

Vasquez Boulevard

I-270 to 64th Avenue

October
2023

Project Number: CO 006A-069

Project Code: 22922

Commerce City, Colorado



Environmental Assessment

Lead Agencies:



COLORADO
Department of Transportation

Vasquez Boulevard: I-270 to 64th Avenue

Environmental Assessment

Lead Agencies:

US Department of Transportation Federal Highway Administration



Colorado Department of Transportation



October 2023

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Acronyms and Abbreviations

ADA	Americans with Disabilities Act
APE	Area of Potential Effects
APEN	Air Pollutant Emissions Notice
AQ-PLAG	Air Quality Project-Level Analysis Guidance
AVE	Area of Visual Effect
CDOT	Colorado Department of Transportation
CDPHE	Colorado Department of Public Health and Environment
CEQ	Council on Environmental Quality
CMAQ	Congestion Mitigation and Air Quality Improvement
CO	Carbon Monoxide
CPW	Colorado Parks and Wildlife
DRCOG	Denver Region Council of Governments
EA	Environmental Assessment
E. coli	Escherichia coli
EHSM	Environmental, Health and Safety Management
EJ	Environmental Justice
EO	Executive Order
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
GHG	Greenhouse Gas
HSIP	Highway Safety Improvement Program
HASP	Health and Safety Plan
HUTF	Highway User Tax Fund
LBP	Lead-based Paint
LEP	Limited-English Proficiency
LWCF	Land and Water Conservation Fund
MESA	Modified Environmental Site Assessment
MHGD	Mile High Greyhound Development
MMP	Materials Management Plan
mph	Miles per hour
MS4	Municipal Separate Storm Sewer System



MSAT	Mobile Source Air Toxics
NEPA	National Environmental Policy Act
NOX	Nitrogen Oxide
NRHP	National Register of Historic Places
OSHA	Occupational Safety and Health Administration
PEC	Potential Environmental Concerns
PEL	Planning and Environmental Linkages
PEL Study	Vasquez Boulevard PEL Study
PWQ	Permanent Water Quality
ROW	Right-of-way
RPP	Regional Priority Program
RTD	Regional Transportation District
RTP	Regional Transportation Plan
SHPO	State Historic Preservation Office
STEAP	Screening Tool for Equity Analysis of Project
SWMP	Stormwater Management Plan
SUE	Subsurface Utility Engineering
TIP	Transportation Improvement Program
US	United States
USFWS	United States Fish and Wildlife Service
VCP	Voluntary Cleanup Program
VMT	Vehicle Miles Traveled
VOC	Volatile Organic Compound
vpd	Vehicles per Day
WQCC	Water Quality Control Commission

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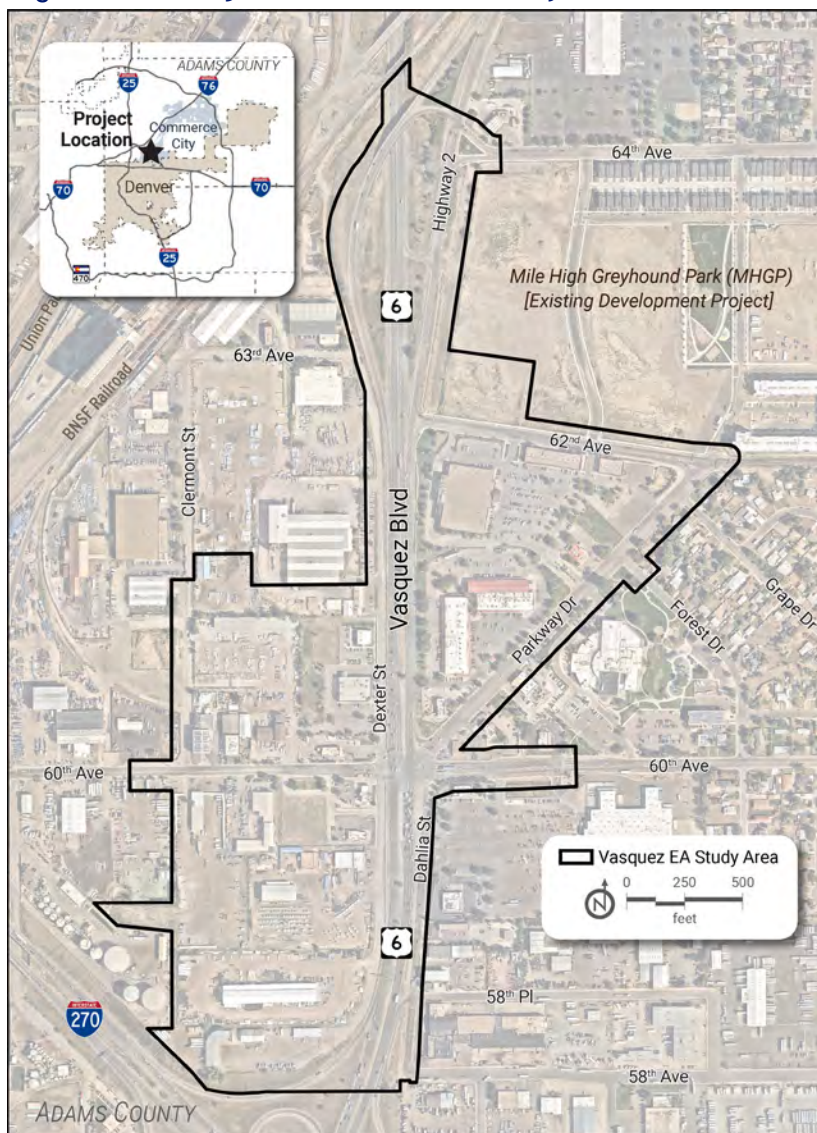
Executive Summary

The Federal Highway Administration and the Colorado Department of Transportation have initiated this Environmental Assessment (EA) for proposed improvements along Vasquez Boulevard in Commerce City, Colorado. The Vasquez Boulevard I-270 to 64th Avenue Project (the Project) includes intersection reconfigurations, the addition of new local roads and improvements to pedestrian facilities. The 60th and 62nd Avenue intersections were evaluated to optimize safety and roadway operations to provide the most effective and efficient project improvements.

Project Location

The Project extends along Vasquez Boulevard from 58th Avenue to south of the BNSF railroad tracks. West of Vasquez Boulevard, the Project extends approximately from Clermont Street, between the on-ramp to I-270 and just north of 60th Avenue. East of Vasquez Boulevard, the Project includes Parkway Drive and 62nd Avenue (**Figure ES1**). Vasquez Boulevard serves as a principle arterial in Commerce City and provides access to I-270.

Figure ES1: Project Location and Study Area



The 60th Avenue/ Vasquez Boulevard intersection facing south. Large trucks frequent this area.

Purpose and Need

The Purpose of the Project is to improve vehicular and pedestrian facilities to enhance connectivity along this vital north-south local transportation corridor. Improvements would connect people and goods reliably and adapt to future travel demands. The current roadway geometry and operations, combined with the lack of safe pedestrian facilities, no longer accommodates existing or future travel demands. Project improvements are needed to:

- improve operations for vehicles and freight
- improve safety
- improve pedestrian connections

Project Issues, Impacts, and Controversy

This EA identifies and addresses potential environmental impacts from the proposed improvements. The Project proposes new local road alignments to the west of Vasquez Boulevard to the local street network. To build the new alignments, right-of-way (ROW) would need to be acquired from adjacent businesses. The acquisition of an entire property or business is not needed to construct the proposed alignment. Coordination with property owners has occurred and will continue to occur throughout the Project.

Proposed Action

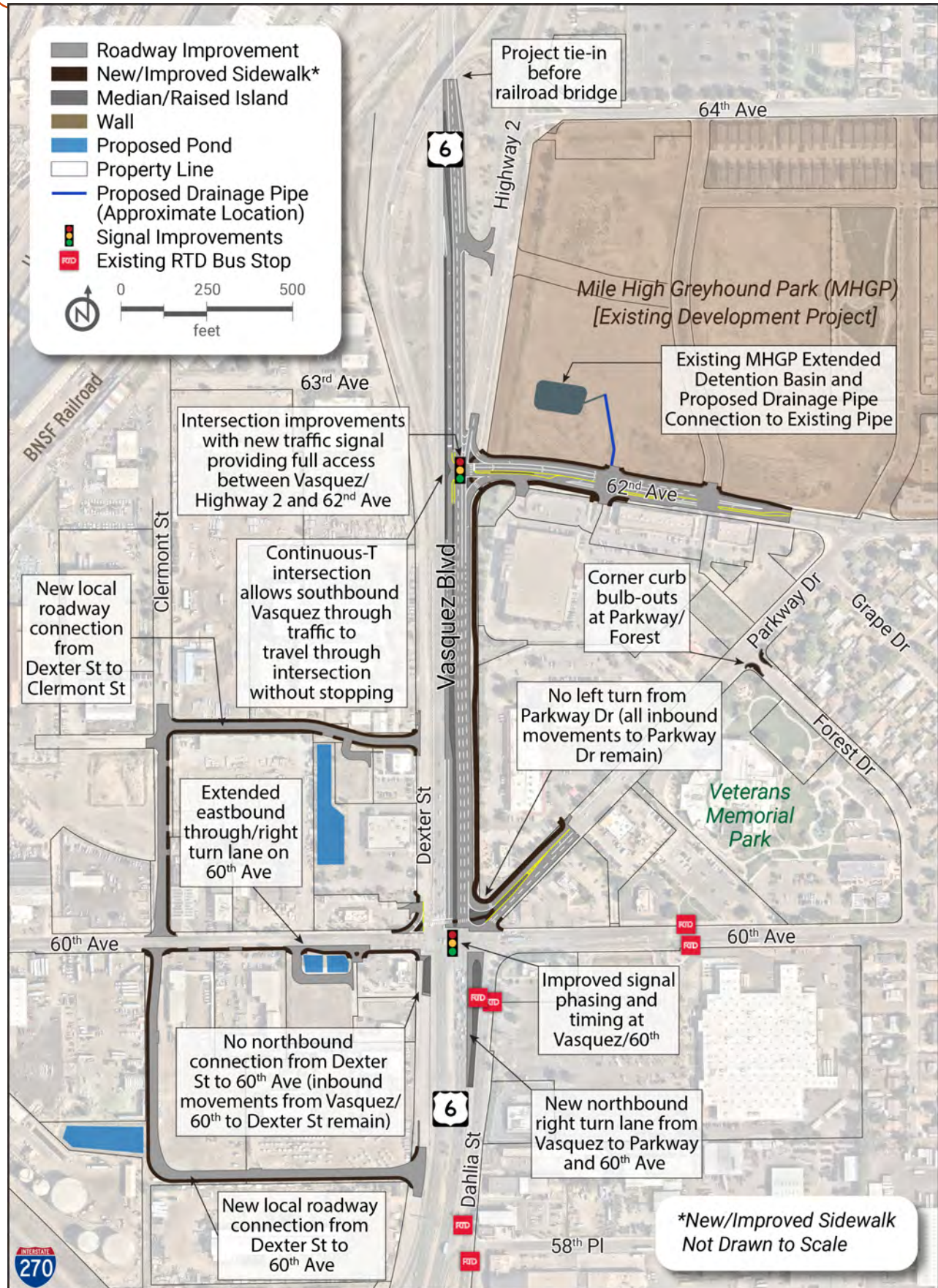
The components included in the Proposed Action are the result of alternatives developed and screened during the Planning and Environmental Linkages Study for Vasquez Boulevard, as well as public and stakeholder engagement and additional alternatives considered during the EA. The Proposed Action is shown in **Figure ES2** and includes:

- Operational and intersection improvements at the Vasquez Boulevard/60th Avenue intersection.
- Operational improvements at the Vasquez Boulevard/62nd Avenue intersection.
- New local street connections west of Vasquez Boulevard.
- Sidewalk improvements and expansions along 60th Avenue, 62nd Avenue, Clermont Street and the new local street connections on the west side of Vasquez Boulevard.

Principal Environmental Issues

Overall, the Project would have some environmental and social impacts on the surrounding area and has the opportunity to reduce local congestion and enhance connectivity through roadway and sidewalk improvements. Potential environmental impacts explored in this EA focus on environmental justice populations, hazardous materials, water quality, local businesses and historic resources. Throughout design, the Project has avoided and minimized potential impacts when possible. Mitigation for permanent impacts and temporary construction impacts has been identified and will be implemented before, during, or after construction.

Figure ES2: Proposed Action



1.0 Introduction and Background

The Colorado Department of Transportation (CDOT) and Federal Highway Administration (FHWA) propose transportation improvements along Vasquez Boulevard (United States Route 6 [US6]) from 58th Avenue (just north of the Interstate 270 [I-270] interchange) to 64th Avenue (the Project), within the City of Commerce City (Commerce City) in Adams County, Colorado. The Project team is following the CDOT and FHWA National Environmental Policy Act (NEPA) process. The purpose of this Environmental Assessment (EA) is to:

- Explain the Project background
- Define the Purpose and Need and Goals of the Project
- Evaluate alternatives considered
- Determine potential social and natural environmental impacts
- Define appropriate mitigation measures and
- Document the agency and public engagement process

1.1 Project Background

CDOT, in cooperation with FHWA and local agencies including Adams County, Commerce City, City and County of Denver, Denver Regional Council of Governments (DRCOG) and the Regional Transportation District (RTD), conducted a Planning and Environmental Linkages (PEL) Study in 2018. The Vasquez Boulevard PEL Study (PEL Study) provided a framework for the implementation of transportation improvements along the corridor between 52nd Avenue and 64th Avenue and along I-270 for ½-mile north and south of the I-270/Vasquez Boulevard interchange. A single Recommended Alternative was not identified as part of the PEL Study. The Project falls within the limits of the PEL Study (**Figure 1**), which recommended three different packages as future options for improvements. To advance the alternatives identified in the PEL Study, the Project is focusing on improvements along Vasquez Boulevard between 60th Avenue and 62nd Avenue.

The Project is estimated to cost approximately \$27 million. The full funding for this project has been secured through a combination of several local, state, and federal sources. The Project has acquired DRCOG Transportation Improvement Program (TIP) funds that consists of Federal Congestion Mitigation and Air Quality Improvement (CMAQ) and freight funds. CDOT's Regional Priority Program (RPP) and Commerce City funding was used as a match to secure this grant funding. Other funding sources include Commerce City Highway User Tax Fund (HUTF), General Funds, US Senate Congressionally Directed Spending funds of \$4M, and CDOT strategic 10-year and Highway Safety Improvement Program (HSIP) funds.

Figure 1: Vasquez Boulevard PEL Study and Vasquez Boulevard EA Study Areas



1.2 Project Location

The Project is located in Commerce City which is a suburb in northern Denver, located in Adams County. Land uses surrounding the Project are zoned for commercial, industrial, mixed use, public and residential (**Figure 2**). To the west of Vasquez Boulevard, there are large warehouse properties comprised of industrial distribution centers. To the northeast of the Study Area, there is a redevelopment area known as the Mile High Greyhound Park (MHGP). This site is currently being redeveloped into a vibrant, mixed-use area in the heart of Commerce City. With land devoted to residential, retail/commercial, open space and multi-cultural/educational uses, the property is poised to help revitalize the area and regain its place as an important community hub. Directly to the east of Vasquez Boulevard there is a commercial center with food and shopping opportunities followed by well-established historic neighborhoods including the Veterans Memorial Park.

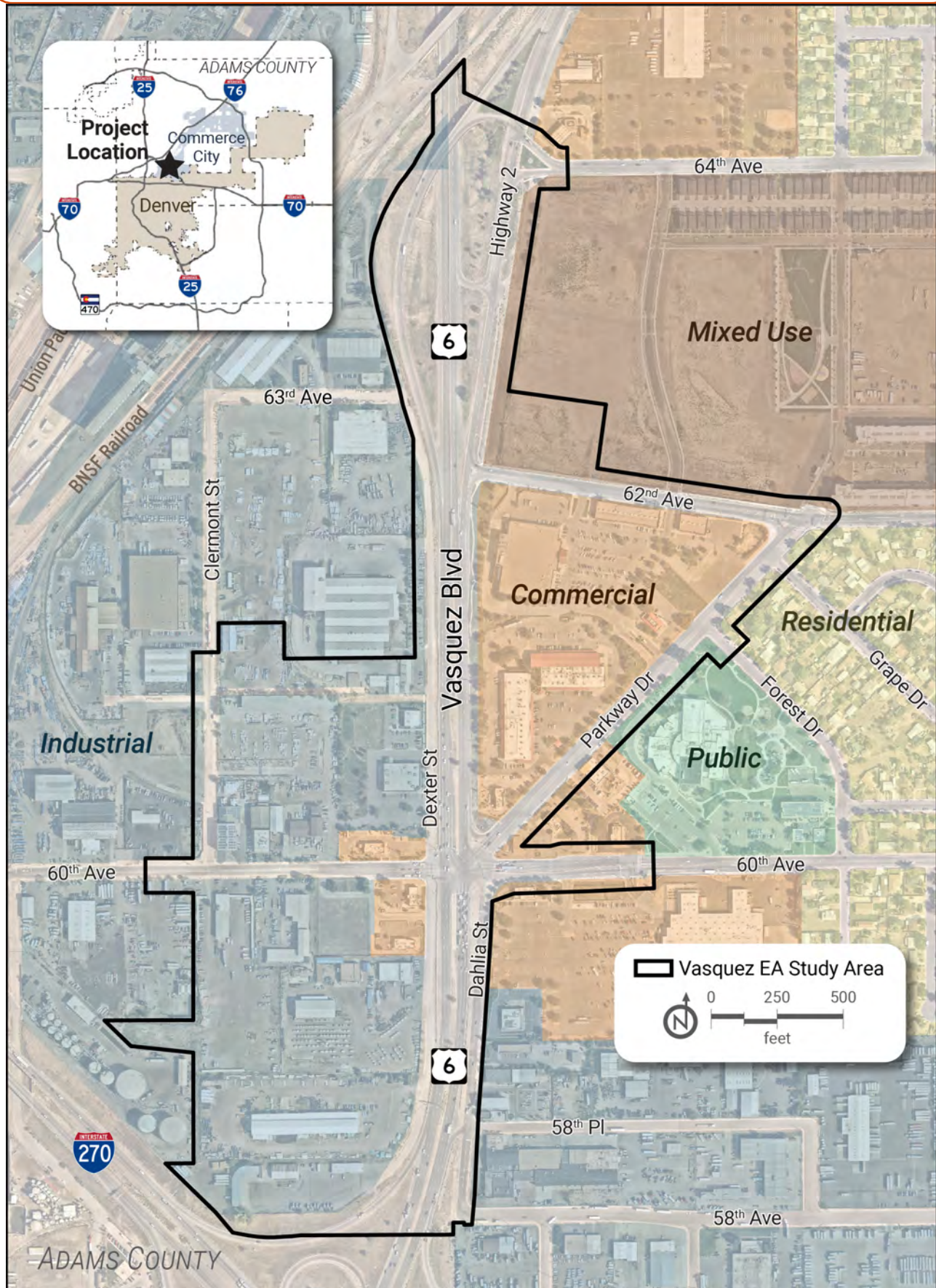
1.3 Study Area

The Study Area extends along Vasquez Boulevard from 58th Avenue (adjacent to the I-270 interchange) to south of the BNSF railroad tracks. West of Vasquez Boulevard, the Study Area extends to Clermont Street, between the on-ramp to I-270 and just north of 60th Avenue. East of Vasquez Boulevard, the Study Area includes Parkway Drive and 62nd Avenue. The Study Area is shown in (**Figure 2**).

The Study Area was established early in the planning process to include all transportation improvements resulting from the Proposed Action. Some environmental resources evaluated for the EA may have a slightly different Study Area depending on specific resource requirements.



Figure 2: Project Location and Study Area



1.4 Roadway Existing Conditions

Vasquez Boulevard is a principal arterial in Commerce City, Colorado. The Project extends approximately 1.6 miles between the I-270 westbound ramp and 64th Avenue. Vasquez Boulevard consists of six through-lanes from I-270 to just south of the 62nd Avenue intersection, then continues north through the Study Area as four lanes (Figure 3). The existing travel lanes measure 12-feet wide, with a speed limit of 45 miles per hour (mph). There is no sidewalk along the majority of Vasquez Boulevard, except for a 500-foot section of five-foot wide sidewalk south of 62nd Avenue on the east side of Vasquez Boulevard.

In the Commerce City C3 Vision Transportation Plan (July 12, 2010), 60th Avenue, Parkway Drive and 62nd Avenue are classified as minor/residential roads. The Vasquez Boulevard/60th Avenue intersection is shared with Parkway Drive and adjacent frontage roads, creating a signalized intersection with eight approaches (Figure 4). There are two-way frontage roads on both sides of Vasquez Boulevard: Dexter Street is west of Vasquez Boulevard, while Dahlia Street is east of Vasquez Boulevard. The unusual multi-leg layout, as well as several left-turning movements, result in an unusually large intersection. The intersection has pedestrian crossings on all legs except the south leg. The Vasquez Boulevard/62nd Avenue intersection is currently an unsignalized, right-in, right-out intersection with no access to Vasquez Boulevard from 62nd Avenue (Figure 5).

Figure 3: Existing Roadway Conditions

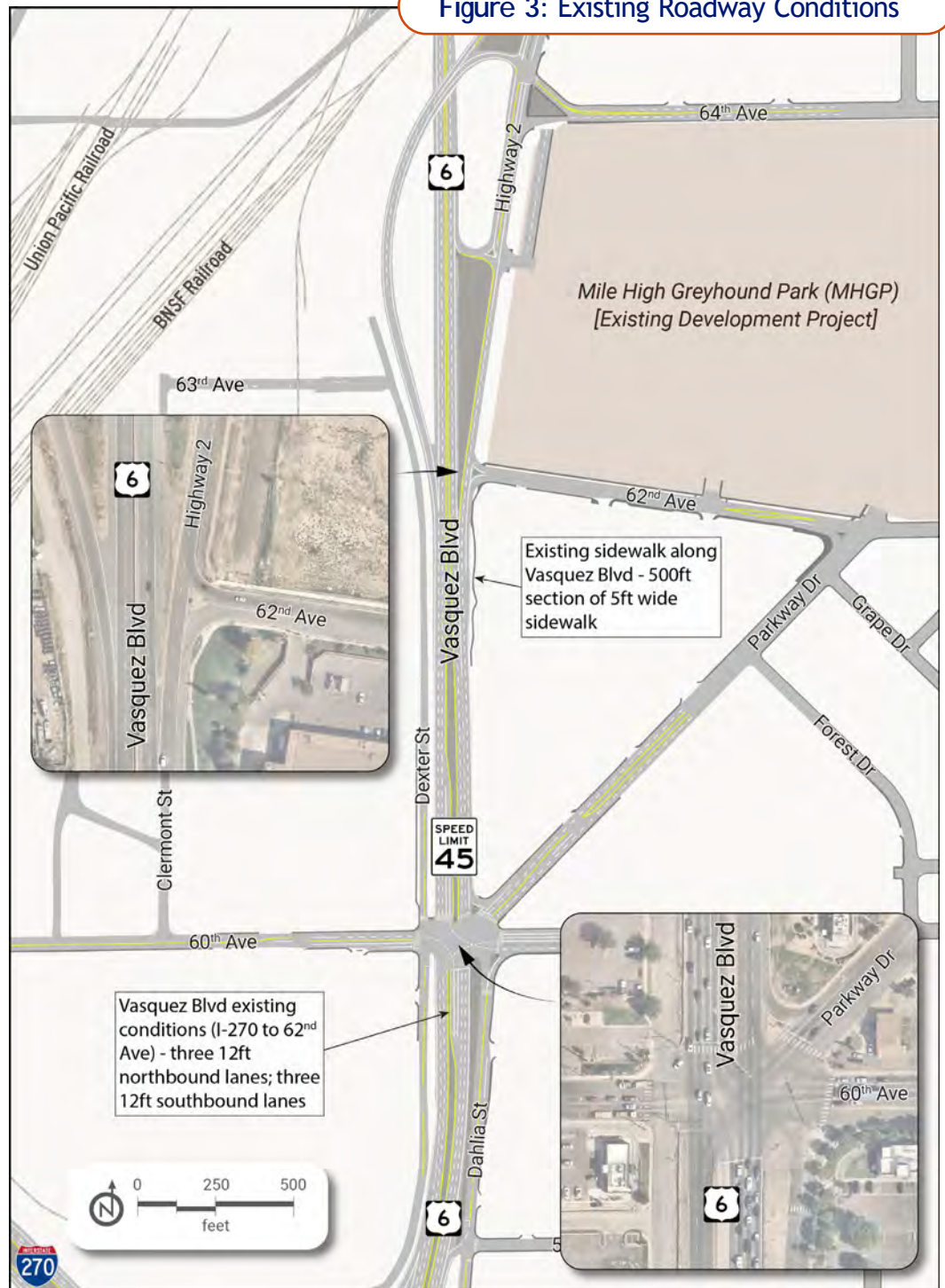


Figure 4: 60th Avenue Existing Turning Movements

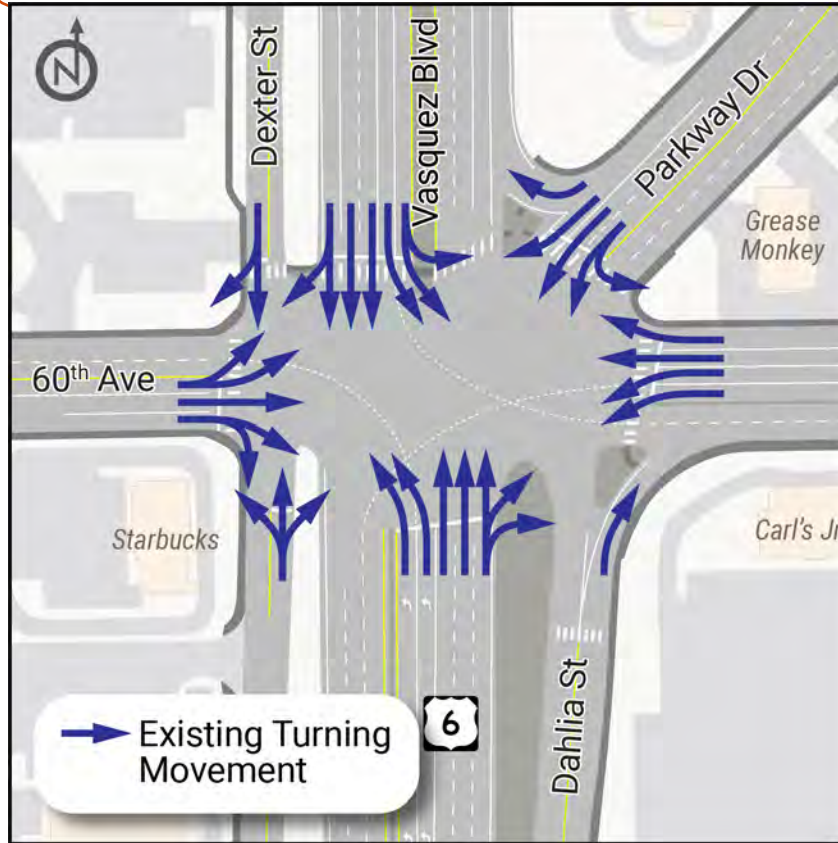


Figure 5: 62nd Avenue Existing Turning Movements



2.0 Purpose and Need

2.1 What is the Purpose of the Project?

The Purpose and Need was informed by the previous PEL Study and the existing transportation conditions identified throughout the Study Area. The Purpose of the Vasquez Boulevard I-270 to 64th Avenue Project is to improve vehicular and pedestrian facilities to enhance connectivity along this vital north-south local transportation corridor. Improvements would link and move people and goods and adapt to future travel demands.

2.2 What are the Needs for the Project?

The current roadway geometry and operations, combined with the lack of safe pedestrian facilities, no longer accommodates existing or future travel demand. Project improvements are needed to:

- improve operations for vehicles and freight
- improve safety
- improve pedestrian connections

Data collected in the corridor justified the Needs which are discussed below and further supported in Appendix A: Purpose and Need.

2.2.1 Operations

Based on 2019 traffic counts, Vasquez Boulevard carries over 40,000 vehicles per day (vpd) while 60th Avenue carries 12,000 vpd east of Vasquez Boulevard. By the year 2040, traffic models predict the average daily traffic will have a moderate growth of 24% for Vasquez Boulevard and 19% for 60th Avenue east of Vasquez Boulevard. Vasquez Boulevard and 60th Avenue play a crucial role in conveying freight traffic to local businesses and industries, but the continual presence of trucks contributes substantially to congestion throughout the corridor. The two intersections, 60th Avenue and 62nd Avenue, have unusual designs that cause delays and restrict traffic movements. The key issues facing the corridor are best visualized by analyzing intersection delay, maximum queue length and vehicular travel time.

Figures 6, 7, and 8 illustrate predicted intersection conditions in the year 2040 with increased traffic and minimal improvements (later described as the No Action in Section 3). The southbound Vasquez Boulevard queue length at the 60th Avenue intersection increases by over 66% in the morning, which is equivalent to an increased delay of over 47 seconds. There is over an 186% increase in the evening going southbound, which amounts to an increased delay of over 105 seconds. The westbound leg of 62nd Avenue at the intersection with Vasquez Boulevard performs even worse with a queue length increase of over 438%, equating to an increased delay of over 137 seconds. There is minimal change in the westbound leg of 62nd Avenue since this isn't a primary movement in the morning.

Figure 6: Intersection Delay Time Increases in Seconds

60th Avenue Increased Delay62nd Avenue Increased Delay

Source: State Highway 6H Safety Assessment Report: MP 292.94 - MP 293.67 (September 2022), Muller Engineering

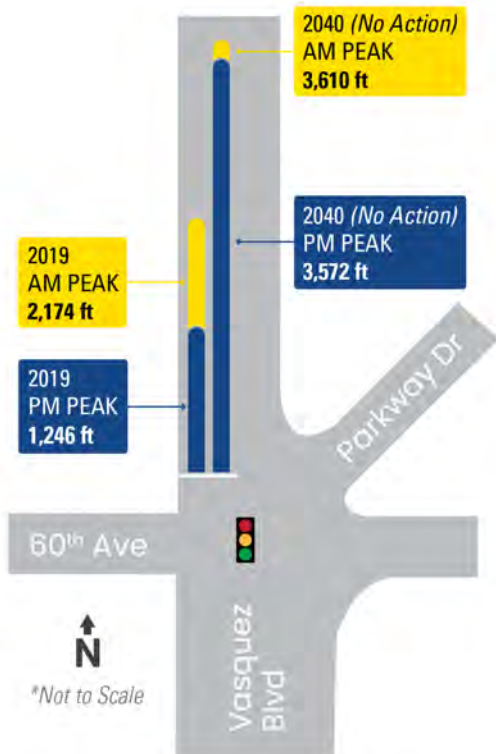


Figure 7: 60th Avenue AM and PM Intersection Queue Lengths - Existing (2019)/No Action (2040)

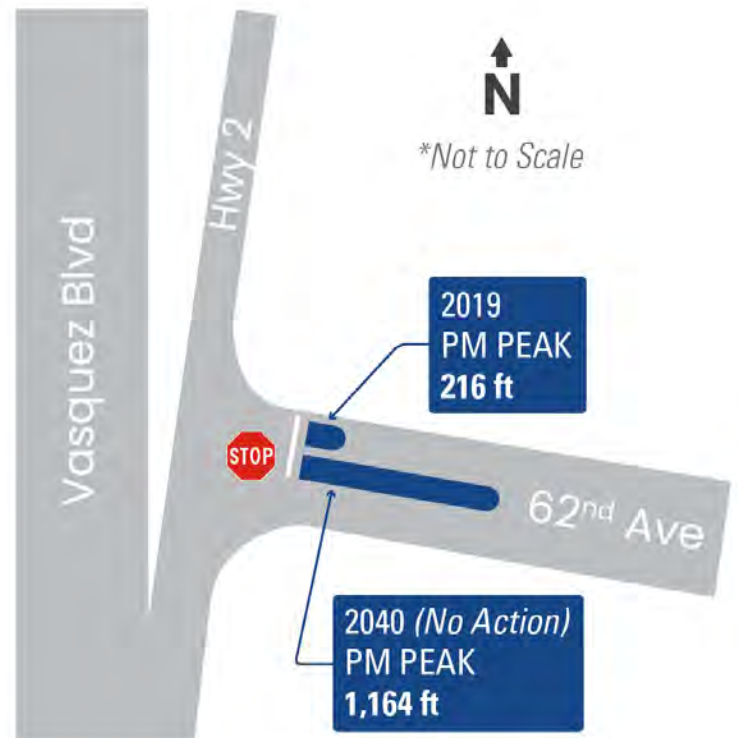


Figure 8: 62nd Avenue PM Intersection Queue Lengths - Existing (2019)/No Action (2040)

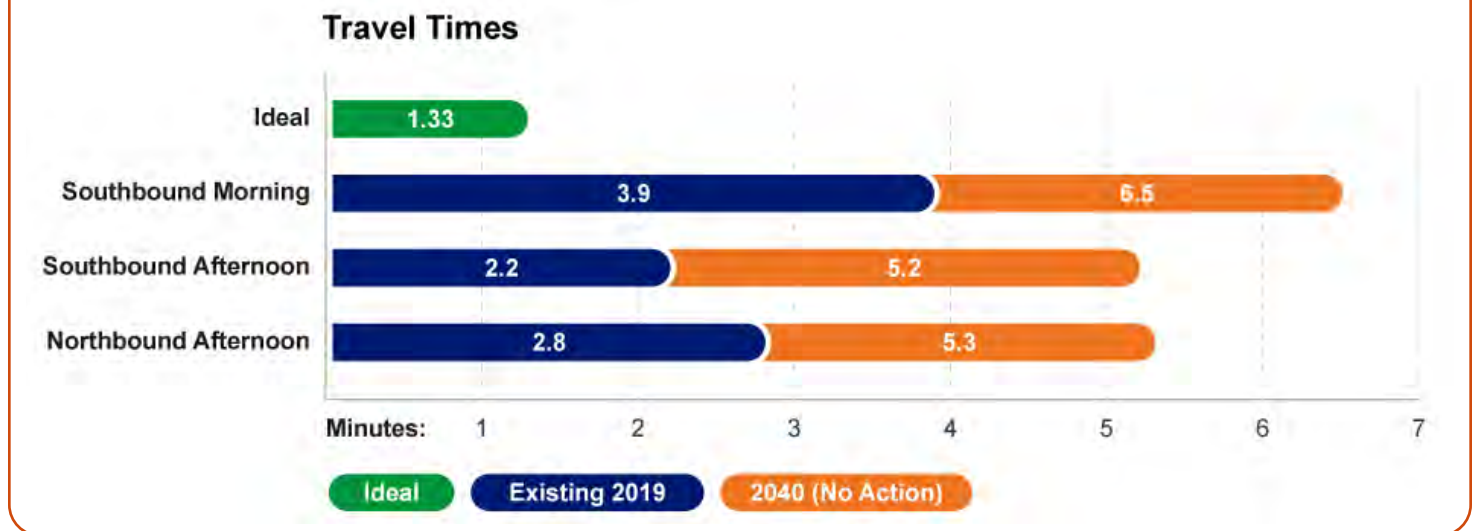
Source: State Highway 6H Safety Assessment Report: MP 292.94 - MP 293.67 (September 2022), Muller Engineering

Source: State Highway 6H Safety Assessment Report: MP 292.94 - MP 293.67 (September 2022), Muller Engineering

Ideal travel time, which is a measure of the time needed to traverse the corridor at the speed limit without being stopped at the intersections, highlights the deteriorating performance of Vasquez Boulevard. The travel time is measured between 58th Avenue to the railroad underpass north of the Highway 2 entrance/exit ramps.

Figure 9 shows the ideal, current, and future (without any improvements) travel times to Vasquez Boulevard. The future travel times increase more than double, due to the poor performance and configuration of Vasquez Boulevard.

Figure 9: Travel Times Along Vasquez Boulevard

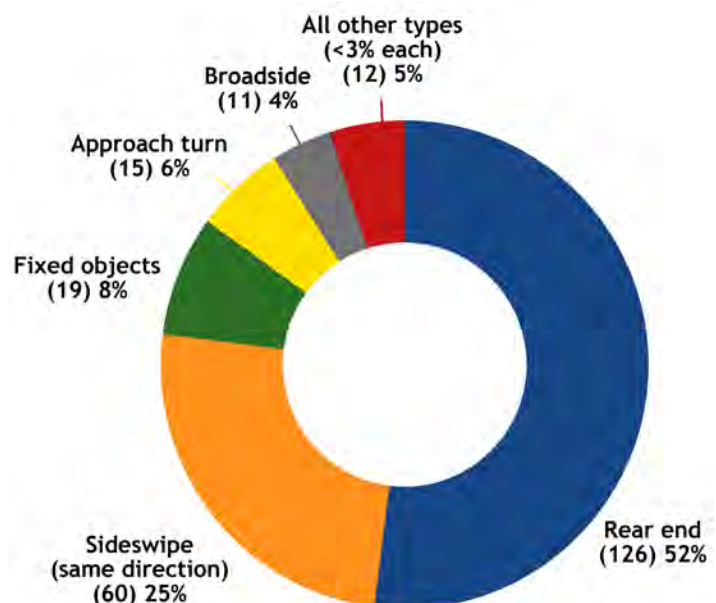


Source: State Highway 6H Safety Assessment Report: MP 292.94 - MP 293.67 (September 2022), Muller Engineering

2.2.2 Safety

A safety assessment for the Study Area was conducted and documented in the Transportation Resources Memo (Appendix C1, Attachment B Safety Assessment Report Muller Engineering, September 2022). During the study period from 2015 to 2019, there were 243 crashes along Vasquez Boulevard in the Study Area. Figure 10 shows the crash distribution by type for the corridor. The Safety Assessment identified traffic congestion as the primary cause of rear end crashes, which is why operational improvements are needed for the Project.

Figure 10: Vasquez Boulevard Crash Distribution (2015 - 2019)



Source: State Highway 6H Safety Assessment Report: MP 292.94 - MP 293.67 (September 2022), Muller Engineering

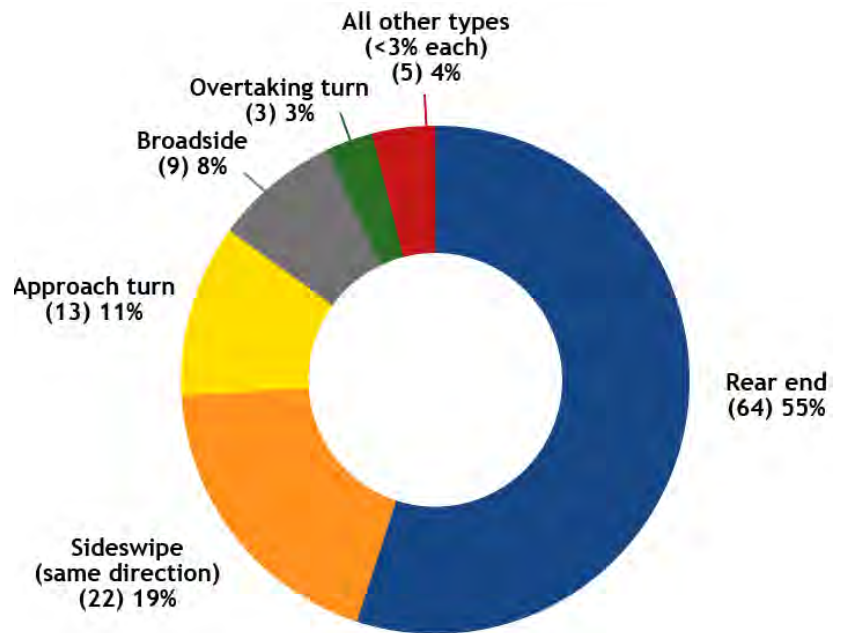
Crashes located at intersections or that are intersection-related accounted for 54% of the total crashes. Of these crashes, 89% occurred at the Vasquez Boulevard/60th Avenue intersection.

Figure 11 shows the crash distribution by type at the Vasquez Boulevard/60th Avenue intersection.

Rear end crashes, which comprise more than half of all crashes, were generally more frequent on weekdays. Crash records also indicate that inconsistent traffic signal placement is a contributing factor for rear end crashes.

Sideswipe crashes are also predominant at Vasquez Boulevard/60th Avenue, most of which involved vehicles turning left. The sideswipe crashes are exacerbated by the high volume of large trucks and tight turning paths.

Figure 11: Vasquez Boulevard/60th Avenue Intersection Crash Distribution (2015 -2019)



Source: State Highway 6H Safety Assessment Report: MP 292.94 - MP 293.67 (September 2022), Muller Engineering

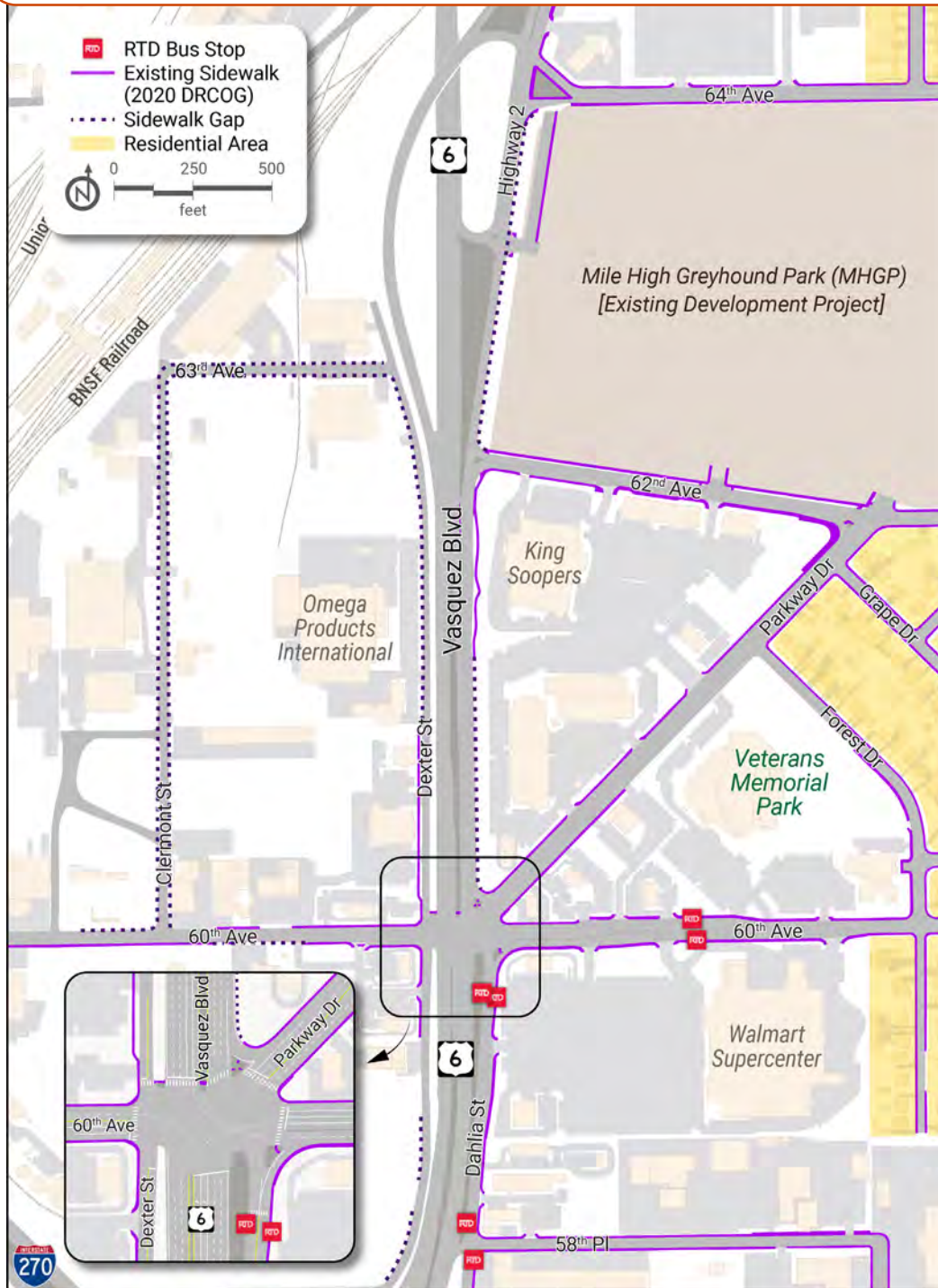
High traffic volumes and deficient pedestrian facilities create safety concerns while traveling through the Study Area. One pedestrian was injured in a night-time crash in October 2018 at the Vasquez Boulevard/60th Avenue intersection. Current pedestrian facilities are aged, indicating a need for appropriate measures to be taken to upgrade to current design standards.

2.2.3 Pedestrian Facilities

The infrastructure within the Study Area lacks connectivity between modes, including roads, bicycles, pedestrians and transit, which limits mobility and decreases the safety of travel. **Figure 12** shows the existing sidewalks and the gaps between facilities. Within the Study Area, there is only one east/west crossing of Vasquez Boulevard. Which is located at 60th Avenue. A lack of crossing opportunities creates a barrier for pedestrians to safely move from the residential area east of Vasquez Boulevard to businesses on the west side.

RTD bus stops located in the vicinity of Vasquez Boulevard/60th Avenue are situated along the southeast frontage road (Dahlia Street) and 60th Avenue. Bus stops in the area serve RTD Routes 48, 49, and 88. Buses stopped at the southbound stop block the single travel lane, causing traffic to back up into the Vasquez Boulevard/60th Avenue intersection and block the designated crosswalk for pedestrians to access the bus stop. The northbound stop is located on the east side of Dahlia Street with sidewalk connections along Dahlia Street and 60th Avenue. Currently, there is not a connected accessible path from the neighborhoods and local businesses to the existing bus stops.

Figure 12: Non-Motorized Facilities



2.3 What are the Goals for the Project?

The goals of the Vasquez Boulevard I-270 to 64th Avenue Project transportation improvements are to:

- balance access between the transportation network and adjacent land uses
- minimize and mitigate impacts to the built environment consistent with local master plans
- minimize impacts to the natural environment

3.0 Alternatives Evaluation

The Project is focused on the improvements along Vasquez Boulevard, specifically at the intersections within the Study Area. Alternatives evaluated as part of this Project include those recommended from the PEL Study, requested by stakeholders after the PEL Study was completed, and otherwise developed to optimize Project goals.

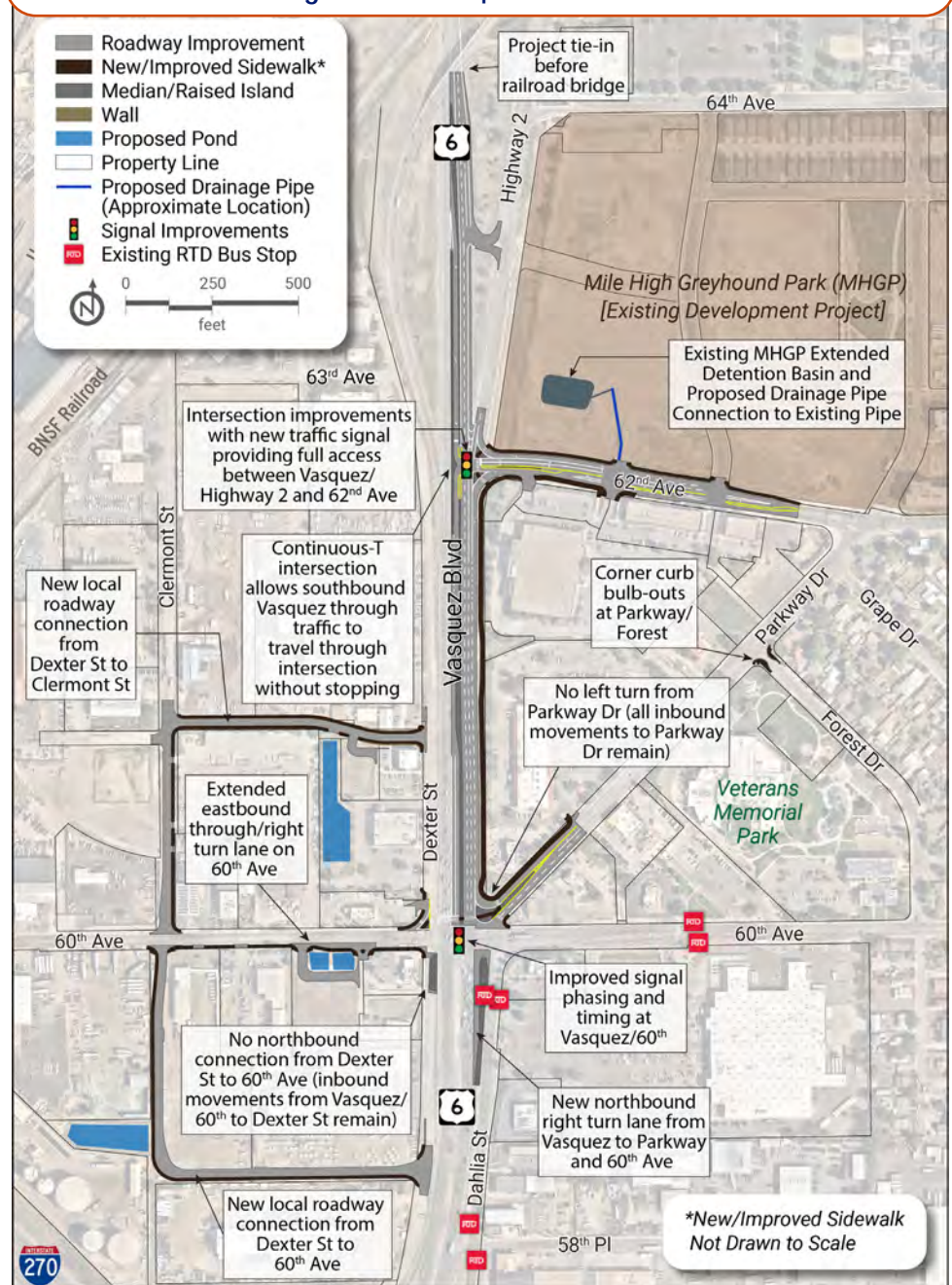
An alternatives evaluation was conducted to compare how well each alternative meets the Project's Purpose and Need, to compare how well each alternative would perform, and to identify the potential impacts of each alternative. Alternatives were refined and developed for the Vasquez Boulevard/60th Avenue and Vasquez

Boulevard/62nd Avenue intersections. The intersection alternatives were initially evaluated separately, then were combined to evaluate operations and optimize the roadway network traffic flow, safety and pedestrian connections. In addition, due to the proposed improvements to Vasquez Boulevard, changes to local roads adjacent to the corridor were developed with several alternatives. The full alternatives analysis documentation can be found in **Appendix B Alternatives Evaluation Analysis**.

3.1 What is the Proposed Action?

The Proposed Action includes improvements at the Vasquez Boulevard/60th Avenue and Vasquez Boulevard/62nd Avenue intersections, as well as the local street network and pedestrian facilities (**Figure 13**).

Figure 13: Proposed Action

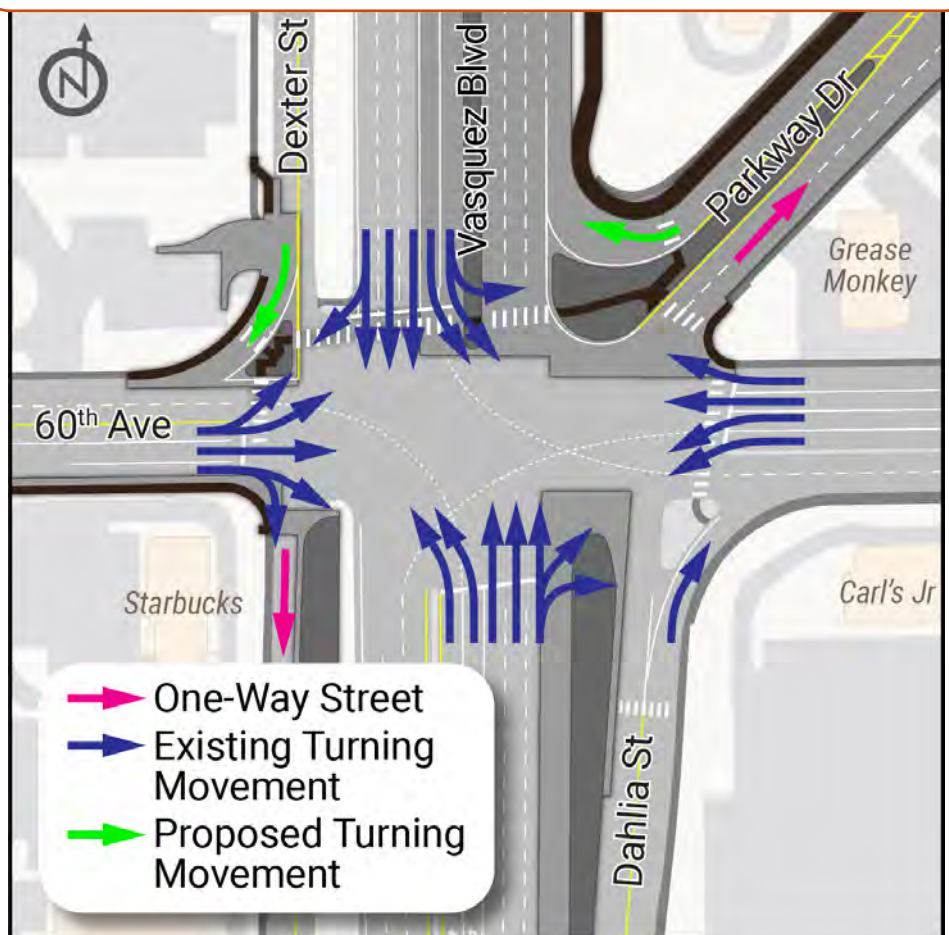


3.1.1 Vasquez Boulevard/60th Avenue

The Proposed Action for the Vasquez Boulevard/60th Avenue intersection includes (Figure 14):

- Only right turn movements to northbound Vasquez Boulevard from Parkway Drive. No access to other roads.
 - All movements entering Parkway Drive remain open as currently structured
- All outbound movements from Vasquez Boulevard/60th Avenue to frontage roads remain as exists now, but inbound movements are restricted
 - Right turn only from southeast frontage road (Dahlia Street)
 - Right turn only from northwest frontage road (Dexter Street)
 - No movement out from southwest frontage road and all southbound movements allowed as currently structured
- Two new local road connections to Clermont Street west of Vasquez Boulevard for full access between frontage roads and 60th Avenue
- Corner curb bulb-outs at the Parkway/Forest intersection to deter drivers from mistaking Forest Drive as an alternate route to 60th Avenue.
 - The bulb-outs and crosswalk would provide visual indication of Forest Drive as a neighborhood street (Figure 13).
- Driveways on 60th Avenue, Parkway Drive and frontage roads remain as currently structured or have minor changes
- Restriping of existing crosswalks and new pedestrian refuges for improved safety and accessibility of pedestrian infrastructure

Figure 14: 60th Avenue Proposed Action



3.1.2 Vasquez Boulevard/62nd Avenue

The Proposed Action for the Vasquez Boulevard/62nd Avenue intersection includes (Figure 15):

- A new traffic signal to provide movement from Parkway Drive to Vasquez Boulevard.
 - Traffic signal provides full access to/from 62nd Avenue and Vasquez Boulevard/Northbound Highway 2
- Southbound Highway 2 off ramp remains in existing configuration
- Continuous green time for southbound traffic on Vasquez Boulevard and the Highway 2 off ramp without stopping at the signal for 62nd Avenue traffic.

Figure 15: 62nd Avenue Proposed Action



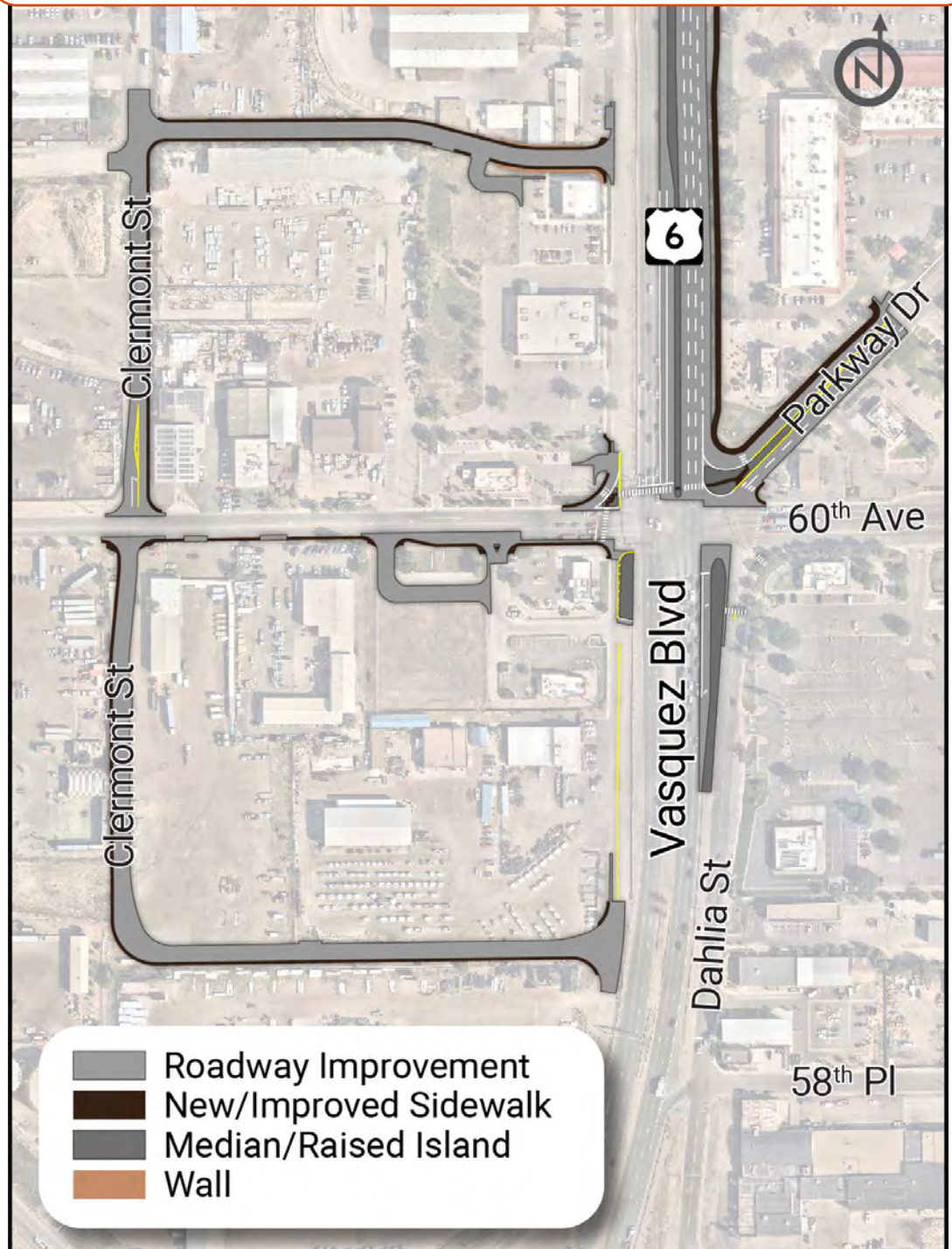
3.1.3 Local Road Connections

The new local roadway connections west of Vasquez Boulevard would enhance the local circulation and pedestrian connectivity of the local street network (**Figure 16**). The new roadways are two-lane, two-way local roads with the potential for direct property driveway access as approved by Commerce City. In order to improve operations at the Vasquez Boulevard/60th Avenue eight-legged intersection, it was necessary to remove access options and turning movements, simplifying the intersection. The new roadways provide safer operations for local transportation while maintaining access to properties. The new connections would

reduce congestion and improve safety by providing alternate local routes and reducing the turning movements at and adjacent to the complicated intersection. While the new local roadway connections would enhance the circulation in the area west of Vasquez Boulevard, they are not expected to substantially change the traffic volume on any of the existing roads.

These new local road connections would be open for traffic prior to construction of the improvements at the Vasquez Boulevard/60th Avenue intersection in order to maintain continuous local access and alternate routes.

Figure 16: Proposed Local Road Connections



3.1.4 Pedestrian Facilities

As part of the Proposed Action, sidewalk improvements and expansions are planned along 60th Avenue, 62nd Avenue, Clermont Street and the new local street connections on the west side of Vasquez Boulevard (**Figure 17**). In order to address the lack of access to the RTD stop on Dahlia Street, a bulbout for pedestrian refuge was included as part of the Project. Corner curb bulb-outs added at the Parkway/Forest Drive intersection would reduce the pedestrian crossing distance across Forest Drive and provide visual indication of Forest Drive as a neighborhood street. The sidewalk would be expanded along Vasquez Boulevard where there is a gap between Parkway Drive and the start of the King Soopers property. There would be improved signal phasing and timing at the Vasquez Boulevard/60th Avenue intersection for safer and more comfortable pedestrian crossings. The addition of the sidewalks would provide connectivity along the Study Area for pedestrian/bicycle travel by filling gaps in the existing sidewalk network. These connections would allow for residential areas to connect to bus facilities, commercial properties, parks and trails in the area. For example, residents in the new residential neighborhoods of the Mile High Greyhound Park redevelopment would be able to utilize the sidewalk along Vasquez Boulevard to travel to the businesses surrounding the Vasquez Boulevard/60th Avenue intersection and have safer access to bus stops in the area.

The addition of the sidewalks and improved crosswalks would allow for enhanced connectivity from the residential neighborhoods to regional trails in the area.

3.2 What is the No Action Alternative?

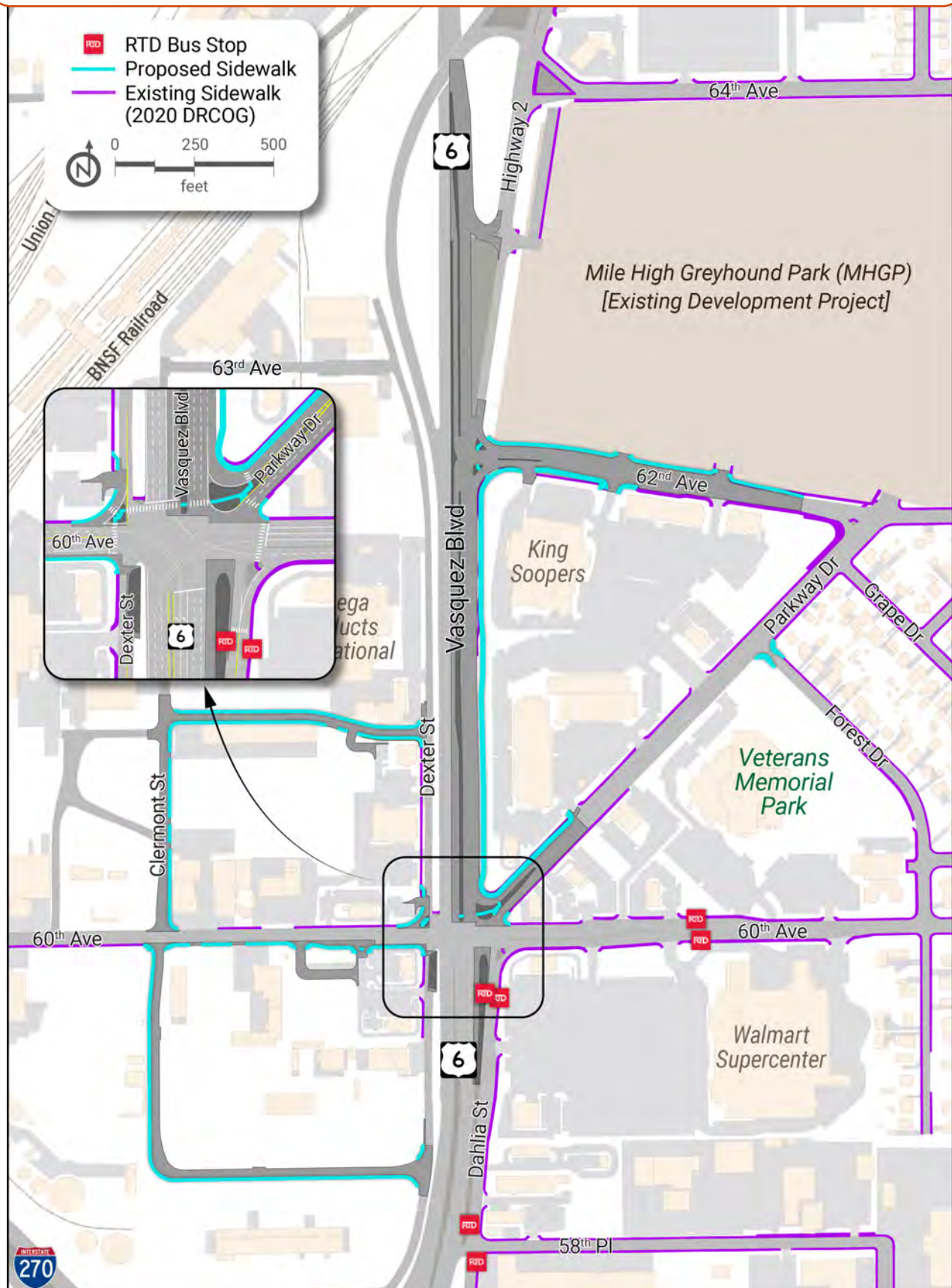
The No Action Alternative includes the projects and improvements that would progress if the Proposed Action is not implemented. Under the No Action, only routine maintenance and improvements already planned and funded by CDOT, Commerce City, Adams County and/or RTD would be completed. Routine maintenance of the existing street network is included in the No Action Alternative. The following programmed transportation improvements located within a larger area surrounding the Study Area that may affect regional travel within the Study Area are considered part of the No Action:

- I-270 improvements between I-25 and I-70 (south of Study Area)
- Highway 2 widening between 72nd Avenue and I-76 (north of Study Area)
- RTD North Metro Corridor commuter rail (future stations west and north of Study Area)

The Project also considers the most recent MHGP site plans and traffic forecasts as part of the No Action alternative. The MHGP, located northeast of the Vasquez Boulevard/Highway 2/62nd Avenue intersection, has the first phase currently under construction with future phases planned and funded. The MHGP will add vehicular traffic at existing and new accesses on Highway 2 and 62nd Avenue, along with additional pedestrian and bicyclist demand and infrastructure in the Study Area.

The MHGP is currently planned and approved to develop 68.239 acres of property in total. Of that total acreage, approximately 13% (8.877 acres) of the land is planned for commercial use, 25% (16.795 acres) for 'Mixed-use Village Center' use, 16% (11.127 acres) for residential use, and 14% (9.697 acres) for residential mixed use property. Approximately 10% (6.506 acres) will be for institutional uses, and 22% (15.237 acres) for parks, open space and public uses.

Figure 17: Proposed Sidewalk Connections



4.0 Affected Environment, Environmental Consequences And Mitigation Commitments

The following resources were identified for further analysis during the NEPA process due to potential for impacts: transportation resources, air quality, noise, environmental justice, land use, recreational, historic, hazardous materials, utilities, biological, water quality, floodplains, visual, right-of-way, archeologic and paleontological resources. Cumulative impacts, those resulting from the Project in combination with other past, present, or reasonably foreseeable projects in the Study Area, are included in the EA analysis (**Appendix C15**). Farmlands were determined to not be present within the Study Area and are not included in the impacts analysis.

The No Action and Proposed Action were evaluated for impacts to the environmental resources listed above. Permanent impacts were identified for the No Action Alternative and Proposed Action Alternative and are those that permanently change the Study Area's resources that would last through the Project horizon year (2040). Temporary impacts were identified for the Proposed Action and generally occur only during construction. Mitigation measures have been included to address the identified impacts.

The following sections provide a summary of resources for existing conditions, impacts resulting from the No Action and Proposed Action and mitigation, permits, and clearances required prior to construction for the Proposed Action. Corresponding technical reports in **Appendix C** provide additional information. The impacts and corresponding mitigation are indicated with numbers in each section. The mitigation measure numbers also correspond to the mitigation tracking table in **Appendix E**.

4.1 Transportation Resources

A complete noise analysis was completed for the study and is further described in **Appendix C1 Transportation Resources Memorandum**.

4.1.1 Affected Environment

The Study Area was evaluated for the operations and safety of the roadway and pedestrian facilities. Current traffic conditions are resulting in long delay times, high traffic volumes and unsafe driving conditions. High traffic volumes, along with a lack of pedestrian facilities in the area, create safety concerns for pedestrians.

The Vasquez Boulevard/60th Avenue intersection experiences long wait times with multi-leg configurations. The pedestrian infrastructure is disconnected, making travelers uncomfortable navigating the area.

4.1.2 No Action

The No Action would continue scheduled maintenance operations. The operations, safety and reliability of Vasquez Boulevard and its intersections in the Study Area are expected to decrease substantially.

4.1.3 Proposed Action

Impacts

The Proposed Action includes intersection improvements at Vasquez Boulevard/60th Avenue and Vasquez Boulevard/62nd Avenue, as well as new pedestrian facilities and local road connections.

60th Avenue: Left turns are restricted from Parkway Drive to southbound Vasquez Boulevard or 60th Avenue. All inbound movements from Vasquez/60th to frontage roads remain as exists now, but outbound movements are restricted.

62nd Avenue: The new traffic signal at the Vasquez Boulevard/62nd Avenue intersection is included in the Project to maintain full access to Vasquez Boulevard from the residential and retail area along 62nd Avenue and Parkway Drive.

Pedestrian Improvements: The Proposed Action also includes sidewalk improvements and expansions along Vasquez Boulevard and adjoining local roads in the Study Area (**Figure 17**). The addition of sidewalks would provide connectivity along the Study Area for safe non-motorized travel, including improved access and routes to regional trails.

Local Road Connections: Due to the changes in the direct connections for the west side frontage road (Dexter Street) at the Vasquez/60th intersection, new and improved local road connections are included in the recommendations to maintain and improve access for vehicular, truck, and multimodal access to the properties located west of Vasquez Boulevard between 58th Avenue and 63rd Avenue.

The Proposed Action would reduce 2040 afternoon traffic delays at the 60th Avenue and 62nd Avenue intersections by 114.8 seconds/vehicle, and 115.1 seconds/vehicle, respectively. The Proposed Action would also reduce delay at the 60th Avenue intersection for 2040 peak morning traffic by 84.1 seconds/vehicle.

Temporary road closures or detours may be required during construction. Along with the road closures, sidewalks may also be detoured for safe pedestrian access. New sidewalks would ultimately provide safer access to existing RTD transit stops.

Mitigation

The Proposed Action has been developed to provide transportation benefits to the pedestrian, bicyclist and vehicular travelers of the Study Area. Mitigation measures to minimize transportation impacts during construction include the following:

- T.1 Vasquez Boulevard and existing surrounding streets will remain open to traffic during construction. Short-term road closures may be allowed for construction activities. (Construction)
- T.2 Adequate and safe vehicle and pedestrian/bicycle detours will be in place to allow mobility to be maintained throughout the Study Area. (Construction)
- T.3 The new local roadways shall be constructed before work on Vasquez Boulevard begins to maintain access to all businesses during construction and provide construction phasing. (Construction)

4.2 Air Quality

A complete noise analysis was completed for the study and is further described in **Appendix C2 Air Quality Technical Memorandum**.

4.2.1 Affected Environment

Three types of air quality pollutants are associated with transportation projects: criteria pollutants, (carbon monoxide [CO], volatile organic compounds [VOCs], and nitrogen oxide [NOX]), mobile source air toxics (MSATs) and greenhouse gases (GHGs).

This Project is in the DRCOG's 2022-2025 TIP and DRCOG's 2050 Metro Vision Regional Transportation Plan (RTP) and meets regional conformity requirements. DRCOG has made a commitment to meet the State's GHG emission reduction requirements, resulting in the Project meeting the State and regional requirements.

CDOT's Air Quality Project-Level Analysis Guidance (AQ-PLAG) is intended to assist CDOT in the completion of project-level air quality analyses for road improvement projects. The AQ-PLAG states that a project must follow the CRS 43-1-128 law, if it is defined as a Regionally Significant Transportation Capacity project. The Project does not meet the definition, therefore, the CRS-43-1-128 does not apply.

4.2.2 No Action

The No Action would leave Vasquez Boulevard as it currently is configured, and would provide typical current maintenance activities. Congestion would continue to increase in the Study Area, increasing travel delay, fuel use, vehicle emissions, and GHG emissions.

4.2.3 Proposed Action

Impacts

The Project would reduce vehicle delay, travel times and vehicle idling times which ultimately reduces emissions of criteria pollutants, MSATs, and GHGs. Emissions are also forecasted to decrease substantially over the next several decades due to improvements in fuel and engine efficiency standards and vehicle fleet improvements.

Temporary construction impacts of the Project would generate criteria pollutant, MSATs, and GHG emissions. Sources of construction emissions include construction equipment, worker vehicles, material handling, project implementation and detouring vehicles.

Mitigation

The following are mitigation measures for the temporary air quality impacts during construction:

- AQ.1 The contractor shall submit any required Air Pollutant Emission Notice(s) (APEN) to the Colorado Department of Public Health and Environment (CDPHE) Air Pollution Control Division, and the CDOT Region 1 Air Quality Specialist and the CDOT Engineer, for concurrent review prior to the Preconstruction meeting for the Project. (Construction)

- AQ.2 A Fugitive Dust Control Plan will be required, and the contractor shall be responsible for compliance of the Plan. (Construction)

4.3 Noise

A complete noise analysis was completed for the study and is further described in **Appendix C3 Traffic Noise Technical Memorandum**.

4.3.1 Affected Environment

The Project meets the criteria for a Type III project established in 23 CFR 772, which does not require analysis for highway traffic noise impacts. Type III projects do not involve construction of a highway on a new location, added capacity, construction of new through lanes or auxiliary lanes, substantial changes in the horizontal or vertical alignment of the highway, exposure of noise sensitive land uses to a new or existing highway noise source, or any other activity classified as a Type I or Type II project. Although the proposed Project includes new roads, they would be classified as local roads, and are expected to have low traffic volumes. **Appendix C1 Transportation Resources Technical Memorandum** shows traffic volume estimates. CDOT acknowledges that a noise analysis is required if changes to the Project result in its reclassification as a Type I project.

4.3.2 No Action

It is anticipated that the No Action would not affect the noise levels in the Project Study Area.

4.3.3 Proposed Action

Impacts

As the Project is considered a Type III project, it is not expected to cause ongoing permanent noise impacts from traffic operations. Temporary construction noise impacts are anticipated.

Properties within or adjoining the Study Area may be exposed to noise caused by temporary construction activities of the Project. Construction noise impacts are anticipated to be from tools, heavy machinery and construction vehicles operating during construction hours.

Mitigation

The following are mitigation measures for the temporary noise impacts during construction:

- N.1 The contractor shall prepare a draft Construction Noise Mitigation Plan, and submit the plan to the CDOT Region 1 Noise Specialist and the CDOT Engineer for review prior to the pre-construction meeting for the Project.
- N.2. Applicable city (Section 6-2011 of Commerce City's Municipal Code) and the Colorado Noise Statute (C.R.S. 25-12-102) shall be followed during construction. (Construction)

4.4 Environmental Justice and Equity

A complete Environmental Justice (EJ) and Equity analysis was completed for the study and is further described in **Appendix C4 Social Resources Technical Memorandum**.

4.4.1 Affected Environment Low-Income and Minority Populations

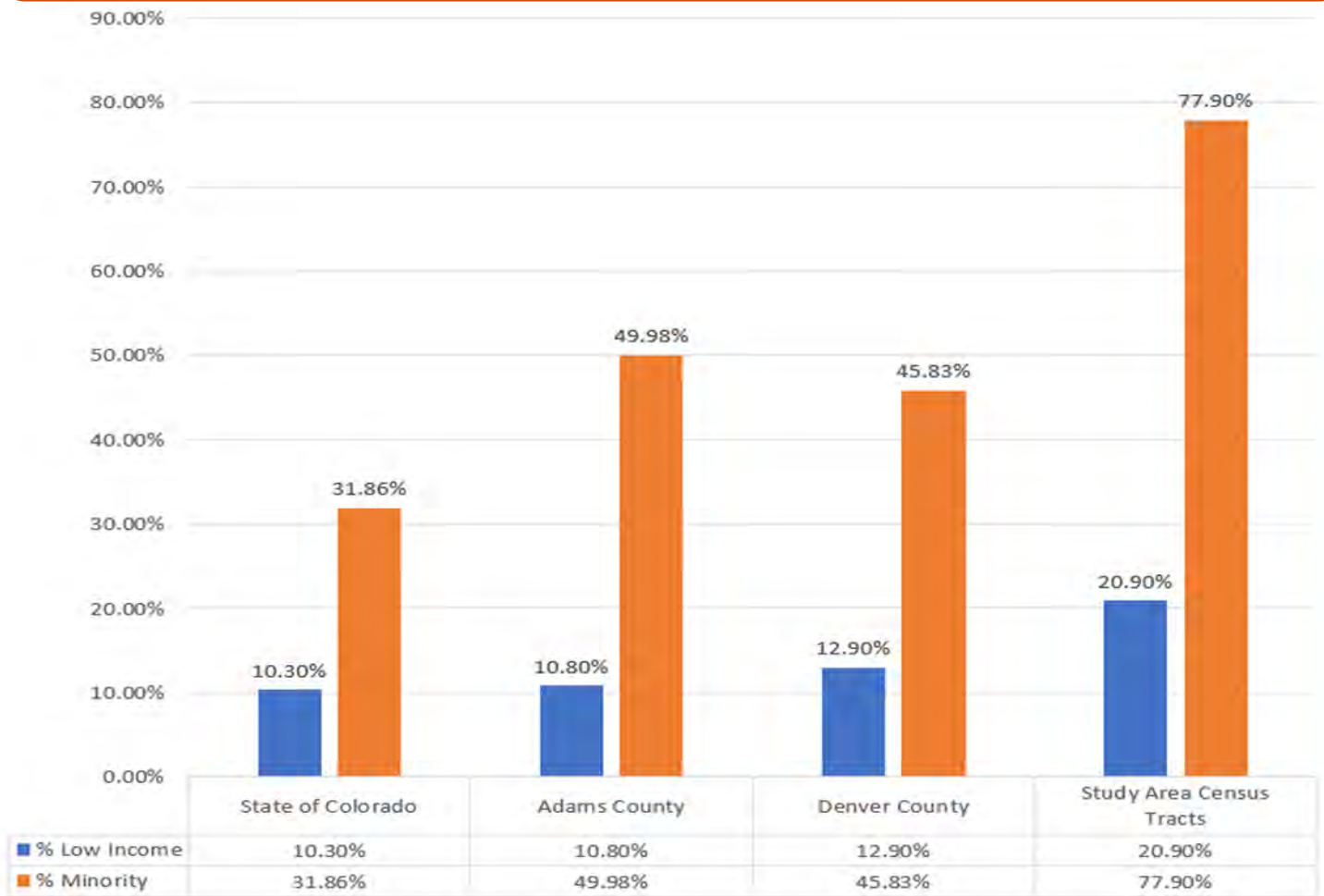
The Federal Executive Order (EO) 12898, regarding Environmental Justice (EJ) in populations that are minority and/or low-income, defines ‘low-income populations’ as any readily identifiable group of low-income persons who live in proximity of, and would be affected by, a proposed federally funded transportation project. Because CDOT receives federal funding, the Project has been reviewed for its potential impacts on surrounding minority and low-income populations. Furthermore, CDOT complies with Colorado House Bill 1260, and CDOT’s Environmental Stewardship Guide, which ensures that the statewide transportation system is constructed and maintained in an environmentally responsible, sustainable, and compliant manner.

All Census Tracts within the Study Area exceed the State and County proportions of minority populations (ACS 2015-2019 data). Denver County Census Tract 35 (**Figure 18 and 19**) reported the highest minority population in the Study Area (87.46% and Adams County Census Tract 89.01 reported the lowest (66.98%. The census tract with the lowest percentage of minority residents is 16.91% higher than the Adams County average, and 35.03% higher than the State of Colorado percentage overall.

According to the Council on Environmental Quality (CEQ), a Census Tract or area is considered a low-income population when either:

- The low-income population of the affected area exceeds 50%, or
- The population percentage of the affected area is meaningfully greater than the low-income population percentage in the general population or other appropriate unit of geographical area.

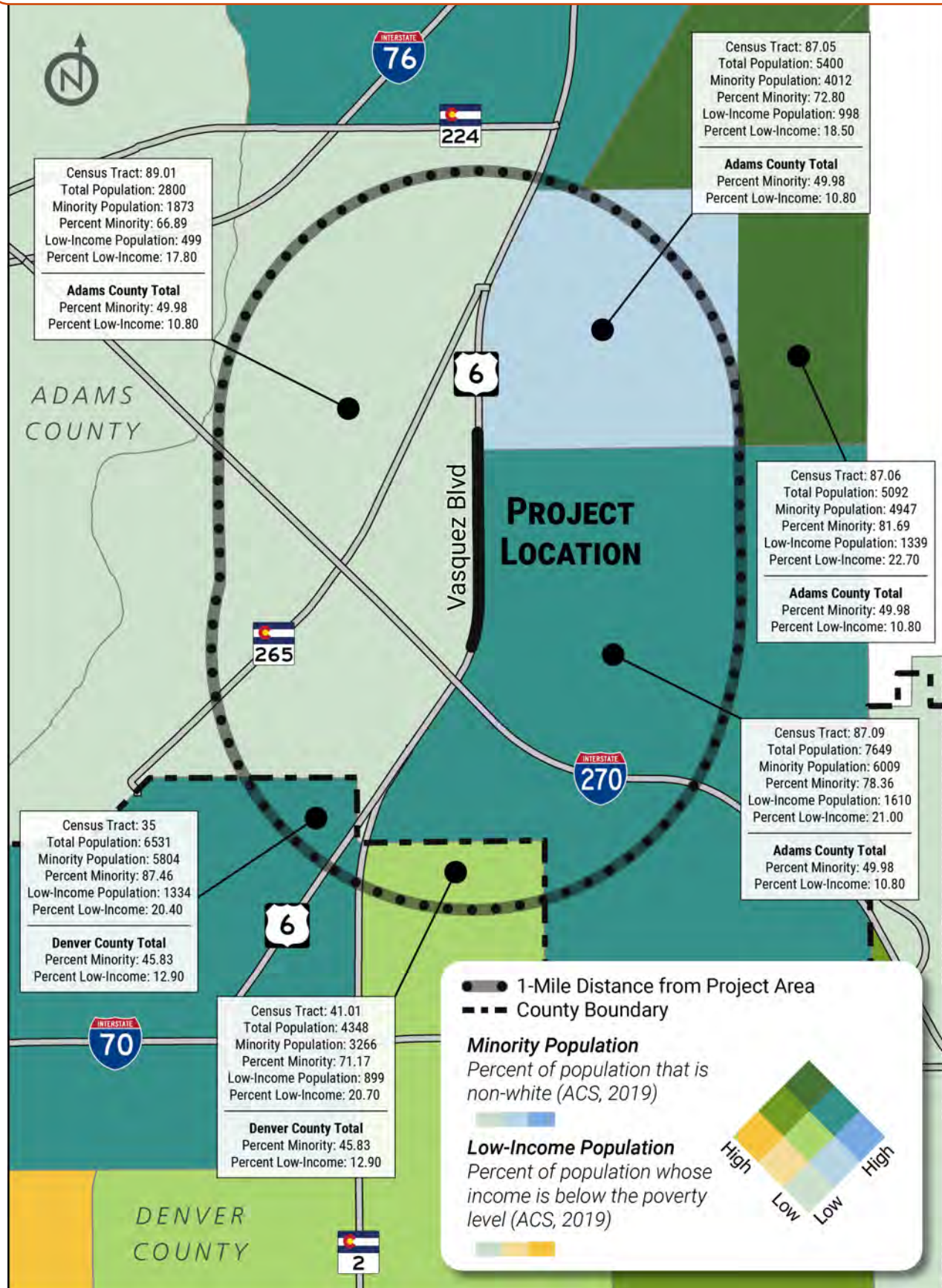
Figure 18: Comparison of Low-Income and Minority Populations



Source: American Community Survey 2015-2019

The census tracts in the Study Area all have population percentages of low-income and minority persons greater than the state of Colorado. Therefore the community is an EJ population.

Figure 19: Study Area Census Tracts with Low-Income and Minority Populations



Employment and Economic Viability

In areas with large populations of low-income residents, it is important to consider possible contributing factors, such as the unemployment conditions for the area.

Within the ½ mile Study Area, 67% of the population falls into the Labor Force classification; 6% of this Labor Force population is reported as Unemployed (4% of the total population). This means that the unemployment rate for the study area population is 5%, which is higher than the unemployment rate for Denver County (3%, Adams County (4% or the State (4%. The 'Unemployed' classification represents those who are actively seeking or available for employment, but do not have a job. The remaining 33% of the population 16 years of age or older in the Study Area is considered 'Not in the Labor Force', residents who are not currently working and are not actively seeking employment. Jobless individuals not currently seeking employment as well as those who are looking but have not searched for employment recently ('Unavailable Jobseekers' are included in this classification, as well as retired individuals. A breakdown of this information can be found in **Figure 20**.

This data infers that 37% of the population within the Study Area is not currently employed; this percentage is either actively seeking but unable to find employment or currently not seeking employment.

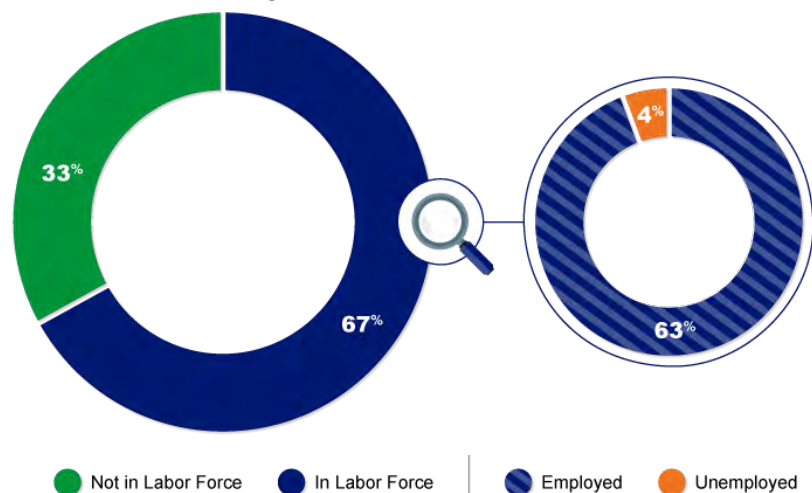
Many factors contribute to an area's unemployment rate, such as large populations of persons with physical or mental impairments, lack of transportation options or accessibility, and a lack of nearby opportunities for employment (also known as economic viability).

A notable 23% of the population within a ½ mile buffer of the Study Area are persons with physical or mental impairments; this proportion is higher than the percentages reported in Commerce City (16%, Adams County (15%, and the State of Colorado (14%. 11% of the Study Area population is also made up of Seniors (age 65+, which is higher than in the whole of Adams County (10% but lower than for the State (14%. The local population of persons of retirement age, and/or with disabilities may contribute to the 33% who are 'Not in the Labor Force'.

Other factors that may contribute to the Study Area's unemployment rate of 4% include:

- Gaps in access to or affordability of public transportation,
- Limited local employment opportunities
- Large Senior Population (age 65+); and
- Gaps in access to employment opportunities.

Figure 20: Employment



Source: American Community Survey 2015-2019

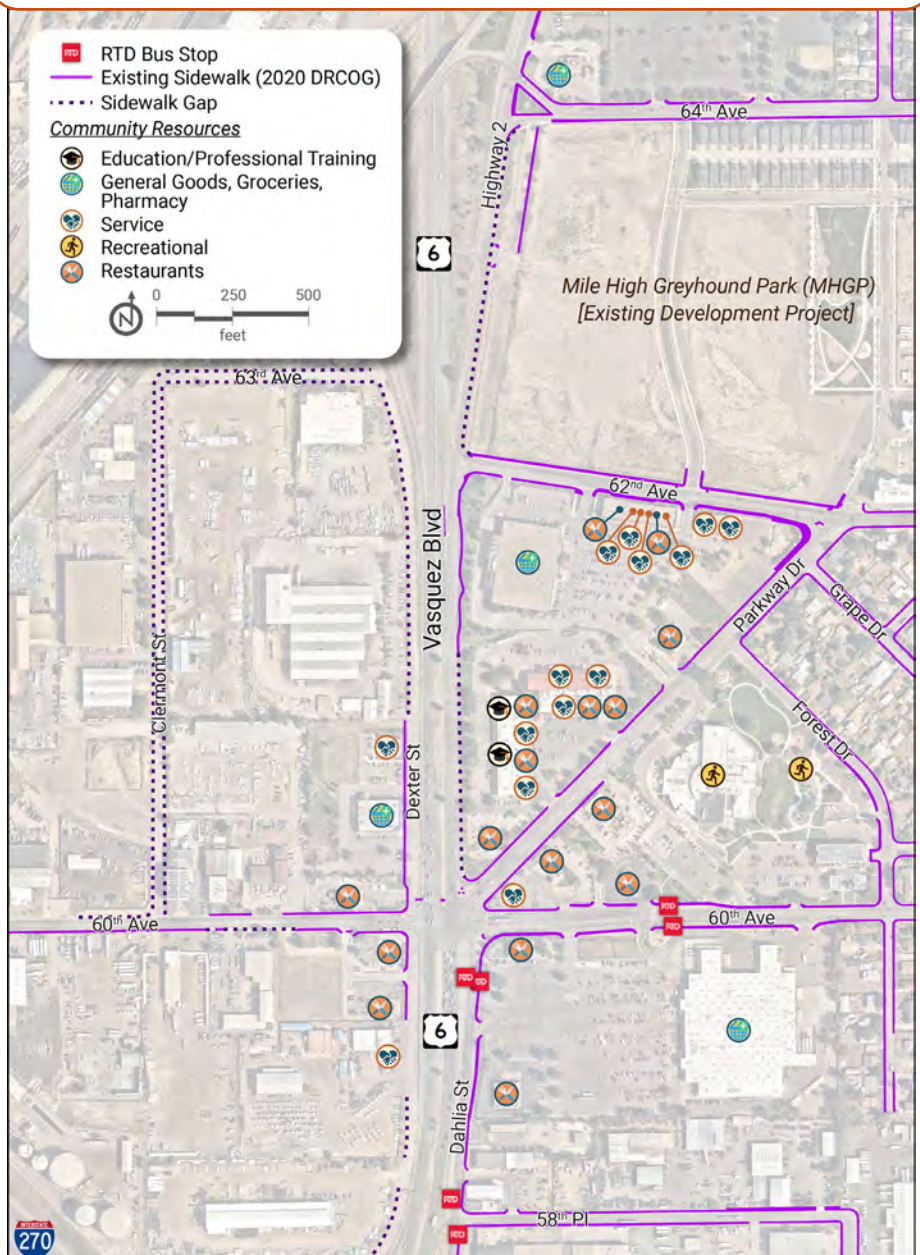
Local Businesses and Community Resources

The Study Area is mainly divided by Vasquez Boulevard with industrial and commercial zones on the west side, residential and commercial zones on the east side, and several community resources located adjacent to the roadway. With commercial and light industrial properties accounting for a large portion of the Study Area, maintaining or improving access to local businesses is essential for the economic vitality of this Area (**Figure 21**). Facilities such as recreation centers, schools, religious facilities and community gathering places are particularly important as they increase the quality of life to the community. Walkable access to local services and places of employment such as groceries, medical services, pharmacies, pet care, laundry facilities and banks also improves quality of life, particularly for low-income residents who might not own a vehicle. Improving the accessibility to these resources helps establish the equitable use of local businesses and services for the community. Businesses in the area that are local or small business include Lougi Nails & Spa, The Feline Fix, Playland Coin Laundry, Mullen Tire & Service, Los Tamales, Mama's Café, Taco River, and Mei Wei. These businesses are all located on the east side of Vasquez Boulevard off of 60th, 62nd, and Parkway Drive, with an exception of Mullen Tire & Service.

The Denver Small Business Certification and Contract Management System, CDPHE's Colorado EnviroScreen and the Colorado Office of Economic Development and International Trade Minority Business Office Business Directory were searched for minority owned, women-owned, small and/or emerging businesses. The three database searches did not identify any businesses within or adjacent to the Study Area. Although no businesses were identified by the databases, there could still be minority-owned or minority-employing businesses within the Study Area that have not applied for these certifications.

With the Project Study Area being entirely within an EJ community, the

Figure 21: Existing Accessibility to Community Resources



assumption has been made that the surrounding businesses serve, employ, or are owned and operated by people who are part of the EJ community.

Pedestrian Facilities and Transit Dependency

The FHWA Screening Tool for Equity Analysis of Projects (STEAP) was used to determine that approximately 8% of households within a ½ mile buffer from the Study Area do not own a vehicle (Figure 22). Additionally, the STEAP found that 25% of households owned only one vehicle, despite 90% of households having more than one occupant.

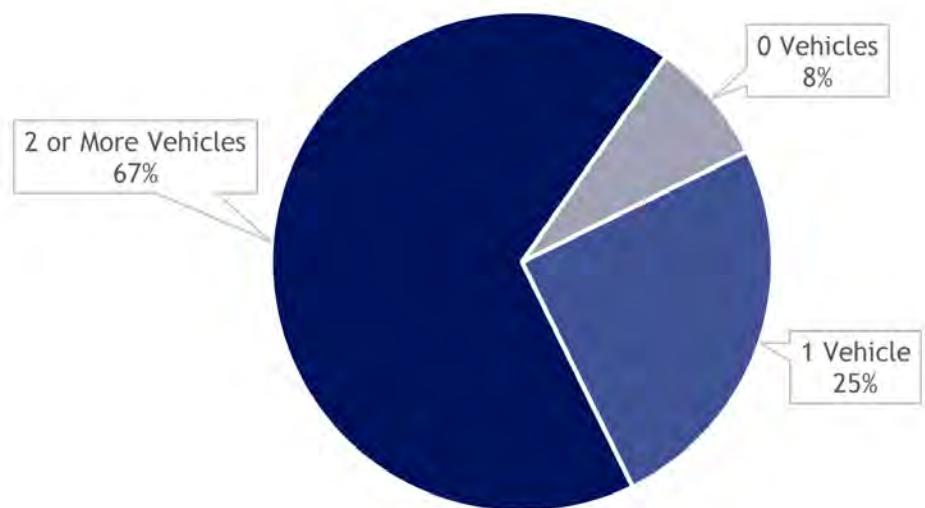
ACS 2015-2019 data was used to compare modes of transportation to work. While transportation by car, truck, or van were found to be the most popular, there are residents reported in all Census Tracts that rely on public transportation.

Within the Study Area there are currently bus stops located at the corners of Dahlia Street and 58th Place, Dahlia Street and 60th Avenue, on 60th Avenue near the Walmart Supercenter, and 60th Avenue and Glencoe Street. Coordination between Commerce City, the RTD, and the Project team was ongoing throughout this study; Commerce City intends to implement bus stop improvements in the Project corridor separately from this Project.

Half of the Census Tracts identify employees that commute to work only by walking. Vasquez Boulevard presents a barrier for pedestrians who rely on public transit and walkability to places of employment.

As previously mentioned, 23% of the population within a ½ mile buffer from the Study Area is a person with disabilities. This makes ADA (Americans with Disabilities Act) compliance and accessibility of public spaces particularly relevant to this Project.

Figure 22: Vehicle Ownership within 1/2 Mile from the Study Area



Source: American Community Survey 2015-2019

Air Quality and Environmental Justice

As mentioned in Section 4.2 above, CRS 43-1-128 law does not apply to this corridor, as the Project is not defined as a Regionally Significant Transportation Capacity Project. While this law does not apply, environmental justice evaluations do assess potential health impacts caused by transportation facilities,

particularly when those impacts affect minority and low-income populations. Since the Study Area consists of predominately low-income and minority residents, it is important to understand existing air quality concerns and evaluate how they could be improved or worsened by the No Action or Proposed Action alternatives.

EPA's EJScreen data was used to identify the following existing air quality-related concerns within the ½ mile buffered Study Area from the Project:

- In the 99th State percentile and 98th national percentile for Air Toxic Cancer Risk
- In the 98th State percentile and 95th national percentile for Diesel Particulate Matter
- In the 98th State percentile and 87th national percentile for Particulate Matter
- In the 92nd State percentile and 91st national percentile for Ozone

Air Toxic Cancer Risk, Diesel Particulate Matter, Particulate Matter and Ozone measurements relate to health risks associated with air quality conditions.

Populations with Limited-English Proficiency

Residents within the Study Area who speak one language other than English are considered Limited-English Proficient (LEP). All Census Tracts within the Study Area report a range of 6%- 40% of the populations as LEP, with Spanish-speaking adults as the majority of this LEP population. Persons who are LEP make up more than 14% of the population for nearly all Census Tracts; all except Census Tract 41.01 surpass Adams County and Denver County averages for LEP populations. Census Tracts with the highest proportion of LEP persons are located on both on the north and southwest sides of the Study Area.

A small amount of the population also speaks Asian and Pacific Islander languages, as well as other languages not listed in the Census data. These residents make up 1% of the overall Study Area population and less than 5% of the population of any individual census tract within the Study Area, so additional action was not warranted to address translations for this group.

4.4.2 No Action

Impacts

Benefits

In the No Action condition, no notable benefits are anticipated to the Economic condition, Equity or Environmental Justice of the Study Area.

Burdens

With the Mile High Greyhound Park constructing more commercial and residential facilities in the Study Area, increased pedestrian and vehicular traffic is anticipated in both the No Action and Proposed Action Alternatives; increased traffic would worsen the safety conditions and comfort for all corridor users. In the No Action, the growing needs of the community would continue to cause problems for adjacent areas. A decline in safety and comfort in a predominately low-income and minority community leads to greater risk of inequity and worsens existing conditions.

As traffic congestion increases with ongoing construction, accessibility to existing and future local businesses would worsen; with the No Action, access to these businesses would remain the same, likely resulting in negative impacts on the employees and patrons. The economic viability of the surrounding area would be negatively affected as well, leading to further economic resource concerns.

In the No Action, the increase in congestion and standstill traffic would likely worsen existing air quality concerns; the effects of worsening air quality conditions on the Study Area's residents would, in turn, worsen the existing EJ conditions.

4.4.3 Proposed Action

Impacts

Benefits

The Proposed Action would improve the current comfort and safety conditions for pedestrians, transit users and passenger vehicles in the Study Area; providing safer and easier access to local residential properties would benefit the EJ populations in the area, and community resources would be more accessible through improved vehicular flow, sidewalk availability and crosswalks.

With the addition of a sidewalk between Parkway Drive and 62nd Avenue, more pedestrians would have direct access to the Mile High Greyhound Park residential and commercial properties. This would likely benefit the economic viability of the area by improving accessibility to new businesses, and from new residential properties to existing businesses. Such improvements to economic viability may also improve job accessibility for low-income residents, improving the EJ conditions for the Study Area.

The Proposed Action would improve the safety of pedestrian crossings and would assist in connecting the eastern residential areas to the western commercial and industrial areas of the corridor, improving the current pedestrian barrier effects of Vasquez Boulevard.

Sidewalks, curb ramps and driveways would be improved to meet ADA standards, further improving accessibility for all pedestrians. ADA accessibility would improve equity and EJ for the surrounding communities, as well as corridor pedestrian users.

The improvements provided by the Proposed Action would increase pedestrian access along the corridor, and potentially decrease the need for vehicular transportation. This improved pedestrian access is especially beneficial to EJ populations who might not have access to an automobile, or who may rely on public transit for mobility.

These improvements would also increase equity for the corridor by improving the quality of life for local residents. Improved pedestrian access of the area improves access to community resources such as parks, schools, grocery stores and churches/religious facilities.

The Proposed Action has the potential to assist in decreasing the unemployment rates of the area by improving access to public transportation facilities and connectivity of sidewalks. Walkable and bikeable access is essential for an area where 8% of households do not own a vehicle, and members of every census tract walk to work.

Congestion in the Study Area is anticipated to be reduced through enhanced signal timing and restriping of Vasquez Boulevard. With southbound Vasquez Boulevard having a continuous lane at the 62nd Avenue intersection, the air quality conditions are anticipated to improve. These improvements would benefit the existing EJ conditions of the corridor.

Burdens

During construction, business owners, residents in the area, and travelers of the corridor may be impacted by limited access and traffic congestion. Users may also experience construction dust and noise during construction hours. The census tracts of the Study Area are comprised of EJ populations, which would experience the most direct impacts from construction burdens. These impacts would be short-term and temporary.

Partial property acquisition would be required from commercial properties along 60th Avenue, Clermont Street, Dexter Street and Parkway Drive. This would include the loss of outdoor commercial/industrial storage areas or undeveloped space, however, no long term hardship on businesses are anticipated due to the property acquisitions. Three restaurants along Dexter Street (Arby's, Starbucks and Wendy's) are anticipated to have partial property acquisitions, without long term hardship or direct impacts to business operations occurring as a result. These restaurants are identified in **Figure 2 1** near the intersection of Vasquez Boulevard and 60th Avenue. There would be no direct impacts to any business operations or residential properties from these acquisitions.

Overall travel time throughout the corridor would be decreased with the proposed improvements, however an increased travel time may be experienced with the restricted turning movements. Restricted turning movements and potential impacts to businesses are described below.

Southbound Dexter Street north of 60th Avenue would be a right turn only onto 60th Avenue. (**Figure 14**) Businesses south of 60th Avenue are still accessible by vehicles using the new local road connections. This change in turning movements may increase travel time for users. The improvements would add new sidewalks, a pedestrian island, and crosswalks for safer pedestrian movement and improved connectivity.

Northbound Dexter Street south of 60th Avenue would be a one-way southbound only. To access 60th Avenue or Parkway Drive, drivers would use the new local roadways, which adds an additional city block of out-of-direction travel to make those connections.

Access to businesses would still be available for all properties in the study area. Intersection improvements are intended to optimize vehicle and pedestrian safety. Although direct turning movements would be restricted for the Vasquez Boulevard/60th Avenue intersection, the new local roads would allow movements and access to be maintained. Frequent users of the corridor may need to reassess current travel routes and reacclimate to the modified movements of Vasquez Boulevard, 60th Avenue, and 62nd Avenue intersections. Increased safety at the intersections would promote pedestrian and vehicular usage and attract travelers to use local businesses and services.

4.4.4 Mitigation

Based on the above discussion and the full Environmental Justice analysis described in **Appendix C4 Social Resources Memo**, the Proposed Action would not cause disproportionately high and adverse effects on any minority or low-income populations in accordance with the provisions of EO 12898 and FHWA Order 6640.23A.

Mitigation measures to minimize impacts on EJ groups during construction include the following:

- EJ.1 Pedestrian detours will be provided (where needed) with signing and ADA compliant access to improve the safety of travelers in the area and to allow for access during construction. (Construction)

- EJ.2 Local businesses will be informed of the Project's construction activities and access to the businesses will be maintained throughout construction. (Construction)
- EJ.3 Distribution of Spanish translated materials and intentional outreach to LEP communities will continue through all Project phases. (Construction)

4.4.5 Public Engagement

Addressing Limited-English Proficiency: For persons with LEP, language can be a barrier to participation in planning studies and transportation design projects. CDOT, as a recipient of federal assistance, provides written translations of vital documents for each eligible LEP language group that constitutes five percent of the affected population.

As previously stated, every Census Tract within the Study Area has 6%-32% of its population who have LEP, with Spanish-speaking adults making up the large majority of this population.

In accordance with Title VI of the Civil Rights Act of 1964 and Executive Order 13166, CDOT's Policy Directive 604.0 provides that no person on the grounds of race, color, national origin, sex, disability, or age, be excluded from participation in, be denied the benefits of, or be subjected to discrimination in any operation of CDOT or of any department or agency to which CDOT extends federal assistance. This policy directive also states that "CDOT shall seek to communicate with LEP populations and provide LEP individuals meaningful access to CDOT programs and activities." (CDOT Limited-English Proficiency Plan, 2021).

To equitably engage LEP populations in or adjacent to the Study Area, all public outreach to date was developed and presented with translation options available. During the PEL Study, focus groups, one-on-one meetings, one public open house, a project website, a project hotline, and a project flyer were used to engage the community. At in-person events, and via the project hotline, a Spanish translator was made available. For all informational project materials (online, in the flyer and presentation materials) both Spanish and English text was used.

Since the PEL study, additional public outreach activities have been conducted. This outreach includes:

- Small-group presentations to stakeholders (Mile High Greyhound Park, Freight Advisory Council Steering Committee)
- Focus group meetings (including freight industry, Pedestrian and Bicyclist Travel, Spanish language, and Business focus groups)
- King Soopers Pop-up event
- Postcard mailers
- Project factsheets
- Socia media and local news updates
- City Council briefings

All materials distributed on the project included Spanish translations, and all in-person events had a Spanish translator present.

CDOT will continue to provide Spanish translations during any future public engagement efforts and of any project document upon request.

Virtual Accessibility

According to the STEAP analysis, approximately 20% of the households within ½ mile from the Study Area do not have a computer at home. Within this same population, approximately 27% of households do not have internet connection at home.

A lack of computer ownership and internet access at home often correlates with low-income, and disadvantaged communities. What this data means for the proposed Project is that public engagement efforts would need to offer in-person options to equitably involve EJ communities surrounding the Project.

4.5 Land Use

A complete land use analysis was completed for the study and is further described in **Appendix C4 Social Resources Technical Memorandum**.

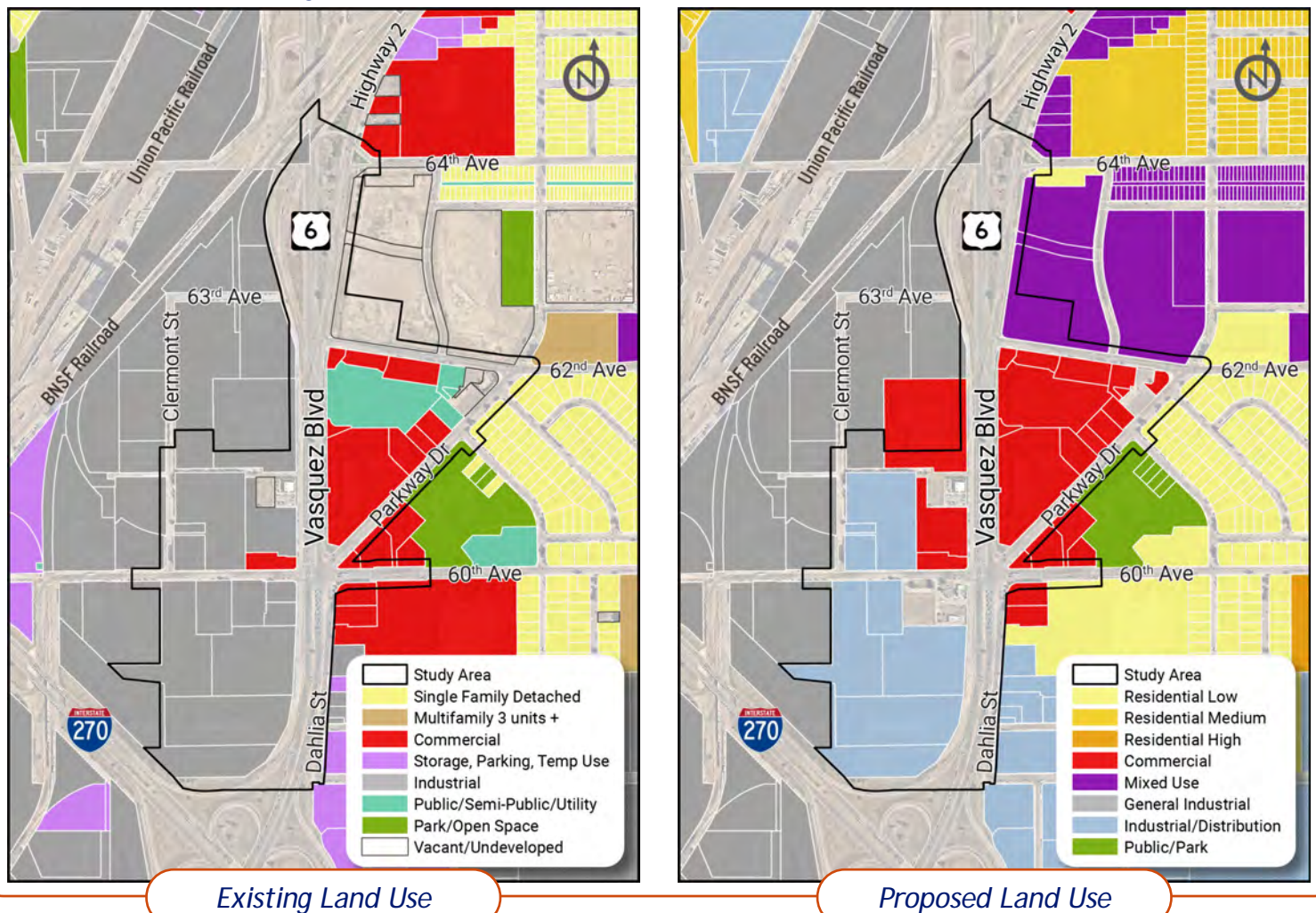
4.5.1 Affected Environment

The Study Area's land use contains or is adjacent to properties zoned for commercial, industrial, public and residential land use (**Figure 23**). Commerce City has been one of the Metro Area's fastest growing communities and developed land has doubled in size within the past few decades. The growth of Commerce City is exemplified by the Mile High Greyhound Park development, which is set to construct commercial retail, residential units for single-families and affordable housing units.

4.5.2 No Action

The No Action does not accommodate the future land use changes in the Study Area as identified in the Commerce City Comprehensive Plan and the Mile High Greyhound Park Urban Renewal Plan.. With the expected changes in land use due to the Mile High Greyhound Park, an increased demand on the local roadway systems is anticipated.

Figure 23: Existing and Future Land Use in Commerce City



4.5.3 Proposed Action

Impacts

With the Proposed Action, the area would likely see an improvement in mobility and safety for pedestrian, motorists and non-motorized travel. With the estimated increase in residential density and commercial facilities along Vasquez Boulevard (Figure 23) identified in the Commerce City Comprehensive Plan and Mile High Greyhound Park Urban Renewal Plan, safety and mobility improvements are not only preferred, but are needed.

Mitigation

Mitigation measures would not be required as part of the Proposed Action.

4.6 Recreational Recreational, Section 4(f) Recreational and Section 6(f) Resources Resources

A complete recreational resources analysis was completed for the study and is further described in Appendix C4 Social Resources Technical Memorandum.

4.6.1 Affected Environment

There are seven public parks and recreational areas that are adjacent to or within the vicinity of the Study Area. Recreational Section 4(f) resources are publicly owned parks, recreational, or wildlife refuges of national, state, or local significance that are open to the public. Section 6(f) properties are recreational properties that are purchased or improved with grants from the Land and Water Conservation Fund (LWCF) Act (Figure 24).

Figure 24: Recreational Resources near the Project



4.6.2 No Action

The No Action would not have any permanent or temporary impacts to recreational resources.

4.6.3 Proposed Action

Impacts

The Proposed Action would improve pedestrian and vehicular access to recreational, Section 4(f) and Section 6(f) properties, further enhancing these existing facilities.

To accommodate for ADA compliance and sidewalk improvements at Veterans Memorial Park, a portion of grassy area would be paved and converted to sidewalk. The work would be within road right-of-way (ROW), outside of the legal park boundary, and therefore does not constitute a Section 4(f) use. However, the LWCF boundary extends outside of the legal park boundary and encompasses a portion of the road ROW where this work is taking place, which constitutes a Section 6(f) impact (**Figure 25**). Early Colorado Parks and Wildlife (CPW) coordination has occurred, and formal agency approval will be obtained prior to construction.

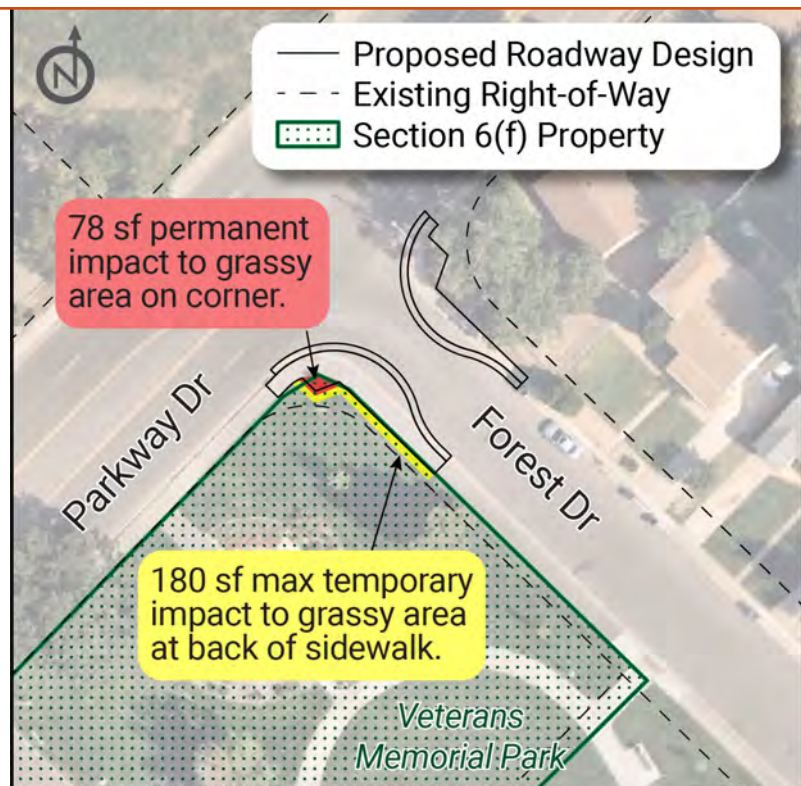
Temporary impacts may occur during construction due to delays, detours, and short-term closures of Vasquez Boulevard, Parkway Drive, 60th Avenue and Forest Drive. Construction could create delays for users traveling to park properties, but access would remain open during construction.

Mitigation

Mitigation measures to minimize impacts on Recreational Resources include the following:

- RR.1 All park access would remain open during construction. (Construction)
- RR.2 Agency coordination for the Section 6(f) impact will be complete prior to construction. (Permanent)

Figure 25: Sidewalk Improvements at Veterans Memorial Park



4.7 Historic and Section 4(f) Historic Resources

A complete historic resources analysis was completed for the study and is further described in Appendix C5 Historic and Section 4(f) Historic Resources Report and Consultation.

4.7.1 Affected Environment

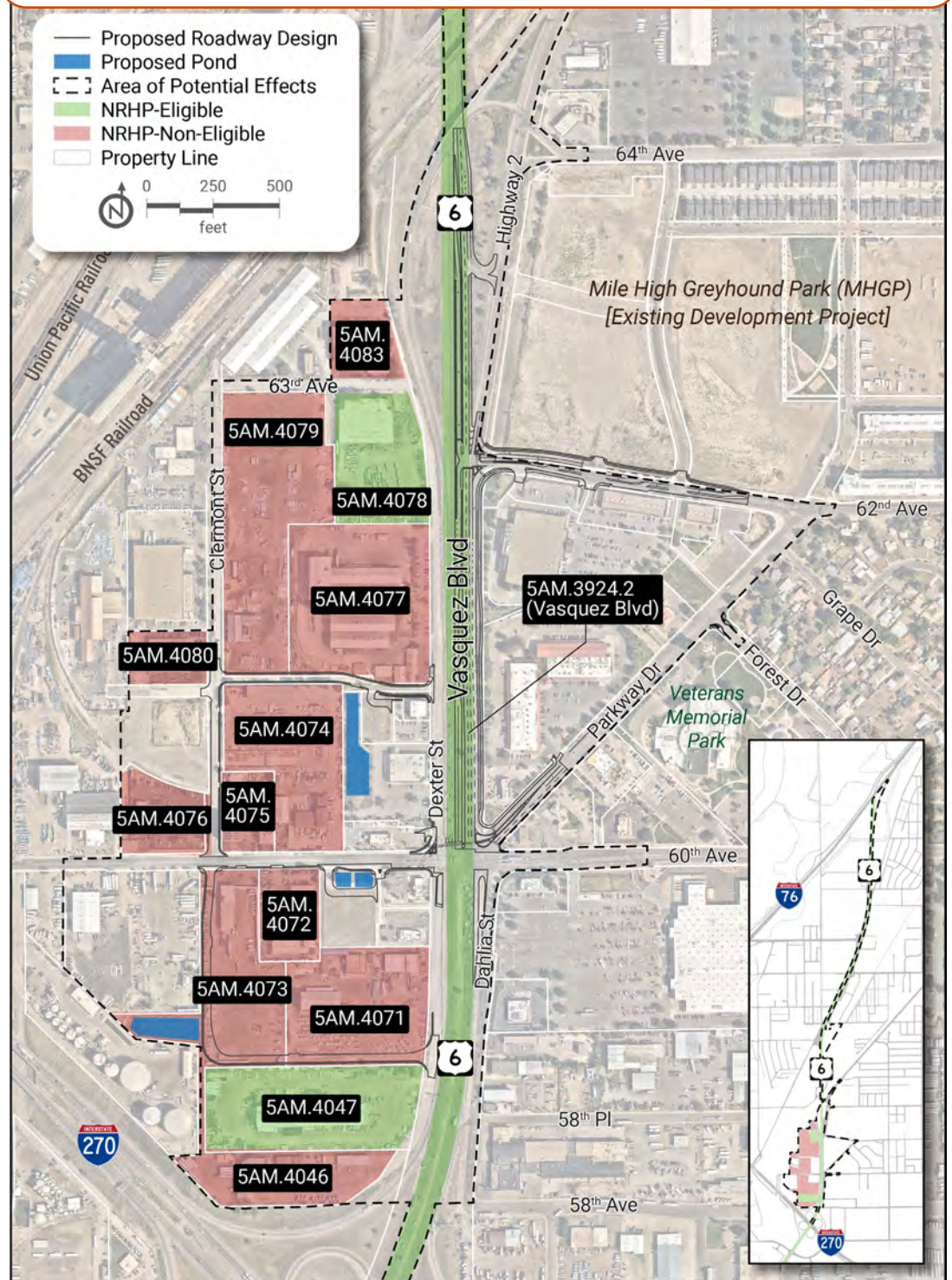
Historic properties were identified within an Area of Potential Effect (APE) and evaluated for National Register of Historic Places (NRHP) eligibility. The APE includes properties

that may be subject to any impacts by the Project. Section 4(f) of the U.S. Department of Transportation Act of 1966 requires special consideration of historic sites for transportation projects.

Fourteen potentially historic resources were identified within the APE. Three resources, one linear resource and two industrial properties, were identified as NRHP-eligible resources (Figure 26). The other eleven properties identified were determined to be not eligible.

The NRHP-eligible linear resource is a segment of Vasquez Boulevard (US 6) spanning 3.49 miles (5AM.3924.2) and goes through the Study Area. At its southern end, it intersects with I-270 and travels north, where it curves to the northeast and joins I-76.

Figure 26: APE and Historic Resources Map



The segment of US 6 within the Project was determined to be non-supporting of the overall integrity of the resource due to substantial alignment and configuration changes over the past several decades.

The NRHP-eligible industrial properties include the Pepper Tank Co./Plastics, Inc. building (5AM.4047) and the Clermont Realty Co./Steel Inc./Hooper Corp. building (5AM.4078). Both buildings were determined to be eligible properties that embody the distinctive characteristics of a type, and are two examples of post-World War II production sheds in the Commerce City.

4.7.2 No Action

Under the No Action, the historic properties throughout the Study Area would remain unaltered, and no impacts would occur.

4.7.3 Proposed Action

Impacts

For the three NRHP-eligible resources that were identified within the APE (5AM.3924.2, 5AM.4047, and 5AM.4078) effects determinations were made based on the Proposed Action improvements. CDOT coordinated determinations of effects with the State Historic Preservation Office (SHPO). The SHPO concurred with the proposed APE and determinations of NRHP eligibility. The Project would have no adverse effects on the three properties.

In the early design, a new local road travelled through the western and southern portions of the Pepper Tank Property (5AM.4047) and required acquisition of portions of the historic property. After discussing with the SHPO as part of the Section 106 process, CDOT and the design team minimized the impacts to the property by moving the roadway alignment to the northern edge of the Pepper Tank Property (5AM.4047), where it is shown in the final design that is moving forward. This design change avoided what could have been an adverse effect under Section 106. Because the impact to the Pepper Tank Property was determined to have no adverse effect, FHWA made a *de minimis* finding under Section 4(f). A *de minimis* finding involves the use of a Section 4(f) property that is generally minor in nature. This finding is due to the smaller easements needed in the northwest corner of the Pepper Tank property and the determination of no adverse effects. There would be no use of the Clermont Realty Co./Steel Inc./Hooper Corp. building, therefore, a Section 4(f) review or Section 106 consultation was not required.

The Project would not alter any historic characteristics or diminish the integrity of the US 6 linear resource. Since US 6 is a transportation facility, the Project fell under a Section 4(f) transportation facility exception determination by FHWA.

Mitigation

Mitigation measures are not required as part of the Proposed Action.

4.8 Hazardous Materials

A complete hazardous materials analysis was completed for the study and is further described in Appendix C6 Hazardous Materials Technical Memorandum.

4.8.1 Affected Environment

A Modified Environmental Site Assessment (MESA) was prepared using CDOT's hazardous materials guidance. This assessment conducted a database search of available local, state, tribal and federal environmental agency databases for sites with potential or known environmental conditions. A summary of identified findings of known hazardous materials and potential environmental concerns (PECs) within the Study Area is presented in **Table 1** and shown in **Figure 27**. The sites are identified as medium risk categories, which means that following initial investigation it is still unclear whether contamination is located within the project footprint. Additionally, with the extensive amount of commercial and industrial use of the properties in the area, there is a risk of encountering potentially contaminated materials.

Table 1: Findings Summary

Location	Finding
Harris Transportation: 5901 Dexter Street	<ul style="list-style-type: none"> Leaking Underground Storage Tank Site Registered Storage Tank Site
Mile High Greyhound Park: 6200 Dahlia Street	<ul style="list-style-type: none"> Former Commerce City Dog Track Solid Waste Disposal Site State institutional control/engineering control registries site Greyhound Flats Voluntary Cleanup Program (VCP) Site

4.8.2 No Action

The No Action would have no effects on hazardous material sites identified.

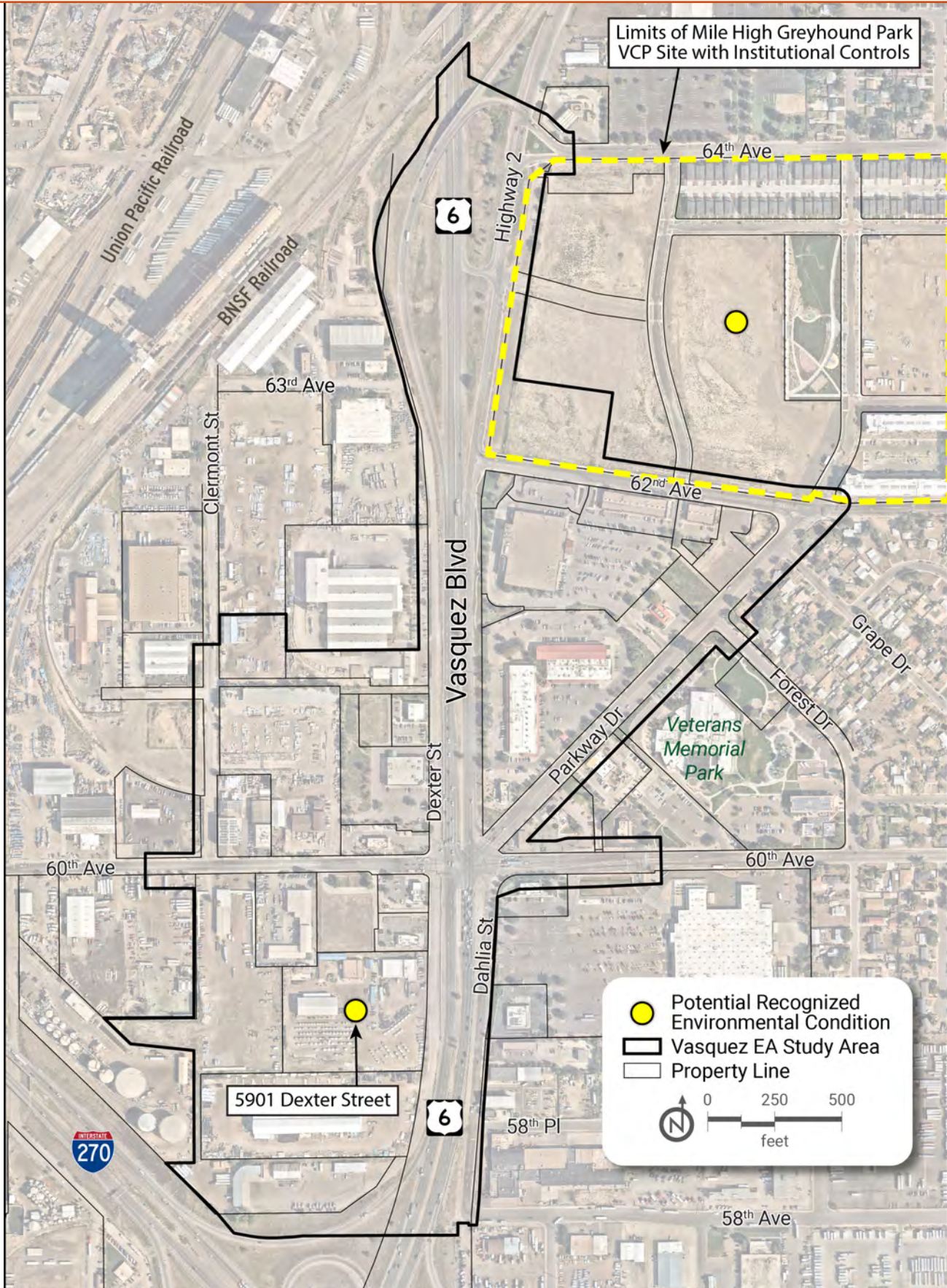
4.8.3 Proposed Action

Impacts

The Proposed Action has the potential to impact hazardous materials from sites associated with PECs in the Study Area and in the surrounding area. If these properties are impacted and hazardous materials are found, increased construction costs to the Project would be needed to mitigate the effects of hazardous materials. Additional impacts on worker's health and safety also need to be considered when handling waste and disposal of contaminated materials.

Prior to final design, a geotechnical investigation along with a hazardous material assessment of the site soils is to be finalized. This information will be used to inform permanent water quality and final design. Excavation for drilling of caissons for the traffic signal reconfigurations may impact ground water during construction.

Figure 27: Known PEC Properties within the Study Area



Mitigation

During construction when working near these sites, the contractor should be looking for possible signs of contamination. The following are mitigation measures for hazardous materials for the Project:

- HM.1 Contractors and workers shall comply with the Colorado Department of Transportation's (CDOT) latest Revision of Section 250 - Environmental, Health and Safety Management (EHSM) of the Standard Specifications for Road and Bridge Construction; (Construction)
- HM.2 Prior to construction, CDOT will prepare a Project-specific Materials Management Plan (MMP) that details site-specific standard operating procedures regarding the identification, sampling, handling and disposal of wastes and hazardous materials that could be encountered during construction; (Construction)
- HM.3 The contractor shall complete a Health and Safety Plan (HASP) to address potential wastes and hazardous materials that could be uncovered during construction; (Construction)
- HM.4 Workers shall be alert during excavations for any visual or olfactory signs of contamination. If gas, soil and/or groundwater contamination is encountered, work will stop immediately, and the procedures outlined in the CDOT Specification 250 and subsection 107.25.(b) shall be followed; (Construction)
- HM.5 Prior to construction, the contractor shall identify any painted metal items that could be impacted during construction. If painted metal items identified in the Study Area are slated for removal and disposal, the contractor shall test for lead-based paint (LBP) and, if present, removing, disposing, or recycling of the painted components shall be done in compliance with CDOT Specification 250 - EHSM (including, but not limited to, Section 250.04) and all applicable Occupational Safety and Health Administration (OSHA), local, state and federal regulations; (Construction)
- HM.6 Structural excavation, such as caisson and retaining wall construction, may require the dewatering of contaminated groundwater. If dewatering is necessary, groundwater brought to the surface will be managed according to Section 107.25 of the CDOT Standard Specifications for Road and Bridge Construction and permitted by the CDPHE Water Quality Control Division, in accordance with Section 402 of the Clean Water Act; (Construction)
- HM.7 If any drinking water and groundwater monitoring wells are located within the proposed construction area, the wells will be abandoned and plugged according to CDOT Section 202.02 in Standard Specifications for Road and Bridge Construction and in conformance with the Colorado Department of Natural Resources Division of Water Resources State Engineer Water Well Construction Rules, specifically Rule 16, "Standards for Plugging, Sealing, and Abandoning Wells and Boreholes"; and (Construction)
- HM.8 Consult with CDOT Property Management regarding any structure and property acquisitions and/or impacts. (Permanent)

4.9 Utilities

A complete utilities analysis was completed for the study and is further described in **Appendix C7 Utility Technical Memorandum**.

4.9.1 Affected Environment

The Study Area contains private and publicly owned utilities including sanitary sewer, communications, electric, storm sewer, water, gas, and several unknown facilities. The majority of the utility facilities along Vasquez Boulevard are distributed behind the curb on both the east and west sides, and beyond the roadway travel lanes. In contrast, there are multiple facilities within the travel lanes of east 60th Avenue, east 62nd Avenue, Parkway Drive and east 64th Avenue.

4.9.2 No Action

Under the No Action, the utilities throughout the Study Area would remain in place and no impacts would occur.

4.9.3 Proposed Action

Impacts

The Proposed Action would require that some above ground utility features and connections be shifted to avoid the proposed travel lanes and sidewalks. The grading to be performed poses a risk to underground utilities could be hit and damaged during construction and result in safety, environmental and/or cost impacts of varying scales. The facility with the highest risk of impact would be the gas line in the Study Area; impacts to the gas line could result in contamination, fire, utility service disruption or explosion.

Mitigation

Mitigation measures to minimize utility impacts during construction include the following:

- UT.1 Utility coordination will continue throughout the design process to identify opportunities to avoid and minimize potential utility impacts. (Construction)
- UT.2 Additional Subsurface Utility Engineering (SUE) investigations will occur as needed to reduce unexpected utility encounters. (Construction)

4.10 Biological Resources

A complete biological resources analysis was completed for the study and is further described in **Appendix C8 Biological Resources Technical Memorandum**.

4.10.1 Affected Environment

Threatened and Endangered Species

Two state-listed species have the potential to occur in habitat located in the Study Area, black-tailed

prairie dog and Burrowing Owl. There is a known black-tailed prairie dog colony located along Dahlia Street, west of the Mile High Greyhound Development (MHGD) project. The following five federal-listed species occur in the South Platte River, downstream from the Study Area, and have potential to be affected by water depletion to the South Platte River Basin: Whooping Crane, interior Least Tern, Piping Plover, pallid sturgeon, and western prairie fringed orchid. The Monarch butterfly is a candidate for federal listing with potential to occur in the Study Area.

Migratory Birds

No active or inactive raptor nests, ground, or arboreal nests were observed during the site visits or identified on CPW's raptor database.

Vegetation, Noxious Weeds and Invasive Weeds

Five noxious weed species identified on the Colorado Noxious Weed List as requiring active management occur in the Study Area: downy brome, field bindweed, puncturevine, Russian olive and scotch thistle. Much of the vegetation is planted/manicured along medians and sidewalks where minor impacts to vegetation would occur.

Wetlands and Other Waters

No wetlands or other surface waters were identified in the Study Area.

4.10.2 No Action

No impacts to biological resources would occur under the No Action.

4.10.3 Proposed Action

Impacts

Threatened and Endangered Species

During construction, the Project may result in ground disturbance to prairie dog burrows which could also impact Burrowing Owls that require the burrows for nesting and roosting. The Whooping Crane, Piping Plover, interior Least Tern, western prairie fringed orchid, and pallid sturgeon could be impacted by construction due to potential water depletions in the South Platte River. CDOT has undergone formal consultation with the United States Fish and Wildlife Service to have an agreement for potential impacts on the South Platte River species. The Monarch butterfly is a candidate species with no legal protection, but no adverse effects to the species are expected.

Migratory Birds

Migratory birds have the potential to be impacted by clearing/grubbing of ground vegetation, trimming/removal of trees and construction noise.

Vegetation, Noxious Weeds and Invasive Weeds

Noxious and invasive weeds are also present in the Study Area and construction activities have the potential for introducing and spreading them.

Mitigation

Mitigation measures to minimize impacts on biological resources include the following:

Threatened and Endangered Species

- BR.1 For pallid sturgeon, Piping Plover, Whooping Crane, interior Least Tern, and western prairie fringed orchid, the water used for this Project will be reported to the USFWS at the year's end after the completion of the Project as per the consultation and Programmatic Biological Assessment between FHWA and USFWS. (Permanent)
- BR.2 Prior to construction, the contractor shall conduct new surveys for the presence of active prairie dog colonies and follow CDOT's Impacted Black-tailed Prairie Dog Policy (CDOT 2009). For unavoidable impacts to the colony along Dahlia Street, trapping and removal may be required due to the surrounding development constraints. (Construction, Permanent)
- BR.3 If construction activities occur between March 15 and October 31, the contractor shall also follow CDOT's *Revision of Section 240 for Prairie Dog Management* and CPW's *Recommended Survey Protocols and Actions to Protect Nesting Burrowing Owls*. (Construction)

Migratory Birds

- BR.4 A migratory bird survey will be conducted prior to construction if work is scheduled to take place between April 1st and August 31st. Pre-construction surveys are valid for seven days and would need to be repeated if work does not commence within that time period. (Construction)
- BR.5 Comply with the requirements of the Migratory Bird Treaty Act according to CDOT *Revised Section 240* for Protection of Migratory Birds. (Construction)

Vegetation, Noxious Weeds and Invasive Weeds

- BR.6 An Integrated Noxious and Invasive Weed Management Plan will be prepared by CDOT prior to construction to address the control methods to be used to stop the continued spread of noxious and invasive weed species. (Construction)

4.11 Water Quality

The rationale for this analysis and ongoing coordination with Commerce City are discussed further in the **Appendix C9 Vasquez Boulevard Water Quality Technical Report**.

4.11.1 Affected Environment

The Project lies in the South Platte River Basin and the stormwater from within the Project limits drains to two stream segments, Sand Creek and the South Platte River. The segments of Sand Creek and the South Platte River are both listed in Water Quality Control Commission (WQCC) Regulation 93: *Colorado's Section 303(d) List of Impaired Waters and Monitoring and Evaluation List* as impaired or identified for monitoring and evaluation. Sand Creek, from the confluence with Westerly Creek to the confluence

with the South Platte River is listed as impaired for *Escherichia coli* (*E. coli*) and selenium. The South Platte River, from Sand Creek to approximately 600 feet below 120th Avenue occurs on the Monitoring and Evaluation list for water temperature. According to CDOT's Phase 1 Municipal Separate Storm Sewer System (MS4) permit, "roadway pollutants of concern" include total suspended solids, cadmium, chromium, copper, iron, lead, magnesium, nickel, manganese, zinc, inorganic nitrogen, total phosphorus, chloride, sodium, oil and grease. Therefore, neither stream segment contains any CDOT roadway pollutants of concern.

The Project is located within overlapping MS4 permit areas, CDOT's individual permit and Commerce City's Statewide General Permit. Both MS4 permits require post-construction stormwater management control measures for projects that meet certain permit conditions.

4.11.2 No Action

The No Action would leave Vasquez Boulevard as it currently is configured and would not provide any improvements beyond typical maintenance activities. As part of US 6, normal maintenance of Vasquez Boulevard would continue to be performed by CDOT, including the current discharge of stormwater into Sand Creek and the South Platte River. Normal maintenance of side streets within Commerce City ROW would continue to be performed by Commerce City.

4.11.3 Proposed Action

Impacts

The Proposed Action would result in a net increase in impervious area of approximately 2.8 acres (16% increase over existing conditions) that would contribute to increased highway stormwater runoff. Along highways, the majority of pollutants are generated by vehicle traffic. The increased runoff would result in degradation of water quality due to contaminated runoff from roadway pollutants if not treated.

This Project triggers the Commerce City MS4 permit requirements but does not trigger the CDOT MS4 permit requirements. Therefore, the Project would require Post-Construction Stormwater Management Control Measures for New Development and Redevelopment for Commerce City that meet the "base design standard".

Additional temporary water quality impacts have the potential to occur during construction including:

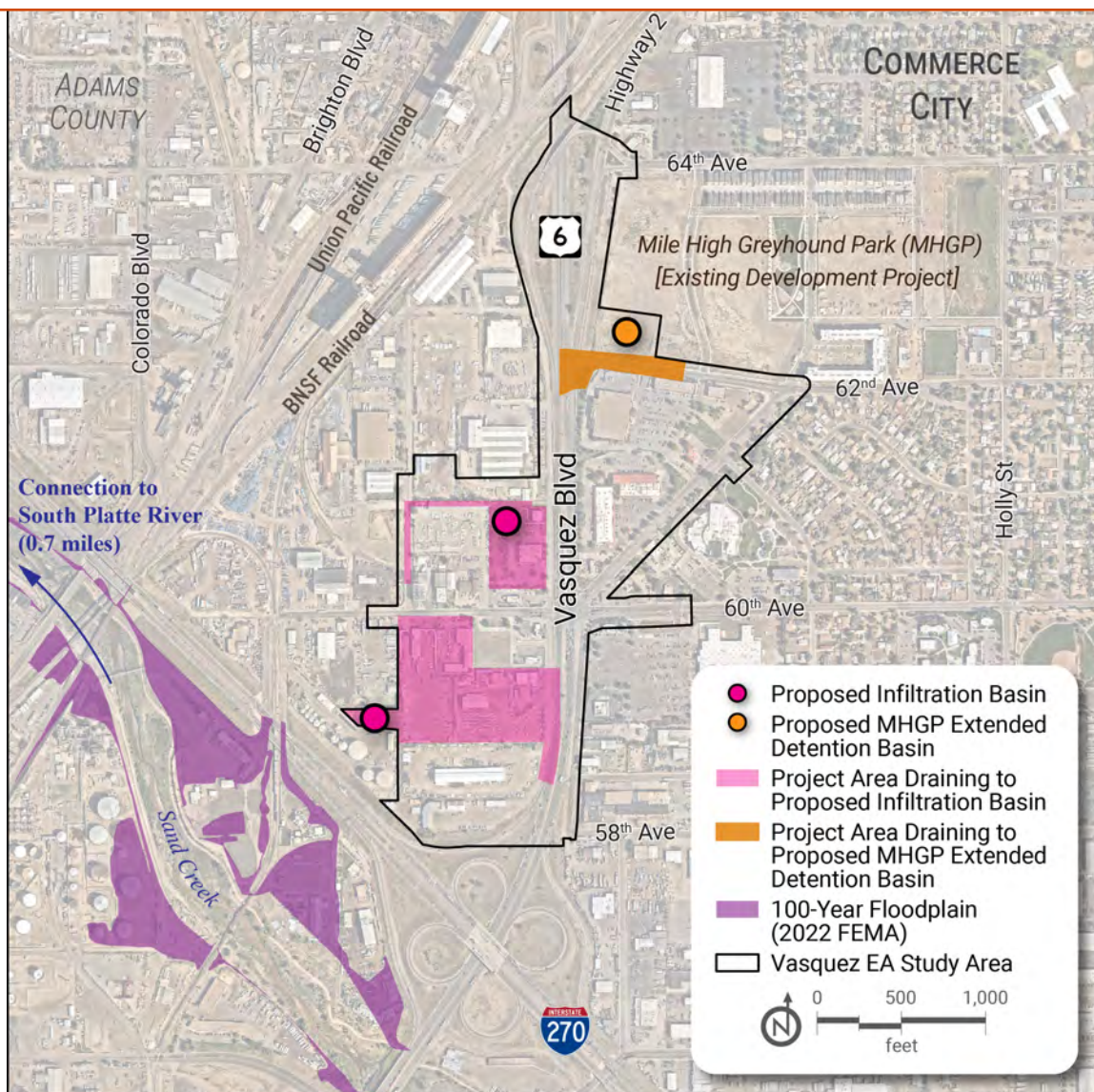
- Soil disturbance which could be washed into the storm drain system and discharged into drainageways.
- Vehicle tracking/carrying sediment onto the roadway.
- Concrete wash-out potential which can be conveyed into the drainageways.
- Accidental spills from construction equipment and staging areas, including oil or lubricant leaks.
- Caisson installations for traffic signals and utility improvements all have potential of encountering groundwater. Exposure of the groundwater could potentially lead to degradation of groundwater quality through spills and/or leaks of potentially harmful materials.

Mitigation

Mitigation measures to minimize impacts on water quality include the following:

- WQ.1 Three proposed permanent water quality (PWQ) facilities are included for the Project as mitigation (**Figure 28**). Two facilities are anticipated to require Permanent Easements (PE) and/or ROW acquisition. (Permanent)
 - Northeast of 62nd Avenue and Vasquez Boulevard: In cooperation with MHGP development, planned water quality and detention pond by the developer will be utilized for treatment of runoff from 62nd Avenue and Vasquez Boulevard.
 - Clermont Street - North of 60th Avenue: An infiltration pond is proposed to treat runoff from the new proposed roads.
 - Clermont Street - South of 60th Avenue: A proposed infiltration pond will be included to treat runoff from the new proposed roads.

Figure 28: Water Quality Map



Temporary mitigation measures shall take place during construction to reduce potential for water quality to be impacted such as:

- WQ.2 A spill prevention, control and countermeasure plan will be developed and implemented for the Project construction site to establish standard operating procedures and require employee training to minimize the accidental release of pollutants that could contaminate stormwater runoff. (Construction)
- WQ.3 A stormwater management plan (SWMP) will be prepared by CDOT to outline and detail erosion and sediment control within the Study Area during initial, interim and final construction phases. (Construction)

4.12 Floodplains

A complete floodplains analysis was completed for the study and is further described in **Appendix C10 Floodplain Technical Memorandum**.

4.12.1 Affected Environment

South of the Study Area, Sand Creek flows northwest along the south side of I-270 toward its confluence with the South Platte River. The Flood Insurance Rate Map (FIRM) panel shows the 100-year Sand Creek floodplain lies south of I-270 and doesn't extend into the Study Area. The 500-year floodplain does extend into the southwest corner of the Study Area.

4.12.2 No Action

No impacts to floodplains result from this alternative.

4.12.3 Proposed Action

Impacts

No impacts to the 100-year floodplain result from the Project. The 500-year floodplain is an area of moderate flood hazard and therefore does not require a floodplain permit.

Mitigation

No mitigation required due to no impacts on the resource.

4.13 Visual Resources

A complete visual analysis was completed for the study and is further described in **Appendix C11 Visual Impact Assessment Memorandum**.

4.13.1 Affected Environment

An Area of Visual Effect (AVE) was established for the Project based on defining landscape features and the visibility of improvements from key viewpoints. The AVE considers visibility from both travelers and neighbors of the Study Area.

The Study Area is heavily impacted by the industrial environment including buildings, smokestacks, grain silos, fuel refineries and corresponding transportation infrastructure. Background views to the front range can be found but are extremely limited by buildings and transportation elements. Minimal vegetation is located within the Study Area.

4.13.2 No Action

The No Action Alternative would not contribute to improved visual character or quality of the Study Area.

4.13.3 Proposed Action

Impacts

The Proposed Action would result in beneficial visual impacts by repairing and replacing damaged roadways and infrastructure. The Proposed Action will improve the current poor natural and built conditions by planting trees along Vasquez Boulevard, where possible. The addition of the new local roads would not negatively impact the visual character as it is an existing industrial area.

During construction, temporary visual impacts could result from dust, construction signage and equipment and traffic delays creating further visual disorder and obstructions to visual quality.

Mitigation

In accordance with CDOT's Guidelines, the following items are options to minimize, and/or mitigate for visual impacts.

- V.1 During the creation of the landscaping plans, new tree locations will be determined to create a better visual environment for pedestrians. (Permanent)

4.14 Archaeological Resources

Archeological resources were reviewed for this study and are further described in **Appendix C12 Archaeological Assessment**.

4.14.1 Affected Environment

The Study Area is characterized by extensive disturbance from prior road construction and decades of development and redevelopment. Prior archaeological surveys of the Study Area have identified one isolated prehistoric archaeological artifact. The artifact was reported in 1950 and was collected. Two 19th century trails and an earlier expeditionary route passed through the Project's general vicinity, but their actual routes are not specifically known, nor has any evidence been documented in the Study Area. None of these archaeological resources are eligible for the NRHP.

4.14.2 No Action

Under the No Action, there would be no potential to encounter or impact archaeological resources.

4.14.3 Proposed Action

Impacts

Due to widespread prior disturbance, there is no demonstrated potential for intact archaeological deposits and no impacts are anticipated to occur from activities associated with the Proposed Action.

Mitigation

Mitigation measures to minimize potential impacts on archaeological resources encountered during construction include the following:

- AR.1 Should previously unidentified archaeological resources be discovered during any phase of construction, work will stop until the CDOT Senior Staff Archaeologist is contacted and the resources have been evaluated and appropriate Section 106 of the National Historic Preservation Act compliance coordination and actions have occurred, as necessary. The contractor shall comply with CDOT Standard Specification 107.23 (Archaeological and Paleontological Discoveries). (Construction)

4.15 Paleontological Resources

Paleontological resources were reviewed for this study and are further described in **Appendix C13 Paleontological Assessment**.

4.15.1 Affected Environment

According to the best available geologic map of the Study Area, the Project is partly underlain by artificial fill and primarily underlain by Pleistocene alluvial deposits. These units are themselves underlain at variable depth by the Cretaceous and Paleocene Denver and Arapahoe Formations, with the nearest available well data showing this bedrock unit at approximately 18 feet below the surface.

Artificial fill is of recent human origin and considered non-sensitive for paleontological resources. Pleistocene deposits may contain fossil or subfossil remains, particularly of ice age mammals, and are generally considered to be moderately paleontologically sensitive. These units have produced ice age mammal localities within a few miles of the Study Area. The Denver and Arapahoe Formations, if reached by Project excavation, are to be considered highly sensitive, with numerous scientifically important fossils known from the greater Denver Metro area. However, no previously recorded fossil localities are known to occur within the Study Area.

4.15.2 No Action

Under the No Action, there would be no potential to encounter or impact paleontological resources.

4.15.3 Proposed Action

Impacts

The Study Area is underlain at variable depth by the Cretaceous, Paleocene Denver and Arapahoe Formations. While no previously recorded fossil localities are known to occur within the Study Area, there is a potential for impacts if these formations are reached by excavation during construction.

Mitigation

Mitigation measures to minimize potential impacts on paleontological resources during construction include the following:

- PR.1 The CDOT staff Paleontologist will be provided final design plans depicting major excavation (such as for large caissons, underpasses, etc.) to determine the need to conduct a survey prior to construction. (Construction)
- PR.2 If disturbance yields any subsurface bones or other potential fossils anywhere within the Project during construction, then work in the area should cease immediately and the CDOT Staff Paleontologist should be notified as soon as possible to assess their significance and make further recommendations. The Contractor shall comply with CDOT standard specification 107.23. (Construction)

4.16 Right-of-Way Impacts

ROW impacts were reviewed for this study and are further described in **Appendix C14 Right-of-Way Technical Memorandum**.

4.16.1 Affected Environment

Existing ROW widths in the Study Area range from approximately 57 to 293 feet. For the Vasquez Boulevard ROW, the southern and northern ends of the Study Area are the widest, narrowing towards the middle of the Study Area. Average widths of the other roadways in the Study Area include 60th Avenue at 72 feet, 62nd Avenue at 60 feet, Clermont Street at 57 feet and Parkway Drive at 80 feet. The widths were obtained from the survey ROW file and include the paved roadway surface and additional CDOT-owned land beyond the edge of pavement. Properties adjacent to roadways in the Study Area are in both public and private ownership.

4.16.2 No Action

Under the No Action, no property acquisition, residential or business relocations, or permanent or temporary easements would occur.

4.16.3 Proposed Action

Impacts

Based on preliminary design plans, adjacent private properties would be impacted by property

acquisition needed to construct the improvements outlined in **Section 3.1**. Across the 23 impacted properties, approximately 5.21 acres of property acquisition, 0.01 acre of permanent easement, and 2.32 acre of temporary easement are required. The full acquisition of any properties is not required and no residential or business relocations would occur. The partial-property acquisitions would only be from commercial properties without any building acquisitions.

CDOT is committed to maintaining communication with property owners and stakeholders affected by the Proposed Action. Team members have contacted all owners of potentially affected properties and businesses and have met with many of these owners to explain the Proposed Action and understand its effect on owners' properties. The record of impacted property owner coordination is provided in **Appendix C14, Attachment B**.

Mitigation

Mitigation measures to minimize ROW impacts during construction include the following:

- RW.1 CDOT will continue to meet with and advise property owners of the acquisition process throughout Project development relative to the impact on their property. (Permanent)
- RW.2 The acquisition of any property interests will comply with state and federal requirements, including the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, which is a federally mandated program that applies to all acquisitions of real property or displacements of persons resulting from federal or federally assisted programs or projects. A right of way specialist will be assigned to each property owner to assist them with this process. (Permanent)

5.0 Public and Agency Involvement

5.1 What Outreach and Opportunities for Public Involvement Were Provided?

The PEL Study provided the first opportunity for the public to gain information and provide input on the range of improvements to address transportation needs on Vasquez Boulevard. The public information and outreach techniques that were used during the PEL included focus groups, partnership building through one-on-one meetings, a public open house, the Project website, a Project hotline and a Project flyer. The alternatives recommended from the PEL Study were carried forward to the Vasquez Boulevard Project.

Members of the public were informed and involved in the Vasquez Boulevard, 58th Avenue to 64th Avenue Project at three main public engagement points:

- Project introduction
- Property owner review of conceptual design
- Proposed Project

Activities at each point are described in the sections below. A combination of outreach and involvement tools were used to reach the variety of stakeholders in the Study Area. A Project web page was available for two-way information sharing (<https://www.codot.gov/projects/vasquez-improvements-i270-to-64th>) and comments were accepted throughout the Project duration.

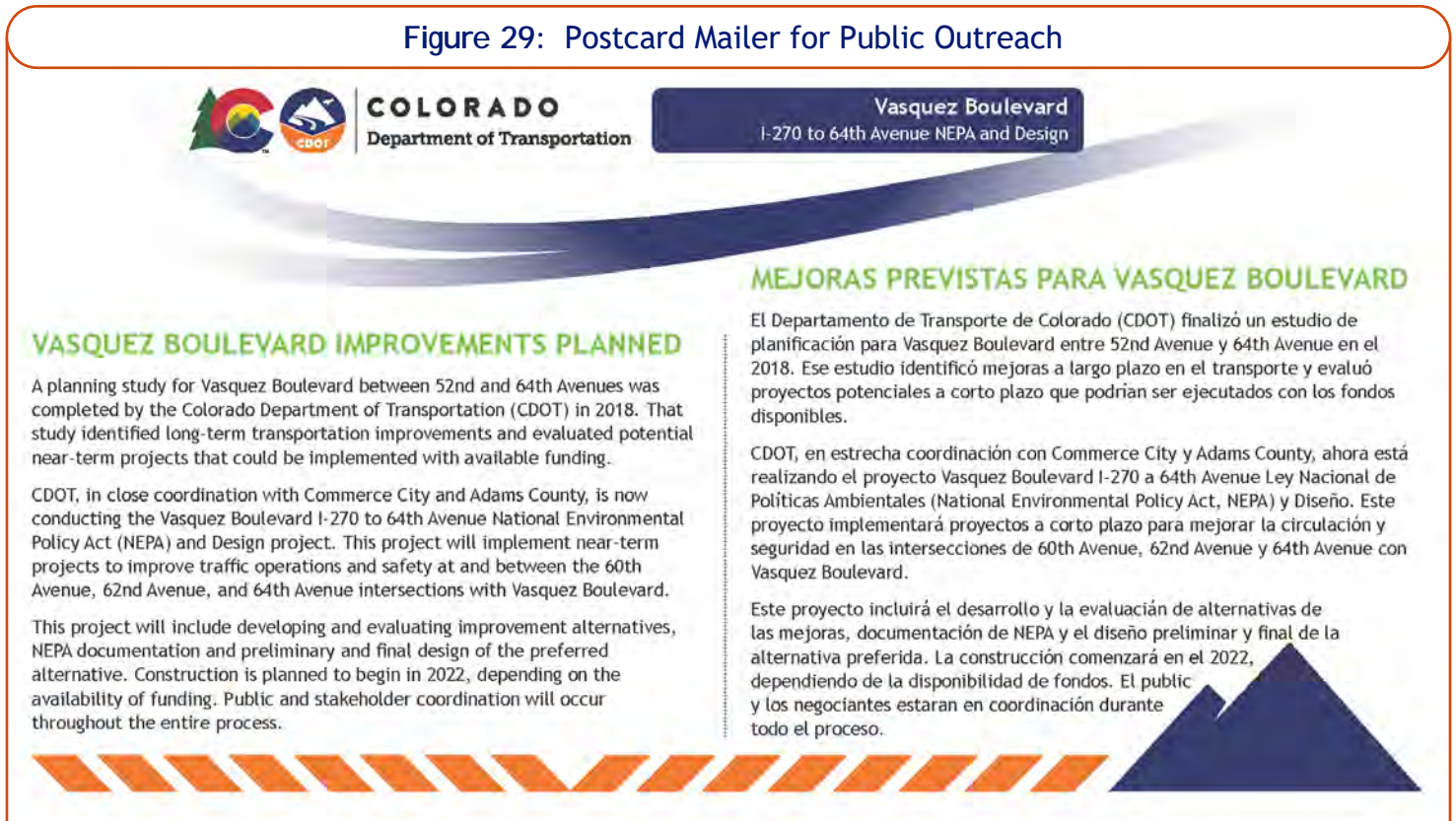
5.1.1 Project Introduction

The first engagement point informed the public about the transition to the NEPA process for the near-term intersection improvements, the Project Purpose and Goals, and the anticipated schedule. Public comments were gathered regarding existing transportation issues, concerns in the Study Area, and suggestions for project alternatives. The engagement point included the following meetings:

- December 9, 2019: Mile High Greyhound Park development meeting
- December 17, 2019: Freight Advisory Council Steering Committee presentation
- January 11, 2020: Pop-up community event at King Soopers grocery store
- February 3, 2020: Freight industry focus group meeting
- February 5, 2020: Pedestrian and bicyclist travel focus group meeting
- February 17, 2020: Spanish language focus group meeting
- February 18, 2020: Business focus group meeting

The focus group meetings were each attended by 8 to 14 group members. The pop-up was a pass-through event where attendance wasn't quantified, but approximately 200 fact sheets were distributed.

Figure 29: Postcard Mailer for Public Outreach



Advertisements and notices for this engagement point included:

- A postcard mailer to nearly 750 property owners and tenants in the Study Area (Figure 29)
- Bilingual Project fact sheet in 450 Central Elementary (located at 64th Avenue and Holly Street near the Project) student folders
- Notices by Commerce City on their social media, local access television Channel 8 and on recreation center television screens

5.1.2 Property Owner Review of Conceptual Design

The second public engagement point facilitated direct coordination with potentially impacted property owners through individual and small group video conferences (video conferences were used due to the 2020 pandemic). A letter was mailed or emailed directly to each potentially impacted property owner inviting them to a meeting to discuss the Project with CDOT ROW staff and Project team members. Individual meetings were held with those with anticipated ROW impacts and/or potential access changes. Follow-up meetings were held and letter/email updates were provided as needed. During the initial meetings, the Project Purpose, Goals, process and anticipated schedule were reviewed and the conceptual Project design was presented for comments. Subsequent meetings presented in-progress revised conceptual design for comment and ways to mitigate or minimize impacts to their property were discussed. **Appendix D Attachment A** includes a summary of all correspondence and meetings with potentially impacted property owners.

5.1.3 Proposed Project

The third public engagement point included updates to the Project web page and meetings with the established focus groups to present the proposed Project, Project process and anticipated schedule for Project implementation. Group member comments were solicited regarding the proposed Project, including any impacts/associated mitigation and suggestions for design modifications to be incorporated as the Project design efforts continue.

The engagement point included the following meetings that were each attended by 11 to 16 group members:

- June 6, 2023: Freight industry focus group meeting
- June 8, 2023: Pedestrian and bicyclist travel focus group meeting
- June 12, 2023: Business focus group meeting

5.1.4 Outreach to Environmental Justice and Underserved Populations

Efforts were made during public engagement points to include and involve environmental justice and underserved populations including LEP. Spanish translated materials were made available on the Project web page, at the community pop-up event and distributed in nearby school weekly folders and e-newsletters. The initial Project notice postcard mailer information was written in both Spanish and English. Spanish translation was available at the community pop-up and the Project map and comment form was available in Spanish.

A focus group was formed specifically to include and involve the voices of Spanish-speaking members of the community. This group met on February 27, 2020 as part of the project introduction engagement point. Cultivando, an organization serving the Latino community in Adams County focused on community-led work, social justice and collaborative leadership, partnered with CDOT to host the meeting at their office, providing familiarity and childcare to increase participation. An interpreter was used for simultaneous interpretation to facilitate the discussion between the Project team and focus group members. The Project history, Purpose, Goals, Study Area, schedule and involvement opportunities were presented and the group members were invited to ask questions and provide comments to the Project team.

5.2 What Outreach and Opportunities for Agency Involvement Were Provided?

Outreach, coordination and consultation were conducted with multiple federal, state and local agencies and stakeholders during the preparation of this EA.

5.2.1 Resource Agency Coordination

Letters were mailed and emailed to federal, state and local resource agencies to serve as an invitation to the official agency scoping meeting for the Project. This meeting was held on April 11, 2022 to review the Project's Purpose and Need, review the Project schedule and obtain agency comment on

any important environmental or regulatory issues. CDOT and FHWA were also included in the meeting. Comments were invited via email for those who were unable to attend the meeting. The resource agencies included:

- Colorado Department of Public Health and Environment
- Air Pollution Control Division
- Hazardous Materials Division
- Solid Waste Management Division
- Water Quality Control Division
- State Historic Preservation Office
- Colorado Parks and Wildlife
- US EPA Region 8
- US Army Corps of Engineers
- US Fish and Wildlife Service - Colorado Field Office
- Mile High Flood District
- Denver Regional Council of Governments
- Regional Transportation District

The letter inviting agencies to the agency scoping meeting is included in **Appendix D Attachment B**, along with documentation of resource agency replies received. Although some agencies had no concerns in the Study Area, a few items were noted for consideration in the future:

- EPA noted they are concerned about air quality and environmental justice in the area.
- CDPHE noted the area has hazardous materials present so hazardous materials testing is important.
- The USFWS liaison noted an item for consideration during construction; the contractor should cover open-topped tanks if and when they cannot be actively monitored by construction staff in order to protect migratory birds in relation to the Migratory Bird Treaty Act.

5.2.2 Local Agency Coordination

An agency kickoff meeting was held on September 25, 2019 with CDOT, Commerce City, and Project team representatives. An initial agency workshop followed on November 13, 2019, which included CDOT, Commerce City, Adams County, DRCOG and FHWA. The purpose of the workshop was to introduce the Project, gain a better understanding of agency visions for the Study Area, and to revisit the Purpose and Need and Project Goals.

At Project onset, a Project Management Team was formed to facilitate coordination between CDOT, Commerce City, Adams County, and the consultant project team. This group met three times to discuss the PEL to NEPA transition, public engagement efforts and alternatives development and evaluation. Following these meetings, it was determined that individual coordination should occur with Adams County, so informal briefings occurred as needed. Project Management coordination meetings involving

CDOT, FHWA and consultant team members occurred on a regular basis following alternatives evaluation.

A design charrette was held on August 13, 2020 with CDOT executives and staff, Commerce City, Adams County and members of the consultant project team. This involved a roundtable discussion of agency perspectives and priorities along with an interactive visioning exercise for 60th Avenue and Vasquez Boulevard long-term improvements (**Appendix D, Attachment C**).

Coordination occurred frequently with Commerce City throughout the project, oftentimes multiple times per month (a list of coordination meetings can be found in **Appendix D, Attachment D**). This included regular staff leadership check-ins and meetings focused on technical disciplines and project aspects. Briefings to City Council occurred to discuss public engagement and alternatives development and evaluation:

- February 24, 2020: City Council briefing
- June 8, 2020: City Council briefing
- November 9, 2020: City Council briefing

5.2.3 Tribal Coordination

Eleven tribes that have a presence within or near the Project were contacted and informed about the Proposed Action and were provided with an interest response form (**Appendix D, Attachment E**). The tribes that were contacted are:

- Apache Tribe of Oklahoma
- Cheyenne River Sioux Tribal Council
- Cheyenne & Arapaho Tribes of Oklahoma
- Comanche Nation of Oklahoma
- Kiowa Tribe of Oklahoma
- Northern Arapaho Tribe
- Northern Cheyenne Tribal Council
- Ogalala Lakota Tribal Council
- Pawnee Nation of Oklahoma
- Rosebud Sioux Tribe
- Standing Rock Sioux Tribal Council

There has not been a tribe that has requested to participate in the Project discussions. One response was received to the consultation letters by the Pawnee Nation indicating that one archaeological site is located near the Project, but would not be affected.

5.3 What Additional Opportunities for Stakeholder Involvement Will Be Provided?

A fourth public engagement opportunity will be held during the 30-day public review period for the EA. The purpose of this engagement will be to gather public input for consideration prior to preparation of a decision document. The EA document will be available for a 30-day public review on the Project web page and at the Eagle Pointe Recreation Center within the Study Area. A public open house will be held at Eagle Pointe Recreation Center within the 30-day public review period and all graphic displays from the meeting will be available on the Project web page following the meeting. Comments received during the 30-day review period will be considered by CDOT and FHWA before a decision document is issued. Responses to comments formally submitted through the aforementioned channels will be included in the decision document, which will be made available on the Project web page (<https://www.codot.gov/projects/vasquez-improvements-i270-to-64th>). Preliminary design plans are also available for review in Appendix F.

The general public will be kept informed at key points through news releases, and those subscribed to the EA Project mailing list will receive email notices, at a minimum. Notice of the EA's public meeting and notice of the decision document availability will be sent electronically to the Project mailing list and distributed through CDOT and Commerce City communication channels. Flyers advertising the Project and the EA 30-day public review will be distributed to community gathering places in and around the Study Area.

The public review and comment period for this EA will last 30 days. Comments can be submitted in the following ways:

- Online:** <https://www.codot.gov/projects/vasquez-improvements-i270-to-64th>
- By email:** dot_vasquez_i270to64@state.co.us
- By phone:** 303-398-6767
- In writing:** Matt Fink, P.E.; Design Project Manager
Colorado Department of Transportation
4670 Holly Street, Denver, CO 80216