptance:</i> Educating the public and gaining acceptance for road pricing initiatives is challenging, especially if there is resistance or skepticism regarding the fairness and effectiveness of the pricing system. Local elected officials and regional planning departments bear the brunt of this scrutiny.</p>

What metrics do you track to evaluate a project and tell if it is successful?	
<p>Areas of Agreement:</p> <p><i>Revenue Generation:</i> Assess the revenue generated from road pricing to ensure financial sustainability and viability of the pricing system.</p>	
State	Local/Regional
<p><i>VMT Reduction and GHG Reduction:</i> In the Sustainable Community Strategies, metrics related to Vehicle Miles Traveled (VMT) reduction and greenhouse gas (GHG) emissions reduction are essential for assessing the effectiveness of road pricing projects.</p> <p><i>Statutory Requirements and Guidelines:</i> Evaluation processes are guided by statutory requirements and guidelines, such as those set out in AB194 and US Code Title 23, which provide frameworks for pricing and project evaluation.</p> <p><i>Data Collection and Analysis:</i> Challenges exist in accurately measuring VMT impacts and assessing the impact of road pricing initiatives, especially considering the complex dynamics of induced demand and traffic patterns.</p> <p><i>Travel Demand Models:</i> Travel demand models are used for evaluating the potential impacts of projects, but their effectiveness and accuracy may vary, and they may not fully account for induced demand or changes in traffic patterns.</p>	<p><i>Travel Time and Speed Improvements:</i> Evaluate changes in travel times and speeds along the corridor to determine if road pricing has resulted in reduced congestion and improved traffic flow.</p> <p><i>Mode-Shift and Transit Ridership:</i> Track shifts in travel behavior, such as increased transit ridership or carpooling, to gauge the impact of road pricing on mode choice.</p> <p><i>Operational Performance:</i> Assess the operational performance of the road pricing system, including reliability, ease of use, and customer satisfaction, to ensure efficient and effective implementation.</p> <p><i>Cost-Benefit Analysis:</i> Conduct a cost-benefit analysis to evaluate the economic efficiency and effectiveness of road pricing, comparing the costs of implementation with the benefits achieved in terms of reduced congestion, improved mobility, and environmental sustainability.</p> <p><i>Community Engagement and Feedback:</i> Solicit feedback from stakeholders and the community to understand their experiences, perceptions, and concerns regarding road pricing, and incorporate this input into the evaluation process.</p>

What is the political environment around road pricing?	
<p>Areas of Agreement:</p> <p><i>Political Will and Public Perception:</i> Lack of political will stems from road pricing being perceived as unpopular among the public, leading to reluctance among elected officials to support such initiatives. The issue becomes particularly contentious when considering equity concerns and the potential impact on different socio-economic groups.</p> <p><i>Necessity vs. Unpopularity:</i> There is recognition among everyone that road pricing will be necessary due to the decline in gas tax revenue, especially by the 2030s. However, there is also widespread acknowledgment that road pricing is locally unpopular and politically challenging.</p>	
State	Local/Regional
<p><i>Role of State Agencies:</i> State agencies, such as CALTRANS and CALSTA, play a critical role in advocating for road pricing initiatives and navigating political challenges. They set the tone for what is encouraged at the regional and local level, and are the ultimate approvers of projects. Clarity around the state’s goals for pricing, and what is and isn’t desirable in a project, is their most important role.</p>	<p><i>Transparent Communication:</i> There is a need to clearly communicate the goals, objectives, and potential benefits of road pricing to stakeholders and the public. Addressing concerns and misconceptions through open dialogue and providing accurate information about the need for pricing and its potential impacts is crucial.</p> <p><i>Revenue Allocation:</i> Developing transparent mechanisms for revenue allocation and reinvestment is vital. Clearly defining how revenue generated from road pricing will be used to fund transportation projects, improve infrastructure, and enhance mobility options helps community members feel on board.</p> <p><i>Collaborating Across Jurisdictions:</i> Many MPO’s coordinate efforts and collaborate with neighboring jurisdictions, transportation agencies, and regional partners to ensure consistency and alignment in road pricing strategies. Addressing shared transportation</p>

	<p>challenges requires collaborative approaches and coordinated action.</p> <p><i>MPO and Board Dynamics:</i> Metropolitan Planning Organizations and elected board members face challenges in reaching consensus on road pricing strategies. Divisive debates and disagreements between elected officials, the public, and agency staff require time and resources to work through.</p>
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What resources or authorities are needed for more road pricing?	
<p>Areas of Agreement:</p> <p><i>Federal Clarity and Compliance:</i> Clarity and compliance with federal regulations and guidelines are important, particularly if federal funding or oversight is involved in road pricing projects. Ensuring alignment with federal transportation policies and regulations helps avoid conflicts and facilitates coordination with federal agencies. Particular clarity should be given on the state's ability to price a general purpose lane - or convert a GP lane to an HOV/HOT lane.</p>	
State	Local/Regional
<p><i>Information and Data:</i> Accurate and reliable data are crucial for designing effective road pricing schemes. This includes data on traffic patterns, vehicle volumes, travel behavior, socio-economic demographics, and environmental impacts.</p>	<p><i>Technology and Infrastructure:</i> Advanced technology and infrastructure are necessary to support road pricing systems, including toll collection mechanisms, electronic tolling systems, traffic monitoring equipment, and data analytics capabilities. Investment in technology and infrastructure is essential for the efficient and effective operation of road pricing schemes.</p> <p><i>Collaboration and Partnerships:</i> Collaboration and partnerships among various stakeholders, including government agencies, transportation authorities, municipalities,</p>

	<p>community organizations, and private sector partners, are essential for successful implementation. This collaboration helps ensure alignment of goals, coordination of efforts, and effective stakeholder engagement. Some Joint Power Authorities set up for tolling projects include local officials, regional powers, and a CALTRANS member, which helps streamline approvals and represent views from all levels of government.</p>
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Miscellaneous Responses:

State:

Revenue Allocation and Funding Mechanisms: There is an opportunity to allocate revenue from pricing initiatives for various transportation priorities such as active transportation, transit, and sustainable infrastructure projects. Ensuring that funds are applied at the regional level and invested in sustainable transportation options is crucial.

Climate Action Plans for Infrastructure: Initiatives like the Climate Action Plan for California Infrastructure (CAPTI) underscore the importance of integrating climate considerations into infrastructure planning and development, including transportation infrastructure. This could be expanded upon.

Regional/Local:

Lane Expansion and Road Pricing: There is a tension between the desire for lane expansion to alleviate congestion and the challenges associated with implementing road pricing, particularly in terms of political feasibility and regulatory constraints. Better guidance and coordination between agencies like CALTRANS and regional entities can help navigate these challenges. Many view expansion as the only politically feasible way to price a lane - some hope that this first lane will get people comfortable with the idea and lead to the conversion of existing lanes in the future. This is at odds with the regional VMT reduction goals.

Transit Investment: Recognizing that road pricing is just one component of a comprehensive transportation strategy, investment in transit infrastructure, active transportation options, and transit-oriented development (TOD) is essential. Integrating road pricing with transit

improvements can provide travelers with more options and help reduce reliance on single-occupancy vehicles.

Transportation Funding: There is a need for a broader conversation around transportation funding and financing mechanisms. Road pricing can generate revenue, but it must be part of a larger funding strategy that includes diverse sources of funding and investment in transportation infrastructure and services.

Land-Use Planning: Land-use planning plays a significant role in shaping transportation patterns and outcomes. Integrating land-use and transportation planning can help create more sustainable, walkable, and transit-friendly communities while reducing reliance on automobiles and mitigating congestion.

Policy Goals and Pairings

Agencies involved in pricing projects often have diverse and sometimes conflicting goals due to the complexity of transportation systems and the varied needs of stakeholders. For instance, while one agency may prioritize reducing congestion and improving traffic flow, another may focus on increasing revenue or meeting climate targets. These differences in goals can lead to challenges in decision-making and result in conflicting ideas between a local project implementer and a state agency. To reduce this conflict, this section identifies the four main objectives that government agencies are trying to achieve with their pricing projects, and the policy pairings that can help a pricing project achieve that goal.

Goal: Reducing Traffic Congestion

To address the goal of reducing congestion and traffic, implementing pricing mechanisms such as priced lanes, either new or existing, can effectively manage demand and encourage more efficient use of road infrastructure. With dynamic pricing, toll rates can be adjusted in real-time based on traffic conditions to optimize flow and minimize congestion. Policy pairings that can help achieve this goal include:

- *Implement Dynamic Pricing:* Dynamic pricing allows for flexibility in adjusting toll rates based on demand, maximizing revenue potential during peak periods of congestion.
- *Improving Transit Along Corridor:* Using revenue generated from pricing to invest in transit infrastructure along the corridor can provide commuters with viable alternatives to driving, thereby reducing reliance on single-occupancy vehicles and alleviating congestion.

Goal: Increasing Revenue

To increase revenue, implementing pricing mechanisms such as priced lanes, whether new or existing, can generate additional funding for transportation projects and infrastructure maintenance. Dynamic pricing can further increase revenue generation by adjusting toll rates based on demand. Policy pairings that can help achieve this goal include:

- *Implement Dynamic Pricing:* Dynamic pricing allows for flexibility in adjusting toll rates based on demand, maximizing revenue potential during peak periods of congestion while ensuring affordability during off-peak times.

Goal: Reducing VMT

To align with climate goals, implementing pricing mechanisms such as priced lanes, particularly on existing infrastructure, can help reduce greenhouse gas emissions by incentivizing mode shifts towards more sustainable transportation options. Policy pairings that can help achieve this goal include:

- *Avoiding Expanding Roadway Capacity:* Expanding roadway capacity induces additional VMT, resulting in increased vehicle emissions, and encourages car-dependent urban sprawl, undermining efforts to mitigate climate change.
- *Improving Transit Along Corridor:* Investing revenue generated from pricing into transit improvements along the corridor and beyond can enhance accessibility to public transportation, reducing reliance on carbon-intensive single-occupancy vehicles and contributing to emissions reductions.
- *Integrated Land-Use Planning:* Pricing will theoretically change land values, with land closer to city centers becoming more valuable. Cities should encourage dense infill development that encourages active transportation and transit usage.

Goal: Addressing Inequities in the Existing Transportation System

To address inequities in the existing transportation system, implementing pricing mechanisms such as priced lanes, particularly on existing infrastructure, can provide opportunities for revenue redistribution that benefits everyone. Policy pairings to help achieve this goal include:

- *Implement Dynamic Pricing:* Dynamic pricing can be leveraged to ensure affordability for low-income drivers during off-peak hours, mitigating the burden of tolls on economically disadvantaged communities.
- *Providing Discounts for Carpooling:* Offering discounts or incentives for carpooling, particularly for low-income individuals, can increase accessibility to shared transportation options and reduce the financial burden of tolls.
- *Providing Discounts for Low-Income Households:* Offering discounts or credits for low-income households to use the toll lanes can increase choice. Programs like Basic Universal Mobility Wallets can offer funds for transit, micromobility, carshare, and priced lanes, ensuring that everyone can benefit from new infrastructure.
- *Improving Transit Along Corridor:* Investing revenue generated from pricing into transit improvements along the corridor and beyond can enhance accessibility to public transportation, which benefits households without access to a personal vehicle.

Case Studies

Case Study 1: Riverside 91 Express Lanes

Background: The Riverside 91 Express Lanes, operational for over 20 years, represent one of the earliest examples of priced lanes in Southern California. The 91 Express Lanes span a 10-mile stretch along the Riverside Freeway (State Route 91), offering congestion-free travel for commuters willing to pay a toll.

Implementation: The 91 Express Lanes were developed through a public-private partnership and were one of the first facilities in the U.S. to utilize dynamic pricing, where toll rates fluctuate based on real-time traffic conditions (Orange County Transportation Authority, 2022). The project involved the conversion of existing high-occupancy vehicle (HOV) lanes into priced lanes, with tolls collected electronically via transponders or license plate recognition systems.

Outcomes: The 91 Express Lanes have successfully alleviated congestion and reduced travel times for commuters, particularly during peak hours. Revenue generated from tolls has been reinvested into transportation infrastructure and transit services in the region. The corridor along the lanes experienced reduced traffic collisions, but did show evidence of increased collisions where the lanes start and end (Sullivan, 2000). There is not a low-income toll assistance program, and use of the lanes typically increases as household income increases. Modelling has shown that the climate impact of the lanes is equal to adding an HOV lane or general purpose lane - there were small increases in carpooling, but no notable increase in transit use along the corridor. The project has served as a model for priced lane projects in California and across the country, and the managed lanes are planned to extend even further along the corridor.

Case Study 2: Orange County 405 Express Lanes and San Mateo 101 Express Lanes

Background: The Orange County 405 Express Lanes and San Mateo 101 Express Lanes represent the most recent additions to California's network of priced lanes, both opening in December of 2023. These projects aim to address congestion on two of the state's busiest corridors, the I-405 in Orange County and US-101 in San Mateo County.

Implementation: The Orange County 405 Express Lanes and San Mateo 101 Express Lanes were developed to provide congestion-free travel options for motorists willing to pay a toll. Both projects added a lane in each direction and converted an existing HOV lane to a priced lane, with tolls varying based on demand (Orange County Transportation Authority, 2018). Electronic tolling systems are utilized for seamless payment collection. The San Mateo Express Lanes project also created a Community Transportation Benefits Program, paid for by toll revenue, that gives financial assistance to low-income residents (San Mateo County Transportation District,

n.d.). Residents have the choice between a \$100/year Clipper Card for transit use in the Bay Area, or \$100/year FasTrak credit for using the toll lanes.

Outcomes: Both projects have seen varying degrees of success in reducing congestion and improving travel times. The Orange County 405 Express Lanes are quite popular, with nearly 1 million average transactions per week (Orange County Transportation Authority, 2024). The San Mateo project has seen a very slight uptick in the amount of carpool users in the lanes, as HOV 3+ can use them for free. They also noted in a recent Board report that the Community Transportation Benefits Program is being well-received, with a majority of qualified households opting for the Clipper Card, which is a win for incentivized transit use (San Mateo County Express Lanes Joint Power Authority, 2024). Neither project has been operational long enough to have insights into changes in VMT, transit use, or climate impacts.

Case Study 3: LA Congestion Pricing Study

Background: The LA Congestion Pricing Study explores the feasibility of implementing cordon pricing in Los Angeles to manage traffic congestion and reduce emissions. The study focuses on exploring a pricing zone in the downtown area, West side, and Santa Monica Mountains corridor between the San Fernando Valley and West side, where vehicles would be charged a fee for entering during peak hours (LA Metro, n.d.).

Implementation: The LA Congestion Pricing Study involves extensive analysis of traffic patterns, travel behavior, and potential impacts on various stakeholders. Public engagement and stakeholder consultation are integral parts of the study process to ensure transparency and gather input from affected communities. The current plan is targeting 2028 for potential implementation of one or all of the pricing scenarios under consideration.

Outcomes: The LA Congestion Pricing Study is ongoing, with preliminary findings indicating the potential effectiveness of cordon pricing in reducing congestion and improving air quality in downtown Los Angeles. Modeling suggests a small decrease in Daily Miles Travelled in the region, as well as a 30% reduction in traffic delay (LA Metro, 2023). The study has sparked dialogue among policymakers, transportation agencies, and community stakeholders about the role of pricing, and recently exemptions for HOV 3+ and low-income drivers have been added to the project scope. Future steps involve further analysis to assess the feasibility and impacts of implementing congestion pricing in LA, with the potential to start state and federal environmental processes later in 2024.

Policy Recommendations

This report recommends the following three policy actions for state and local officials to maximize the potential benefits of road pricing in the state of California:

1. **Price Existing Lane Capacity** to maximize the benefits of road pricing and increase the efficiency of our existing highway network.
2. **Increase Government Transparency** with clear messaging on the need for road pricing, the benefits it can provide, and how money will be reinvested.
3. **Invest in Alternatives** to car travel, by prioritizing excess toll revenue for investments in local streets, public transit, and low-income household assistance through programs like Universal Mobility Wallets.

In addition to the three main recommendations above, the following points reflect the most common problems that were raised during interviews, and some potential solutions:

Importance of Inter-Agency Communication and Coordination: Effective communication and coordination among transportation agencies, including the California Department of Transportation (CALTRANS), the California Air Resources Board (CARB), and Metropolitan Planning Organizations (MPOs), is paramount for the successful implementation of transportation policies and initiatives. Collaboration facilitates alignment of goals, sharing of resources, and the development of integrated strategies to address complex transportation challenges.

- Addressing Tensions Between CALTRANS/CARB and MPOs: Tensions between state agencies like CALTRANS and CARB and regional MPOs can hinder progress toward shared transportation and climate goals. It is imperative to foster constructive dialogue and establish mechanisms for resolving conflicts or competing priorities. Encouraging mutual understanding, transparency, and accountability can help bridge the gap between state and regional perspectives.
- Clarity Around Policy Direction: Clear policy direction is essential for guiding transportation investments and shaping future infrastructure development. State policy makers must provide clarity on priorities such as prioritizing investments in existing infrastructure over building new highway lanes and implementing pricing mechanisms on existing lanes. At its core, agencies across the state should be able to speak to common goals: reining in transportation emissions, using new transportation investments to create a more equitable system, and planning for the financial and physical health of the

system. Establishing a unified vision for sustainable transportation can guide agency actions and resource allocation.

- Acceptance of Leadership Roles: Given the potential controversy surrounding certain policy decisions, it may be necessary for agencies like CALTRANS to assume leadership roles, even if unpopular. Taking decisive action to prioritize sustainable transportation solutions, such as pricing existing lanes or reallocating funding from highway expansion to alternative modes, requires strong leadership and a willingness to make difficult choices in the interest of long-term sustainability. There is also an opportunity for the state to put some rules around increased revenue allocation, steering investment towards sustainable transportation alternatives such as transit and active transportation. A state-wide program that provides transportation benefits, such as pre-paid transit fares or FasTrak credits for low-income drivers can also ensure more equitable outcomes in the transportation system. Another approach would be to spend excess revenue to fund more programs that use the Universal Mobility Wallet approach, which provides low-income households with stipends to access carshare, public transit, ride-hail and more (Brozen, 2024).
- Relationship Between Pricing and the Road User Charge: The state of California is actively pursuing state-wide and regional programs around road pricing and a road user charge, both of which will require significant political will to accomplish. For the typical Californian, these two things will be easily connected as the newest charge to their pocketbook, yet the planning and rollout of these programs are currently kept very separate. I believe there is a need to integrate pricing and road user charge systems to create a clear conversation about the future of transportation funding within the state.
- Discussion of Distrust in Government: Interviews for this report revealed themes of distrust in government, particularly regarding transportation decision-making and funding priorities. Agencies attempting to begin a road pricing project in their region face a lot of public distrust, with many people saying that road pricing is a “cash grab” or that they do not trust the government to spend additional revenue. This distrust stems from concerns about transparency, equity, and the perceived lack of responsiveness to community needs. Addressing these concerns will be crucial for building public support and credibility for pricing and road user charge initiatives.
 - American attitudes towards transportation investment are shifting, emphasizing a growing appetite for alternatives to traditional highway expansion projects (Trumm, 2023). This evolving public sentiment underscores the importance of engaging with communities, fostering transparency, and aligning transportation policies with broader sustainability and equity goals.

Examples from Other States: California is not the only state trying to tackle the climate impacts of its transportation investments. Looking to examples from other states can provide

valuable insights and best practices for addressing transportation and climate challenges. Initiatives like Colorado's GHG Planning Standard and Virginia's Smart Scale tool for project selection demonstrate innovative approaches to integrating climate considerations into transportation planning and project prioritization.

- The Colorado Greenhouse Gas Planning Standard is an innovative approach to transportation planning that aims to reduce pollution and greenhouse gas emissions from the transportation sector. Approved on December 16, 2021, by the Colorado Transportation Commission, this standard mandates the Colorado Department of Transportation (CDOT) and the state's five Metropolitan Planning Organizations to achieve specific GHG reduction levels by 2025, 2030, 2040, and 2050 (Colorado Department of Transportation, 2021). It involves modeling existing transportation networks and future significant capacity projects using travel demand models, followed by an analysis through the EPA's Motor Vehicle Emission Simulator (MOVES). This standard, part of the state's Greenhouse Gas Pollution Reduction Roadmap, encourages the development of long-range transportation plans that support more sustainable travel choices.
- Virginia's SMART SCALE tool, on the other hand, is a data-driven prioritization process designed to allocate limited tax dollars to the most critical transportation projects based on their potential benefits. This process evaluates projects based on several key factors, including improvements to safety, reduction of congestion, increase in accessibility, contribution to economic development, promotion of efficient land use, and environmental impact. The outcomes are scored and ranked to guide the Commonwealth Transportation Board in project selection decisions (Office of Intermodal Planning and Investment, 2024). SMART SCALE ensures transparency and accountability in the project evaluation process, incorporating public engagement to refine and adjust the prioritization process over time. Projects are categorized and compete for funding through two main pathways: the District Grants Program (DGP), which is local-specific, and the High-Priority Projects Program (HPPP), which is statewide.

Transportation Demand Models and Evaluation: Transportation Demand Models (TDMs) play a critical role in informing transportation planning and policy decisions by forecasting future travel demand and evaluating the potential impacts of various interventions, including pricing strategies. However, there are significant challenges associated with the transparency, accuracy, and effectiveness of current TDMs, which can hinder their utility in assessing the impacts of pricing initiatives.

- Challenges with TDMs: One major challenge with TDMs is their often opaque and proprietary nature, which limits transparency and public understanding of model inputs, assumptions, and methodologies. This "black box" nature makes it difficult for

stakeholders to assess the reliability and validity of model outputs and to understand how changes to the transportation system are simulated and evaluated. When a new road toll project is implemented, rather than rely solely on the TDM to predict outcomes, implementing agencies should set tolls and then measure the effects. This data can be used to validate (or invalidate) the outputs from the model.

Furthermore, TDMs may struggle to adequately capture complex feedback loops and behavioral responses to pricing interventions. Changes in travel behavior, mode choice, and route selection resulting from pricing policies are often difficult to model accurately, leading to uncertainty in predicting the outcomes of pricing initiatives.

- Need for Updates and Validation: Given these challenges, there is a pressing need to update and improve TDMs to enhance their accuracy, transparency, and usability for evaluating pricing strategies. This includes making TDMs more transparent and open-access. Additionally, TDMs should be rigorously tested and validated against real-world data to ensure their reliability and effectiveness in simulating transportation outcomes. By calibrating TDMs using historical data and validating model predictions against observed outcomes, transportation agencies can enhance confidence in the accuracy and reliability of model projections.

Future Research

Understanding the Impacts of Road Pricing: Many local implementers of road pricing projects are tracking metrics like financial returns and vehicle flow rates, but there is little research to show what changes occur when a priced lane is built in regards to VMT, mode-shift, or how low-income drivers use the facility. Additionally, studies should investigate how road pricing affects transit speeds, and how people's sentiment towards transit options may change when confronted with a higher cost of driving. Public opinion research about how community members feel before and after a priced lane is built can also be useful for future projects.

It is important to note that all priced roads in California have resulted from highway expansions. If a general-purpose lane is converted to a priced lane, the effects of the change should be carefully studied.

Conclusion

The state of California has offered many carrots over the years for drivers to reduce their impacts: better transit, carpool incentives, etc. These strategies have not worked, however, as per capita VMT continues to increase. Road pricing represents a promising strategy for addressing the complex challenges facing transportation systems, including congestion, emissions, and funding shortfalls. By charging users for the direct costs of road use, pricing mechanisms can incentivize more efficient and sustainable travel behaviors, manage demand for limited road capacity, and generate revenue for transportation investments.

Despite the potential benefits of road pricing, there are significant barriers to its implementation, including technical complexities, political resistance, and equity concerns. Addressing these challenges will require concerted efforts from policymakers, transportation agencies, and communities to develop equitable, effective, and socially acceptable pricing solutions.

To meet California's goal of achieving carbon neutrality by 2045, the Scoping Plan finds VMT must diminish from 24.6 miles per day in 2019, to 18.4 miles by 2030 (a 25 percent reduction) and to 17.2 miles per day by 2045 (a 30 percent reduction). Charging people for the true cost of driving can reduce traffic, reduce VMT, reduce GHG and air pollutant emissions, improve equity, health, and traffic safety, and generate revenue. To meet the challenge for our time and confront climate change, we need to start tolling today for tomorrow's transportation future.

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Appendix

Appendix A.

Interviewees:

Name	Agency
Anne Mayer	Riverside County Transportation Commission
Darrell Johnson	Orange County Transportation Authority
Matt Click	Placer County Transportation Authority
Sean Charpentier	County Association of Governments San Mateo
Annie Nam	Southern California Association of Governments
Lana Wong	CARB
Caitlin Greenway	CARB
Anup Tapase	Metropolitan Transportation Commission
Andrew Quinn	CALTRANS
Dustin Foster	Sacramento Area Council of Governments
Mark Vallianatos	LA Metro
Beth Osborne	Transportation for America
Lauren Prehoda	CALTRANS

Note: some interviewees requested to remain anonymous and have been left off this list.

Interview Questions:

Background

1. What is your organization, and what is your role in the organization?
2. Is your organization hoping to implement a road pricing, congestion pricing, or cordon pricing scheme? What is your city/region considering?

Projects, Policy, and Purpose

3. What is the primary objective of implementing road pricing in your region? Or, worded differently, what problem(s) are you trying to solve with pricing?

4. What benefits are you hoping to see from implementing road pricing? Are there any potential negative impacts you are preparing for?
5. How are you choosing where to implement these projects?
6. How do you plan to evaluate the success of these projects? Are there any specific metrics you are hoping to track?

Politics

7. Who are your partners in this work - are you working with other government agencies?
8. What level of political and stakeholder support is there for road pricing, and how do you plan to navigate potential challenges or opposition?
9. What do you need to institute a road pricing scheme? (authorization, legal clarity, resources, information, etc.)
10. What other, related projects or policies are you pursuing to help meet your transportation goals?

Closing

11. Is there anything else you would like to share about transportation pricing or your work?