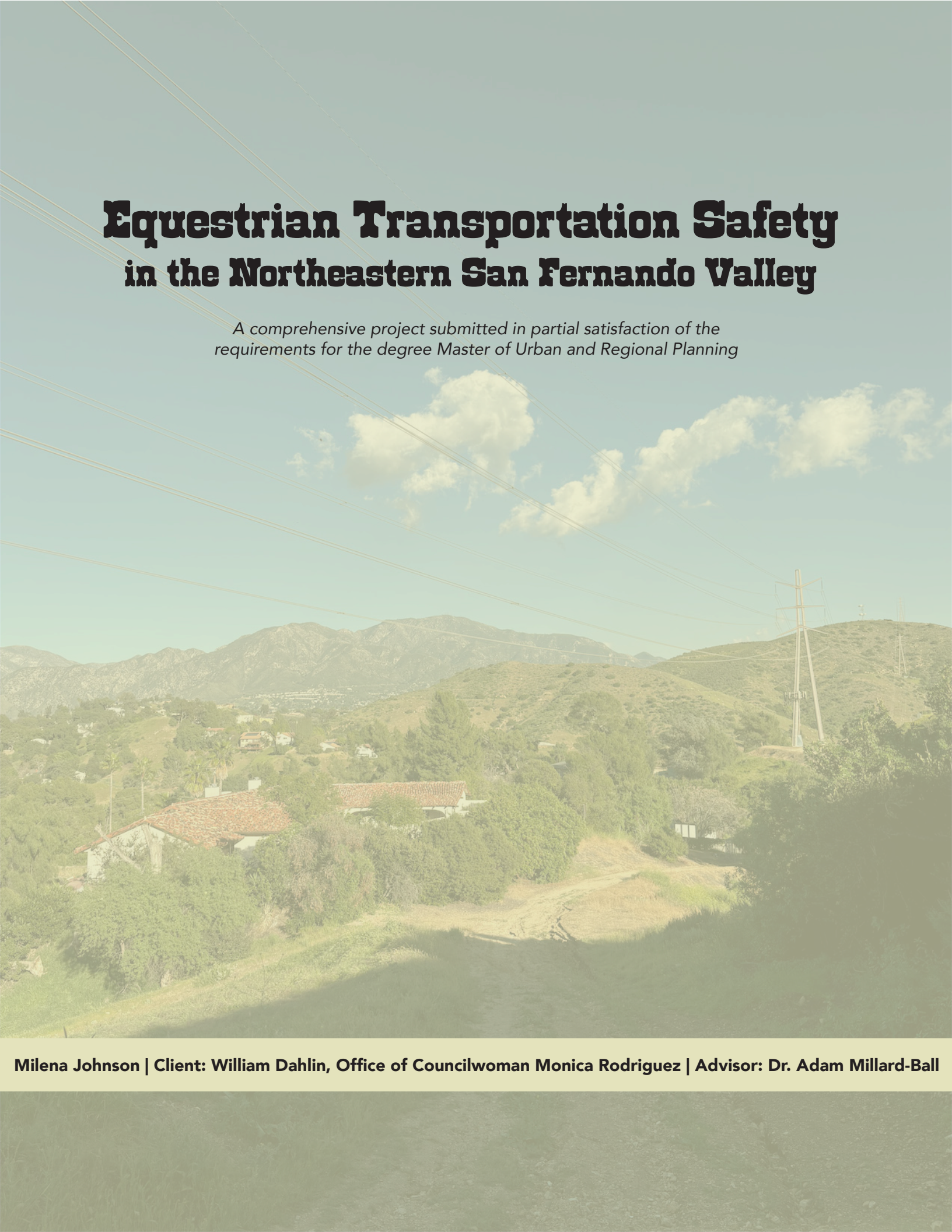




Equestrian Transportation Safety in the Northeastern San Fernando Valley

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

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Technical Report Documentation Page

1. Report No. N/A	2. Government Accession No. N/A	3. Recipient's Catalog No. N/A	
4. Title and Subtitle Equestrian Transportation Safety in the Northeastern San Fernando Valley		5. Report Date June 2026	
		6. Performing Organization Code UCLA-ITS	
7. Author(s) Milena Johnson		8. Performing Organization Report No. LAS2603	
9. Performing Organization Name and Address Institute of Transportation Studies, UCLA 3320 Public Affairs Building Los Angeles, CA 90095-1656		10. Work Unit No. N/A	
		11. Contract or Grant No. N/A	
12. Sponsoring Agency Name and Address UCLA Institute of Transportation Studies www.its.ucla.edu		13. Type of Report and Period Covered Final	
		14. Sponsoring Agency Code UC ITS	
15. Supplementary Notes DOI:10.17610/T6N894			
16. Abstract The Northeastern San Fernando Valley is a historic, passionate, and diverse equestrian community in suburban Los Angeles. It hosts approximately three-quarters of the equestrian population of the City of Los Angeles. Though the region has an extensive network of equestrian trails, many of these trails are unofficial, not clearly mapped, or lacking in safe infrastructure. Additionally, many community members have expressed concerns about future access to the trails given proposed land use changes. In response, the City of Los Angeles and the Office of Councilwoman Monica Rodriguez, who represents the Seventh Council District encompassing many of these neighborhoods, are working to improve equestrian mobility throughout this region and to other key recreational areas. To supplement this effort, I conducted a safety project to both understand the existing activity patterns of equestrians and to identify potential improvements to the network. This project seeks to answer the question: "What transportation safety improvements can be made to the equestrian network in the Northeastern San Fernando Valley?" In order to identify equestrian transportation safety improvements, I analyzed GIS data and qualitative information from equestrian community stakeholders, and reviewed equestrian best practices from official guidelines and from other equestrian communities. I then constructed a list of potential improvements which will aid Council District Seven in creating and maintaining a safer equestrian transportation network.			
17. Key Words Equestrian transportation, safety, transportation planning		18. Distribution Statement No restrictions.	
19. Security Classif. (of this report) Unclassified	20. Security Classif. (of this page) Unclassified	21. No. of Pages 55	22. Price N/A

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 Office of Councilwoman Monica Rodriguez as a planning client. The views expressed herein are those of the author and not necessarily those of the Department, the UCLA Luskin School of Public Affairs, UCLA as a whole, or the client.

Acknowledgments

I would like to first express my gratitude to the Office of Councilwoman Monica Rodriguez for providing me the opportunity to complete this project, and I greatly admire their dedication to serving their community. William Dahlin, who served as my primary point of contact, provided excellent guidance and encouragement throughout the project, and was always eager to connect me with community members and resources.

I would also like to thank my faculty advisor, Dr. Adam Millard-Ball, for his support in designing a truly unique transportation planning project. I am also thankful for Jay Wu and Jared Knight who generously shared their time and equestrian planning knowledge with me.

Finally, I am incredibly grateful to the equestrians of Council District Seven, who eagerly participated in my community engagement activities, provided tours of their neighborhoods, and invited me into their magical equestrian world in the bustling city of Los Angeles. This project would not have been possible without their extensive participation and enthusiasm for this project.

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Executive Summary

Project Overview

The Northeastern San Fernando Valley is a historic, passionate, and diverse equestrian community in suburban Los Angeles. It hosts around three-quarters of the equestrian population of the City of Los Angeles. Though the region has an extensive network of equestrian trails, many of these trails are unofficial, not clearly mapped, or lacking in safe infrastructure. Additionally, many community members have expressed concerns about future access to the trails given proposed land use changes.

In response, the City of Los Angeles and the Office of Councilwoman Monica Rodriguez, who represents the Seventh Council District encompassing many of these neighborhoods, are working to improve equestrian mobility throughout this region and to other key recreational areas. To supplement this effort, I conducted a safety project to both understand the existing activity patterns of equestrians and to identify potential improvements to the network. This project seeks to answer the question: **“What transportation safety improvements can be made to the equestrian network in the Northeastern San Fernando Valley?”** In order to identify equestrian transportation safety improvements, I analyzed GIS data and qualitative information from equestrian community stakeholders, and reviewed equestrian best practices from official guidelines and from other equestrian communities. I then constructed a list of potential improvements which will aid Council District Seven in creating and maintaining a safer equestrian transportation network.

Findings

From my research, I identified three **Primary Equestrian Transportation Safety Challenges** in the Northeastern San Fernando Valley:

1. Land Use and Trail Management

Equestrians fear that new development will impede the existing equestrian transportation network. The network’s informal status creates safety hazards, often due to a lack of maintenance.

2. Conflicts with Other Recreational Modes

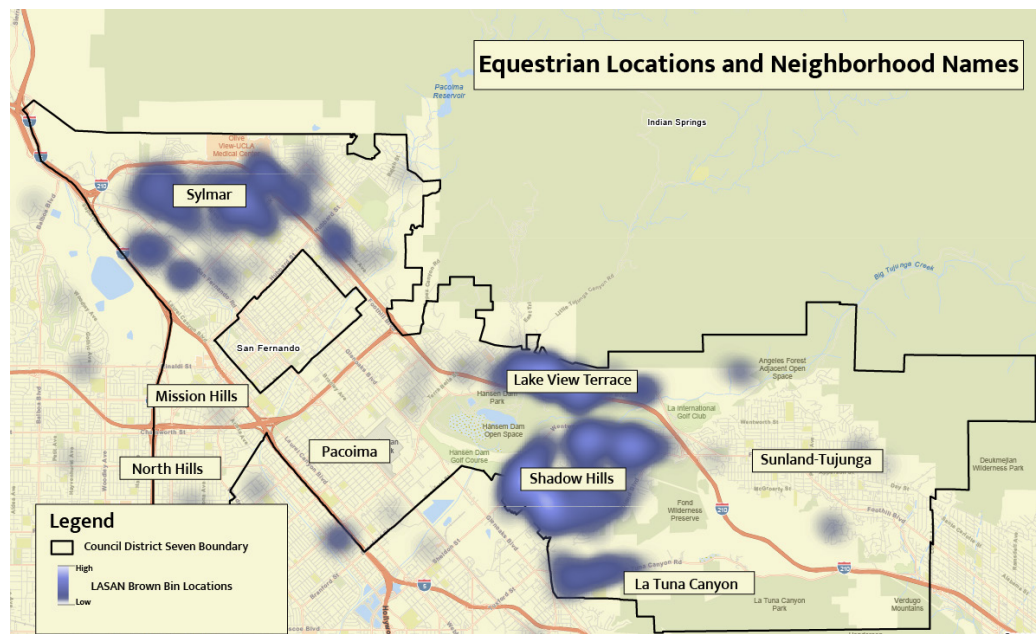
The increasing popularity of ATVs, dirt bikes, and e-bikes in equestrian areas spook horses and endanger riders.

3. Vehicular Conflicts

Located in a suburban area, the community faces more conflict points with speeding cars in comparison to rural equestrian communities.

The **Angeles Forest Foothills** and **Hansen Dam Recreational Area** are the two primary recreational areas frequented by equestrians. Both spaces have a limited number of safe access points by horse and are becoming more popular for use by other recreational modes, hampering equestrian safety. These two areas are separated by **Foothill Boulevard**, a high-traffic arterial parallel to the 210 Freeway that separates equestrian destinations and lacks safe sidewalk trails and crossings. Vehicular speeding and blind curves also pose a major threat to safe crossings.

Map of Los Angeles Sanitation Brown Bin Service Locations in Council District Seven



Equestrian Transportation Safety Toolbox

After reviewing these safety challenges, relevant planning guidelines and literature, and best practices in other equestrian communities, I created an Equestrian Transportation Safety Toolbox applicable to the Northeastern San Fernando Valley.

Tool	Issue Addressed	Purpose
Infrastructure		
Equestrian-Level Push Buttons	Vehicular Conflicts	To trigger a pedestrian/equestrian crossing phase at a signalized intersection. These buttons are placed at a height where an equestrian rider is able to access without dismounting the horse.
Equestrian Warning Signage	Vehicular Conflicts	To alert drivers that they are entering an area frequented by equestrians.
Lighting	Vehicular Conflicts	Allows equestrians to see the roadway, trail, and other modes during dark or cloudy conditions, and allows other users of the roadway to better see equestrians.
Trail Barriers	Vehicular Conflicts, Recreational Mode Conflicts	Protects equestrians from vehicular traffic and clearly designates equestrian spaces by separating the trail from other parts of the roadway.
Flashing Red-Light Crossings	Vehicular Conflicts	To stop drivers at a crossing and allow equestrians to safely cross.
Step-Over Bars	Recreational Mode Conflicts	Allows equestrians and pedestrians to enter a trail or recreational space by "stepping over" a low bar or fence, while preventing wheeled vehicles from entering.
Land Use		
Equestrian Overlay Zones	Land Use & Trail Management	A zoning tool placed over a "base" zoning that includes additional horsekeeping provisions.
Horsekeeping in Zoning	Land Use & Trail Management	Even outside of designated Equinekeeping Districts, most single-family residential zones in the City of Los Angeles allow for horsekeeping.
Recreational Spaces	Land Use & Trail Management	Allows for equestrian activities, sports, and community gatherings in a safe and defined area.

Mobility		
Separated-Use paths	Land Use & Trail Management, Recreational Mode Conflicts	Protects equestrians from conflicts with other recreational modes, such as cyclists, pedestrians, and motorized vehicles, which are a common source of “spooking” for horses.
Shared-Use paths	Land Use & Trail Management, Recreational Mode Conflicts	Allows for multiple modes, in addition to equestrians, to utilize limited trail or sidewalk space.
Wayfinding	Land Use & Trail Management, Recreational Mode Conflicts	Clearly designates where equestrian trails are located and how to connect from one trail to another.
Policy		
Community Awareness	Land Use & Trail Management, Vehicular Conflicts, Recreational Mode Conflicts	Informs non-equestrians on considerations and recommended behavior for traveling in an equestrian community.
Driver’s Education	Vehicular Conflicts	Informs California drivers of the laws surrounding sharing the road with horses.
Enforcement	Land Use & Trail Management, Vehicular Conflicts, Recreational Mode Conflicts	Monitors compliance with traffic safety laws and trail use.
Mapping	Land Use & Trail Management, Recreational Mode Conflicts	Ensures that all community members have access and knowledge of the trail network; clearly delineates where public access is permitted and by which modes.
Trail Masterplans	Land Use & Trail Management, Recreational Mode Conflicts	Identifies key roles, responsibilities, and goals for managing and constructing a trail network.

Recommendations

Based on the community feedback and my review of relevant equestrian planning best practices, I conclude by recommending that Council District Seven prioritizes 1. A study of a complete equestrian facility on Foothill Boulevard and 2. Mapping all existing equestrian facilities by type.

Background

The San Fernando Valley is a suburban area within the City of Los Angeles that maintains an active presence of equestrian activity, culture and identity. The Northeastern San Fernando Valley in particular, as encompassed by Council District Seven, borders the San Gabriel Mountains and has maintained aspects of semi-rural lifestyles to a much greater extent when compared to more developed areas in the Valley. Equestrians in this area travel along a mixed network of transportation infrastructure, including official and unofficial trails, private and public land, and along roadways in the public right of way. New land use developments, post-pandemic increases in traffic violence across the U.S., and recent fatal equestrian collisions within the community have placed a larger focus on equestrian safety as they navigate this loose travel network.

In 2019, a vehicle struck two horses being ridden on Foothill Boulevard in Lake View Terrace, killing the horses and seriously injuring the riders (Flores, 2019). This tragic event led to a surge of interest in equestrian safety, especially along high-traffic arterials. As Council District Seven works to update the Trails Masterplan with the potential impact of improved equestrian safety in mind, I conducted an Applied Planning Research Project to better understand equestrian transportation safety measures and identify what improvements can be made to the equestrian network in the Northeastern San Fernando Valley.

Literature Review

The purpose of this literature review is to summarize both the existing academic understanding and current planning practice of equestrian safety in suburban roadway and off-street path contexts. I begin with an overview of how equestrian transportation developed in the suburban San Fernando Valley, review existing equestrian transportation safety research (which is largely limited to outside of the United States), and conclude with a review of the state of equestrian transportation planning in the Northeastern San Fernando Valley.

While there have been recent advancements in transportation research for “vulnerable road users,” or users of the roadway that do not use motorized vehicles, this progress is largely limited to pedestrians and cyclists. Equestrian travel obviously represents a smaller share of all trips in comparison to these other two modes, but there exist suburban areas in the United States where equestrian activity is still relatively popular. As U.S. cities suburbanized post-World War II, horses resurged in popularity both as a patriotic symbol of the American frontier and as a recreational hobby available to homeowners in low-density suburbs. It is therefore not uncommon for equestrian travel and motorized vehicles to interact on shared roadways in these suburban settings.

Horses as a Transportation Mode

Horses have always been part of the transportation network in the United States and continue to thrive in certain communities despite other technological innovations. Horses powered the first transit systems, including the horse-drawn omnibus and streetcar, and were often perceived as a transportation machine first and an animal second (Tarr & McShane, 2008). Even during this time period of horse-reliant transportation, individual horseback riding in an urbanized setting was rare (Tarr & McShane, 2003). Following the invention of motorized vehicles, horses were almost entirely used for recreational horseback riding.

It is difficult to collect accurate demographics of the horse population in the U.S., particularly for unregistered horses or small-scale horse facilities (Kilby, 2007). The American Horse Council, a horse industry trade organization, estimated a total of 6.7 million horses in the country, with approximately 1% of households owning at least one horse (American Horse Council, 2024). The most recent Equine Population Demographics Report from the United States Department of Agriculture noted that for half of the equine population, their primary purpose was pleasure, with ranch or farm work as the second most common use (National Animal Health Monitoring System, 2017)¹. While horse ownership is still relatively rare, suburbanization has allowed leisure horseback riding to thrive even in close proximity to urban centers.

Horses in Suburban Los Angeles

The switch in the primary purpose of horses from freight and travel to personal leisure mirrors the growth in suburban horse-keeping. As middle-class white families moved from urban centers to new suburban developments in the latter half of the twentieth century, suburban or “backyard” horsekeeping rose in popularity. Charles Collins (1978) describes two primary planning conflicts that arose from the growth of suburban horsekeeping. First, debates over the zoning restrictions local governments placed on residential horsekeeping, and second, concerns with the safety of horseback riding on city streets. The response of the City of Los Angeles to these two concerns led to the continued popularity of suburban horsekeeping in the present day. First, Los Angeles County had relatively lax zoning requirements for the maximum square footage required for each horse, and second, California as a whole developed several extensive networks of equestrian-friendly trails during this time period (Collins, 1978). With horse-friendly regulation and easy access to natural trails, horse ownership thrived in suburban communities across the greater Los Angeles area.

Horsekeeping was especially protected in the San Fernando Valley, the site of Los Angeles’s largest postwar suburban developments. In *Making the San Fernando Valley: Rural Landscapes, Urban Development, and White Privilege*, Laura Barraclough argues that the practice of “rural urbanism,” which includes backyard horsekeeping, was used to define the modern conception of the San Fernando Valley itself. Horses were both a marketing tool for the new suburban developments, as a patriotic symbol of the western frontier, and a land use preservation tool, as various equestrian clubs, homeowners associations, and historic preservation groups advocated for protecting their “horse-keeping lifestyle” through advocating against continued urban development

¹ This report only surveys operations with 5 or more horses, and only in 28 states, including California.

(Barraclough, 2011). Horsekeeping, particularly white dominated horsekeeping, was therefore both an amenity of these new suburban communities, and a practice that homeowners would use planning regulations to protect.

At the same time, equestrian activities were central to many Los Angeles Latino communities. Charrería, the traditional Mexican equestrian sport, is practiced across the region (Amador, 2023). In her more recent book *Charros: How Mexican Cowboys are Remapping Race and American Identity*, Barraclough (2019) details how Mexican horse ownership was used to establish cultural identity within these largely white-dominated suburbs in the San Fernando Valley. Horsekeeping and equestrian sport are therefore central to the cultural identity of many Latino San Fernando Valley communities.

Transportation Safety Concerns

Suburban horsekeepers have less access to open land and designated horse trails as their rural counterparts, making riding on city streets, and therefore potential conflicts with other transportation modes, a common occurrence. In the State of California, equestrians riding in the public right of way are granted the same rights and restrictions as a vehicle driver (California Vehicle Code §21050). However, little academic research has been conducted on horse collisions within the United States outside of the Pennsylvania region.

In some rural areas of Pennsylvania, “horse and buggy”, or a non-motorized horse drawn carriage, are a common transportation mode for the Amish community. Collisions between a horse and buggy and a motor vehicle are rare relative to other motor vehicle conflicts, but can be more dangerous for those involved (Gorucu et al., 2016). Severe horse-and-buggy collisions are often caused by low-visibility conditions, speeding, or unsafe turning movements by either driver (Gorucu et al., 2016; Qawasmeh et al., 2024). While there are clear differences between operating a horse and buggy and individual horseback riding, these studies do demonstrate some of the unique safety concerns of horse travel, particularly in the relatively slower reaction time of horse drivers.

Safety Research in the United Kingdom

Most academic research on equestrian transportation safety has been conducted in the United Kingdom. The geographic limitation of research may be due to the formal political organization of equestrians in the U.K. through the British Horse Society, which also collects reports of horse-related incidents and safety concerns. Chapman and Musselwhite (2011) published the first academic article defining horses as vulnerable road users, a transportation mode category traditionally limited to cyclists and pedestrians.

The analysis used focus groups of horse users and non-horse users to identify roadway conflicts between drivers and horses, noting that non-horse users who are personally familiar with horses are more likely to use caution when passing a horse on the roadway (Chapman & Musselwhite, 2011). The focus group discussions highlighted clear gaps in knowledge of best safety practices when sharing a roadway between motorized vehicles and equestrians.

Following this initial research venture, several quantitative analyses of equestrian collisions were conducted in the U.K. These studies revealed that most horse riders involved in a collision are female (Pollard & Grewar, 2023; Trump & Parkin, 2020) and most reported horse collisions are with a motor vehicle (Pollard & Grewar, 2023). The most common factors behind a collision between a horse and a motor vehicle involve the vehicle speeding, passing or overtaking the horse, or hitting the rear-end of the horse (Pollard & Grewar, 2020; Trump & Parkin, 2020). Though there are clear limitations to these analyses, as they only examine officially reported collisions, they still reveal clear factors that influence the severity of equestrian and motor vehicle collisions.

These factors are also distinctly different from the characteristics of other vulnerable road user collisions. Around half of severe pedestrian collisions and 40 percent of severe bicycle collisions in the United Kingdom occur at a roadway intersection (Department of Transport, 2025). Equestrian collision patterns, however, typically involve speeding and overtaking, which occurs outside of an intersection or driveway turning movement. Standard safety strategies for cyclist and pedestrian travel, which largely address intersection safety, may therefore not apply to equestrians.

Finally, Chapman & Musselwhite (2025) conducted a recent literature review of all equestrian road safety research in the U.K. over the past two decades. This review highlighted the aforementioned collision patterns and concluded with recommendations for improved equestrian collision research and reporting. They also recommended several design interventions that could address equestrian collision patterns, such as building more multi-use paths, directing equestrians to ride on low-traffic routes, and providing ample space on the roadway for motor vehicles to pass equestrians safely (Chapman & Musselwhite, 2025). Standardized planning and design recommendations, however, have not yet been implemented.

Safety Research in Other Countries

Equestrian road safety research in countries outside the U.K. and the U.S. reflect similar findings. Simsekoglu, Dalland, & Robertsen (2020) conducted a survey of Norwegian horse users, which also found that most horse riders were female. The survey focused on perceived risk rather than variables in reported collisions, noting that most horse users perceive other road users to be the greatest risk to their safety (Simsekoglu et al., 2020). In a survey of Australian horse riders, more than half of respondents reported experiencing a collision or near-miss in the past year (Thompson & Matthews, 2015). Additionally, respondents reported similar collision factors to research from the U.K., including speeding and passing movements. The study also emphasized the importance of noise distractions for horseback riders, where a loud or sudden noise can “spook” a horse, which can be an important issue on a busy roadway (Thompson & Matthews, 2015). Again, while these studies have identified factors that influence the roadway safety of equestrians, these factors have not been translated into transportation planning practice.

Equestrian Transportation Planning Practices

Standardized planning guidelines for equestrians in the U.S. have not yet been formalized as there have been for pedestrians, cyclists, and motor vehicle drivers. The Equine Land Conservation Resource (ELCR), a non-profit organization advocating against development on land used for equestrian development, has published general guidelines on planning for equestrian-friendly communities. These guidelines, however, largely focus on policies that discourage greenfield development, such as infill development incentives, rather than specific equestrian mobility policies (Hughes, 2015). These guidelines may also not apply to an area like the San Fernando Valley, where land uses are generally defined as suburban, not rural. The ELCR does address the maintenance and design of a trail network as a primary component of planning an equestrian community (Bolte, 2014). They emphasize the importance of planners and policy makers conducting community engagement with local equestrians to understand important equestrian facilities and routes (Bolte, 2014). Community engagement is a stage in most planning efforts, but may be particularly useful for equestrians as an understudied mode of travel.

Considering the economic value that equestrian activity may bring to a community, there have been multiple analyses on equestrians' preferred trail design. In general, equestrians desire trails that are long-distance and scenic, both in terms of the general natural landscape and opportunities for viewpoints (Hu et al., 2015; Auchter, 2008). Hu et al. (2015) also showed that equestrians prefer trails that are restricted to equestrian-only use, which poses a dilemma for planners, as equestrians generally consist of a smaller fraction of recreational trail users in comparison to cyclists or hikers. The ideal equestrian trail from the user perspective, however, would not be shared-use.

Equestrian Planning in Los Angeles

First published in 1968, the Major Equestrian Trails and Hiking Plan provided the first standards of equestrian trail design in the City of Los Angeles. Though these standards are generally more relevant to rural or park trails, they do include some important considerations for planning in a semi-urban area. First, the plan states that street crossings should be generally avoided, and if they do exist, should be at controlled intersections. This is especially relevant in equestrian areas in suburban Los Angeles, where roadway crossings are unavoidable. Second, the plan states that equestrian trails should be limited to equestrian and pedestrian use only, prohibiting cyclists, motorcyclists, and any other vehicle (Los Angeles Department of City Planning, 2009). This guideline is pertinent considering that equestrian travel on city streets can be unavoidable in the suburban San Fernando Valley, and there may be limitations in fully separated right of way between motorized vehicles, cyclists, and equestrians.

Community Equestrian Planning

On the neighborhood-scale, equestrian mobility is a common goal in community land use planning in the Northeastern San Fernando Valley. The City of Los Angeles publishes 34 community plans that guide land use policy on the neighborhood level. Of the community plan documents that compose the Northeastern San Fernando Valley, Arleta-Pacoima, Sylmar, Sunland-Tujunga-Lake View Terrace-Shadow Hills-East La Tuna Canyon, and Mission Hills-Panorama City-North Hills, all four plans considered equestrian needs in both land use and mobility planning. Besides Sylmar, these plans have not been updated since the 1990s. The Arleta-Pacoima and Mission Hills-Panorama City-North Hills plans include more general goals on equestrian mobility. For instance, they both include the goal that "a system of equestrian trails should be established," but do not include a specific map or implementation plan (Los Angeles Department of City Planning, 1995). While the Sunland-Tujunga-Lake View Terrace-Shadow Hills-East La Tuna Canyon plan has also not been recently updated, it includes

more detailed equestrian planning considerations. It calls for zoning policies that preserve low-density equestrian oriented neighborhoods from higher density development, and requires that new developments maintain access to trails (Los Angeles Department of City Planning, 1997). This community plan also specifically encourages trails within developed areas, stating that roadway improvements should consider the addition of equestrian trails that occupy one side of a street's right of way (Los Angeles Department of City Planning, 1997). Though few planning guidelines exist for non-rural equestrian trails, these plans demonstrate that equestrians are a major planning consideration in these communities.

The Sylmar Community Plan, which was updated the most recently in 2015, provides more extensive guidelines on the development of an equestrian trail network. The document includes not only plans for separated equestrian trails, but a map designating "trail priority streets," that show designated space for both equestrians and pedestrians (Los Angeles Department of City Planning, 2015). This plan is also the only to mention safety concerns in trail design, highlighting amenities that could be included on trail priority streets such as marked crosswalks, signage, and crossing push-buttons that are at rider height (Department of City Planning, 2015). Finally, this plan also includes specific design standards for trail priority streets. Trails adjacent to streets are expected to be at least six feet in width, and physical barriers between the trails and auto traffic are recommended for high-traffic arterials (Department of City Planning, 2015). Though the specific land use context varies between these four community plan areas, the Sylmar Community Plan is the most recent and most extensive example of standardized equestrian transportation planning in the Northeastern San Fernando Valley.

Horsekeeping and equestrian activities continue to thrive in equestrian-oriented suburban communities in the present day, but the safety implications of equestrian travel sharing roadway space with other transportation modes is severely underresearched. Significant research progress on equestrian collision patterns and perceptions of equestrian roadway safety has been achieved outside the U.S. over the past decade, but these findings may be limited to the legislative and roadway context of those particular countries. Equestrian planning efforts in the U.S. are based solely on general "best practices" rather than comprehensive safety research. In identifying potential safety improvements in the Northeastern San Fernando Valley, I therefore most rely on community perspectives and the performance of existing improvement measures as sources for understanding equestrian transportation safety in this unique land use context.

Methodology

Reviewing relevant literature on equestrian transportation safety revealed a clear gap of academic and policy research on the subject, as well as a lack of standardized professional planning practices, especially in the western United States. As such, my data collection for this project involved both an analysis of existing data and community engagement processes to create a localized understanding on the experience of equestrian transportation safety in the Northeastern San Fernando Valley. My data collection involved both quantitative and qualitative processes, and information specific to the district and broader information on the general state of planning for equestrian safety. My methodology is divided into three distinct phases: geodata mapping, community engagement and outreach, and equestrian community case studies.

Geodata Mapping

First, I collected existing geodata on the presence of equestrians within the district. As a proxy variable for horse populations, I mapped Los Angeles Sanitation's Brown Bin locations, or addresses that receive specialized trash services for large animal manure. I compared these clusters of horsekeeping areas to specialized equinekeeping zoned areas, and generalized socioeconomic variables to better understand each equestrian area. These maps serve to quantitatively describe the existing geographies of the equestrian communities in the Northeastern San Fernando Valley.

Community Engagement and Outreach

Second, I led a community engagement activity with equestrian community members from across the Northeastern San Fernando Valley to better understand their concerns with transportation safety. In this meeting, I asked community members to mark on a printed map where they experience transportation safety concerns while riding or leading their horse. They were then asked to also note their specific concern with each point, such as high traffic flows, broken infrastructure, or lighting. Conversation between community members naturally flowed, and they would often build on each other's concerns to express new concerns or additional details. I also probed participants to expand on certain points, provide more detail, or to include participants who spoke less often.

I also followed up on this meeting with two additional meetings with individual participants, who volunteered to show specific safety concerns in the Lake View Terrace, Tujunga Wash, and Shadow Hills areas. Through these follow up conversations, I was able to better identify the specific locations of transportation concerns, and photograph them for this report. I analyzed the information gathered from both the initial community engagement meeting and the follow-up outreach conversations by identifying key safety themes, or concerns that were repeatedly brought up by community members, and primary locations of concern, or the most common locations where safety concerns were identified.

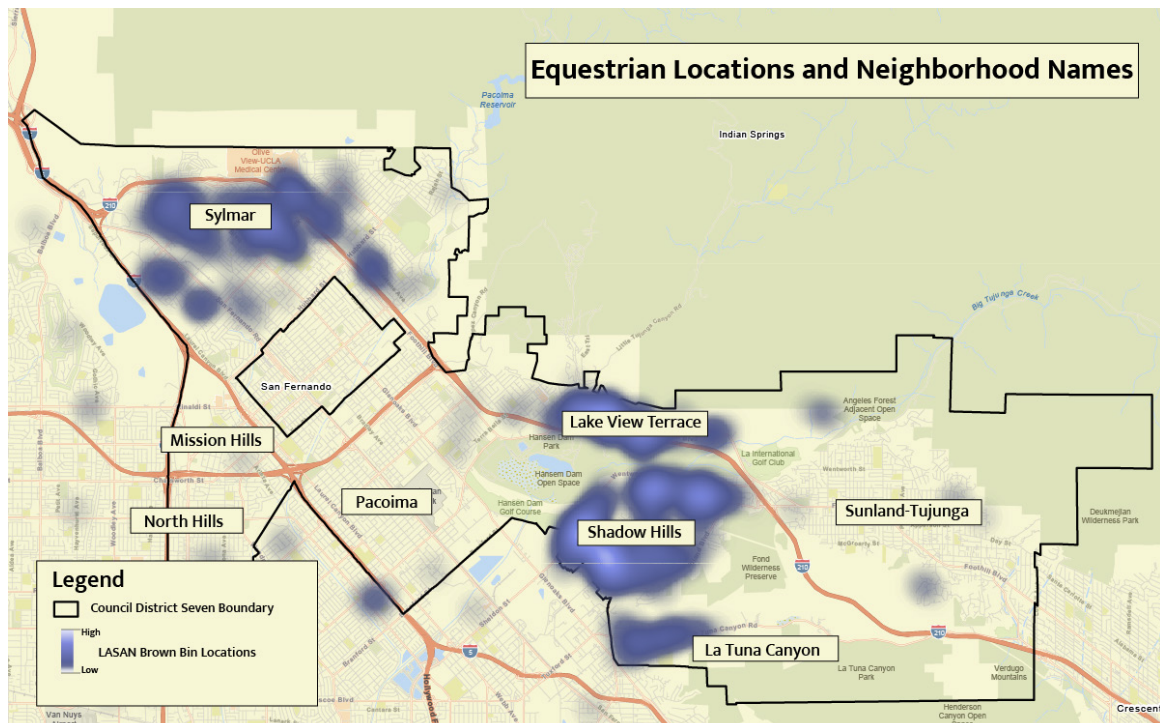
Equestrian Community Case Studies

Third, I created a series of case studies on equestrian transportation planning in Southern Californian communities. I developed a list of cities that repeatedly mention the term “equestrian” in their recent general plans using the California General Plan Database Mapping tool (Banginwar, 2023). I contacted planning departments from this list to request a short interview with a city planner to discuss their equestrian planning practices. I conducted interviews with planners from Rancho Cucamonga and Laguna Hills. These interviews were conducted over Zoom and I used the interview questions listed in Appendix B. I also analyzed the content of the plans themselves to identify where equestrian issues are addressed, their proposed policy solutions, and how, if at all, transportation safety concerns are framed. In combination with the interviews, these case studies serve as a foundation for understanding equestrian transportation planning best practices.

Geodata Mapping

The following section introduces the location and characteristics of equestrian communities in Council District Seven. Since horses are not accounted for in typical U.S. Census data collection, gathering accurate data on horse ownership, especially on a local-level, often requires proxy measures. Figure 1 shows addresses that receive brown bin service, or large animal manure removal, from the City of Los Angeles's Sanitation Department. These locations do not represent a fully-accurate horse population, as some owners may not use brown bin services and this data does not account for the number of horses residing at each address. Additionally, brown bin services are used by owners of other large animals such as goats and llamas. However, as the resulting map generally reflects observations and local knowledge of equestrian communities, it is an appropriate measure of equestrian communities. Figure 1 also shows the approximate location of neighborhoods as labeled by Council District Seven.

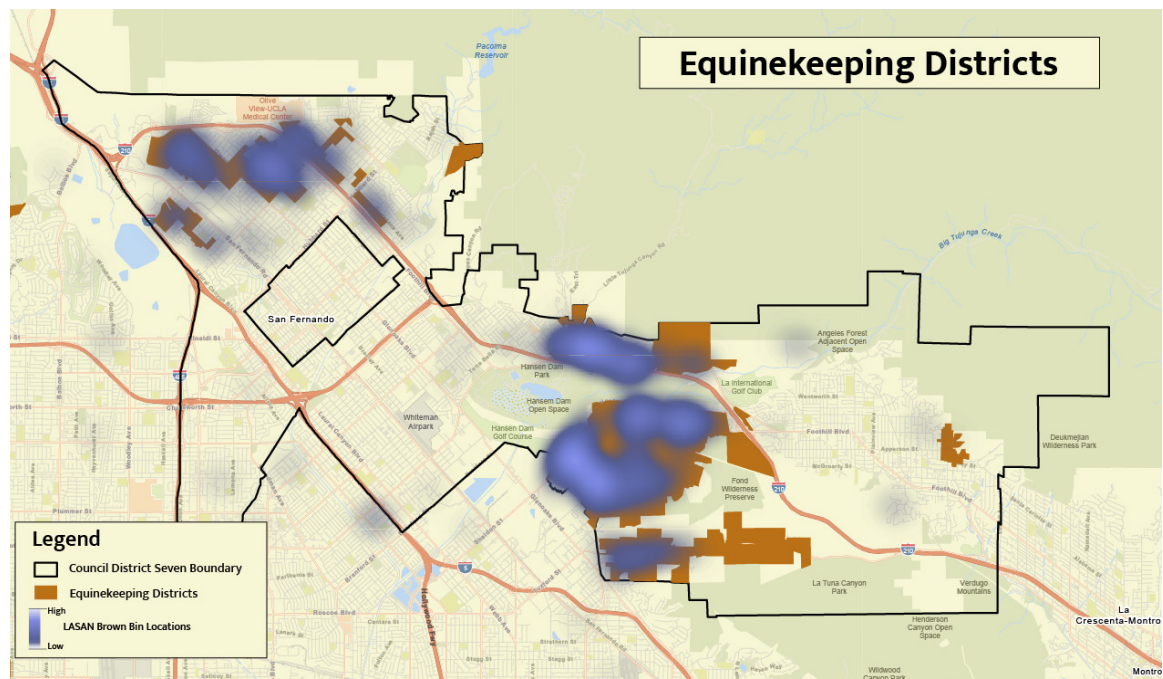
Figure 1: Map of Los Angeles Sanitation Brown Bin Service Locations in Council District Seven



There are two clear primary hubs of equestrian activity in the District. First, the northwestern hub in the neighborhood of Sylmar, and the second, the southeastern hub in the neighborhoods of Lake View Terrace and Shadow Hills. These two areas are separated by a large gap in equestrian activity, where land uses are more densely populated, such as the City of San Fernando, located entirely within the borders of Council District Seven, or industrial land uses, such as those that border the neighborhood of Pacoima.

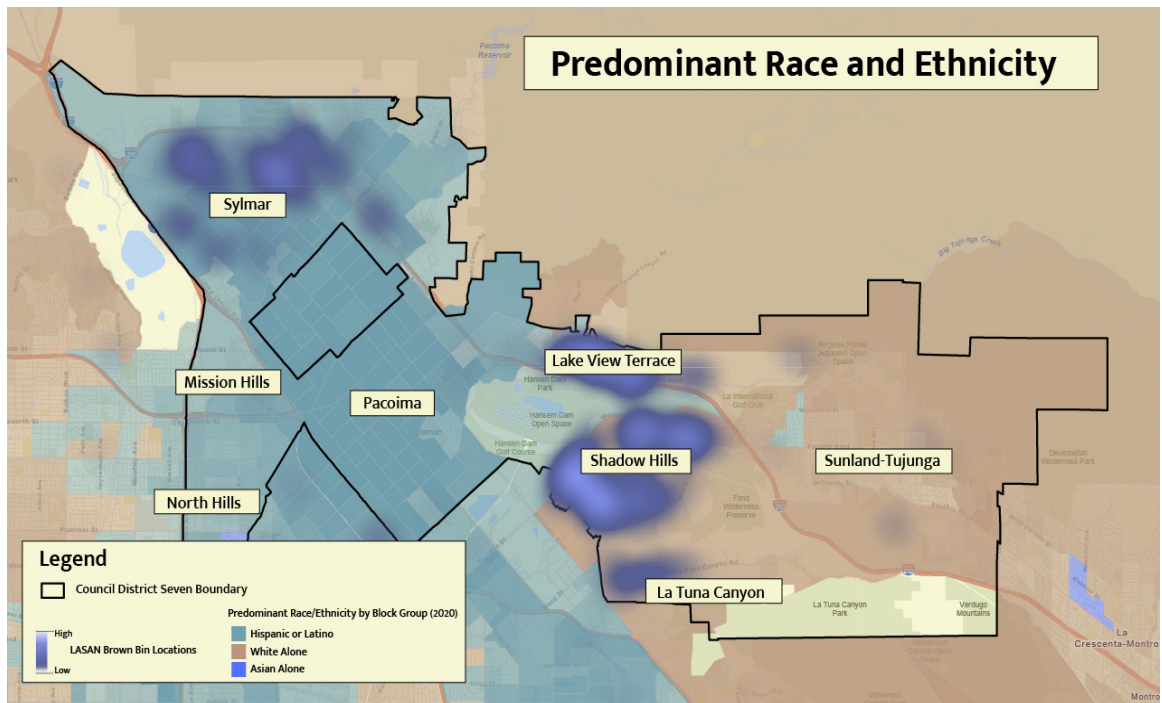
Most addresses served by LASAN brown bin services are located in Equinekeeping Districts, as shown in Figure 2. Equinekeeping Districts are supplemental use districts that conditionally permit horses on residential lots. Residents keeping horses are limited to one horse per 4,000 square feet and which must be kept 35 feet or further from the nearest dwelling unit (LAMC §13.05). Horses are still permitted in most other residential zoning categories, but under stricter land use conditions. For example, horsekeeping is permitted in R1 single family zones as long as the lot is at least 20,000 square feet (LAMC §12.08). The location of Equinekeeping Districts therefore does not represent the entirety of equestrian areas, but it does highlight areas where the City has recognized concentrated equestrian activity.

Figure 2: Map of Equinekeeping Districts in Council District Seven



Both communities have long histories of agricultural and equestrian lifestyles, but vary in demographic characteristics. As a whole, Council District Seven has a majority Hispanic or Latino population. Racial distributions vary greatly within the district however, as shown in Figure 3. Neighborhoods east of Hansen Dam are predominantly non-Hispanic white, while neighborhoods west of Hansen Dam are predominantly Hispanic or Latino. The two primary hubs of equestrian activity are also divided between these two areas, with the Sylmar hub located in the predominantly Hispanic or Latino areas west of Hansen Dam, and the Lake View Terrace/Shadow Hills hub located in the eastern segment.

Figure 3: Predominant Race or Hispanic Origin by Census Tract (ACS 5-Year Estimates 2023)



Community Engagement

The equine community engagement meeting took place on Friday, January 30th, 2026 at the Lake View Terrace Recreation Center. Participants included multiple Council District Seven Staff and seven equestrian community leaders representing the organizations described in Table 1. Five community leaders were from the eastern equestrian area, representing the neighborhoods of Lake View Terrace and Shadow Hills, while two were from the Northwestern equestrian area, representing the neighborhood of Sylmar. The attendance therefore represented an approximate coverage of all equestrian areas in Council District Seven.

Table 1: Organizations Represented at the Equine Community Engagement Meeting

Organization	Geographic Area(s)	Description
Horsemen in Action	Sylmar	A coalition of equestrians that host equestrian sporting events and advocate for local equestrian issues.
Shadow Hills Property Owners Association	Shadow Hills, Stonehurst	A volunteer association of residents that advocate for the preservation of rural and open spaces.
Foothill Trails District Neighborhood Council	Lake View Terrace, La Tuna Canyon, Shadow Hills	An official neighborhood council that reports to the Los Angeles City government. Preserving low-density and equestrian friendly land uses are their central concern.
California State Horsemen's Association	California (Region 7 represents Los Angeles County)	A non-profit organization that advocates for the interests of equestrians and the broader leisure horse industry for state and local legislative issues.

To better understand safety concerns in the area, I asked participants to share broadly about the safety concerns they or someone they knew had experienced while riding. Rather than a structured interview or survey, participants naturally built on or responded to thoughts raised by others. I also occasionally probed for further details or examples to hear more about specific safety insights. Additionally, I asked every participant to draw out these safety concerns physically on a map of the district and to draw their typical riding routes to provide a sense of where they are often riding. I first discuss the general safety themes that arose during this discussion, and then move to an analysis of the specific locations of these safety concerns.

Key Safety Themes

1. Land Use & Trail Management

Land use changes were by far the most pressing concern at the meeting, though they were not always strictly relevant to safety concerns. Many residents brought up the recent state level actions, Senate Bill 9 and Senate Bill 79, which both aim to increase housing production by overriding some local level zoning restrictions. Senate Bill 9 streamlines the process of constructing additional dwelling units (ADUs) on existing residential parcels, and Senate Bill 79, which will not go into effect until July 2026, enables increased residential density near high frequency transit stops. Residents were concerned that these state bills would harm the current land uses provided in their equestrian communities. However, both of these policies are state-level bills that cannot be addressed in the scope of this project. Additionally, there are essentially no Senate Bill 79 eligible areas near the equestrian neighborhoods in Council District Seven. The nearest eligible areas are along the proposed East San Fernando Valley light rail line along Van Nuys Boulevard, which is in the central area of the District.

Preserved low-density spaces and equestrian-oriented open spaces are state goals of several of the organizations represented at the meeting (see Table 11). ADUs are of particular high concern, as the existing Equinekeeping Districts, which are the residential zoning categories that permit horsekeeping in the City of Los Angeles, horse enclosures must be 35 feet or further from any dwelling unit (Los Angeles Municipal Code, Article 3 §13.05). An increase in ADU development could possibly lead to legal conflicts with existing equestrian properties.

While these broader land use legal changes do not generally affect equestrian transportation safety, local-level land use issues can. Many residents reported that residential lots were building past their existing lot lines into the right of way. Others noted the installing of mailboxes and paved concrete, or parking cars past their official lot lines. These areas between residential parcels and the streets were traditionally seen as important spaces for riding, and these physical obstructions can force equestrians to ride on the street, which they perceive as significantly more dangerous. Participants also highlighted that these obstructions may be particularly dangerous during an emergency evacuation event.

2. Conflicts with Recreational Modes

Unsafe behaviors of other recreational travel modes was a common complaint among participants, and was represented equally across both geographic equestrian areas. These other recreational travel modes primarily included traditional bicycles, mountain bicycles, dirt bicycles, electric bicycles, and all-terrain vehicles (ATVs). Participants complained about experiences with other recreational modes both in shared spaces (i.e. easements between streets and residential lots, which are open to cyclists and equestrians) and in spaces where recreational modes are prohibited (i.e. recreational trails that prohibit mountain bicycles and motorized vehicles). Participants were also particularly against new infrastructure provided for these modes, such as new protected bicycle facilities, which they perceived as infringing on equestrian spaces.

The concerns about these other modes were due to their speed, noise, or users' improper attention to surroundings. Participants noted that these other modes may travel dangerously fast in shared spaces, and produce noises that may "spook" horses. As demonstrated in my literature review, horses are shown to be extremely sensitive to sudden noises, and may behave erratically or dangerously when spooked by these modes. Participants also shared a general lack of trust in these other modes to properly pay attention to their surroundings, including the safety of nearby equestrians. I probed for a specific discussion of any measures that have been successful in maintaining equestrian-only and pedestrian-only spaces. Some participants appreciated "step-over bars," metal bars that limit motor vehicle access. However, others noted that any bar that can be stepped over by a horse can most likely be crossed by an ATV.

3. Vehicular Conflicts

Cars appeared to not be as central of a safety concern to the participants. When I asked specifically about motor vehicle conflicts, however, many participants shared specific instances of unsafe driving behaviors or unsafe conflict points with cars. Representatives from Sylmar shared experiences of cars driving recreationally (e.g. performing doughnuts or other tricks) in open spaces behind the Olive View Medical Center. Similarly to experiences with smaller motorized vehicles, these cars would produce sudden noises that could spook horses, which had even led to horses falling or injuring their rider.

Outside of open spaces, residents were eager to discuss their experiences with different roadway crossing infrastructures and contexts. New flashing red light crossings were greatly appreciated, especially in comparison to previous yellow light only crossings. High speeds among drivers were a commonly cited reason for unsafe crossings. Notably, residents also underscored the importance of ample space for waiting at roadway crossings. While lights, signs, and marked crossings are necessary to fully alert drivers of an equestrian crossing, participants noted that some intersections did not have enough space for equestrians to wait with an appropriate buffer from car traffic.

Primary Locations of Concern

1. Foothill Boulevard

Foothill Boulevard is a 4 to 5 lane arterial roadway that runs parallel to the 210 Freeway in Council District Seven. A portion of Foothill Boulevard in the Sylmar and Pacoima neighborhoods is designated as part of the High Injury Network (Los Angeles City Planning, 2016). It also provides access to all equestrian neighborhoods in the District and importantly, the Hansen Dam Horse Park. It was also the location of the 2019 vehicle collision that killed two horses and seriously injured their riders. As a dangerous, high-traffic street that is also heavily frequented by equestrians, it was the most commonly mentioned location for safety concerns.

Some segments of Foothill Blvd. have painted bike lanes, while others have dirt bridle paths occasionally protected with metal bars. Several segments have both facilities (see Figure 4). Many participants were frustrated with this current state, as they believe the District prioritized construction of the bike lane over improving the existing equestrian facility. Many also argued that they were “promised” equestrian safety improvements from the District following the 2019 collision that never materialized. However, possible equestrian improvements are limited, as the corridor is designated for “Tier 2 Bicycle Lanes” in City of Los Angeles’ Mobility Plan 2035. Varying right-of-way widths throughout the corridor mean that there are many segments that are simply not wide enough to support both a bicycle and equestrian facility. There are currently large gaps between the equestrian, pedestrian, and bicycle facilities present along Foothill Blvd., and multiple instances where the bollards protecting the bicycle lanes have been vandalized or destroyed.

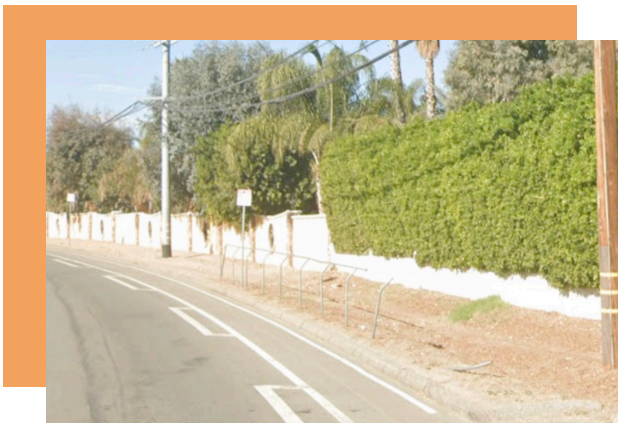


Figure 4: Parallel Painted Bicycle Lane and Bridle Path along Foothill Blvd.

The gaps in the equestrian facility are due to its regulatory ties to land use. New developments along Foothill Blvd. are required to construct the bridle path adjacent to their property, thus some parcels of land have well-constructed bridle paths with ample space for equestrians (see Figure 4). Since the construction of this path is piecemeal and limited to new developments, it is unable to best serve the equestrian community until it is fully constructed.

Additionally, there is no clear entity (neither the City nor private land owners) responsible for the maintenance of the trail. The protective metal bars are bent or misshapen in several areas due to collisions with vehicles (see Figure 5). Even if constructed to completion, this facility would therefore require consistent maintenance.

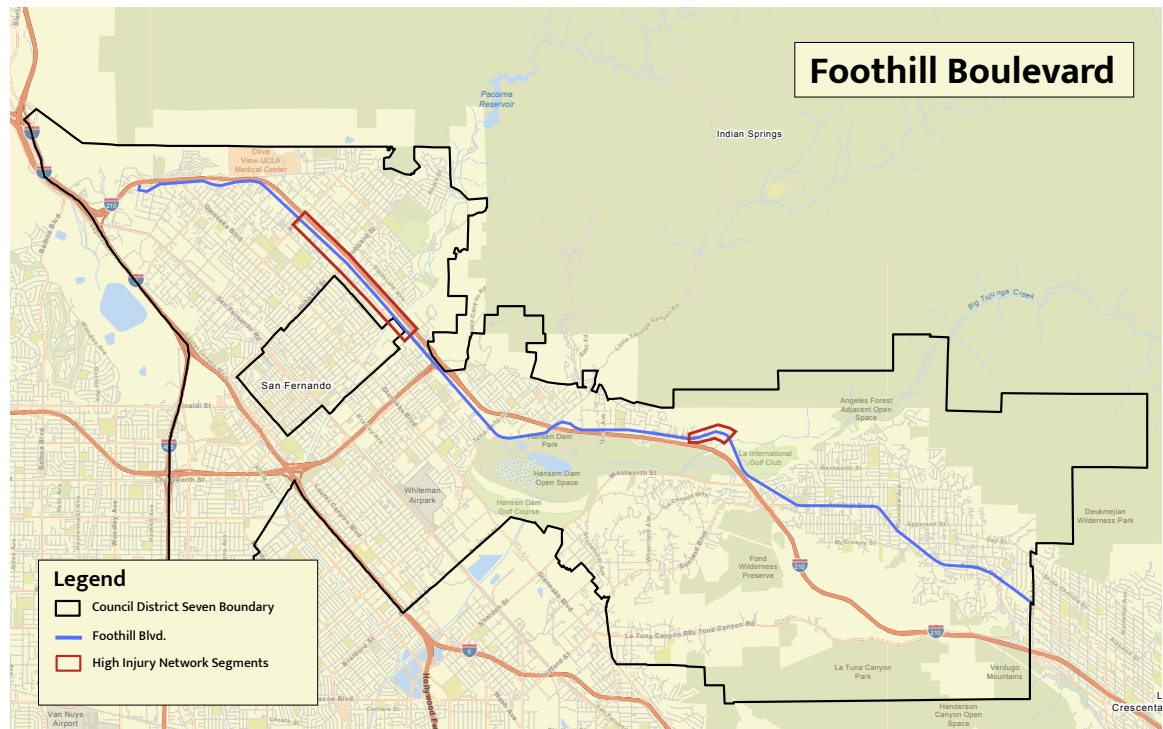
Foothill Blvd. runs parallel to the 210 Freeway, a major regional route connecting Pasadena to the San Fernando Valley, it is often used as an alternative route to the freeway. This was a primary concern for participants, who shared observations of cars speeding on Foothill, disregarding equestrian crossings, or appearing unaware that they were driving in an equestrian area. Familiarity with horses or simply knowledge that

an area has horses is a key factor in limiting equestrian-vehicle collisions. Vehicles driving Foothill as a high-capacity alternative to the Freeway therefore pose a significant risk to the equestrian community that relies on the arterial for access to key equestrian destinations. Additionally, participants shared that occasionally freight trucks would be routed down Foothill, even though it is not a designated truck route. While the issue with freight trucks has mostly been addressed through communications with the City, it still highlights the inherent risks present along Foothill. It cannot both safely serve the mobility needs of equestrians and other vulnerable road users while still existing as a high-capacity regional arterial.



Figure 5: Bent Metal Bars on Bridle Path along Foothill Blvd.

Figure 6: Foothill Blvd. within Council District Seven



2. Hansen Dam Area

The Hansen Dam Area consists of multiple facilities surrounding the Hansen Dam, which was built for flood control in 1940, and is a central location for equestrian activity in the San Fernando Valley. All facilities are owned by the Los Angeles Recreation and Parks Department, including the Hansen Dam Recreational Area, the Hansen Dam Horse Park, which has horse stables, trails, and arenas, and Orcas Park, which is located next to the Horse Park. Outside of the formal boundaries of the Recreation and Parks Department, the Tujunga Wash is also a popular area for riding.

Figure 7: Hansen Dam Area



Located besides Foothill Boulevard, safe access to the Hansen Dam Area is a key concern for many residents. There are limited access points from the Lake View Terrace neighborhood, and all involve crossing Foothill Boulevard and passing under the 210 Freeway. The intersection of Wheatland and Foothill, for example, is one of the few access points, and was listed as an intersection of concern by residents. Equestrians shared experiences of turning cars failing to see equestrians waiting to cross the intersection and of limited space underneath the Freeway. Many equestrians, especially from further neighborhoods like Sylmar, were also frustrated with limited parking access. While equestrians from nearby neighborhoods like Shadow Hills and Lake View Terrace are able to ride their horses to the area, others rely on transporting their horse in a trailer to access the recreational facilities. Parking at Orcas Park is currently closed on Sundays due to safety concerns around large social gatherings at the park and recreational vehicular activity. Many community members suggested more enforcement from park rangers as an alternative to closed parking lots, though they also acknowledged the limited resources and staffing capabilities of park rangers.

Concerns about the Hansen Dam Area result primarily from concerns that equestrian activity is increasingly limited both from barriers to access in the form of restricted parking, and from potential threats to safety from other recreational modes. In general, equestrians desired improved access points to the Hansen Dam Area, both by car and by horse, and more spaces designated and maintained specifically for equestrian use.

2. Angeles Forest Foothills

Though this project is designed to address safety concerns within the boundaries of Los Angeles Council District Seven, the most popular riding area for the equestrian community lies outside of the city borders in the Angeles National Forest. The National Forest is located in the San Gabriel Mountains, and its foothills border Council District Seven on the northeast, directly adjacent to the equestrian communities of Sylmar and Lake View Terrace. The fact that this area is not managed by the City frustrates many equestrians, who find it difficult to identify a contact point to share concerns about trail damage or maintenance issues. Many trails located in this area are unofficial or not mapped in a clear database, and there is no designated body responsible for trail maintenance. Equestrians shared that they themselves help to maintain or repair trails in this area, and that they can be especially dangerous after periods of heavy rain. Trail maintenance is required throughout the year to guarantee a safe riding experience, and the lack of a designated contact point limits equestrian mobility in this area.

Direct access to the equestrian trails in the Angeles National Forest is a key component of the desirability of the equestrian neighborhoods in the Northeastern San Fernando Valley. Equestrians in the Sylmar and Lake View Terrace neighborhoods are often able to ride directly from their homes to trailheads in the foothills. As such, the land use concerns surrounding new developments intruding on the equestrian network are especially pertinent for access to the Angeles Forest Foothills. Many participants shared examples of specific homes or businesses that blocked or restricted access to trailheads. Similar to the Hansen Dam Area, the increasing popularity of other recreational modes also pose a threat to equestrian safety. Equestrians in the Sylmar area were particularly concerned about increasing motorized vehicular activity in the equestrian trail network behind the Olive View Medical Center. This is a popular access point for Sylmar residents, as it provides direct access from neighborhood streets to the trail network. Though the trails only permit equestrians and pedestrians, many Sylmar equestrians observed dirt bikes and ATVs on these trails, often spooking horses. Equestrians have even observed cars driving recreationally in this area, which serve as an even greater threat to equestrian safety due to their larger size and louder noise. Like the Hansen Dam Area, this area is an important resource for the equestrian community who are concerned about threats from other recreational modes within the area, and limited access to the area from within the city. While enforcing legal restrictions on activities within the area may be outside the scope of this project, maintaining safe and permitted access to the Angeles Forest Foothills from within the city limits will be necessary to maintain the thriving equestrian community.

Equestrian Community Case Studies

Case study cities were selected by identifying the top ten cities in the Southern California region by mentions of the term “equestrian” in their General Plan document. Table 2 lists these cities below in order of “equestrian” mentions. I contacted planners at these city departments, and conducted phone call or zoom interviews using the questions listed in Appendix A.

Table 2: City Plans by Number of “Equestrian” Mentions

Jurisdiction	Plan	Number of Mentions
Rancho Cucamonga	General Plan 2010	61
Norco	General Plan 2009	54
Hesperia	General Plan 2010	53
Laguna Hills	General Plan 2009	41
El Monte	General Plan 2011	35
California City	General Plan 2009	33
Hemet	General Plan 2012	33
Pico Rivera	General Plan 2014	31
Santee	General Plan 2003	31
Chino	General Plan 2010	31

Note: Any plans from before 2000 were excluded to focus on more recent planning efforts. Any cities with plans from multiple years were also only noted as only the most recent plan.

The two cities serving as case study examples of equestrian planning in comparison to Council District Seven are Rancho Cucamonga and Laguna Hills. Basic demographic and contextual information about each city are listed in Table 3. While case study cities were selected based on their similarity to the population, land use and equestrian activity of Council District Seven, the District remains a unique environment of relatively high residential density with equestrian activity, while the case study cities all have relatively lower population densities.

Table 3: Demographic Comparisons of Equestrian Communities

Jurisdiction	Population (2020)	Area (sq mi)	Population Density (people per sq mi)
Council District Seven	268,719	37.40	7,120
Rancho Cucamonga	174,453	40.12	4,349
Laguna Hills	31,374	6.57	4,791

Rancho Cucamonga

Rancho Cucamonga is a city in San Bernardino County bordering the foothills of the San Gabriel Mountains. The most recent Rancho Cucamonga General Plan, PlanRC 2021, includes equestrian considerations in its visioning, stating “pedestrians, cyclists, equestrians, and skateboarders will enjoy the freedom of mobility choice,” recognizing horse riding as a modal choice equivalent in validity to traditional forms of walking or cycling (PlanRC 2021, pg. 55). Rancho Cucamonga includes three historic communities of Alta Loma, Cucamonga, and Etiwana. Alta Loma, located closest to the San Gabriel foothills, is the center of equestrian culture and activity in Rancho Cucamonga (PlanRC 2021, pg. 34). The equestrian character of Alta Loma is maintained by Rancho Cucamonga Trail Implementation Plan (1991), which proposes a map of Community Trails designed for shared pedestrian and equestrian use concentrated in Alta Loma.

This area is also encompassed by a specific Equestrian Overlay Zone, which in addition to permitting the on-site storage of horses, is directly tied to the Trail Implementation Plan. All new developments in this zone must add to the proposed trail network (City of Rancho Cucamonga Code of Ordinances §17.38.020). The majority of the planning department’s interfacing with equestrian issues is therefore largely focused on ensuring the appropriate construction and maintenance of these trail easements (J. Knight, personal communication, 2026). While many equestrian areas are facing little to no development in Council District Seven due to increased wildfire risk or the lack of utility connections, Alta Loma’s equestrian neighborhoods have seen significant growth over the past few decades, leading to a well-connected network of trails. At the same time, this “piecemeal” approach has been less successful in overseeing the maintenance of these trails, as some trail easements are maintained by the city while others are a private responsibility (J. Knight, personal communication, 2026). Some community members have thus expressed dissatisfaction or concern with the maintenance of some Community Trails.

The planning department has not experienced any recent issues of equestrian safety concerns. While many equestrians in Council District Seven ride along major high-volume arterials, Alta Loma's trail network travels between homes or along slower, neighborhood streets, perhaps leading to a lack of concerns surrounding equestrian trail safety. However, while the Community Trail network is designed to be shared by pedestrians and equestrians, there have been some community concerns around appropriate sharing practices (J. Knight, personal communication, 2026). This mirrors a common equestrian complaint in Council District Seven: a dislike of sharing riding spaces and trails with cyclists. Overall, however, most equestrian planning in Rancho Cucamonga focuses on the management of trail easements and maintenance rather than safety issues. Additionally, since the trail implementation plan has already outlined a network of trails, and continued development incentivizes the expansion of the network, trail connectivity is of little concern.

Laguna Hills

Laguna Hills is a relatively new suburban city, incorporated in 1991 in Orange County. Unlike either Council District Seven or Rancho Cucamonga, equestrian activity and trails are almost entirely privately managed. Though the mobility element of the most recent Laguna Hills General Plan also identifies a goal to "accommodate different users such as pedestrians, cyclists, and equestrians," (Laguna Hills General Plan, 2009, pg. M-2), the equestrian community is almost entirely centered in the Nellie Gail Ranch, a master planned equestrian community managed by the Nellie Gail Homeowners Association. The Nellie Gail Ranch has a specific "Estate Residential" zoning category, which allows for large residential lots with permitted horse keeping (Laguna Hills Zoning Code §9-12). Though this is similar to the Horse Overlay Zone present in both the City of Los Angeles and Rancho Cucamonga, the equestrian trail network has already been completed and there are no future expansion plans. The Nellie Gail Ranch predates the incorporation of Laguna Hills, and was envisioned and designed as an equestrian community.

The equestrian trails present in Laguna Hills are entirely limited to the Nellie Gail Ranch and are privately maintained by the Nellie Gail Homeowners Association (J. Wu, personal communication, 2026). The maintenance and connectivity of equestrian trails are therefore not under the responsibility of the local planning department. The planning department has similarly not received any direct concerns from residents about equestrian safety (J. Wu, personal communication, 2026). Most equestrian trails are not located alongside roadways, and any crossings are generally on slow, neighborhood streets. This once again contrasts with Council District Seven's equestrian network, which conflicts often with high-traffic areas. Laguna Hills serves as an example of an

almost entirely private management of equestrian mobility that is permitted by the planning code, as opposed to all other examples that involve a greater involvement with public planning processes.

Summary of Issues

The Northeastern San Fernando Valley differs from typical equestrian communities in the United States due to its unique environment in suburban Los Angeles. My geospatial analysis revealed that while equestrian households are concentrated in relatively small geographic areas, these communities produce a large amount of equestrian activity. Additionally, the largest clusters of equestrian activity, Sylmar and Lake View Terrace/Shadow Hills, are separated by many geographic obstacles, including the 210 Freeway, Foothill Boulevard, and industrial land uses in Pacoima. Through my community engagement activities and conversations with equestrian community members, I identified three key equestrian transportation safety challenges: vehicular conflicts, conflicts with other recreational modes, and land use concerns. While vehicular conflicts are a safety challenge that equestrians share with other vulnerable road users, such as pedestrians and cyclists, the latter two are relatively unique to equestrians. Equestrians from the Study Area spoke extensively about how even a relatively quiet noise from a bike or ATV could spook a horse, leading to unpredictable behavior and posing a threat for the rider. The current equestrian network is a mix of formal spaces, such as designated paths along roadways, and informal spaces, such as unmarked trails in the Tujunga Wash. As such, small changes to existing development patterns can easily place the entire network at risk. With its location in suburban Los Angeles, conflicts with vehicles, other modes, and the potential impacts of new development are much higher than for equestrian communities in less densely populated areas.

Though there are many other cities in the greater Los Angeles region with a significant equestrian population, few face these exact challenges. While trail maintenance, for example, is a concern among equestrians in Rancho Cucamonga, their approach of tying equestrian trail construction to new residential development created an extensive community equestrian network. The Northeastern San Fernando Valley, however, has relatively slower development trends, especially in high fire-risk areas near the foothills. Laguna Hills represents a common category of equestrian community in Southern California: the master planned equestrian community. Many equestrian cities and neighborhoods were designed explicitly for equestrian lifestyles, and as such maintain an extensive and well-maintained network of equestrian trails. Many of these communities are also significantly higher-income than the

Northeastern San Fernando Valley. While these master planned communities may occasionally face vehicular conflicts or conflicts with other recreational modes, their equestrian lifestyle and identity is maintained by existing land use patterns. My recommendations for equestrian transportation safety improvements in the Northeastern San Fernando Valley therefore draw on guidance from a variety of environments (urban, suburban, and rural) to best address their unique safety challenges.

Equestrian Transportation Safety Toolbox

I compiled the following equestrian transportation safety toolbox based on guidance from equestrians consulted during the community engagement process, tools that were used in my case study communities, and on guidance outlined in several planning and policy documents. The documents I reviewed are listed below. While the United States Forest Service Equestrian Design Guidebook is a comprehensive planning document for designing equestrian facilities, it is oriented more towards rural contexts. As such, I reviewed urban planning documents and design guidelines to better situate the equestrian recommendations within the uniquely dense and suburban context of the Northeastern San Fernando Valley. The resulting recommendations in the toolbox are therefore most pertinent to equestrian communities that interact with uniquely urban issues and infrastructure, such as high-traffic streets and limited open space.

Documents Reviewed

California Drivers Handbook (2025):

Provides a general overview of information Californians applying for a driver's license are expected to know.

California State Parks Trails Handbook (1991, last updated 2019):

While this document is designed to guide State Park planners and administrators, many practices and guidelines are relevant to trails outside of State Park jurisdiction. Chapter 7 focuses specifically on Equestrian Trail Design.

City of Los Angeles Complete Streets Design Guide (2014, last updated 2025):

Provides design guidance and example concepts for safe and accessible streets in the City of Los Angeles. It explicitly addresses equestrian considerations through Section 4.18: Sidewalk Equestrian Trails.

City of Los Angeles Municipal Code §12.00-§13.21:

Article 2 of the Municipal Code that governs the legal regulations on different zoning categories, including regulations on horsekeeping. Article 3 establishes supplemental use districts, where regulations on the Horsekeeping District are found.

City of Los Angeles Supplemental Street Design Guide (2020):

A supplementary document that expands on the recommendations in the Complete Streets Design Guide to provide more specific details on roadway design.

U.S. Department of Transportation Federal Highway Administration Manual on Uniform Traffic Control Devices (last updated 2026):

Dictates the standard design and installation of traffic control devices, primarily roadway signage, across the country.

United States Forest Services Equestrian Design Guidebook for Trails, Trailheads, and Campgrounds (2007):

This is the most extensive public guidance on best practices for equestrian trail design. While it is intended for use by the USFS, many practices and guidelines are relevant to trails in the Northeastern San Fernando Valley, and the guidebook even addresses urban trail considerations.

U.S. Department of Transportation Federal Highway Administration Proven Safety Countermeasures :

A list of safety tools which have been shown to significantly reduce vehicular crashes, as well as considerations and recommendations for installation.

The Equestrian Transportation Safety Toolbox is summarized in Table 4. I further categorized each tool by which key safety theme it addressed: Land Use & Trail Management, Vehicular Conflicts, or Recreational Mode Conflicts.

Table 4: Equestrian Transportation Safety Toolbox

Tool	Issue Addressed	Purpose
Infrastructure		
Equestrian-Level Push Buttons	Vehicular Conflicts	To trigger a pedestrian/equestrian crossing phase at a signalized intersection. These buttons are placed at a height where an equestrian rider is able to access without dismounting the horse.
Equestrian Warning Signage	Vehicular Conflicts	To alert drivers that they are entering an area frequented by equestrians.
Lighting	Vehicular Conflicts	Allows equestrians to see the roadway, trail, and other modes during dark or cloudy conditions, and allows other users of the roadway to better see equestrians.
Trail Barriers	Vehicular Conflicts, Recreational Mode Conflicts	Protects equestrians from vehicular traffic and clearly designates equestrian spaces by separating the trail from other parts of the roadway.
Flashing Red-Light Crossings	Vehicular Conflicts	To stop drivers at a crossing and allow equestrians to safely cross.
Step-Over Bars	Recreational Mode Conflicts	Allows equestrians and pedestrians to enter a trail or recreational space by “stepping over” a low bar or fence, while preventing wheeled vehicles from entering.
Land Use		
Equestrian Overlay Zones	Land Use & Trail Management	A zoning tool placed over a “base” zoning that includes additional horsekeeping provisions.
Horsekeeping in Zoning	Land Use & Trail Management	Even outside of designated Equinekeeping Districts, most single-family residential zones in the City of Los Angeles allow for horsekeeping.
Recreational Spaces	Land Use & Trail Management	Allows for equestrian activities, sports, and community gatherings in a safe and defined area.

Mobility		
Separated-Use paths	Land Use & Trail Management, Recreational Mode Conflicts	Protects equestrians from conflicts with other recreational modes, such as cyclists, pedestrians, and motorized vehicles, which are a common source of “spooking” for horses.
Shared-Use paths	Land Use & Trail Management, Recreational Mode Conflicts	Allows for multiple modes, in addition to equestrians, to utilize limited trail or sidewalk space.
Wayfinding	Land Use & Trail Management, Recreational Mode Conflicts	Clearly designates where equestrian trails are located and how to connect from one trail to another.
Policy		
Community Awareness	Land Use & Trail Management, Vehicular Conflicts, Recreational Mode Conflicts	Informs non-equestrians on considerations and recommended behavior for traveling in an equestrian community.
Driver’s Education	Vehicular Conflicts	Informs California drivers of the laws surrounding sharing the road with horses.
Enforcement	Land Use & Trail Management Vehicular Conflicts, Recreational Mode Conflicts	Monitors compliance with traffic safety laws and trail use.
Mapping	Land Use & Trail Management, Recreational Mode Conflicts	Ensures that all community members have access and knowledge of the trail network; clearly delineates where public access is permitted and by which modes.
Trail Masterplans	Land Use & Trail Management, Recreational Mode Conflicts	Identifies key roles, responsibilities, and goals for managing and constructing a trail network.

Infrastructure

Equestrian-Level Push Buttons

To trigger a pedestrian/equestrian crossing phase at a signalized intersection. These buttons are placed at a height where an equestrian rider is able to access without dismounting the horse.



Per the LA Complete Streets Design Guide, equestrian-level push buttons are recommended on “sidewalk equestrian trails.” These buttons shall be 5-6 feet from the ground to reach the average height of an equestrian rider. While pedestrian push buttons must be located within 5 feet of a crosswalk, equestrian-level push buttons must be 6.5 feet from the roadway to accommodate space for the horse.



Community Feedback: Many signalized intersections in the Northeastern San Fernando Valley are lacking adequate waiting space on either side of the roadway.

Figure 8: Equestrian-Level Push Button in Lake View Terrace (photo by Milena Johnson)

Equestrian Warning Signage

To alert drivers that they are entering an area frequented by equestrians.

The MUTCD W11-7 features an image of an equestrian on a yellow diamond, a standardized design for warnings on the roadway. The MUTCD recommends that if the signage is used specifically for an equestrian crossing, it shall include an arrow pointing to the crossing or state how distant the crossing is in feet.



Community Feedback: Some community members also expressed that these warning signs do not suffice in adequately warning drivers, and should include additional signage encouraging slower speeds.



Figure 8: MUTCD W11-7 (photo from CA MUTCD Design Chart, 2014)

Lighting

Allows equestrians to see the roadway, trail, and other modes during dark or cloudy conditions, and allows other users of the roadway to better see equestrians.



Improved lighting is listed as one of the Federal Highway Administration's (FHWA) proven safety countermeasures. Due to high rates of equestrian activity, arterials in the study area may require higher levels of pedestrian-level lighting than typically considered given the roadway context

Figure 9: Crosswalk Lighting (photo from Adobe Stock)

Trail Barriers

Protects equestrians from vehicular traffic and clearly designates equestrian spaces by separating the trail from other parts of the roadway.

The LA Complete Streets Design Guide recommends a minimum height of 4 feet for all fences and barriers along an equestrian path or trail, with a greater height along busier roadways and a lower height at crossings to allow for better visibility.

 **Community Feedback:** Though wooden fencing is a common equestrian trail barrier, it may not be as safe as sturdier materials.



Figure 10: Equestrian Trail Fence (photo by Milena Johnson)

Flashing Red-Light Crossings

To stop drivers at a crossing and allow equestrians to safely cross.



Figure 11: HAWK Beacon (photo from City of Costa Mesa)

The FHWA labels these crossings as High Intensity Activated Crosswalks, or “HAWK”s, and have been shown to significantly improve pedestrian visibility. While the LA Complete Streets Design Guide recommends HAWKs at unsignalized crossings where pedestrian activity is high, a similar principle could be applied to unsignalized crossings where equestrian activity is high.

Step-Over Bars

Allows equestrians and pedestrians to enter a trail or recreational space by “stepping over” a low bar or fence, while preventing wheeled vehicles from entering.

The United States Forest Service Equestrian Design Guidebook describes several considerations when using stepover bars/gates. First, a higher height for the bar may be more effective in preventing unwanted wheeled traffic, but inexperienced horses or riders may be unable to cross at higher heights. It recommends bars lower than 1 foot for riders with limited experience. Second, while it is difficult for motorized or wheeled vehicles to cross these bars, it is still possible.



Figure 12: Step-Over Gate (photo from Centerwire)



Community Feedback: Motorized vehicle access was a common concern among community members, who expressed that any bar low enough for a horse to cross is likely low enough for a motorized vehicle, such as an ATV, to cross.

Land Use

Equestrian Overlay Zones

A zoning tool placed over a “base” zoning that includes additional horsekeeping provisions.

The City of Los Angeles’s Equestrian Overlay Zones are named Equinekeeping Districts, and allow for residential horsekeeping of one horse per 4,000 square feet.

Horsekeeping in Zoning

Even outside of designated Equinekeeping Districts, most single-family residential zones in the City of Los Angeles allow for horsekeeping.

The “R1” single family zone allows for horsekeeping, but with stricter conditions than the Equinekeeping Districts. It allows for one horse per 5,000 square feet and requires that horses may only be kept on lots exceeding 20,000 square feet.

Recreational Areas

Allows for equestrian activities, sports, and community gatherings in a safe and defined area.



Figure 13: Horse Training Area at the Lake View Terrace Recreational Center (photo by Milena Johnson)

The best practice for designing an equestrian-oriented recreational space will depend on the equestrian community’s needs and the characteristics of the land available. Some important equestrian considerations, as provided in the USFS Equestrian Design Guidebook, are ample space for horse trailer parking, separation from other uses, and connections to the existing trail network.

Separated-Use Paths

Protects equestrians from conflicts with other recreational modes, such as cyclists, pedestrians, and motorized vehicles, which are a common source of “spooking” for horses.

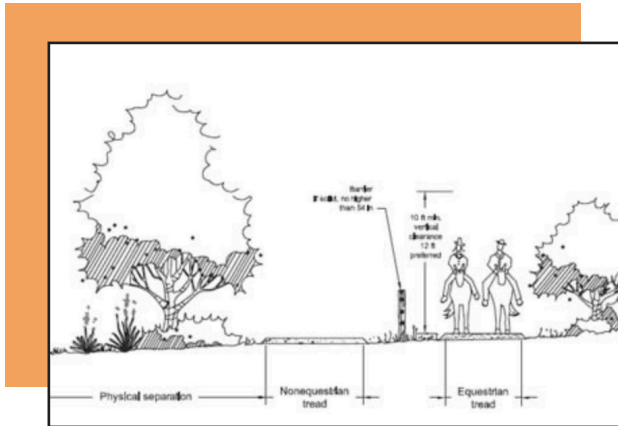


Figure 13: Example Equestrian Path with Physical Separation (from the USFS Equestrian Design Guidebook)

Purely equestrian-only paths are rare in Southern California, though there are many paths restricted to equestrians and pedestrians only, who often present the least concern in comparison with noisier modes.



Community Feedback: Many community members have noted the difficulty in maintaining these trails for equestrian and pedestrian-only uses, usually due to a lack of other infrastructural tools or enforcement.

Shared-Use Paths

Allows for multiple modes, in addition to equestrians, to utilize limited trail or sidewalk space.

The USFS Equestrian Design Guidebook categorizes shared-use paths into single-tread, meaning a singular material throughout that is shared by all trail users, and multiple-tread, meaning multiple materials are used in parallel and designed for different trail users. Ideal tread materials differ between trail users; natural tread materials are recommended for horses while paved materials are best for cyclists.

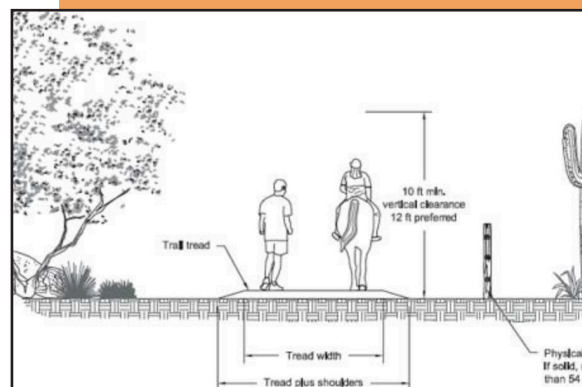


Figure 14: Example Equestrian Path with no Separation (from the USFS Equestrian Design Guidebook)

While accommodating multiple treads is ideal, there is often limited space in urban equestrian areas like the study area. In the City of Los Angeles, urban shared-use equestrian paths are designated as “sidewalk equestrian trails,” and feature natural tread for equestrians and typical paved sidewalks for pedestrians.



Community Feedback: Community members were emphatic that cyclist and equestrian uses should not be combined on the same trail.

Trail Design Standards

I also compared equestrian trail design standards between different equestrian communities in Southern California. Table 5 compares the standards recommended in each municipality, though the existing trails may differ from the written standards.

Table 5: Equestrian Trail Design Standards Comparison

City	Vertical Clearance	Trail Width	Trail Barrier	Tread Material
Los Angeles	10 feet	10-12 feet	4 foot fence, “Woodcrete” preferred	
Apple Valley			3 foot white vinyl rail fencing	Native soil or decomposed granite
Burbank	12 feet	10-12 feet	4 foot fence	Soft natural material (woodchips, soil, sand)
Norco		12 feet	3.5 foot wood fence	Polymer coated crushed stone pathway mix
Rancho Cucamonga	10 feet	12 feet	6 foot PVC fence or wall	Decomposed granite surfacing
Yorba Linda		10 feet	3.5 PVC fence	Soil

Wayfinding

Clearly designates where equestrian trails are located and how to connect from one trail to another.

Many equestrian trails in the study area are not marked as trails, traverse between publicly and privately owned land, and may or may not connect to other trails in the network. Most equestrians rely on their own personal or community-based knowledge of trails. Wayfinding signage can include signs that clearly mark where a trail is, where it leads, and which direction to follow. Larger informational signs at trailheads can even show local maps of the nearby trail network and equestrian amenities. Wayfinding and informational signage can include additional safety warnings such as which modes are permitted to use the trail or possible unsafe weather conditions and other hazards.



Figure 14: Example Trail Wayfinding Signage (photo from AccessRecreation)

Policy

Community Awareness

Informs non-equestrians on considerations and recommended behavior for traveling in an equestrian community.



Figure 15: Equestrian Advocacy Sign from the Foothills District Neighborhood Council (photo by Milena Johnson)

One of the primary factors identified in equestrian collisions is a lack of familiarity with horses, their behavior, and when to expect to interact with a horse on the roadway. Informal education practices, such as community events, newsletters, and informational signage can help to both alert non-equestrians on how to safely interact with equestrians in the roadway and simply acknowledge that the study area is frequented by equestrian activity.

Driver's Education

Informs California drivers of the laws surrounding sharing the road with horses.

The California Driver's Handbook currently only addresses equestrians in so far that it asserts that horses are allowed to use the road and should not be intentionally spooked. Many community leaders argued that equestrian safety should be addressed more thoroughly in required Driver's Education courses, such as explaining how to safely pass an equestrian or the dangers of spooking a horse.



Community Feedback: This was a popular advocacy goal for many equestrian stakeholders in the Northeastern San Fernando Valley.

Enforcement

Monitors compliance with traffic safety laws and trail use.

Several community members expressed a desire for stronger enforcement to address multiple safety areas, such as vehicular speeding, illegal dumping, or illegal use of trails by motorized vehicles. While there is limited evidence on the efficacy of enforcement in increasing safety, some innovative measures can be applied to encourage safer travel behaviors, such as automated speed enforcing cameras, or hiring park rangers to monitor trail activity.

Mapping

Ensures that all community members have access and knowledge of the trail network; clearly delineates where public access is permitted and by which modes.

Currently, equestrian trails in the study area are largely informal, unmapped, and only known by an individual equestrian's personal knowledge. Maintaining a clear database of trail locations, especially one that is accessible to the public, allows for safer equestrian travel and a clear delegation of trail maintenance efforts.

Trail Masterplans

Identifies key roles, responsibilities, and goals for managing and constructing a trail network.

The USFS Equestrian Trail Guideline argues that well-planned trail systems not only address many of the concerns addressed above in mapping, but provide an opportunity to establish operations and maintenance plans- or determining when, how, and who will maintain a trail. The Rancho Cucamonga Trail Implementation Plan also serves as an example of how assigning a responsibility for trail development, in their case new developers, can build out an extensive trail network.

Recommendations

While the Equestrian Transportation Safety Toolbox provides a range of treatments applicable to a wide array of safety issues in the Northeastern San Fernando Valley, I have also included two concrete recommendations for pursuing equestrian transportation safety in Council District Seven. These recommendations are potential immediate next steps for the District in addressing the major safety concerns for the equestrian community.

Study a Complete Equestrian Facility for Foothill Boulevard

Foothill Boulevard is both a popular facility for and a barrier to equestrian travel in the Northeastern San Fernando Valley. While recent improvements such as enhanced equestrian crossings are appreciated by the equestrian community, the arterial lacks a complete equestrian facility and instead has fragmentary bridle paths with varying degrees of protection from vehicular traffic. There are also several constraints to installing a complete equestrian facility:

- **Inconsistent Right of Way:** Foothill Boulevard has differing widths throughout Council District Seven, some segments have adequate space to currently accommodate a new equestrian facility and others do not.
- **Encroachment:** Part of the inconsistent right-of-way is due to private residential parcels that have built out past the legal boundary of their lot line.
- **Required Bicycle Facilities:** As designated in *Mobility Plan 2035*, any equestrian facilities would need to also accommodate a separated bicycle lane.

While these factors do constrain equestrian planning on Foothill Boulevard, they do not entirely restrict any future designs from providing both a bicycle, equestrian, and even a pedestrian facility. First, space for an equestrian facility could be created by reducing the number of vehicular travel lanes on this corridor. Though removing travel lanes may be unpopular with the community, there is already a precedent for lane reductions with a recent project that reduced the number of lanes on Foothill Boulevard east of Wentworth Street from four to two.

Additionally, removing a travel lane is likely more politically feasible than enforcing residential lot boundaries and could provide safety benefits for all modes through reducing vehicle speeds.

A comprehensive redesign of Foothill Boulevard could also include dedicated pedestrian space for segments lacking a complete walkway. Bicycle facilities should be separated from equestrian facilities, but sharing right of way between equestrians and pedestrians is generally considered to be acceptable. A complete equestrian facility could therefore equally benefit pedestrian safety and mobility. In the case that a paved pedestrian facility is more desirable, paved shoulders are also generally considered acceptable in rural contexts (Alta Planning & Design, 2016).

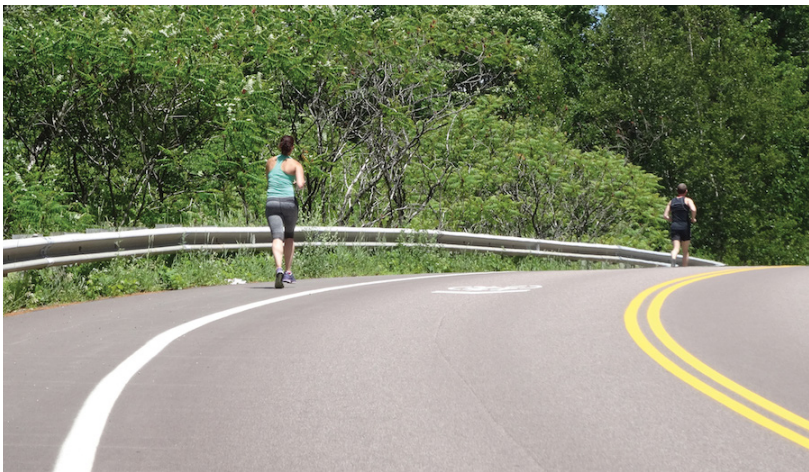


Figure 16: Paved Shoulder in Montpelier, Vermont (photo from *Small Town and Rural Design Guide*)

Map Equestrian Facilities in Council District Seven

There is currently no complete map of all equestrian facilities (roadside bridle paths and off-road trails) for the Northeastern San Fernando Valley, nor the entire City of Los Angeles. The City has published a plan for proposed equestrian trails, but it does not identify which segments have been completed.

The Foothill Trails District Neighborhood Council, which represents the Lake View Terrace, La Tuna Canyon, and Shadow Hills neighborhoods, recently undertook an effort to map the equestrian network in their neighborhoods (see Figure 17). While this map is valuable to Council District Seven's future equestrian transportation planning efforts, it is limited only to these neighborhoods in the southeastern equestrian community. The Sylmar neighborhood also has an extensive equestrian network, but it is not included in

this neighborhood council nor the map. While I intended to gather route information from the community engagement phase, the routes drawn by community members did not include enough detail to form a comprehensive map. Additionally, this map does not distinguish between the types of equestrian facilities present in this network, such as roadside bridle paths, off-road trails, or traditional neighborhood roads that are safe for equestrian travel (akin to a Class III shared bikeway).

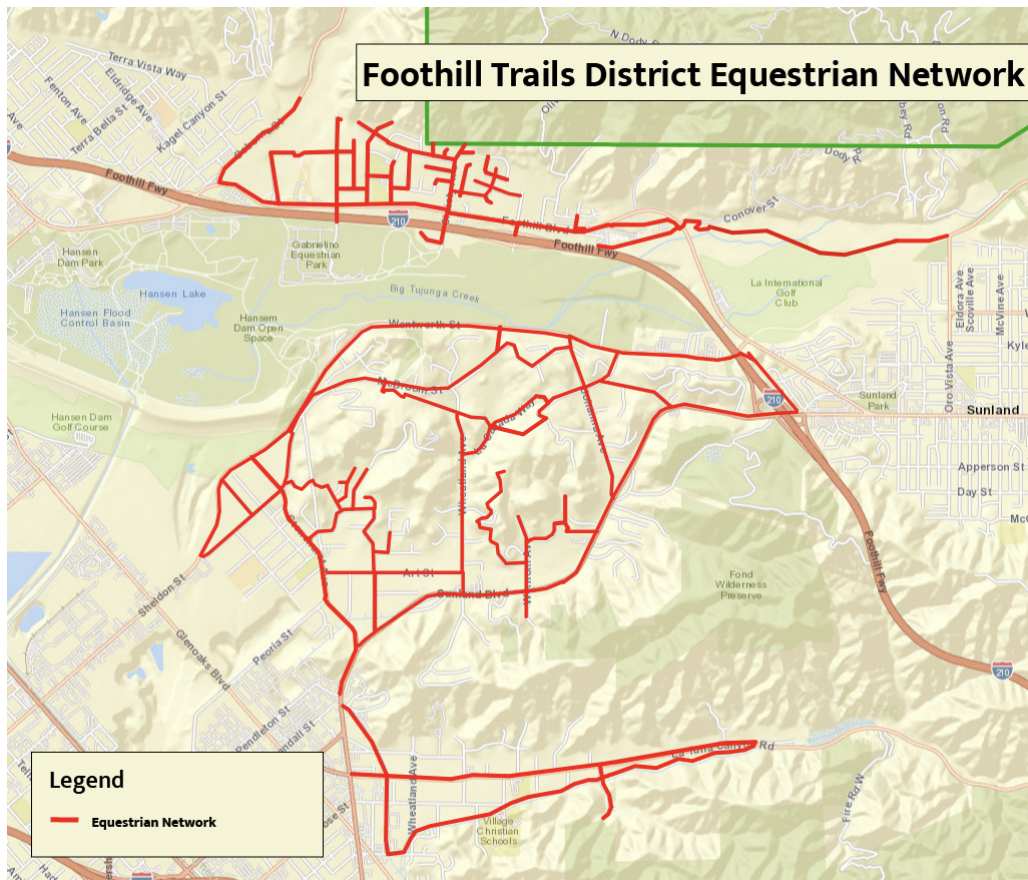


Figure 17: Equestrian Network Mapped by the Foothill Trails District Neighborhood Council

To effectively plan for future equestrian investments, Council District Seven should therefore work to map the existing equestrian network across all equestrian communities and categorize each segment by the type of equestrian facility.

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Appendix A: Planner Interview Questions

I noticed in ____ plan (General Plan, Mobility Element, Community Plan, Active Transportation Plan, etc.) that you included specific goals/policies/plans for equestrians. How present is equestrian activity and horse keeping in your planning jurisdiction?

Has your jurisdiction always considered equestrians during the planning process?

If not, do you know when it began to consider equestrians during the planning process?

What does community engagement with your equestrian community look like?

Are there any concerns your equestrian community has expressed about planning efforts?

Have you, your team, or the equestrian community identified any safety concerns in your jurisdiction?

If so, what has or has not been done to address those safety concerns?
Have those efforts been well-received?

Have those efforts been successful?

What is the biggest challenge you face in planning for equestrians in your jurisdiction?

Are there any other equestrian planning efforts in your jurisdiction that we haven't already discussed?