Mobility 2045

KILLEEN-TEMPLE METROPOLITAN PLANNING ORGANIZATION

Regional Freight Transportation & Parking Study

April 2021

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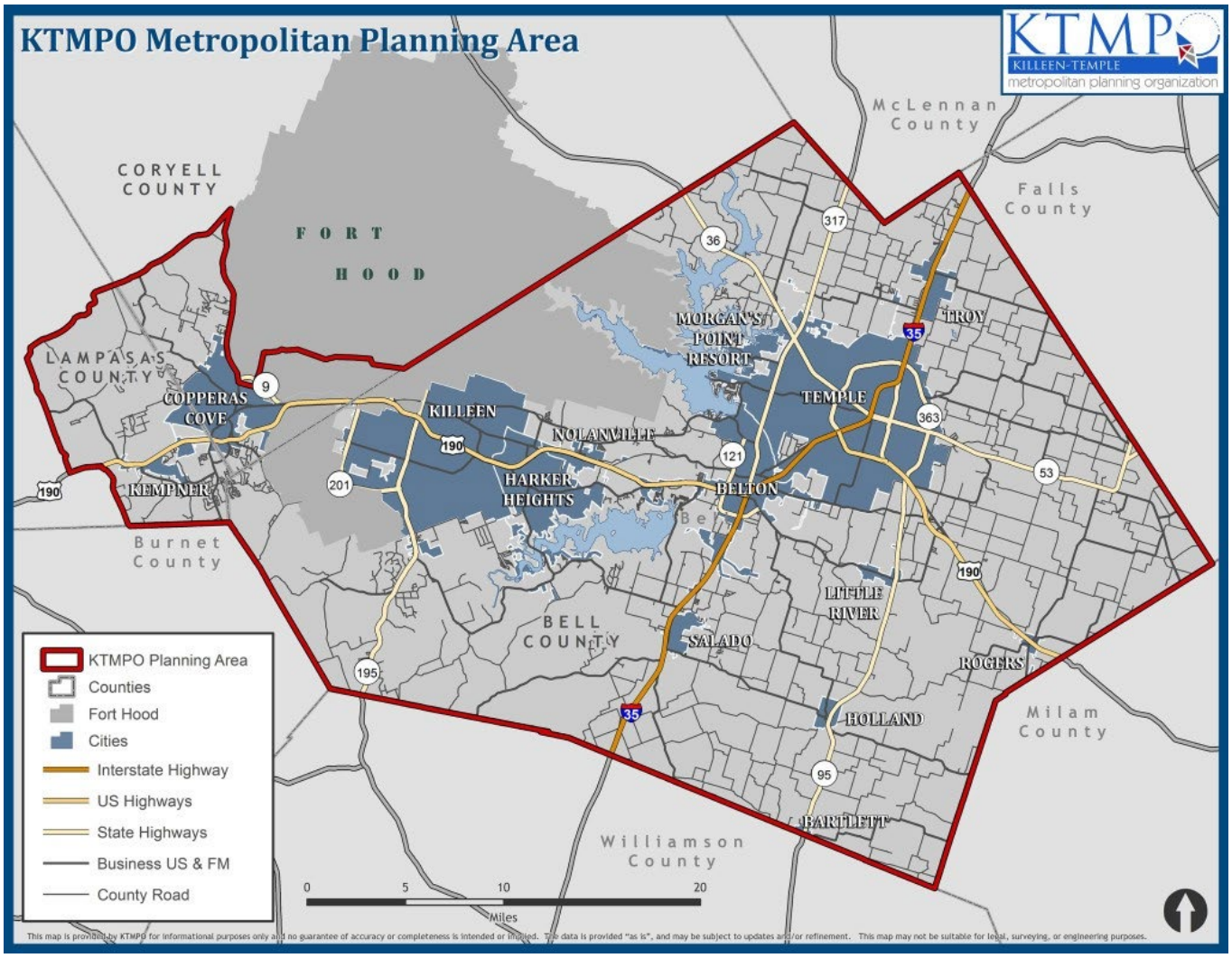
Introduction

The Killeen – Temple Metropolitan Planning Organization (KTMPO) is the planning organization for the federally designated Transportation Management Area in Central Texas. The KTMPO boundary covers all of Bell County and parts of Lampasas and Coryell Counties along with portions of Fort Hood (see ***Figure 1***).

Figure 1: KTMPO Planning Area



Source: KTMPO

KTMPO has been building a more multimodal and performance-based regional transportation planning process. Such a process will help the region comply with Fixing America's Surface Transportation (FAST) Act requirements, while also promoting a holistic planning approach that considers needs and solutions beyond the traditional automobile-oriented process.

To that end, KTMPO conducted this *Regional Freight Transportation and Parking Study* to better understand freight issues and concerns with an emphasis on truck parking. The KTMPO region lies on Interstate Highway 35 (IH-35), a major trade corridor connecting to large freight markets in Dallas-Fort Worth and San Antonio as well as the Laredo Port of Entry, one of the largest trade gateways on the southern border. The region also has significant freight

generators and supply chain service companies such as Wilsonart, McLane Company, and Fort Hood. Freight is an important contributor the region's economic success.

Federal regulations govern how long truck drivers may operate their vehicles before stopping for rest.[1] This creates a need for safe truck parking, especially on major freight corridors like IH-35. The issue garnered national attention in 2009 when truck driver Jason Rivenburg was murdered in South Carolina after stopping to rest at an abandoned gas station. In response, Congress passed "Jason's Law" in 2012. The law prioritized funding for truck parking areas and required the United States Department of Transportation (USDOT) to conduct a survey of truck parking availability by state. Many states including Texas have since developed truck parking plans to better understand the need and propose solutions.

KTMPO supported and participated in the Texas Department of Transportation (TxDOT) *Statewide Truck Parking Study* but recognizes the need for a more localized study. This project therefore builds on the foundation provided by the statewide truck parking plan, including relevant findings from that study while digging deeper into KTMPO truck parking issues, needs, and opportunities.

The remainder of this report is organized as follows:

- **Freight and Truck Parking Needs and Deficiencies –** This chapter summarizes relevant results of the *Texas Statewide Truck Parking Study* and other literature, inventories the KTMPO region's truck parking supply/current conditions, assesses non-truck parking freight needs/projects, and summarizes results of targeted outreach to regional freight stakeholders.
- **Truck Parking Supply and Demand –** This section estimates current (2018) and future (2045) truck parking demand by major freight corridor within the KTMPO area using a parking demand model developed by the Federal Highway Administration (FHWA) and supplemented with TxDOT and local data, and compares it with known and anticipated supply to quantify the regional truck parking shortfall.
- **Recommended Truck Parking Locations –** This chapter assesses specific sites within the KTMPO planning area that may be suitable for expanded truck parking (either new capacity or expansion of existing sites).
- **Recommended Truck Parking Policies –** The final chapter identifies policy recommendations for KTMPO and its partners to consider as they seek to improve truck parking in the region. Some policies would be led by KTMPO while others would require coordination with TxDOT and/or private partners.

[1] https://www.fmcsa.dot.gov/regulations/hours-service/summary-hours-service-regulations

Freight and Truck Parking Needs and Deficiencies

A key first step in any freight study is to assess freight needs and deficiencies. This process helps a region understand transportation system issues and potential solutions as they relate to freight. This section reviews current truck parking conditions in the KTMPO region to establish the existing context as it relates to parking; evaluates freight projects and needs derived from existing planning documents; and summarizes feedback received from truck parking stakeholders to build upon recent statewide freight planning efforts.

TxDOT completed its *Texas Statewide Truck Parking Study* in April 2020. This state-level study builds on the 2018 *Texas Freight Mobility Plan* with a focus on truck parking. It provides a high-level view of truck parking needs and actionable steps for adding truck parking capacity on state-owned right-of-way. The state-level study had a data-driven approach supported by a robust public involvement effort informed by state- and national-level freight stakeholders and by truck drivers. Truck drivers' needs and opinions were particularly well represented in the data, as approximately 1,200 of the 1,600 survey responses were from truck drivers.

The completed work of the *Texas Statewide Truck Parking Study* provides a solid basis for this KTMPO *Regional Freight Transportation and Parking Study*. This existing body of work provides the context and the starting point for the more localized and more detailed work in this study. Specifically, the state-level study recommended a balanced and comprehensive approach to identifying needs and developing solutions. This study will therefore proceed in this direction by an inventory and analysis of KTMPO-level truck parking needs, including:

- **Current Conditions,** including physical inventories of spaces and facilities from a literature review, field review, and an examination of aerial imagery.
- **Freight Projects and Defined Needs** pulled from existing network projects, categorized as freight constraining, freight supportive, or freight friendly.
- **Freight Stakeholder Outreach,** expanding the outreach list beyond just drivers to include additional groups such as freight origin and destination sites, truck parking site operators, local government, and law enforcement.

Freight needs are generally the same as those for passenger traffic, but they show some differences since freight frequently travels farther, often crosses jurisdictional boundaries, and doesn't follow the same time of day distribution. Also, road and bridge design features such as tight turning radii, low bridge clearances, and weight restrictions that don't pose a problem for passenger vehicles can be severe obstacles for large vehicles. Regulatory issues are also an important difference, with hours-of-service rules imposing needs for short-term breaks and long-term rest stops. It's therefore important to understand regional freight needs and deficiencies, how well the KTMPO's current slate of projects addresses them, and where the gaps are. A thorough literature review was undertaken to understand KTMPO regional freight transportation system deficiencies.

The following documents were reviewed:

- The *Texas Freight Mobility Plan*, completed by TxDOT in 2018
- *Freight Infrastructure Design Considerations*, a component of the Texas Freight Mobility Plan implementation, completed by TxDOT in 2018
- The *Texas Statewide Truck Parking Study*, completed by TxDOT on February 14, 2020

- *Stakeholder Workshop and Freight Infrastructure Design Considerations Workshop* held in Belton, Texas on February 14, 2019 as part of the public outreach for the Texas Statewide Truck Parking Study
- *Overview and Draft Recommendations for the Waco District*, a component of the *Texas Statewide Truck Parking Study* providing a summary of data and findings for the eight county TxDOT Waco District
- *Truck Safe Parking Proposal* from the United States Transportation Alliance, April 2019
- Texas Freight Advisory Committee March 31, 2020 Meeting minutes

The inventory of existing truck parking locations and spaces illustrates the level of detail found in these studies and emphasizes the need for the more localized review from this study. The *Texas Statewide Truck Parking Study Overview for the Waco District* identifies 21 truck parking locations in the District, as shown in ***Figure 2***. Only five of the listed locations are within the KTMPO area. In contrast, ***Figure 3*** shows the truck stops identified in the KTMPO area through this study, based on the literature review, field review, examination of aerial imagery, and regional freight stakeholder surveys and interviews.

Figure 3: Truck Stops in the Waco District

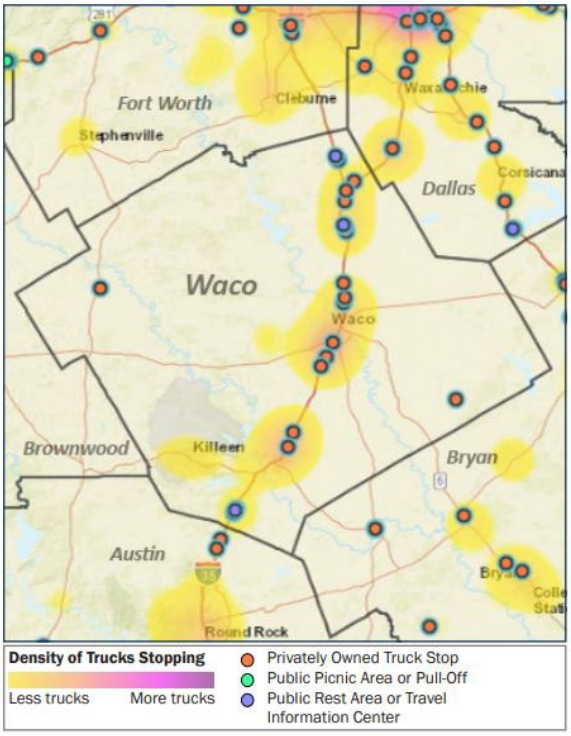
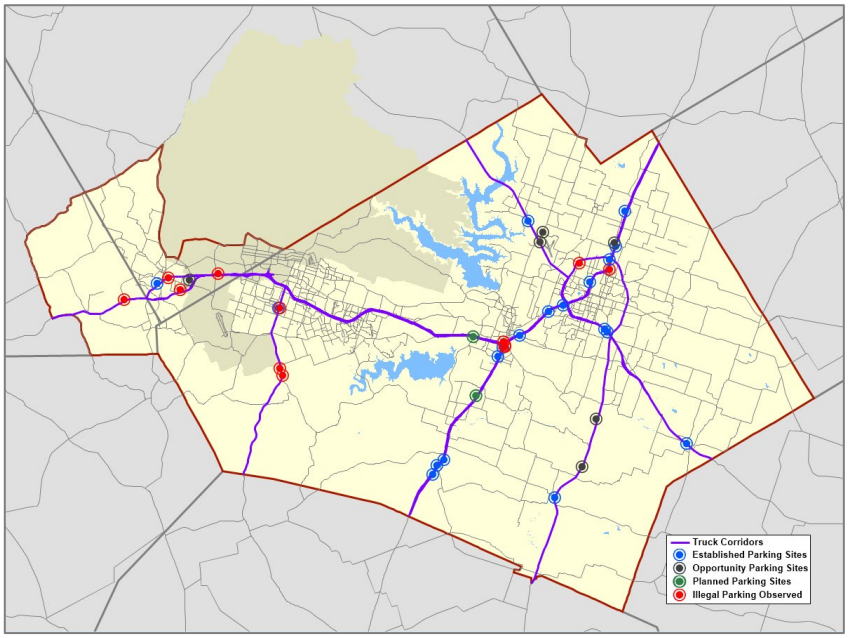


Figure 2: Truck Stops in the KTMPO Area



Sources: Texas Statewide Truck Parking Study: Overview and Draft Recommendations for the Waco District and CDM Smith

The differences between the two Figures illustrates both the purpose and the advantages of this study:

- The statewide study lists four existing truck parking sites and two opportunity sites for the KTMPO area. This study has identified 39 sites plus two planned sites.
- Both studies classify sites as existing or opportunity sites. This study expands the categories to include observed unauthorized parking sites and planned sites. It identifies 19 existing sites for authorized parking, 12 sites of unauthorized parking identified by observation and by survey results, eight opportunity sites, and two additional planned sites which are currently proceeding through the re-zoning or permitting process.
- All the current sites identified by the statewide study lie along IH-35, while this study has identified sites on IH-14, IH-35, US 190, Bus 190, SH 36, SH 95, and SH 195.

- The statewide study lists only a select few amenities for each site. This study inventories seven amenities for each site, adding references to some highly desired amenities which were identified but not inventoried by the statewide study.
- This study has defined an information template for each site which includes aerial imagery and street views.

This study will build on the results of the *Texas Freight Mobility Plan*, the *Texas Statewide Truck Parking Study*, and other previous work, and will build upon them with the same data-driven approach, but with a stronger focus on the local KTMPO area. The ultimate result of the study will be a more detailed and usable analysis of existing and future truck parking needs, coupled with practical and cost-effective strategies and recommendations.

Current Conditions

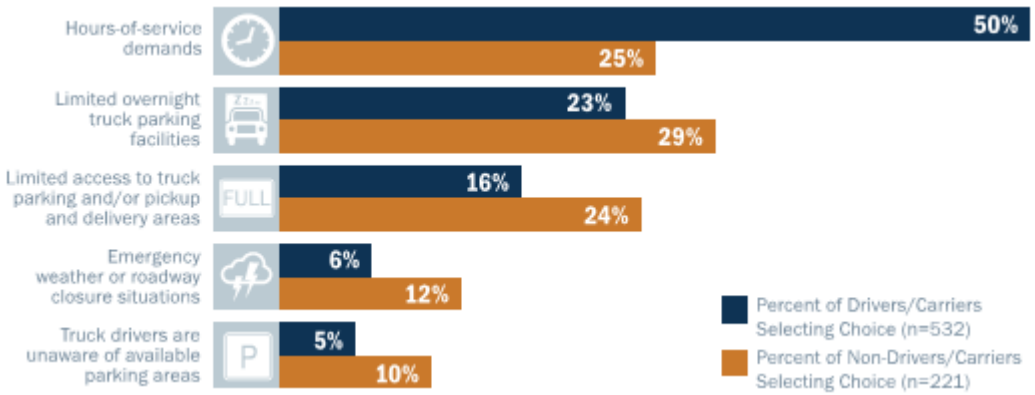
The review of the truck parking literature and field review in the KTMPO area has defined several categories of conditions. Some conditions are directly related to truck parking, while others focus on non-parking needs but still have an influence on the need for truck parking, operations, or how parking is provided.

General Conditions Affecting Truck Parking

The literature review made clear that the Federal hours-of-service regulations are an overarching consideration in planning for truck parking. Drivers must be certain of their ability to make it to an available parking spot before their mandated hours-of-service limits, which drives the need for travel time reliability, spacing between parking sites, availability of parking spaces, and information on parking spaces. If an authorized parking space cannot be found before the mandated hours-of-service limits are met, then the driver has only two choices available: to park in an unauthorized location or to drive illegally in hopes of finding an authorized parking space.

Facing these two choices, 50 percent of truck drivers responding to the *Texas Statewide Truck Parking Study* surveys cited hours-of-service regulations as the primary driver in their need for parking. Of drivers who responded that they made the choice to park in an unauthorized location, 63 percent said that they had to do so at least once a week, and 10 percent said that they parked in unauthorized locations every day. ***Figure 4*** is a chart from the *Texas Statewide Truck Parking Study* that illustrates the reasons given for parking in unauthorized locations, with the responses from truck drivers shown separately from non-drivers.

Figure 4: Reasons Given for Unauthorized Truck Parking



Source: Texas Statewide Truck Parking Study

Number of Physical Parking Spaces

The *Texas Statewide Truck Parking Study* inventory for the Waco District was 1,415 spaces, with an average peak hour utilization of 123 percent, or 299 unauthorized parked trucks. Within the KTMPO area, field review and aerial imagery showed an inventory of 448 spaces. Using the District-level statistic for the KTMPO area equates to an average peak hour need of 551 spaces, or 103 additional spaces. This is an approximation, since factors other than the raw number of parking spaces are important, but it gives a high-level view of the overall need in the KTMPO region.

The literature review and inventories also detailed the concept of opportunity sites, which are sites with available vacant land which may be used for truck parking. Some opportunity sites are currently vacant, but others were observed with unauthorized parking. Opportunity sites show varying levels of practicality for immediate use depending on their physical conditions. Eight opportunity sites were found in the KTMPO area:

- Bellaire Street in Temple, with 10 available spaces: This is a dead-end street surrounding vacant land adjacent to the Mayborn Civic Center parking lot. Trucks were observed parked on the street.
- SH 95 at Mills Road in Holland, with three available spaces: This is a picnic area with a pull-through driveway which would allow single file parking on the unpaved shoulders.
- SH 317 at Little Mexico Road in Temple, with four available spaces: This opportunity site is unpaved right-of-way at the intersection.
- IH-35 north of Berger Road in Temple, with 10 available spaces: This is an unpaved lot next to a recreational vehicle (RV) park which is currently used to store inoperative vehicles and building materials. Trucks were observed parked here.
- SH 36 east of SH 317 in Temple, with 10 available spaces: This opportunity site is a paved vacant lot serving a vacant commercial building, located next to a restaurant.
- SH 95 at Little River in Academy, with up to 100 available spaces: This site is an old section of road which is used as a dragstrip.
- Business 190 at Robertson Avenue in Copperas Cove, with 50 available spaces: Historical aerial imagery shows that this paved vacant lot serving a commercial building which has been demolished is commonly used for truck parking.
- The vacant land across from the Cinergy Cinema at Constitution Drive and MLK Boulevard in Copperas Cove was suggested as an opportunity site in a stakeholder interview.

In addition to these opportunity sites, the *Truck Safe Parking Proposal* suggested general categories of opportunity sites for consideration:

- All state-owned properties with available unused land for safe truck parking, including closed rest areas and weigh stations.
- Single-file truck parking on the shoulders of one or both sides of entrance ramps. Parking on the shoulders of exit ramps was not recommended because of the speeds of vehicles exiting the interstates, but speeds of vehicles entering the interstates would be much slower.

Distribution of Parking Sites

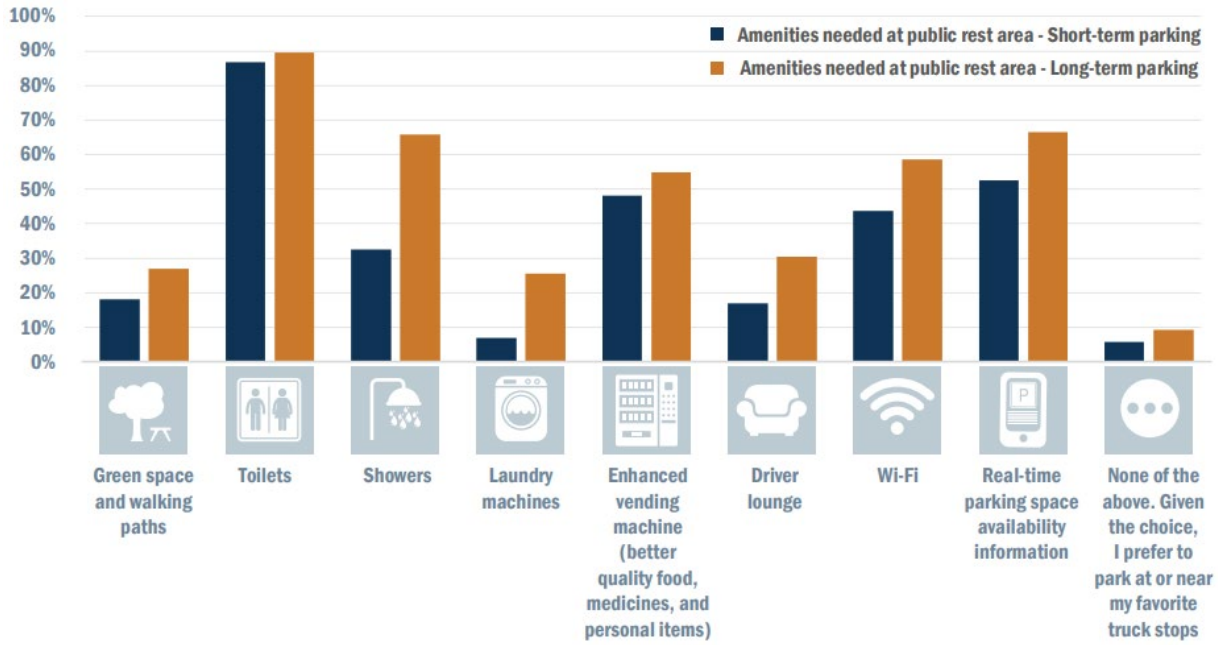
The literature did not present any consistent recommendation for the preferred distribution of parking sites. In general, truck drivers facing operational and regulatory issues prefer sites spaced more closely, at distances of 30 to 50 miles. From the perspective of public and private entities providing parking sites, a more common preference was a spacing of up to 100 miles.

Amenities at Parking Sites

Amenities make a difference in the utilization of truck parking sites. The *Texas Statewide Truck Parking Study* reported that drivers prefer to park at a location with amenities, and the study reported that "It is not uncommon to see trucks spilling out of private truck stops onto the shoulders and ramps while a mile down the road, a public Safety Rest Area has numerous open truck parking spaces." In fact, the study summary for the Waco District showed fifteen truck parking sites over capacity during the average peak hour while at the same time six sites were at less than 30 percent capacity. With this in mind, the raw inventory of truck parking sites can be seen as insufficient; it is necessary to track both the parking sites and the amenities available at the sites. This data also reveals that the overall sum of parking capacity is insufficient; the capacity at sites with amenities is more important than the capacity at sites without the desired amenities.

The study surveyed drivers on their desired amenities for short-term and for long-term parking, as shown in ***Figure 5***. The top desired amenities from this survey are toilets, showers, information on parking availability, WiFi, and food.

Figure 5: Truck Driver Survey on Desired Amenities at Parking Sites



Source: Texas Statewide Truck Parking Study

Complementing this online survey, the *Texas Statewide Truck Parking Study* also reported that safety and convenience are priority concerns of drivers for both short-term and long-term parking.

Access to Destination and Parking Sites

The road network providing access to freight origin and destination sites and to parking sites has an impact on truck parking demand at different sites, travel time reliability, and unauthorized parking. If a truck driver is facing their hours-of-service limits, reliable access to sites becomes critical.

Construction zones and the configuration of the temporary routes defined during construction have a direct effect on travel time reliability and the comfort level of truck drivers. If their primary route is under construction and the route configuration is congested, uncertain, or unsafe, then truck drivers may take alternate routes, including local streets which were never intended for truck loading or geometric needs. Additionally, truck drivers seeking alternate routes may be unaware of road and bridge loading or geometric restrictions.

Real-Time Information

Surveys from the *Texas Statewide Truck Parking Study* showed that truck drivers' needs for a reliable parking space and compliance with hours-of-service limits were primary reasons for unauthorized truck parking. Surveys cited a preference for real-time information on available parking spaces or the ability to reserve a space as a logical approach to preventing unauthorized parking.

Several mechanisms for providing information on available truck parking spaces were referenced in the statewide study. Linkages to common apps such as TruckerPath or SecurSpace can provide real-time information. Another suggested mechanism was to simply display the total number of spaces available at a site on their respective highway exit signs, so a driver has some idea of the chances of finding an available space.

Freight Projects and Defined Needs

To supplement the freight transportation and truck parking needs identified through the literature review, road network projects were also reviewed. Since road network projects are generated by KTMPO member jurisdictions based on their perceptions of need, and since all projects are vetted through the KTMPO project prioritization process with a review of freight impacts, an examination of road network projects from KMTPO's Metropolitan Transportation Plan (MTP) and the Transportation Improvement Program (TIP) is another way of determining freight transportation and parking needs in the region. Additionally, conceptual freight projects from freight studies, workshops, and committee meetings provided a source of stakeholders' perceptions of freight needs. Proposed and conceptual projects were reviewed from the following documents:

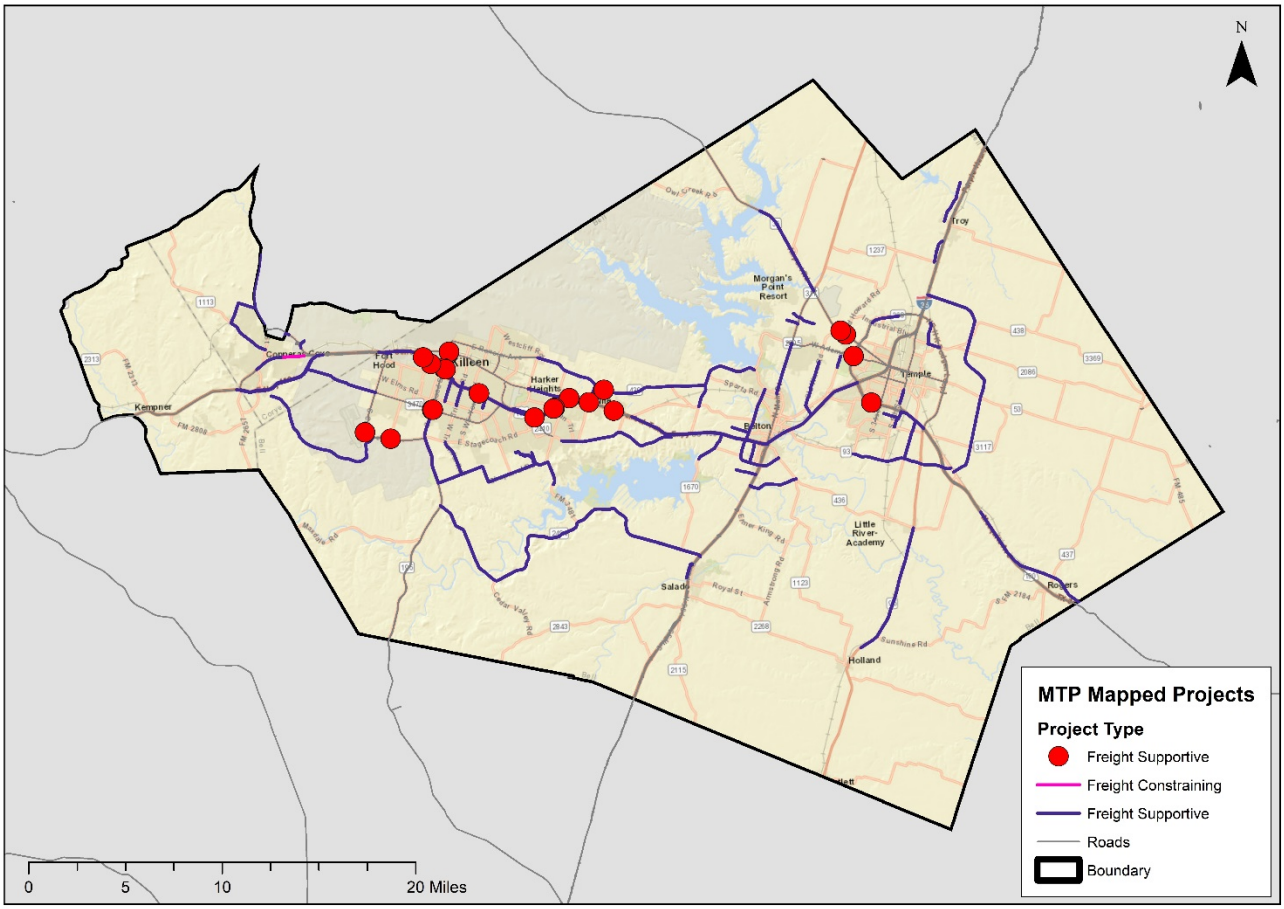
- KTMPO 2045 Metropolitan Transportation Plan (MTP)
- KTMPO 2019-2022 Amended Transportation Improvement Plan (TIP) and Monthly Letting Projects
- TxDOT Texas Freight Mobility Plan
- The TxDOT Freight Workshop
- Texas Freight Advisory Committee March 31, 2020 Meeting
- Texas Statewide Truck Parking Study Workshop Belton

A total of 389 projects were identified from these sources, and then parsed and consolidated down to 184 by removing projects for routine maintenance, aesthetics, or exclusively for active transportation or transit.

The projects were classified as **freight friendly** (projects focused on freight), **freight supportive** (projects addressing general transportation needs but with a positive impact on freight mobility) and **freight constraining** (projects addressing general transportation needs but with a negative impact on freight mobility).

There are no freight friendly projects that explicitly include increasing truck parking. The majority are freight supportive projects that include roadway infrastructure changes such as widening roads or reconfiguring the roadway, which can help support the movement of trucks through the region. A very few freight constraining projects were identified, which featured Complete Streets approaches with narrowed travel lanes and tighter turn radii. ***Figure 6*** maps the projects and shows the freight supportive road and intersection projects and the freight constraining projects.

Figure 6: Freight Supportive and Freight Constraining Projects



Source: CDM Smith analysis of KTMPO MTP and TIP Projects

The overall review of projects identified several general categories of needs which are applicable to freight:

- Access management is a general need on the arterial system, with most projects concentrated in urbanized areas. Access management affects access to sites, operations, and safety. While access management projects are generally freight supportive, in specific locations restrictions on left turns may be freight constraining.
- Capacity on roads and at intersections is a general need throughout the network. Capacity projects to add travel lanes are generally freight supportive.
- Connectivity projects include projects that eliminate gaps in the network. These projects are generally freight supportive.
- Operations projects improve traffic flows and safety with intersection treatments such as turn lanes, turnarounds, and signal configuration and timing, and with roadway treatments such as converting an undivided roadway into a divided roadway. Such improvements are also generally freight supportive provided they have appropriate geometry for trucks.
- Safety projects may either serve to prevent crashes with treatments such as lighting, chevrons on curves, and rumble strips, or may be intended to mitigate the effects of crashes with projects such as safety end treatments. Safety improvements benefit all system users, including freight.

In general, the freight-related projects identified by the review of regional projects are freight supportive, identifying locations of general transportation needs in several categories. Tracking the locations of these projects therefore provides an indication of the locations of general roadway needs that impact freight transportation.

Freight Stakeholder Outreach

The *Texas Freight Mobility Plan* and its follow-up *Texas Statewide Truck Parking Study* are both state-level studies with extensive public outreach to a broad range of stakeholders. The level of effort for both studies was extensive, and the parking study featured very strong outreach to truck drivers which provides a solid basis for this study. Further, both studies are recent but were completed before the impacts of the coronavirus situation were felt in the transportation industry. Any field data collection which can be conducted under the present situation may not be reflective of the true and long-term freight needs, and so cannot be fully relied upon for long-term planning. The data from these two studies is therefore generally preferable to data which can be collected under the present situation. However, two issues are present with the data which require some supplementary efforts to render them more useful for this study.

First and most importantly, the data from both studies is at the statewide level. While this is appropriate for defining general and overarching issues, it must be supplemented with specific local-level data for other issues.

Secondly, the data from these state-level studies concentrates on truck drivers. Again, this is appropriate for those studies and provides a solid basis for identifying drivers' issues, but it is not the complete picture. Further data from the perspective of truck stop operators, freight origin and destination sites, general planners, and law enforcement is necessary to provide a more complete picture of truck transportation and parking needs in the KTMPO region.

Survey and Interview Design and Distribution

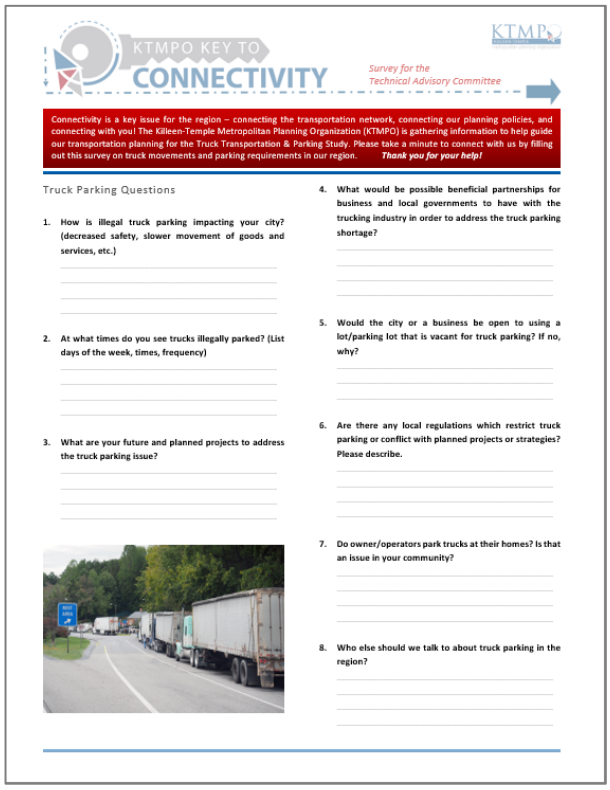
To accommodate this additional outreach need, a set of five customized surveys was developed within the standard *KTMPO Key to Connectivity* format. This format was used to provide continuity to previous regional surveys, promote the survey as an official instrument in ongoing regional planning, and to thereby increase the response rate. The surveys were limited to one or two pages for general distribution and to three pages for the customized Technical Advisory Committee (TAC) survey, and generally consisted of five to 10 questions and a map. Each survey included an invitation for the respondent to provide their contact information if they wanted to provide more information on the survey or if they wanted to receive ongoing project information. The surveys were also used as the basis for telephone interviews with four selected freight stakeholders, allowing them a venue for written responses to supplement their interview responses. The interviewees (selected in consultation with KTMPO) included:

- Michael Bolin, Deputy District Engineer, TxDOT Waco District and Freight Advisory Committee Member
- Kent Cagle, City Manager, City of Killeen
- Ginger Watkins, Cameron Industrial Foundation and Freight Advisory Committee Member
- Collin Hill, Livestock Nutrition Center and Freight Advisory Committee Member

The surveys were distributed to 98 freight stakeholders in a list derived from the KTMPO TAC, Freight Advisory Committee, attendees at the *Texas Statewide Truck Parking Study* workshop, industry contacts, and parking site operators identified through the literature review and field work. Each was also provided with the opportunity to distribute additional customized surveys to other contacts that they had; for example, TAC members were encouraged to provide law enforcement surveys to their contacts, and stakeholders associated with freight origin and destination sites were encouraged to provide truck driver surveys to their contacts. Distribution of all surveys was made electronically and was conducted through KTMPO to provide official standing for the surveys and to increase the response rate.

A sample survey instrument illustrating the customized surveys is shown as ***Figure 7***.

Figure 7: Sample of the Customized Freight Stakeholder Surveys

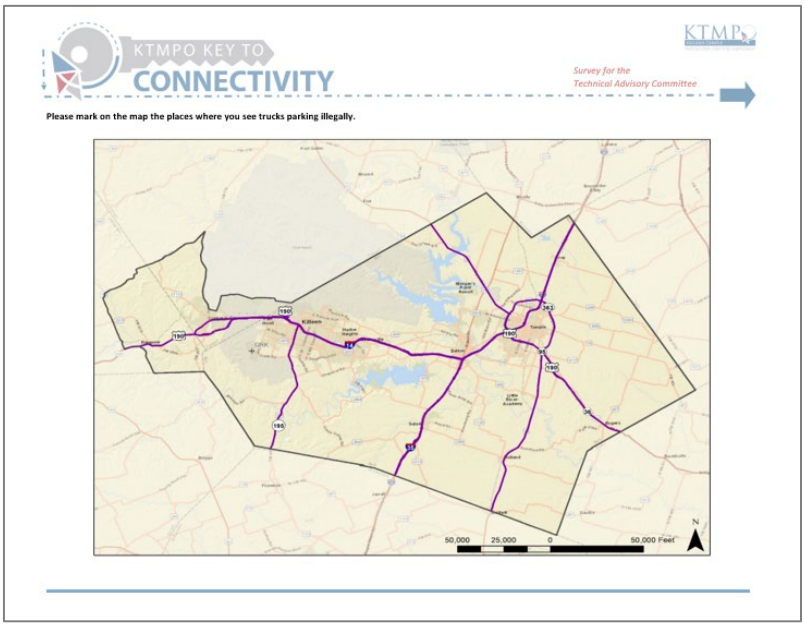

KTMPO KEY TO CONNECTIVITY

Survey for the Technical Advisory Committee

Connectivity is a key issue for the region – connecting the transportation network, connecting our planning policies, and connecting with you! The Killeen-Temple Metropolitan Planning Organization (KTMPO) is gathering information to help guide our transportation planning for the Truck Transportation & Parking Study. Please take a minute to connect with us by filling out this survey on truck movements and parking requirements in our region. *Thank you for your help!*

Truck Parking Questions

1. How is illegal truck parking impacting your city? (decreased safety, slower movement of goods and services, etc.)
2. At what times do you see trucks illegally parked? (List days of the week, times, frequency)
3. What are your future and planned projects to address the truck parking issue?
4. What would be possible beneficial partnerships for business and local governments to have with the trucking industry in order to address the truck parking shortage?
5. Would the city or a business be open to using a lot/parking lot that is vacant for truck parking? If no, why?
6. Are there any local regulations which restrict truck parking or conflict with planned projects or strategies? Please describe.
7. Do owner/operators park trucks at their homes? Is that an issue in your community?
8. Who else should we talk to about truck parking in the region?



Survey and Interview Results

A five-week period from August 10, 2020 to September 12, 2020 was provided for contacts to respond to the distributed surveys. Interviews of freight stakeholders were conducted by phone as contacts were made over the same period. In total, four phone interviews were conducted, and sixteen surveys were completed. Interviews or completed surveys were received from four out of the five targeted groups; only the truck parking site operators provided no responses, as shown in ***Table 1***. The survey responses are presented in ***Appendix A:*** Completed Surveys and Interviews.

Table 1: Number of Interviews and Surveys by Stakeholder Group

Stakeholder Group	Interview	Survey
Freight Origin and Destination (OD) Sites	1	5
Law Enforcement	0	5
KTMPO TAC	3	4
Truck Drivers	0	2
Truck Parking Site Operators	0	0

Freight Origin and Destination Sites Survey and Interview Results

It was found that origin and destination (OD) site respondents from Cameron, which is outside the KTMPO study area, did not feel there was an issue with truck parking. This is because different companies provide their truck

parking. Furthermore, other OD sites in Temple also felt like they did not have an issue with truck parking because of the nature of their industry (for example: being a freight rail line).

Four out of the six surveys came from Nolanville. The survey respondents all expressed different concerns, one felt that there was a lack of truck parking and did not have enough parking for truckers, and the other sites felt that they did not have truck parking issues. Two of the sites allow only their trucks to park on-site whereas the other respondent was vague so it cannot be determined as to why they feel as if there is not an issue with truck parking. At all the sites, morning (7:00 am-11:59 am) was checked as the peak time for trucks arriving at the site. Only two out of the four sites have amenities for truckers such as restrooms.

Law Enforcement Survey and Interview Results

Law enforcement responses came from police in five different cities within the KTMPO region: Belton, Copperas Cove, Temple, Kempner, and Morgan's Point Resort.

The Belton law enforcement survey stated that trucks were parked in unauthorized locations on evenings and weekends and that truck parking can affect congestion and safety when on roadways or near intersections. Furthermore, owner-operators parking at their homes is seen in densely populated areas. Trucks are also informally parked in industrial, commercial, and business areas. Areas identified with high levels of unauthorized truck parking are near Holland Road in Belton, where IH-14 and IH-35 intersect. Another area where trucks are seen parking in unauthorized locations is near W Avenue J near the US 190 frontage road where IH-14 and IH-35 intersect.

The Copperas Cove survey found that trucks are parked in unauthorized locations during the weekend and holidays or after normal business hours. There is a safety issue with trucks parking in unauthorized locations because it is commonplace at intersections where visibility can be impacted by the approaching vehicles. When asked if vacant parking lots could be used for truck parking, respondents expressed concern about increased wear and tear on the parking lots. The City of Copperas Cove allows truck drivers to park their trucks at their homes, but they require a permit to do so. Trucks are also parking near Big Divide Road and near Risen Star Lane because of construction in those areas. The main concern that was expressed in the survey is the wear and tear on the roadway.

In Temple, the respondent noted seeing trucks parking in unauthorized locations on weekends and nights in neighborhoods along with industrial areas. Unauthorized truck parking was noted on Industrial Boulevard adjacent to NW H K Dodgen Loop.

In Kempner, the respondent identified that there are no issues with unauthorized truck parking in the area.

TAC Survey and Interview Results

For the TAC results, three interviews were conducted with respondents working in the TxDOT Waco District, Killeen, and Cameron. Survey respondents work in Fort Hood, Temple, and Belton.

In the TxDOT Waco District, the main concerns are highway unauthorized truck parking along ramps, which cause safety concerns. Most of the unauthorized truck parking is concentrated on the IH-35 corridor, and while TxDOT has put signs up to prohibit truck parking, the signs have often been run over within a week.

In terms of future and planned projects to address the truck parking issue, there are not many projects in the Waco District. TxDOT owns and operates four major Safety Rest Areas in the Waco District which are used for truck parking, and they are frequently at capacity, even during non-peak periods. TxDOT is worried that if they build more truck parking, trucks will shift out of paid lots and move into the free parking spaces, meaning that there will always be a demand for truck parking that will never be met. TxDOT was also considering an automated system for

showing real-time truck parking availability at the TxDOT facilities in the district, but it was not seen as providing useful information because the facilities are so frequently at 100 percent capacity.

TxDOT feels that they can have a beneficial partnership with enforcement agencies, since they are unable to enforce rules relating to truck parking. TxDOT is also open to using a vacant lot for truck parking, but they expressed concern that the city rarely has unused real estate to be used for this. During the interview, it was also noted that operators do park the trucks at their houses and it only becomes an issue when they park on TxDOT's right of way. The most unauthorized truck parking is seen on IH-35 and IH-14 in Bell County. In addition to having trucks parked unauthorized there, IH-35 also causes issues with congestion.

TxDOT mentioned that they would like to see alternate routes studied for hurricane evacuations, ensuring that they can accommodate the volume of trucks and people. During an evacuation, certain roads may be closed and, with the additional traffic demand, would cause significant congestion on the remaining evacuation routes.

Killeen stakeholders stressed the importance of maintaining appealing aesthetics. Truck parking in vacant lots is opposed because it is unsightly and can bring down the property values of the neighborhood. For example, adding truck parking near the Civic Center would not be beneficial to the city of Killeen because it is next to one of the nicer retail areas. Additionally, trucks parked near the Civic Center can cause traffic congestion and safety issues.

Unauthorized truck parking is mostly observed during the evenings. Observed unauthorized parking locations include the vicinity of SH 95 at Elms Road and along SH 95 south of the city limits near the junkyards. There is also a good enforcement system in Killeen, so operators do not park trucks at their homes. The respondent also felt that there was not a huge issue of unauthorized truck parking on IH-14 and SH 95.

The interview for Cameron revealed that there is not an extensive amount of unauthorized truck parking there. There are a few places where trucks are parked unauthorized such as shopping centers, where trucks can be seen in early mornings on Sundays and Mondays. The reason as to why there is not a large issue with truck parking is because it is rural, and truck parking demand is mostly driven by five manufacturing sites. These sites provide their own private parking spaces for their trucks.

In Cameron, there are no regulations that restrict truck parking except for an ordinance that prohibits semi-trucks on courthouse square streets. Operators are also not allowed to park trucks outside of their houses.

The Fort Hood survey stated that unauthorized truck parking impacts the area by there being trucks that park on the right shoulder of the IH-14 exit ramp at Clarke Road. This is causing safety concerns for traffic entering the Clarke Road Access Control Point (the Access Control Point is the checkpoint gate for traffic entering Fort Hood). Trucks parked in unauthorized locations are observed Monday-Friday from 6:00 a.m. to noon.

Fort Hood is planning a future project for truck parking to upgrade the SH 9 intersection at Tank Destroyer Boulevard to a cloverleaf design and opening Tank Destroyer Boulevard as a commercial truck entrance. This project is expected to eliminate the truck back-up on US 190 and IH-14.

In terms of suggested partnerships, it was mentioned that there is empty land across from the Cinergy Cinema on Constitution Drive that could be an overflow parking area. Drivers who arrive on the weekend are not permitted to enter Fort Hood. Fort Hood also has access control regulations that prevent trucks from parking within the installation.

The surveys completed by those who work in Temple noted that unauthorized truck parking is causing some issues in the Industrial park area, downtown, and some neighborhood streets. Unauthorized truck parking in these areas cause traffic congestion, safety issues, and pavement deterioration on road shoulders.

Regulations that restrict truck parking in Temple include Ordinance 37.98, which bans vehicles having more than two axles parking on streets or alleys. One of the respondents noted that there is an issue with owner/operators parking trucks at their home which causes congestion. The City of Temple would be open to regulations to allow using vacant or underused lots for truck parking.

The Belton survey revealed that unauthorized truck parking blocks travel lanes, causing congestion and safety issues. The time where trucks are seen parked in unauthorized locations are Monday through Friday during business hours when trucks are making deliveries.

Currently there are two planned new truck parking sites in Belton. One includes a permit review for a truck stop at IH-14 at FM 1670, and the second is a possible rezoning for a truck stop at IH-35 near Dillard Road.

Local ordinances in Belton prohibit trucks from parking in the right of way. Parking in residential areas is prohibited unless the truck is behind the front yard setback line. There have been issues of operators parking trucks at their homes. The survey respondent suggests that the City of Belton should identify large parking lots that are not being used overnight and allow their use for truck parking. Furthermore, businesses that are OD sites should do more to coordinate truck parking.

A bottleneck that is impacting freight in the area is at Main Street between Holland Road and the railroad overpass. It is a two-lane road with a center turn lane and trucks tend to park in the center turn lane to deliver goods which blocks traffic.

Truck Driver Survey and Interview Results

Due to COVID-19, there was a challenge in obtaining survey results since the team was unable to physically go to truck stop locations and distribute surveys. Only two surveys from truck drivers were provided. Both truck drivers are either based in or drive through Nolanville. Both truck drivers marked bathroom and fuel as their most important amenities. In addition to those amenities, one of the truck drivers also added showers, laundry facilities, and restaurants.

When asked what the biggest issue faced with truck parking in the region one of the respondents said places to fuel that are big enough for trucks and the other respondent said distance between facilities, capacity at existing facilities, and safety. If the parking lot is full, one of the truck drivers waits until a spot opens up and the other parks in a local company's lot. Both truck drivers mentioned construction on IH-14 as causing barriers or bottlenecks.

Truck Parking Supply and Demand

The previous section provided an overview of truck parking in the region including existing parking locations and needs documented from other studies. To fully understand regional parking patterns and needs, it's important to quantify parking supply and demand on the region's key freight corridors. Analyzing parking at the corridor level provides insight into where additional public or private parking supply should be located.

A parking analysis was performed to quantify current (2018) and future (2045) truck parking supply and demand. Current and potential truck parking supply was estimated via review of available public and private data, websites, apps, plans, and by observation. Demand was estimated using a 2002 Federal Highway Administration (FHWA) corridor-level modeling approach. Adjustments to the demand estimates were made based on the FHWA Freight Analysis Framework version 4 (FAF4) truck-based origin-destination and assigned commodity flows database, the KTMPO's regional travel demand model, and stakeholder surveys. The truck parking shortfall for the region is estimated as the excess parking demand over the known supply of parking spaces. Truck parking supply and demand estimates were validated against the TxDOT Statewide Truck Parking Study.

Appendix B: Supply and Demand Assessment Methodology provides details on the truck parking supply and demand assessment methodology.

Current and Potential Truck Parking Supply

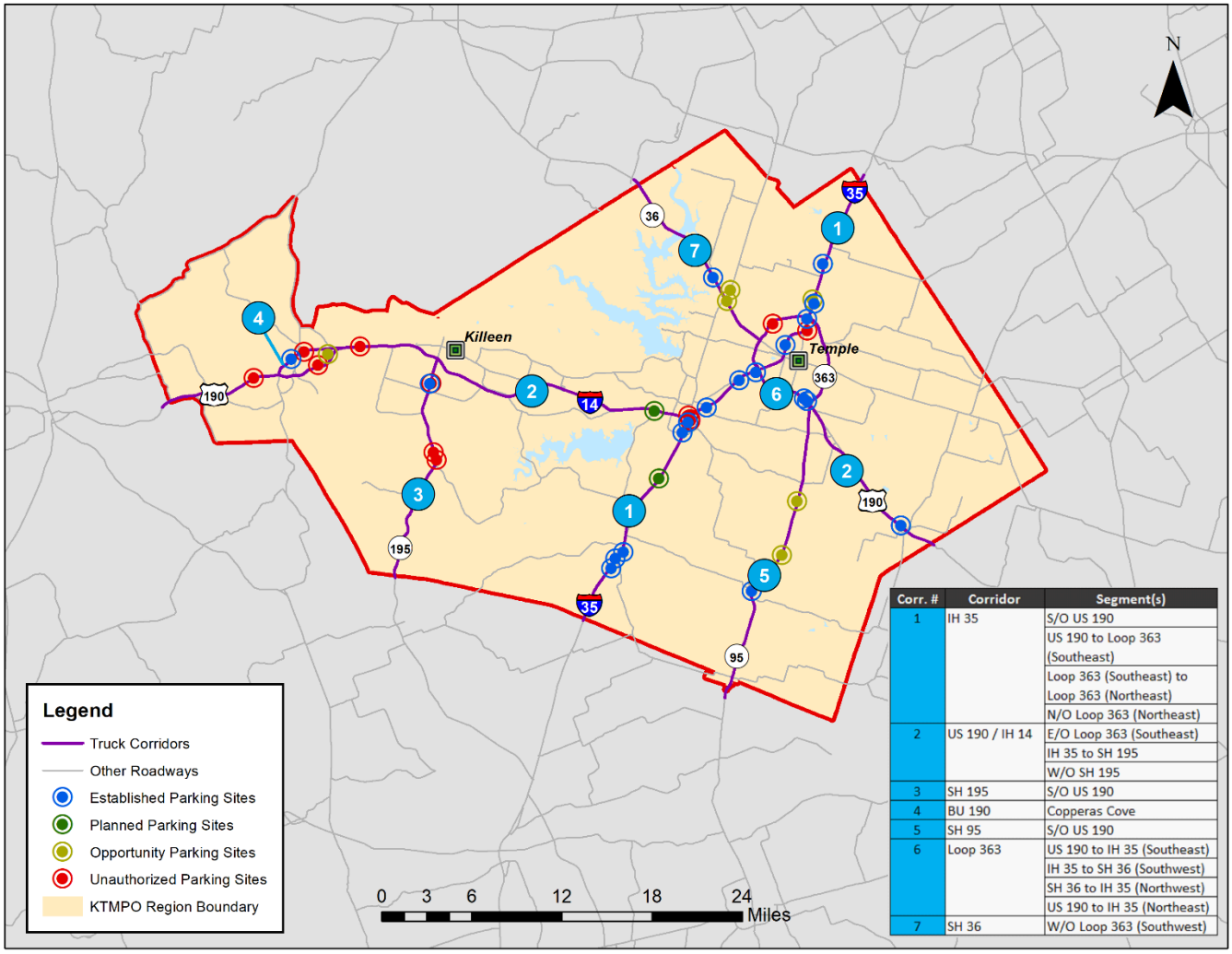
Figure 8 shows a set of seven truck corridors identified in the KTMPO region as suited for truck parking. These include Interstate Highway 35 (IH-35, #1 on the map); US highway 190 (US 190)/IH-14 (#2); state highway 195 (SH 195, #3); US 190-Business (US 190-BUS, #4); SH 95 (#5); Loop 363 (#6); and SH 36 (#7). These corridors were further divided into subsegments for demand modeling purposes which are shown in the table on the map. More details are provided in ***Appendix B:*** Supply and Demand Assessment Methodology. Over these truck corridors, a set of 19 established, two planned and eight opportunity, or a total of 27 authorized truck parking sites were identified as the truck parking supply in the KTMPO region. They contribute 448 established, 21 planned and 167 opportunity, or a total of 636 truck parking spaces. In addition to these locations, interviews conducted with stakeholders identified 12 unauthorized parking sites. ***Figure 8*** also shows all truck parking supply locations.

Table 2 lists the authorized truck parking sites including general description, location, number of truck parking spaces, and amenities. (Note the Corridor Segment ID column denotes the corridor subsegments listed in ***Figure 8***.) Truck parking facilities with showers were considered suitable for overnight truck parking. This is supported by the findings of truck driver surveys in the TxDOT Statewide Truck Parking Study. Showers and laundry machines are more desired amenities to truck drivers with a long-term parking need than those with a short-term parking need. Based on this, six locations (all of them established sites and all except one along IH-35) with 268 truck parking spaces (all except seven spaces along IH-35) were identified as overnight truck parking supply.

Known unauthorized truck parking sites (gleaned from surveys and interviews) are listed in ***Table 3***.

Appendix C: Existing Truck Parking Profile Sheets contains detailed profile sheets for each of the identified locations including unauthorized ones. These include information such as: site name and street address, site location on a regional map, bird's eye view, key amenities (e.g., restrooms, showers, fuel, restaurant, etc.), paved/unpaved areas, access points to property, parking fees (if any), and the estimated total number of parking spaces and observed off-peak utilization percentage based on daytime aerial images. When the site is included in the TxDOT Statewide Truck Parking Study, peak hour utilization is also provided.[2]

Figure 8: Truck Parking Sites in the KTMPO Region



Source: CDM Smith's Truck Parking Supply and Demand Model Version 1.2 for the KTMPO Region.

[2]Note that the truck parking utilization were estimates in the statewide study based on American Transportation Research Institute truck GPS data sample expanded to truck population. These are not outputs of the demand analysis in this study.

Table 2: Summary of Authorized Truck Parking Sites in the KTMPO Region

Site ID	Corr.-Seg. ID	Description	Location	City	Public/ Private	Parking Site Type	No. of Spaces	RES	SHO	FUE	SER	RET	RST	HOT	WIF	RPT	Notes
3	1-1	Bell County Rest Area Northbound*	IH-35 MP 281	Salado	Public	Established	28	1	0	0	0	0	0	0	1	1	
2	1-1	Bell County Rest Area Southbound*	IH-35 MP 282	Salado	Public	Established	28	1	0	0	0	0	0	0	1	1	
55	5-1	Opportunity Site	SH 95 at Mills Rd	Holland	Public	Opportunity	3	0	0	0	0	0	0	0	0	1	Picnic area.
5	7-1	Opportunity Site	SH 317 at Little Mexico Rd	Temple	Public	Opportunity	4	0	0	0	0	0	0	0	0	1	Grassy area within ROW.
6	1-3	Southwest Travel Center*	IH-35 at H K Dodgen Loop	Temple	Private	Established	81	1	1	1	0	1	1	0	0	1	Scales.
9	1-4	Love's Truck Stop #719*	IH-35 at Lely Rd	Troy	Private	Established	150	1	1	1	1	1	1	0	1	1	Unpaved overflow lot. Washing machines, showers, scales, tires.
8	1-1	JDs Travel Center*	IH-35 at FM 2115	Salado	Private	Established	25	1	0	1	0	1	1	0	0	1	Unpaved lot.
10	1-1	7-11	IH-35 at Loop 121	Belton	Private	Established	4	1	0	1	0	1	1	1	0	0	Hotel across the street.
11	1-1	CEFCO Truck Stop	IH-35 south of IH-14	Belton	Private	Established	24	1	0	1	0	1	1	1	0	0	Tight for maneuvering around gas pumps and exit.
12	1-2	McDonald's	IH-35 at 6th St	Belton	Private	Established	8	1	0	1	0	0	1	0	0	0	Fuel across the street.
13	1-2	Motel 8	IH-35 N of Midway Drive	Temple	Private	Established	20	1	1	1	0	1	1	1	1	0	Amenities in walking distance. Unpaved lot for hotel customers.
14	1-2	Budget Inn	IH-35 S of Loop 363	Temple	Private	Established	6	1	1	0	0	0	0	1	1	0	Unpaved lot for hotel customers.
16	1-4	Kyrish Truck Centers	IH-35 S of Berger Rd	Temple	Private	Established	30	0	0	0	1	0	0	0	0	0	Unpaved lot next to truck sales and service.
50	1-4	Opportunity Site	IH-35 N of Berger Rd	Temple	Private	Opportunity	10	0	0	0	0	0	0	0	0	0	Unpaved lot next to Lucky's RV Park.
18	3-1	CEFCO	SH 195 at Elms Rd	Killeen	Private	Established	8	1	0	1	0	0	0	0	0	0	Unpaved lot next to CEFCO.
19	2-1	Valero	US 190/SH 36 at Joe Lee Rd	Rogers	Private	Established	3	1	0	1	0	1	0	0	0	0	Unpaved lot behind gas station.
20	7-1	CEFCO	SH 36 at Moffat Rd	None (rural)	Private	Established	4	1	0	1	0	1	0	0	0	0	Area marked by stone blocks.
21	7-1	Opportunity Site	SH 36 SE of SH 317	Temple	Private	Opportunity	10	1	0	0	0	0	1	0	0	0	Extra parking space and abandoned building lot next to restaurant.
22	5-1	Guy's Quick Stop	SH 95 at FM 2268	Holland	Private	Established	8	1	0	1	0	1	0	0	0	0	Unpaved lot at convenience store.
27	2-1	CEFCO	Loop 363 at MLK Dr	Temple	Private	Established	5	1	0	1	0	1	0	0	0	0	Paved lot.
58	5-1	Opportunity Site	SH 95 at Little River	Academy	Private	Opportunity	100	0	0	0	0	0	0	0	0	0	Old section of road used as a dragstrip. No amenities but only one mile south of Academy.

Site ID	Corr.-Seg. ID	Description	Location	City	Public/ Private	Parking Site Type	No. of Spaces	RES	SHO	FUE	SER	RET	RST	HOT	WIF	RPT	Notes
28	2-1	Conoco	Loop 363 at Dogwood Ln	Temple	Private	Established	5	1	0	1	0	1	0	0	0	0	Paved apron and unpaved space around gas station.
29	1-3	Days Inn	IH-35 south of Nugent Ave	Temple	Private	Established	4	1	1	0	0	0	0	1	1	0	Unpaved lot behind hotel.
30	4-1	Super 8	US 190 at FM 116	Copperas Cove	Private	Established	7	1	1	1	0	1	1	1	1	0	Unpaved lot behind hotel.
69	2-2	Planned Site	IH-14 at FM 1670	Belton	Private	Planned	11	1	0	1	0	1	1	0	0	0	TexStar Travel Center currently under development review.
48	2-3	Opportunity Site	Constitution Dr at MLK Blvd	Copperas Cove	Private	Opportunity	40	0	0	0	0	0	0	0	0	0	Vacant land for site suggested in interview.
49	1-1	Planned Site	IH-35 at Dillard Rd	Belton	Private	Planned	10	0	0	0	0	0	0	0	0	0	Re-zoning currently under review.

SUMMARY:

			No. of Locations			Parking Site Type	No. of Spaces	RES Cnt.	SHO Cnt.	FUE Cnt.	SER Cnt.	RET Cnt.	RST Cnt.	HOT Cnt.	WIF Cnt.	RPT Cnt.	
			19			Established	448	18	6	14	2	12	8	6	7	5	
			2			Planned	21	1	0	1	0	1	1	0	0	0	
			6			Opportunity	167	1	0	0	0	0	1	0	0	2	
			27			**Authorized TOTAL**	**636**	**20**	**6**	**15**	**2**	**13**	**10**	**6**	**7**	**7**	

*TRUCK PARKING SITE INCLUDED IN THE TXDOT STATEWIDE TRUCK PARKING STUDY

RES = RESTROOMS, SHO = SHOWERS, FUE = FUEL, SER = SERVICE, RET = RETAIL, RST = RESTAURANT, HOT = HOTEL, WIF = WIFI, RPT = STATE REPORT

Source: TxDOT Statewide Truck Parking Study; CDM Smith's Truck Parking Supply and Demand Model Version 1.2 for the KTMPO Region.

Table 3: List of Unauthorized Truck Parking Sites in the KTMPO Region

Site ID	Corr.-Seg. ID	Description	Location	City	Public/ Private	Notes
15	1-3	Mayborn Civic Center	IH-35 at Bellaire Rd	Temple	Public	Dead-end road adjacent to civic center.
31	4-1	Opportunity Site	US 190 at Robertson Ave	Copperas Cove	Private	Large paved parking at razed building. Across the street from Cove Terrace shopping strip.
35	1-2	Miller Heights Baptist Church	Holland Rd at IH-35	Belton	Private	Unauthorized parking noted in surveys.
34	1-2	Immanuel Lutheran Church / Summit Gas Station	Holland Rd at IH-35	Belton	Private	Unauthorized parking noted in surveys.
36	1-2	Norman Building Materials Yard	W Ave J at IH-35 SB FRTG	Belton	Private	Unauthorized parking noted in surveys.
56	2-3	Roadside at Valero Station	Big Divide Rd at US 190	Copperas Cove	Public	Unauthorized parking noted in surveys.
38	2-3	Roadside	Risen Star Ln	Copperas Cove	Public	Unauthorized parking noted in surveys.
39	3-1	Retail Site Parking Lot	SH 195 at Elms Rd	Copperas Cove	Private	Unauthorized parking noted in surveys.
40	3-1	Centex Scrap & Metal	SH 195 S of Reece Creek Rd	None (rural)	Private	Unauthorized parking noted in surveys.
47	3-1	Off Ramp	IH-14 WB Off Ramp at Clarke Rd	Fort Hood	Public	Unauthorized parking along shoulder noted in surveys.
42	6-3	Scrap Yards	SH 195 N of Reece Creek Rd	None (rural)	Private	Unauthorized parking noted in surveys.
59	2-3	Opportunity Site	Industrial Blvd at Loop 363	Killeen	Public	Unauthorized parking noted in surveys.

Source: CDM Smith's Truck Parking Supply and Demand Model Version 1.2 for the KTMPO Region.

Current Truck Parking Demand

The demand estimation methodology relies mostly on the 2002 FHWA corridor-level parking demand approach with two key adjustments:

- The fraction of time long-haul truckers must be off-duty and/or parked over eight consecutive days under the Federal Motor Carrier Safety Administration (FMCSA) regulations was adjusted from 0.7 to 0.633 based on a 2007 *Pennsylvania Truck Parking Study*.[3] This adjustment better accounts for hours of service regulations.
- The default short-haul and long-haul trip shares in the 2002 FHWA model were replaced with the truck corridor-specific estimates derived from the FHWA Freight Analysis Framework version 4 (FAF4) truck-based origin-destination and assigned commodity flows database and the KTMPO's regional travel demand model. This better represents length of haul patterns in the KTMPO region.

[3] As per https://www.talkpatransportation.com/assets/TAC/Truck%20Parking%20in%20Pennsylvania%20-%20December%202007%20-%20Final%20Report.pdf (last accessed on September 30, 2020):
Fraction of time long-haul truckers must be off-duty and/or parked over eight consecutive days under FMCSA regulations = 1- [Maximum on-duty hours per eight consecutive days (FMCSA) x Driving hours permitted in a daily on-duty window] / [Total hours in eight consecutive days - Average hours at home (off-duty) for long-haul truckers over eight consecutive days] = 1 – (70 x 0.79) / (192 – 42) = 1 – 55 / 150 = 0.633.

The FHWA model requires inputs including corridor length, average free flow speeds and travel times, current/forecast year truck annual average daily traffic (AADT) and the shares of such traffic that are short-haul and long-haul. For modeling purposes, the seven truck corridors were subdivided into corridor segments. ***Table 4*** provides the model inputs used in this analysis by corridor segment. "Short-haul" in the context of this table is a combination of 100 percent of truly short-haul truck movements (<= 200 miles one-way distance) and 50 percent of medium-haul truck movements (> 200 miles, <= 400 miles one-way distance). On the other hand, "Long-haul" in the context of this table is a combination of 50 percent of medium-haul truck movements (> 200 miles, <= 400 miles one-way distance) and 100 percent of truly long-haul truck movements (> 400 miles one-way distance).[4] Shares of the flows by haul distance and movement type (external-external, external-internal, internal-external, internal-internal) out of daily total truck flows were derived from the FAF4 and the regional travel demand model truck OD flows. Truck volume forecasts were developed using the FAF4 assigned truck flows. ***Appendix B:*** Supply and Demand Assessment Methodology contains further details.

The base year Average Annual Daily Truck Traffic (AADTT) data available from TxDOT was 2018. Hence, this was used in the base year for this study. The truck traffic forecasts are based on the FAF4, the horizon year for which is 2045. Hence, this was used as the forecast year for this study. In 2018, the average daily truck volume on the IH-35 corridor (approximately 18,500 trucks/day) is over 10 times higher than the average truck volume on the other truck corridors used in this study (approximately 1,600 trucks/day). Also, in 2018, the percentage of long-haul truck trips is over 80 percent on the IH-35 corridor, while it varies widely between 0 and 67 percent on the other truck corridors. By 2045, the truck flows are expected to nearly double on all corridors and the long-haul truck trip shares are also expected to go up marginally.

Figure 9 and ***Figure 10*** show the daily truck flows and long-haul shares for 2018 and 2045 on a map.

[4] In this study, the thresholds of 200 miles and 400 miles one-way distance were defined to break haul types into truly short-haul, medium-haul and truly long-haul. Truck trips that are 200 miles one-way distance are expected to return to trucker's home base on every trip; truck trips that are 400 miles one-way distance are expected to return to trucker's home base on every alternate trip.

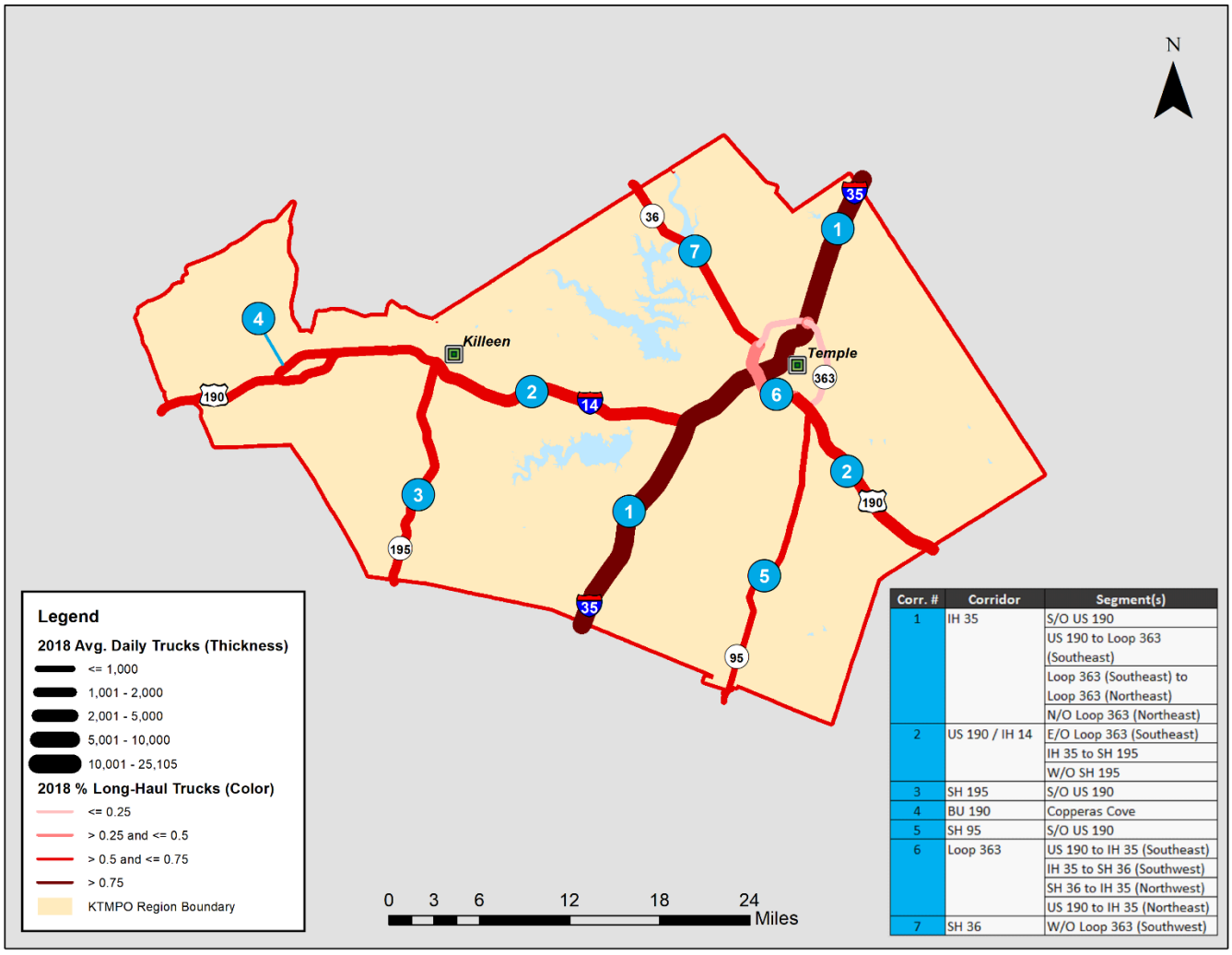
Table 4: Flows, Speeds, and Flow Shares by Length of Haul on Truck Corridors in the KTMPO Region

Corr. ID	Corridor	Corr.-Seg. ID	Segment	Length, (miles)	Avg. Free Flow Speed, (mph)	Avg. Free Flow Travel Time, (hours)	2018			2012-2045	2045		
							Truck AADT	% Short-Haul	% Long-Haul	CAGR in Truck AADT	Truck AADT	% Short-Haul	% Long-Haul
1	IH-35	1-1	S/O US 190	15.6	68.8	0.2	17,000	18.9%	81.1%	2.1%	29,800	14.4%	85.6%
		1-2	US 190 to Loop 363 (Southeast)	5.6	64.7	0.1	16,400	15.0%	85.0%	2.3%	30,200	12.2%	87.8%
		1-3	Loop 363 (Southeast) to Loop 363 (Northeast)	5.2	64.1	0.1	15,700	14.4%	85.6%	2.2%	28,400	11.5%	88.5%
		1-4	N/O Loop 363 (Northeast)	10.2	65.0	0.2	25,100	17.5%	82.5%	2.0%	43,300	13.9%	86.1%
2	US 190 / IH-14	2-1	E/O Loop 363 (Southeast)	14.1	67.1	0.2	2,100	33.0%	67.0%	3.0%	4,700	26.7%	73.3%
		2-2	IH-35 to SH 195	18.5	70.7	0.3	2,400	32.9%	67.1%	2.6%	4,900	26.8%	73.2%
		2-3	W/O SH 195	19.9	69.6	0.3	1,600	33.0%	67.0%	2.8%	3,300	26.8%	73.2%
3	SH 195	3-1	S/O US 190	15.5	60.3	0.3	1,500	41.7%	58.3%	2.6%	3,100	33.6%	66.4%
4	BU 190	4-1	Copperas Cove	5.2	50.8	0.1	1,300	33.1%	66.9%	2.4%	2,500	26.7%	73.3%
5	SH 95	5-1	S/O US 190	20.9	55.0	0.4	300	41.5%	58.5%	2.2%	600	33.6%	66.4%
6	Loop 363	6-1	US 190 to IH-35 (Southeast)	3.1	55.0	0.1	3,400	58.1%	41.9%	3.2%	8,000	57.2%	42.8%
		6-2	IH-35 to SH 36 (Southwest)	2.2	58.5	0.0	2,400	66.1%	33.9%	3.2%	5,600	71.2%	28.8%
		6-3	SH 36 to IH-35 (Northwest)	4.0	58.7	0.1	700	100.0%	0.0%	3.0%	1,500	100.0%	0.0%
		6-4	US 190 to IH-35 (Northeast)	6.5	57.5	0.1	600	100.0%	0.0%	2.0%	1,000	100.0%	0.0%
7	SH 36	7-1	W/O Loop 363 (Southwest)	13.9	68.3	0.2	1,200	32.9%	67.1%	2.2%	2,200	26.8%	73.2%

NOTE: 2018 AND 2045 AADT ESTIMATES, AVERAGE OVER THE CORRIDORS AND SEGMENTS, WERE ROUNDED TO THE NEAREST 100 ABOVE.

Source: 2018 TxDOT Truck AADT Data, FHWA FAF4 Truck-Based Origin-Destination Flows and Assigned Flows Database, KTMPO's Regional Travel Demand Model, CDM Smith's Truck Parking Supply and Demand Model Version 1.2 for the KTMPO Region.

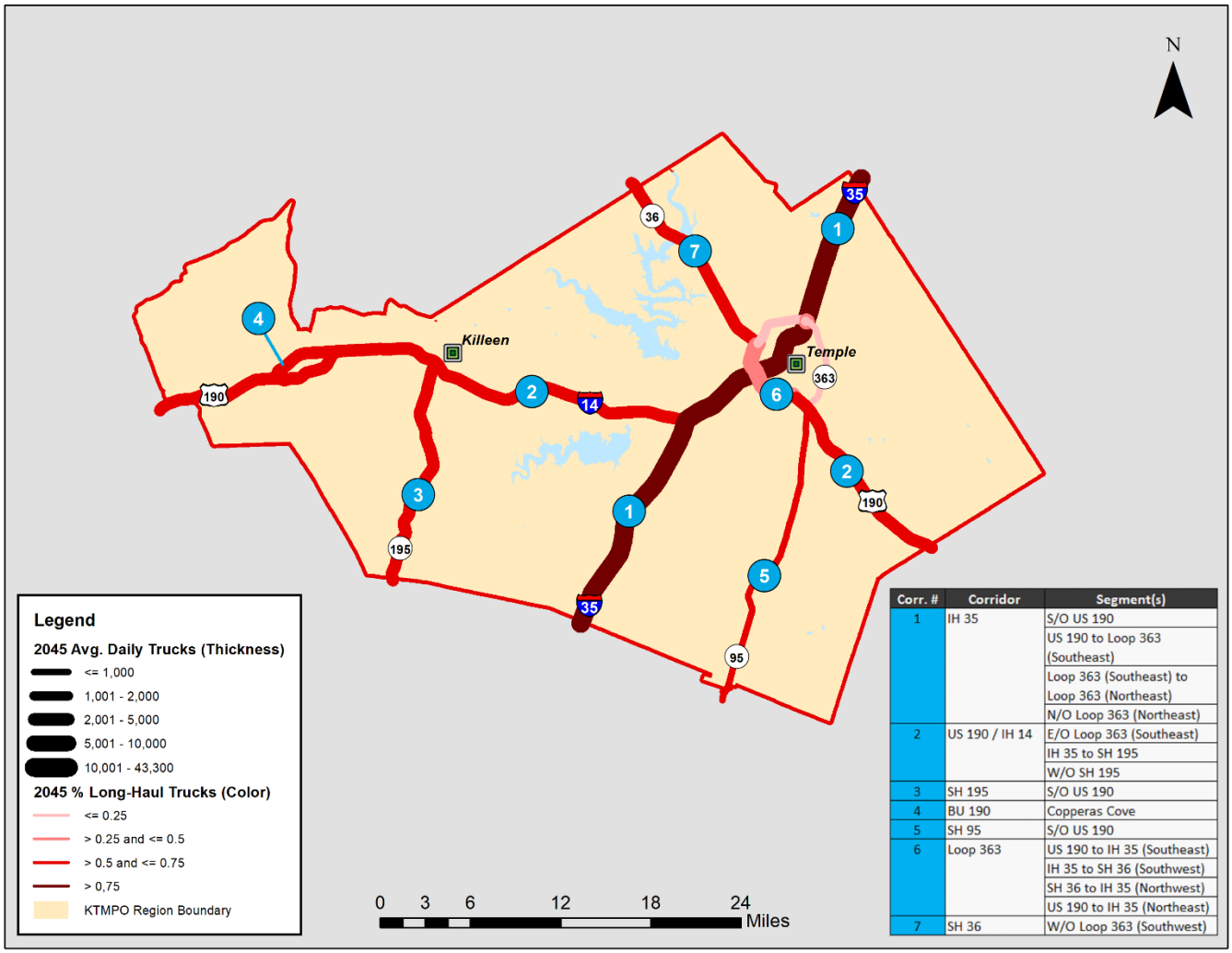
Figure 9: 2018 Truck AADT and Percent Long-Haul on Truck Corridors in the KTMPO Region



Corr. #	Corridor	Segment(s)
1	IH 35	S/O US 190
		US 190 to Loop 363 (Southeast)
		Loop 363 (Southeast) to Loop 363 (Northeast)
		N/O Loop 363 (Northeast)
2	US 190 / IH 14	E/O Loop 363 (Southeast)
		IH 35 to SH 195
		W/O SH 195
3	SH 195	S/O US 190
4	BU 190	Copperas Cove
5	SH 95	S/O US 190
6	Loop 363	US 190 to IH 35 (Southeast)
		IH 35 to SH 36 (Southwest)
		SH 36 to IH 35 (Northwest)
		US 190 to IH 35 (Northeast)
7	SH 36	W/O Loop 363 (Southwest)

Source: 2018 TxDOT Truck AADT Data, FHWA FAF4 Truck-Based Origin-Destination Flows and Assigned Flows Database, KTMPO's Regional Travel Demand Model, CDM Smith's Truck Parking Supply and Demand Model Version 1.2 for the KTMPO Region.

Figure 10: 2045 Truck AADT and Percent Long-Haul on Truck Corridors in the KTMPO Region



Source: 2018 TxDOT Truck AADT Data, FHWA FAF4 Truck-Based Origin-Destination Flows and Assigned Flows Database, KTMPO's Regional Travel Demand Model, CDM Smith's Truck Parking Supply and Demand Model Version 1.2 for the KTMPO Region.

Table 5 shows the FHWA truck parking demand model outputs. These include daily truck-hours of parking demand and peak hour parking demand by truck parking need type – short-term and overnight. The FHWA model estimates short-term parking demand for both the short-haul and long-haul truck trips, while it estimates overnight parking demand only for the long-haul portion of the truck trips. However, the average parking duration for overnight parking (i.e. the inverse of parking space turnover rate) is almost 7.6 times that of short-term parking. The peak hour for total truck parking demand typically coincides with the peak hour for overnight parking, which is between 10 pm and 6 am. In the nighttime hours, the FHWA model assumes the short-haul parking peaking factor is 0.02 based on professional judgment, but the model documentation notes that the peak-hour for short-haul parking demand alone could fall in the daytime (around 12 pm); the FHWA model did not estimate the daytime peak parking factor for short-haul moves. In the night conditions, the long-haul parking peaking factor, on the other

hand, is 0.09 which is a result of calibrating the FHWA model using field surveys.[5] So, during the peak hour for total truck parking demand, the peak parking factor for overnight parking is 4.5 times that of short-term parking. As a combined result of the differences in parking space turnover and peak parking factors, the overnight parking demand is many times higher compared to the short-term parking demand in the peak hour.

A stakeholder survey respondent noted that Cameron, Texas east of the KTMPO region has sufficient truck parking facilities at its five major freight generators, so overnight truck parking demand for corridor and segment ID #2-1 (US 190 east of Loop 363 (Southeast) was adjusted downward by 90 percent. Also, per the 2002 FHWA model, peak hour demand (both short-term and overnight) was allocated to rest area and truck stop spaces in the ratio 23%:77% (the breakout is not shown in ***Table 5***), rounded up to integer values and added to obtain the peak hour demand value. Due to the rounding, the short-term parking demand in 2018 and 2045 appear to be close values.

Table 5: Short-Term and Overnight Truck Parking Demand on Truck Corridors in the KTMPO Region

Corr. ID	Corr.	Corr.-Seg. ID	Segment	2018				2045			
				Short-Term		Overnight		Short-Term		Overnight	
				Daily Parking Demand (truck-hours / day)	Peak Hour Parking Demand (spaces / hour)	Daily Parking Demand (truck-hours / day)	Peak Hour Parking Demand (spaces / hour)	Daily Parking Demand (truck-hours / day)	Peak Hour Parking Demand (spaces / hour)	Daily Parking Demand (truck-hours / day)	Peak Hour Parking Demand (spaces / hour)
1	IH-35	1-1	S/O US 190	369	29	2,272	206	648	52	4,215	381
		1-2	US 190 to Loop 363 (Southeast)	136	12	878	80	250	21	1,668	151
		1-3	Loop 363 (Southeast) to Loop 363 (Northeast)	123	11	800	73	223	20	1,496	135
		1-4	N/O Loop 363 (Northeast)	379	30	2,372	215	653	54	4,269	385
			SUB-TOTAL	**1,007**	**82**	**6,322**	**574**	**1,774**	**147**	**11,648**	**1,052**
2	US 190 / IH-14	2-1	E/O Loop 363 (Southeast)	44	4	23	3	95	8	53	6
		2-2	IH-35 to SH 195	61	5	308	29	122	9	679	63
		2-3	W/O SH 195	44	4	220	21	90	7	500	46
			SUB-TOTAL	**149**	**13**	**551**	**53**	**307**	**24**	**1,232**	**115**
3	SH 195	3-1	S/O US 190	**39**	**3**	**169**	**16**	**77**	**6**	**389**	**36**
4	BU 190	4-1	Copperas Cove	**14**	**2**	**68**	**7**	**25**	**3**	**139**	**13**
5	SH 95	5-1	S/O US 190	**12**	**2**	**53**	**6**	**22**	**3**	**107**	**11**
6	Loop 363	6-1	US 190 to IH-35 (Southeast)	19	2	60	7	44	3	143	13
		6-2	IH-35 to SH 36 (Southwest)	9	2	23	3	20	2	44	5
		6-3	SH 36 to IH-35 (Northwest)	5	2	0	0	10	2	0	0
		6-4	US 190 to IH-35 (Northeast)	7	2	0	0	11	2	0	0
			SUB-TOTAL	**40**	**8**	**83**	**10**	**85**	**9**	**187**	**18**
7	SH 36	7-1	W/O Loop 363 (Southwest)	**24**	**3**	**121**	**12**	**43**	**4**	**239**	**22**
			TOTAL	**1,285**	**113**	**7,367**	**678**	**2,333**	**196**	**13,941**	**1,267**

Source: 2018 TxDOT Truck AADT Data, FHWA FAF4 Truck-Based Origin-Destination Flows and Assigned Flows Database, KTMPO's Regional Travel Demand Model, 2002 FHWA Model for Truck Parking Demand Estimation, CDM Smith's Truck Parking Supply and Demand Model Version 1.2 for the KTMPO Region.

[5] FHWA, Model Development for National Assessment of Commercial Vehicle Parking, Section 4 – Truck Parking Demand Model Calibration, March 2002. Available at: https://www.fhwa.dot.gov/publications/research/safety/01159/4.cfm (last accessed on September 17, 2020)

The results indicate that, in 2018, the KTMPO region had a peak hour demand of roughly 113 short-term parking spaces and 678 overnight parking spaces, or a total of 791 spaces. This would increase by 2045 to roughly 196 short-term parking spaces and 1,267 overnight parking spaces, or a total of 1,463 spaces. This is an 85 percent increase. Also, about 75 percent of short-term demand and about 85 percent of overnight demand is associated with the IH-35 corridor and these shares are roughly the same in the base and future years. This is driven by its higher truck flow and higher long-haul flow share.

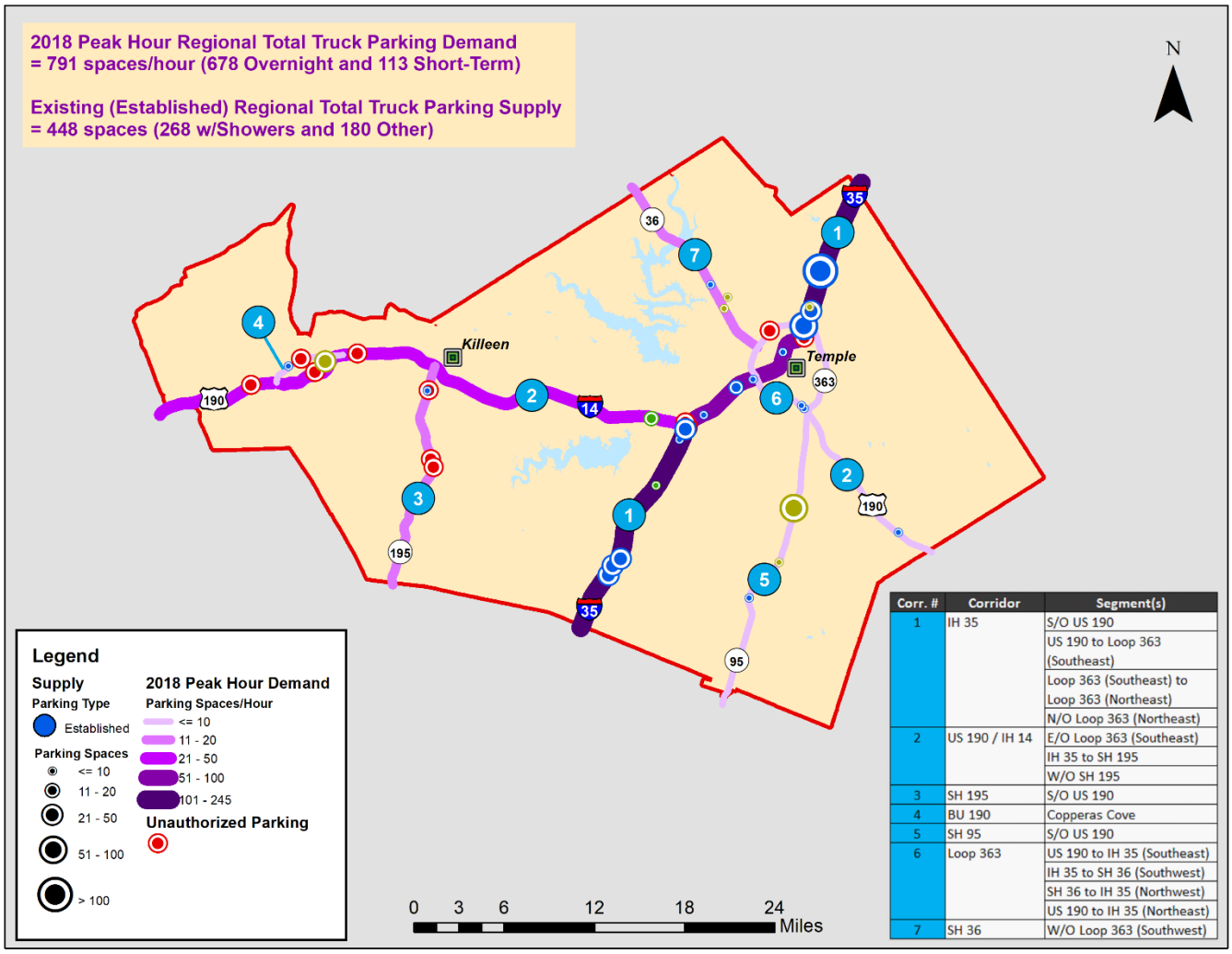
At a daily level, the KTMPO region had a truck parking demand of roughly 8,650 truck-hours per day in 2018, which would increase to roughly 16,275 truck-hours per day by 2045, that is an 88 percent increase.

Figure 11 and ***Figure 12*** show comparisons of the corridor-level peak hour truck parking demand in 2018 and 2045 in spaces/hour to the authorized facility-level truck parking supply. Peak hour parking demand exceeds supply by 343 spaces in 2018 and this shortfall is expected to grow to 827 spaces by 2045. Assuming showers are an essential amenity for truck drivers needing to park overnight, the supply shortfall for overnight parking is estimated to be even higher: 410 spaces in 2018 and 999 spaces in 2045.

The largest opportunity site with 100 parking spaces capacity was identified on SH 95, but this does not appear to be a location with the greatest parking demand.

The occurrence of unauthorized parking at various parts of the KTMPO region may be indicative of the supply shortfall for overnight parking. Other reasons for the parking at unauthorized locations may include drivers running out of hours of service, cost of parking, and distance to staging area, among other things. The analysis found that unauthorized parking is taking place on corridors with the highest truck parking demand.

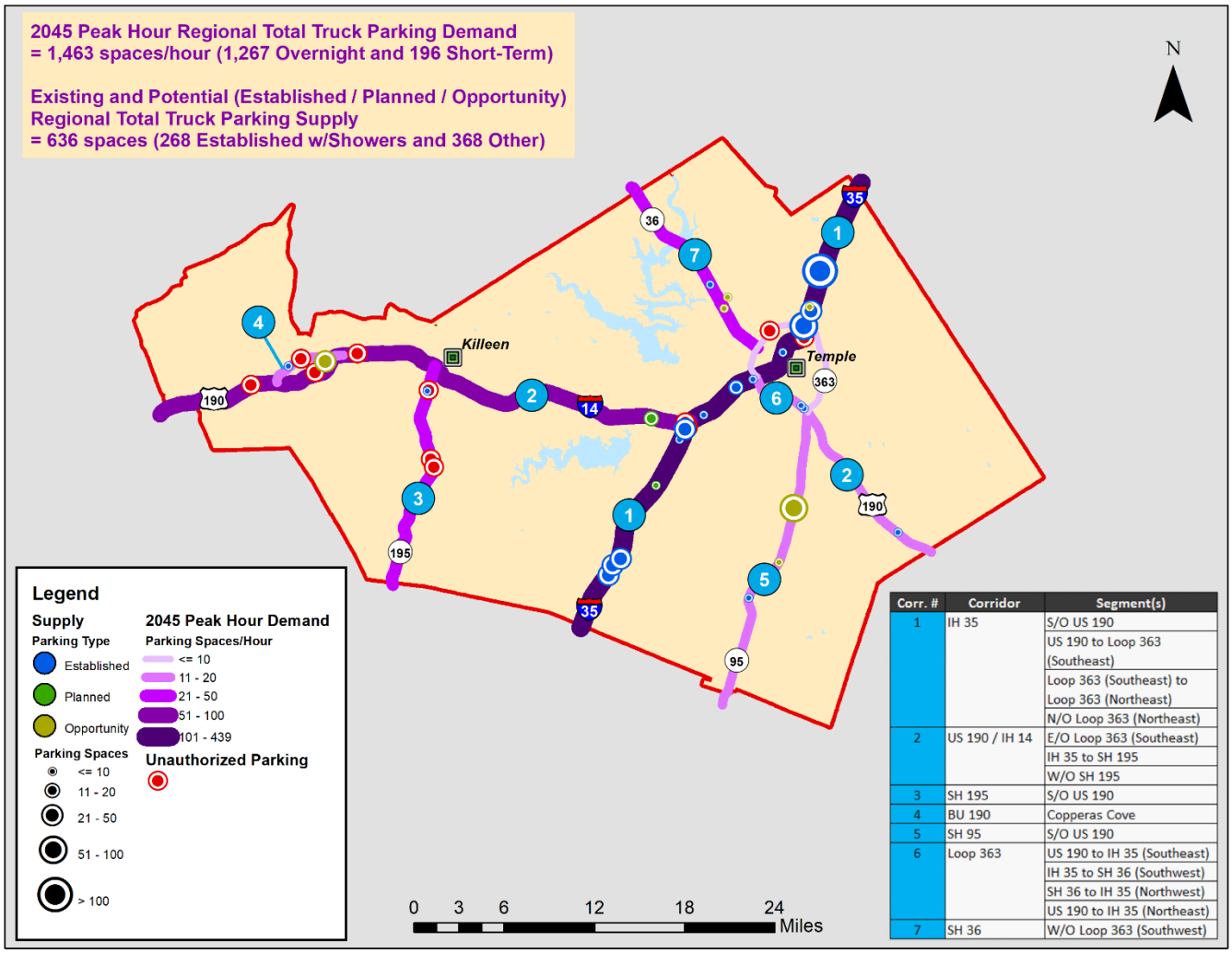
Figure 11: 2018 Peak Hour Truck Parking Demand by Corridor versus Existing Authorized (Established) Truck Parking Supply by Facility on Truck Corridors in the KTMPO Region



Corr. #	Corridor	Segment(s)
1	IH 35	S/O US 190
		US 190 to Loop 363 (Southeast)
		Loop 363 (Southeast) to Loop 363 (Northeast)
		N/O Loop 363 (Northeast)
2	US 190 / IH 14	E/O Loop 363 (Southeast)
		IH 35 to SH 195
		W/O SH 195
3	SH 195	S/O US 190
4	BU 190	Copperas Cove
5	SH 95	S/O US 190
6	Loop 363	US 190 to IH 35 (Southeast)
		IH 35 to SH 36 (Southwest)
		SH 36 to IH 35 (Northwest)
		US 190 to IH 35 (Northeast)
7	SH 36	W/O Loop 363 (Southwest)

Source: 2018 TxDOT Truck AADT Data, FHWA FAF4 Truck-Based Origin-Destination Flows and Assigned Flows Database, KTMPO's Regional Travel Demand Model, 2002 FHWA Model for Truck Parking Demand Estimation, CDM Smith's Truck Parking Supply and Demand Model Version 1.2 for the KTMPO Region.

Figure 12: 2045 Peak Hour Truck Parking Demand by Corridor versus Existing and Potential Authorized (Existing, Planned and Opportunity) Truck Parking Supply by Facility on Truck Corridors in the KTMPO Region



Corr. #	Corridor	Segment(s)
1	IH 35	S/O US 190
		US 190 to Loop 363 (Southeast)
		Loop 363 (Southeast) to Loop 363 (Northeast)
		N/O Loop 363 (Northeast)
2	US 190 / IH 14	E/O Loop 363 (Southeast)
		IH 35 to SH 195
		W/O SH 195
3	SH 195	S/O US 190
4	BU 190	Copperas Cove
5	SH 95	S/O US 190
6	Loop 363	US 190 to IH 35 (Southeast)
		IH 35 to SH 36 (Southwest)
		SH 36 to IH 35 (Northwest)
		US 190 to IH 35 (Northeast)
7	SH 36	W/O Loop 363 (Southwest)

Source: 2018 TxDOT Truck AADT Data, FHWA FAF4 Truck-Based Origin-Destination Flows and Assigned Flows Database, KTMPO's Regional Travel Demand Model, 2002 FHWA Model for Truck Parking Demand Estimation, CDM Smith's Truck Parking Supply and Demand Model Version 1.2 for the KTMPO Region.

Comparison to TxDOT Statewide Truck Parking Study

The KTMPO region parking supply and demand estimates produced for this study were qualitatively validated against the results of the *TxDOT Statewide Truck Parking Study*:

- On the supply side, five of the 27 authorized truck parking locations identified in this study were also found in the TxDOT Statewide Truck Parking Study. These include site IDs 2, 3, 6, 9, and 8 (see ***Table 2***), all of which are located on IH-35 and contribute 70 percent of truck parking spaces at established sites. For these matching sites, the estimated number of truck parking spaces in this study were mostly consistent with the statewide study. The exception was the Love's Truck Stop #719 site, where the statewide study estimated 114 truck parking spaces, whereas this study estimated 150 truck parking spaces. The difference may be due to consideration of the site's overflow lot as part of the supply analysis in this study. The remaining 14 established sites, two planned and six opportunity sites

identified in this study and not in the statewide study contribute an additional 324 truck parking spaces and are located on all truck corridors. This study thus enhanced the truck parking supply information developed in the statewide study.

- On the demand side, the TxDOT study focused on estimating truck parking utilization and unauthorized parking hotspots via Global Positioning System (GPS) data. Information is summarized at the TxDOT District level. For the Waco District, the statewide study found a high-capacity need (> 80 percent utilization) at most of the truck stops within the KTMPO region. At the Bell County rest areas, the demand exceeds the inventory level in the peak hour of 1 a.m. to 2 a.m. These findings are generally consistent with the regional truck parking supply shortfall estimated in this study. Moreover, the statewide study found peak hour truck parking demand of about 1,489 spaces in the Waco District; given that approximately one third of IH-35's length within the Waco District falls in the KTMPO region, it's reasonable to expect parking demand on IH-35 in the KTMPO area would be roughly one third that of the Waco District, or 496 spaces. This is reasonably close to the demand estimate made for the IH-35 corridor in this study, which is 656 spaces.

Conclusions and Considerations for Developing Optimum Truck Parking Supply

The truck parking demand and supply analysis conducted in this study showed that there is a regional shortfall in truck parking supply, especially in overnight truck parking. If this demand is not met, then unauthorized truck parking would continue to occur in the KTMPO region.

However, there are other considerations relating to the development of truck parking supply, mostly centered around safety and quality of life concerns. For example, in the stakeholder interviews conducted for this project, the TxDOT Waco District expressed a concern on the safety of road users resulting from unauthorized truck parking on off-ramps. At the same time, TxDOT – Waco District is worried that if they build more truck parking, trucks will shift out of paid lots and move into the free parking spaces, meaning there will always be a demand for truck parking that will never be met. During another stakeholder interview, the City of Killeen expressed that trucks parking in vacant lots can bring the surrounding property values down and does not contribute to a pleasing aesthetic. Developing truck parking sites near the Civic Center and nicer retail areas is not desirable to the City.

Keeping the above in mind, there are tools KTMPO can use to help develop an optimum supply of truck parking in the region. Such options include but are not limited to:

- Increasing public awareness of the need for and economic benefits from truck parking;
- Improving enforcement and/or identifying alternate sites for unauthorized parking, especially where there have been crashes involving parked trucks;
- Integrating truck parking site development guidelines into land use plans – e.g., provide buffers from residential, school, hospital, and shopping areas, encourage shared-use parking permits with suitable industrial/commercial facilities, churches, vacant lots, etc.; and
- Providing incentives to private developers for developing essential amenities – showers, fuel, truck service, etc. and real-time parking availability information services.

These and other potential policy tools are further explored in the *Truck Parking Policies* section.

Recommended Truck Parking Locations

Previous chapters assessed system deficiencies for freight, inventoried existing truck parking in the region, and estimated current and future truck parking demand for key freight corridors. These steps are critical for helping KTMPO understand freight and truck parking needs in the region, including the overall supply shortfall. In addition, it's important to assess specific sites that may be suitable for expanding truck parking capacity. Conducting such an assessment will help KTMPO integrate freight and truck parking needs into future land use and development planning.

This chapter identifies recommended locations for expanded truck parking supply in the KTMPO region. The following sections describe how potential truck parking locations were identified and evaluated by KTMPO and the project team; summarize TAC input received via a survey; recommend potential sites for future truck parking; and identify additional locations where expansion of existing truck parking capacity can be encouraged.

Identifying Truck Parking Opportunity Sites

An initial list of candidate truck parking sites was developed through a combination of Google Maps desktop review, review of the TxDOT Statewide Truck Parking Study, results from the supply and demand assessment, field review, and interview/survey results. The team reviewed the truck parking demand analysis results to identify corridors with the highest demand, then used Google Maps to identify areas along high-demand corridors with empty plots of land while trying to avoid rural areas with low truck parking demand (unless such sites were identified by stakeholders). The team also used Google Maps and field review to review current truck parking sites and assess whether there were areas nearby where more truck parking could be added. Sites that are too small or located next to homes were excluded.

Additional sites were identified by reviewing the interview/survey results and incorporating sites that stakeholders had identified, in addition to field review and Google Earth imagery which was used to identify unauthorized truck parking sites. This constitutes new data collection that identified additional truck parking sites beyond those inventoried in the TxDOT Statewide Truck Parking Study.

The resulting list of candidate sites was cross-referenced with the Bell County Appraisal District (CAD) parcel GIS web site to derive acreage, ownership, and other data; the team manually calculated acreage for parcels that couldn't be found on the Bell CAD site. The team also cross-checked sites against KTMPO land use maps and industrial area GIS files to assess site and surrounding area land use.

This process resulted in a set of 25 sites that could be considered candidates for expanded truck parking because they are currently used for that purpose (legally or otherwise) or are vacant parcels with no apparent land use conflicts. For clarity, these sites are collectively referred to as 'opportunity sites.'

The team developed a one-page profile for each site which included a map showing the site location in the region, an aerial view highlighting the specific site location, and parcel data including GPS coordinates, parcel owner, 2020 assessed value, adjacent land uses, total parcel acreage, and an estimate of how many truck parking spaces the site could accommodate. The parking space estimate was based on a rough estimate of 10 parking spaces per acre,[6] adjusted to account for building footprints or other features that would reduce the space available for truck parking.

[6] Florida DOT District 6, *Miami-Dade County Truck Parking Assessment*, March 12, 2019.

Each prospective site was reviewed by the KTMPO project team, and sites deemed infeasible (for example, because they are too small or adjacent to incompatible land uses like churches) were discarded. ***Table 6*** lists the 25 opportunity sites, including nine that were discarded and the reasons why they weren't advanced.

Six new opportunity sites were added based on KTMPO feedback. These sites encompass potential new truck parking along US 190 across from Big Divide Road in Copperas Cove (nearby but distinct from Site ID 56), a newly identified site along IH-35, and potential sites related to the new Joint Use Facility at Fort Hood. The Joint Use Facility sites were suggested in a prior stakeholder survey response. It should be noted that the sites at Fort Hood are outside of KTMPO's planning jurisdiction; they are nonetheless captured here to highlight the need and inform the Army's site planning.

The final list of candidate opportunity sites is shown in ***Table 7***, showing all the currently unused sites which can be recommended for future truck parking sites. This table does not include the 21 sites which are either in use for authorized parking or are already planned and under review. The complete set of opportunity site profiles for all 22 sites is provided in ***Appendix D:*** Truck Parking Opportunity Sites.

Table 6: Initial List of Candidate Opportunity Sites and Reasons for Exclusion

Site ID	Location	Description	City	Latitude	Longitude	Advanced to TAC/FAC (Y/N)	Reason for not Advancing
5	SH 317 at Little Mexico Road	Northeast corner of intersection	Temple	31.167985	-97.416115	Y	
21	8730 Airport Road	South of SH 317 interchange	Temple	31.157510	-97.421968	Y	
31	US 190 at Robertson Ave	East of BUS 190/Robertson Ave intersection	Copperas Cove	31.118608	-97.898831	Y	
39	3300 S Fort Hood Street	Intersection of S Fort Hood St and Elms Rd	Killeen	31.085417	-97.754998	Y	
48	Constitution Dr at MLK Blvd	Southeast corner of intersection	Copperas Cove	31.115773	-97.870238	Y	
50	16278 N General Bruce Drive	Near IH-35 Exit 304	Temple	31.156335	-97.327030	Y	
51	2500 S IH-35	South of East Loop 121	Belton	31.027425	-97.474082	Y	
52	Toll Bridge Road	Near IH-35 Exit 289A	Belton	31.007828	-97.486945	Y	
54	620 W Highway 190	US 190 Frontage Road at S Connell Street	Belton	31.048302	-97.473466	Y	
55	Mills Lane	At SH 95	Bell County	30.911160	-97.367400	Y	
56	Big Divide Road at US 190	Northeast corner of intersection	Copperas Cove	31.094374	-97.954084	Y	
58	Hwy 95	Little River Dragway	Bell County	30.963784	-97.350031	Y	
59	9202 NW H K Dodgen Loop	At Industrial Blvd	Temple	31.134664	-97.370286	Y	
60	4931 S IH-35	North of IH-35 Exit 290	Belton	31.012698	-97.482956	Y	
61	IH-35	South of IH-35 Exit 287	Belton	30.968714	-97.520674	Y	
69	3555 West Highway 190	At Stillhouse Hollow Dam Rd	Belton	31.053660	-97.506030	Y	

Site ID	Location	Description	City	Latitude	Longitude	Advanced to TAC/FAC (Y/N)	Reason for not Advancing
46	NW H K Dodgen Loop	Across Loop 363 from CEFCO Travel Center	Temple	31.139941	-97.330981	N	Safety issues
15	IH-35 at Bellaire Road	Mayborn Civic Center	North Temple	31.127098	-97.336144	N	Inappropriate location
34	1415 S Wall St	Immanuel Lutheran Church / Summit Gas Station	Belton	31.044497	-97.465526	N	Incompatible land use - Church
35	1400 S Wall Street	Miller Heights Baptist Church	Belton	31.043152	-97.465578	N	Incompatible land use - Church
36	1000 S Main St	West Ave J and South Pearl Street	Belton	31.048252	-97.467679	N	Limited capacity, existing business on site
38	Roadside at Risen Star Lane	Near Liberation Lane	Copperas Cove	31.105436	-97.881919	N	Incompatible land use - Residential area
42	Hwy 195	In front of Hwy 195 Used Auto Parts	Killeen	31.018845	-97.754234	N	Too small, not a high-demand parking corridor
40	Hwy 195	Near Cen-Tex Scrap and Metal	Bell County	31.011343	-97.751194	N	Too small, not a high-demand parking corridor
47	IH-14 WB Off Ramp at Clarke Rd	At Clarke Rd Exit	Fort Hood	31.122603	-97.833967	N	Too small, unsafe location on a highway exit ramp

Table 7: Final List of Candidate Opportunity Sites

Site ID	Location	Description	City	Latitude	Longitude
5	SH 317 at Little Mexico Road	Northeast corner of intersection	Temple	31.167985	-97.416115
21	8730 Airport Road	South of SH 317 interchange	Temple	31.157510	-97.421968
31	US 190 at Robertson Ave	East of BUS 190/Robertson Ave intersection	Copperas Cove	31.118608	-97.898831
39	3300 S Fort Hood Street	Intersection of S Fort Hood St and Elms Rd	Killeen	31.085417	-97.754998
48	Constitution Dr at MLK Blvd	Southeast corner of intersection	Copperas Cove	31.115773	-97.870238
50	16278 N General Bruce Drive	Near IH-35 Exit 304	Temple	31.156335	-97.327030
51	2500 S IH-35	South of East Loop 121	Belton	31.027425	-97.474082
52	Toll Bridge Road	Near IH-35 Exit 289A	Belton	31.007828	-97.486945
54	620 W Highway 190	US 190 Frontage Road at S Connell Street	Belton	31.048302	-97.473466
55	Mills Lane	At SH 95	Bell County	30.911160	-97.367400
56	Big Divide Road at US 190	Northeast corner of intersection	Copperas Cove	31.094374	-97.954084
58	Hwy 95	Little River Dragway	Bell County	30.963784	-97.350031
59	9202 NW H K Dodgen Loop	At Industrial Blvd	Temple	31.134664	-97.370286
60	4931 S IH-35	North of IH-35 Exit 290	Belton	31.012698	-97.482956
61	IH-35	South of IH-35 Exit 287	Belton	30.968714	-97.520674
63	US 190 at Big Divide Road (across US 190 from Valero Station)	Across from Big Divide Rd terminus	Copperas Cove	31.093654	-97.952480
64	US 190 at Clarke Road	South of US 190/Clarke Rd intersection	Copperas Cove	31.119783	-97.836477
65	US 190 West of Montague Village	East of Clements Drive	Fort Hood	31.120282	-97.824109
66	US 190 Between Montague Village and College	Between IH-14/US 190 and solar farm	Fort Hood	31.119705	-97.846687
67	Highway 9 and Tank Destroyer Blvd	East of Hwy 9 and South of Tank Destroyer Blvd	Copperas Cove	31.128783	-97.869473
68	IH-35 at Shanklin Road	West of IH-35 near Exit 289A	Salado	31.008313	-97.489004
69	3555 West Highway 190	At Stillhouse Hollow Dam Rd	Belton	31.053660	-97.506030

Stakeholder Input

The 22 opportunity sites as listed in ***Table 7*** were presented to the KTMPO TAC and Freight Advisory Committee (FAC) at the regular TAC meeting held on December 2, 2020. FAC and TAC members were asked to review the opportunity site profiles and complete a survey questionnaire for each site. The survey consisted of yes/no questions designed to elicit information about each site's overall suitability for truck parking, such as future land use plans, conflicts with other transportation modes, acceptability of increased truck traffic at the site, and potential environmental issues. The survey instrument is shown in ***Figure 13***.

Figure 13: Site Assessment Survey Instrument

	Truck Opportunity Site ID Number																					
	5	21	31	39	48	50	51	52	54	55	56	58	59	60	61	63	64	65	66	67	68	69
1 Are there active plans for developing this property? (if yes, please provide details)																						
2 Are there active plans for developing surrounding land which may result in conflicts? (if yes, please provide details)																						
3 Is increased truck traffic acceptable at this site? (if no, please provide details)																						
4 Are there any conflicts with zoning or other regulatory issues? (if yes, please provide details)																						
5 Are there any conflicts with environmental issues? (if yes, please provide details)																						
6 Are there any conflicts with other transportation modes? (if yes, please provide details)																						
7 Is it practical to develop this site with amenities?																						
8 Overall, would you recommend this site for development for truck parking?																						

Please place a check mark in the box to indicate a "yes" answer for each site as attached. Please feel free to ffer any additional comments or details.

Survey responses were received from Copperas Cove, Killeen, Fort Hood, Bell County, Belton, and Temple covering 17 individual opportunity sites. Overall, stakeholders recommended the following 8 sites for further truck parking development:

- **Site 21 (8730 Airport Road, Temple) –** The City of Temple indicated that there are no active plans for development on or around this site that might conflict with truck parking, nor are there zoning issues associated with it. The site does not pose environmental challenges or create conflicts with other modes and is practical for developing truck parking with amenities. This parcel could accommodate about 11 truck parking spaces.
- **Site 52 (Toll Bridge Road near IH-35 in Belton) –** The City of Belton noted that this site is zoned appropriately. The City is currently installing a water line in the area and has scheduled sewer installation as well.
- **Site 54 (620 W Hwy 190, Belton) –** The City of Belton does not foresee future development on or near this property that would conflict with truck parking, nor are there apparent environmental or zoning issues. The site is practical for development with amenities.
- **Site 55 (SH 95 at Mills Lane near Holland) –** Bell County indicated this site is acceptable for increased truck traffic and appears to be an old TxDOT picnic area with no restrooms. This site was also identified in the TxDOT statewide study. The parcel can accommodate about three truck parking spaces.
- **Site 56 (Northeast corner of Big Divide Road/US 190 intersection) –** Copperas Cove noted this might be the best site for new truck parking in Copperas Cove. The site can potentially provide up to 25 parking spaces.
- **Site 58 (SH 95 at Old Academy Dragstrip) –** According to Bell County this site is acceptable for increased truck traffic, although it's also near the Leon River and some pecan orchards, so care would need to be taken to prevent pollution. This site could accommodate up to 290 spaces.

- **Site 59 (9202 NW H K Dodgen Loop, Temple) –** This site, currently owned by McLane Inc., is near the industrial park and Loop 363, making it a convenient choice for truck parking. The site is also large; at nearly 20 acres, it could accommodate up to 198 truck parking spaces.
- **Site 67 (Highway 9 and Tank Destroyer Boulevard, Copperas Cove) –** Fort Hood stated that truck parking is feasible at this location and that truck traffic can move off IH-14 at the Clark Road exit if Fort Hood opens the gate at Tank Destroyer Boulevard. The site has room for about 175 spaces. Development at this site would be under Fort Hood's jurisdiction.

In addition, the City of Temple indicated that truck parking may be feasible at **Site 50 (16278 N General Bruce Drive)** because it has direct access to North Outer Loop. However, it's also in the IH-35 Gateway Zoning overlay, which has strict development standards and may not be compatible with truck parking. This site could provide up to 21 spaces.

The seven sites dismissed by stakeholders in their responses were:

- **Site 5 (SH 317 at Little Mexico Road, Temple) –** Not recommended because it's located in the floodplain which adds to development cost. The site is also not near any industrial or commercial uses and therefore probably has little demand for truck parking.
- **Site 39 (3300 S Fort Hood Street, Killeen) –** Killeen recommends against increased truck traffic here because it's close to residential/commercial areas and additional truck traffic through the central part of the city is undesirable. Traffic in the area mostly consists of passenger vehicles with high turning movements; mixing this traffic with heavy truck traffic may not be appropriate.
- **Site 51 (2500 S IH-35, Belton) –** The City of Belton stated that this site is less than two acres and therefore probably too small for a truck stop. A zoning change would also be required.
- **Site 60 (4931 S IH-35, Belton) –** According to the City of Belton, this property is scheduled to receive water and sewer service but is not zoned appropriately for truck parking.[7]
- **Site 61 (IH-35 South of Exit 287) –** Water is not available at this site and it would require a zoning change to be developed as truck parking.
- **Site 64 (US 190 at Clarke Road, Copperas Cove) –** According to Fort Hood, this site is adjacent to a road that accesses West Fort Hood and military family housing, making truck parking infeasible.
- **Site 66 (US 190 between Montague Village and College, Fort Hood) –** Site belongs to Fort Hood and truck parking is not desired.

Remaining Opportunity Sites

The TAC and FAC survey responses provided input on 22 sites, approving eight sites, dismissing eight, and marking one as a possible site. The responses left five sites unevaluated, which may nor may not be feasible. Pros and cons of these sites are provided in ***Table 8***. Sites 48 and 63 received partial survey responses but no definitive recommendation on whether they are suitable for truck parking:

- **Site 48 (Constitution Drive at MLK Blvd in Copperas Cove) –** The City of Copperas Cove noted that increased truck traffic is acceptable here, but there are also land use and zoning conflicts. This is a developed retail and service area, so land values may also be an issue.

[7] Although Belton's future land use plan designates this area for commercial use and a zoning change could be pursued, there is no guarantee such an application would be successful.

- **Site 63 (Big Divide Road at US 190 in Copperas Cove) –** The City of Copperas Cove stated that there are zoning conflicts and the property is not amenable to increased truck traffic. Site 63 is immediately across US 190 from site 56 at Big Divide Road, which was recommended as the best site in Copperas Cove for new truck parking.

These locations should be further assessed for potential negative impacts prior to development as truck parking.

The remaining three sites received no ratings from any TAC member, and so were assessed qualitatively based on desktop review of each site's location, access, and surrounding land uses.

- **Site 31 (US 190 at Robertson Ave in Copperas Cove)** is a large paved lot in a commercial area, but is also in downtown Copperas Cove, a location where additional truck traffic may not be desirable. It is a current site with observed informal truck parking.
- **Site 65 (US 190 east of Clarke Rd)** is a very large, vacant parcel but is on Fort Hood property. It was proposed as a convenient staging area for the future Joint Use Facility but lies on the south side of US 190 very similar to sites 64 and 66, which were dismissed.
- **Site 68 (IH-35 south of Shanklin Rd)** can be considered for truck parking because it is on IH-35 with no apparent land use conflicts. Note that this summary is based on the consultant team's judgment from information available and may not fully reflect 'on the ground' conditions or stakeholder preferences. It is directly across IH-35 from site 52, which was approved.

Site 69 was omitted from the assessment because it's already under development review as a new truck stop.

A tally sheet summarizing survey responses along with comments received is provided in ***Appendix E:*** Summary of Truck Parking Site Survey Responses.

Table 8: Remaining Opportunity Site Recommendations

Site ID	Location	Description	City	Pros	Cons	Recommendation
31	US 190 at Robertson Ave	East of BUS 190/Robertson Ave intersection	Copperas Cove	• Large paved lot • Zoned as commercial • Amenities nearby	• Downtown Copperas Cove; additional trucks may not be desirable	• Assess potential community impacts
48	Constitution Dr at MLK Blvd	Southeast corner of intersection	Copperas Cove	• Large vacant lot in a commercial area • Amenities nearby	• Zoning conflicts • Potential access issues	• Assess potential community impacts
63	US 190 at Big Divide Road (across US 190 from Valero Station)	Across from Big Divide Rd terminus	Copperas Cove	• Vacant land with observed informal truck parking	• Low-demand corridor • Zoning conflicts • Few amenities nearby	• Assess potential community impacts
65	US 190 West of Montague Village	East of Clements Drive	Fort Hood	• Very large vacant parcel	• Outside of KTMPO planning jurisdiction	• Coordinate with Fort Hood
68	IH-35 at Shanklin Road	West of IH-35 near Exit 289A	Salado	• On IH-35	• No amenities nearby	• Advance for consideration

Recommended Opportunity Sites for New Truck Parking

Table 9 provides a list of recommended opportunity sites for new truck parking based on stakeholder feedback and analysis conducted, recommended for potential development in addition to the 21 sites of existing authorized truck parking. The table also identifies which sites were recommended by TAC and FAC stakeholders in the survey responses. ***Figure 14*** shows the locations on a map (the numbers in the green circles are the Site IDs from ***Table 9***). Overall, this study identified 10 sites that could provide up to about 2,676 parking spaces. However, the two sites on Fort Hood property (and thus outside of KTMPO's planning jurisdiction, and which were recommended to specifically serve the planned Joint Use Facility rather than general truck parking in the region) account for 1,785 of those potential spaces, leaving 891 spaces that could be developed on the remaining sites. The supply/demand analysis found a shortfall of 343 parking spaces in 2018, which is forecasted to grow to over 800 spaces by 2045.

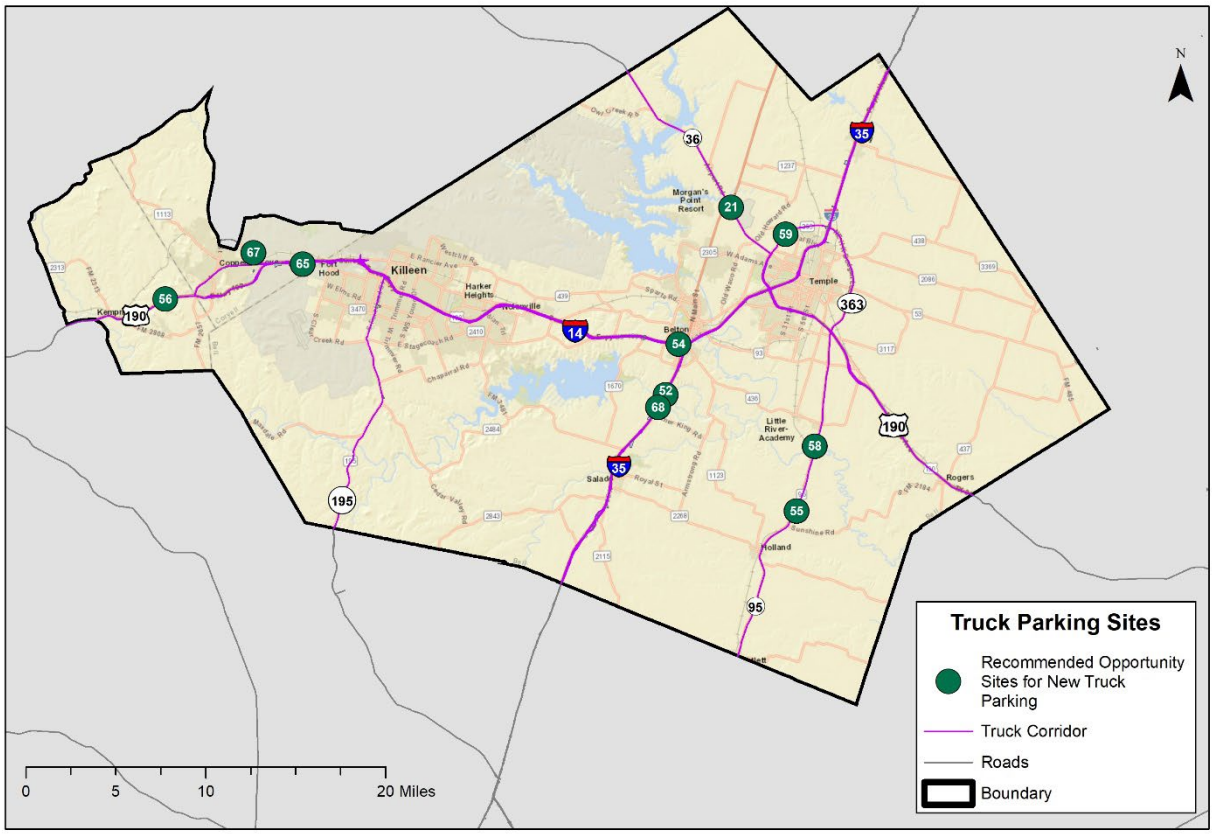
The remaining eight recommended sites consist of two publicly owned parcels, with the remainder being privately owned. It's important to note that the owners of these parcels may have other plans for them that don't involve truck parking. Some are also located on low-demand truck corridors where market demand may not justify new truck parking capacity.

In addition to the sites listed, **Site 50 (16278 N General Bruce Drive)** may be feasible for truck parking but needs further assessment for potential community impacts since it's located in the I-35 Gateway zoning overlay. Also, there is a parcel at IH-35 and Dillard Road (south of Exit 287) that is currently under re-zoning review for development as a truck stop.

Table 9: Sites Recommended for New Truck Parking

Site ID	Location	Stakeholder Recommended?	City	Ownership	Potential Number of Truck Parking Spaces
21	8730 Airport Road, south of SH 317	Y	Temple	Private	11
52	Toll Bridge Road near IH-35	Y	Belton	Private	160
54	620 W Hwy 190	Y	Belton	Private	127
55	Mills Lane at SH 95	Y	Bell County	Public	3
56	Big Divide Road at US 190	Y	Copperas Cove	Public	25
58	SH 95 at Little River Dragway	Y	Bell County	Private	290
59	9202 NW H K Dodgen Loop (at Industrial Blvd)	Y	Temple	Private	198
65	US 190 West of Montague Village (east of Clements Dr)	N	Fort Hood	Public (Department of Defense)	1,610
67	Highway 9 and Tank Destroyer Blvd	Y	Copperas Cove	Public (Department of Defense)	175
68	IH-35 at Shanklin Rd	N	Salado	Private	77

Figure 14: Recommended Sites for New Truck Parking



Truck Parking Expansion Sites

The previous sections outlined how KTMPO identified sites for potential new truck parking. It's also important to look at sites that already provide truck parking to assess opportunities to expand existing capacity and/or add amenities. ***Table 10*** lists existing truck parking locations (both formal and informal) that were identified in the supply and demand task through literature review, stakeholder outreach, and desktop review via Google Earth. This list excludes the opportunity sites for which the TAC and FAC provided feedback (see ***Table 7***), as well as those discarded by KTMPO (see ***Table 6***). The first five locations (Site IDs 2 through 9) are also identified in the TxDOT Statewide Truck Parking Study. The sites are also mapped in ***Figure 15*** (the numbers correspond to the Site IDs from ***Table 10***).

These sites have a mix of amenities. Of the 19 total sites found, 18 have restrooms, 14 sell fuel, and 12 have retail services such as a convenience store. Eight sites have a restaurant, six have a hotel, and six have WiFi. Restaurants and hotels may be on site (e.g., the McDonald's at IH-35 and 6th Street in Belton has designated truck parking spots), or they may be nearby (e.g., there is a Budget Host Inn within walking distance of the CEFCO on IH-35 south of IH-14 in Belton). Only two sites provide truck repair services.

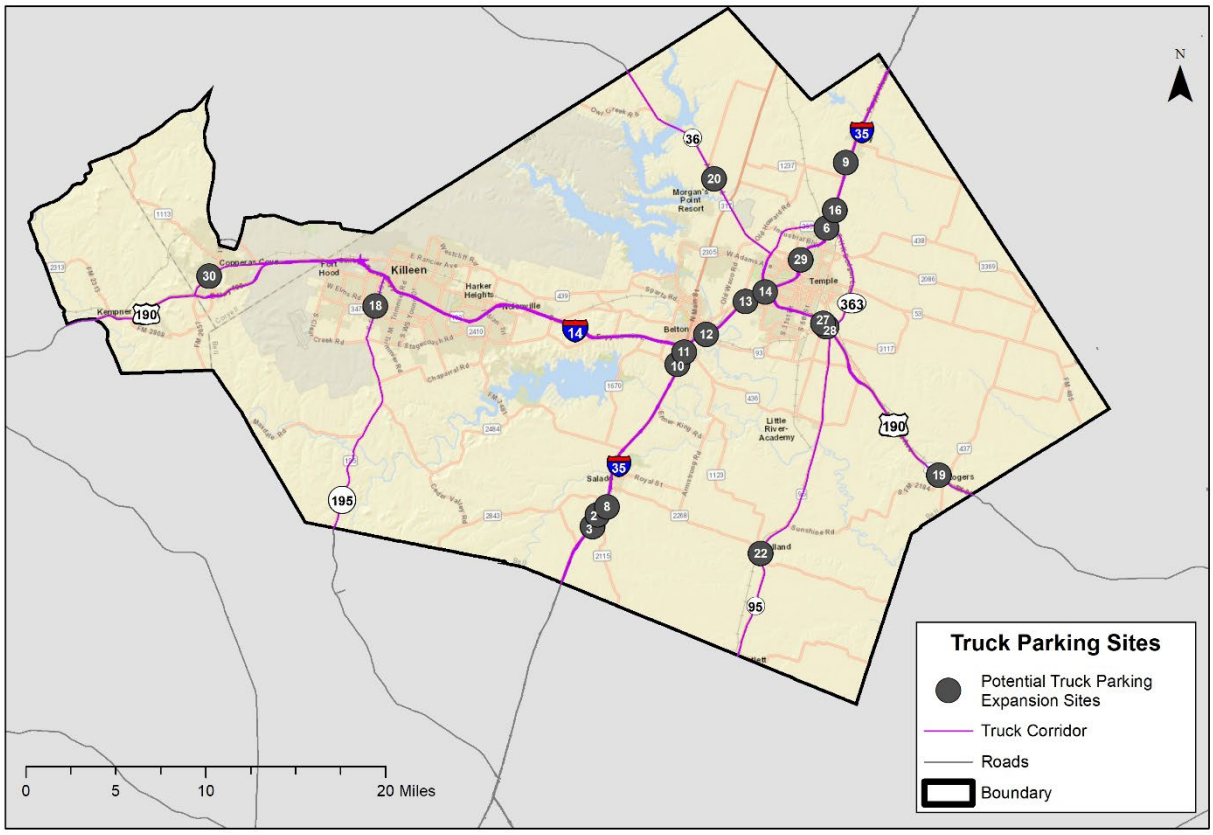
All sites except the TxDOT Bell County rest areas (Site IDs 2 and 3) are privately owned, so options for expanding parking capacity or adding amenities are subject to market forces. KTMPO may wish to coordinate with TxDOT to expand the rest areas. The rest areas have restrooms and WiFi, but no other amenities. Since truck drivers prefer sites with amenities such as restaurants, convenience stores, and showers, public-private partnerships can be considered to provide amenities that would make these sites more attractive for drivers.

Detailed profile sheets for these existing sites are provided in ***Appendix C***.

Table 10: Potential Truck Parking Expansion Sites

Site ID	Description	Location	City	Type	Identified in Statewide Study?	Adjacent Vacant Land
2	Bell County Rest Area SB	IH-35 MP 282	Salado	Formal	Y	Y
3	Bell County Rest Area NB	IH-35 MP 281	Salado	Formal	Y	Y
6	Southwest Travel Center	IH-35 at H K Dodgen Loop	Temple	Formal	Y	Y
8	JDs Travel Center	IH-35 at FM 2115	Salado	Formal	Y	Y
9	Love's Truck Stop #719	IH-35 at Lely Rd	Troy	Formal	Y	Y
10	7-11 Store	IH-35 at Loop 121	Belton	Formal	N	Y
11	CEFCO Truck Stop	IH-35 south of IH-14	Belton	Formal	N	N
12	McDonald's	IH-35 at 6th St	Belton	Formal	N	Y
13	Super 8 Motel	IH-35 N of Midway Drive	Temple	Informal	N	Y
14	Budget Inn	IH-35 S of Loop 363	Temple	Informal	N	N
16	Kyrish Truck Centers	IH-35 S of Berger Rd	Temple	Informal	N	Y
18	CEFCO 3	SH 195 at Elms Rd	Killeen	Informal	N	Y
19	Valero	US 190/SH 36 at Joe Lee Rd	Rogers	Informal	N	Y
20	CEFCO 2	SH 36 at Moffat Rd	Rural	Informal	N	Y
22	Guy's Quick Stop	SH 95 at FM 2268	Holland	Informal	N	N
27	CEFCO 1	Loop 363 at MLK Dr	Temple	Formal	N	Y
28	Conoco	Loop 363 at Dogwood Ln	Temple	Informal	N	Y
29	Days Inn	IH-35 south of Nugent Ave	Temple	Informal	N	Y
30	Hill Country Inn	US 190 at FM 116	Copperas Cove	Informal	N	Y

Figure 15: Potential Sites for Expanded Truck Parking



Recommended Truck Parking Policies

Introduction

This final chapter of the study considers information from previous chapters to generate truck parking policy recommendations. Policy recommendations were derived by reviewing system deficiencies for freight, current parking supply, optimum supply, and suggestions for expanding or developing new truck parking. A key study finding is that the KTMPO region has a demand for truck parking that is not being met. The truck parking demand analysis found a shortfall of 343 spots in 2018 which is expected to grow to 827 spaces in the future with most of the demand concentrated along the IH-35 corridor. Because of this, the policy recommendations focus on increasing the supply of truck parking and making formal parking lots more attractive and more accessible to truckers.

This chapter identifies 19 policy recommendations to help meet the demand for truck parking in the KTMPO region. The full list of policy recommendations is shown in ***Table 11***. Each policy option is characterized as KTMPO lead (policy would be developed and/or implemented mostly by KTMPO) or KTMPO support (policy would be mostly driven by other actors like TxDOT, KTMPO member jurisdictions, or the private sector). ***Table 11*** also provides a description of each policy; candidate sites to which it could be applied, if any; examples available from other studies, as available; and links to such studies with page numbers if applicable.

These recommendations are just a starting point of what KTMPO can do to improve existing and create new truck parking in the region.

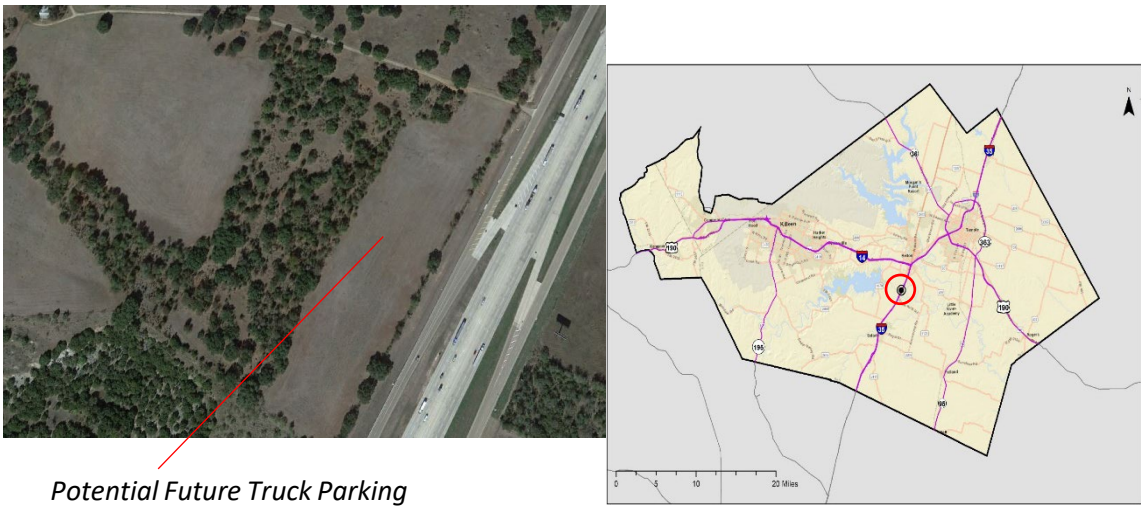
KTMPO Led Policies

These policy recommendations are ones that KTMPO would lead, although some may still require outside support for implementation (e.g., enacting design guidelines for new truck parking). However, KMTPO can consider the logistics of policy implementation immediately.

Policies include:

- **Consider the development of future truck parking sites on IH-35 –** As the primary regional truck corridor, IH-35 has the highest demand for truck parking. This study identified several vacant lots along IH-35 that might be suitable for truck parking, but there could be others. An example is Site 68 (IH-35 at Shanklin Road in Salado, see ***Figure 16***). This site wasn't specifically recommended by stakeholders in the site suitability survey, but it wasn't dismissed either. Such sites can be considered as a category because they lie along the highest demand corridor, but they are mostly private property, vacant, and have issues with zoning and infrastructure. Developing these sites will therefore need coordination among owners and local jurisdictions.

Figure 16: Vacant Parcel on IH-35 at Shanklin Road, Salado, Texas



Source: CDM Smith

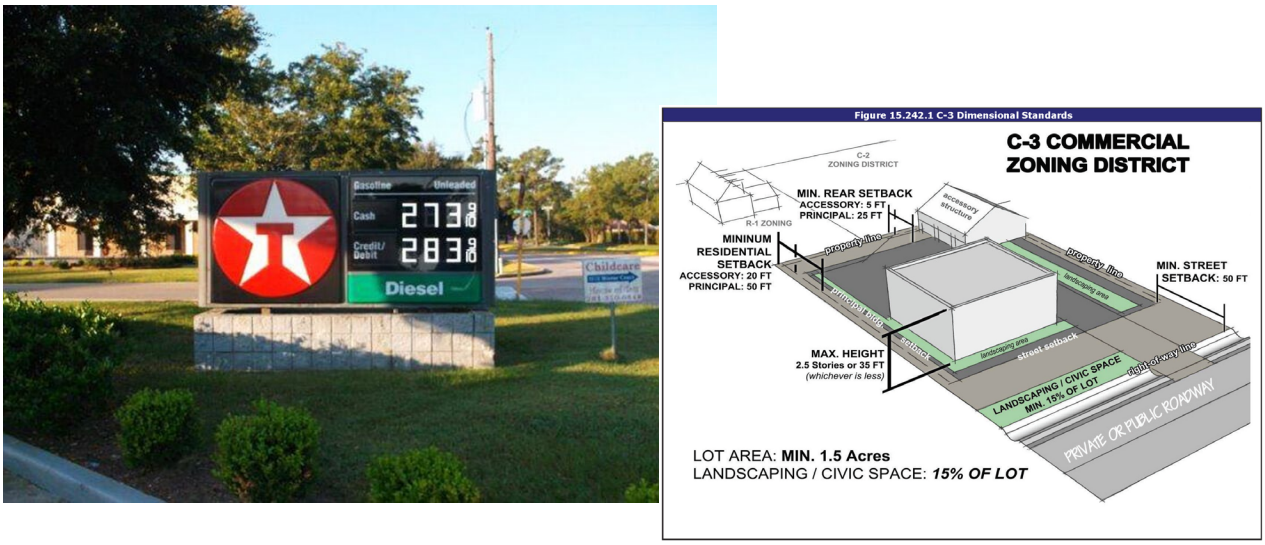
- **Consider using small lots adjacent to or with amenities –** Because IH-35 is such an important corridor, vacant land is limited and truck parking may not be the highest and best land use. However, smaller lots that are suitable can be used for truck parking, especially if there are amenities nearby. An example is the McDonald's at 6th Avenue and IH-35 in Belton (***Figure 17***), which provides eight parking spots, is located across the street from a CEFCO with diesel fuel, and features easy access to IH-35 with no land use conflicts. KTMPO can consider similar sites for use as truck parking along IH-35 and other regional freight corridors.

Figure 17: McDonald's Providing Truck Parking in Belton

Source: CDM Smith

- **Collaborate with local government to draft design guidelines for new truck parking locations –** One of the key concerns about truck parking is that it's not aesthetically pleasing and may not fit in well with surrounding development. To mitigate this concern, KTMPO could work with member jurisdictions to develop model design guidelines for truck parking. These could include several approaches, such as using monument style signs, setbacks and maximum building heights, and requiring vegetative buffers or screens to better integrate parking within the urban fabric. ***Figure 18*** shows examples of design options that could be pursued.

Figure 18: Example of Monument Style Signs and Commercial Zoning Design Guidelines



Sources: www.bakerssigns.com; St. Croix County, Wisconsin

- **Explore the further development of the identified eight opportunity sites by meeting with the parcel owners –** Eight privately owned parcels were identified as suitable new parking opportunity sites. However, the owners of these sites may have other plans for them, so it would be premature to make an official recommendation that they be developed as parking. Nonetheless, KTMPO staff could meet with the owners of these sites to explore opportunities, identify any obstacles, and otherwise continue assessing the locations.

- **Coordinate with Fort Hood on the Joint Use Facility –** As a joint military/civilian truck and rail cargo transfer center, the Joint Use Facility will generate new demand for truck parking and staging areas, potentially both on and off base. KTMPO should therefore coordinate with Fort Hood officials on plans for truck parking on and around the Joint Use Facility. Fort Hood officials noted that Site 67 (***Figure 19***) would be feasible for truck parking. Access to the site and to its parking and waiting areas will also be an infrastructure issue which may require road projects like ramps and turn lanes. Local officials recently applied for a Defense Economic Adjustment Assistance Grant that would have helped fund construction of ramps from SH 9 onto Tank Destroyer Boulevard. The grant wasn't funded, but the need remains, especially if the Joint Use Facility attracts significant truck activity.

Figure 19: Site 67 Near the Planned Joint Use Facility

Source: CDM Smith

- **Focus on low-cost amenities at existing or new parking locations –** The National Coalition on Truck Parking identified several low-cost options for transportation system owners and operators to provide additional truck parking.[8] These include alternative methods of trash removal, low-cost surface material, vault toilets, and safety measures like emergency phones or fire extinguishers. These approaches can reduce the initial capital investment and ongoing maintenance costs.

KTMPO Support Policies

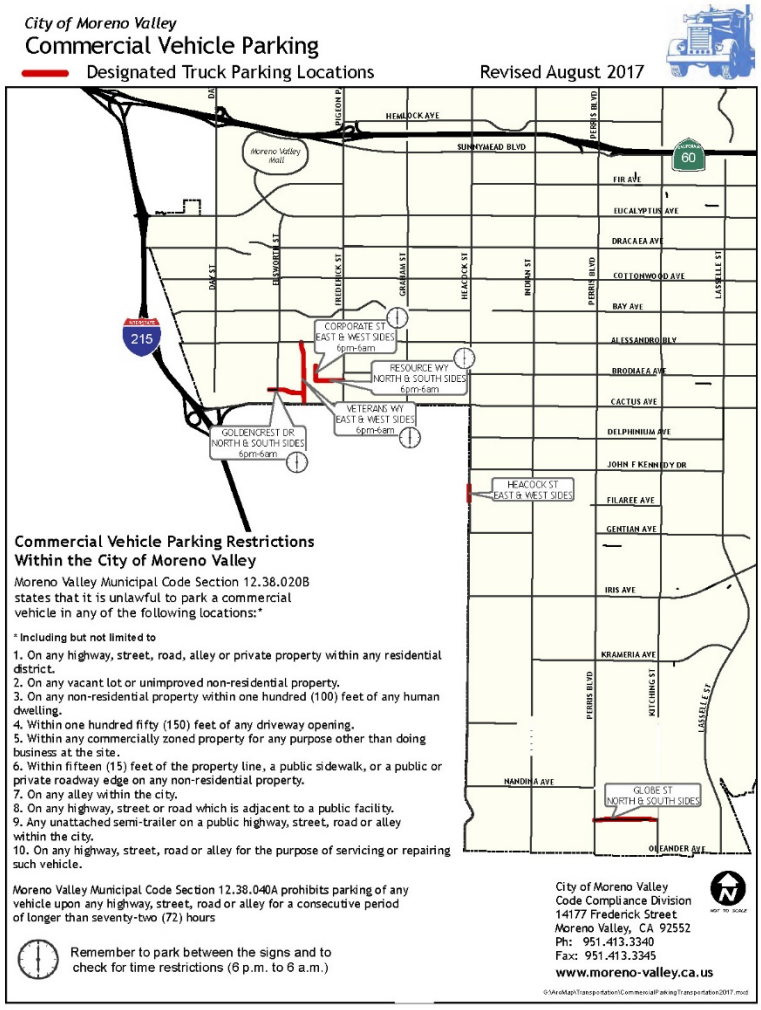
These policy recommendations would be led by other entities with KTMPO support and participation. Entities may include TxDOT, local government, or P3 (public-private partnerships). KTMPO should strategically think about who or whom within the agencies/businesses would contribute to the success of the policy being implemented and has knowledge or experience around the issue of truck parking in the region.

Policies include:

- **Designate areas for long term street parking or overnight parking –** Street parking could be allowed or even encouraged in appropriate places, such as near industrial parks or other freight-intensive land uses. This is a KTMPO support policy since code changes to allow for such parking would ultimately be up to member jurisdictions, but KTMPO could suggest logical locations. This option may be appropriate for sites like Industrial Boulevard, which was suggested by a TAC member. There are also suggestions in the trucking industry for limited truck parking alongside freeway on ramps (parking on off ramps is not appropriate for safety reasons due to high-speed traffic). Designated parking areas should be coupled with signage to advise drivers where and when parking is permitted. ***Figure 20*** is a map from the City of Moreno Valley, California showing permitted on-street parking locations in that city.

[8] FHWA, *National Coalition on Truck Parking: Parking Capacity Working Group – Considerations for Maintaining Low-cost Truck Parking Facilities*, retrieved February 16, 2021 from https://ops.fhwa.dot.gov/freight/infrastructure/truck_parking/workinggroups/parking_capacity/product/considerations.htm

Figure 20: Example of Designated On-Street Truck Parking for Moreno Valley, California



Source: City of Moreno Valley, California

- **Create incentives for businesses if they allow for truckers to park in their lots –** KTMPO could partner with jurisdictions to develop incentives for businesses that permit drivers to park in their lots during off-hours. An example would be creating a tax credit for companies that allow for such use.

- **Consider levying a local fuel tax for funds to build new truck parking –** A local fuel tax could be one avenue for raising money to support infrastructure investments around new parking facilities. Funds raised would need to be used for public infrastructure, but such investment might encourage private sector truck parking development.

- **Leverage existing state agency grant programs to promote new truck parking on IH-35 –** There are state grant programs that might apply to new parking development, if it can be shown the new facilities will meet the goals of the grants. An example is the Texas Economic Development Website, which helps fund projects that demonstrate economic benefits. The Defense Economic Adjustment Assistance Grant program may also be appropriate for projects on or near Fort Hood.

- **Identify large venue parking lots that can be used for truck parking –** Many large venues feature large, paved parking lots that are underused when the venue isn't hosting an event. The Mayborn Civic Center

was identified early in this study as such a site, though it was later dismissed. Still, there may be other suitable venues in the region where truck parking could be permitted. KTMPO could work with member cities to assess the feasibility of allowing parking at such sites.

- **Reduce liability for businesses that permit truck parking on their property –** Truck parking can pose a risk to businesses that allow for other firms' trucks to park on their property. To mitigate this, changing state law to indemnify the liability created or establishing an insurance pool might encourage big box stores and shopping centers to take on truck parking.

- **Establish partnerships with freight generating facilities and promote the development of onsite truck parking –** As freight activity nodes, large freight generators like industrial parks and intermodal transfer centers are logical candidates for additional parking capacity since they're unlikely to have incompatible land uses nearby and the infrastructure is probably designed with large vehicles in mind anyway. This policy may apply to the Cameron Industrial Park.

- **Explore the creation of paid truck parking sites –** KTMPO, TxDOT, and local truck stop operators could look for a private partner to develop and deploy a technology-enabled truck parking site where drivers would be able to reserve a truck parking spot via a mobile app or web site. The Oasis Trucking Center in Detroit is an example cited in the *Texas Statewide Truck Parking Study*.

- **Partner with TxDOT to expand capacity and amenities at TxDOT owned rest areas –** KTMPO may wish to explore options for improving the safety rest areas in Salado in coordination with TxDOT. These sites were identified as high need for new truck parking capacity in the statewide study, with unauthorized parking at the rest areas indicating significant unmet demand. If allowed by law and regulation, TxDOT could implement a public-private partnership arrangement like the Safe Phone Zones in Arizona, which generates revenue that can be reinvested in rest areas, including for truck parking.

- **Develop partnerships with TxDOT and private truck parking locations that need a high level of improvement or amenities –** The FHWA Interstate Oasis Program allows for private sector participation in creating travel center facilities near Interstate highways but not within the highway right of way. Privately operated Oasis facilities must provide amenities including truck parking and adhere to contractual standards regarding cleanliness and operating hours. In exchange, state DOTs may provide signage directing travelers to the Oases. ***Figure 21*** is the Belvidere Oasis, located on the Illinois Tollway east of Rockford, Illinois. It features truck parking and fueling services, convenience stores, restrooms, and multiple dining options.

Figure 21: Belvidere Oasis on the Illinois Tollway

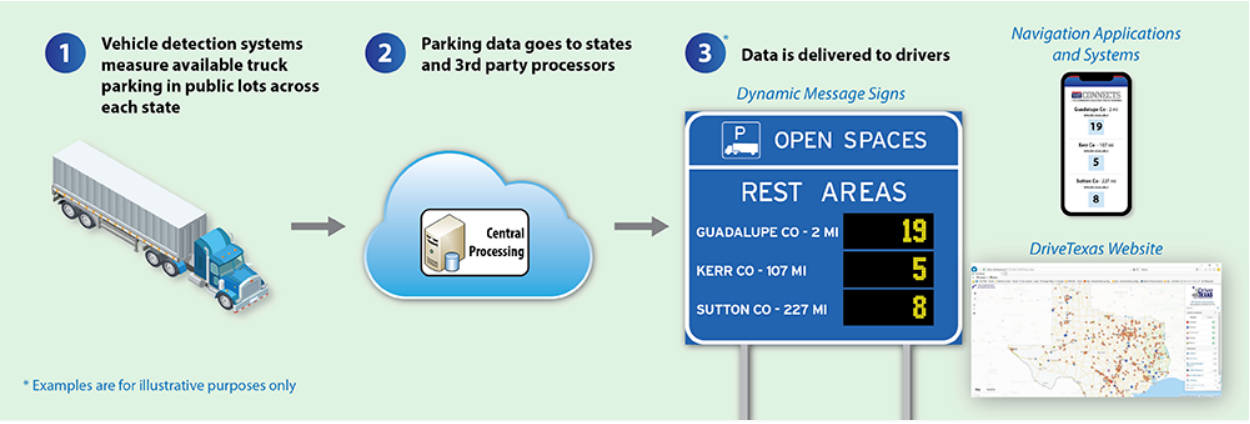
Sources: Google Maps, www.tollwayoases.com

- **Support TxDOT in expanding or upgrading existing parking at pull-offs or picnic areas –** In the statewide parking study, TxDOT identified picnic areas and pull-offs that may be candidates for additional public truck parking. KTMPO should collaborate with TxDOT to identify such sites in the MPO region and explore options for improving or expanding them. Site 55 (the small pull-off area on SH 95 in Holland) may be a candidate for such improvements.

- **Collaborate with TxDOT to develop and maintain awareness campaigns –** KTMPO could also partner with TxDOT to identify underused truck parking (for instance, at freight generators or unused weigh stations), then develop an information campaign to promote driver awareness of available parking. The information gleaned could eventually be included in a truck parking technology deployment, if TxDOT and its partners deploy such a system.

- **Collaborate with TxDOT on Truck Parking Technology Solutions –** The *Texas Statewide Truck Parking Study* recommended that TxDOT deploy truck parking availability systems (TPAS). TPAS are intelligent transportation systems designed to gather, fuse, and disseminate real-time information on truck parking availability at connected sites. ***Figure 22*** shows how a TPAS might work. Information can be distributed to drivers via multiple means including dynamic message signs, mobile apps, and traveler information web portals. TxDOT is currently coordinating with California, Arizona, and New Mexico to deploy this technology for 37 public truck parking sites on IH-10 from California to Texas. If TxDOT invests in such a system for IH-35, KTMPO can support the effort by coordinating stakeholder involvement and recommending potential implementation sites beyond the Salado rest areas.

Figure 22: Example Truck Parking Availability System



Source: I-10 Corridor Coalition

Table 11: Recommended Truck Parking Policies

Lead/Support	Policy	Description	Candidate Sites	Example	Source
KTMPO Lead	Consider the development of future truck parking sites on IH-35.	Conduct further analysis to determine if there are any other locations along IH-35 that can be used for truck parking. In the coming years, KTMPO should keep in mind that there is a significant demand for truck parking in the region along the IH-35 corridor.	51, 52, 60, and 68	N/A	
KTMPO Lead	Consider using all lots adjacent to or with amenities for truckers to use as truck parking, even if the lots are small.	Consider all lots that are viable for truck parking (close to highway, amenities, zoned correctly, etc.). Even if only one or two spaces can be developed, it will help meet the demand.	55	Municipal truck parking was created on industrial land use in Weed, California. It only accommodates 30 trucks, but there have been fewer complaints about unauthorized truck parking since it was created. Truck stop maintenance is provided by the Pilot Travel Center across the street, which also provides amenities such as food, fuel, and lodging within walking distance. In Belton, there is a McDonalds along IH-35 that has around eight truck parking spots. The spots help alleviate some of the truck parking demand along IH-35. Since the spots are at a McDonalds, those who park there can access amenities such as food and restrooms. There is also a CEFCO and tire repair shop within walking distance.	Minnesota Statewide Truck Parking Plan (Weed, CA example) (Page 79)
KTMPO Lead	Collaborate with local governments to draft design guidelines for new truck parking locations.	Develop design guidelines for new truck parking sites to ensure that they are aesthetically pleasing. The design guidelines can include vegetative buffers, sufficient lighting, signage type, and more.		Aesthetics was an issue mentioned in the Killeen interview. To combat the negative aesthetics sometimes associated with truck parking, design guidelines can be developed and the FHWA Freight and Land Use Handbook should be consulted.	The FHWA Freight and Land Use Handbook
KTMPO Lead	Explore the further development of the identified eight opportunity sites by meeting with the parcel owners.	Meet with the parcel owners for the eight opportunity sites identified as the most viable for truck parking, to see if they would be willing to develop truck parking and any barriers they may need to overcome to do so. This should be done after KTMPO develops incentives that encourage private property owners to allow for/build truck parking.	21, 52, 54, 58, 59, 65, 67, 68	N/A	
KTMPO Lead	Coordinate with Fort Hood on the Joint Use Facility for how truck parking can be added there.	Discuss with Fort Hood how truck parking can be implemented in the new Joint Use Facility and if there are any barriers to having parking there, since the area may be restricted or they may not want an increase in truck traffic to the area.	67	N/A	

Lead/Support	Policy	Description	Candidate Sites	Example	Source
KTMPO Lead	Focus on the development of low-cost amenities (trash removal, surface material, toilets, safety and security) for new and existing truck stops.	Low-cost amenities should be added to existing public truck stops where appropriate. For new truck parking locations, these amenities need to be added to the plans. It will be a standard that all truck parking sites in the region will adhere to.	2 and 3	N/A	Nevada Truck Parking Implementation Plan (Page 23)
KTMPO Support	Designate areas for long term street parking or overnight parking.	In addition to formal truck parking locations, these sites would be for long term and overnight parking only. These sites would be much smaller only allowing a few trucks to park there. However, if it is possible to add multiple sites like this across the region, some of the overnight parking demand can be met.		In Moreno Valley, California, there is truck parking along specific roadways. Some of these spots are for overnight only. Trucks are allowed to park in these locations for a maximum of 72 hours. In Carson, California, there are also areas of the city where trucks can park for up to 72 hours. There are also designated specific truck routes.	Minnesota Statewide Truck Parking Plan (Page 79)
KTMPO Support	Collaborate with local government to create incentives for businesses if they allow truckers to park in their lots overnight or for an extended period.	Develop incentives such as tax credits that can be used to persuade businesses to develop/allow for truck parking.		A draft bill in New York State would have created tax incentives for truck parking. The bill would award truck stops, travel plazas, shipping and receiving facilities a tax credit varying from 20-50 percent. The bill was proposed in 2013, but never passed. However, something similar can be taken up in the KTMPO region.	National Association of Truck Stop Owners (NATSO)
KTMPO Support	Consider levying a local fuel tax for funds to build new truck parking.	If funds are needed to build new truck parking or improve on existing truck parking, levying a local fuel tax should be considered. The fuel tax revenue would be used for the creation, improvement, and maintenance of truck parking facilities.		Love's Truck Stop partnered up with the City of Decatur, IL to create a truck stop. To obtain the funds, the city levied a five-cent gas tax and 1 cent diesel tax. The revenue that was generated within five months was around $750,000. The revenue will be used to improve roads in the area to better handle trucks; in return, Love's will construct a new truck stop there which will bring employment and other benefits to the city.	Federal Highway Administration (FHWA) National Coalition on Truck Parking: Funding, Finance, and Regulations Working Group - Public-Private Partnerships (P3) Examples and Considerations
KTMPO Support	Collaborate with local and state government to leverage existing state-agency grant programs to provide private sector resources to build new parking along IH-35.	It is important to find funding opportunities for developing, maintaining, and operating truck parking locations. Public private partnerships and federal funding should be leveraged to fill the gap between state and local funding.	52 and 68	The Texas Economic Development Website provides grant opportunities for economic development. https://gov.texas.gov/business/page/organization	Florida Statewide Truck Parking Study (Page 56)
KTMPO Support	Work with local government to identify large venue parking lots that can be used for truck parking.	There are many large venues in the area such as the Mayborn Civic Center, where truck parking can be considered in the future when the venue is not in use. This can be catalyzed through a land suitability analysis.		The Mayborn Civic Center and other large venues in the area can be considered for truck parking when not in use for other purposes.	Florida Statewide Truck Parking Study (Page 56)
KTMPO Support -Legislation	Consider a change in state law to indemnify the liability created or establish an insurance pool that would allow	For big box stores to want to allow trucks from other companies to park, there would need to be a change in their liability insurance. By doing this, they may be		N/A	Minnesota Statewide Truck Parking Plan (Page 78)

Lead/Support	Policy	Description	Candidate Sites	Example	Source
	for big box stores and shopping centers to be more willing to take on truck parking since it poses a risk.	more willing to allow for truck parking since they are not liable.			
KMTPO Support - P3	Establish partnerships with freight generating facilities to promote the development of onsite truck parking	Developing partnerships with industries such as those in the Cameron Industrial Park (Cameron, Texas) to develop a plan for increasing truck parking and providing truck parking to trucks that are not affiliated with the companies at the industrial park.		The State of Florida is looking at developing a "Friendly Truck Parking Network" that would work with freight generating facilities to see if it's appropriate for trucks to park there and it would help guarantee truck parking.	Florida Statewide Truck Parking Study (Page 56)
KTMPO Support - P3	Explore the creation of paid truck parking sites through partnering with private for-profit companies such as Truck Specialized Parking Services (TSPS) for drivers to be able reserve a truck parking spot.	The paid parking scheme would allow truck drivers to reserve their parking spot by paying a fee. Revenue would be made through these user fees; however, amenities can be added such as laundry, food, showers, and more. These can also generate revenue.		The Oasis Trucking Center in Detroit, Michigan has partnered with TSPS, a firm that implements commercial truck parking solutions. There is a mobile reservation system along with amenities such as shower, food, laundry, and on-site security. Hourly parking starts from $3.00- and 24-hour parking is $20.00.	Texas Statewide Truck Parking Study (Page 105) https://www.rigrest.com/facilities/oasiscentral/
KTMPO Support - Partner with TxDOT	Develop a partnership with TxDOT to expand capacity and amenities at TxDOT owned rest areas.	Develop a partnership with TxDOT to identify where an expansion of capacity and amenities should be undertaken. Once the relationship between KTMPO and TxDOT is established, private partnerships can also be undertaken to fund the identified capacity and amenity improvements.	2 and 3	Arizona and various other states have rest area sponsorships. These sponsorships allow for revenue to be generated at rest areas. In Arizona, there is a public private partnership with Geico through the creation of Safe Phone Zones at rest areas. Geico is responsible for the maintenance of the rest area, but Arizona DOT still owns it. The goal of the safe phone zone is to have the driver pull off the highway and use the phone in the rest area. While they are doing so, they also can spend money at the rest area. The revenue can be used for truck parking capacity or amenity improvement.	Safe Phone Zones
KTMPO Support - Partner with TxDOT	Develop partnerships with TxDOT and private truck parking locations that need a high level of improvement or amenities.	TxDOT would partner with private truck stops and provide support (funding or advertisements) for improvements such as adding new amenities or fixing dilapidated structures. In return, the private facility would need to conform to a certain set of rules, such as hours of operation, amenities offered, and being willing to undergo TxDOT inspections.	2, 3, 11, 18	The Interstate Oasis Program provides funds for facilities near interstate highways, but not in the right of way. Interstate Oases are required to provide truck parking along with other amenities. In Utah, several Interstate Oases have been developed at truck parking sites that were requiring a significant amount of maintenance. The state went in and provided signs to advertise the Oases, but the location had to meet certain requirements such as being open 24 hours and maintaining a certain level of cleanliness. In Illinois, there are Toll Road Oases that provide amenities such as food courts, WiFi, fuel for truckers, and more.	Federal Highway Administration (FHWA) National Coalition on Truck Parking: Funding, Finance, and Regulations Working Group - Public-Private Partnerships (P3) Examples and Considerations https://tollwayoases.com/

Lead/Support	Policy	Description	Candidate Sites	Example	Source
KTMPO Support - Partner with TxDOT	Collaborate with TxDOT on how they should expand and upgrade existing truck parking at pull-offs or picnic areas.	As identified in the Texas Statewide Truck Parking Study, TxDOT is looking to expand and upgrade existing truck parking pull-offs or picnic areas. For TxDOT to understand KTMPO's specific need for expansion in these TxDOT owned areas, a relationship between the two entities should be formed.	55	N/A	Texas Statewide Truck Parking Study (Page 101)
KTMPO Support - Partner with TxDOT	Collaborate with TxDOT to develop and maintain awareness campaigns to inform truck drivers, freight generators, and facility managers of underutilized truck parking.	A possible addition to the Don't Mess with Texas Littering Campaign could address the issue of truck parking on a statewide level. However, for truck drivers, freight generators, and facility managers programs should include an informational campaign on truck parking locations that are underutilized in the area. In the future a truck parking availability system could be created.		In Florida, truck drivers are currently being informed about "safe zones" at weigh stations they can park at. Florida is looking at incorporating this into their current Truck Parking Availability System.	Florida Statewide Truck Parking Study (Page 55)
KTMPO Support - Partner with TxDOT	Collaborate with TxDOT on truck parking technology solutions	Support TxDOT in efforts to develop and/or deploy a truck parking availability system on the IH-35 corridor.	2, 3	TxDOT is developing a TPAS on IH-10 as part of a multistate effort funded by a USDOT grant. The goal is to provide drivers with real-time information on space availability via multiple means including variable message signs, mobile apps, and web sites.	Texas Statewide Truck Parking Study (page 107)

N/A: NOT APPLICABLE

Source: CDM Smith

Appendix A: Completed Surveys and Interviews

KTMPO KEY TO CONNECTIVITY

KTMPO KILLEEN-TEMPLE metropolitan planning organization

Survey for Freight Origin/Destination Sites

Connectivity is a key issue for the region – connecting the transportation network, connecting our planning policies, and connecting with you! The Killeen-Temple Metropolitan Planning Organization (KTMPO) is gathering information to help guide our transportation planning for the Truck Transportation & Parking Study. Please take a minute to connect with us by filling out this survey on truck movements and parking requirements in our region. ***Thank you for your help!***

Truck Parking Questions

1. **When is the peak time for trucks arriving at your site?**
   ◯ **Morning (7:00 am - 11:59 am)**

2. **Do truckers arriving at your site need off-site parking due to delivery times or staging? If so, where do they park?**
   They park at a truck stop. They have a truck stop in Cameron

3. **Do you allow truckers to park at your facility overnight?**
   Yes

4. **Do you have any amenities available to truckers parking at your site such as restrooms, food, waiting area, or others?**
   No

5. **Do you know of any regulatory issues that prevent more truck parking from being built?**
   No

6. **Who else should we talk to about truck parking in the region?**
   Not off the top of her head

KTMPO KEY TO CONNECTIVITY

Survey for Freight Origin/Destination Sites

Freight Operational Questions

7. **Are there any barriers or bottlenecks in the region which impact truckers serving your site?**

What	Where/How
Roadway	No
Bridges	No
Rail	No
Intermodal Connectors or Transfer Sites	No
Other: _____	No

8. **Safety – Are there any freight-related safety concerns for you or truckers serving your site (what and where)?**
   No

9. **Effects – How do these challenges affect your business?**
   NA

10. **Policy/Programmatic/Organizational – How do public policies or organizations affect your business?**
    Not much

11. **Summary – Is there anything else you would like to tell us which would help explain truck parking or other freight issues that you face?**
    Located in industrial park of Cameron and a little facility. Since they are a small business their facility can accommodate their truckers

KTMPO KEY TO CONNECTIVITY

KTMPO KILLEEN-TEMPLE metropolitan planning organization

Survey for Freight Origin/Destination Sites

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Truck Parking Questions

1. **When is the peak time for trucks arriving at your site?**
   - ◯ Morning (7:00 am - 11:59 am)
   - ◯ Afternoon (12:00 pm - 6:59 pm)
   - ◯ Night (7:00 pm - 10:59 pm)
   - ◯ Overnight (11:00 pm - 6:59 am)

2. **Do truckers arriving at your site need off-site parking due to delivery times or staging? If so, where do they park?**
   We are a freight railroad and have little if no truck traffic in our daily routine.

3. **Do you allow truckers to park at your facility overnight?**
   No. There is no need for that arrangement

4. **Do you have any amenities available to truckers parking at your site such as restrooms, food, waiting area, or others?**
   NONE

5. **Do you know of any regulatory issues that prevent more truck parking from being built?**
   No. The Temple industrial Park is very truck accessible and ample parking.

6. **Who else should we talk to about truck parking in the region?**
   Mars Petcare, USA ; Buzzi Unicem ; McLane Foods ; PFG Company ; Walmart Distribution

Freight Operational Questions

7. **Are there any barriers or bottlenecks in the region which impact truckers serving your site?**

What	Where/How
Roadway	
Bridges	
Rail	
Intermodal Connectors or Transfer Sites	
Other: _____	

8. **Safety – Are there any freight-related safety concerns for you or truckers serving your site (what and where)?**
   None

9. **Effects – How do these challenges affect your business?**
   N/A

10. **Policy/Programmatic/Organizational – How do public policies or organizations affect your business?**
    This railroad's customers are rail and truck dependent. One cannot exist without the other. Having a transportation plan/infrastructure that supports both rail and truck is vital.

11. **Summary – Is there anything else you would like to tell us which would help explain truck parking or other freight issues that you face?**

_____

_____

_____

_____

KTMPO KEY TO CONNECTIVITY

Survey for Freight Origin/Destination Sites

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Truck Parking Questions

1. **When is the peak time for trucks arriving at your site?**
   - ☑ Morning (7:00 am - 11:59 am)
   - ○ Afternoon (12:00 pm - 6:59 pm)
   - ○ Night (7:00 pm - 10:59 pm)
   - ☑ Overnight (11:00 pm - 6:59 am)

2. **Do truckers arriving at your site need off-site parking due to delivery times or staging? If so, where do they park?**
   YES park on road in front of store due to limited parking.

3. **Do you allow truckers to park at your facility overnight?**
   NO

4. **Do you have any amenities available to truckers parking at your site such as restrooms, food, waiting area, or others?**
   restroom and food

5. **Do you know of any regulatory issues that prevent more truck parking from being built?**
   NO

6. **Who else should we talk to about truck parking in the region?**

KTMPO KEY TO CONNECTIVITY

Survey for Freight Origin/Destination Sites

Freight Operational Questions

7. Are there any barriers or bottlenecks in the region which impact truckers serving your site?

What	Where/How
Roadway	
Bridges	
Rail	
Intermodal Connectors or Transfer Sites	
Other: _____	not enough parking available

8. <u>Safety</u> – Are there any freight-related safety concerns for you or truckers serving your site (what and where)?

NO

9. <u>Effects</u> – How do truck parking challenges affect your business?

They can not park here not enough room

10. <u>Policy/Programmatic/Organizational</u> – How do public policies or organizations affect your business?

11. <u>Summary</u> – Is there anything else you would like to tell us which would help explain the truck parking issues that you face?

Not enough room

Please feel free to provide your contact information:

- ☑ If you want us to contact you with the final document when this study is complete
- ☐ If you would like us to contact you to give you additional information about the study
- ☐ If you would like us to contact you so you can give us additional information

Store0045@cefcostores.com

KTMPO KEY TO CONNECTIVITY

Survey for Freight Origin/Destination Sites

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Truck Parking Questions

1. **When is the peak time for trucks arriving at your site?**
   - ☑ Morning (7:00 am - 11:59 am)
   - ○ Afternoon (12:00 pm - 6:59 pm)
   - ○ Night (7:00 pm - 10:59 pm)
   - ○ Overnight (11:00 pm - 6:59 am)

2. **Do truckers arriving at your site need off-site parking due to delivery times or staging? If so, where do they park?**
   We have plenty of room to accommodate trucks on site that are making deliveries or picking up from our stores.

3. **Do you allow truckers to park at your facility overnight?**
   No.

4. **Do you have any amenities available to truckers parking at your site such as restrooms, food, waiting area, or others?**
   There isn't a need at our place of business for truck drivers to have such facilities. Their time here is usually no longer than 30 minutes.

5. **Do you know of any regulatory issues that prevent more truck parking from being built?**
   No, its not something that I follow,

6. **Who else should we talk to about truck parking in the region?**

KTMPO KEY TO CONNECTIVITY

Survey for Freight Origin/Destination Sites

Freight Operational Questions

7. Are there any barriers or bottlenecks in the region which impact truckers serving your site?

What	Where/How
Roadway	Mapping is an issue specifically in our area of Nolanville on both sides of Interstate-14.
Bridges	Roads and addresses need to be updated for GPS purposes. It can be hard for drivers to find
Rail	places that don't map accurately. This has been a problem for years.
Intermodal Connectors or Transfer Sites	
Other: _____	

8. Safety – Are there any freight-related safety concerns for you or truckers serving your site (what and where)?

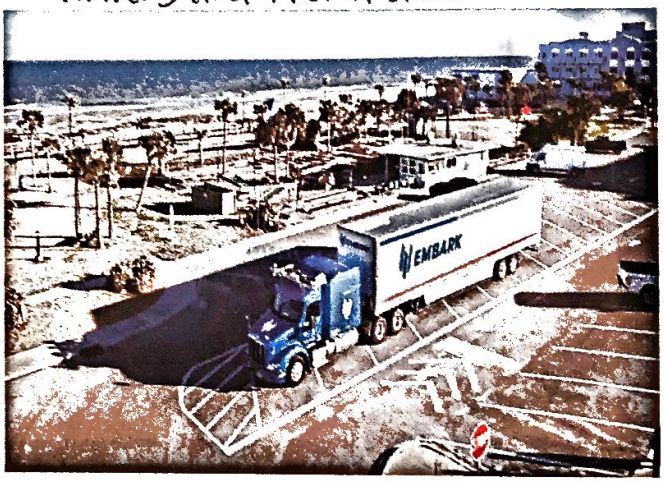
No

9. Effects – How do truck parking challenges affect your business?

We don't have parking issues at our business. We also don't allow trucks to stay and park on our property. We are a day time operation and only have deliveries dropped off by big trucks. The only trucks that park onsite are the ones we own.

10. Policy/Programmatic/Organizational – How do public policies or organizations affect your business?

You would need to be more specific as to what policy or organizations you are speaking of, there are many rules and regulations we must follow as Commerical drivers and a retail store.



11. Summary – Is there anything else you would like to tell us which would help explain the truck parking issues that you face?

We don't have truck parking issues, However we are often asked about truck parking from truck drivers. These are people just looking for a place to park over night or over the weekend when they are home here locally. We don't allow it because of the liability Concerns on our Property.

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- ○ If you want us to contact you with the final document when this study is complete
- ○ If you would like us to contact you to give you additional information about the study
- ○ If you would like us to contact you so you can give us additional information

KTMPO KEY TO CONNECTIVITY

Survey for Freight Origin/Destination Sites

Connectivity is a key issue for the region – connecting the transportation network, connecting our planning policies, and connecting with you! The Killeen-Temple Metropolitan Planning Organization (KTMPO) is gathering information to help guide our transportation planning for the Truck Transportation & Parking Study. Please take a minute to connect with us by filling out this survey on truck movements and parking requirements in our region. ***Thank you for your help!***

Truck Parking Questions

1. **When is the peak time for trucks arriving at your site?**
   - ● Morning (7:00 am - 11:59 am)
   - ● Afternoon (12:00 pm - 6:59 pm)
   - ○ Night (7:00 pm - 10:59 pm)
   - ○ Overnight (11:00 pm - 6:59 am)

2. **Do truckers arriving at your site need off-site parking due to delivery times or staging? If so, where do they park?** No. Trucks come in to load and offload containers. No offsite needed.

3. **Do you allow truckers to park at your facility overnight?** No. Only our trucks are on the property.

4. **Do you have any amenities available to truckers parking at your site such as restrooms, food, waiting area, or others?** When trucks arrive w/ our daily inventory we do offer them a restroom to use, cold bottle of water, and sitting area in office if needed. Due to Covid limited access to office

5. **Do you know of any regulatory issues that prevent more truck parking from being built?**

   No.

6. **Who else should we talk to about truck parking in the region?**

   Not sure. Maybe ABC OR someone w/ alot of freight incoming

KTMPO KEY TO CONNECTIVITY

KTMP

Survey for Freight Origin/Destination Sites

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Truck Parking Questions

1. **When is the peak time for trucks arriving at your site?**
   - (●) Morning (7:00 am - 11:59 am)
   - ( ) Afternoon (12:00 pm - 6:59 pm)
   - ( ) Night (7:00 pm - 10:59 pm)
   - ( ) Overnight (11:00 pm - 6:59 am)

2. **Do truckers arriving at your site need off-site parking due to delivery times or staging? If so, where do they park?**

   No

3. **Do you allow truckers to park at your facility overnight?**

   No

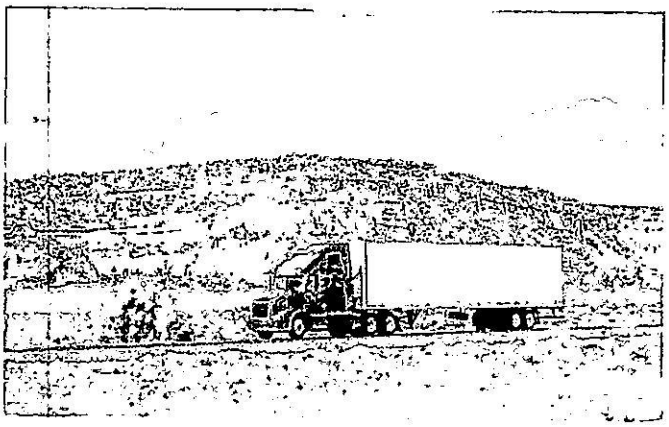
4. **Do you have any amenities available to truckers parking at your site such as restrooms, food, waiting area, or others?**

   Restroom

5. **Do you know of any regulatory issues that prevent more truck parking from being built?**

   No

6. **Who else should we talk to about truck parking in the region?**



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KTMPO KEY TO CONNECTIVITY

Survey for Freight Origin/Destination Sites

Freight Operational Questions

7. **Are there any barriers or bottlenecks in the region which impact truckers serving your site?**

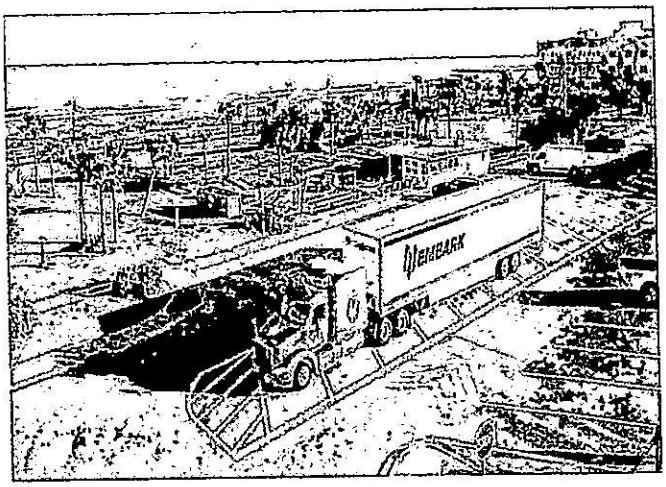
What	Where/How
Roadway	
Bridges	
Rail	
Intermodal Connectors or Transfer Sites	
Other: _____	

8. **<u>Safety</u> – Are there any freight-related safety concerns for you or truckers serving your site (what and where)?**

Current Construction of I-14

9. **<u>Effects</u> – How do truck parking challenges affect your business?** They Don't

10. **<u>Policy/Programmatic/Organizational</u> – How do public policies or organizations affect your business?**



11. **<u>Summary</u> – Is there anything else you would like to tell us which would help explain the truck parking issues that you face?**

Please feel free to provide your contact information:

- ◯ If you want us to contact you with the final document when this study is complete
- ◯ If you would like us to contact you to give you additional information about the study
- ◯ If you would like us to contact you so you can give us additional information

KTMPO KEY TO CONNECTIVITY

Survey for Law Enforcement

Connectivity is a key issue for the region – connecting the transportation network, connecting our planning policies, and connecting with you! The Killeen-Temple Metropolitan Planning Organization (KTMPO) is gathering information to help guide our transportation planning for the Truck Transportation & Parking Study. Please take a minute to connect with us by filling out this survey on truck movements and parking requirements in our region. ***Thank you for your help!***

1. **At what times do you see trucks illegally parked? (List days of the week, times, frequency)**

   Evenings and weekends

2. **Does illegal truck parking affect congestion or safety?**

   Yes when on roadways or near intersections.

3. **Do you see any regulatory, safety, or practical issues to using a vacant parking lot for truck parking?**

   Permission from property owner, zoning issues in some areas, otherwise may or may not be issue.

4. **Do you see owner/operators park trucks at their homes? Does this have any congestion or safety effects?**

   Yes and it does in densely populated residential areas.

5. **Do you see trucks operating or parking on local roads leading to industrial sites? Please list or mark on the map.**

   Yes, Industrial/Commercial Business Areas.

6. **Are there any other congestion or safety concerns related to truck parking?**

   Not on a regular basis but occasionally when parked in street.

7. **<u>Summary</u> – Is there anything else you would like to tell us which would help explain the truck parking issues that you face?**

   N/A

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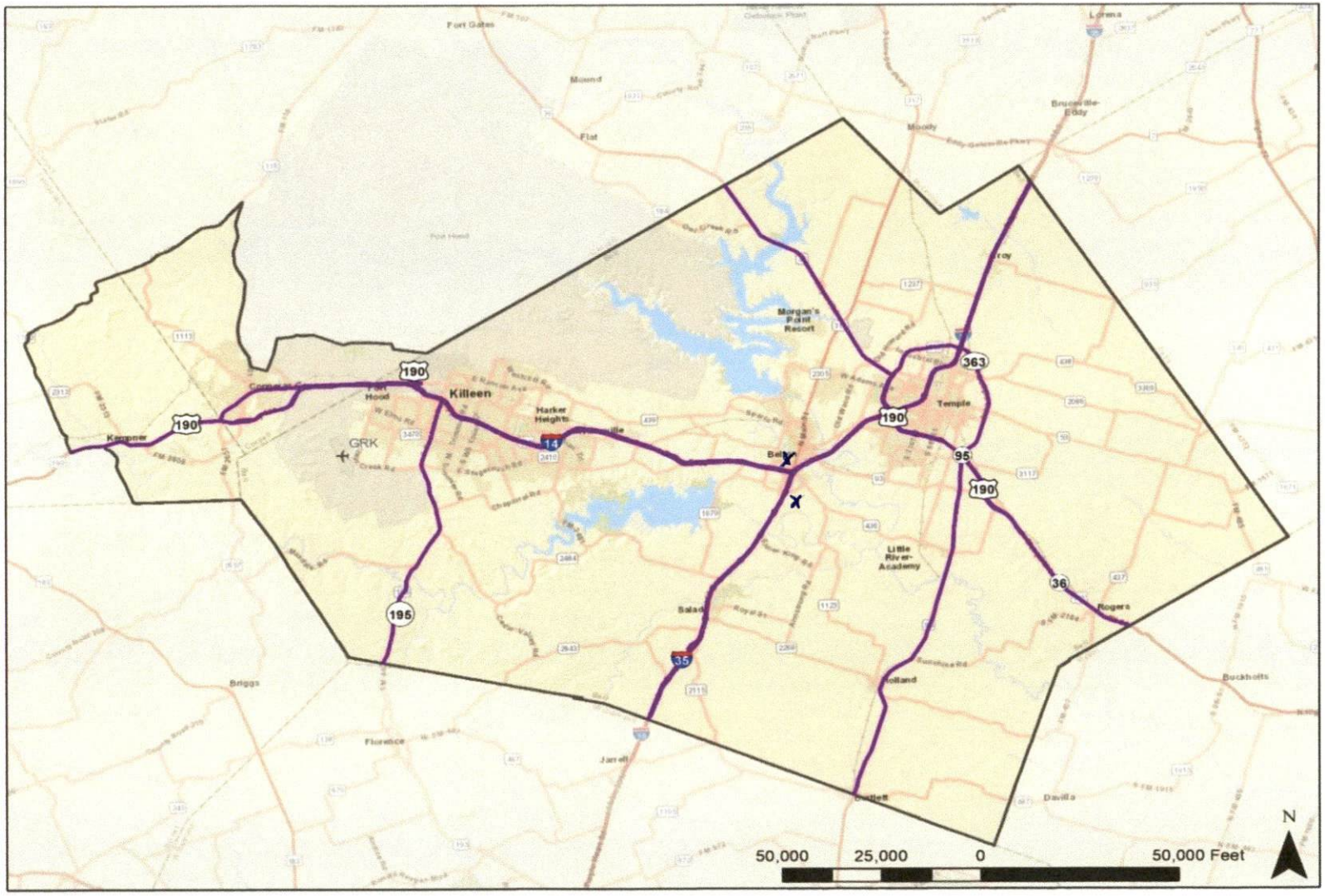
KTMPO KEY TO CONNECTIVITY

KTMPO KILLEEN-TEMPLE metropolitan planning organization

Survey for Law Enforcement

Where do you see illegal truck parking in the KTMPO region? Where do you see trucks operating or parking on local roads (please mark on the map)



KTMPO KEY TO CONNECTIVITY

Survey for Law Enforcement

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1. **At what times do you see trucks illegally parked? (List days of the week, times, frequency)**
   Mostly during the weekends and holidays. During the work week, trucks may be found parked illegally after normal business hours.

2. **Does illegal truck parking affect congestion or safety?**
   It does not affect congestion as much as it does safety. This is apparent mainly at intersections where visibility is impacted by approaching vehicles.

3. **Do you see any regulatory, safety, or practical issues to using a vacant parking lot for truck parking?**
   It would be dependent on the primary use of the parking lot. For instance, using a vacant parking lot of a business outside of normal operating hours would allow for the safe parking of trucks. However, this would likely lead to greater wear and tear on the parking lot due to the weight of the truck and/or trailer. There would also be an issue with customer parking when the business reopened if the trucks were still present.

4. **Do you see owner/operators park trucks at their homes? Does this have any congestion or safety effects?**
   We have quite a few operators who park their truck at their home. The City requires a permit if the operator wishes to park on the street. This allows the City to ensure parking of the truck does not impact the safety of other motorists. If the truck is parked in the operator's driveway, this sometimes affects pedestrians walking on the sidewalk who have to walk around the truck and into the street in order to get around it.

5. **Do you see trucks operating or parking on local roads leading to industrial sites? Please list or mark on the map.**
   Currently, there are two primary sites; Big Divide Road and Risen Star Lane. This is due to construction in those areas.

6. **Are there any other congestion or safety concerns related to truck parking?**
   Overnight parking of trucks lead to greater wear and tear on the roadway. This eventually leads to distortions in the roadway and presents a potential safety issue.

7. **Summary – Is there anything else you would like to tell us which would help explain the truck parking issues that you face?**
   Locating and identifying the owner or responsible operator of the truck has proved troublesome. Our community is home to many truck drivers who often find it difficult locating sufficient and safe parking of their trucks while home.

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- ◯ If you would like us to contact you so you can give us additional information

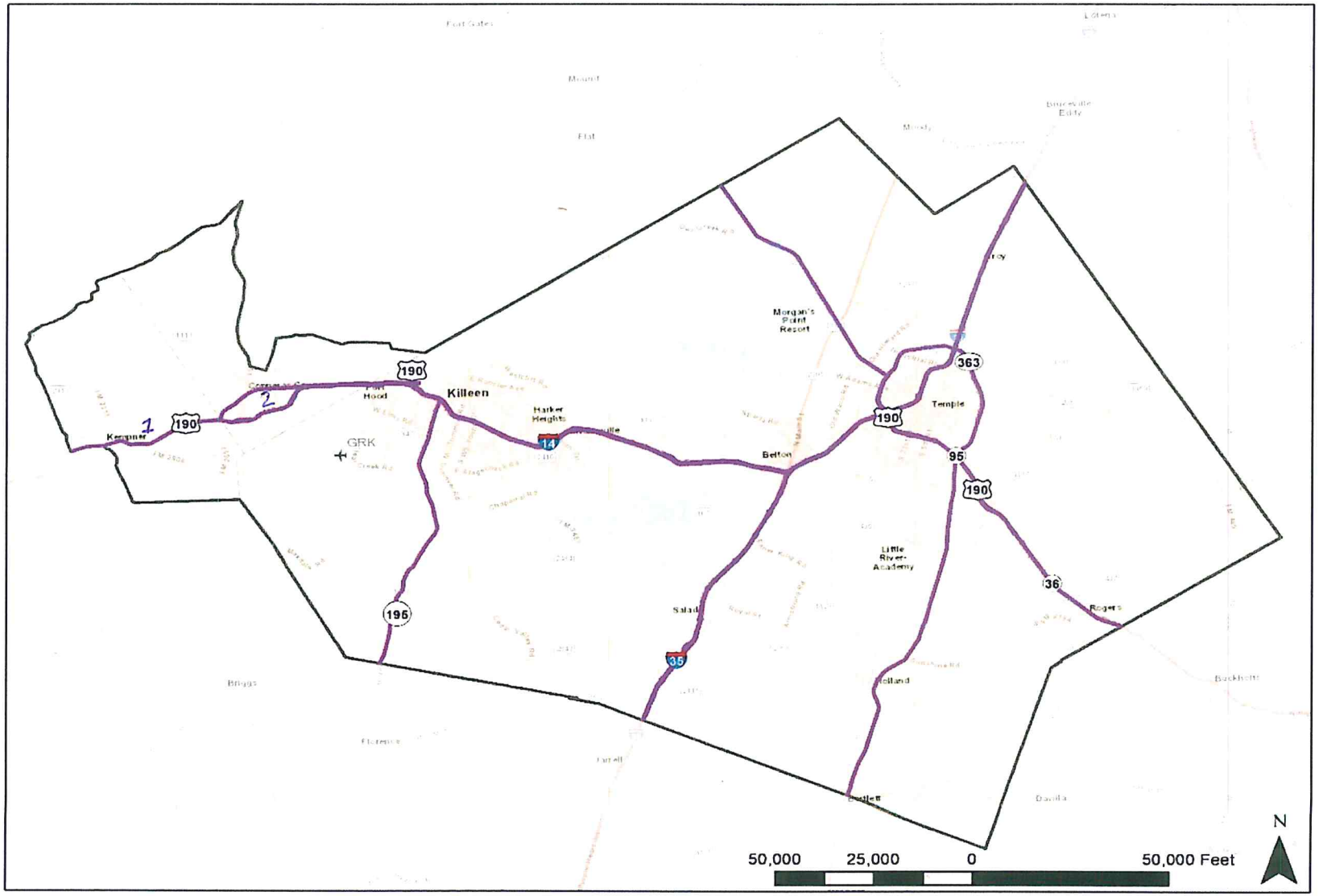
Gabriel Cardona
Email: gcardona@copperascovetx.gov

KTMPO KEY TO CONNECTIVITY

Survey for Law Enforcement

Where do you see illegal truck parking in the KTMPO region? Where do you see trucks operating or parking on local roads (please mark on the map)

1. Big Divide
2. Risen Star



KTMPO KEY TO CONNECTIVITY

Survey for Law Enforcement

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1. **At what times do you see trucks illegally parked? (List days of the week, times, frequency)**

   Weekends and nights in neighborhoods

2. **Does illegal truck parking affect congestion or safety?**

   Yes

3. **Do you see any regulatory, safety, or practical issues to using a vacant parking lot for truck parking?**

   NO

4. **Do you see owner/operators park trucks at their homes? Does this have any congestion or safety effects?**

   Yes. This causes road congestion and safety/visibility concerns in neighborhoods

5. **Do you see trucks operating or parking on local roads leading to industrial sites? Please list or mark on the map.**

   Yes, Industrial area

6. **Are there any other congestion or safety concerns related to truck parking?**

7. **<u>Summary</u> – Is there anything else you would like to tell us which would help explain the truck parking issues that you face?**

Please feel free to provide your contact information:

- ◯ If you want us to contact you with the final document when this study is complete
- ◯ If you would like us to contact you to give you additional information about the study
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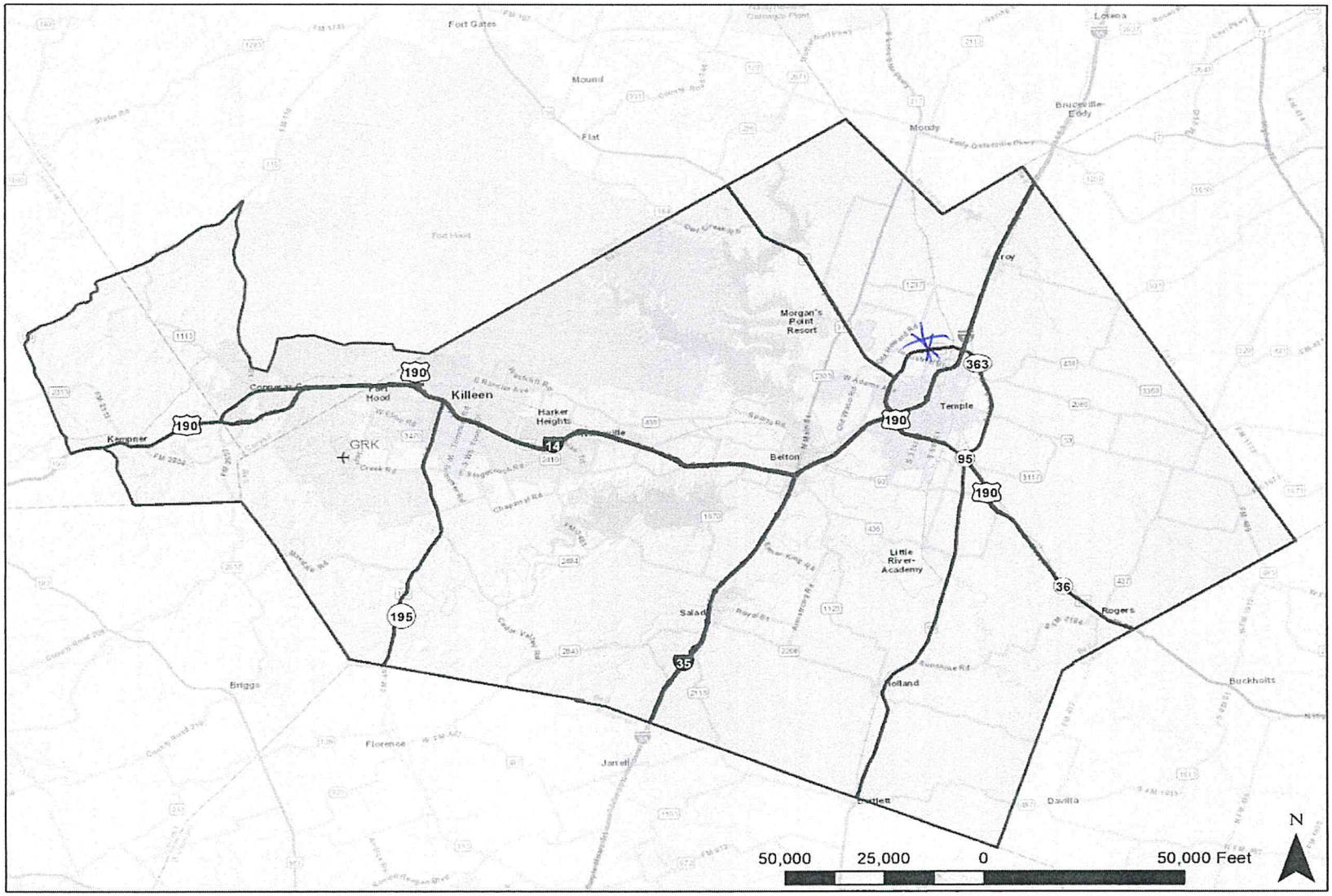
KTMPO KEY TO

CONNECTIVITY

Survey for Law Enforcement

Where do you see illegal truck parking in the KTMPO region? Where do you see trucks operating or parking on local roads (please mark on the map)



KTMPO KEY TO CONNECTIVITY

Survey for Law Enforcement

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1. **At what times do you see trucks illegally parked? (List days of the week, times, frequency)**

   Not at ALL

2. **Does illegal truck parking affect congestion or safety?**

   NO, we do not have illegal truck parking

3. **Do you see any regulatory, safety, or practical issues to using a vacant parking lot for truck parking?**

   NO

4. **Do you see owner/operators park trucks at their homes? Does this have any congestion or safety effects?**

   NO

5. **Do you see trucks operating or parking on local roads leading to industrial sites? Please list or mark on the map.**

   NO

6. **Are there any other congestion or safety concerns related to truck parking?**

   NO

7. **Summary – Is there anything else you would like to tell us which would help explain the truck parking issues that you face?**

   We do not have truck parking issues

Please feel free to provide your contact information:

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- ○ If you would like us to contact you to give you additional information about the study
- ○ If you would like us to contact you so you can give us additional information

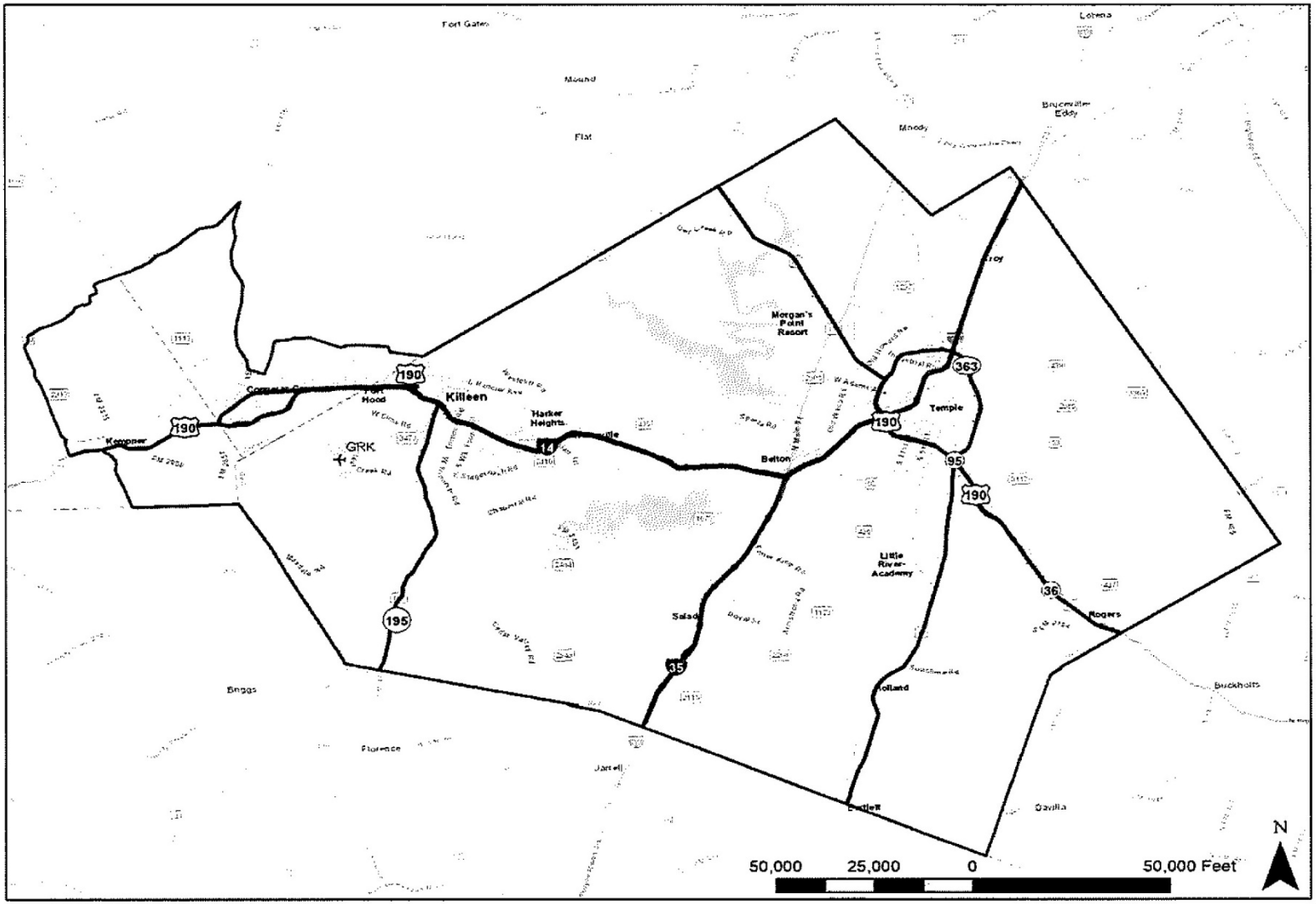
Mayor Harvey, Keith L.
PO Box 660
Kempner, Tx 76539
mayorharvey@embarqmail.com

KTMPO KEY TO

CONNECTIVITY

Survey for Law Enforcement

Where do you see illegal truck parking in the KTMPO region? Where do you see trucks operating or parking on local roads (please mark on the map)



KTMPO KEY TO CONNECTIVITY

Survey for Law Enforcement

Connectivity is a key issue for the region – connecting the transportation network, connecting our planning policies, and connecting with you! The Killeen-Temple Metropolitan Planning Organization (KTMPO) is gathering information to help guide our transportation planning for the Truck Transportation & Parking Study. Please take a minute to connect with us by filling out this survey on truck movements and parking requirements in our region. ***Thank you for your help!***

1. **At what times do you see trucks illegally parked? (List days of the week, times, frequency)**
   None in Morgan's Point Resort

2. **Does illegal truck parking affect congestion or safety?**
   Not in Morgan's Point Resort

3. **Do you see any regulatory, safety, or practical issues to using a vacant parking lot for truck parking?**
   A vacant parking lot might not provide enough lighting for security.

4. **Do you see owner/operators park trucks at their homes? Does this have any congestion or safety effects?**
   Not in Morgan's Point Resort

5. **Do you see trucks operating or parking on local roads leading to industrial sites? Please list or mark on the map.**
   Not in Morgan's Point Resort

6. **Are there any other congestion or safety concerns related to truck parking?**
   Not in Morgan's Point Resort

7. **<u>Summary</u> – Is there anything else you would like to tell us which would help explain the truck parking issues that you face?**
   None in Morgan's Point Resort

Please feel free to provide your contact information:

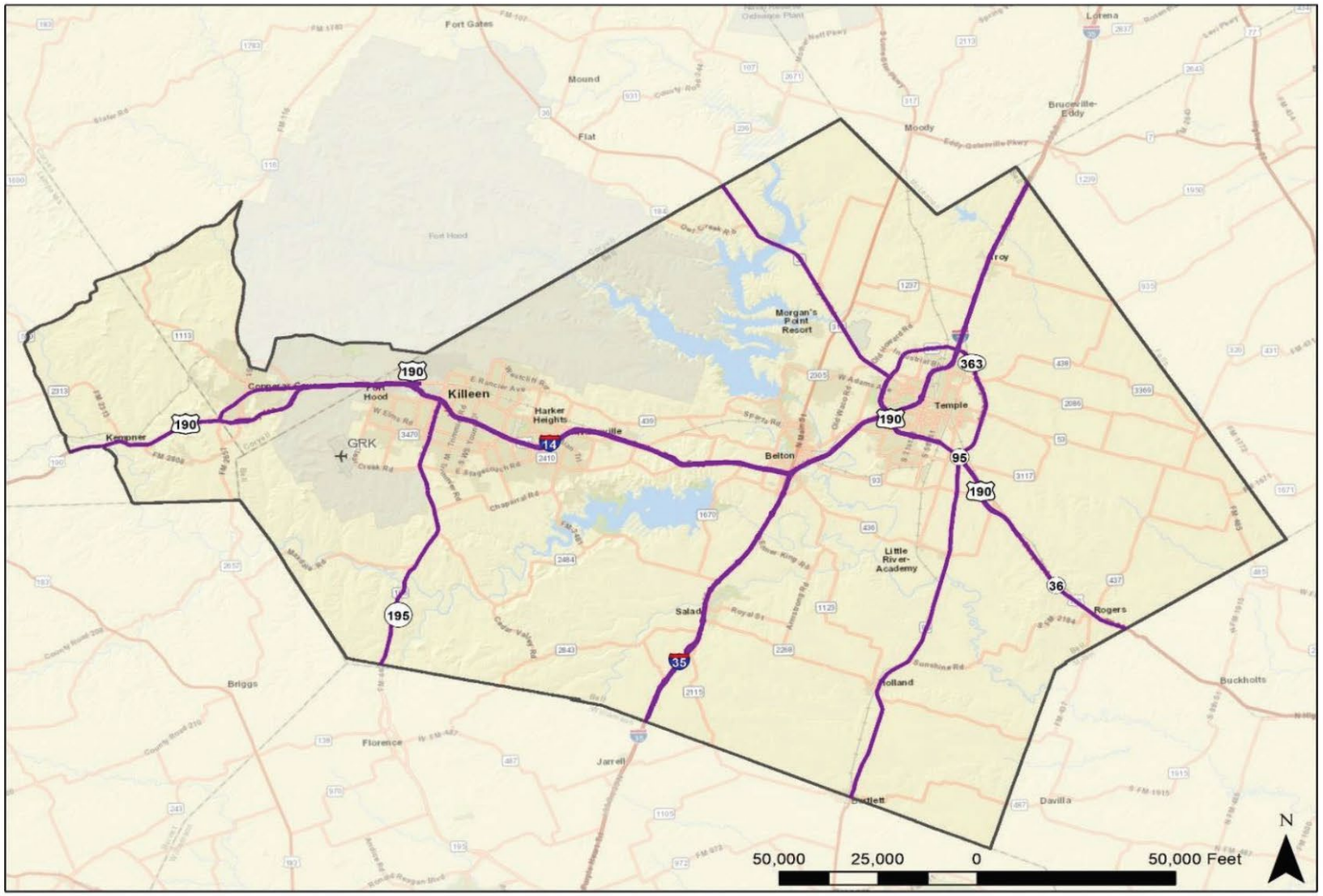
- ◯ If you want us to contact you with the final document when this study is complete
- ◯ If you would like us to contact you to give you additional information about the study
- ◯ If you would like us to contact you so you can give us additional information

KTMPO KEY TO CONNECTIVITY

KTMPO KILLEEN-TEMPLE metropolitan planning organization

Survey for Law Enforcement

Where do you see illegal truck parking in the KTMPO region? Where do you see trucks operating or parking on local roads (please mark on the map)



KTMPO KEY TO CONNECTIVITY

KTMPO KILLEEN-TEMPLE metropolitan planning organization

Survey for the Technical Advisory Committee

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Truck Parking Questions

1. **How is illegal truck parking impacting your city? (decreased safety, slower movement of goods and services, etc.)**
   Doesn't want to speak for cities, but the state corridor safety is always the big concern there especially when it comes to ramps. Common area for trucks to park because of the wide shoulders. Feels that this is an issue in the Waco District (most of it on the I-35 Corridor). Have put up signs in the past that says no parking and within a week they will be driven over or mowed down. TxDOT is not an enforcement agency, all they can do is sign and remind and local jurisdictions to enforce.

   Not a lot of illegal truck parking off of the I-35 Corridor. Sometimes SH6 or SH 36 do have issues at times when the oil fields were booming. Really not a lot of truck accommodations on those secondary corridors.

2. **At what times do you see trucks illegally parked? (List days of the week, times, frequency)**
   All days of the week, every day, primarily at night. Seems to have enough capacity for during the day.

3. **What are your future and planned projects to address the truck parking issue?**
   Don't have any projects in the Waco District for Truck parking. Waco District has 4 major truck stops (owned and operated by TxDOT) along the I-35 corridor. Have been in place for over 5 years. They are always at capacity. They could never really build enough because more trucks might shift out of paid lots and there will still be a demand for truck parking. Would like to see the trucking industry or truck stops take care of the parking. Had TTI doing some look at truck parking along the I-35 corridor. Research was related to seeing if there can be an automated system for showing truck stop availability. Realized they are always at 100% at capacity so no point in implementing the automated system.

4. **What would be possible beneficial partnerships for business and local governments to have with the trucking industry in order to address the truck parking shortage?**
   Really think that the businesses and the local governments to try to understand that there is a latent demand for truck parking. A beneficial partnership would be enforcement since TxDOT cannot enforce. If there would be more truck parking services from business and locals and that is enforced.

5. **Would the city or a business be open to using a lot/parking lot that is vacant for truck parking? If no, why?**
   TxDOT would not have any problems with this. Rare to have it on their ROW. They do agreements for leasing rights of way for property for businesses. Open to this given the right situation. Kind of rare though. A city may but the state doesn't have that kind of unused real estate.

6. **Are there any local regulations which restrict truck parking or conflict with planned projects or strategies? Please describe.**
   Not that he is aware of. Nothing that comes from TxDOT other than the typical laws governing highways.

7. **Do owner/operators park trucks at their homes? Is that an issue in your community?**
   Some people do. It only tends to be an issue with TxDOT if they are their home and it is parked on TxDOT's right of way. If it becomes a common occurrence TxDOT contacts local law enforcement to contact the owner that they should not be parking on TxDOT ROW.

8. **Who else should we talk to about truck parking in the region?**
   Person in planning that handles the overall arching study for TxDOT Sherry Pifer. They asked if they have the ROW and if TxDOT is opposed to those types of truck stops, right next to Hillsborough I-35 East and West split. Issue is that there is no lighting and no facilities.

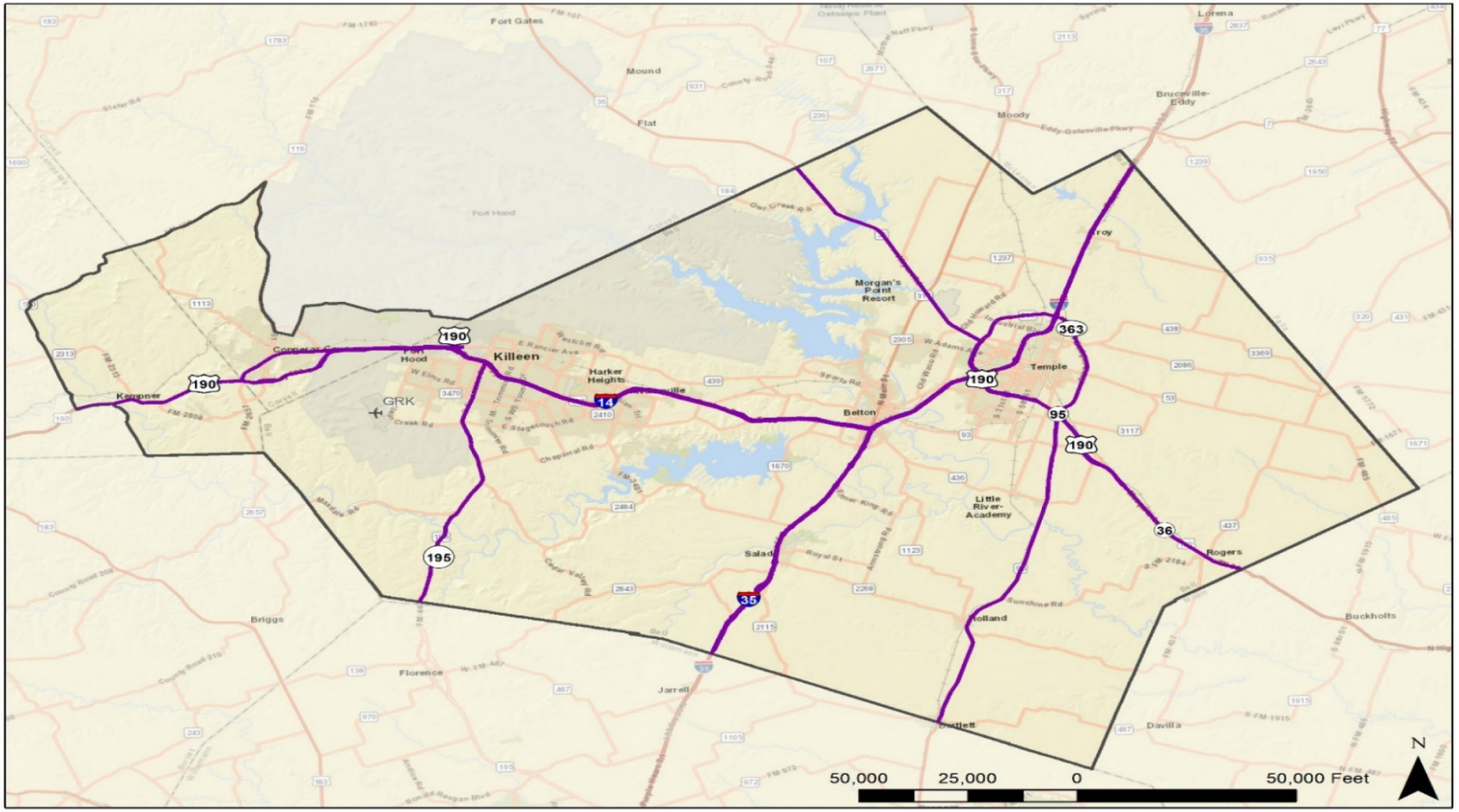
KTMPO KEY TO CONNECTIVITY

KTMPO KILLEEN-TEMPLE metropolitan planning organization

Survey for the Technical Advisory Committee

Please mark on the map the places where you see trucks parking illegally.

I-35, along I-14 in Bell County



Freight Operational Questions

9. What barriers or bottlenecks most affect freight in this region?

What	Where/How
Roadway	Number of lanes, congestion. Don't have a lot of roads that impact freight other than I-35 but they are currently widening that. Have gotten the whole stretch through Waco to 3 lanes so not really seeing roadway impact freight
Bridges	Have load zone bridges but nowhere near major corridors. Only have one or two on system. Limit the bridge to one-way traffic.
Rail	Only going to see at crossing rail impacts to freight in the city. Killeen (Bus 190 and FM 439 intersection) has one at grade roadway that was of concern a few years ago. Impacted the last mile freight component.
Intermodal Connections	Mostly rural along I-35 corridor have no specific intermodal connections that they are worried about
Other: Construction	Has been the biggest impact on freight during the last 10 years. I-35 and I-14 have been under construction. Worked with TTI to try to get automated information to truckers to warn them of delays.

10. Safety – Do you have any freight-related safety concerns (what and where)?

Anytime parking on shoulder over road, or ramp parked it is creating hazards that TxDOT does not want out there.

11. Effects – How do infrastructure and/or modal challenges affect regional freight operations?

No major impacts. Most of the modal issues have already happened down at the port so just see through traffic from long haul trucks. Recent push to get the infrastructure to start to raise the bridge points to a higher minimum clearance but that is a long-term concern. As they are designing new roadways, they are using the new bridge standard. Don't see the old bridges impacting anything for a long time.

12. Policy/Programmatic/Organizational – do any public policies, programs, or organizations affect freight in the region? How? What would you like to see changed?

Can't speak to what you would like to see changed part since they are policy neutral. Biggest impact they have seen is the new digital logging hours (ELD). Metro to the north and south of the district and Waco is the middle region where truckers need to make quick decisions on where they need to park. See more trucks looking for overnight parking now because of that new policy.

Summary

13. Is there anything else you would like to tell us which would help explain the truck parking or other freight issues that you face?

Texas is impacted by hurricanes, have a lot of construction. Several years back I-10 going to Louisiana was impacted by flooding and they shut it down. The alternate route went up to I-20 and I-30 to DFW. A lot of traffic in the area during that region. When talking about alternate routes for freight, has that fully been vetted and rolled out?

KTMPO KEY TO CONNECTIVITY

Survey for the Technical Advisory Committee

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Truck Parking Questions

1. **How is illegal truck parking impacting your city? (decreased safety, slower movement of goods and services, etc.)**
   No increased accidents or any of that. Adds to a general decay of an area looking like it's not well kept. Have a few places in town to keep truck parking out.

2. **At what times do you see trucks illegally parked? (List days of the week, times, frequency)**
   All times, evenings a little more common

3. **What are your future and planned projects to address the truck parking issue?**
   No, not other than code enforcement

4. **What would be possible beneficial partnerships for business and local governments to have with the trucking industry in order to address the truck parking shortage?**
   Not sure about partnerships, there are plenty of businesses where folks park RVs and camp trailers so a similar type business located in the right spot could be benefical

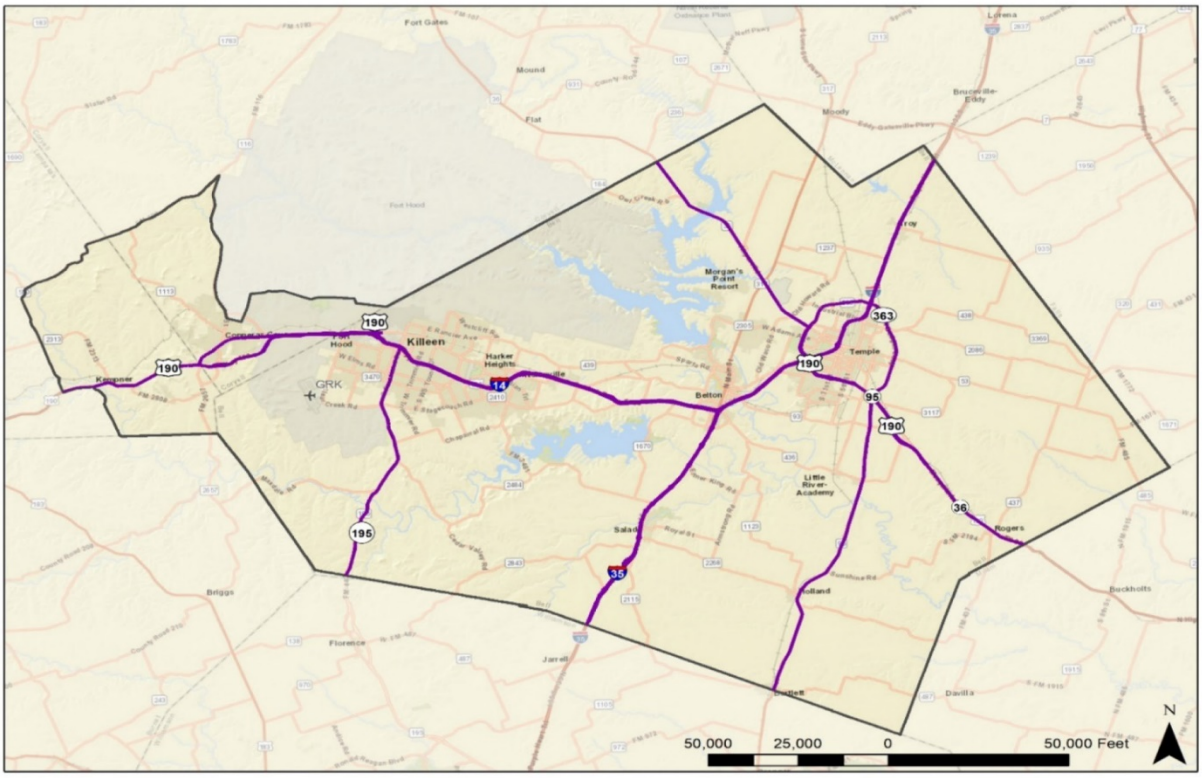
5. **Would the city or a business be open to using a lot/parking lot that is vacant for truck parking? If no, why?**
   Probably not, depends on the zoning and the location. If residential area can't do it. Brings surrounding property values down, makes area appear that no one cares about it. If it rains, they tear up the lot there is more run off (on non-grade surfaces so an empty lot with no asphalt)
   Aleah asked about possible truck parking at the convention center. Would not be well received for truck parking at the civic center, at the convention center times when full and time when empty and when people are having high end events at the civic center it does not look nice. Next to one of the nicer retail areas

6. **Are there any local regulations which restrict truck parking or conflict with planned projects or strategies? Please describe.**
   Plenty of regulations. Ordinances do a pretty good job of protecting truck parking. Parking on an improved surface in a commercial or heavy industrial area.

7. **Do owner/operators park trucks at their homes? Is that an issue in your community?**
   They don't do it much because it is enforced really well

8. **Who else should we talk to about truck parking in the region?**
   Owner/operators. Talk to Director of planning of development. Has been in Killeen for 12-15 years. Mr. Cagle has been in the position for 8 months. Gave me information for sheriff.

mark on the map the places where you see truck parking illegally.



Most of the trucks parked illegally are on I-95 around elms road . Just starting to see it right outside of city limits around I-95 where they don't have a lot of control. Lots of junkyards popping up and trucks park there

KTMPO KEY TO CONNECTIVITY

Survey for the Technical Advisory Committee

Freight Operational Questions

9. **What barriers or bottlenecks most affect freight in this region?**

What	Where/How
Roadway	Fairly uncongested in pretty good shape
Bridges	in pretty good shape
Rail	
Intermodal Connections	Not a lot of intermodal connectors
Other: _____	

10. **Safety – Do you have any freight-related safety concerns (what and where)?**
Don't see a huge problem with it on I-14 or I-95. Seems that it is more of an aesthetic problem, mentioned that when was city manager in Duncanville had more of a problem with this.

11. **Effects – How do infrastructure and/or modal challenges affect regional freight operations?**
Answered previously

12. **Policy/Programmatic/Organizational – do any public policies, programs, or organizations affect freight in the region? How? What would you like to see changed?**
Answered previously

Summary

13. **Who else should we talk to about truck parking and operations in the region?**
Answered previously

14. **Is there anything else you would like to tell us which would help explain the truck parking or other freight issues that you face?**
In Summary, there is illegal truck parking but not a huge amount as Mr. Cagle witnessed at his previous position of City Manager at Duncanville. Killeen is mainly worried about aesthetics and the impacts truck parking will have on that

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Survey for the Technical Advisory Committee

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Truck Parking Questions

1. **How is illegal truck parking impacting your city? (decreased safety, slower movement of goods and services, etc.)**
   Not aware that have an extensive amount to illegal truck parking in Cameron.

2. **At what times do you see trucks illegally parked? (List days of the week, times, frequency)**
   Just a couple of locations, shopping center where you will see a truck parked in the early morning hours usually Sunday-Monday. Occasionally a location along US 190 Texas 36 on the west side of town where a truck will be parked time to time. It is usually because the truck broke down.

3. **What are your future and planned projects to address the truck parking issue?**
   NA

4. **What would be possible beneficial partnerships for business and local governments to have with the trucking industry in order to address the truck parking shortage?**
   In a very rural location, have a lot of truck traffic and 5 manufacturing employers that account for 100 trucks per day in and out of the industrial park. Fortunate that they have a convenience store truck stop with truck parking. Also have a motel that allows truck parking. Issue is less truck parking and more of the logistics side on traffic management.

   Out of the 5 2 have their own truck parking. A third one has their own fleet and not parking anywhere, also has their own parking for the other two one is a metal fab operation and have truck parking but are not highly transactional. The last place does a lot of flatbed hauling and they do have parking.

5. **Would the city or a business be open to using a lot/parking lot that is vacant for truck parking? If no, why?**
   NA

6. **Are there any local regulations which restrict truck parking or conflict with planned projects or strategies? Please describe.**
   No regulations that aware of that restrict truck parking. Only regulation that aware of is the engine brake (recently passed). Ordinance that prohibits semis on the courthouse square streets.

7. **Do owner/operators park trucks at their homes? Is that an issue in your community?**
   Not allowed . Tend to park at the truck stop.; Her son is a driver and used to park his truck on the weekend at the truck stop.

8. **Who else should we talk to about truck parking in the region?**

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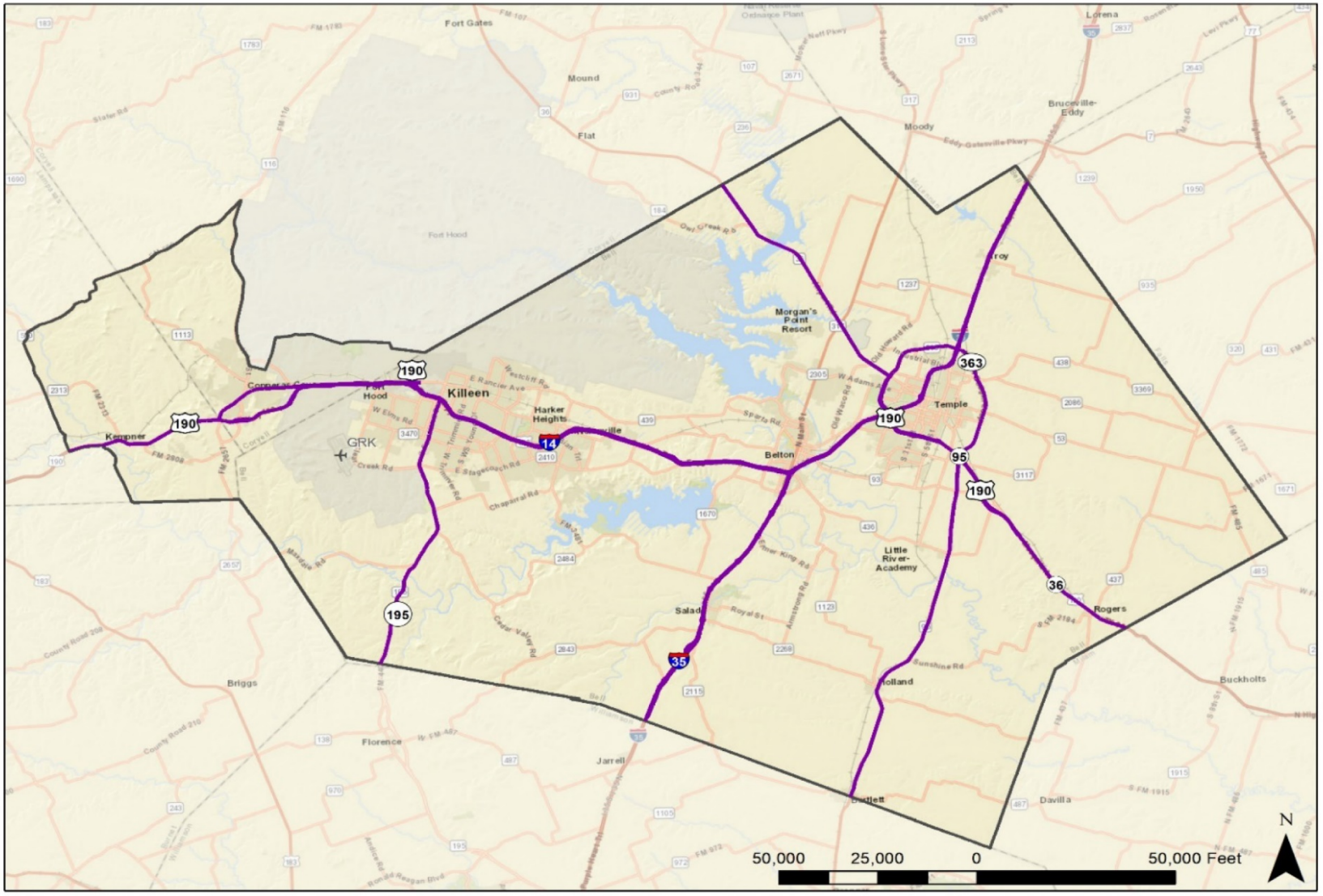
Survey for the Technical Advisory Committee

Please mark on the map the places where you see trucks parking illegally.



Freight Operational Questions

9. What barriers or bottlenecks most affect freight in this region?

What	Where/How
Roadway	At the intersection of US Highway 77 and Texas 36, US 190 and that intersection where highway 77 turns north to go to Waco can be very congested because the trucks use it as an alternate to I-35. Highway 77 is only a two lane road. On highway 77 at industrial park there is only one main entrance in and there are no turn lanes can be a bit of a safety hazard for trucks that are trying to turn into the industrial park.
Bridges	**Two bridges that are two lanes so not an issue**
Rail	
Intermodal Connections	
Other: _____	

10. Safety – Do you have any freight-related safety concerns (what and where)?

Just to emphasize at the US 190, US 77, on US 190 turning north onto highway 77 the turn lane there is very short, stack up there is an issue. It is close to a farm to market road which is used for gravel and grain.

11. Effects – How do infrastructure and/or modal challenges affect regional freight operations?

Sometimes getting raw materials on rail is a challenge so need to switch to truck which is more expensive.

12. Policy/Programmatic/Organizational – do any public policies, programs, or organizations affect freight in the region? How? What would you like to see changed?

The only organizations are the council of governments (COG) KTMPO.

Summary

13. Who else should we talk to about truck parking and operations in the region?

Cameron, a couple of the employers, manufacturers that do heavy trucking Charlotte Pipe and Foundry consistent (operates year round) and affordable interior systems and could comment. Will be sending them a note to see if they have any concerns regarding truck parking.

14. Is there anything else you would like to tell us which would help explain the truck parking or other freight issues that you face?

Can't think of anything right now

KTMPO KEY TO CONNECTIVITY

KTMPO KILLEEN-TEMPLE metropolitan planning organization

Survey for the Technical Advisory Committee

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Truck Parking Questions

1. **How is illegal truck parking impacting your city? (decreased safety, slower movement of goods and services, etc.)**
   Exit Ramp on I-14 Exit 277. Trucks park on the right shoulder causing safety concerns for traffic entering Clark Road Access Control Point. There is no illegal truck parking on Fort Hood.

2. **At what times do you see trucks illegally parked? (List days of the week, times, frequency)**
   Monday - Friday 0600-1200. There is no illegal truck parking on Fort Hood

3. **What are your future and planned projects to address the truck parking issue?**
   There is no illegal truck parking on Fort Hood. Rail's comments = Create a clover leaf off Texas 9 and open Tank Destroyer as a commercial truck entrance. This would eliminate the truck back-up on HWY190 / Interstate 14.

4. **What would be possible beneficial partnerships for business and local governments to have with the trucking industry in order to address the truck parking shortage?**
   Reduce safety concerns for and congestion on roadways and in parking lots. Rail's comments = There is empty land across from the Copperas Cove Movie Theater that could be created into an overflow parking area for drivers that arrive on the weekends when Fort Hood is closed for download/upload. This would be beneficial to both the city and Fort Hood drivers would be able to obtain access to hotels and places to obtain food and drinks.

5. **Would the city or a business be open to using a lot/parking lot that is vacant for truck parking? If no, why?**
   No. Fort Hood has access control that prevents commercial trucks from entering the installation to park. Commercial trucks must have a pick up or delivery on Fort Hood to enter the installation. Drivers are required to pass a 20 year back ground check to enter the installation.

6. **Are there any local regulations which restrict truck parking or conflict with planned projects or strategies? Please describe.**
   Commercial Truck making a delivery of picking up are authorized to park at the CRSP overnight. Drivers are required to pass a 20 year back ground check to enter the installation.

7. **Do owner/operators park trucks at their homes? Is that an issue in your community?**
   This is not an issues for Fort Hood.

8. **Who else should we talk to about truck parking in the region?**

Killeen City Council, Harker Heights City Council, Copperas Cove City Council, and Nolanville City Council. Rail's Comments = TX DOT should be involved with the truck parking in the region.

KTMPO KEY TO CONNECTIVITY

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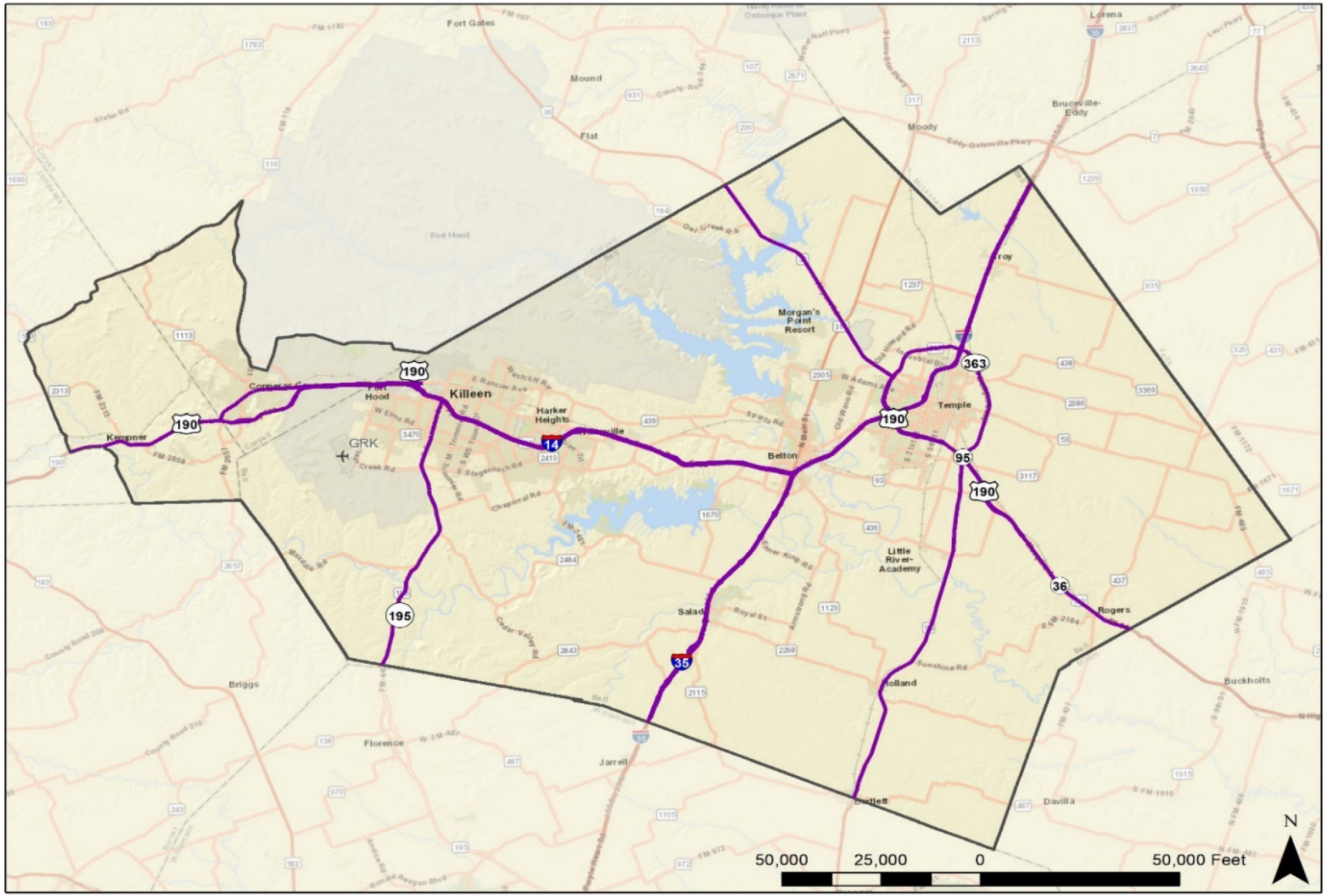
Please mark on the map the places where you see trucks parking illegally.



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Survey for the Technical Advisory Committee

Freight Operational Questions

9. What barriers or bottlenecks most affect freight in this region?

What	Where/How
Roadway	Exit Ramp on I-14 Exit 277. Trucks park on the right shoulder causing safety concerns for traffic entering Clark Road Access Control Point. Large number of trucks entering Fort Hood result a backup onto I-14 due to installation access control policies. Rails Comments = Clarke Road Entrance, due to security check on all truck drivers entering Fort Hood must pass 20yr background check which takes 1 ½ hr – 2 hrs.
Bridges	
Rail	
Intermodal Connections	
Other: Fort Hood Access Control	Fort Hood has Access control that prevents commercial trucks from entering the installation to park. Commercial trucks must have a pick up or delivery on Fort Hood to enter the installation. Drivers are required to pass a 20 year back ground check to enter the installation.

10. Safety – Do you have any freight-related safety concerns (what and where)?

Exit Ramp on I-14 Exit 277. Trucks park on the right shoulder causing safety concerns for traffic entering Clark Road Access Control Point.

11. Effects – How do infrastructure and/or modal challenges affect regional freight operations?

Exit Ramp on I-14 Exit 277. Large number of trucks entering Fort Hood result a backup onto I-14 due to installation access control policies.

12. Policy/Programmatic/Organizational – do any public policies, programs, or organizations affect freight in the region? How? What would you like to see changed?

Fort Hood has access control that prevents commercial trucks from entering the installation to park. Commercial trucks must have a pick up or delivery on Fort Hood to enter the installation. Drivers are required to pass a 20 year back ground check to enter the installation

Summary

13. Who else should we talk to about truck parking and operations in the region?

Killeen City Council, Harker Heights City Council, Copperas Cove City Council, and Nolanville City Council.

14. Is there anything else you would like to tell us which would help explain the truck parking or other freight issues that you face?

Exit Ramp on I-14 Exit 277 is the only commercial truck entrance to Fort Hood. TX DOT should fund "clover leaf off Texas 9 and open Tank Destroyer as a commercial truck entrance. This would eliminate the truck back-up on

HWY190 / Interstate 14".

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Truck Parking Questions

1. **How is illegal truck parking impacting your city? (decreased safety, slower movement of goods and services, etc.)**
   - traffic congestion downtown
   - street congestion in neighborhoods

2. **At what times do you see trucks illegally parked? (List days of the week, times, frequency)**
   downtown - week days, business hours
   neighborhoods - weekends, nights

3. **What are your future and planned projects to address the truck parking issue?**

4. **What would be possible beneficial partnerships for business and local governments to have with the trucking industry in order to address the truck parking shortage?**
   unknown

5. **Would the city or a business be open to using a lot/parking lot that is vacant for truck parking? If no, why?**
   unknown

6. **Are there any local regulations which restrict truck parking or conflict with planned projects or strategies? Please describe.**
   City of Temple Ordinance 37.98 "no vehicle having more than 2 axles are allowed to park on any street or alley."

7. **Do owner/operators park trucks at their homes? Is that an issue in your community?**
   yes - causes street congestion

8. **Who else should we talk to about truck parking in the region?**
   Major distribution centers could expand parking.
   HEB, Walmart, Michaels, etc.

KTMPO KEY TO
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KTMPO
KILLEEN-TEMPLE
metropolitan planning organization

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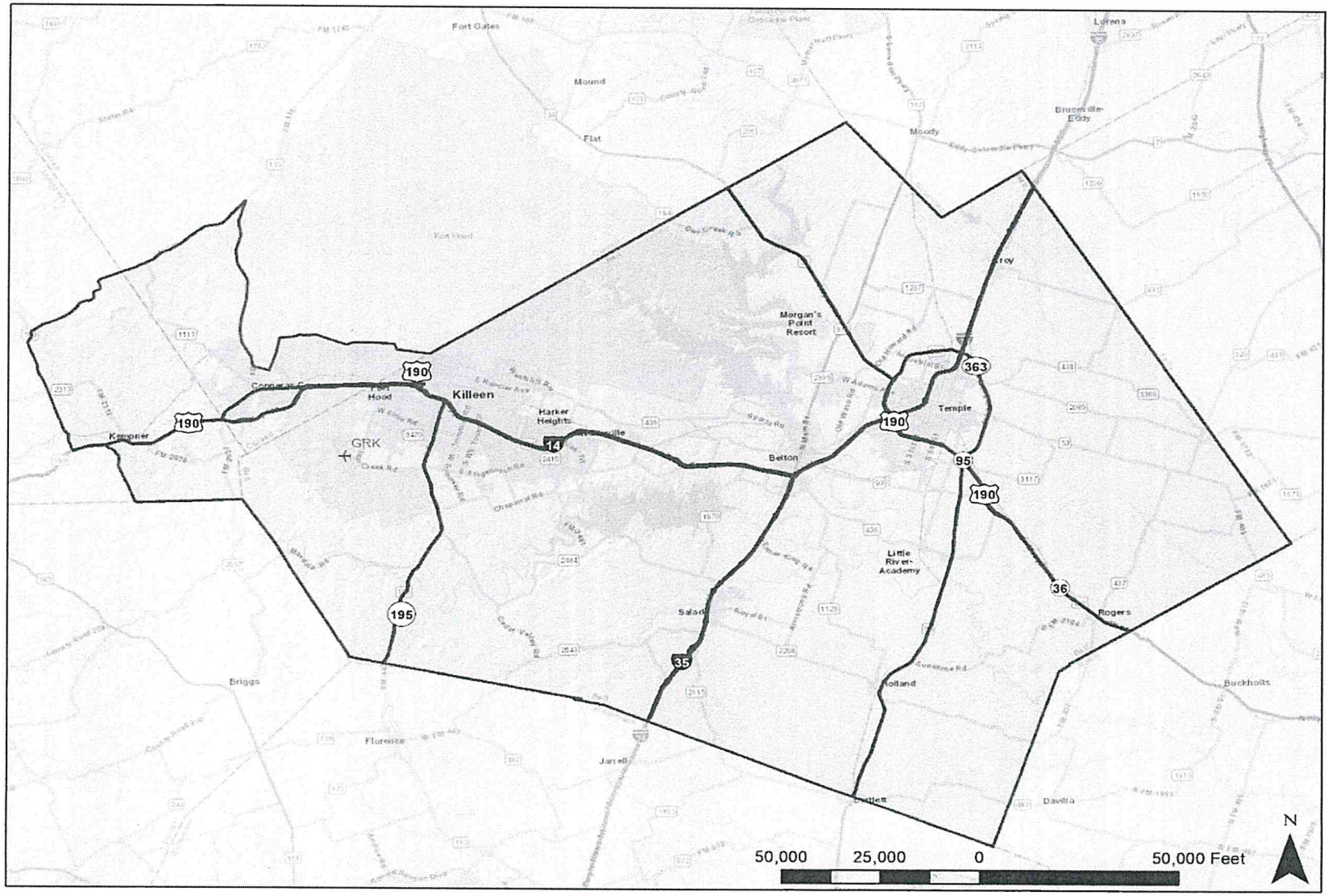
Technical Advisory Committee

Please mark on the map the places where you see trucks parking illegally.



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Survey for the Technical Advisory Committee

Freight Operational Questions

9. What barriers or bottlenecks most affect freight in this region?

N/A

What	Where/How
Roadway	
Bridges	
Intermodal Connections	
Other: _____	

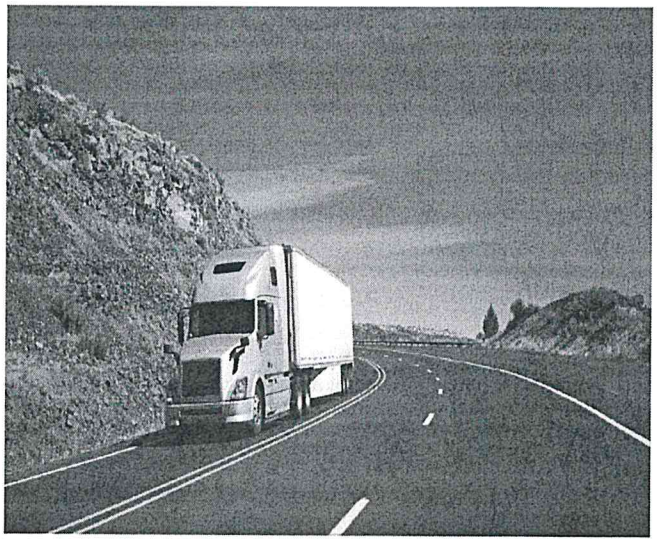
10. Safety – Do you have any freight-related safety concerns (what and where)?

NO

11. Effects – How do infrastructure and/or modal challenges affect regional freight operations?

Interstate construction has improved

12. Policy/Programmatic/Organizational – do any public policies, programs, or organizations affect freight in the region? How? What would you like to see changed?



Summary

13. Who else should we talk to about truck parking and operations in the region?

major distribution centers.

14. Is there anything else you would like to tell us which would help explain the truck parking issues that you face?

Temple is an industrial city and handles a higher than average amount of truck travel

Please feel free to provide your contact information:

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- ◉ If you would like us to contact you to give you additional information about the study
- ○ If you would like us to contact you so you can give us additional information

trichesin@templetx.gov

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Truck Parking Questions

1. **How is illegal truck parking impacting your city? (decreased safety, slower movement of goods and services, etc.)**
   Causing some issues in the Industrial Park, wearing down shoulders and blocking some of the roads

2. **At what times do you see trucks illegally parked? (List days of the week, times, frequency)**
   I haven't seen a specific pattern.

3. **What are your future and planned projects to address the truck parking issue?**
   The city hasn't pushed any initiatives for truck parking, per se. We are moving forward with plans for two parking garages in downtown, but they are not tailored for trucks.

4. **What would be possible beneficial partnerships for business and local governments to have with the trucking industry in order to address the truck parking shortage?**
   Quicker deliveries and shipment pickups. Convenient parking coupled with access to I-35 could be an enticement for manufacturing or distribution businesses to relocate to Temple.

5. **Would the city or a business be open to using a lot/parking lot that is vacant for truck parking? If no, why?**
   Yes, we would.

6. **Are there any local regulations which restrict truck parking or conflict with planned projects or strategies? Please describe.**
   Our code requires paved parking areas and drive entrances. We've had a number of inquiries about a business being able to develop a lot for parking in or around the Industrial park, but they are resistant to paving or constructing permanent offices (They'd prefer to use a portable building)

7. **Do owner/operators park trucks at their homes? Is that an issue in your community?**
   It's not an issue at the Planning level, and not something I'm aware of.

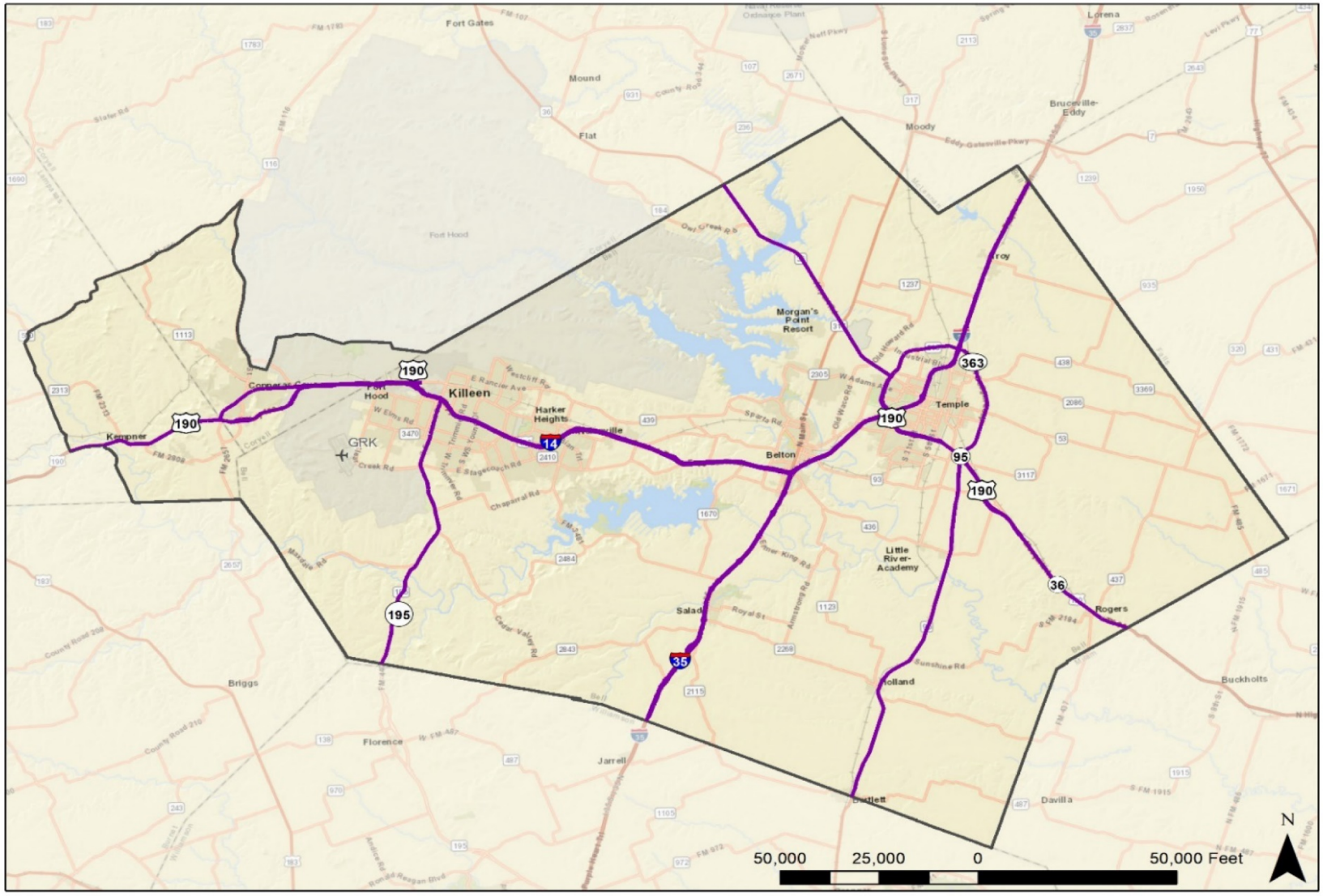
8. **Who else should we talk to about truck parking in the region?**
   Large commercial logistics operations in Temple include HEB, Walmart, McLane, WilsonArt and other manufacturers.

KTMPO KEY TO CONNECTIVITY

KTMPO KILLEEN-TEMPLE metropolitan planning organization

Survey for the Technical Advisory Committee

Please mark on the map the places where you see trucks parking illegally.



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Freight Operational Questions

9. **What barriers or bottlenecks most affect freight in this region?**

What	Where/How
Roadway	**Narrow roadways for the "Last mile" to reach the end user. i.e. Moore's Mill Rd, Kegley Road, Little River Rd (aka Old Highway 95)**
Bridges	**I-35 forms a barrier, there are limited options (bridges) to cross from east to west**
Intermodal Connections	**Limited intermodal freight movement. There is a short-line rail company that serves the Industrial Park, but no commercial facilities.**
Other: _____	**Other than I-35 or SH 317, there are limited options for trucks traveling between Belton and Temple**

10. **<u>Safety</u> – Do you have any freight-related safety concerns (what and where)?**
    Dust from trucks leaving the quarry near SH 317 can sometimes impede visibility. Trucks occasionally leave debris on the road.
    Weaving lanes and on-ramps along I35 between Lp 363 and Midway – failures to yield or observe speed limits contribute to crashes.

11. **<u>Effects</u> – How do infrastructure and/or modal challenges affect regional freight operations?**
    Turn lanes and ramps to highways can still be concerns for congestion as well as safety.

12. **<u>Policy/Programmatic/Organizational</u> – do any public policies, programs, or organizations affect freight in the region? How? What would you like to see changed?**
    TxDOT funding – where highways have been widened or realigned, traffic flows better which includes freight movement.

Summary

13. **Who else should we talk to about truck parking and operations in the region?**
    Large commercial logistics operations in Temple include HEB, Walmart, McLane, WilsonArt and other manufacturers

14. **Is there anything else you would like to tell us which would help explain the truck parking issues that you face?**

    _____

    _____

    _____

Please feel free to provide your contact information:

◯ If you want us to contact you with the final document when this study is complete

◯ If you would like us to contact you to give you additional information about the study

◯ If you would like us to contact you so you can give us additional information

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Planner, City of Temple
jdeckman@templetx.gov
254-298-5270

KTMPO KEY TO CONNECTIVITY

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Survey for the Technical Advisory Committee

Connectivity is a key issue for the region – connecting the transportation network, connecting our planning policies, and connecting with you! The Killeen-Temple Metropolitan Planning Organization (KTMPO) is gathering information to help guide our transportation planning for the Truck Transportation & Parking Study. Please take a minute to connect with us by filling out this survey on truck movements and parking requirements in our region. ***Thank you for your help!***

Truck Parking Questions

1. **How is illegal truck parking impacting your city? (decreased safety, slower movement of goods and services, etc.)**
   Decreased safety; roadways/travel lanes being blocked.

2. **At what times do you see trucks illegally parked? (List days of the week, times, frequency)**
   Monday – Friday during business hours when trucks are making deliveries to businesses.

3. **What are your future and planned projects to address the truck parking issue?**
   Two issues: 1) delivery trucks and temp parking for loading/unloading; and 2) long term and/or over-night parking.
   No projects for temp parking. For long term/over-night parking there are some private ventures that will help…truck stop at I-14 and FM 1670 undergoing permit review; rezoning underway for possible truck stop near I-35 and Dillard Road.

4. **What would be possible beneficial partnerships for business and local governments to have with the trucking industry in order to address the truck parking shortage?**
   The trucking industry is key to keeping our economy healthy and providing basic supplies necessary for life. The city, Chamber of Commerce, and businesses need to work cooperatively to help them find a safe place to park for over-night stays, maybe utilizing large parking lots that are not used during the evening hours. Large businesses that are the origin or destination should be more involved in facilitating over-night truck parking. Governmental facilities with large parking lots could be used for this also.

5. **Would the city or a business be open to using a lot/parking lot that is vacant for truck parking? If no, why?**
   Yes, depending on the location.

6. **Are there any local regulations which restrict truck parking or conflict with planned projects or strategies? Please describe.**
   Ordinances prohibit trucks from parking in ROW for long term. Also, parking in residential areas is prohibited unless behind the front yard setback line.

7. **Do owner/operators park trucks at their homes? Is that an issue in your community?**
   Yes, some do and it has been an issue if not in compliance with ordinances as mentioned above in #6.

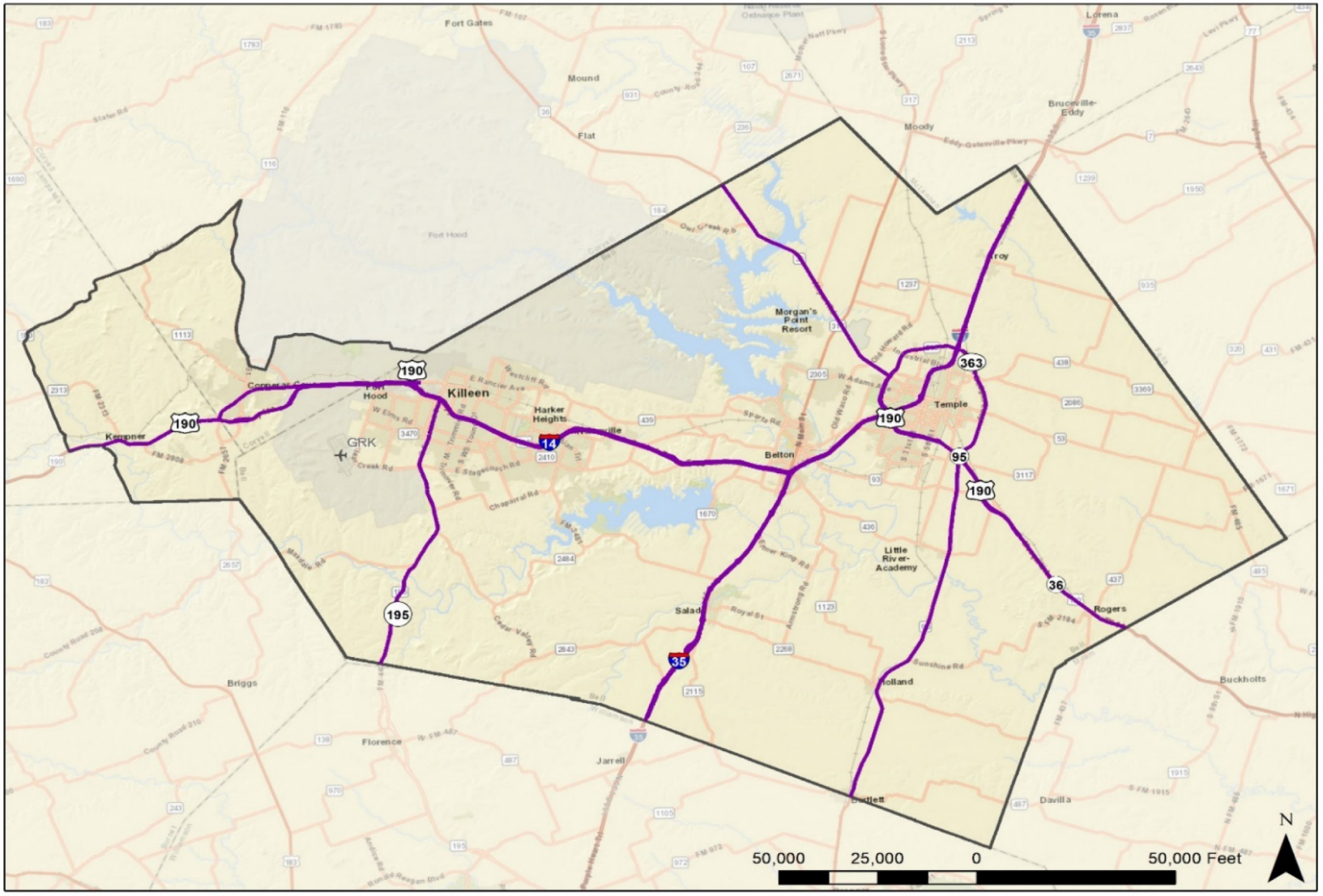
8. **Who else should we talk to about truck parking in the region?**
   Law enforcement at all levels—state (DPS), county sheriff office, city police dept.; TxDOT; Chamber of Commerce; Economic Development Corporations and other business groups (Downtown Belton Business Assoc); large businesses—Walmart, HEB, etc.

KTMPO KEY TO CONNECTIVITY

KTMPO KILLEEN-TEMPLE metropolitan planning organization

Survey for the Technical Advisory Committee

Please mark on the map the places where you see trucks parking illegally.



KTMPO KEY TO CONNECTIVITY

Survey for the Technical Advisory Committee

Freight Operational Questions

9. What barriers or bottlenecks most affect freight in this region?

What	Where/How
Roadway	Main Street between Holland Road and RR overpass…just two lane road with center turn lane. Several trucks park in the center turn lane to deliver goods or block the travel lanes.
Bridges	
Intermodal Connections	
Other: _____	Main Street and 6th Ave intersection—difficult to make turn onto N bound Main Street from 6th Ave.

10. <u>Safety</u> – Do you have any freight-related safety concerns (what and where)?

Main Street as described above in #9; I-35 and I-14 merging area.

11. <u>Effects</u> – How do infrastructure and/or modal challenges affect regional freight operations?

I'm not aware of specific effects in our region—I'm sure in general if infrastructure is lacking, delays will result.

12. <u>Policy/Programmatic/Organizational</u> – do any public policies, programs, or organizations affect freight in the region? How? What would you like to see changed?

Would just like to see more cooperative efforts to address this issue and provide more over-night parking areas that are safe for the truck drivers.

Summary

13. Who else should we talk to about truck parking and operations in the region?

See response to #8 above.

14. Is there anything else you would like to tell us which would help explain the truck parking issues that you face?

No.

Please feel free to provide your contact information:

X If you want us to contact you with the final document when this study is complete

◯ If you would like us to contact you to give you additional information about the study

◯ If you would like us to contact you so you can give us additional information

_____

_____

_____

_____

KTMPO KEY TO CONNECTIVITY

Survey for Truck Drivers

Connectivity is a key issue for the region – connecting the transportation network, connecting our planning policies, and connecting with you! The Killeen-Temple Metropolitan Planning Organization (KTMPO) is gathering information to help guide our transportation planning for the Truck Transportation & Parking Study. Please take a minute to connect with us by filling out this survey on truck movements and parking requirements in our region. ***Thank you for your help!***

1. What amenities are important to you? (please select all that apply)

- ☒ Bathrooms
- ○ Showers
- ☒ Fuel
- ○ Laundry facilities
- ○ Wifi
- ○ Real-time parking information
- ○ Proximity to a hotel
- ○ Truck service or repair
- ○ Truck washing station
- ○ Lighting
- ○ Restaurant on site or nearby

Other:

2. What is the biggest issue that you face with truck parking in the region?

- ○ Distance between parking facilities
- ○ Capacity at existing facilities
- ○ Safety
- ○ Amenities
- ☒ Other: Places to fuel that are big enough for trucks

3. If a parking lot is full, what do you typically do? (select all that apply)

- ☒ Wait for a spot to open up
- ○ Drive to the next truck parking facility
- ○ Park along the shoulder
- ○ Park in a local company's lot

4. What freight barriers or bottlenecks most affect you in this region?

What	Where/How
Roadway	
Bridges	
Modal Transfer	
Other: Construction on Highway	I know this is temporary but it currently slows down traffic in our area.

5. <u>Safety</u> – Are there any freight-related safety concerns in the region (what and where)?

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KTMPO KEY TO CONNECTIVITY

Survey for Truck Drivers

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1. What amenities are important to you? (please select all that apply)

- ◉ Bathrooms
- ◉ Showers
- ◉ Fuel
- ◉ Laundry facilities
- ◉ Wifi
- ○ Real-time parking information
- ○ Proximity to a hotel
- ○ Truck service or repair
- ○ Truck washing station
- ○ Lighting
- ◉ Restaurant on site or nearby

Other: _____

2. What is the biggest issue that you face with truck parking in the region?

- ◉ Distance between parking facilities
- ◉ Capacity at existing facilities
- ◉ Safety
- ○ Amenities
- ◉ Other: City Requires Parking not our Stores

3. If a parking lot is full, what do you typically do? (select all that apply)

- ○ Wait for a spot to open up
- ○ Drive to the next truck parking facility
- ○ Park along the shoulder
- ◉ Park in a local company's lot

4. What freight barriers or bottlenecks most affect you in this region?

What	Where/How
Roadway	I-14 Road Construction
Bridges	
Modal Transfer	
Other: _____	

5. <u>Safety</u> – Are there any freight-related safety concerns in the region (what and where)?

Service Road ; Mornings Cars Speed

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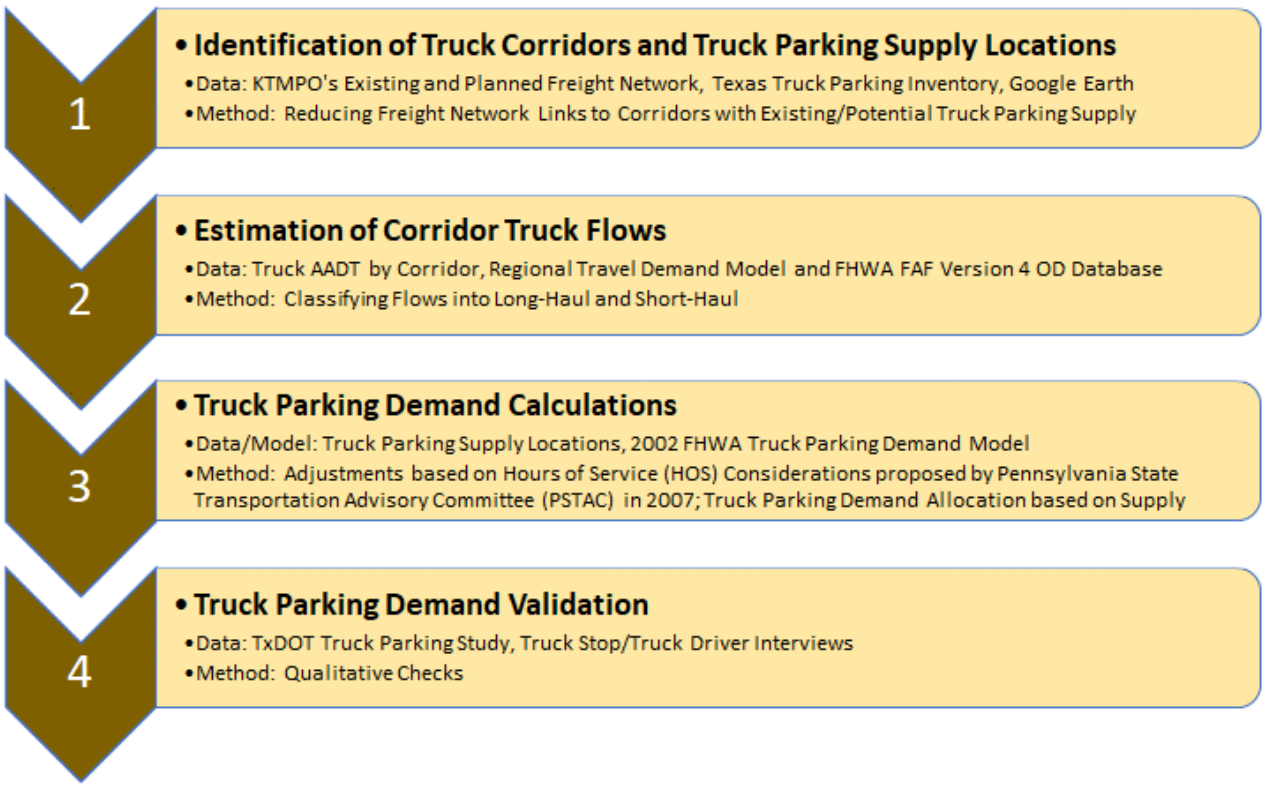
Killeen Has NO TRUCK STOPS

Appendix B: Supply and Demand Assessment Methodology

Overview

A four-step truck parking supply and demand assessment methodology as shown in Figure A-1 was developed in this study. The methodology was implemented as a spreadsheet-based Truck Parking Supply and Demand Model Version 1.2 (referred to as "the Model") for the KTMPO Region and is titled as: "DR1_KTMPO_RFTPS_TPSDModel_V1.2_20200930.xlsx". It is enclosed with this memorandum.

Figure A-1: Truck Parking Supply and Demand Assessment Methodology Flowchart



Source: CDM Smith's Truck Parking Supply and Demand Model Version 1.2 for the KTMPO Region.

Step 1: Identification of Truck Corridors and Truck Parking Supply Locations

In this step, truck corridors and segments suited to truck parking were identified and current and potential truck parking supply along them were estimated in terms of number of truck parking sites and number of truck parking spaces contained in each of them using a review of available public and private data, websites, apps, plans, and by observation. The Model incorporates the truck parking supply analysis findings into two spreadsheet tabs: "TrkPkgSplyLocs" raw data tab and "TrkCorrSplyIDing" processed data tab. The "TrkPkgSplyLocs" raw data tab contains individual truck parking site data such as description, location, city, public/private ownership, parking site type (established, planned, opportunity or unauthorized), spaces, key amenities, and notes. "TrkCorrSplyIDing" processed data tab contains the summaries of the truck parking supply (number of sites and number of spaces) by corridor and segment.

Step 2: Estimation of Corridor Truck Flows

Average daily truck flows and average free flow speeds on the identified truck corridors and segments were estimated in this step. The link level 2018 TxDOT annual average daily truck traffic (AADTT) estimates were averaged over the truck corridors and segments identified in Step 1 and used as the existing daily total truck flows. Compound annualized growth rates determined using FAF4 assigned daily truck flows were applied to the 2018 AADTT to estimate future (2045) daily total truck flows over the truck corridors and segments. Total truck flows in both the existing and future years were then broken down into the following components using FHWA FAF Version 4 Origin-Destination Commodity Flows Database (FAF4) and KTMPO's regional travel demand model (RTDM): (1) external-external medium-haul, (2) external-external long-haul, (3) internal-internal or internal-external or external-internal short-haul, (4) internal-external or external-internal medium-haul, and (5) internal-external or external-internal long-haul. Internal and external were defined with respect to the KTMPO region boundary. Short-haul was defined as truck trips with travel distance <= 200 miles, medium-haul was defined as truck trips with travel distance > 200 miles and <= 400 miles, and long-haul was defined as truck trips with travel distance > 400 miles.

"TrkFlowsEst" tab of the Model contains the calculations and summaries of the various truck flow components. The Model also consists of supporting data tabs of: "TxDOT_AADTT", "FAF4_TrkFlows", "FAF4_ODPattern" and "RegTDM_ODPattern". "TxDOT_AADT" tab of the Model provides 2018 annual average daily truck traffic (AADTT) estimates by roadway link. "FAF4_TrkFlows" tab of the Model provides AADTT estimates in 2012 and 2045 based on FHWA FAF4 Version 4 Origin-Destination (OD) Commodity Flows Database and is used to develop growth rates in AADTT. "FAF4_ODPattern" tab of the Model provides estimate for the external-external truck trips by OD pair and the shares by length of haul based on FAF4 data. "RegTDM_ODPattern" tab of the Model provides estimates for all truck trips by OD pair based on the KTMPO's regional travel demand model.

More details on the truck component flow calculations on the analysis corridors are described as follows.

External-External Truck Flows

IH-35 was assumed as the primary truck corridor for external-external truck flows; all other truck corridors were assumed to have small external-external truck flows compared to their total truck flows. To estimate external-external truck flows on IH-35, FHWA FAF Version 4 Origin-Destination Commodity Flows Database was used, which provides origin to destination tonnage flows by truck mode. The following sub-steps were followed to estimate the external-external medium-haul and external-external long-haul truck flow components:

1. Particular FAF4 zones were selected and grouped into three groups. Domestic zone group A represented domestic regions south of the KTMPO region and included: Laredo, Austin and San Antonio in Texas. Domestic zone group B represented domestic regions north of the KTMPO region and included: Dallas-Fort Worth (Texas), Arkansas, Oklahoma and Midwest States (Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota and Wisconsin). International zone group C represented Mexico only through Laredo Port of Entry. Any OD pairing of zones from group A or group C with zones from group B under the truck mode was assumed to represent IH-35 truck traffic flow through the KTMPO region.
2. Among all possible OD pairings, truck flows between Austin (of domestic zone group A) and Dallas-Fort Worth (of domestic zone group B) and between San Antonio (of domestic zone group A) and Dallas-Fort Worth (of domestic zone group B) were identified as medium-haul type; while all other OD pairings were identified as long-haul type.
3. 2012 and 2045 tonnage data were collected from FAF4 for external-external, medium- and long-haul flows as shown in ***Table B-1***.

4. By assuming annual to daily conversion factor of 313 days/year,[9] average payload factor of 15 tons per loaded truck[10] and an empty return ratio (total trucks to loaded trucks ratio) of 2.0,[11] the tonnage data was converted to truck flows. An adjustment for 2045 truck flows was made by capping the compound annualized growth rate for international trade at 3.0 percent, where uncapped growth rate is 3.8 percent annually. Through geometric interpolation between 2012 and adjusted 2045 truck flows, the 2018 truck flow estimates were made, also as shown in ***Table B-1***.
5. External-external truck flows totals in 2018 and 2045 were estimated as 12,483 and 22,888 trucks, respectively. In 2018, medium-haul and long-haul are split as 21:79, while in 2045, this split will become 17:83.

[9] Assuming weekday truck traffic is twice that on a weekend. The factor is estimated using: 365 – 52 x 2 + 52 x 2 x 0.5 = 313.

[10] As per *Table 32* of FHWA, Research, Development, and Application of Methods to Update Freight Analysis Framework Out-of-Scope Commodity Flow Data and Truck Payload Factors, April 2020, available at: https://ops.fhwa.dot.gov/publications/fhwahop20011/fhwahop20011.pdf (last accessed on September 30, 2020), payload factors vary by commodity type between 9.37 to 34.95 tons per loaded truck; with higher payload factors for bulky commodities (e.g., coal, gravel, cereal grains, etc.) and lower payload factors representing non-bulky commodities (e.g., precision instruments, paper products, electronics, food products, etc.). The IH-35 corridor was assumed to have an average payload factor that is skewed towards non-bulky commodities, hence an average payload factor of 15 tons per loaded truck was assumed, which may be on a lower side.

[11] For every loaded truck, an empty return truck was added, hence, the empty return factor of 2.0. The 100 percent empty back-haul assumption may be conservative. In combination with the assumed payload factor of 15 tons per loaded truck, however, the effective payload factor for all trucks (loaded and empty) is estimated as 7.5 tons per truck. This value was close to the average tons per truck on IH-35 seen in the FAF4 assigned truck flows database. Hence, the combination of payload factor of 15 tons per truck and empty return factor of 2.0 were found reasonable to use.

Table B-1: Estimated External-External Truck Flows through the KTMPO Region

Direction	Type of Flow	Haul Type	2012 Annual Truck Flows, Kilo Tons (FAF4 based)	2045 Annual Truck Flows, Kilo Tons (FAF4 based)	2012 Est. Daily Truck Volume (Vehicles)	2045 Est. Daily Truck Volume (Vehicles)	Adj. 2045 Est. Daily Truck Volume (Vehicles)	2018 Est. Daily Truck Volume (Vehicles)
Northbound	Domestic	Medium-Haul	1,501	2,585	1,227	1,968	1,968	1,337
		Long-Haul	1,384	3,718	1,406	2,328	2,328	1,541
	International	Long-Haul	6,691	24,537	2,695	9,115	7,148	3,363
	SUB-TOTAL		**9,576**	**30,839**	**5,328**	**13,411**	**11,444**	**6,242**
Southbound	Domestic	Medium-Haul	4,259	6,656	1,227	1,968	1,968	1,337
		Long-Haul	5,219	7,210	1,406	2,328	2,328	1,541
	International	Long-Haul	5,962	18,260	2,695	9,115	7,148	3,363
	SUB-TOTAL		**15,440**	**32,127**	**5,328**	**13,411**	**11,444**	**6,242**
Bi-Directional	Domestic	Medium-Haul	5,760	9,241	2,454	3,937	3,937	2,674
		Long-Haul	6,603	10,928	2,813	4,655	4,655	3,083
	International	Long-Haul	12,653	42,797	5,390	18,231	14,296	6,727
	TOTAL		**25,016**	**62,966**	**10,656**	**26,822**	**22,888**	**12,483**

NOTE: HAUL TYPES - SHORT-HAUL: <= 200 MILES, MEDIUM-HAUL: > 200 MILES, <= 400 MILES, LONG-HAUL: > 400 MILES. ADJUSTMENT FOR 2045: COMPOUND ANNUALIZED GROWTH RATE FOR INTERNATIONAL TRADE BY TRUCKS CAPPED AT 3 PERCENT. UNCAPPED GROWTH IS 3.8 PERCENT ANNUALLY.

Source: FHWA FAF4 Commodity Flows Database, CDM Smith's Truck Parking Supply and Demand Model Version 1.2 for the KTMPO Region.

Other (Internal-Internal, Internal-External and External-Internal) Truck Flows

The KTMPO's regional travel demand model (RTDM) and the FHWA FAF4 commodity flows database were used to estimate the other truck flow components while adjusting for the external-external truck flows that are already estimated using FAF4. The production/attraction factors at external stations on the truck corridors based on the RTDM were combined with freight production/attraction factors at the FAF regions outside the KTMPO region by haul length to estimate internal-external and external-internal. The portion of the truck AADT on the truck corridors not accounted by external-external, internal-external and external-internal truck flows was considered as internal-internal truck flows.

Based on the RTDM, ***Figure B-2*** and ***Figure B-3*** show the 2015 truck trips generation and 2015-2045 annualized truck trips growth pattern by traffic analysis zone (TAZ) for informational purposes (not used in the demand estimation). The large freight generators and major employers that are likely attributing to the truck flows from/to the KTMPO region are shown on the right side (see inset).

Large Freight Generators and Major Employers in the KTMPO Region

Central Texas moves freight by truck for nationally known distributors in the Killeen-Temple region, such as McLane Food Services, Wilson Art International plastic laminate products, ACER computer products, Wal-Mart Distribution Services and H-E-B Distribution products.

Fort Hood is a major military installation in the region that covers around 215,000 acres. It has a 65,000 active duty service members and dependents and 9,000 civilian employees. Military goods are transported both by truck and rail.

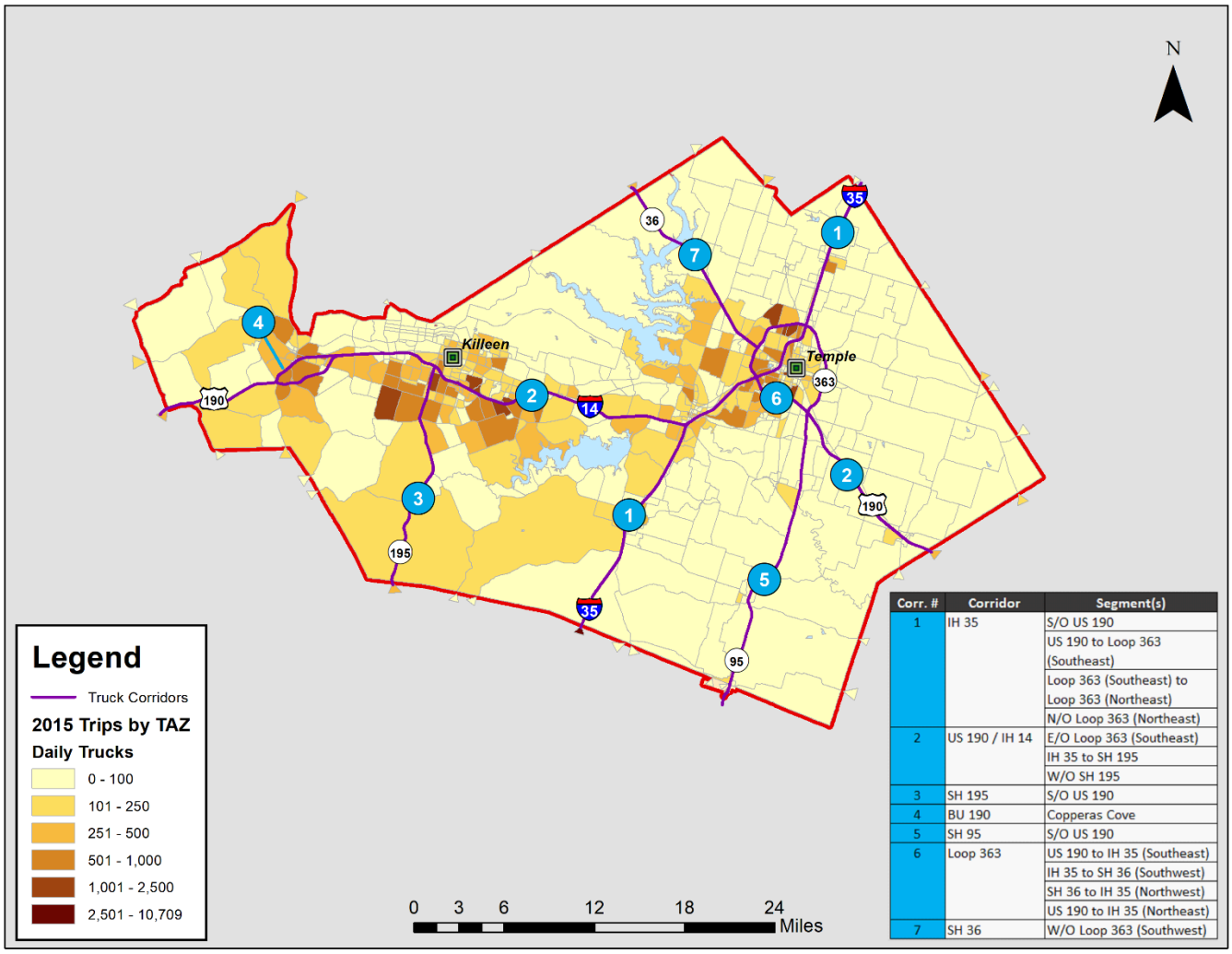
The MPO region is served by Killeen-Ft. Hood Regional Airport and Skylark Field.

Retail malls/stores such as Killeen Mall, Walmart Supercenters, H-E-B stores regularly generate trips for truck-based freight.

The following sub-steps were followed to estimate the haul type shares for internal-internal, internal-external and external-internal truck flow components:

1. Using the same FAF4 sub-OD flow matrix as used in the external-external flows determination, the production and attraction shares for the FAF4 zones south of the KTMPO region, and that for the FAF4 zones north of the KTMPO region were calculated. These are summarized in ***Table B-2***. Using these shares, short-haul, medium-haul and long-haul shares for the flows to/from the KTMPO region (that is internal-external or external-internal) in the northbound and southbound directions were determined. With respect to the KTMPO region, flows to/from Austin, San Antonio and Dallas-Fort Worth were assessed as short-haul type, flows to/from Laredo and Oklahoma were assessed as medium-haul type, and all destinations/origins north of Oklahoma (Arkansas and Midwest States), and south of Laredo (Mexico) were assessed as long-haul type.
2. Using the KTMPO's RTDM, OD (or movement type) shares between the IH-35 external traffic analysis zones (treated as individual zones – at the northern KTMPO boundary and the southern KTMPO boundary) and internal traffic analysis zones (treated as a single and combined zone) were calculated. Numerical estimate for IH-35 external (northern) to IH-35 external (southern) truck flow based on the KTMPO's RTDM was adjusted to the previously calculated external-external truck flow (using FAF4); and the remaining OD flows in the KTMPO's RTDM were adjusted while keeping their relative shares intact. By simultaneously applying the production or attraction shares by haul length and the OD (or movement type) shares, the most detailed volume shares by haul length and movement type were determined for the truck trips with trip ends at the IH-35 external traffic analysis zones. ***Table B-3*** summarizes these shares.
3. For the external zones at the southern KTMPO boundary that are not IH-35 (southern) external zone, that is SH 195 (southern) and SH 95 (southern) external zones, the haul type shares in **sub-step 1** corresponding to the southbound direction were used. IH-35 (northern) external zone is the only external zone in the northern KTMPO boundary, so no further calculations were required for the northern KTMPO boundary. For the external zones at the eastern and the western KTMPO boundaries, that is US 190 (eastern), US 190 (western) and SH 36 (western) external zones, an average of the haul type shares in **sub-step 1** corresponding to both the northbound and southbound directions were used. These shares provide internal-external and external-internal flow shares for all external zones on the truck corridors.
4. For the internal segments of IH-35, US 190 and Loop 363 (the southeast and the southwest segments), an average of the haul type shares estimated for the external segments of the same highways was used. As a special case, the northwest and the southwest segments of Loop 363 were assumed to be 100 percent short-haul type due to their circuity. ***Table B-4*** and ***Table B-5*** summarize the haul type shares for all corridors and segments in 2018 and 2045, respectively.

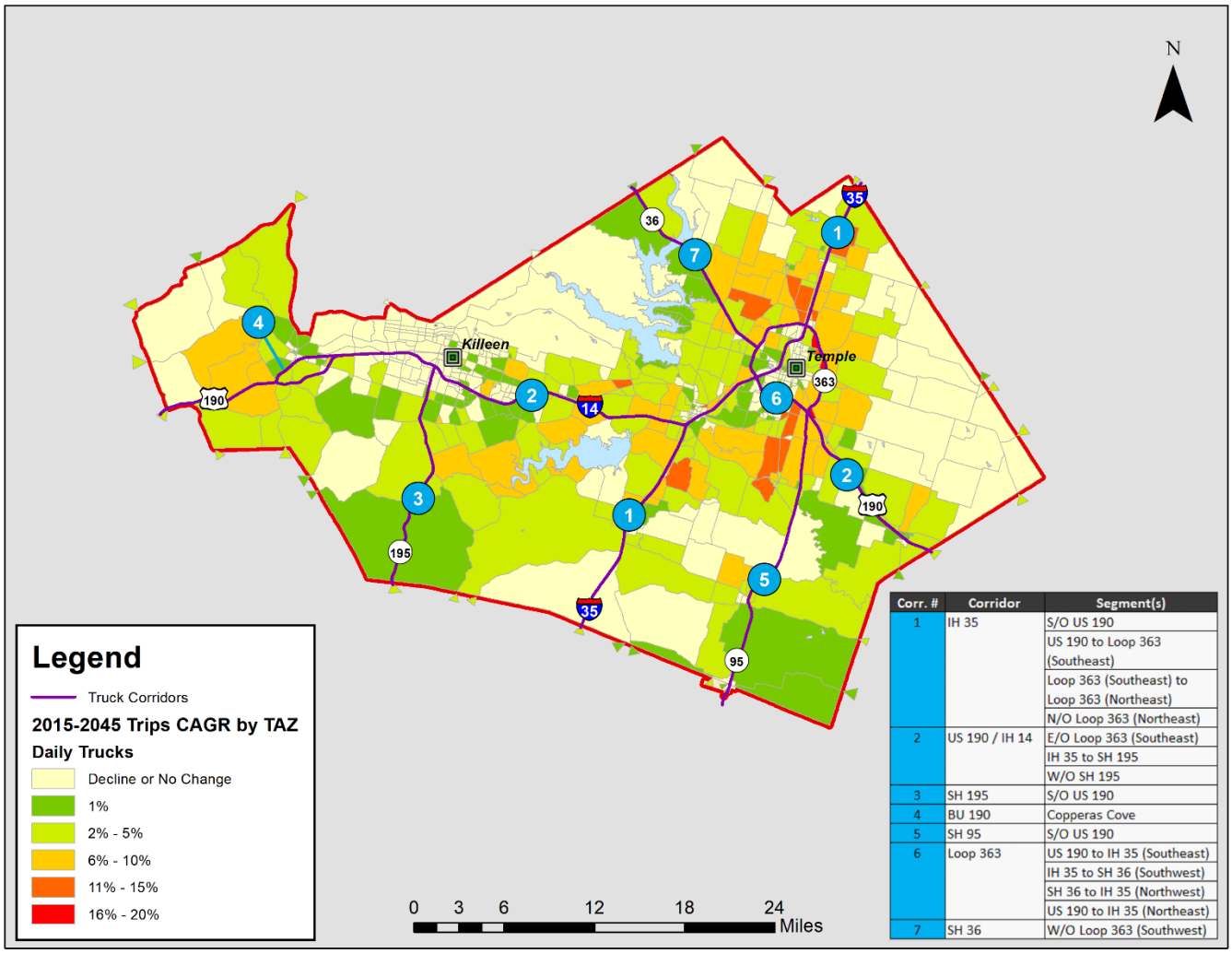
Figure B-2: KTMPO's Regional Travel Demand Model – 2015 Truck Trips by TAZ



Corr. #	Corridor	Segment(s)
1	IH 35	S/O US 190
		US 190 to Loop 363 (Southeast)
		Loop 363 (Southeast) to Loop 363 (Northeast)
		N/O Loop 363 (Northeast)
2	US 190 / IH 14	E/O Loop 363 (Southeast)
		IH 35 to SH 195
		W/O SH 195
3	SH 195	S/O US 190
4	BU 190	Copperas Cove
5	SH 95	S/O US 190
6	Loop 363	US 190 to IH 35 (Southeast)
		IH 35 to SH 36 (Southwest)
		SH 36 to IH 35 (Northwest)
		US 190 to IH 35 (Northeast)
7	SH 36	W/O Loop 363 (Southwest)

Source: KTMPO Regional Travel Demand Model, CDM Smith's Truck Parking Supply and Demand Model Version 1.2 for the KTMPO Region.

Figure B-3: KTMPO's Regional Travel Demand Model –2015-2045 Truck Trips CAGR by TAZ



Source: KTMPO Regional Travel Demand Model, CDM Smith's Truck Parking Supply and Demand Model Version 1.2 for the KTMPO Region.

Table B-2: Flow Shares by Haul Distance to/from the KTMPO Region

Direction	Haul Type	2018 Flow Share	2045 Flow Share
Northbound w.r.t. KTMPO Region	Short-Haul	22.7%	18.7%
	Medium-Haul	3.0%	2.3%
	Long-Haul	74.3%	79.0%
	Total	**100.0%**	**100.0%**
Southbound w.r.t. KTMPO Region	Short-Haul	37.4%	30.3%
	Medium-Haul	8.7%	6.6%
	Long-Haul	53.9%	63.1%
	Total	**100.0%**	**100.0%**

Source: FHWA FAF4 Truck-Based Origin-Destination Flows Database, CDM Smith's Truck Parking Supply and Demand Model Version 1.2 for the KTMPO Region.

Table B-3: Flow Shares by Movement Type and Haul Type for Trip Ends at IH-35 External Zones

O/D	D/O	Haul Type	2018 Flow Share	2045 Flow Share
IH-35 (Northern) External Zone	IH-35 (Southern) External Zone	Medium-Haul	10.7%	9.1%
		Long-Haul	39.1%	43.8%
	Internal	Short-Haul	11.4%	8.8%
		Medium-Haul	1.5%	1.1%
		Long-Haul	37.3%	37.2%
	Total		**100.0%**	**100.0%**
IH-35 (Southern) External Zone	IH-35 (Northern) External Zone	Medium-Haul	15.8%	13.2%
		Long-Haul	57.9%	63.6%
	Internal	Short-Haul	9.9%	7.1%
		Medium-Haul	2.3%	1.5%
		Long-Haul	14.2%	14.7%
	Total		**100.0%**	**100.0%**

Source: FHWA FAF4 Truck-Based Origin-Destination Flows Database, KTMPO Regional Travel Demand Model, CDM Smith's Truck Parking Supply and Demand Model Version 1.2 for the KTMPO Region.

Table B-4: 2018 Flow Shares by Movement Type and Haul Type for Truck Corridor in the KTMPO Region

Corr. #	Corridor	Segment	Corr.-Seg. ID	E-E, Medium-Haul	E-E, Long-Haul	I-I or I-E or E-I, Short-Haul	I-E or E-I, Medium-Haul	I-E or E-I, Long-Haul	E-E, Medium-Haul
1	IH-35	S/O US 190	1-1	16%	58%	10%	2%	14%	16%
		US 190 to Loop 363 (Southeast)	1-2	16%	60%	6%	1%	16%	16%
		Loop 363 (Southeast) to Loop 363 (Northeast)	1-3	17%	62%	5%	1%	14%	17%
		N/O Loop 363 (Northeast)	1-4	11%	39%	11%	2%	37%	11%
2	US 190 / IH-14	E/O Loop 363 (Southeast)	2-1	0%	0%	30%	6%	64%	0%
		IH-35 to SH 195	2-2	0%	0%	30%	6%	64%	0%
		W/O SH 195	2-3	0%	0%	30%	6%	64%	0%
3	SH 195	S/O US 190	3-1	0%	0%	37%	9%	54%	0%
4	BU 190	Copperas Cove	4-1	0%	0%	30%	6%	64%	0%
5	SH 95	S/O US 190	5-1	0%	0%	37%	9%	54%	0%
6	Loop 363	US 190 to IH-35 (Southeast)	6-1	0%	0%	56%	4%	40%	0%
		IH-35 to SH 36 (Southwest)	6-2	0%	0%	65%	3%	32%	0%
		SH 36 to IH-35 (Northwest)	6-3	0%	0%	100%	0%	0%	0%
		US 190 to IH-35 (Northeast)	6-4	0%	0%	100%	0%	0%	0%
7	SH 36	W/O Loop 363 (Southwest)	7-1	0%	0%	30%	6%	64%	0%

Source: FHWA FAF4 Truck-Based Origin-Destination Flows Database, KTMPO Regional Travel Demand Model, CDM Smith's Truck Parking Supply and Demand Model Version 1.2 for the KTMPO Region.

Table B-5: 2045 Flow Shares by Movement Type and Haul Type for Truck Corridor in the KTMPO Region

Corr. #	Corridor	Segment	Corr.-Seg. ID	E-E, Medium-Haul	E-E, Long-Haul	I-I or I-E or E-I, Short-Haul	I-E or E-I, Medium-Haul	I-E or E-I, Long-Haul	E-E, Medium-Haul
1	IH-35	S/O US 190	1-1	13%	64%	7%	2%	15%	13%
		US 190 to Loop 363 (Southeast)	1-2	13%	63%	5%	1%	18%	13%
		Loop 363 (Southeast) to Loop 363 (Northeast)	1-3	14%	67%	4%	1%	15%	14%
		N/O Loop 363 (Northeast)	1-4	9%	44%	9%	1%	37%	9%
2	US 190 / IH-14	E/O Loop 363 (Southeast)	2-1	0%	0%	25%	4%	71%	0%
		IH-35 to SH 195	2-2	0%	0%	25%	4%	71%	0%
		W/O SH 195	2-3	0%	0%	25%	4%	71%	0%
3	SH 195	S/O US 190	3-1	0%	0%	30%	7%	63%	0%
4	BU 190	Copperas Cove	4-1	0%	0%	25%	4%	71%	0%
5	SH 95	S/O US 190	5-1	0%	0%	30%	7%	63%	0%
6	Loop 363	US 190 to IH-35 (Southeast)	6-1	0%	0%	56%	3%	42%	0%
		IH-35 to SH 36 (Southwest)	6-2	0%	0%	70%	2%	28%	0%
		SH 36 to IH-35 (Northwest)	6-3	0%	0%	100%	0%	0%	0%
		US 190 to IH-35 (Northeast)	6-4	0%	0%	100%	0%	0%	0%
7	SH 36	W/O Loop 363 (Southwest)	7-1	0%	0%	25%	4%	71%	0%

Step 3: Truck Parking Demand Calculations

A 2002 FHWA corridor-level modeling approach to truck parking demand estimation was used in this analysis. The key equations in the truck parking demand model are shown below:

Short-Term Parking Demand = Fs x AADT x T% x L/S x Pavg (Short-Term) x (P-SH x PPF-SH + P-LH x PPF-LH) **(Equation 1)**

Where:

Fs = Seasonal Peak Factor = 1.15
AADT = annual average daily traffic on the roadway segment
T% = percentage of trucks on the roadway segment
L = length of the roadway segment
S = average speed on the roadway segment
Pavg (Short-Term) = average short-term parking duration per hour of travel = 5 minutes / hour
P-SH = Proportion of total trucks that are short-haul, assumed as 100 percent of truly short-haul truck movements (<= 200 miles one-way distance) and 50 percent of medium-haul truck movements (> 200 miles, <= 400 miles one-way distance) (see discussion on Adjustments to the 2002 FHWA Model)
PPF-SH = Short-haul peak parking factor = 0.02
P-LH = Proportion of total trucks that are long-haul, assumed as 50 percent of medium-haul truck movements (> 200 miles, <= 400 miles one-way distance) and 100 percent of truly long-haul truck movements (> 400 miles one-way distance) (see discussion on *Adjustments to the 2002 FHWA Model*)
PPF-LH = Long-haul peak parking factor = 0.09

Overnight Parking Demand = Fs x AADT x T% x L/S x P% (Long-Term) x (P-LH x PPF-LH) **(Equation 2)**

Where:

Fs = Seasonal Peak Factor = 1.15
AADT = annual average daily traffic on the roadway segment
T% = percentage of trucks on the roadway segment
L = length of the roadway segment
S = average speed on the roadway segment
P% (Long-Term) = Fraction of time long-haul truckers must be off-duty and/or parked over 8 consecutive days under the Federal Motor Carrier Safety Administration (FMCSA) regulations (see discussion on Adjustments to the 2002 FHWA Model)
P-LH = Proportion of total trucks that are long-haul, assumed as 50 percent of medium-haul truck movements (> 200 miles, <= 400 miles one-way distance) and 100 percent of truly long-haul truck movements (> 400 miles one-way distance) (see discussion on *Adjustments to the 2002 FHWA Model*)
PPF-LH = Long-haul peak parking factor = 0.09

"AADT x T%" was replaced with direct estimates of AADTT in 2018 and 2045 by corridor and segment. "L" was computed for each corridor and segment using the ArcGIS tool applied to the 2018 TxDOT Roadway Inventory On-System, while "S" was computed by dividing "L" for each corridor and segment by travel time over the same. The travel time in turn is based on the speed limits and link lengths in the 2018 TxDOT Roadway Inventory On-System. Thus, the average speed represents a free flow speed. While short-term parking demand is calculated for both short-haul and long-haul truck trips, overnight parking demand is calculated only for the long-haul truck trips. The "PkgDemCalc" tab of the Model presents the truck parking demand calculations.

Adjustments to the 2002 FHWA Model

Two key adjustments were made to the 2002 FHWA model:

- Fraction of time long-haul truckers must be off-duty and/or parked over eight consecutive days under the Federal Motor Carrier Safety Administration (FMCSA) regulations was adjusted from 0.7 to 0.633 based on a 2007 Pennsylvania Truck Parking Study12, as the logic for deriving this factor was laid out more clearly in the 2007 Pennsylvania Report than the 2002 FHWA report and made use of all relevant FMCSA regulations. It is noted however that the correction in the fraction value is small.
- The default "Short-Haul" and "Long-Haul" trip shares in the 2002 FHWA model (that is, fixed P-SH to P-LH ratios of 36%:64% for urban area and 7%:93% for rural area) were replaced with the truck corridor-specific estimates made in this study using the FAF4 and the RTDM truck OD flows.

Step 4: Truck Parking Demand Validation

A qualitative assessment was performed to validate the truck parking supply and demand assessment performed in this study. This was done by comparing the supply and demand results with those in the TxDOT Statewide Truck Parking Study. "PkgDemValid" tab of the Model includes the information collected from the statewide study.

[12] As per: https://www.talkpatransportation.com/assets/TAC/Truck%20Parking%20in%20Pennsylvania%20-%20December%202007%20-%20Final%20Report.pdf (last accessed on September 30, 2020):
Fraction of time long-haul truckers must be off-duty and/or parked over 8 consecutive days under FMCSA regulations =
1- [Maximum on-duty hours per 8 consecutive days (FMCSA) x Driving hours permitted in a daily on-duty window] /
[Total hours in 8 consecutive days - Average hours at home (off-duty) for long-haul truckers over 8 consecutive days] =
1 – (70 x 0.79) / (192 – 42) = 1 – 55 / 150 = 0.633.

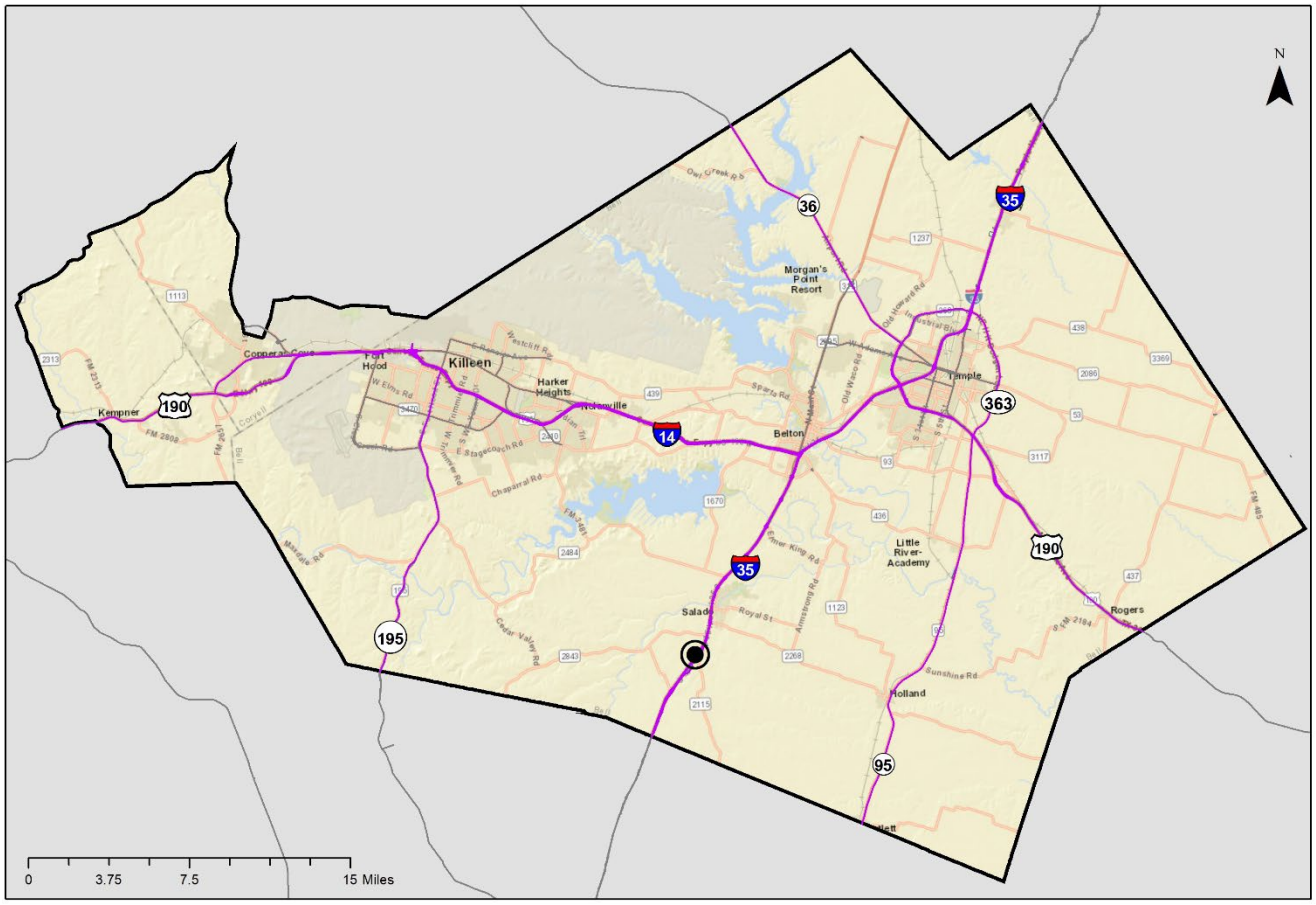
Stakeholder surveys were also reviewed to adjust the demand when needed. A change was made to the demand estimate on the US 190 corridor, particularly the segment east of Loop 363. A stakeholder survey indicated that Cameron, Texas just east of the KTMPO region has five major freight generators that allow short-term and overnight parking. After checking the OD flow pattern through the US 190 (eastern) external zone observed in the RTDM, the demand for overnight parking was therefore reduced by 90 percent on this corridor/segment. "PkgDemCalc" tab of the Model incorporated this adjustment.

Appendix C: Existing Truck Parking Profile Sheets

Authorized Truck Parking Sites (Established, Planned or Opportunity)

Truck Parking Site #2 Profile

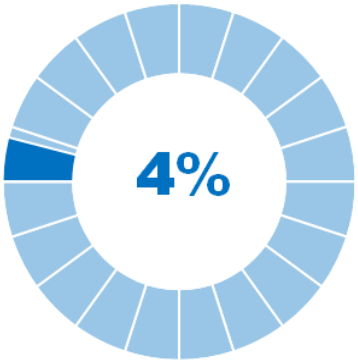
Bell County Rest Area South Bound
16801 IH-35, Salado, Texas



Restrooms

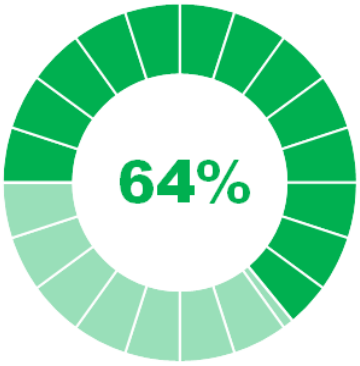
WiFi

Truck parking

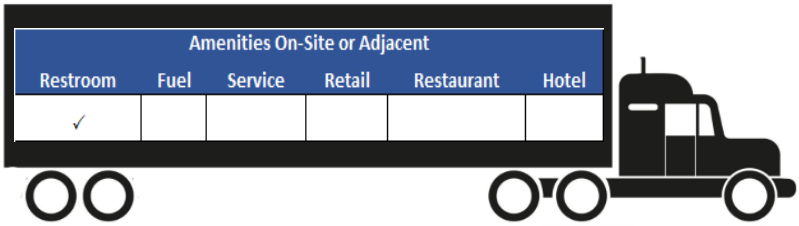


Percentage of the total truck parking spaces in the region

Percentage of the site truck parking spaces that are paved



Observed Off-Peak Percentage of the site truck parking spaces in use



Texas Statewide Parking Study

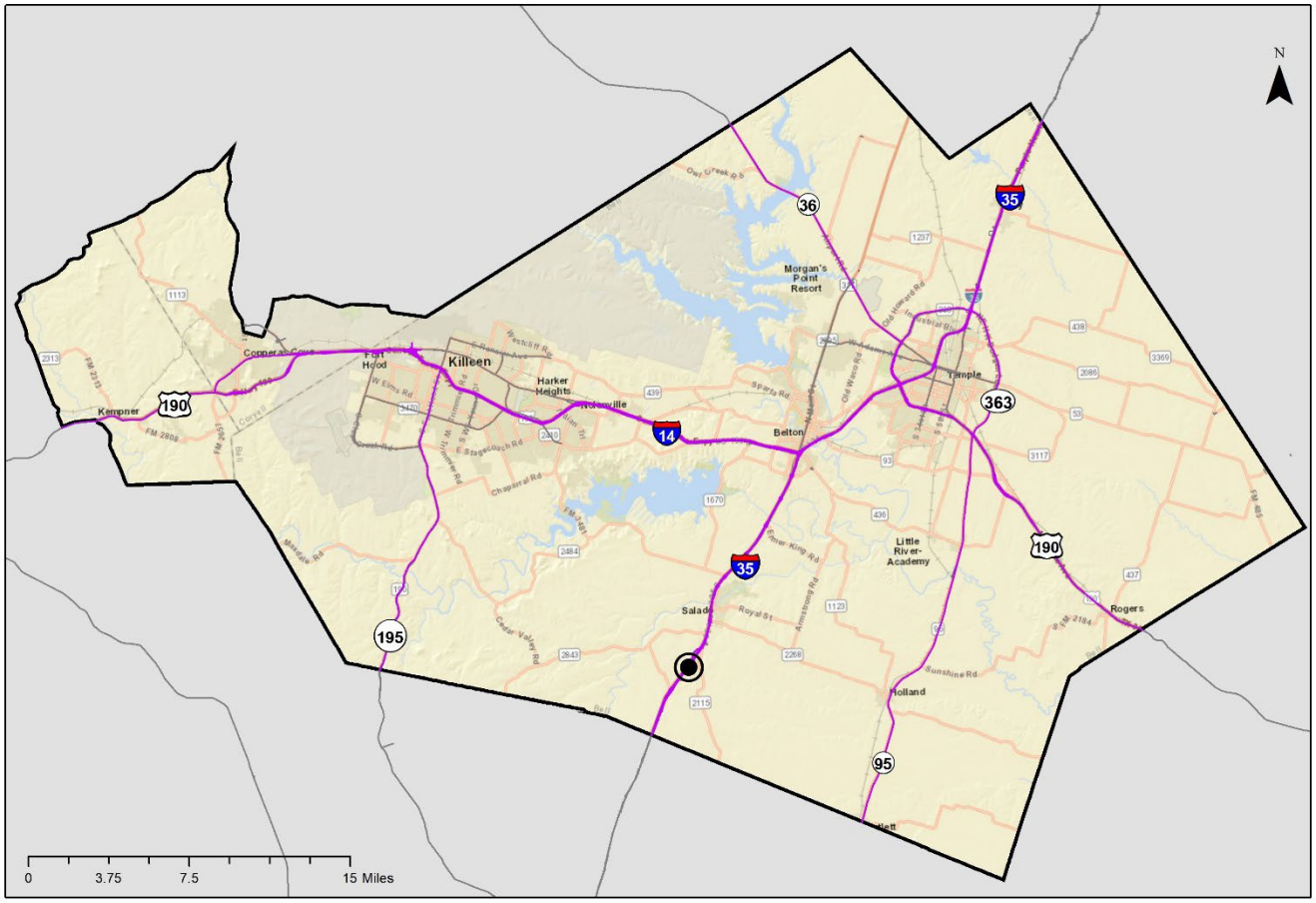
28 Available truck parking spaces listed in the report	**24** Hours per day parking demand exceeds capacity
28 Parking spaces counted on site	Classified as **HIGH** priority for parking capacity upgrades
73 Peak parking demand	

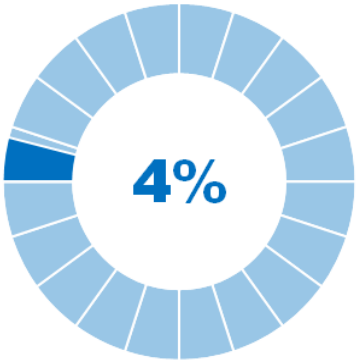
The Bell County Rest Area South Bound is located on the south bound frontage road of IH-35 in Salado. The only amenities at this location are restrooms and WiFi.

There are no hotels, restaurants, or other off-site amenities in the immediate area.

Truck Parking Site #3 Profile

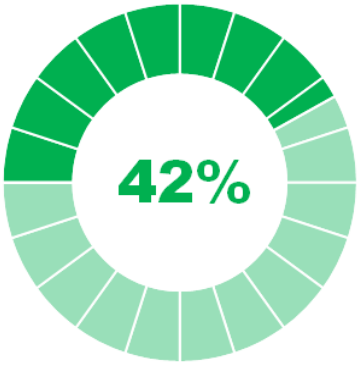
Bell County Rest Area Northbound
IH-35 at Mile Post 281, Salado, Texas



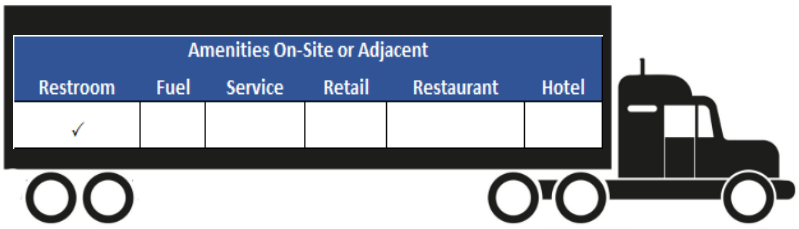


Percentage of the total truck parking spaces in the region

Percentage of the site truck parking spaces that are paved



Observed Off-Peak Percentage of the site truck parking spaces in use



Texas Statewide Parking Study

28 Available truck parking spaces listed in the report

28 Parking spaces counted on site

73 Peak parking demand

24 Hours per day parking demand exceeds capacity

Classified as **HIGH** priority for parking capacity upgrades

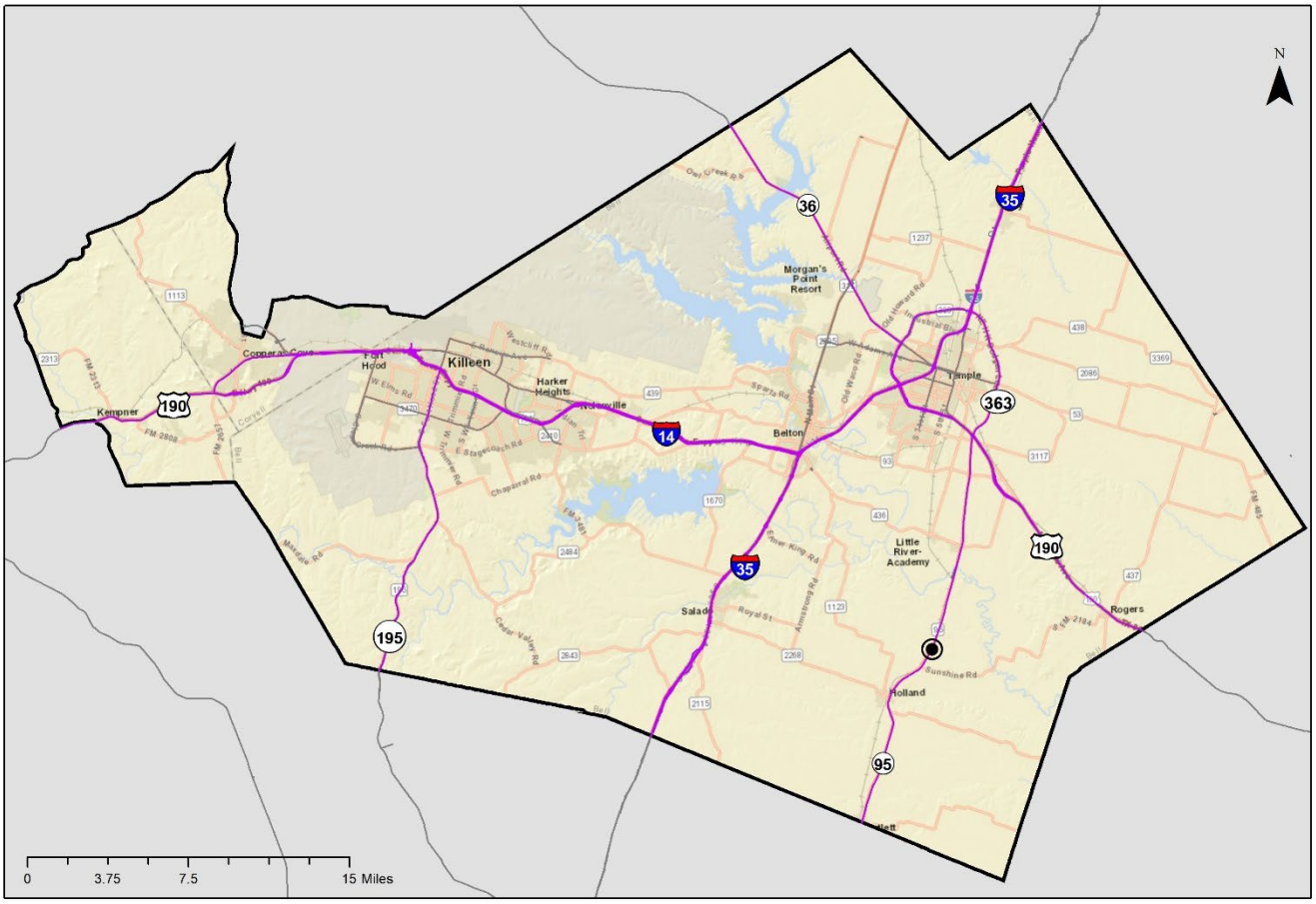
The Bell County Rest Area North Bound is located on the northbound frontage road of IH-35 in Salado. The only amenities at this location are restrooms and WiFi.

There are no hotels, restaurants, or other off-site amenities in the immediate area.

Truck Parking Site #55 Profile

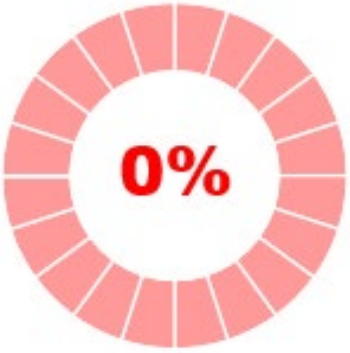
Opportunity Site

State Highway 95 at Mills Road, Holland, Texas



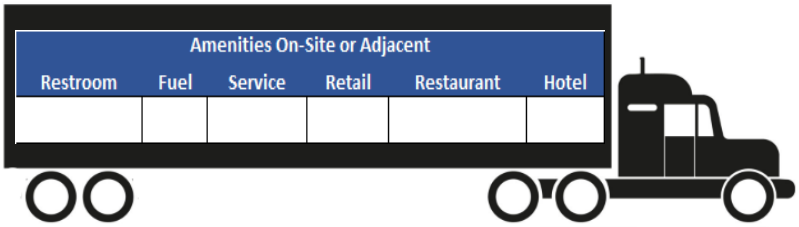
Opportunity parking

Percentage of the total truck parking spaces in the region



Percentage of the site truck parking spaces that are paved

Observed Off-Peak Percentage of the site truck parking spaces in use



Texas Statewide Parking Study

NA — Available truck parking spaces listed in the report	NA — Hours per day parking demand exceeds capacity
3 — Parking spaces counted on site	Classified as LOW priority for parking capacity upgrades
NA — Peak parking demand	

This opportunity site is located along SH 95 in Holland. Since it is an opportunity site, there are currently no amenities for truckers. There is space for three possible truck parking spaces that can be created on the site.

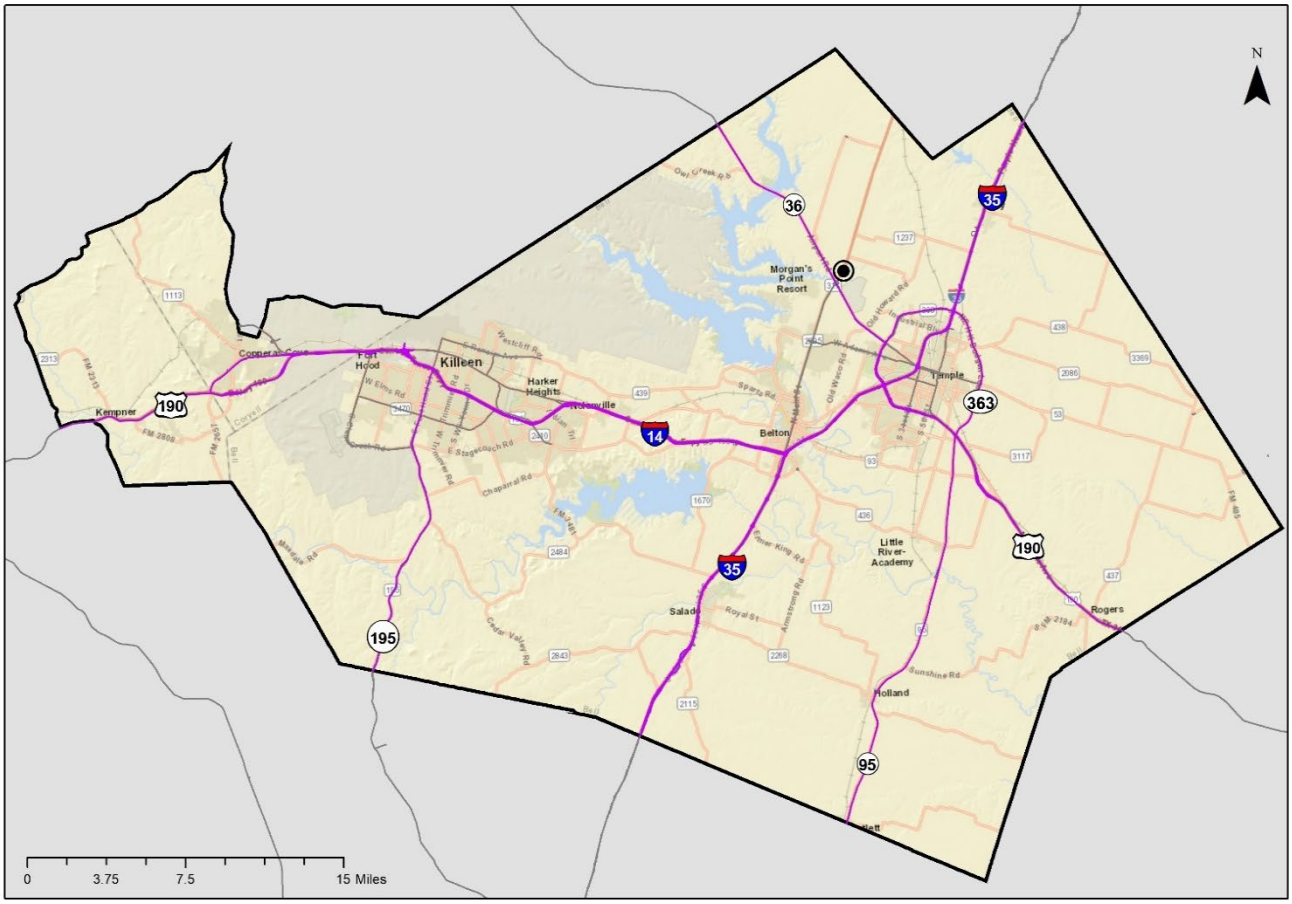
This site is an existing picnic area that was identified in the Statewide Parking Study.

There are no hotels, restaurants, or other off-site amenities in the immediate area.

Truck Parking Site #5 Profile

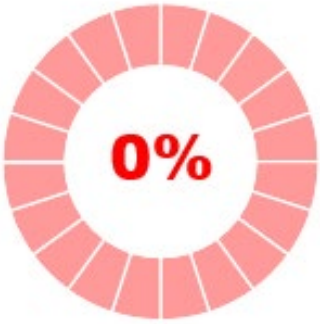
Opportunity Site

SH 317 at Little Mexico Road, Temple, Texas



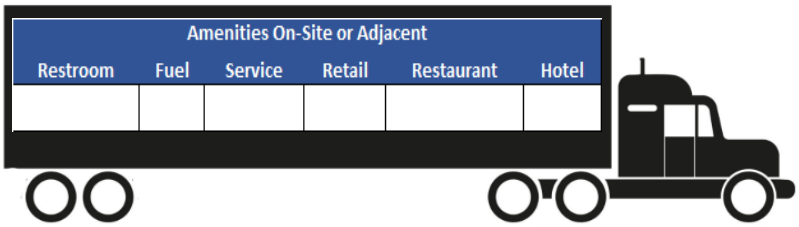
Opportunity parking

Percentage of the total truck parking spaces in the region



Percentage of the site truck parking spaces that are paved

Observed Off-Peak Percentage of the site truck parking spaces in use



Texas Statewide Parking Study

NA — Available truck parking spaces listed in the report	NA — Hours per day parking demand exceeds capacity
4 — Parking spaces counted on site	Classified as LOW priority for parking capacity upgrades
NA — Peak parking demand	

This opportunity site is in Temple. Since it is an opportunity site, there are currently no amenities for truckers. There are four possible truck parking spots that can be created on the site within the TxDOT right of way.

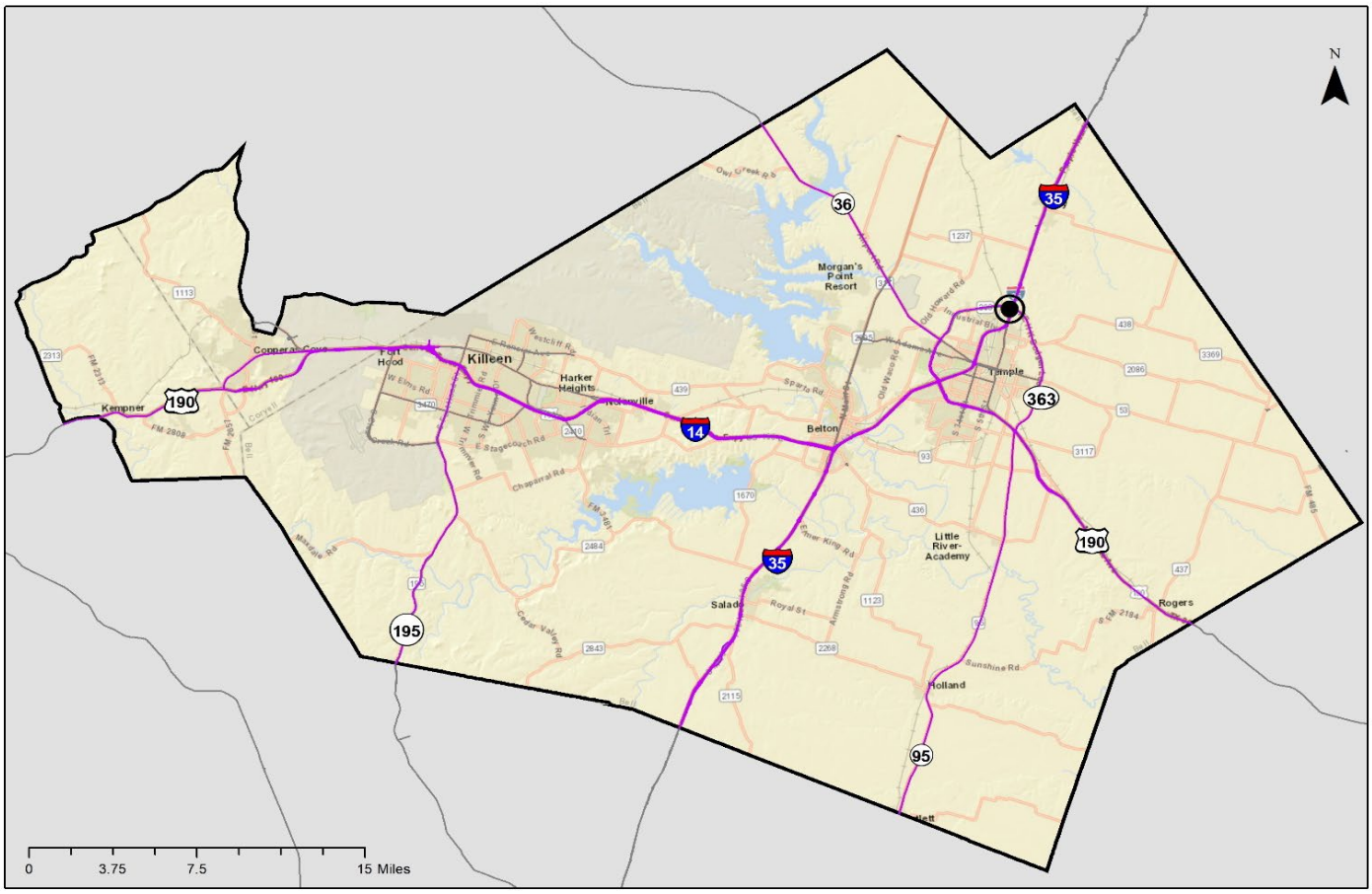
This site was identified in the Statewide Parking Study.

There are no hotels, restaurants, or other off-site amenities in the immediate area.

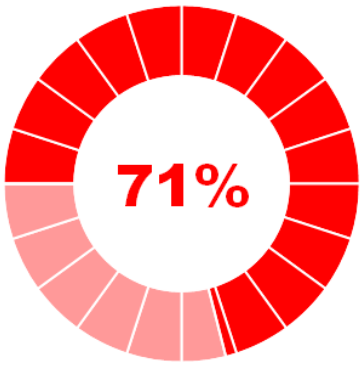
Truck Parking Site #6 Profile

Southwest Travel Center

12310 NW H K Dodgen Loop, Temple, Texas

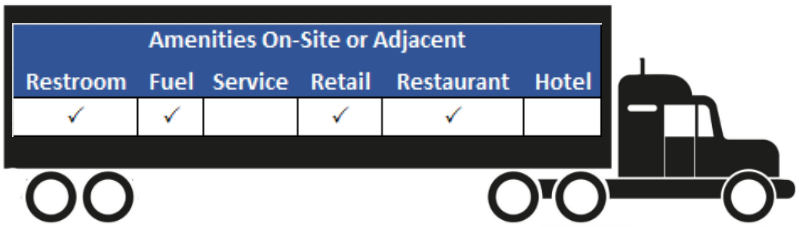


Percentage of the total truck parking spaces in the region



Percentage of the site truck parking spaces that are paved

Observed Off-Peak Percentage of the site truck parking spaces in use



Texas Statewide Parking Study

60 Available truck parking spaces listed in the report	**13** Hours per day parking demand exceeds capacity
81 Parking spaces counted on site	Classified as **HIGH** priority for parking capacity upgrades
80 Peak parking demand	

The Southwest Travel Center is located at the southwest corner of Loop 363 (H K Dodgen Loop) and IH-35, across from the Buckee's. It features a convenience store and Wendy's restaurant, a separate diesel fuel area, paved parking, an unpaved overflow lot, and scales.

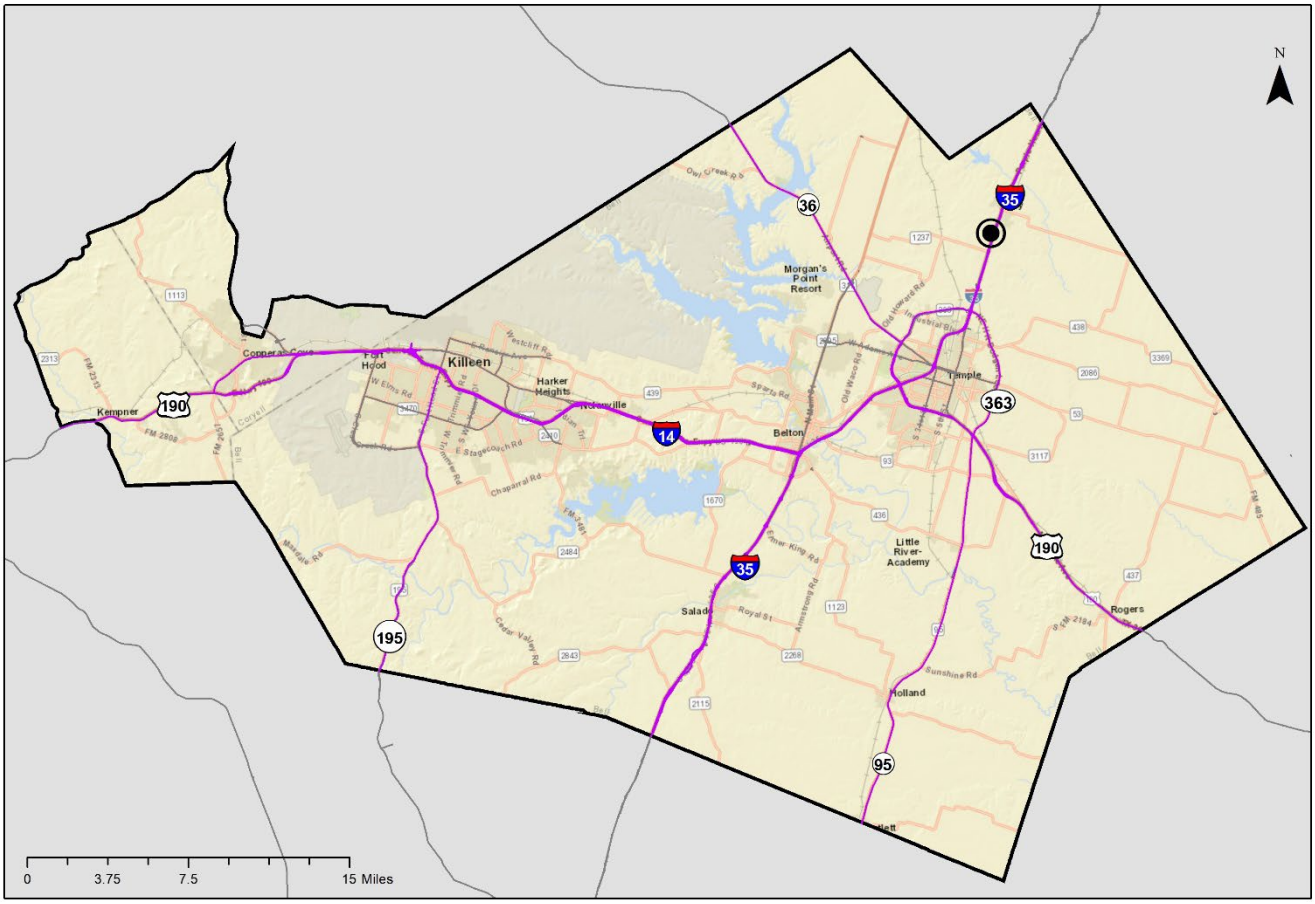
It is adjacent to the North Temple Industrial Park and the Enterprise Industrial Park

There are no hotels, restaurants, or other off-site amenities in the immediate area.

Truck Parking Site #9 Profile

Love's Truck Stop #719

1610 Cotton Gin Road, Troy, Texas



Unpaved overflow lot

Scales

On site mechanic

Convenience store & restaurant

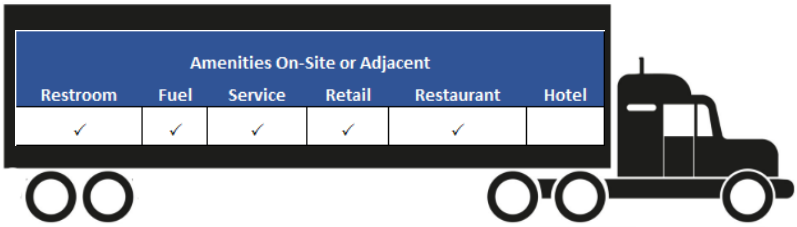
Restrooms

Diesel fuel pumps

Percentage of the total truck parking spaces in the region

Percentage of the site truck parking spaces that are paved

Observed Off-Peak Percentage of the site truck parking spaces in use



Texas Statewide Parking Study

114 Available truck parking spaces listed in the report

120 Parking spaces counted on site

170 Peak parking demand

24 Hours per day parking demand exceeds capacity

Classified as **HIGH** priority for parking capacity upgrades

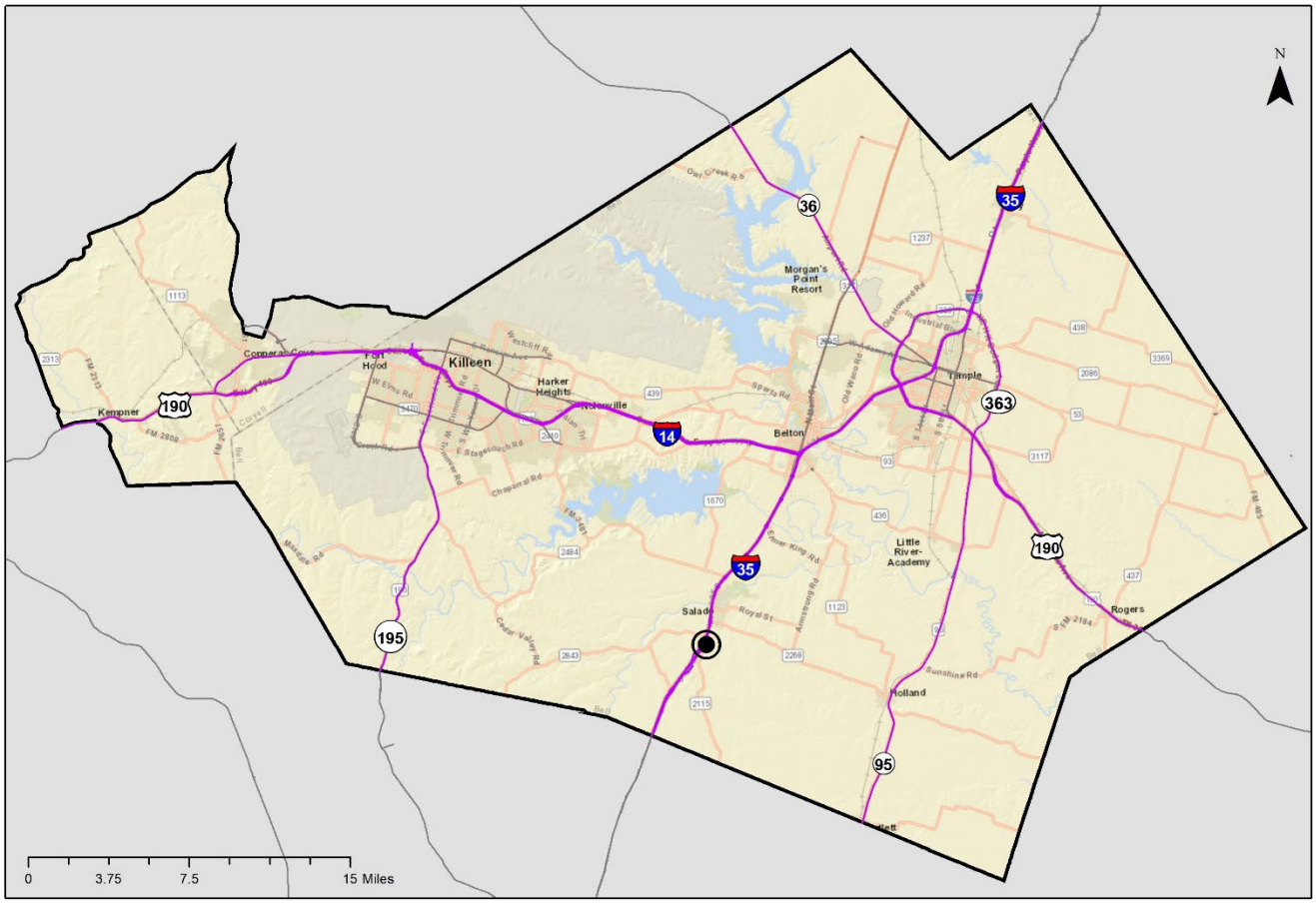
Love's Truck Stop #719 is located on IH-35 a few miles east of Temple. It features a convenience store, a Subway restaurant, a McDonalds restaurant, showers, laundry facilities, WiFi, and on-site mechanic services.

There are no hotels in the immediate area. The Love's is located next to a truck mechanic shop.

Truck Parking Site #8 Profile

JD's Travel Center

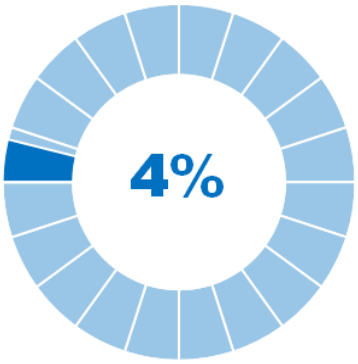
15881 IH-35 Frontage Road, Salado, Texas



Convenience store & grill

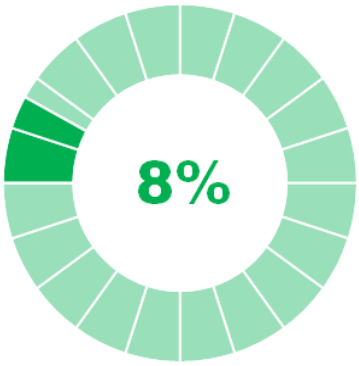
Restrooms

Diesel fuel pumps

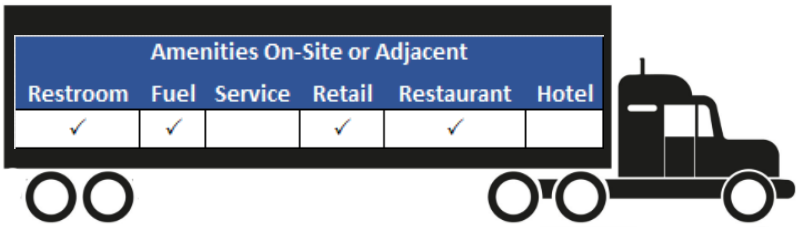


Percentage of the total truck parking spaces in the region

Percentage of the site truck parking spaces that are paved



Observed Off-Peak Percentage of the site truck parking spaces in use



Texas Statewide Parking Study

25	Available truck parking spaces listed in the report
25	Parking spaces counted on site
26	Peak parking demand
3	Hours per day parking demand exceeds capacity

Classified as HIGH priority for parking capacity upgrades

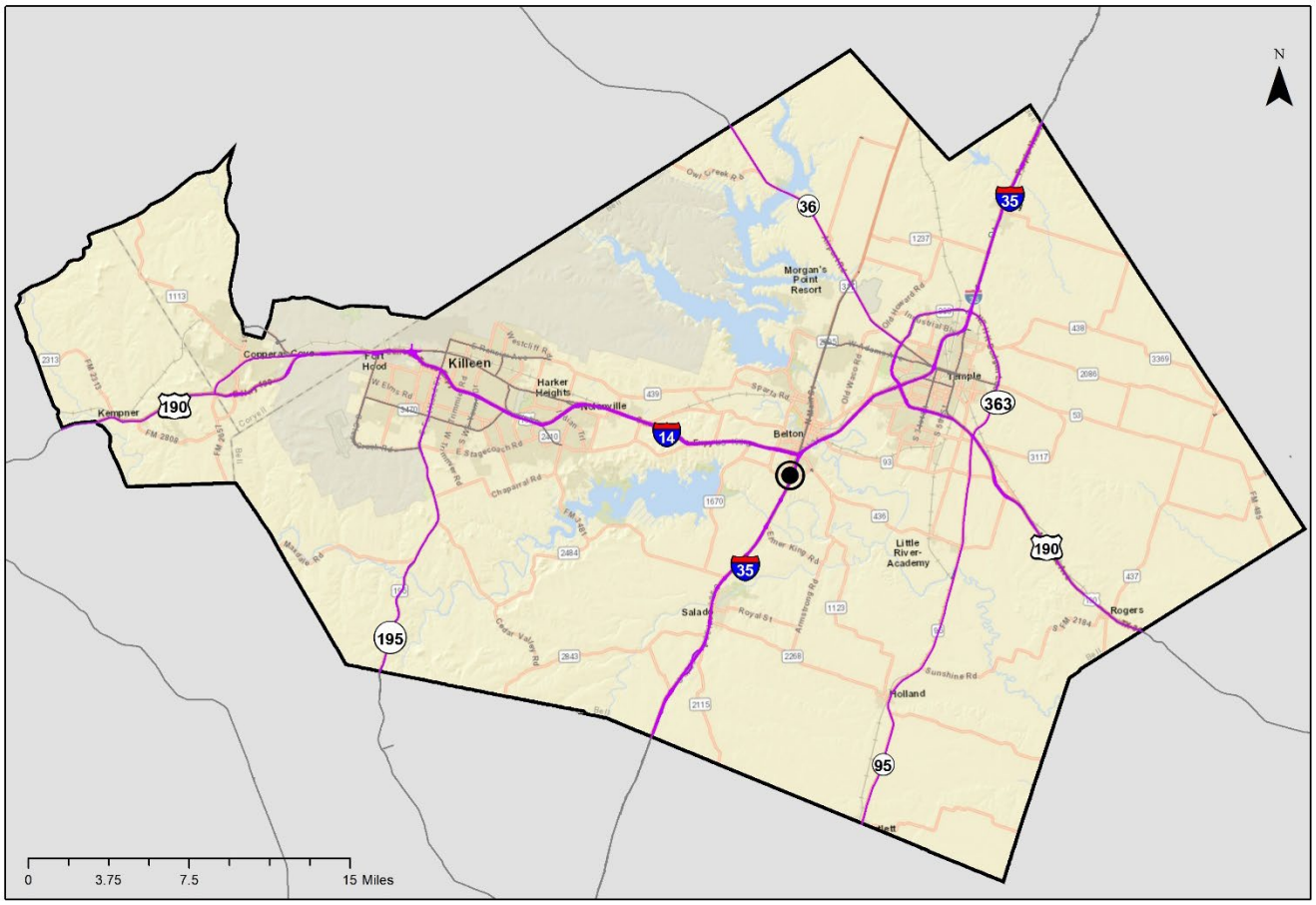
JD's Travel Center is Located on IH-35 just north of the Bell County Northbound Safety Rest Area. It features a grill, convenience store, and paved parking.

There are no hotels, restaurants, or other off-site amenities in the immediate area.

Truck Parking Site #10 Profile

7-Eleven

2701 S N IH-35, Belton, Texas

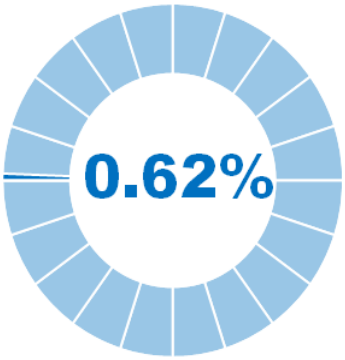


Convenience store & Pio's Taqueria

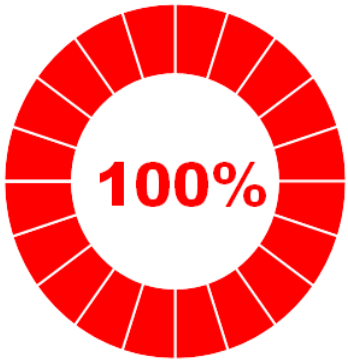
Restrooms

Diesel fuel pumps

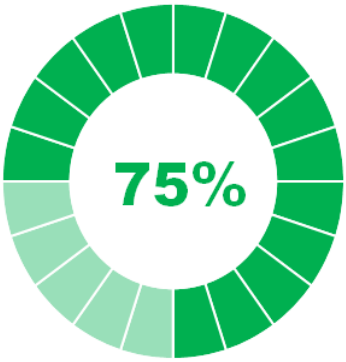
Truck parking



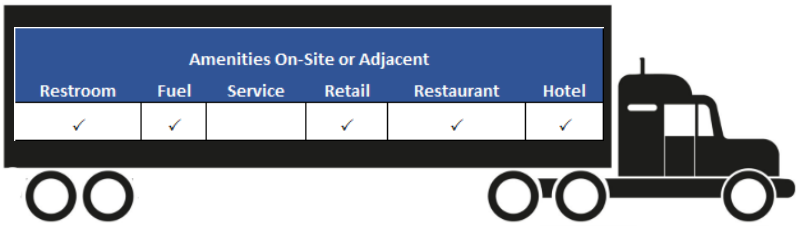
Percentage of the total truck parking spaces in the region



Percentage of the site truck parking spaces that are paved



Observed Off-Peak Percentage of the site truck parking spaces in use



Texas Statewide Parking Study

4 Potential Parking Spaces Counted On Site

*Not listed in the statewide truck parking study

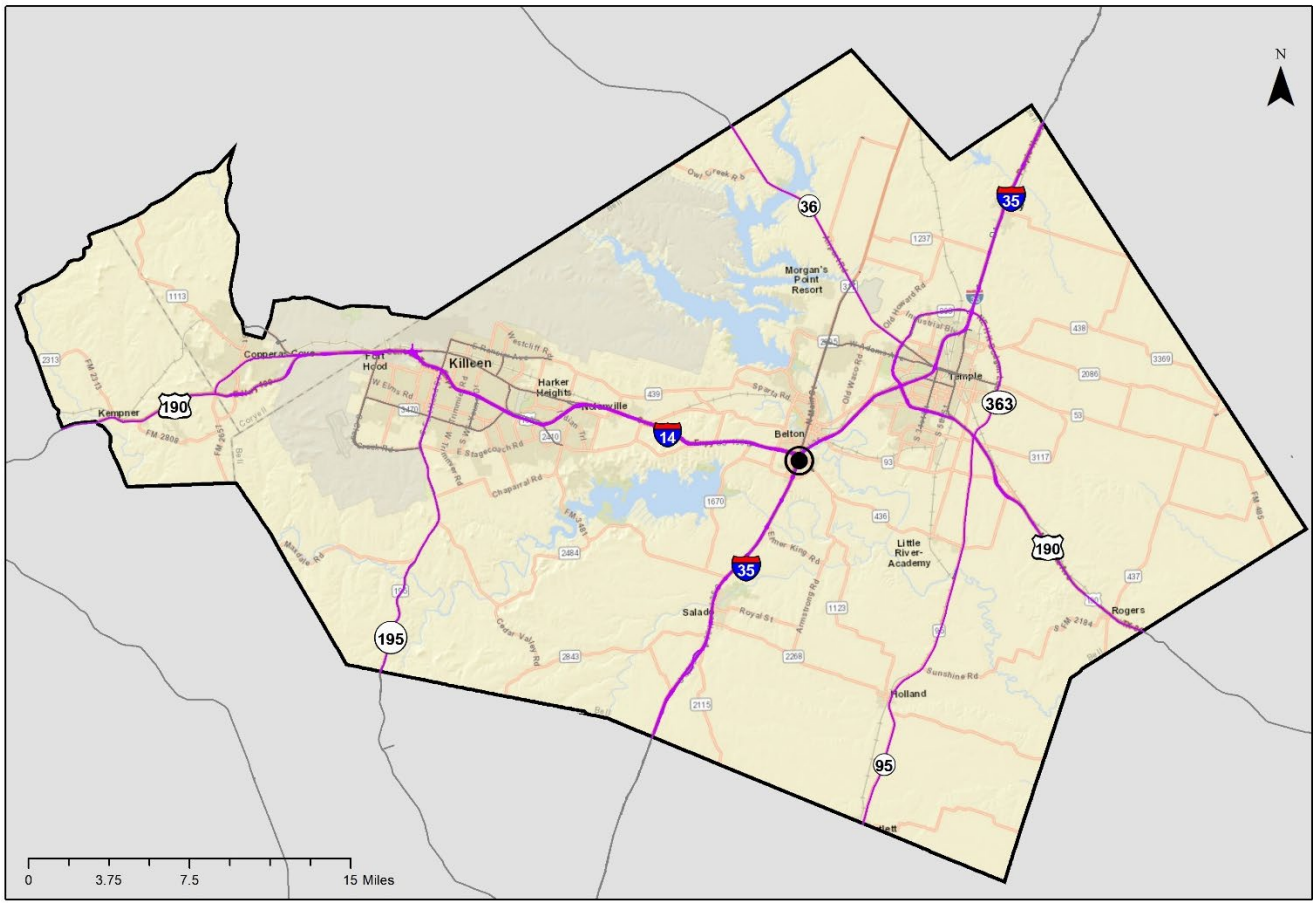
The 7-Eleven is located at near IH-35 near E Loop Drive across from a pawn shop. It features a convenience store, Taqueria restaurant, diesel pumps, restrooms, and paved parking.

There is a LaQunita Inn and Suites by Wyndham further down the street, near the Bell County Expo Center.

Truck Parking Site #11 Profile

CEFCO Truck Stop

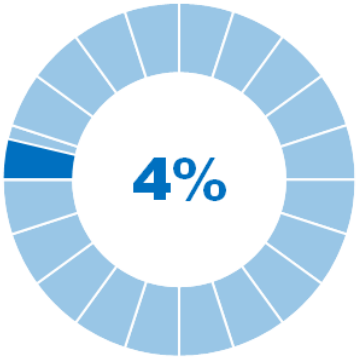
1600 S IH-35, Belton, Texas



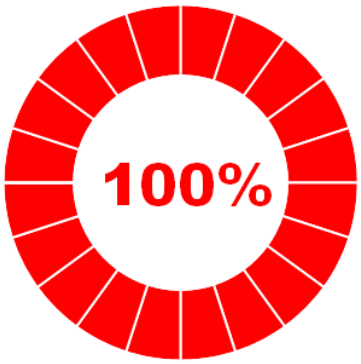
Diesel fuel pumps

Convenience store & Fresh eats cafe

Restroom

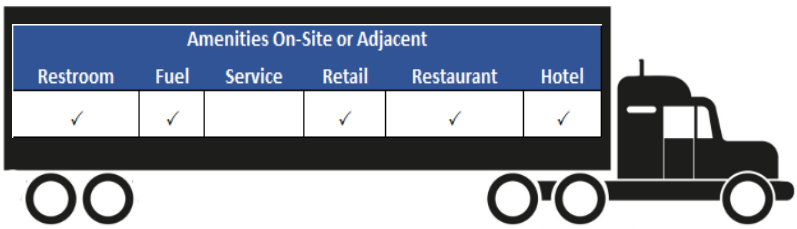


Percentage of the total truck parking spaces in the region



Percentage of the site truck parking spaces that are paved

Observed Off-Peak Percentage of the site truck parking spaces in use



Texas Statewide Parking Study

24 Potential Parking Spaces Counted On Site

*Not listed in the statewide truck parking study

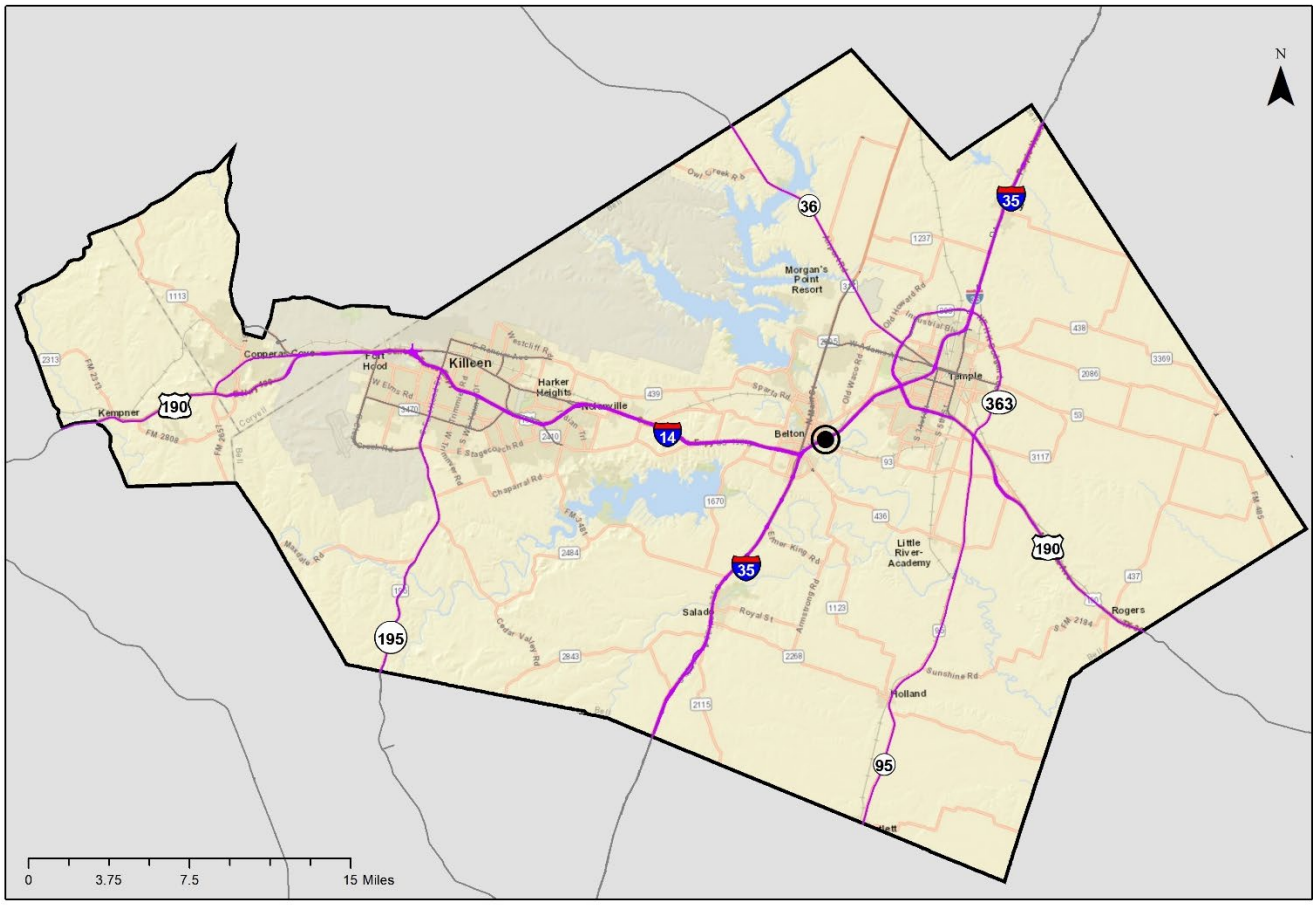
The CEFCO Truck Stop is located on IH-35 in Belton. It features a convenience store, café, a separate diesel fuel area, and paved parking.

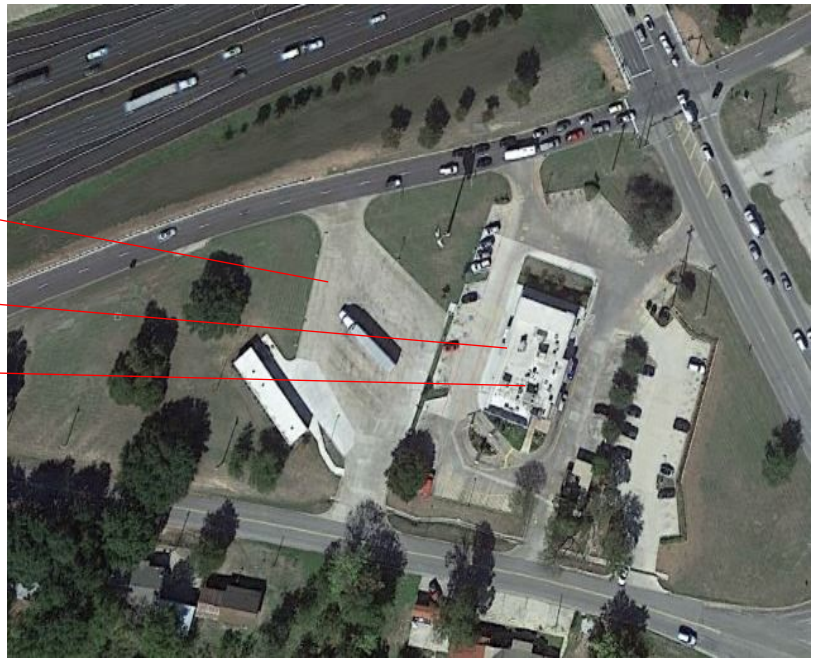
There is are two hotels next to the truck stop along with a tire shop. There is also a restaurant across the street. The truck stop is located adjacent to a residential area.

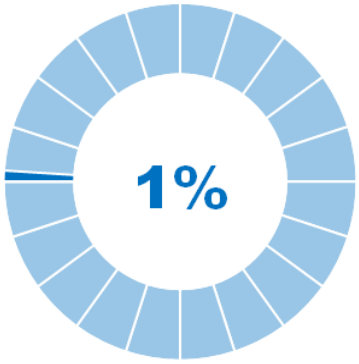
Truck Parking Site #12 Profile

McDonald's

1601 E 6th Avenue St, Belton, Texas

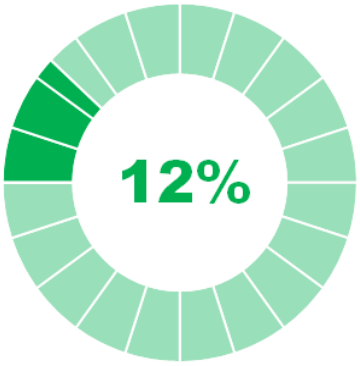




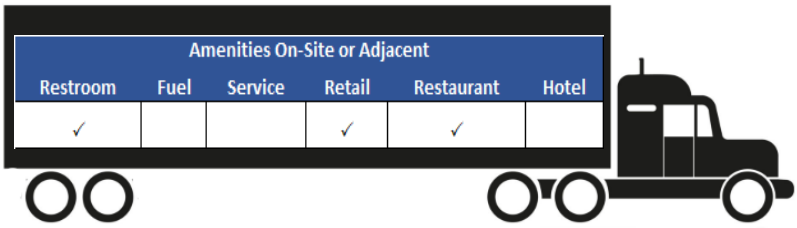


Percentage of the total truck parking spaces in the region

Percentage of the site truck parking spaces that are paved



Observed Off-Peak Percentage of the site truck parking spaces in use



Texas Statewide Parking Study

8 Potential Parking Spaces Counted On Site

*Not listed in the statewide truck parking study

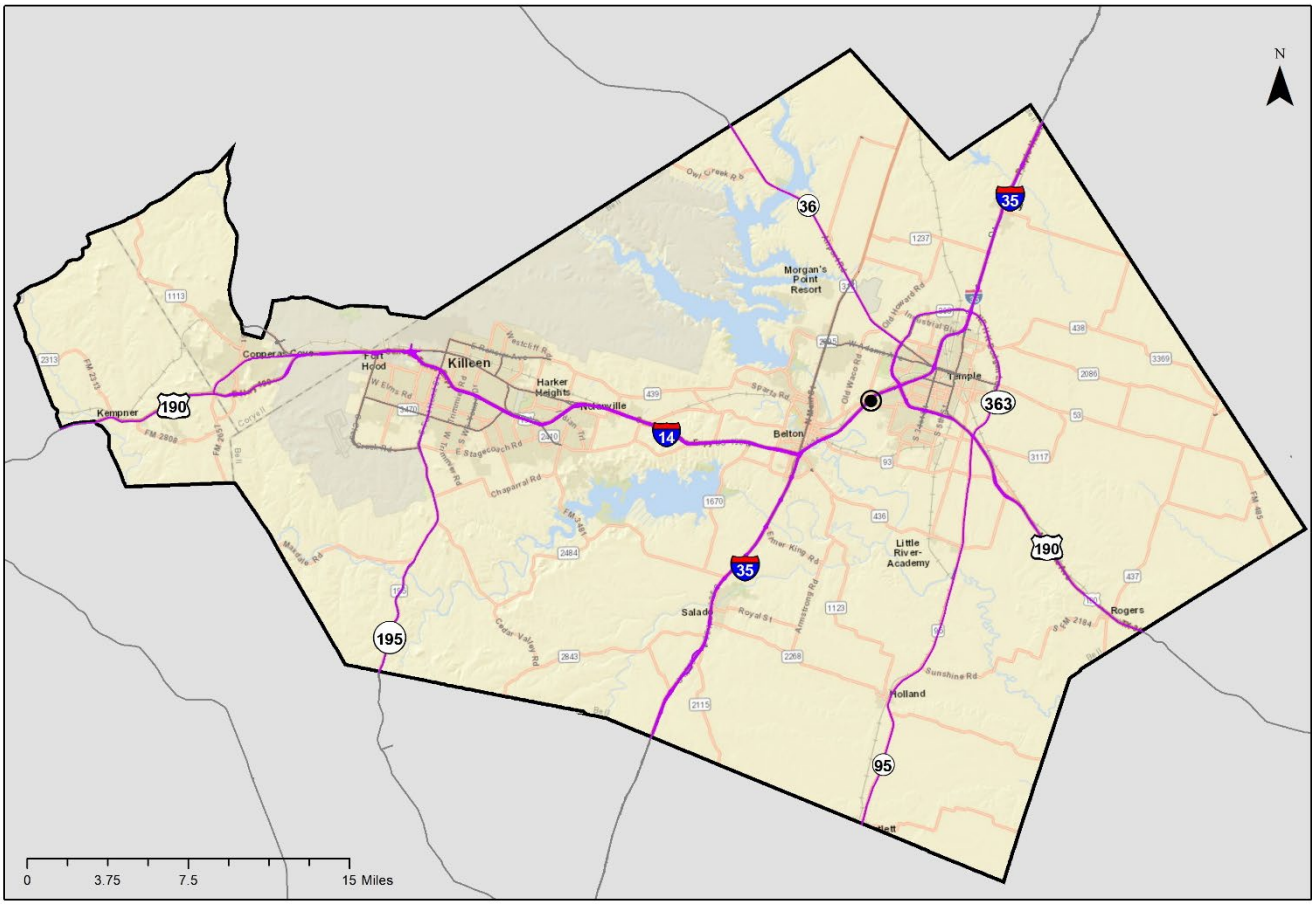
The McDonald's is located on IH-35, a few miles before IH-35 and IH-14 intersect in Belton. It is across the street from a residential neighborhood. The McDonald's provides food, restrooms, and WiFi.

There are no hotels or truck repair shops close by, but there are a variety of fast food chains and a gas station across the street.

Truck Parking Site #13 Profile

Super 8 Motel

5595 S General Bruce Drive, Temple, Texas



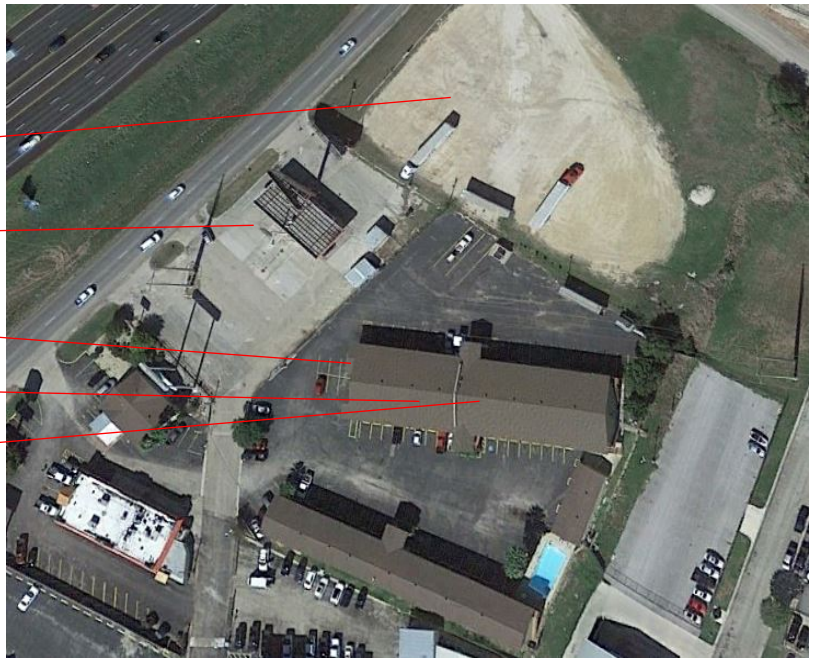
Unpaved truck parking

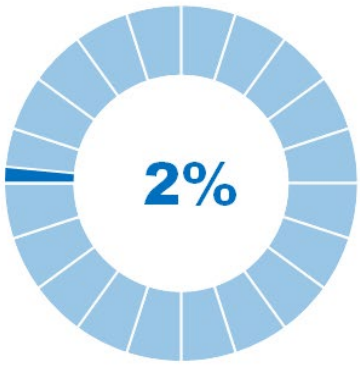
Convenience store

Hotel

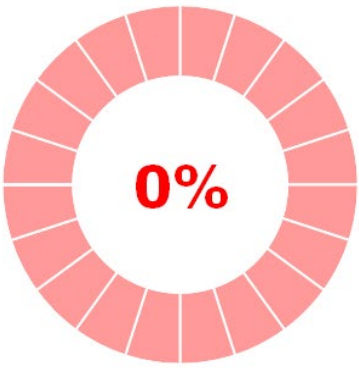
WiFi

Restrooms



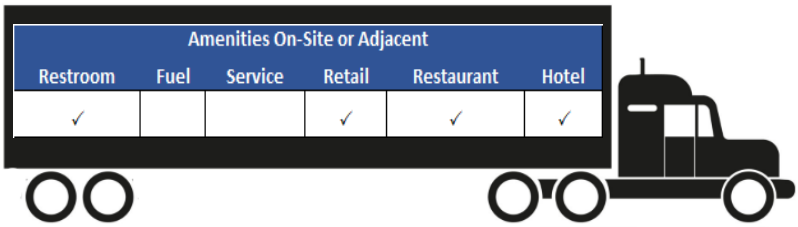


Percentage of the total truck parking spaces in the region



Percentage of the site truck parking spaces that are paved

Observed Off-Peak Percentage of the site truck parking spaces in use



Texas Statewide Parking Study

20 Potential Parking Spaces Counted On Site

*Not listed in the statewide truck parking study

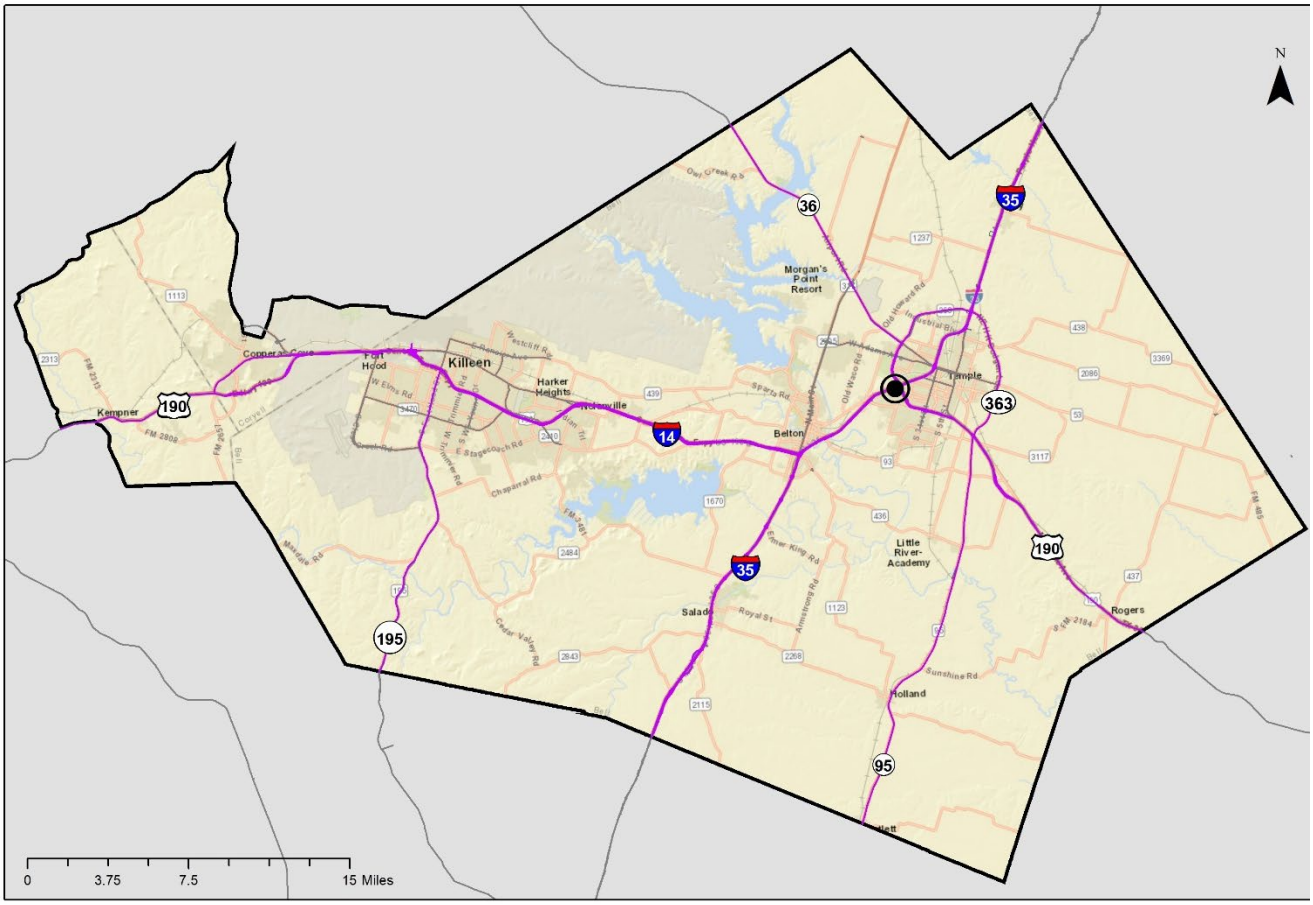
The Super 8 is located along IH-35 in Temple. It features unpaved truck parking that can fit around 20 trucks.

There is a gas station with a convenience store and restaurants adjacent to the hotel's truck parking lot.

Truck Parking Site #14 Profile

Budget Inn

4025 S General Bruce Dr, Temple, Texas

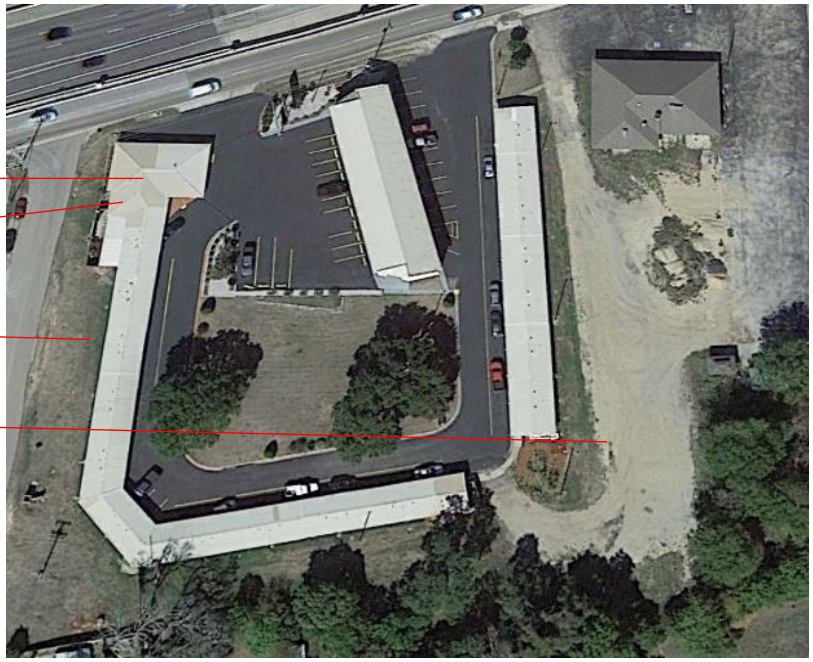


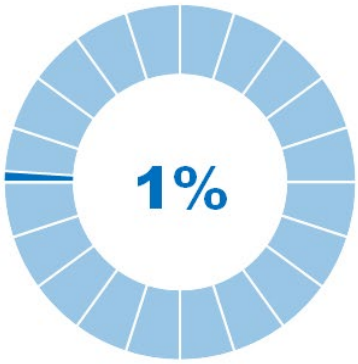
WiFi

Restrooms

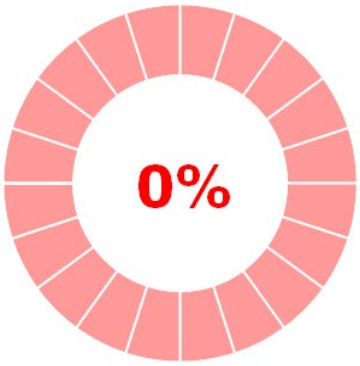
Hotel rooms

Unpaved truck parking

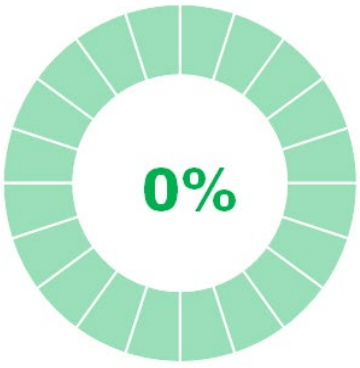




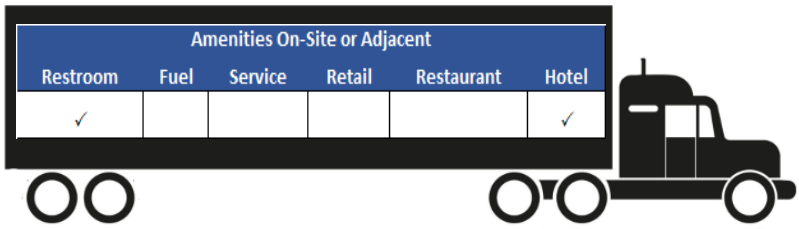
Percentage of the total truck parking spaces in the region



Percentage of the site truck parking spaces that are paved



Observed Off-Peak Percentage of the site truck parking spaces in use



Texas Statewide Parking Study

6 Potential Parking Spaces Counted On Site

*Not listed in the statewide truck parking study

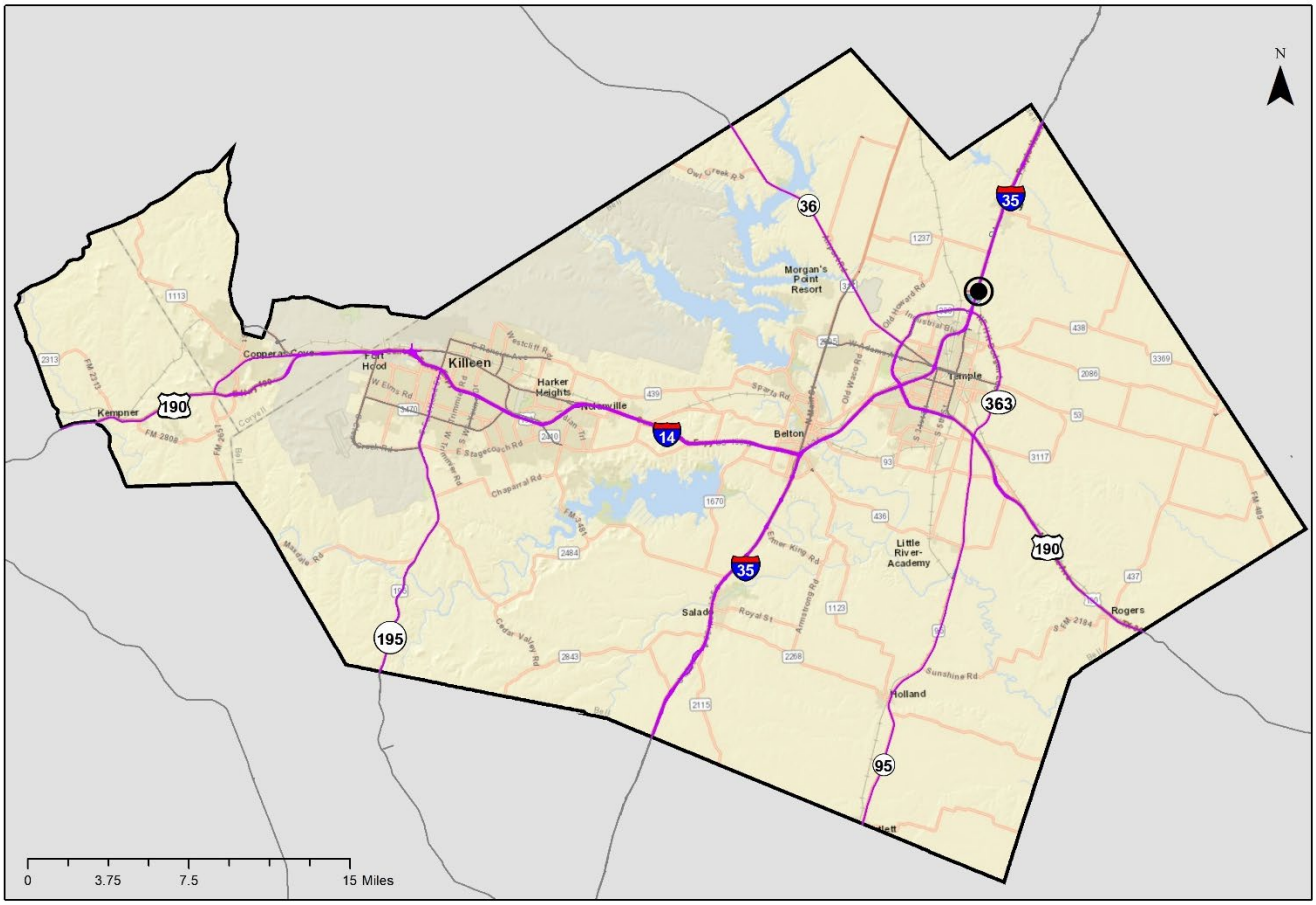
The Budget Inn is located on IH-35 outside of the SH-363 loop (H K Dodgen Loop's). It features hotel rooms, WiFi, bathrooms, and unpaved informal truck parking.

The Budget Inn is next to a Travel Lodge by Wyndham. There are other hotels in the area and the Gateway Center Shopping Mall.

Truck Parking Site #16 Profile

Kyrish Truck Centers

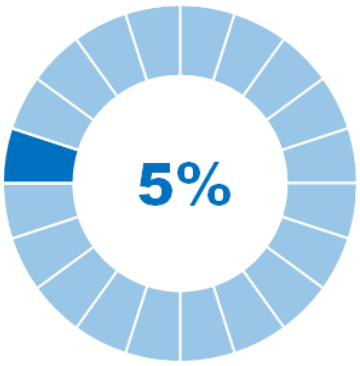
6043 N General Bruce Dr, Temple, Texas



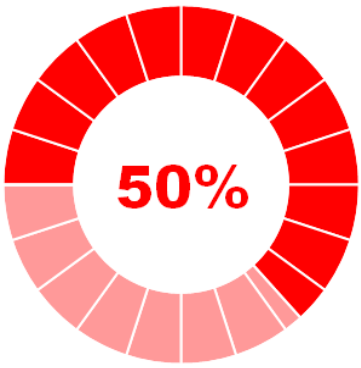
Unpaved truck parking

Service center

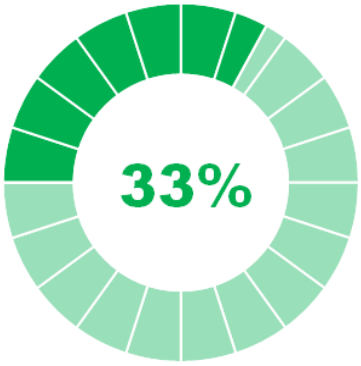
Truck parking



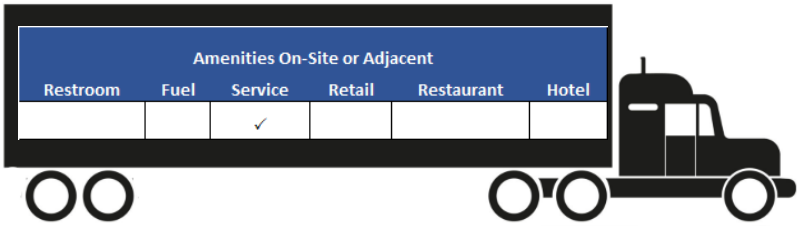
Percentage of the total truck parking spaces in the region



Percentage of the site truck parking spaces that are paved



Observed Off-Peak Percentage of the site truck parking spaces in use



Texas Statewide Parking Study

30 Potential Parking Spaces Counted On Site

*Not listed in the statewide truck parking study

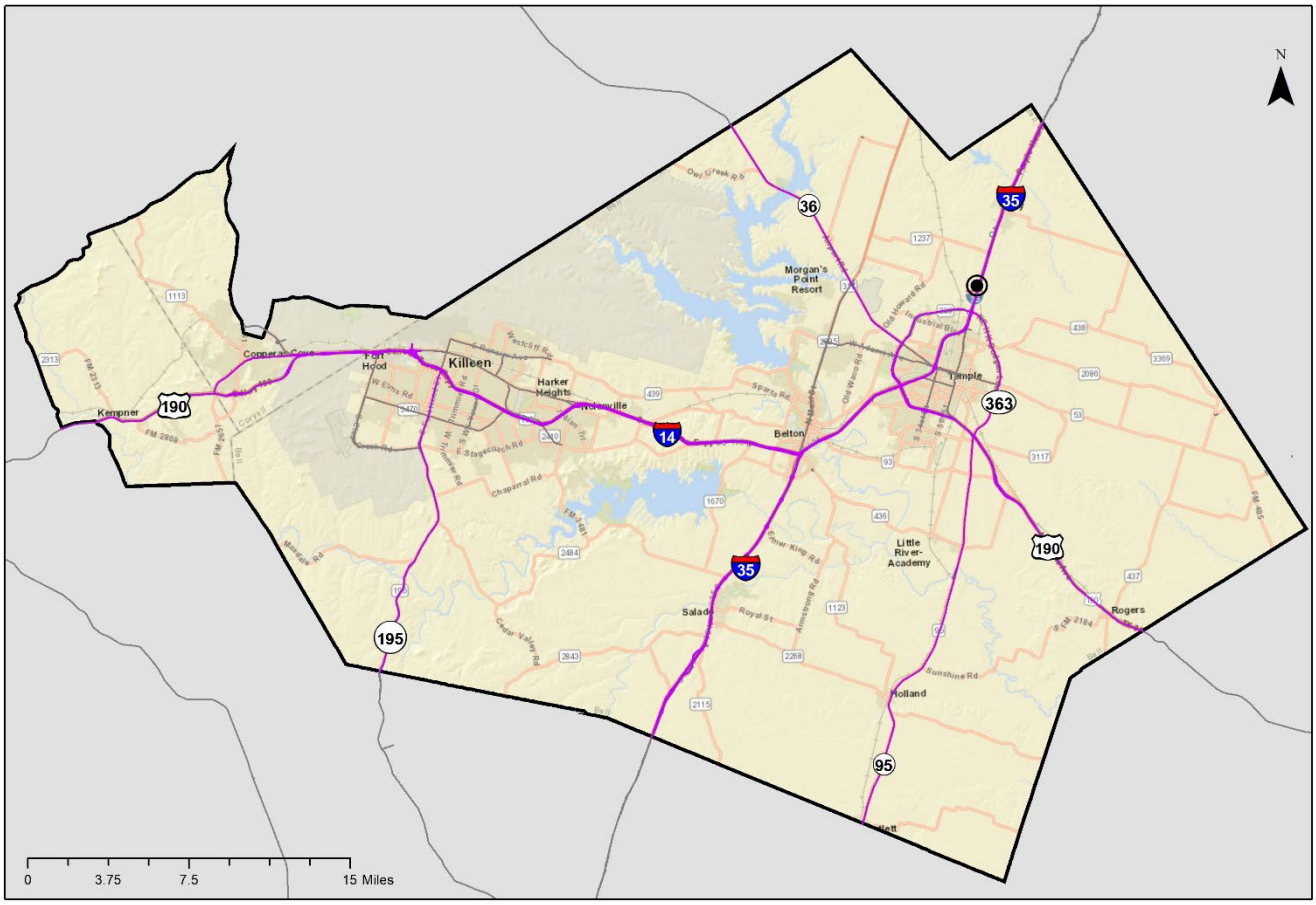
The Kyrish Truck Center is located adjacent to IH-35 north of Temple. It features a service center and both paved and unpaved informal truck parking, which includes truck parking for service.

There are no hotels, restaurants, or other off-site amenities in the immediate area. It is adjacent to an animal nutrition plant.

Truck Parking Site #50 Profile

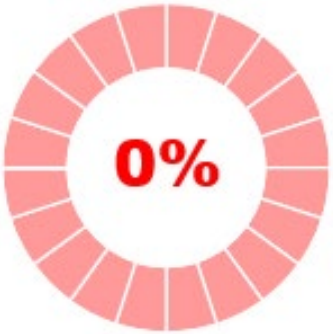
Opportunity Site

IH-35 North of Berger Road, Temple, Texas



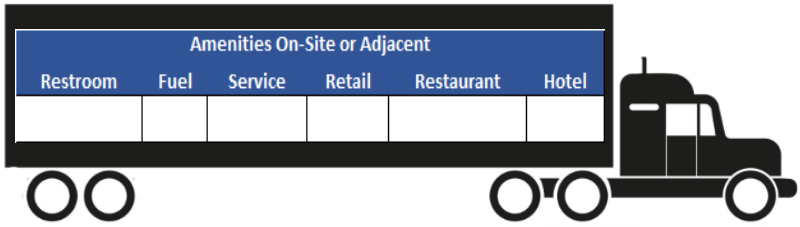
Opportunity parking

Percentage of the total truck parking spaces in the region



Percentage of the site truck parking spaces that are paved

Observed Off-Peak Percentage of the site truck parking spaces in use



Texas Statewide Parking Study

10 Potential Parking Spaces Counted On Site

*Not listed in the statewide truck parking study

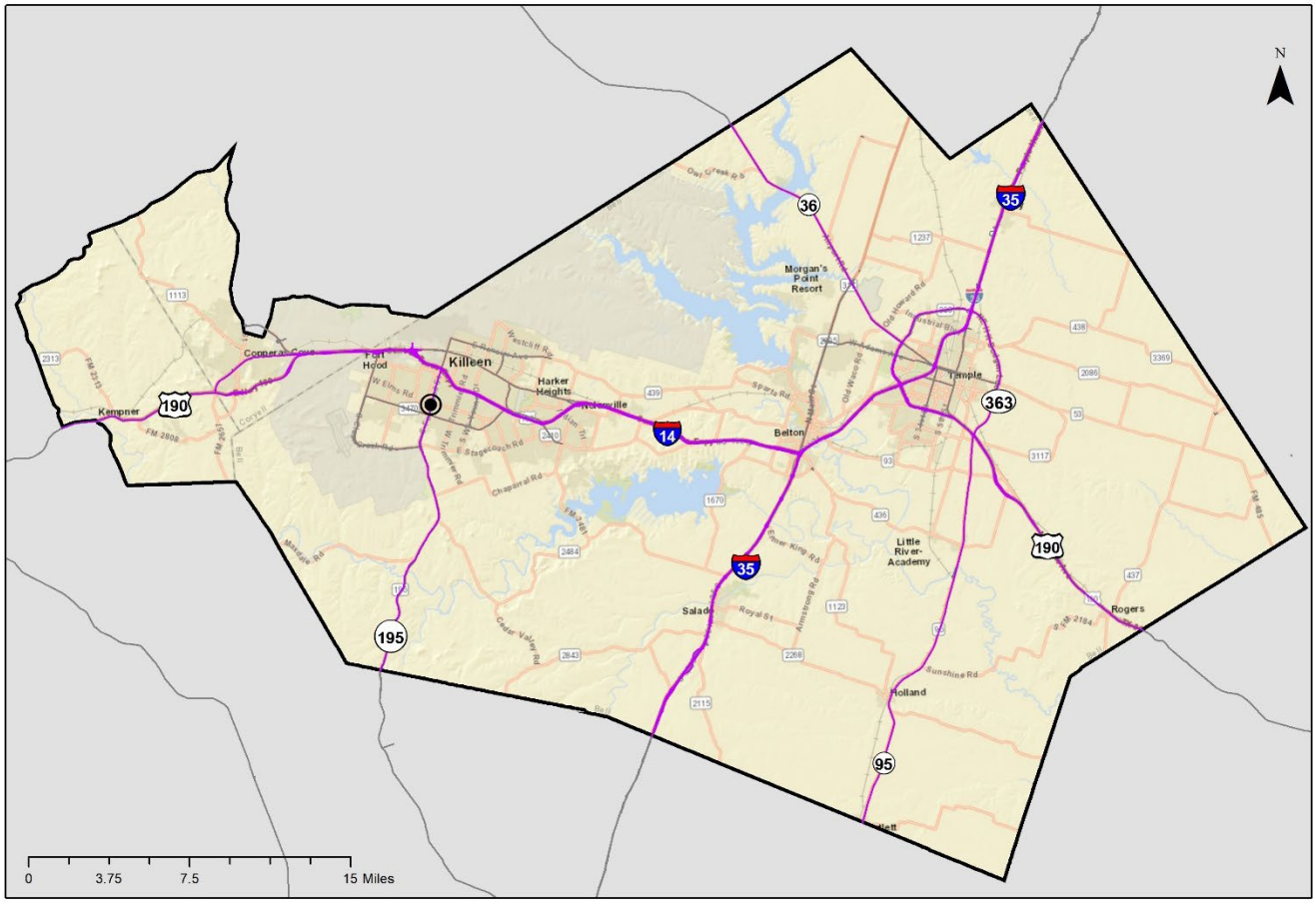
This opportunity site is located along IH-35 in Temple. Since it is an opportunity site, there are currently no amenities for truckers. However, there is room for ten potential truck parking spaces.

The site is a former gas station adjacent to an automotive center and RV park. There are no hotels, restaurants, or other off-site amenities in the immediate area.

Truck Parking Site #18 Profile

CEFCO

3309 S Fort Hood St, Killeen, Texas



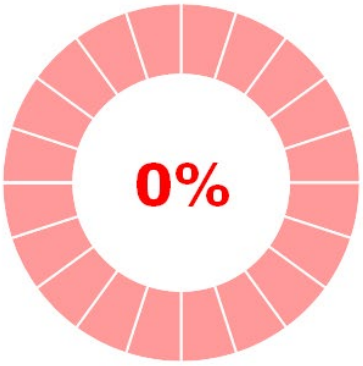
Convenience store

Restrooms

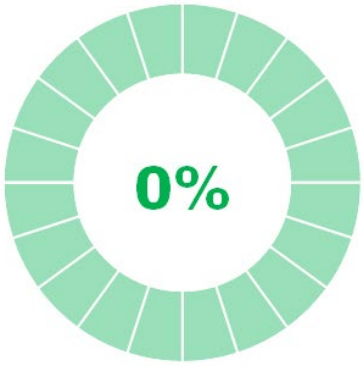
Diesel fuel pumps

Unpaved parking

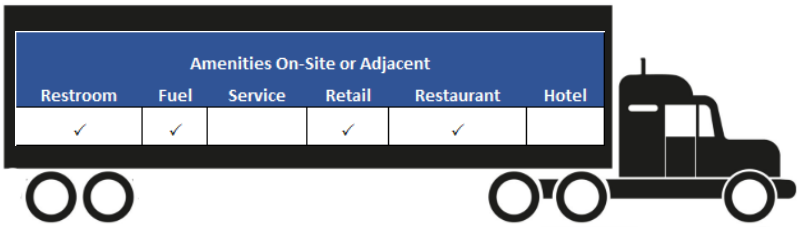
Percentage of the total truck parking spaces in the region



Percentage of the site truck parking spaces that are paved



Observed Off-Peak Percentage of the site truck parking spaces in use



Texas Statewide Parking Study

8 Potential Parking Spaces Counted On Site

*Not listed in the statewide truck parking study

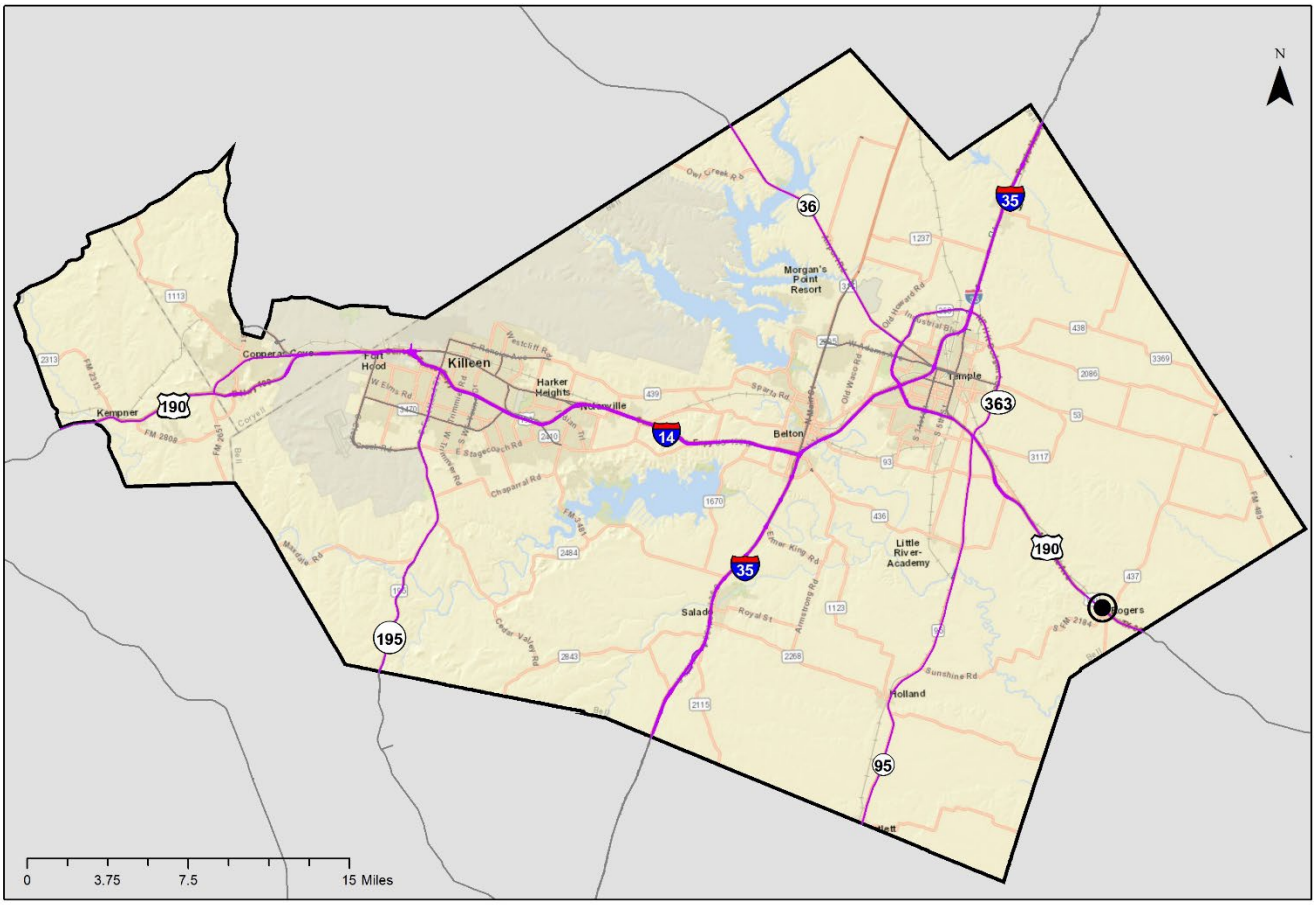
The CEFCO gas station is located on SH-195 in Killeen. There are around 8 informal truck parking spots in the vacant lot next to the CEFCO. The CEFCO features a convenience store and restrooms.

There are restaurants in the immediate area but no hotels or other off-site amenities.

Truck Parking Site #19 Profile

Valero Gas Station

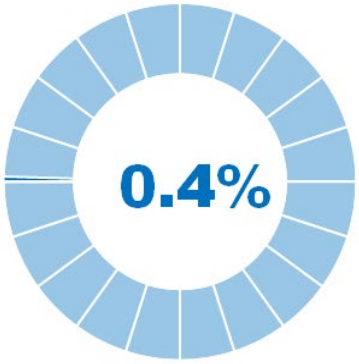
710 W Mesquite Ave, Rogers, Texas



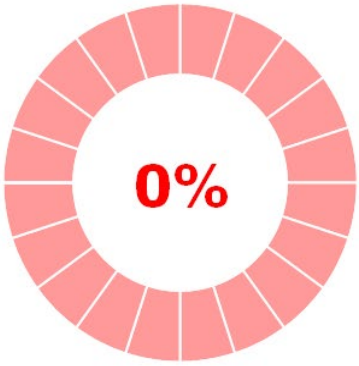
Unpaved truck parking

Convenience store with restrooms

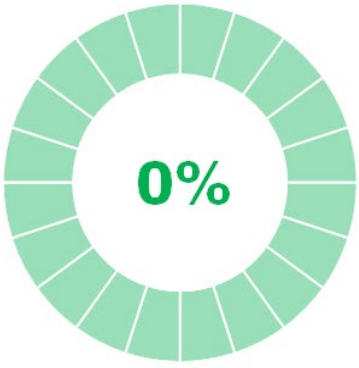
Diesel fuel pumps



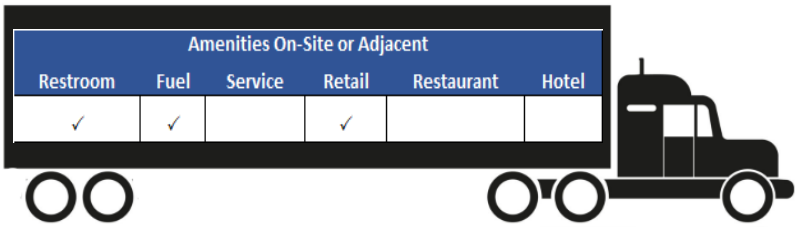
Percentage of the total truck parking spaces in the region



Percentage of the site truck parking spaces that are paved



Observed Off-Peak Percentage of the site truck parking spaces in use



Texas Statewide Parking Study

3 Potential Parking Spaces Counted On Site

*Not listed in the statewide truck parking study

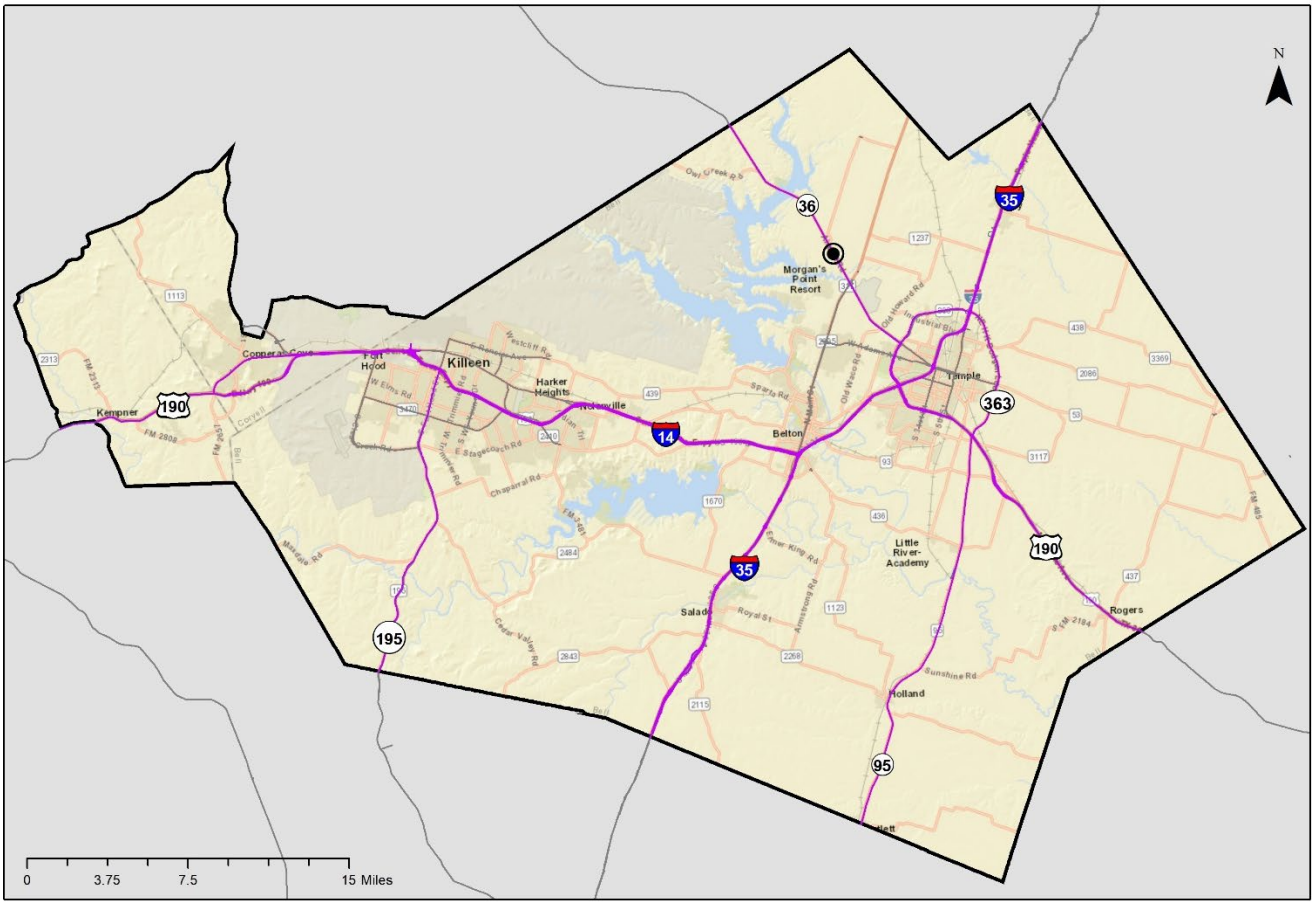
The Valero is located on US-190 in Rogers. It features a convenience store, restrooms, diesel fuel. Behind the Valero there is an unpaved informal truck parking area.

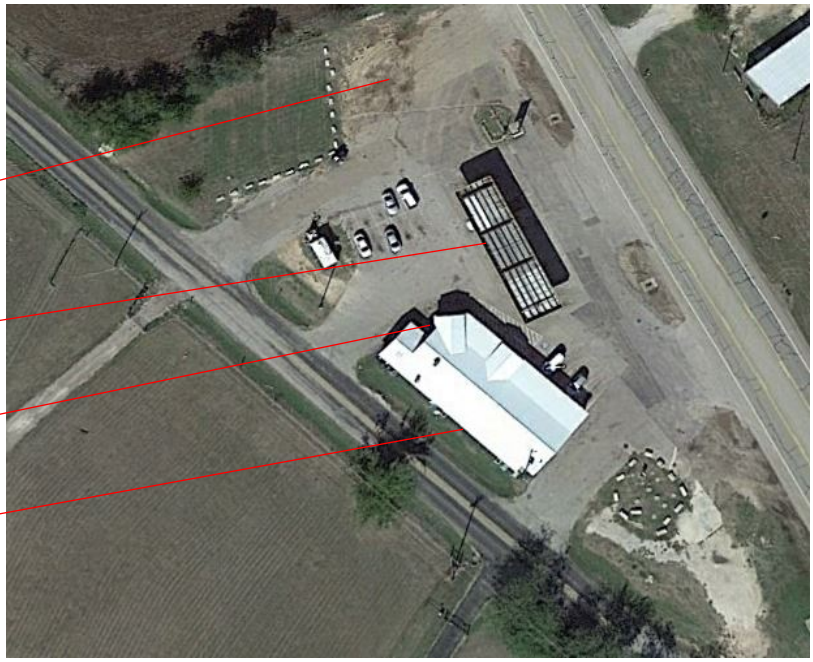
There are no hotels, restaurants, or other off-site amenities in the immediate area.

Truck Parking Site #20 Profile

CEFCO Gas Station

10775 W TX-36, Temple, Texas



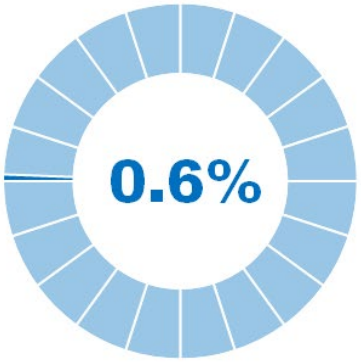


Unpaved parking

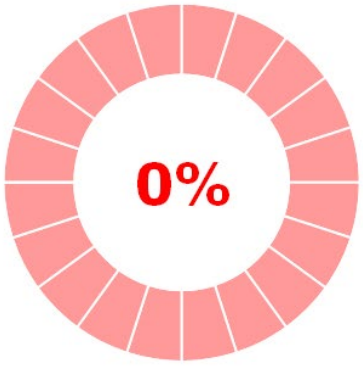
Diesel fuel pumps

Convenience store

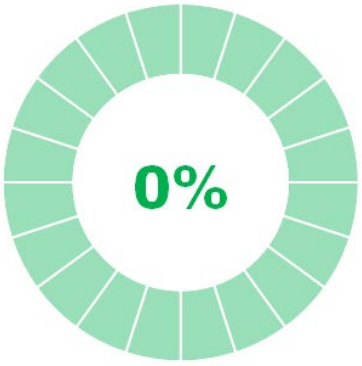
Restrooms



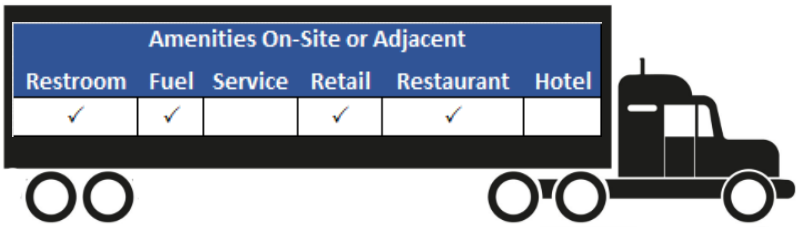
Percentage of the total truck parking spaces in the region



Percentage of the site truck parking spaces that are paved



Observed Off-Peak Percentage of the site truck parking spaces in use



Texas Statewide Parking Study

4 Potential Parking Spaces Counted On Site

*Not listed in the statewide truck parking study

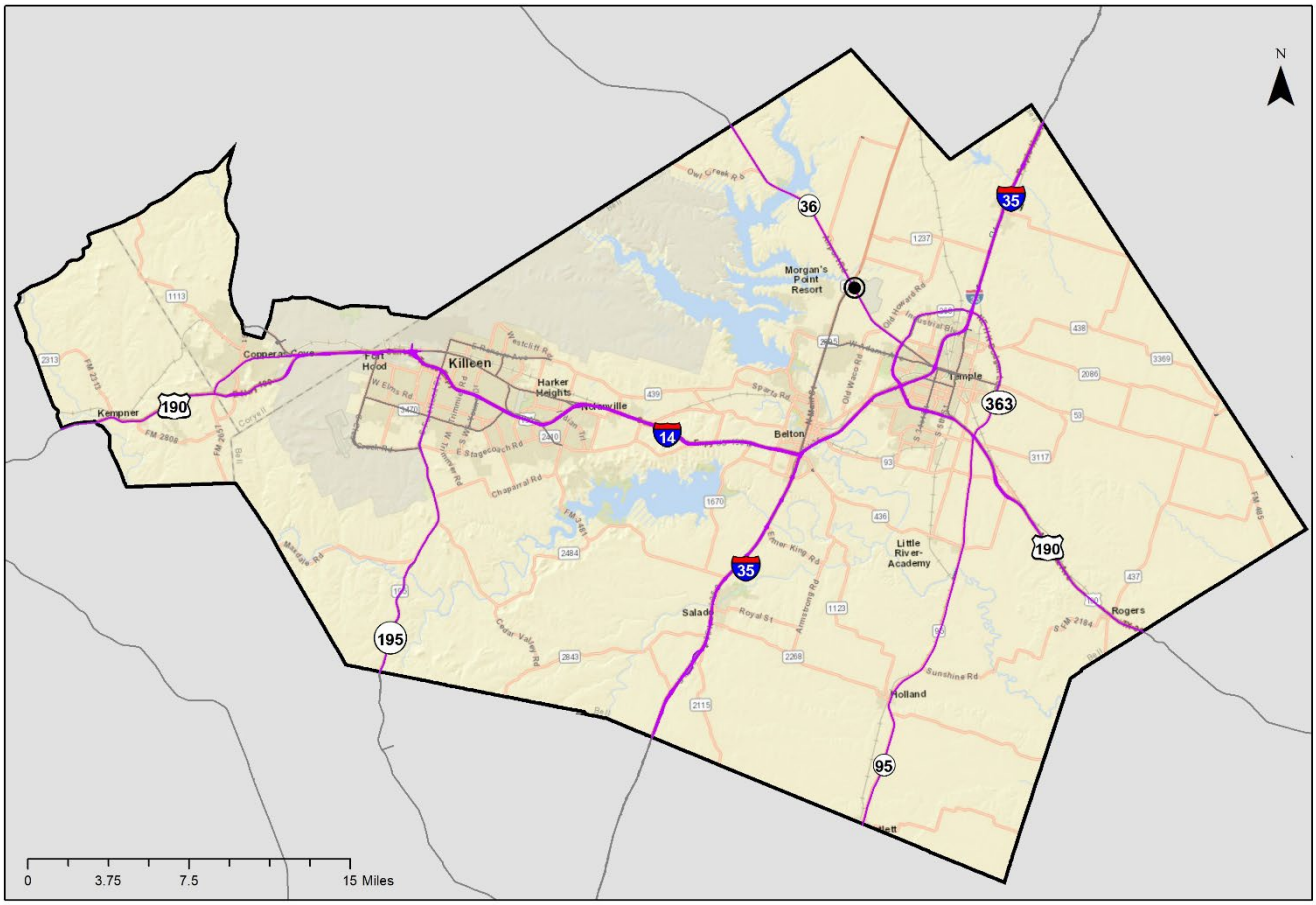
The CEFCO gas station is located on SH 36 in Temple. It features a convenience store, diesel fuel area, and informal unpaved truck parking area marked by stone blocks.

There is a restaurant close by, but there are no hotels, or other off-site amenities in the immediate area.

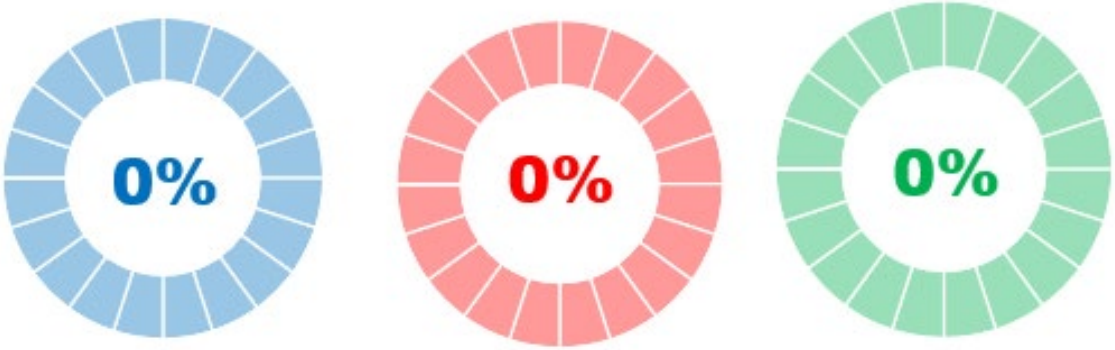
Truck Parking Site #21 Profile

Opportunity Site

SH 36 SE Of SH 317, Temple, Texas



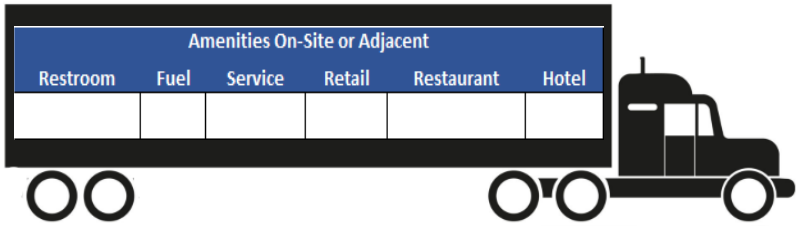
Opportunity parking



Percentage of the total truck parking spaces in the region

Percentage of the site truck parking spaces that are paved

Observed Off-Peak Percentage of the site truck parking spaces in use



Texas Statewide Parking Study

10 Potential Parking Spaces Counted On Site

*Not listed in the statewide truck parking study

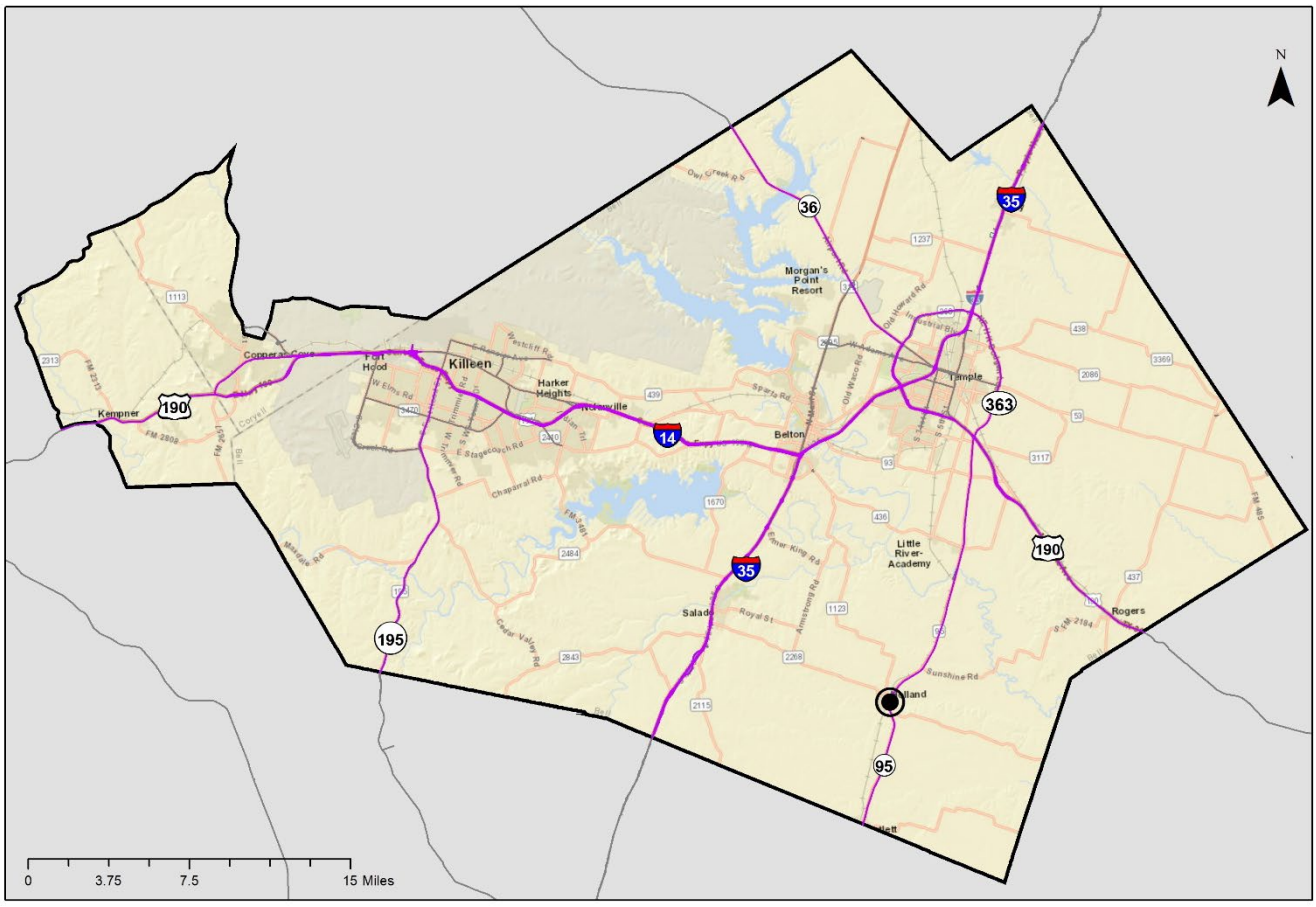
This opportunity site is on SH 36 in Temple. Since it is an opportunity site, there are currently no amenities for truckers. However, there are 10 potential truck parking spaces that can be created on the site.

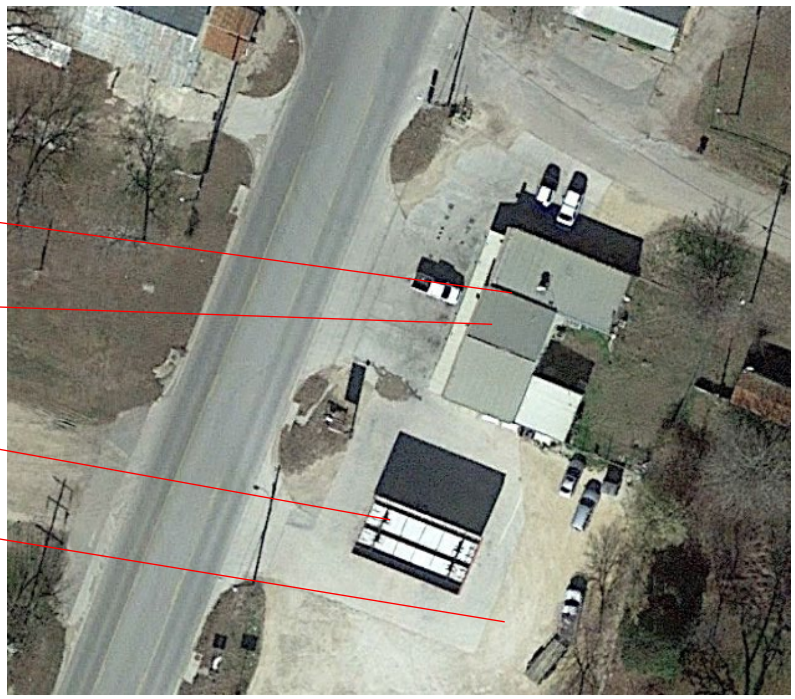
There are no hotels, restaurants, or other off-site amenities in the immediate area.

Truck Parking Site #22 Profile

Guy's Quick Stop

101 S Franklin St, Holland, Texas



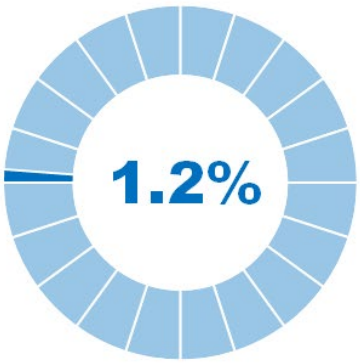


Convenience store

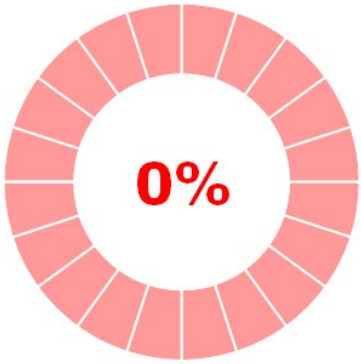
Restrooms

Diesel fuel pumps

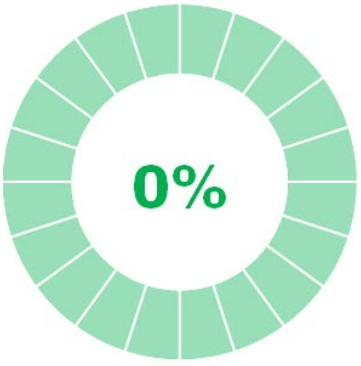
Unpaved parking



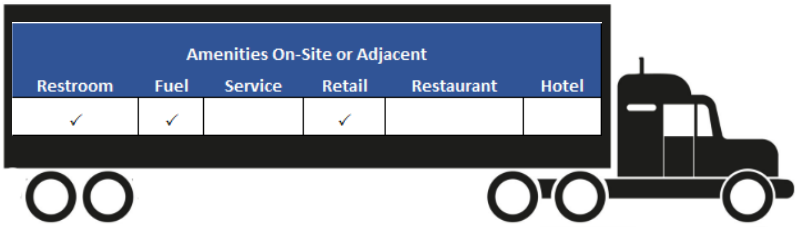
Percentage of the total truck parking spaces in the region



Percentage of the site truck parking spaces that are paved



Observed Off-Peak Percentage of the site truck parking spaces in use



Texas Statewide Parking Study

8 Potential Parking Spaces Counted On Site

*Not listed in the statewide truck parking study

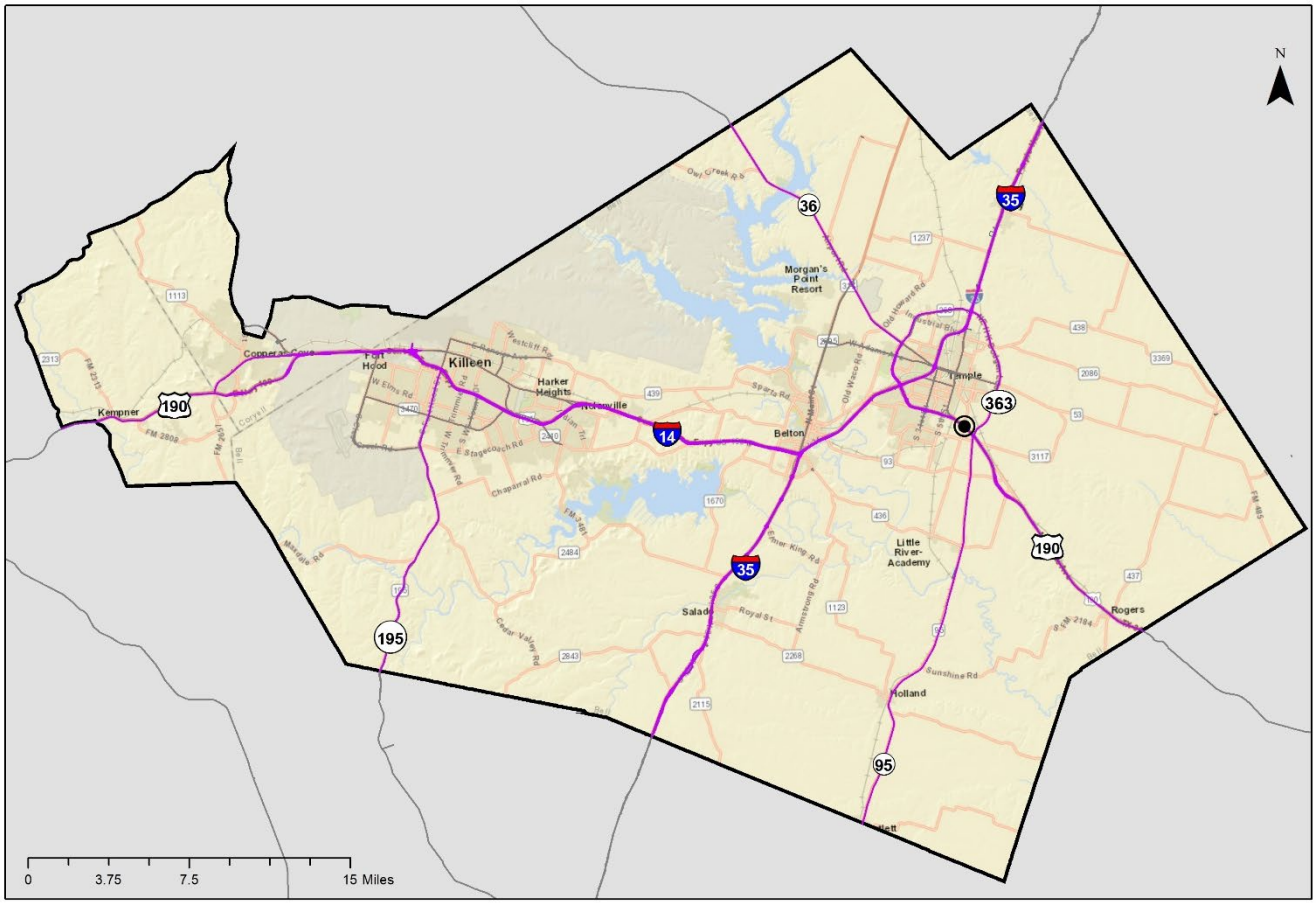
Guy's Quick Stop is located south of Temple on SH 95. It features a convenience store, restrooms, diesel fuel, and informal unpaved parking.

There are no hotels, restaurants, or other off-site amenities in the immediate area. It is adjacent to the Holland City Park.

Truck Parking Site #27 Profile

CEFCO Gas Station

22514 SE H.K. Dodgen Loop, Temple, Texas

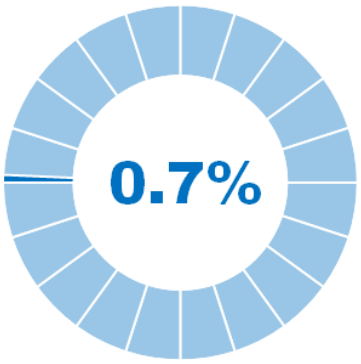


Convenience store

Diesel fuel pumps

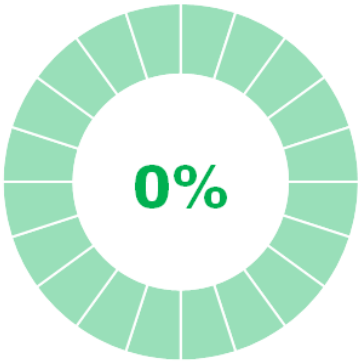
Restrooms

Paved truck parking

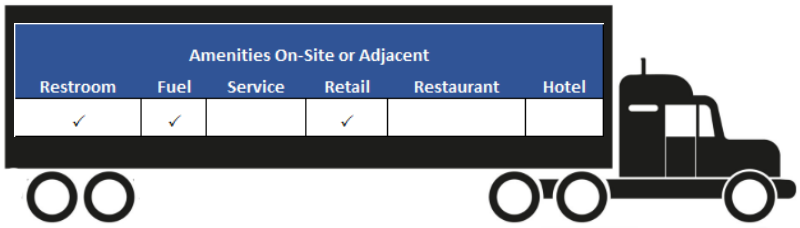


Percentage of the total truck parking spaces in the region

Percentage of the site truck parking spaces that are paved



Observed Off-Peak Percentage of the site truck parking spaces in use



Texas Statewide Parking Study

5 Potential Parking Spaces Counted On Site

*Not listed in the statewide truck parking study

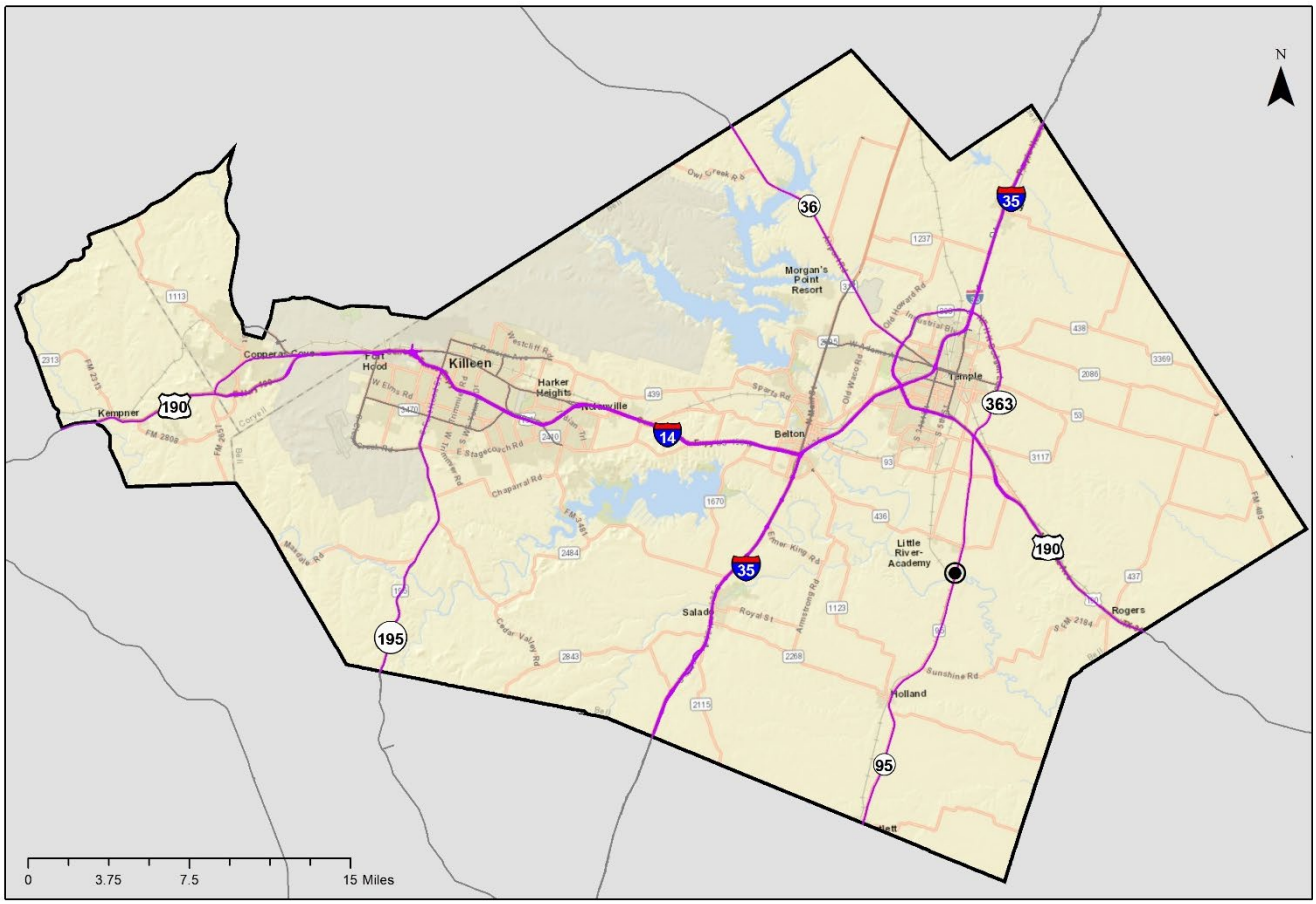
The CEFCO gas station is located at the south corner of Loop 363 (H K Dodgen Loop) and US 190. It features a convenience store, restrooms, diesel, and paved parking.

There are no hotels, restaurants, or other off-site amenities in the immediate area.

Truck Parking Site #58 Profile

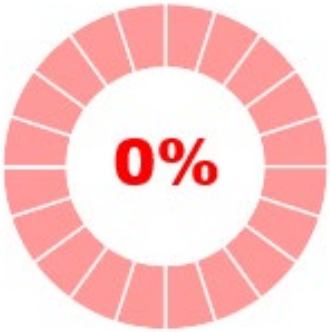
Opportunity Site

SH 95 at Little River, Holland, Texas



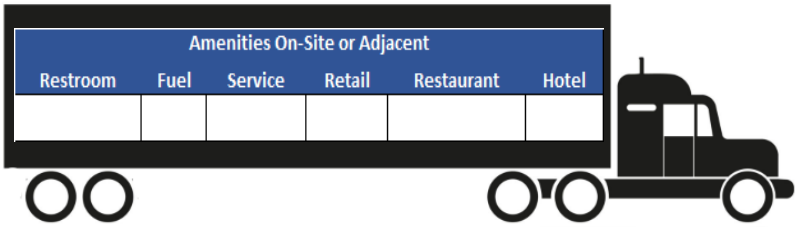
Opportunity parking

Percentage of the total truck parking spaces in the region



Percentage of the site truck parking spaces that are paved

Observed Off-Peak Percentage of the site truck parking spaces in use



Texas Statewide Parking Study

100 Potential Parking Spaces Counted On Site

*Not listed in the statewide truck parking study

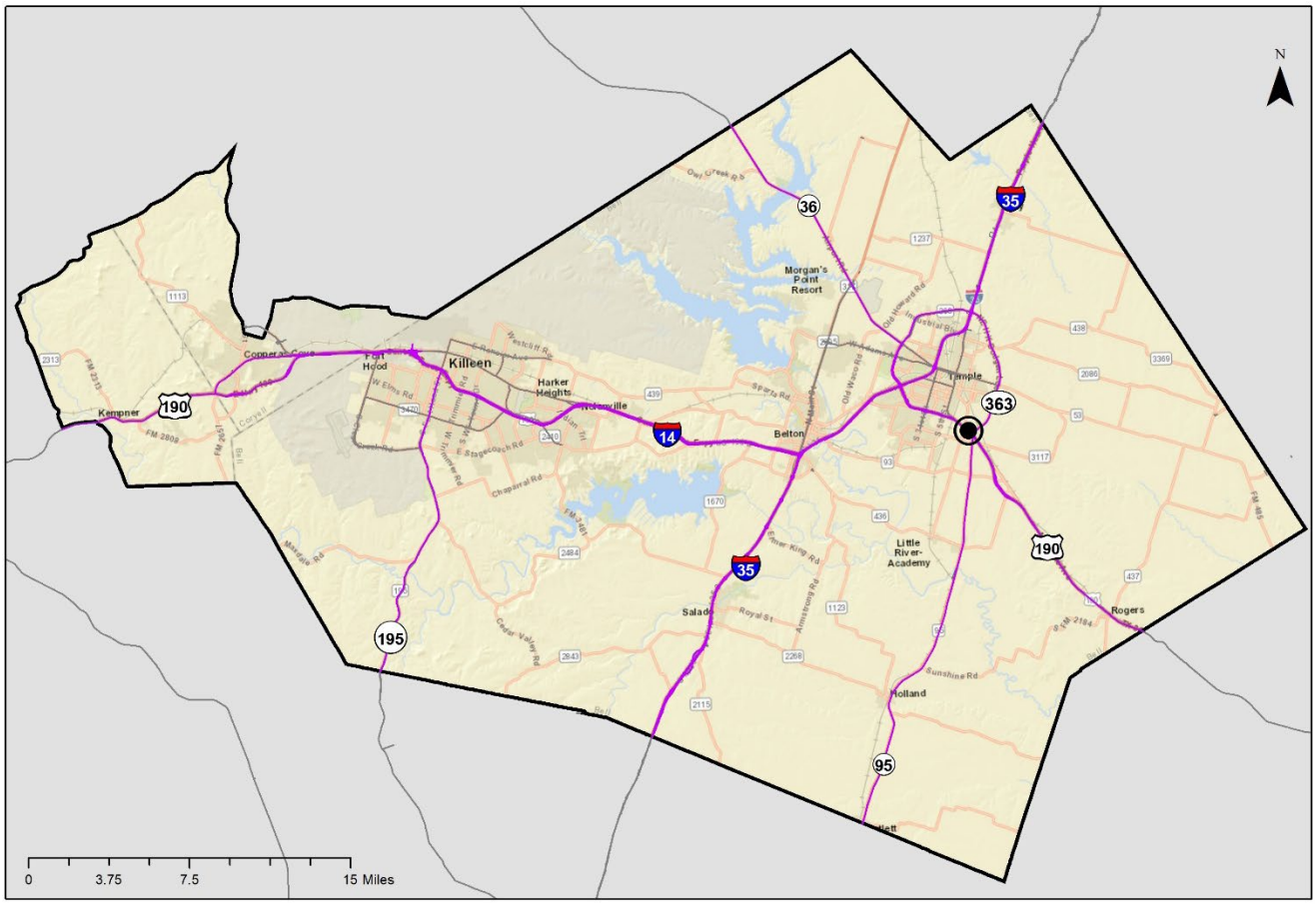
This opportunity site is in on SH 95 in Holland, south of Temple on an old section of the road used as a drag strip. Since it is an opportunity site, there are currently no amenities for truckers. However, there is space for about one hundred potential truck parking spaces.

There are no hotels, restaurants, or other off-site amenities in the immediate area.

Truck Parking Site #28 Profile

Conoco Gas Station

22225 SE H K Dodgen Loop, Temple, Texas



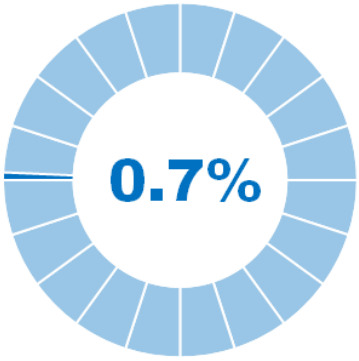
Unpaved parking

Paved Parking

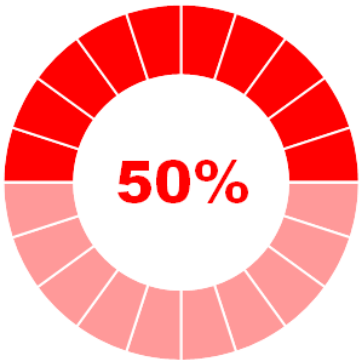
Restrooms

Convenience store

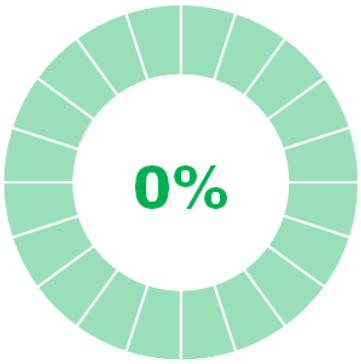
Diesel fuel pumps



Percentage of the total truck parking spaces in the region



Percentage of the site truck parking spaces that are paved



Observed Off-Peak Percentage of the site truck parking spaces in use

Texas Statewide Parking Study

5 Potential Parking Spaces Counted On Site

*Not listed in the statewide truck parking study

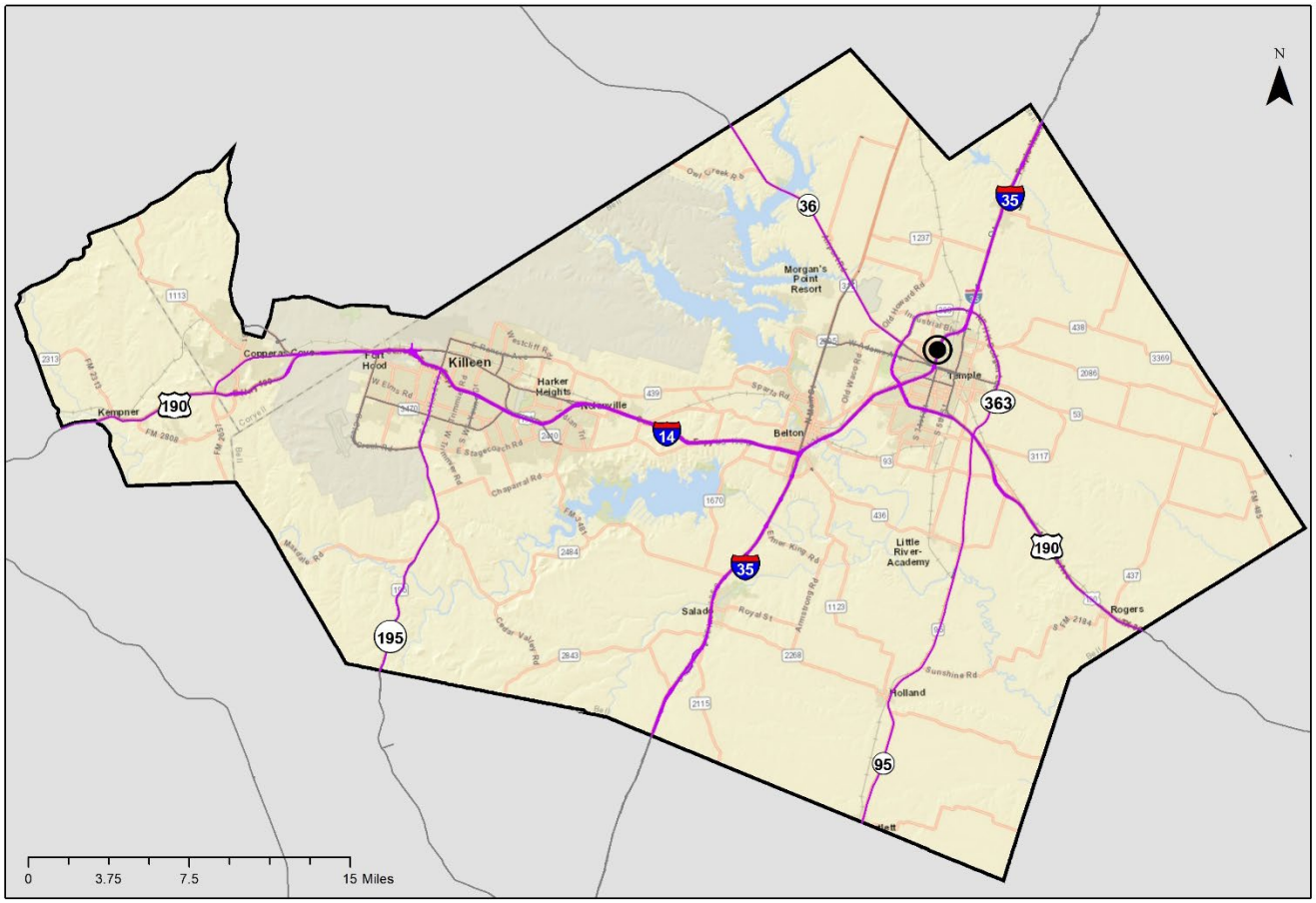
This Conoco gas station is located on US-190 on Loop 363 (H K Dodgen Loop). It features a convenience store, restrooms, diesel fuel, paved, and unpaved parking.

There are no hotels, restaurants, or other off-site amenities in the immediate area.

Truck Parking Site #29 Profile

Days Inn

1104 N General Bruce Dr, Temple, Texas

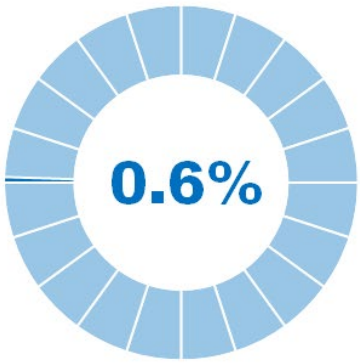


Hotel

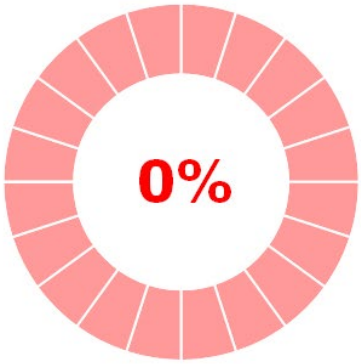
Restrooms

Unpaved parking

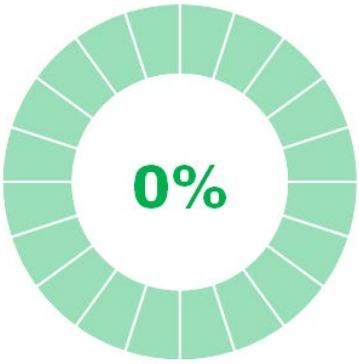
WiFi



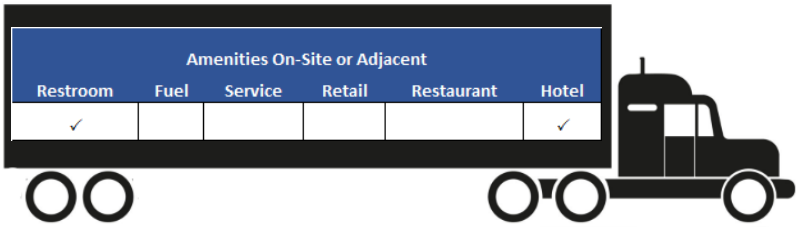
Percentage of the total truck parking spaces in the region



Percentage of the site truck parking spaces that are paved



Observed Off-Peak Percentage of the site truck parking spaces in use



Texas Statewide Parking Study

4 Potential Parking Spaces Counted On Site

*Not listed in the statewide truck parking study

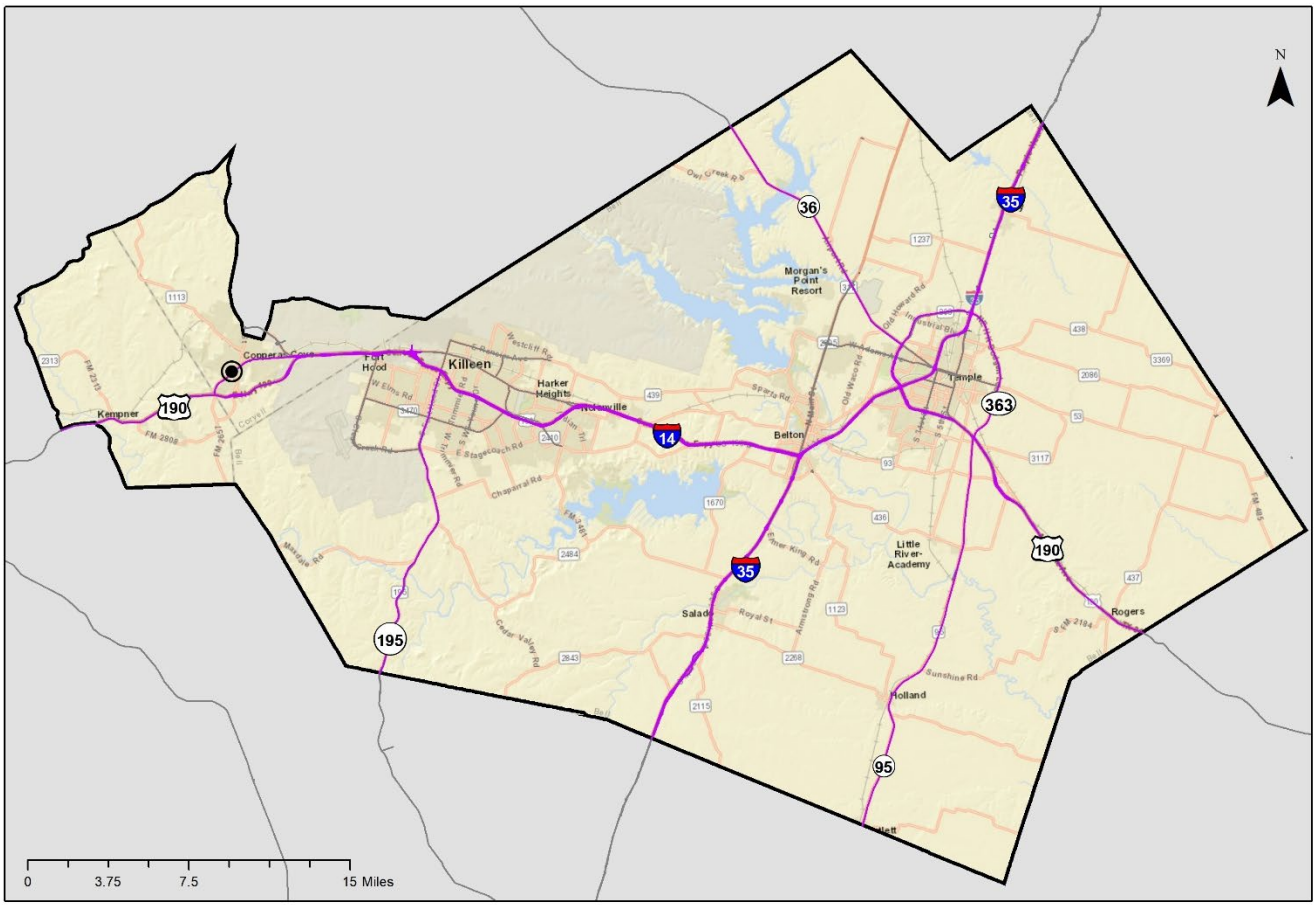
This Days Inn motel is located on IH-35 near downtown Temple. The Days Inn provides around 4 informal unpaved truck parking spots behind the hotel.

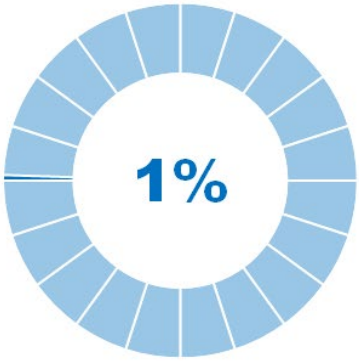
There are multiple hotels and a restaurant near the Days Inn.

Truck Parking Site #30 Profile

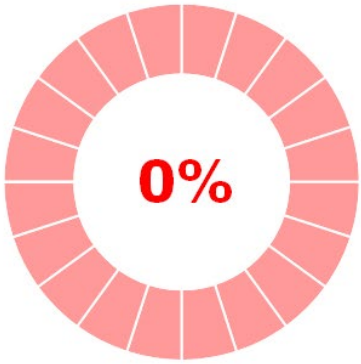
Hill Country Inn and Suites

302 W Hwy 190, Copperas Cove, Texas

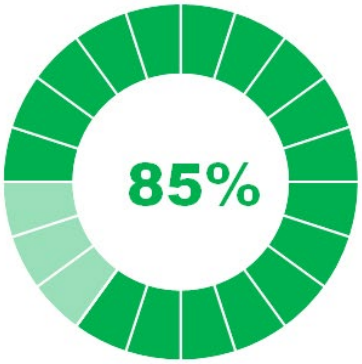




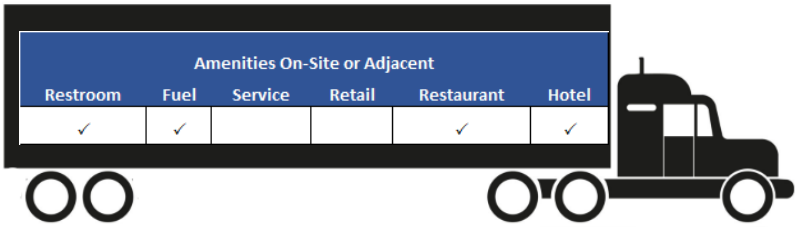
Percentage of the total truck parking spaces in the region



Percentage of the site truck parking spaces that are paved



Observed Off-Peak Percentage of the site truck parking spaces in use



Texas Statewide Parking Study

7 Potential Parking Spaces Counted On Site

*Not listed in the statewide truck parking study

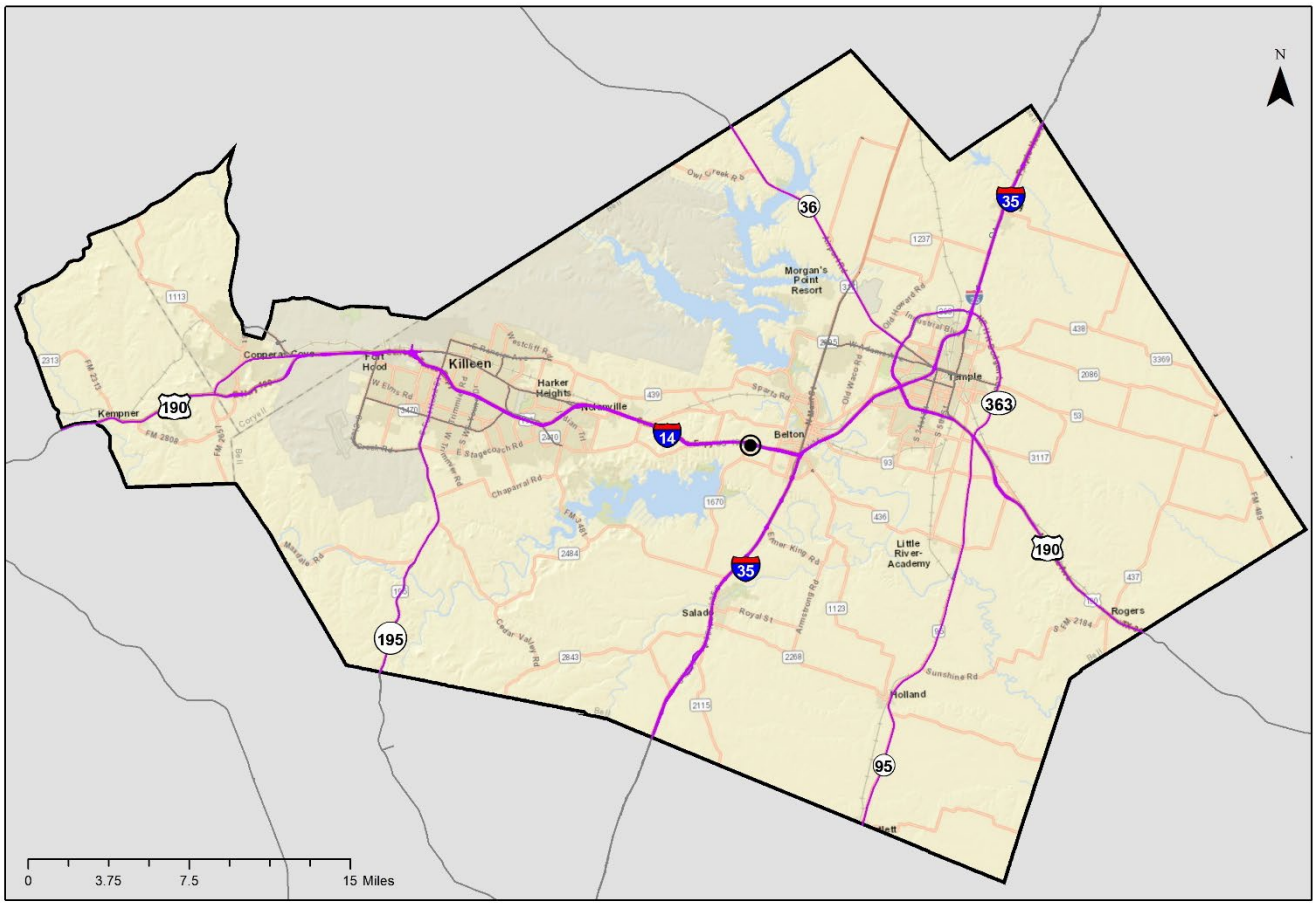
The Hill County Inn and Suites is located on Bus 190 in Copperas Cove. It features unpaved parking, hotel, restrooms, and WiFi. There are around 7 informal unpaved truck parking spots in the lot behind the hotel.

There are hotels, restaurants, and gas stations in close proximity.

Truck Parking Site #69 Profile

TexStar Travel Center

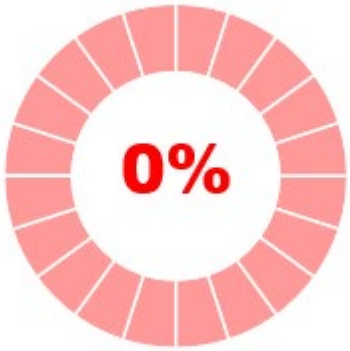
IH-14 at FM 1670, Belton, Texas



Closed gas station

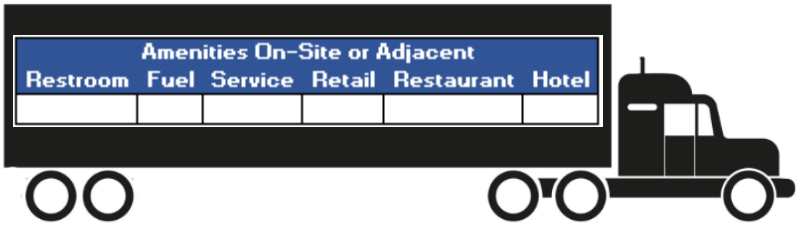
Future paved parking

Percentage of the total truck parking spaces in the region



Percentage of the site truck parking spaces that are paved

Observed Off-Peak Percentage of the site truck parking spaces in use



Texas Statewide Parking Study

11 Potential Parking Spaces Counted On Site

*Not listed in the statewide truck parking study

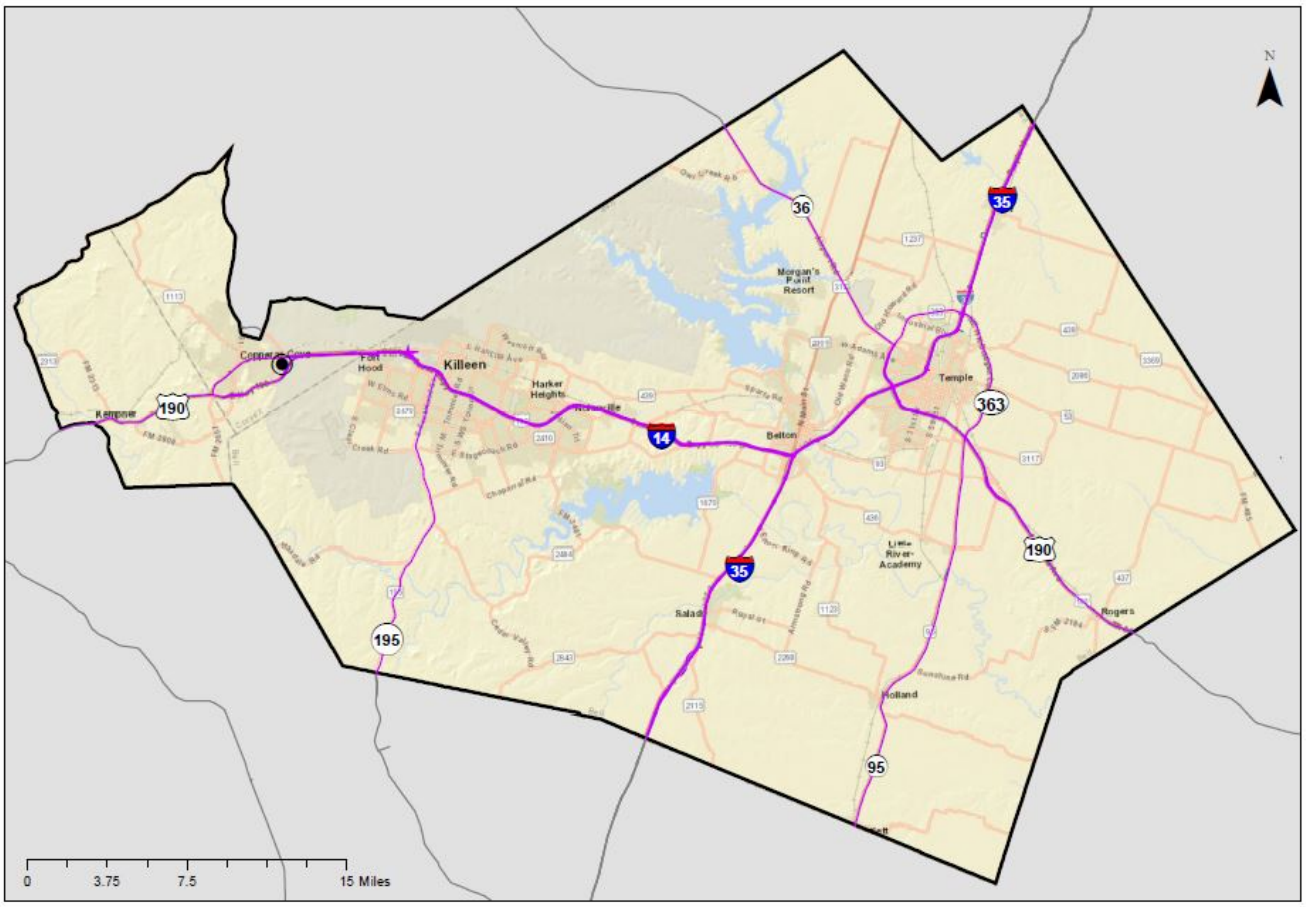
The Texstar Travel Center is a proposed development of a small closed gas station located on US-190 in Belton, Texas.

This site is underdevelopment review and after completion it is estimated that there will be eleven truck parking spots on site, with restrooms, diesel, retail, and a restaurant. Current amenities are limited. There are no hotels, restaurants, or other off-site amenities in the immediate area.

Truck Parking Site #48 Profile

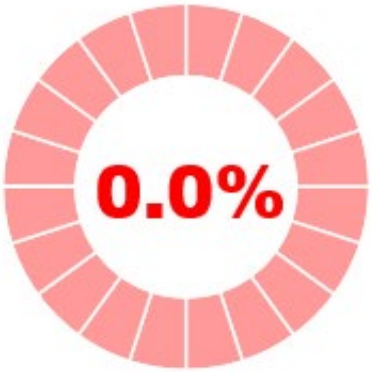
Opportunity Site

Constitution Dr at Martin Luther King Jr Blvd, Copperas Cove, Texas



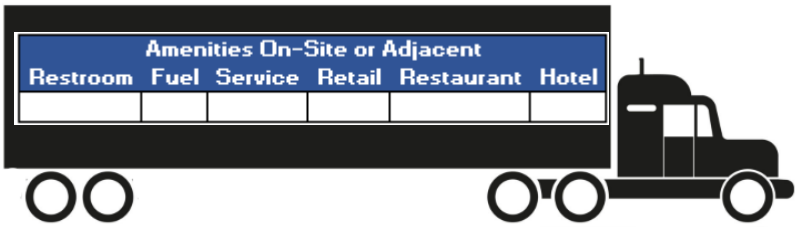
Opportunity parking site

Percentage of the total truck parking spaces in the region



Percentage of the site truck parking spaces that are paved

Observed Off-Peak Percentage of the site truck parking spaces in use



Texas Statewide Parking Study

40 Opportunity parking spaces on site

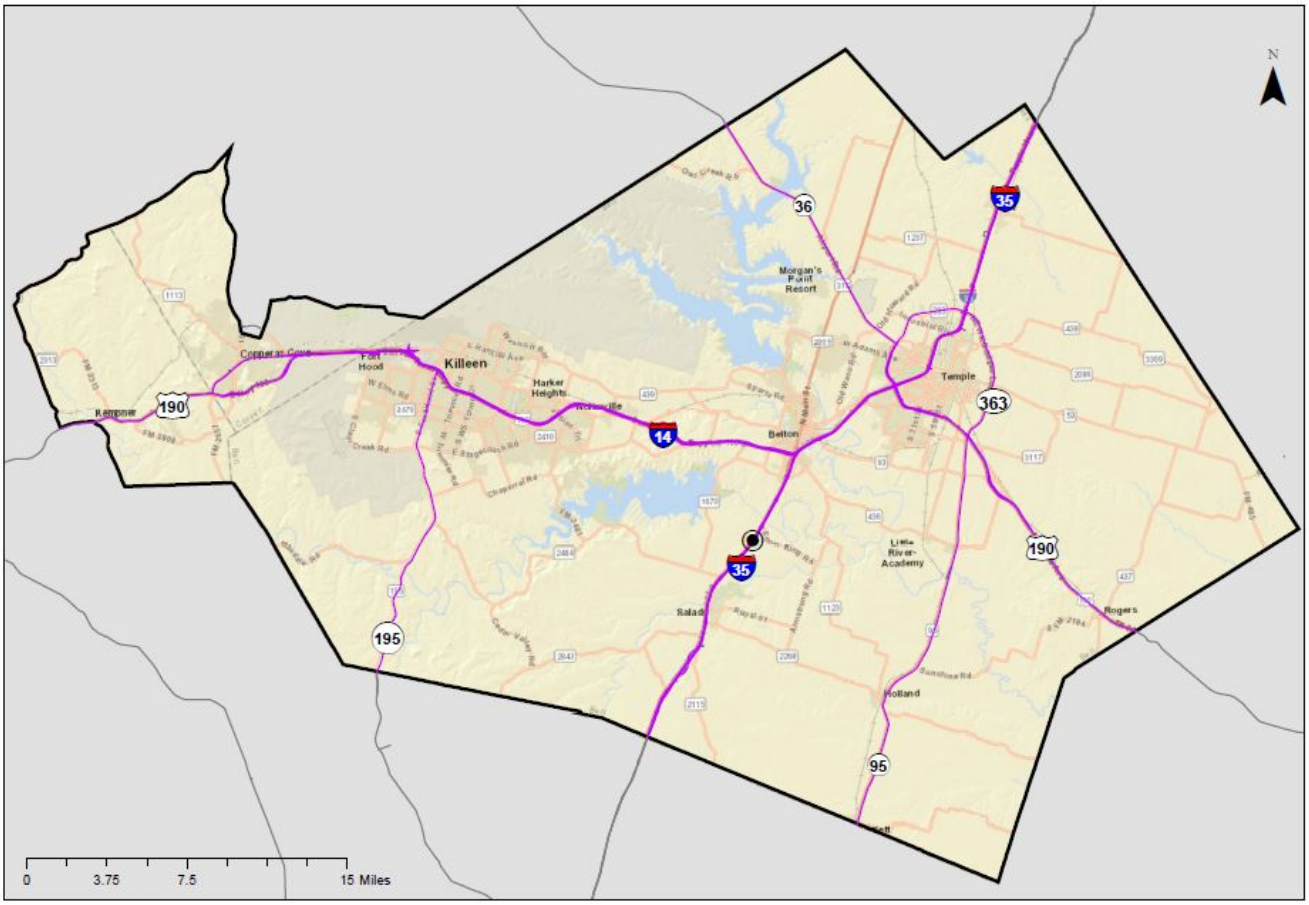
Survey responses suggested this vacant lot as an opportunity site for truck parking. It is located adjacent to a movie theater, with a Wal-Mart, hotels, and a retail strip center in the general area but too far away to be considered as available amenities.

*Not listed in the statewide truck parking study

Truck Parking Site #49 Profile

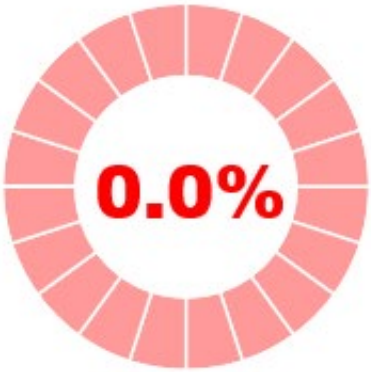
Planned Site

IH-35 at Dillard Road, Belton, Texas



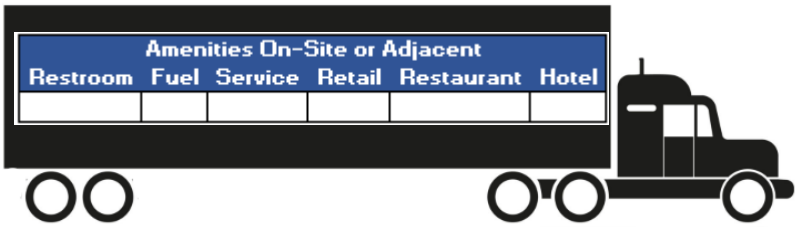
Planned truck stop

Percentage of the total truck parking spaces in the region



Percentage of the site truck parking spaces that are paved

Observed Off-Peak Percentage of the site truck parking spaces in use



Texas Statewide Parking Study

10 Opportunity parking spaces on site

Survey responses noted this location as having submitted an application for re-zoning to develop a truck stop. It is located on the southbound frontage road of IH-35 just south of the Amity Road off-ramp.

No information on the planned amenities was provided, but it can be assumed to have restrooms, fuel, retail, and

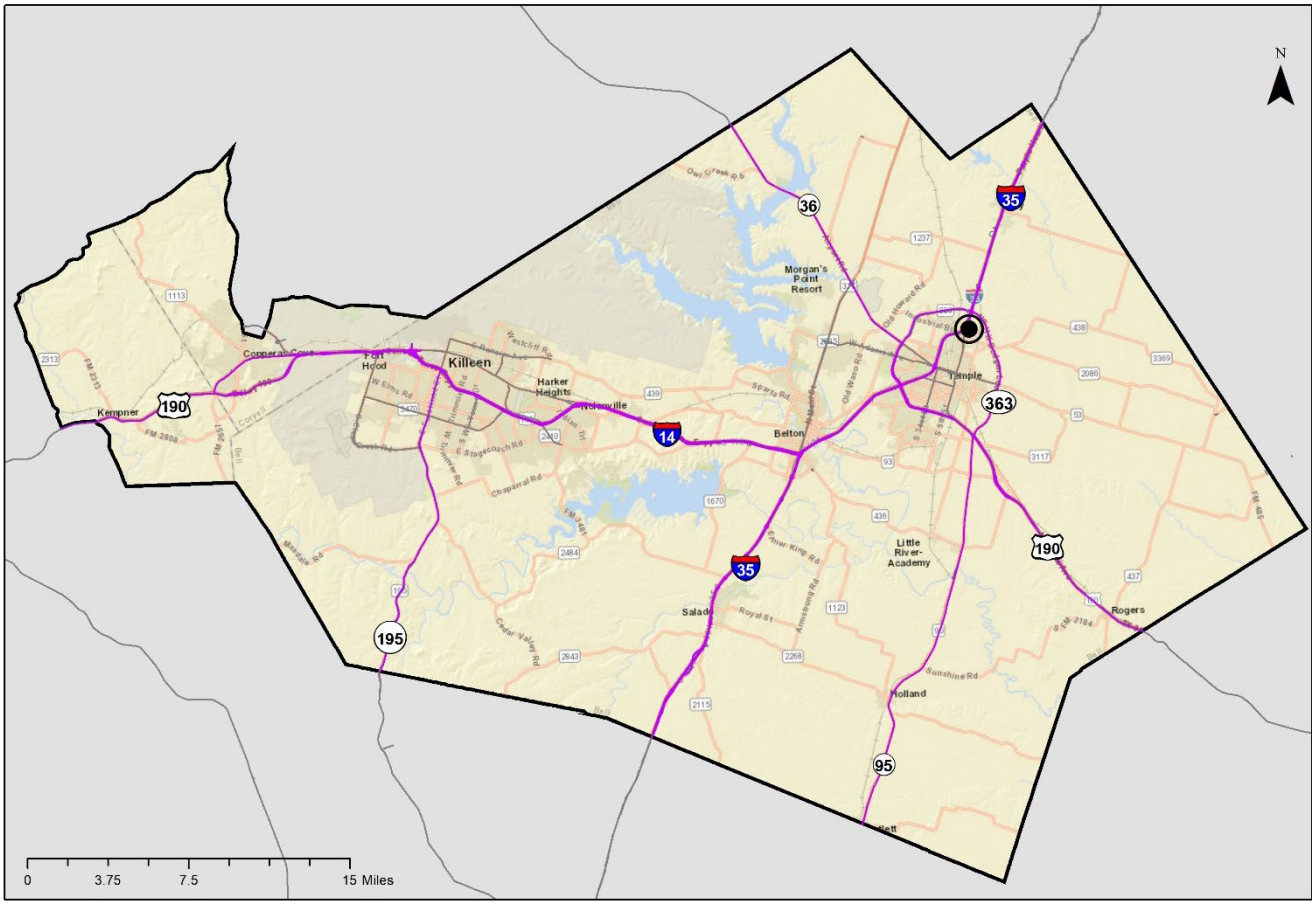
*Not listed in the statewide truck parking study

Unauthorized Truck Parking Sites

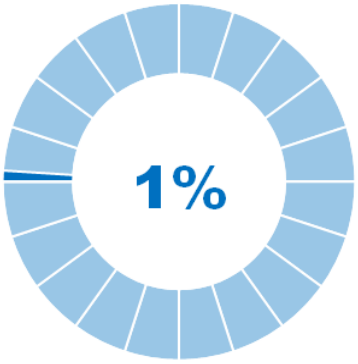
Truck Parking Site #15 Profile

Mayborn Civic Center

3303 N 3rd Street, Temple, Texas

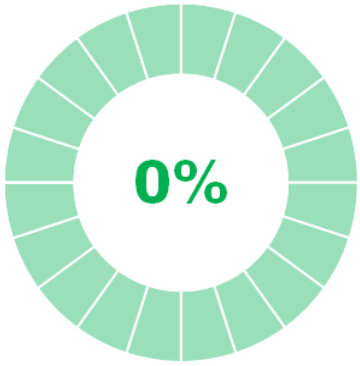


Informal truck parking on dead-end street

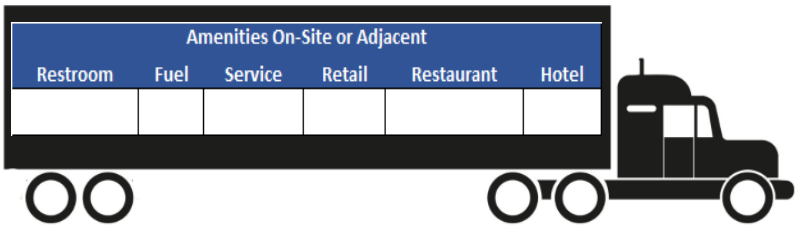


Percentage of the total truck parking spaces in the region

Percentage of the site truck parking spaces that are paved



Percentage of the site truck parking spaces in use



Texas Statewide Parking Study

10 Potential Parking Spaces Counted On Site

*Not listed in the statewide truck parking study

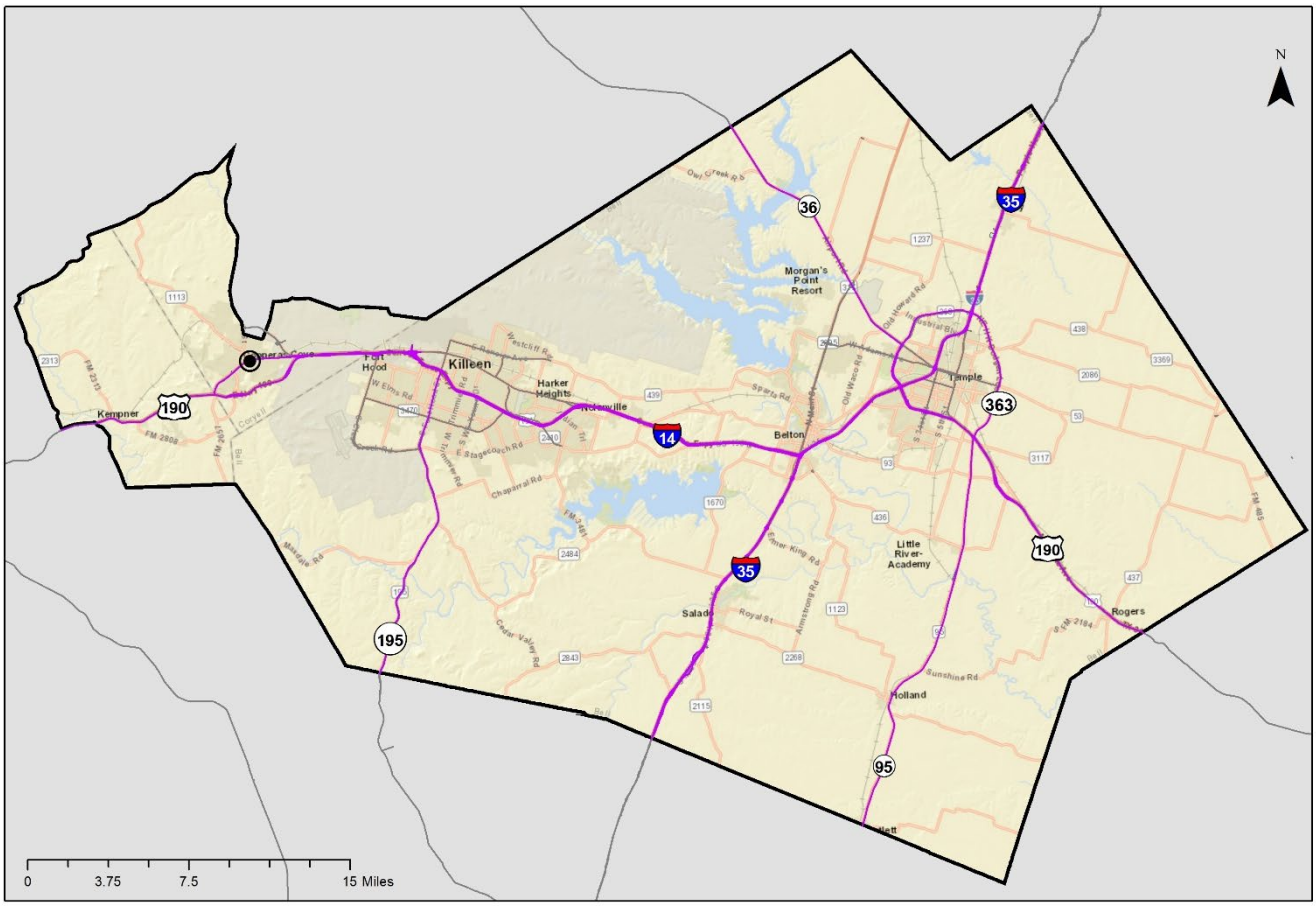
The Mayborn Civic Center can be utilized as a potential truck parking site. This is not the Civic Center Parking lot; this refers to the dead-end street the trucks are parking on. It is located right off IH-35. Currently the location does not offer any amenities for truck parking.

The Civic Center is near a residential community, so there are no nearby off-site amenities.

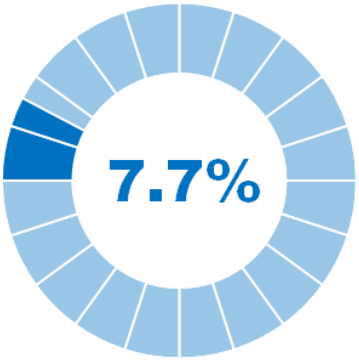
Truck Parking Site #31 Profile

Opportunity Site

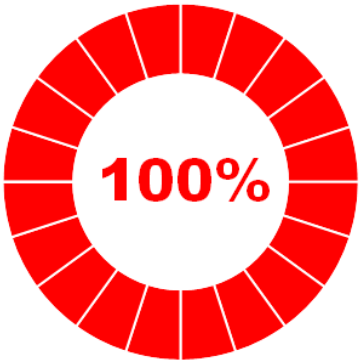
US 190 at Robertson Ave, Copperas Cove, Texas



Opportunity parking



Percentage of the total truck parking spaces in the region



Percentage of the site truck parking spaces that are paved

Percentage of the site truck parking spaces in use

Texas Statewide Parking Study

50 Potential Parking Spaces Counted On Site

*Not listed in the statewide truck parking study

This opportunity site is an unused paved parking lot located along US 190 in Copperas Cove. It is across from the Cove Terrace Shopping Strip. It does not have any on-site amenities.

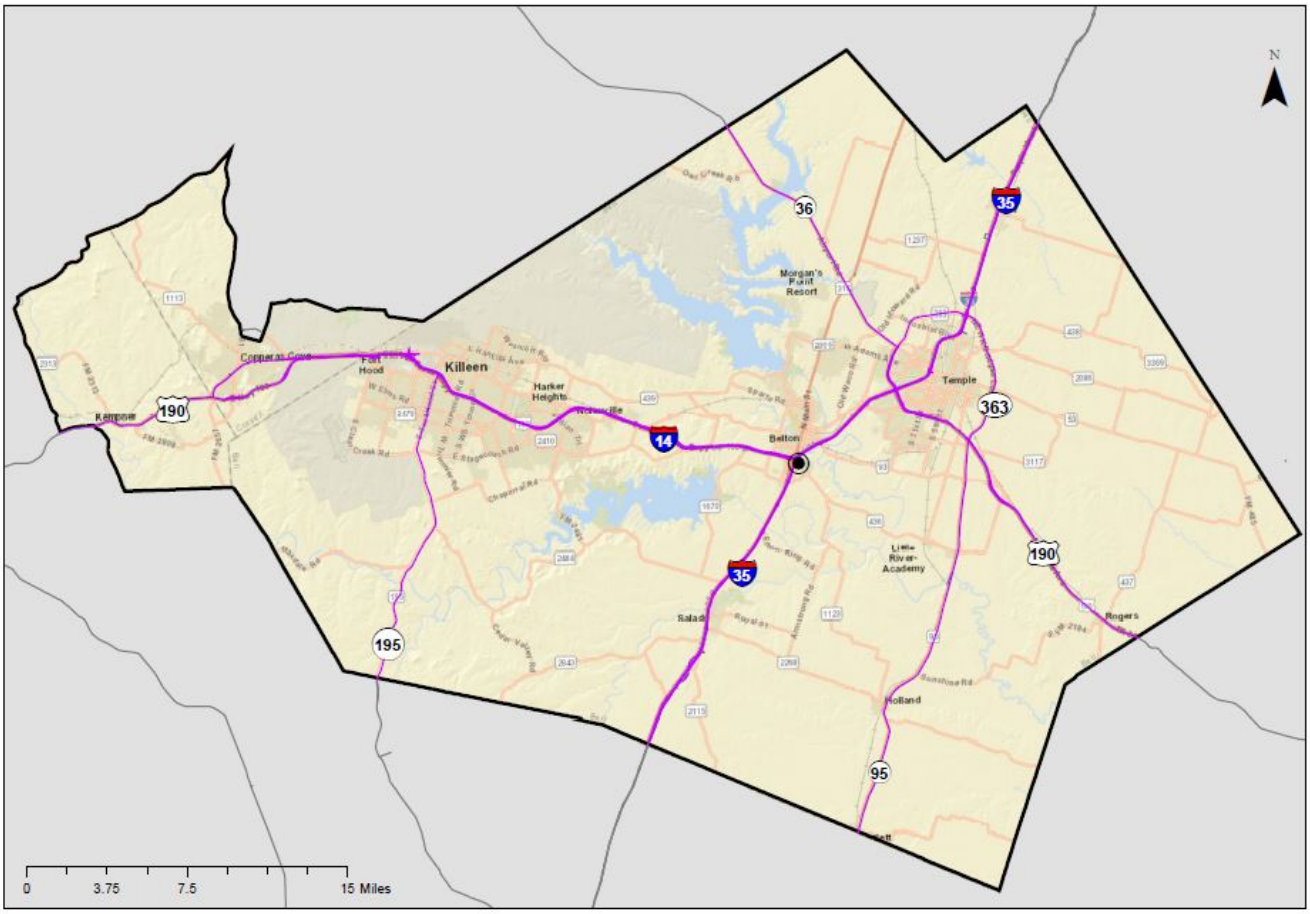
There are retail and dining opportunities in close proximity.

Although this is an opportunity site, it is in active use for unauthorized parking, so the parking spaces are counted in the regional inventory.

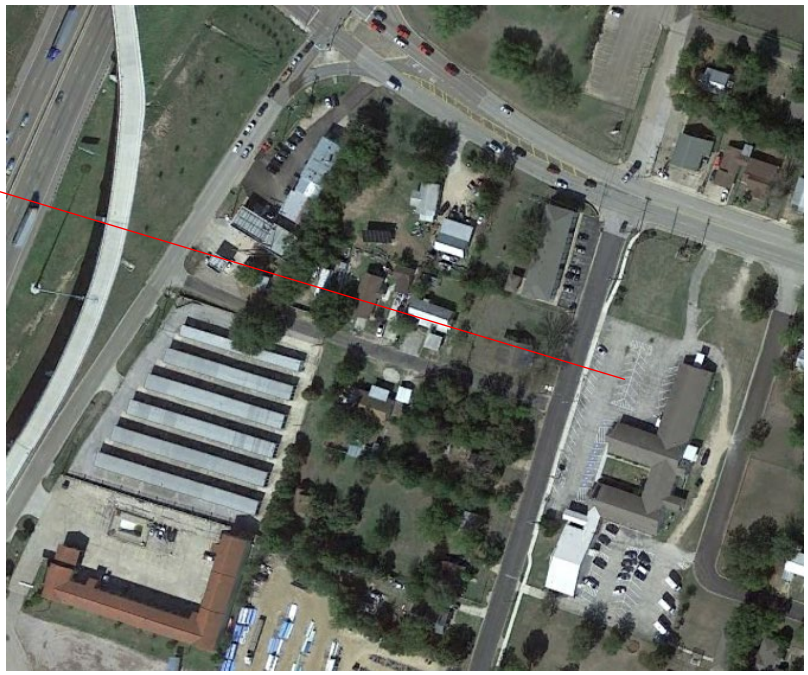
Truck Parking Site #35 Profile

Miller Heights Baptist Church

1400 S Wall St, Belton, Texas



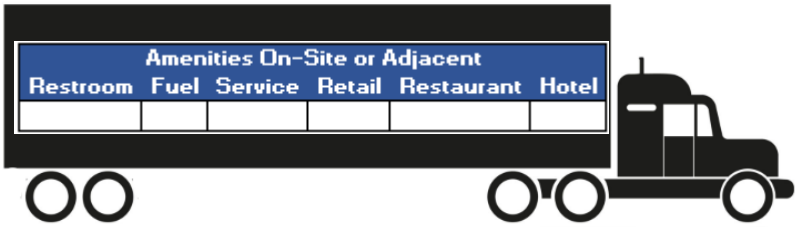
Church parking lot



Percentage of the total truck parking spaces in the region

Percentage of the site truck parking spaces that are paved

Percentage of the site truck parking spaces in use



Texas Statewide Parking Study

6	Unauthorized parking spaces on site

*Not listed in the statewide truck parking study

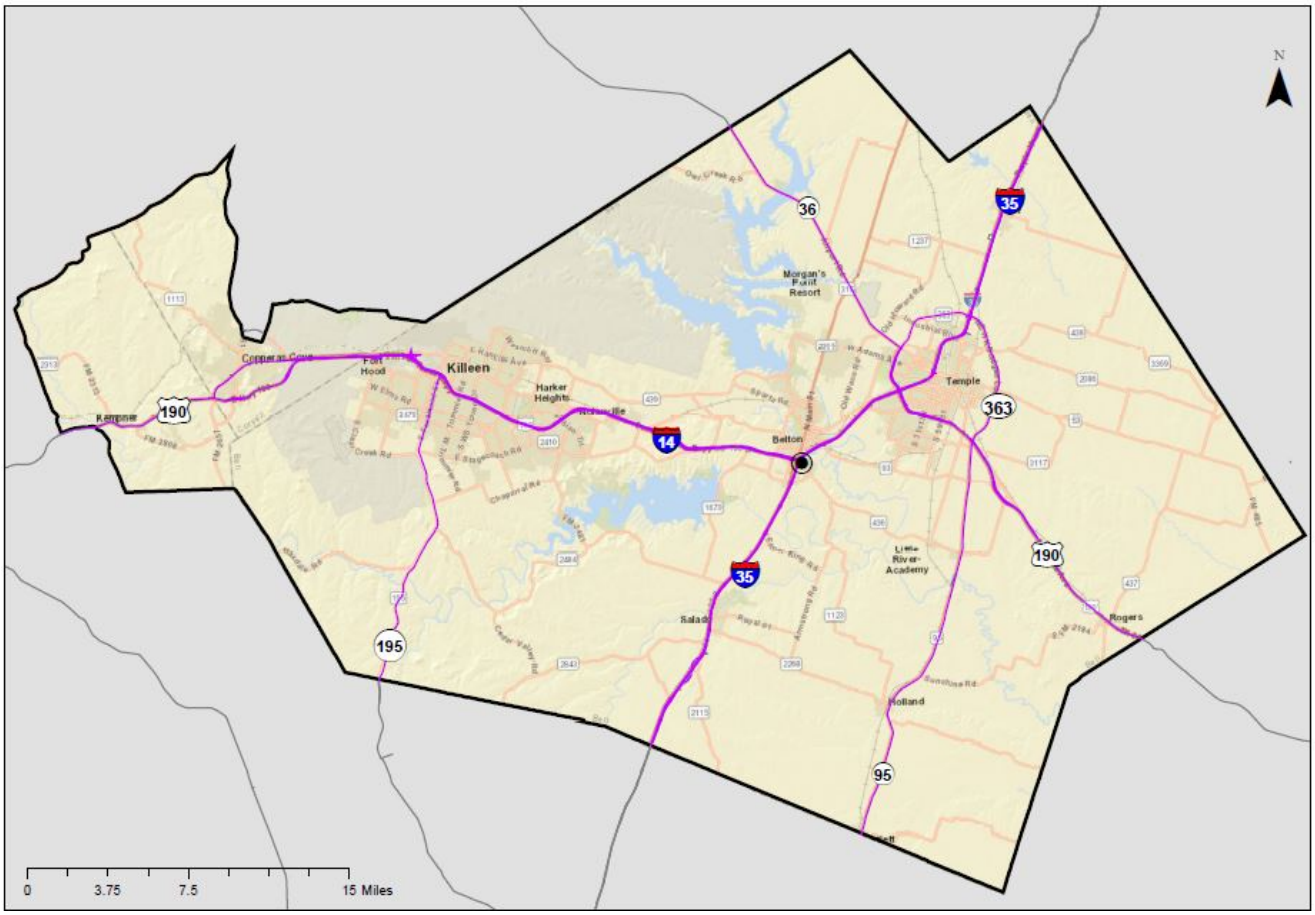
The church parking lot is accessible, unused, and convenient to IH-35. Survey responses indicated that unauthorized truck parking was an issue at this site.

There are no hotels, restaurants, or other off-site amenities in the immediate area.

Truck Parking Site #34 Profile

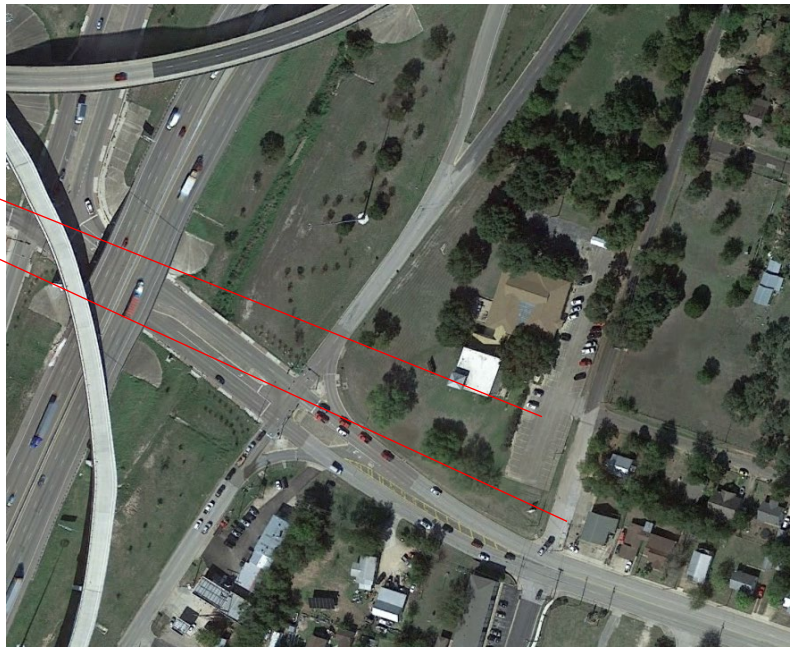
Immanuel Lutheran Church / Summit Gas Station

1415 S Wall St, Belton, Texas



Church parking lot

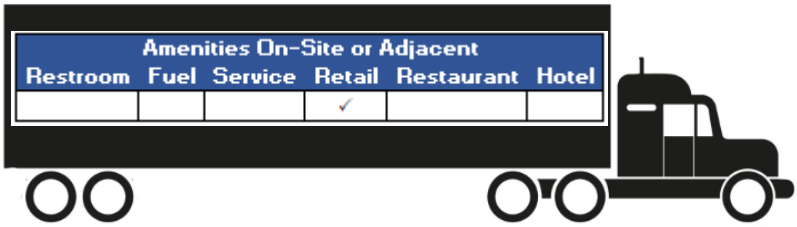
Parking on street adjacent to gas station



Percentage of the total truck parking spaces in the region

Percentage of the site truck parking spaces that are paved

Percentage of the site truck parking spaces in use



Texas Statewide Parking Study

6 Unauthorized parking spaces on site

*Not listed in the statewide truck parking study

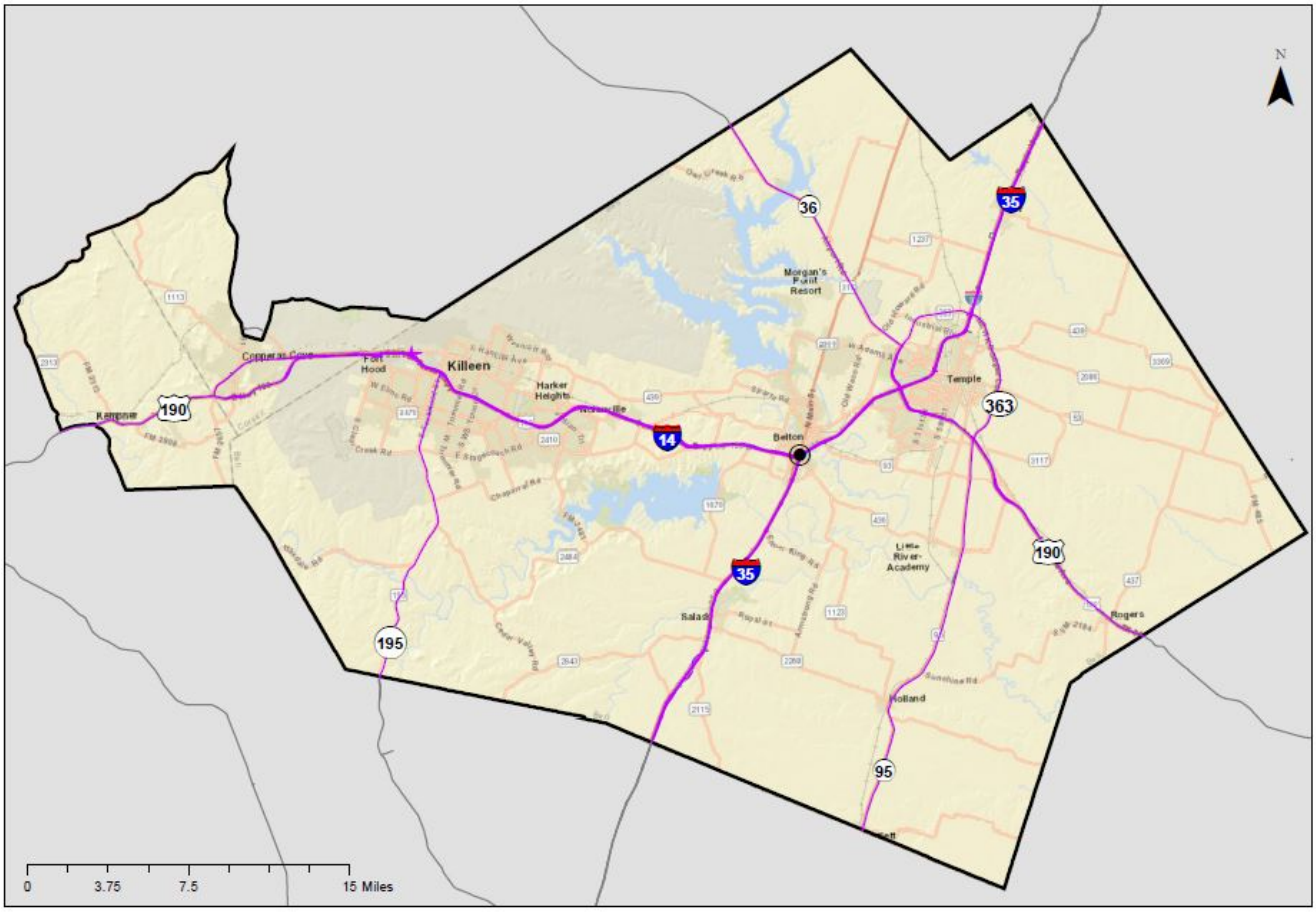
The church and a portion of the gas station parking lot are accessible, unused, and convenient to IH-35. Survey responses indicated that unauthorized truck parking was an issue at this site.

The gas station has only two pumps and no diesel. There are no hotels, restaurants, or other off-site amenities in the immediate area.

Truck Parking Site #36 Profile

Norman Building Materials

1010 S Main St, Belton, Texas

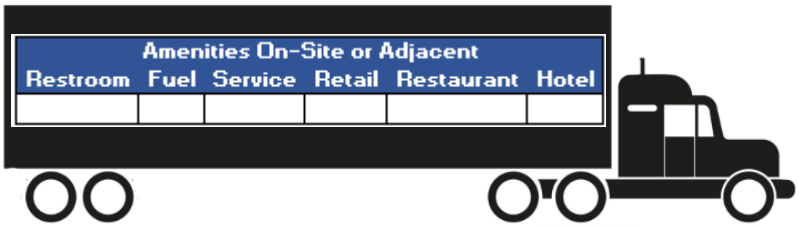


Unauthorized parking

Percentage of the total truck parking spaces in the region

Percentage of the site truck parking spaces that are paved

Percentage of the site truck parking spaces in use



Texas Statewide Parking Study

6 Unauthorized parking spaces on site

*Not listed in the statewide truck parking study

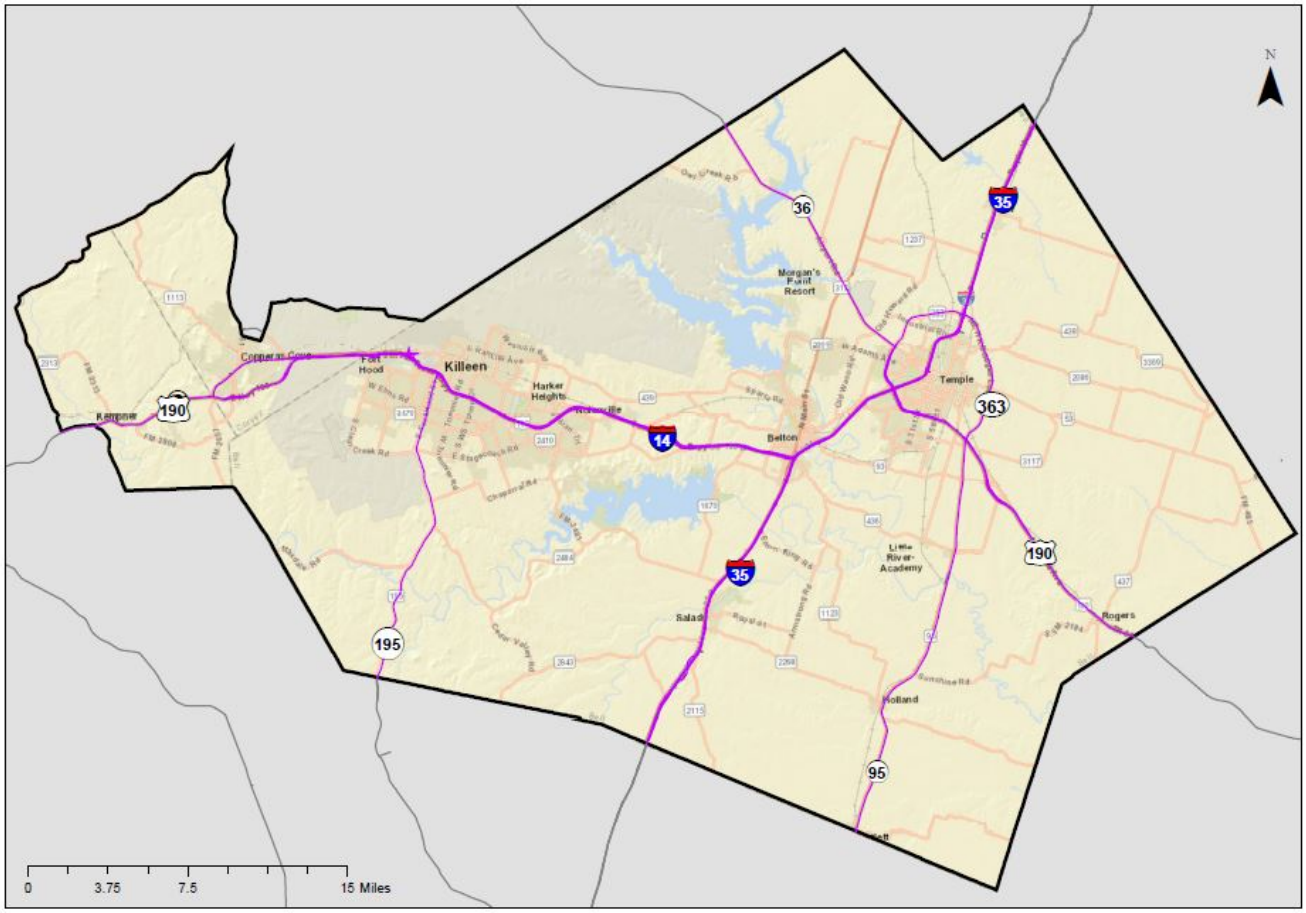
This site has observed unauthorized truck parking along the front of the site and along W Ave J, a low-volume road adjacent to a building materials yard . Survey responses indicated that unauthorized truck parking was an issue at this site.

There are no hotels, restaurants, or other off-site amenities in the immediate area.

Truck Parking Site #56 Profile

Valero Gas Station

2202 W US 190, Copperas Cove, Texas

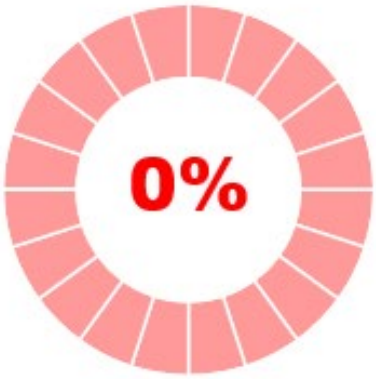


Unpaved truck parking

Convenience store with restrooms

Diesel fuel pumps

Percentage of the total truck parking spaces in the region



Percentage of the site truck parking spaces that are paved

Percentage of the site truck parking spaces in use

Texas Statewide Parking Study

4 Unauthorized parking spaces on site

*Not listed in the statewide truck parking study

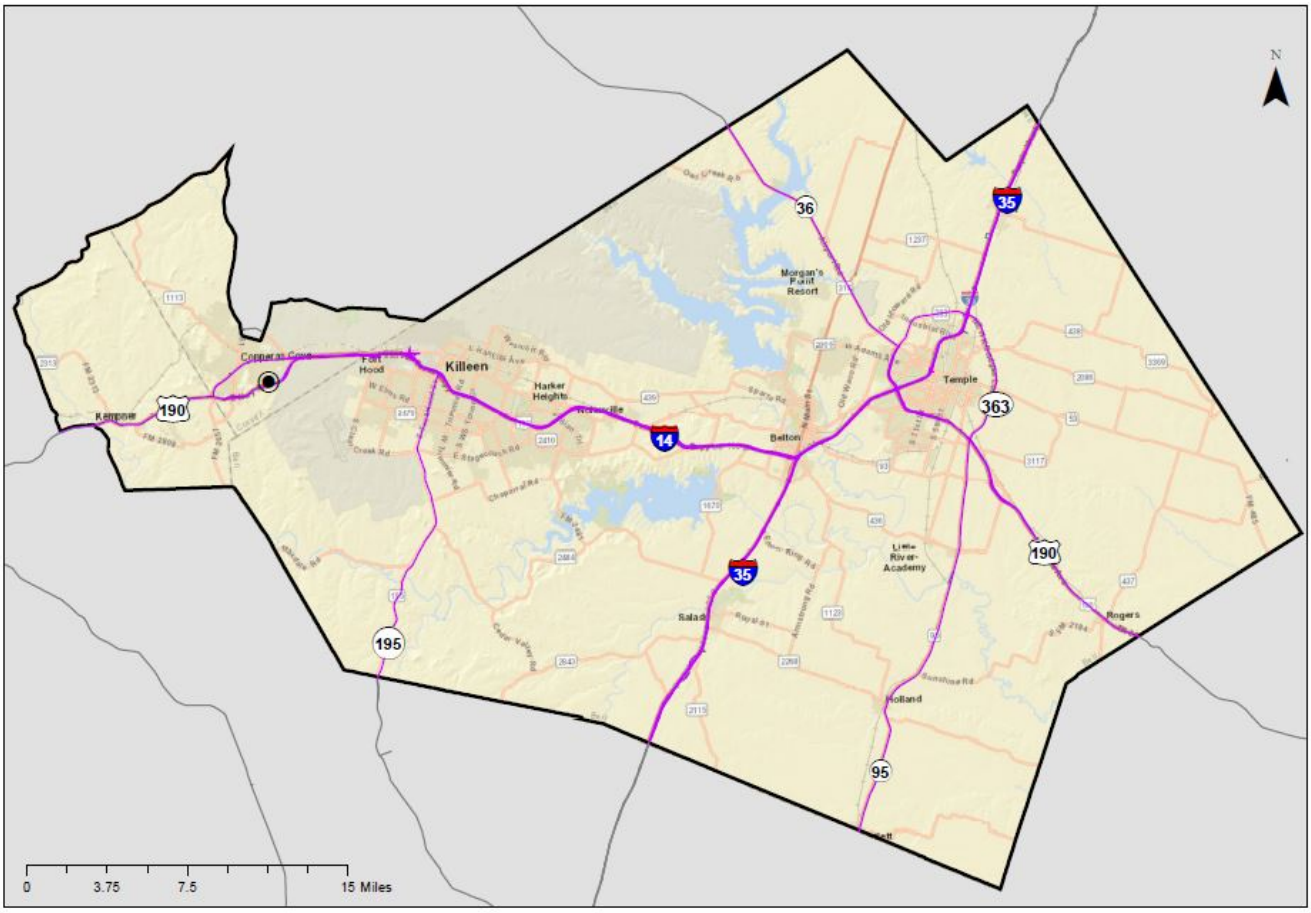
The Valero is located on US 190 west of Copperas Cove. It features a convenience store, restrooms, and diesel fuel. There is an unpaved informal truck parking observed along Big Divide Rd adjacent to the Valero.

There are no hotels, restaurants, or other off-site amenities in the immediate area.

Truck Parking Site #38 Profile

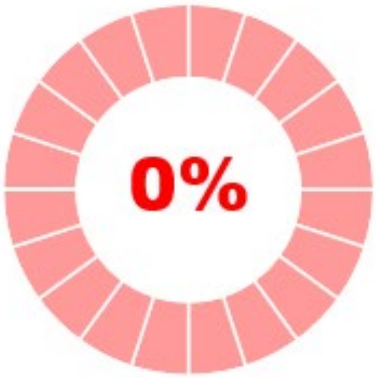
Risen Star Lane

Copperas Cove, Texas



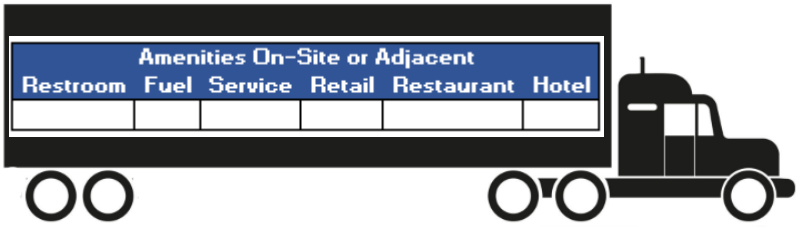
Unauthorized truck parking

Percentage of the total truck parking spaces in the region



Percentage of the site truck parking spaces that are paved

Percentage of the site truck parking spaces in use



Texas Statewide Parking Study

4 Unauthorized parking spaces on site

*Not listed in the statewide truck parking study

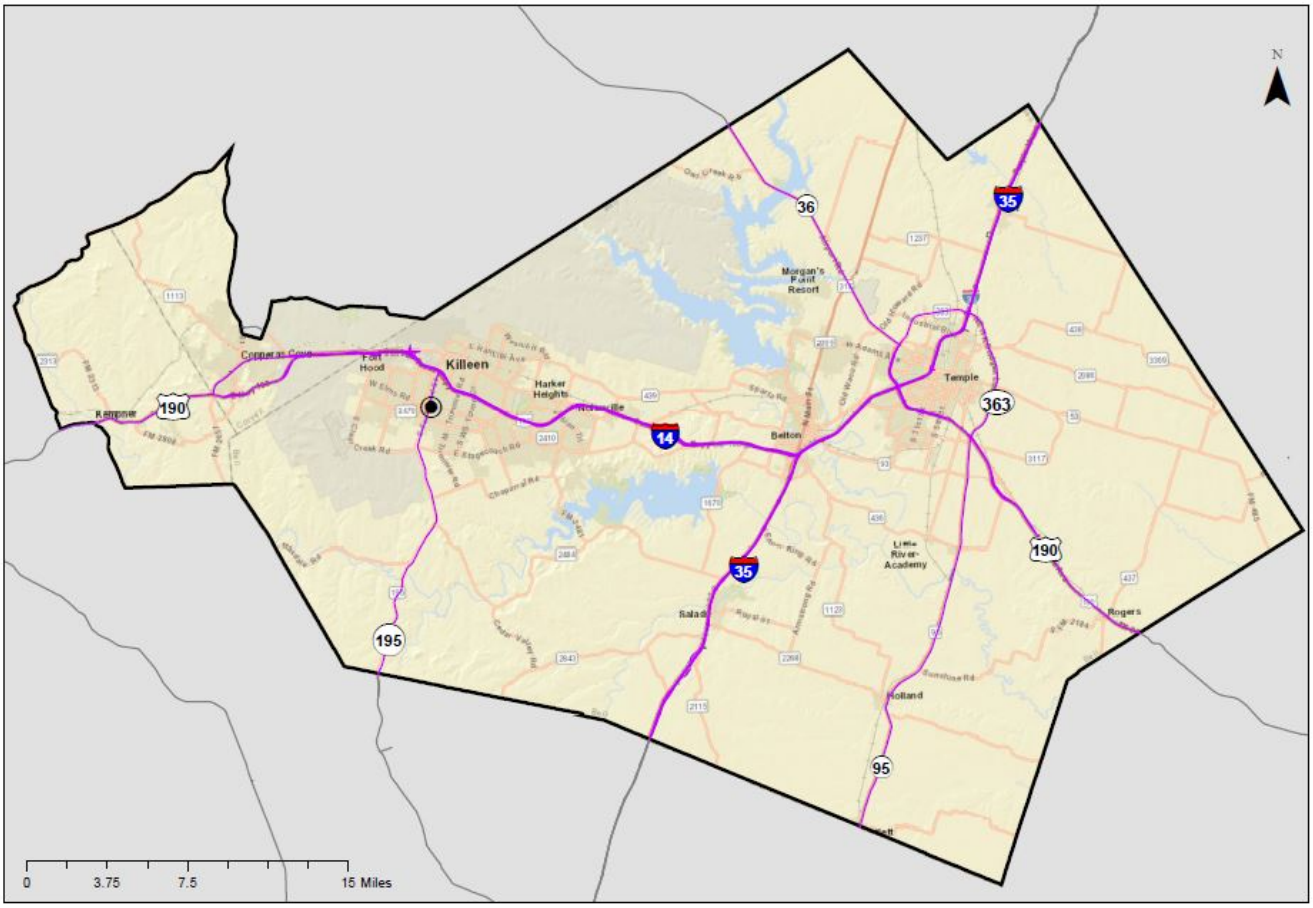
Unauthorized truck parking observed along Risen Star Lane adjacent to new housing construction was reported in the surveys.

There are no hotels, restaurants, or other off-site amenities in the immediate area.

Truck Parking Site #39 Profile

Starlite Station Night Club

3310 S Fort Hood St, Killeen, Texas



Diesel fuel pumps

Convenience store with restrooms

Paved parking

Percentage of the total truck parking spaces in the region

Percentage of the site truck parking spaces that are paved

Percentage of the site truck parking spaces in use

Texas Statewide Parking Study

100 Unauthorized parking spaces on site

*Not listed in the statewide truck parking study

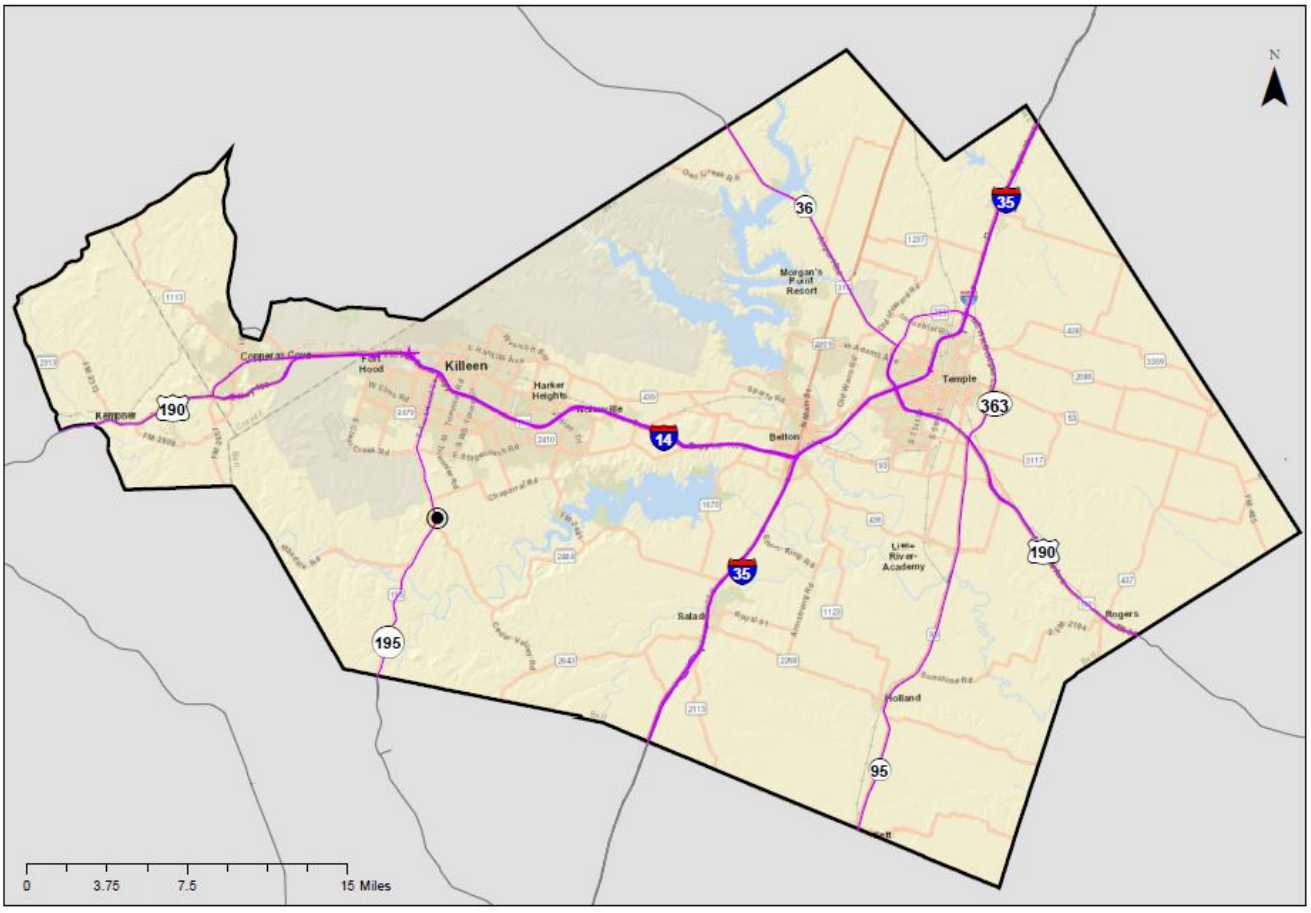
The large parking lot at the intersection of S Fort Hood St (US 195) and Elms Road is tenanted only by a night club, providing a convenient site with limited existing use. Unauthorized parking was reported in the surveys.

There are gas station and convenience stores immediately across S Fort Hood St to the west and across Elms Rd to the north. There are fast food restaurants slightly farther away along Elms Rd to the east, but no other off-site amenities in the immediate area.

Truck Parking Site #40 Profile

Centex Scrap & Metal

12800 SH 195, Rural Area South of Killeen, Texas



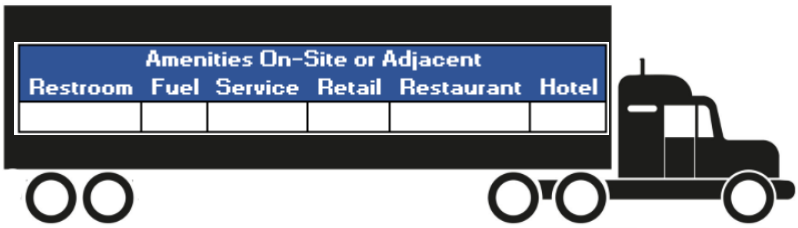
Paved parking

Unpaved parking

Percentage of the total truck parking spaces in the region

Percentage of the site truck parking spaces that are paved

Percentage of the site truck parking spaces in use



Texas Statewide Parking Study

25 Unauthorized parking spaces on site

*Not listed in the statewide truck parking study

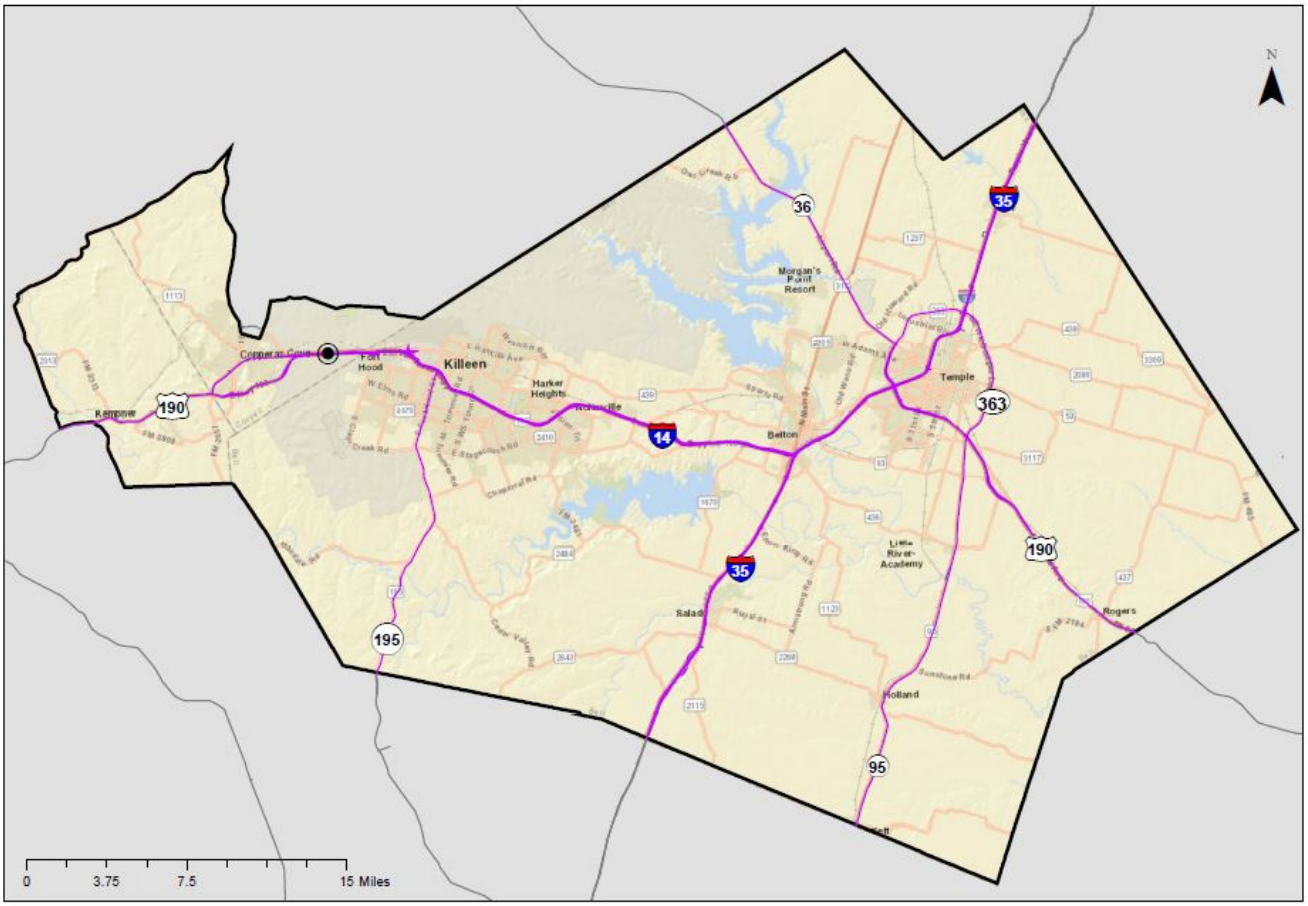
Survey responses indicated that unauthorized truck parking was an issue at this site. It includes long-term storage of trucks and trailers related to the scrap yard.

There are no hotels, restaurants, or other off-site amenities in the immediate area.

Truck Parking Site #47 Profile

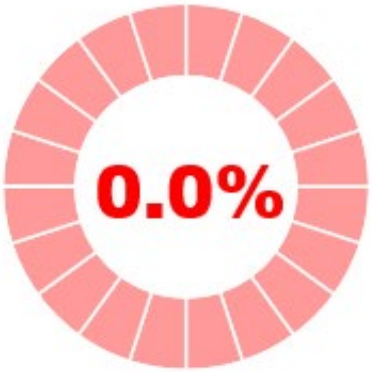
Off Ramp

IH-14 Off Ramp at Clarke Rd, Killeen, Texas



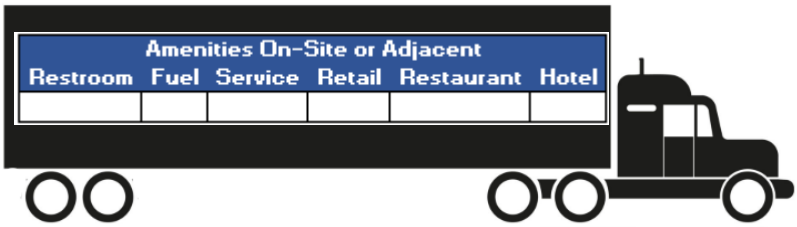
Observed unauthorized parking

Percentage of the total truck parking spaces in the region



Percentage of the site truck parking spaces that are paved

Percentage of the site truck parking spaces in use



Texas Statewide Parking Study

40 Opportunity parking spaces on site

*Not listed in the statewide truck parking study

Surveys indicate that unauthorized truck parking occurs along the IH-14 off ramp at Clarke Road. While the USTA Safe Truck Parking Proposal lists freeway on ramp shoulders as opportunity parking sites, off ramps are not recommended because of their higher speeds.

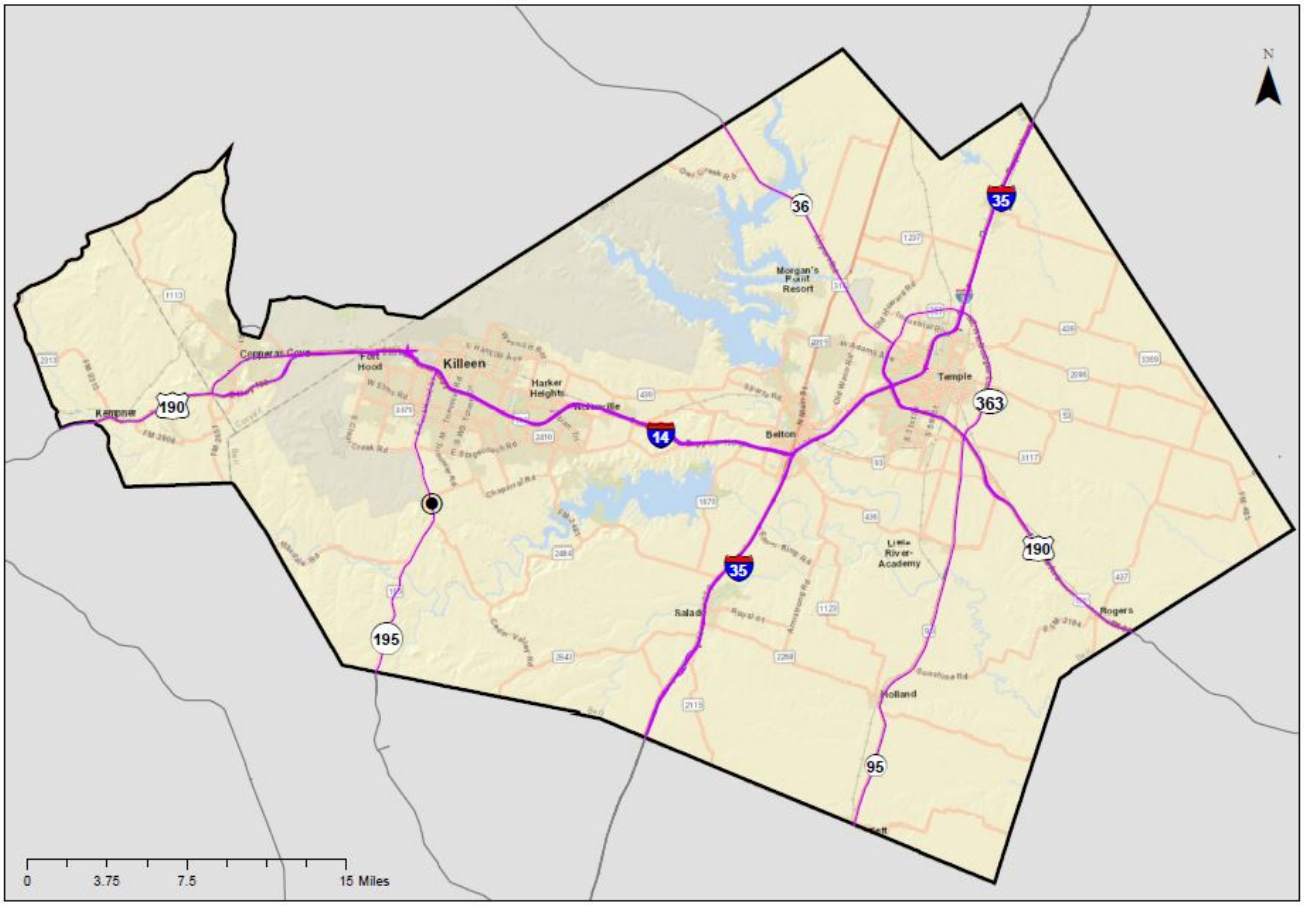
This is a convenient location for accessing Fort Hood.

There are no hotels, restaurants, or other off-site amenities in the immediate area.

Truck Parking Site #42 Profile

Scrap Yards

SH 195 N of Reece Creek Road, Rural Area South of Killeen, Texas

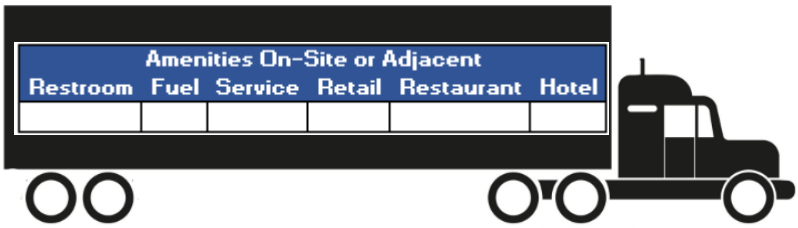


Paved parking

Percentage of the total truck parking spaces in the region

Percentage of the site truck parking spaces that are paved

Percentage of the site truck parking spaces in use



Texas Statewide Parking Study

10 Unauthorized parking spaces on site

*Not listed in the statewide truck parking study

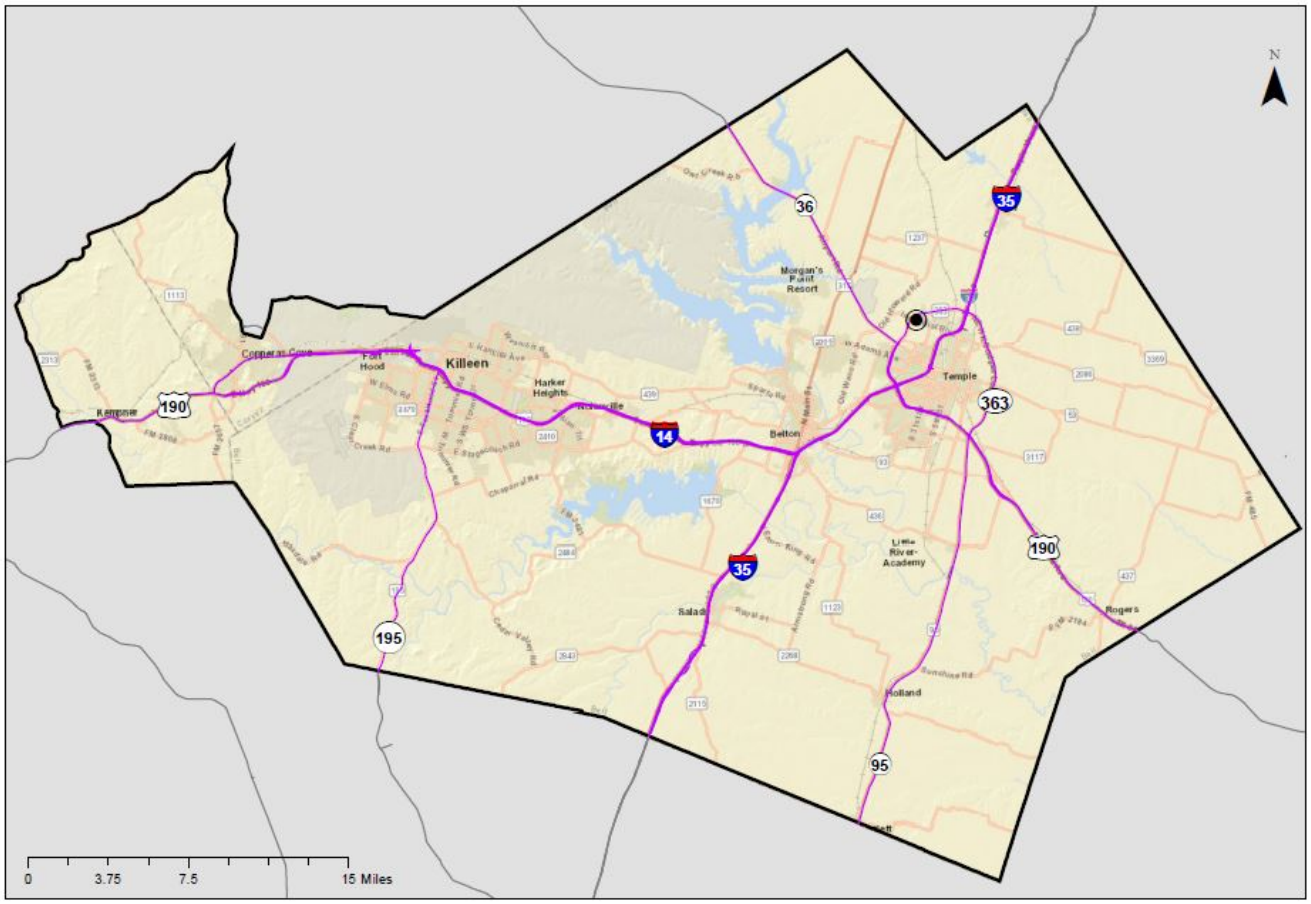
Survey responses indicated that unauthorized truck parking was an issue at these two scrapyards.

There are no hotels, restaurants, or other off-site amenities in the immediate area.

Truck Parking Site #59 Profile

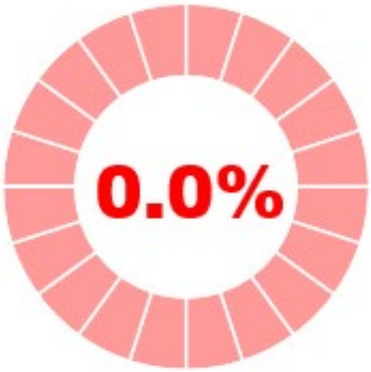
Opportunity Site

Industrial Blvd East of Loop 363, Temple, Texas



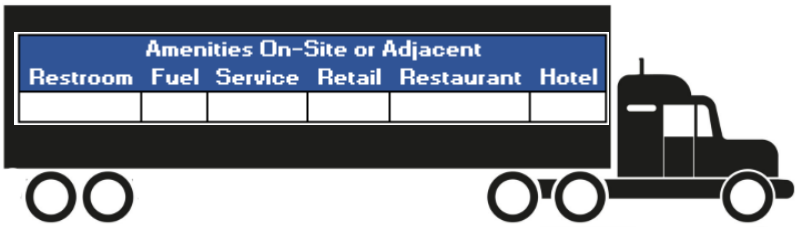
Opportunity parking

Percentage of the total truck parking spaces in the region



Percentage of the site truck parking spaces that are paved

Percentage of the site truck parking spaces in use



Texas Statewide Parking Study

15 Opportunity parking spaces on site

*Not listed in the statewide truck parking study

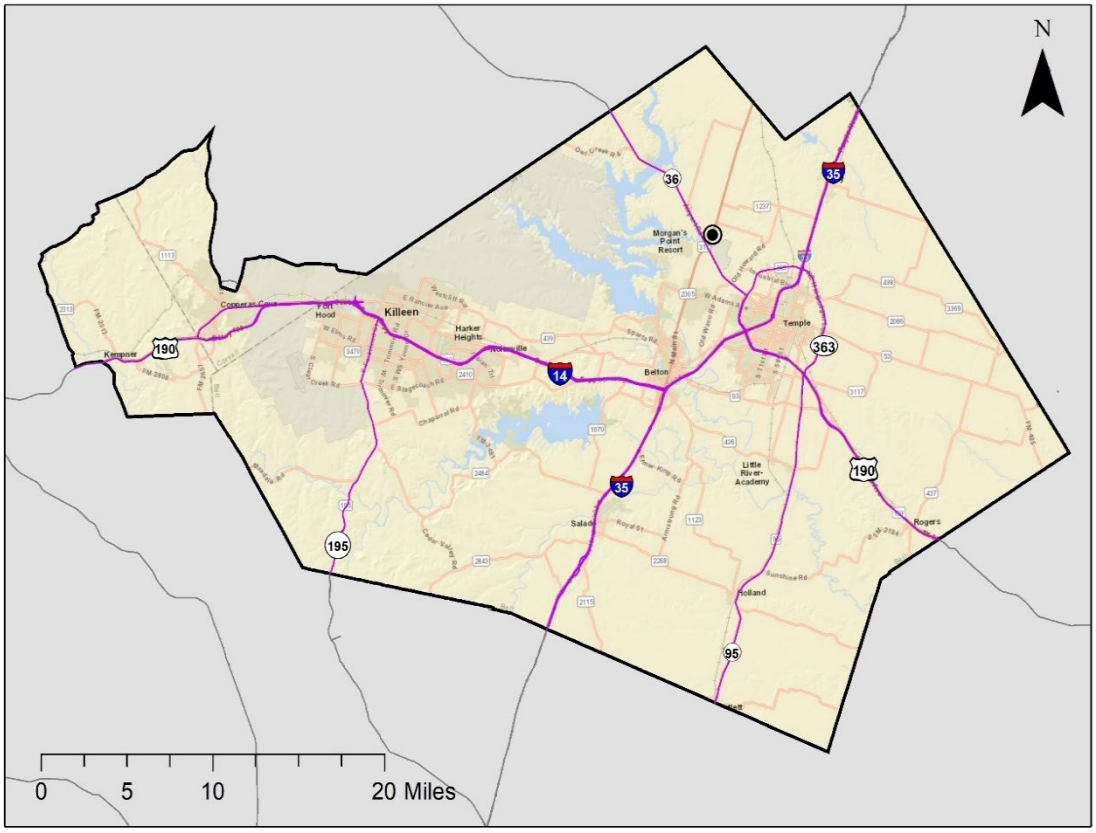
This site is just west of industrial parks in north Temple and convenient to Loop 363. Although the shoulder of the road is sloped and unpaved, survey responses indicated that unauthorized truck parking was an issue at this site.

There are no hotels, restaurants, or other off-site amenities in the immediate area.

Appendix D: Truck Parking Opportunity Sites

Opportunity Site #5

SH 317 at Little Mexico Road, Temple, Texas



Coordinates: 31.167985, -97.416115

Land Use: Open Space near single family residential

Property ID: N/A

Parcel Owners: N/A

2020 Assessed Value: N/A

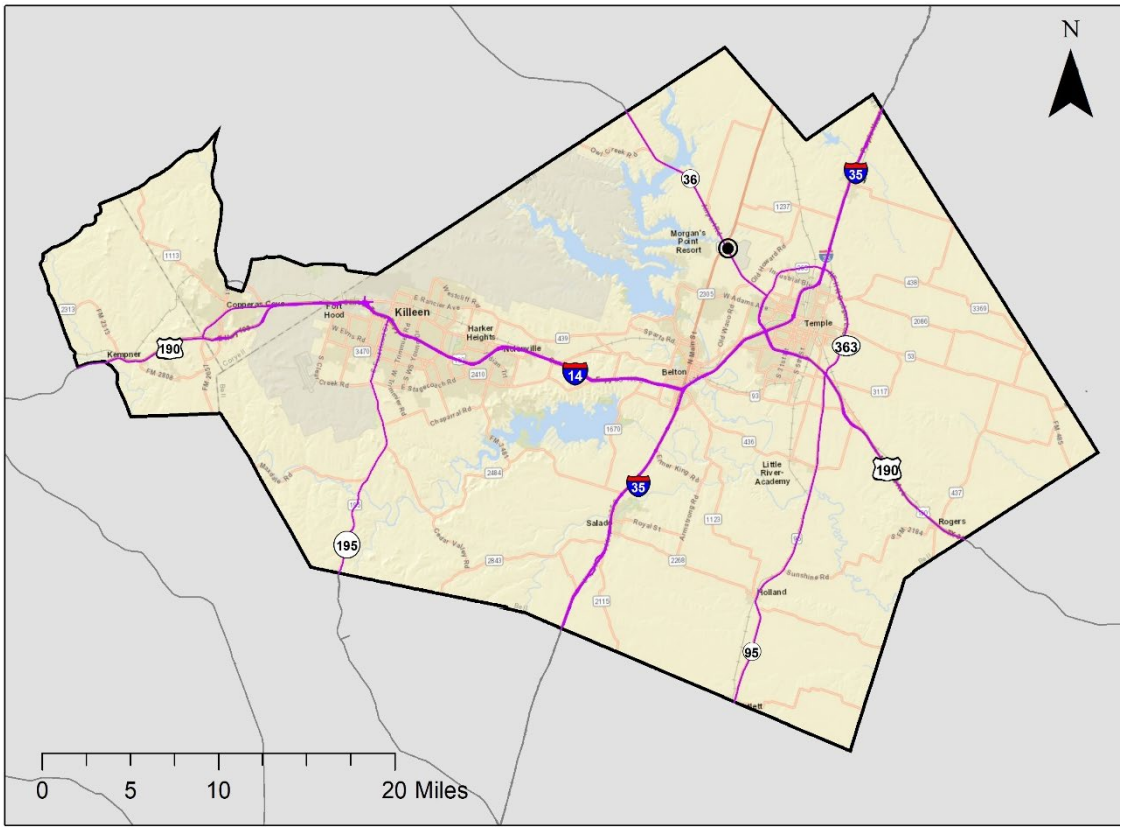
Total Parcel Acreage: 0.70 acres

Estimate of Truck Parking: 4 spaces

Potential Future Truck Parking

Opportunity Site #21

8730 Airport Road, Temple, Texas



Coordinates: 31.15751, -97.421968
Land Use: Commercial near open space and public/institutional

Property ID: 127824

Parcel Owners: Inayatali Maknojia and Mushtaqali Momin

2020 Assessed Value: $138,627

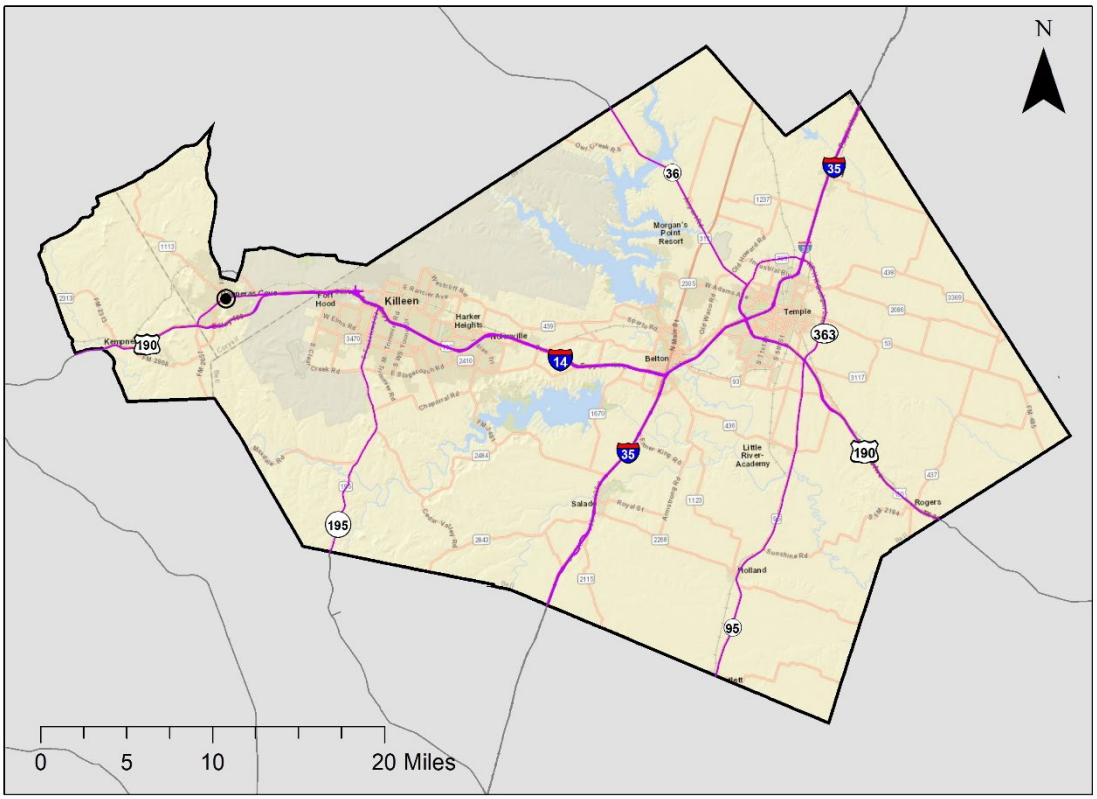
Total Parcel Acreage: 0.89 acres

Estimate of Truck Parking: 11 spaces

Potential Future Truck Parking

Opportunity Site #31

US 190 at Robertson Ave



Coordinates: 31.118608, -97.898831

Land Use: Commercial near single family residential

Property ID: N/A

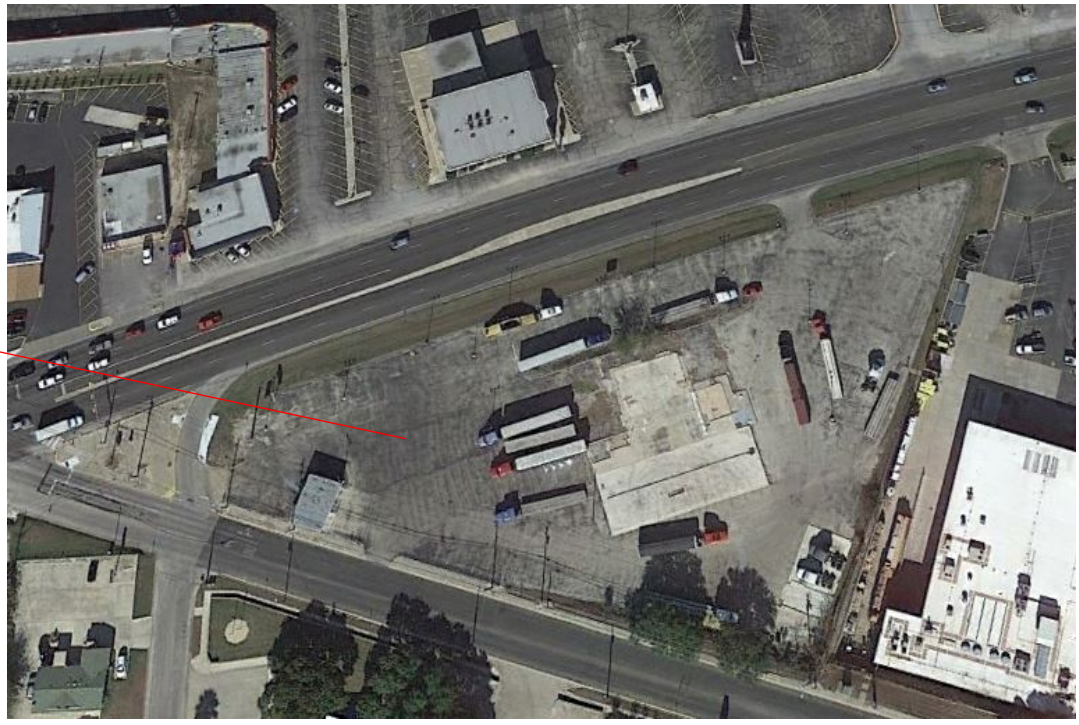
Parcel Owner: N/A

2020 Assessed Value: N/A

Total Parcel Acreage: 2.62

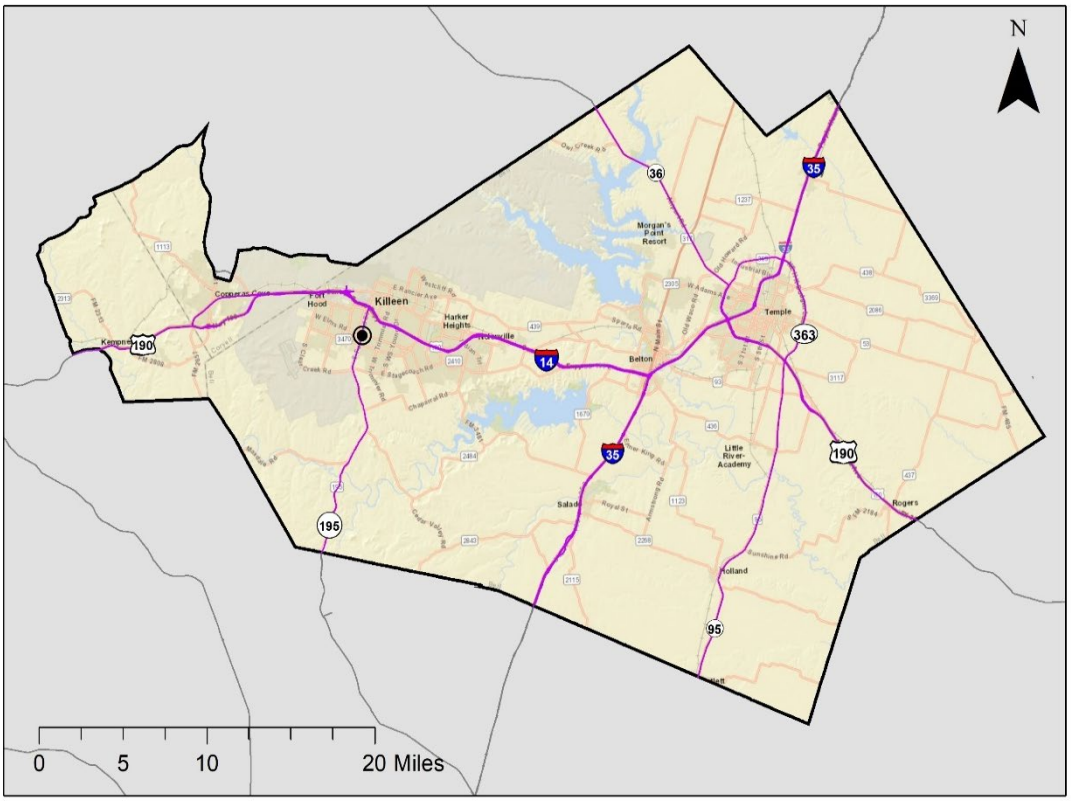
Estimate of Truck Parking: 24 spaces

Potential Future Truck Parking



Opportunity Site #39

3300 S Fort Hood Street, Killeen Texas



Coordinates: 31.085417, -97.754998

Land Use: Commercial near open space, multi and single family residential

Property ID: 37290

Parcel Owner: Four Forty Light Co Inc

2020 Assessed Value: $273,840

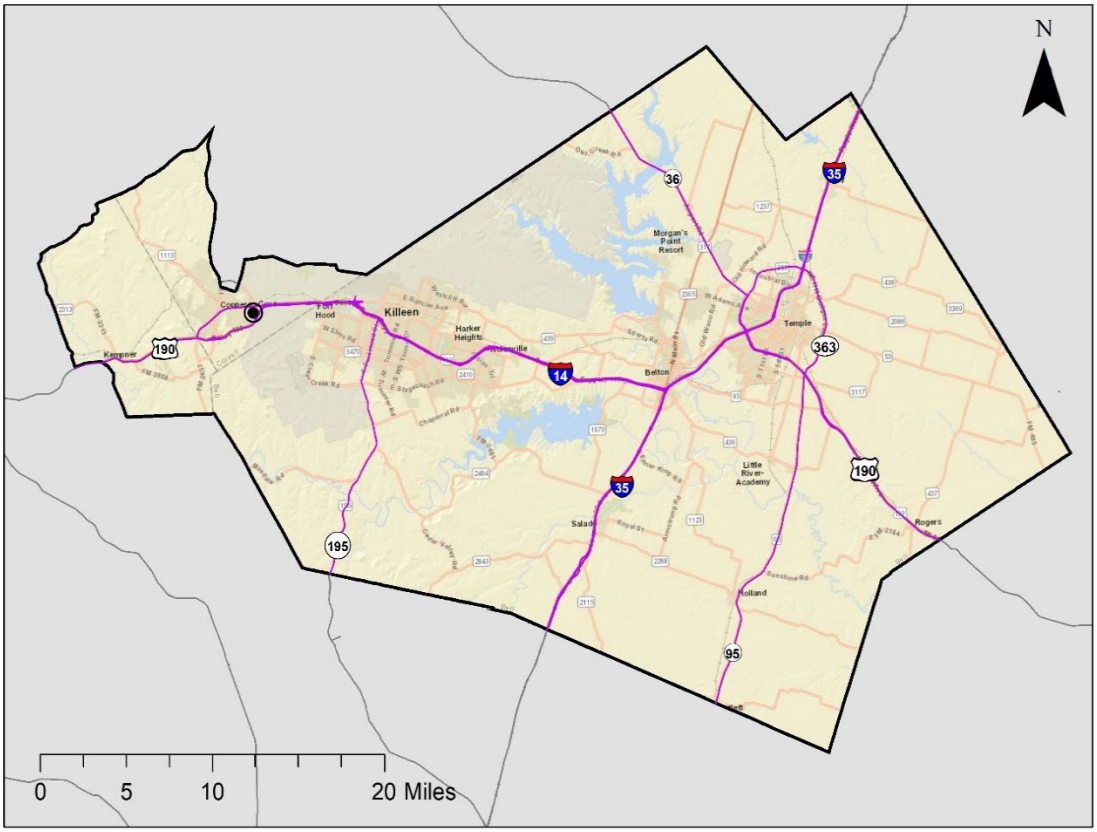
Total Parcel Acreage: 16.87 acres

Estimate of Truck Parking: 168 spaces

Potential Future Truck Parking

Opportunity Site #48

Constitution Dr at MLK Blvd, Copperas Cove, Texas



Coordinates: 31.115773, -97.870238

Land Use: Commercial

Property ID: N/A

Parcel Owner: N/A

2020 Assessed Value: N/A

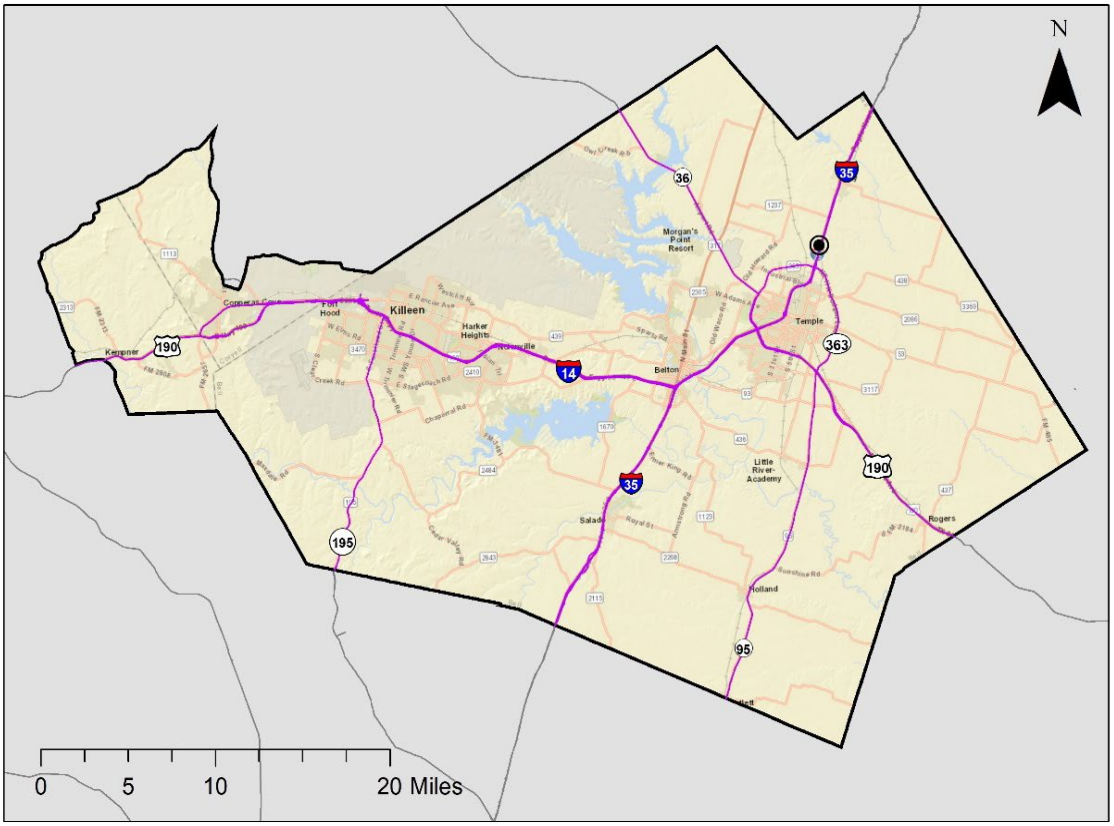
Total Parcel Acreage: 4.16 acres

Estimate of Truck Parking: 40 spaces

Potential Future Truck Parking

Opportunity Site #50

16278 N General Bruce Drive, Temple, Texas



Coordinates: 31.156335, -97.32703

Land Use: Commercial surrounded by open space

Property ID: 30372

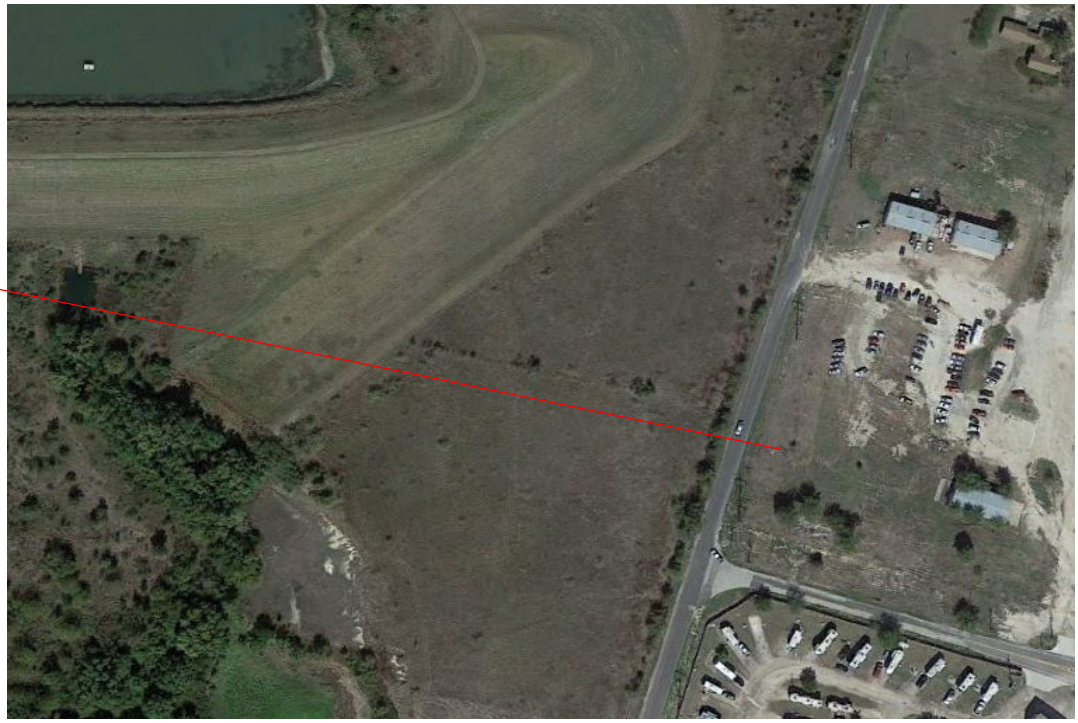
Parcel Owner: 726 LLC ETAL

2020 Assessed Value: $148,823

Total Parcel Acreage: 2.3 acres

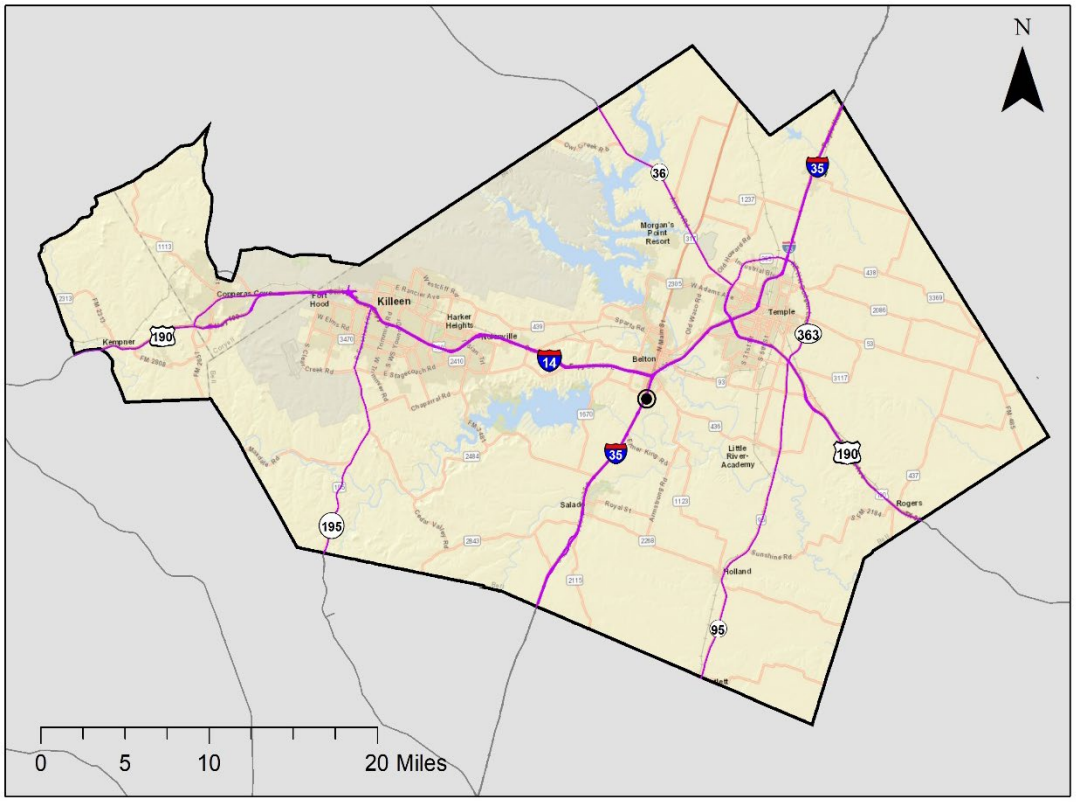
Estimate of Truck Parking: 21 spaces

Potential Future Truck Parking



Opportunity Site #51

2500 S IH-35 Belton, Texas



Coordinates: 31.027425, -97.474082

Land Use: Commercial near single family residential and open space

Property ID: 114705

Parcel Owner: Figs LLC

2020 Assessed Value: $198,717

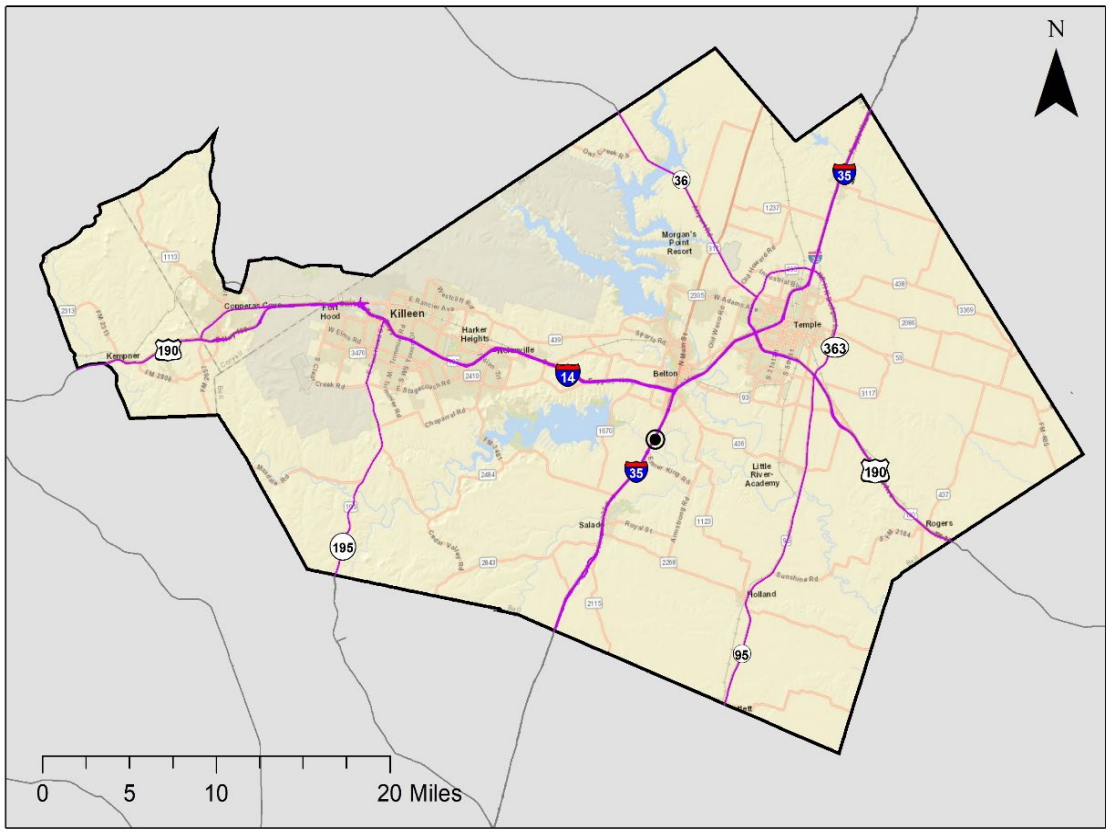
Total Parcel Acreage: 1.72 acres

Estimate of Truck Parking: 17 spaces

Potential Future Truck Parking

Opportunity Site #52

Toll Bridge Road, Belton, Texas



Coordinates: 31.007828, -97.486945

Land Use: Commercial next to open space and single family residential

Property ID: 99276

Parcel Owner: Herrick Properties-LLC Series D

2020 Assessed Value: $97,350

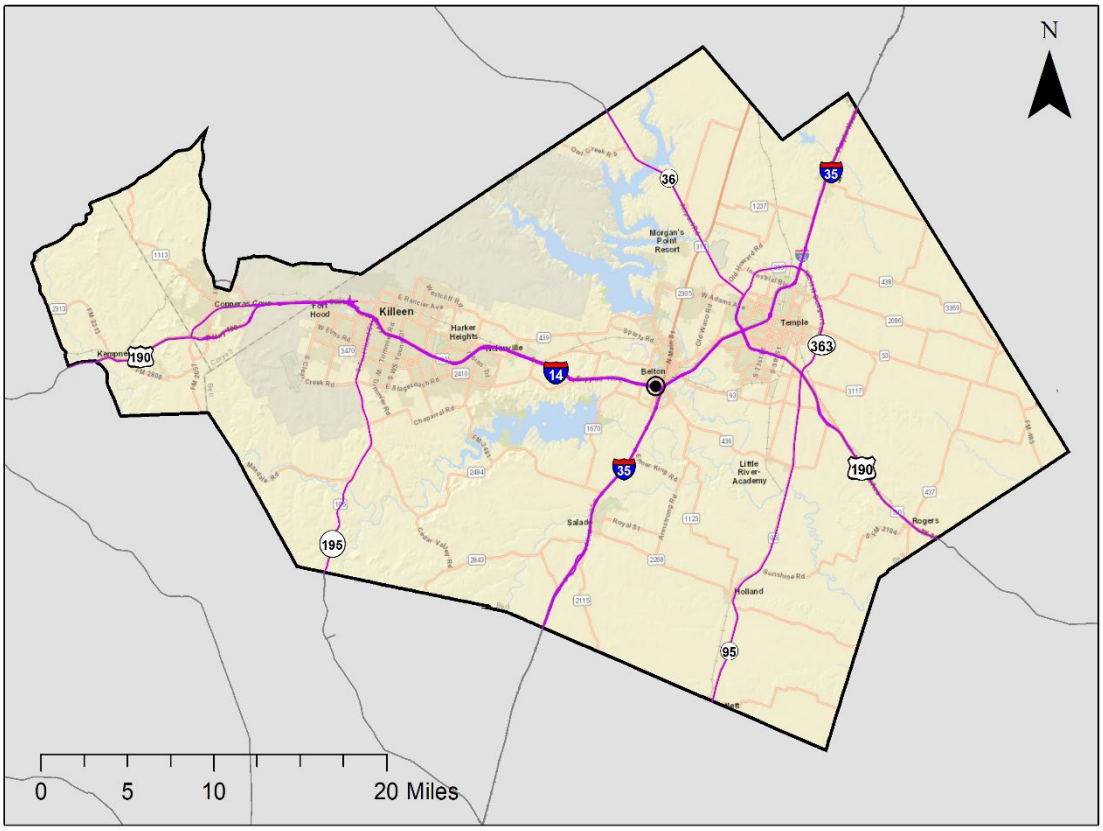
Total Parcel Acreage: 14.26 acres

Estimate of Truck Parking: 160 spaces

Potential Future Truck Parking

Opportunity Site #54

620 W Highway 190, Belton, Texas



Coordinates: 31.048302, -97.473466

Land Use: Commercial near single and multi-family residential, public/ open space, and institutional land

Property ID: 392507

Parcel Owner: Tatanka Tract LP

2020 Assessed Value: $414,680

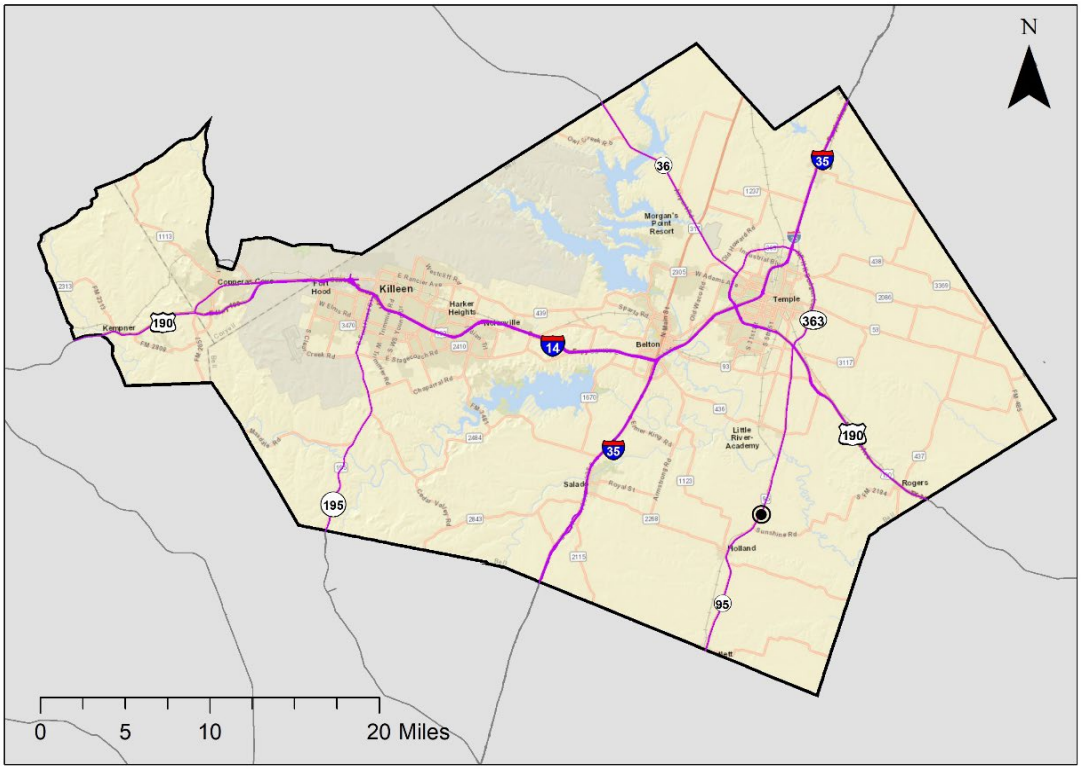
Total Parcel Acreage: 12.70 acres

Estimate of Truck Parking: 127 spaces

Potential Future Truck Parking

Opportunity Site #55

Mills Lane Bell County, Rural Texas



Coordinates: 30.91116, -97.3674

Land Use: Open space adjacent to single family residential

Property ID: 346259

Parcel Owner: Marilyn Ann Springer

2020 Assessed Value: $5,490

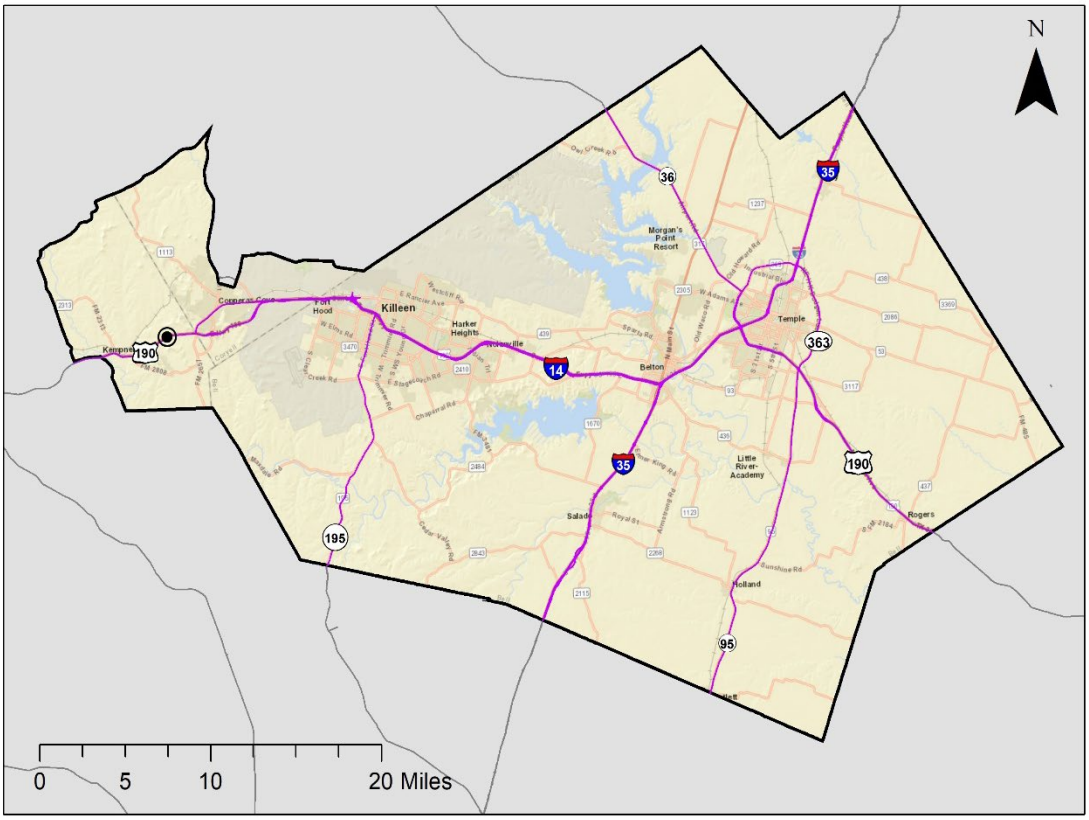
Total Parcel Acreage: 0.387 acres

Estimate of Truck Parking: 3 spaces

Potential Future Truck Parking

Opportunity Site #56

Big Divide Road at US 190, Copperas Cove, Texas



Coordinates: 31.094374, -97.954084

Land Use: Commercial next to open space and single family residential

Property ID: N/A

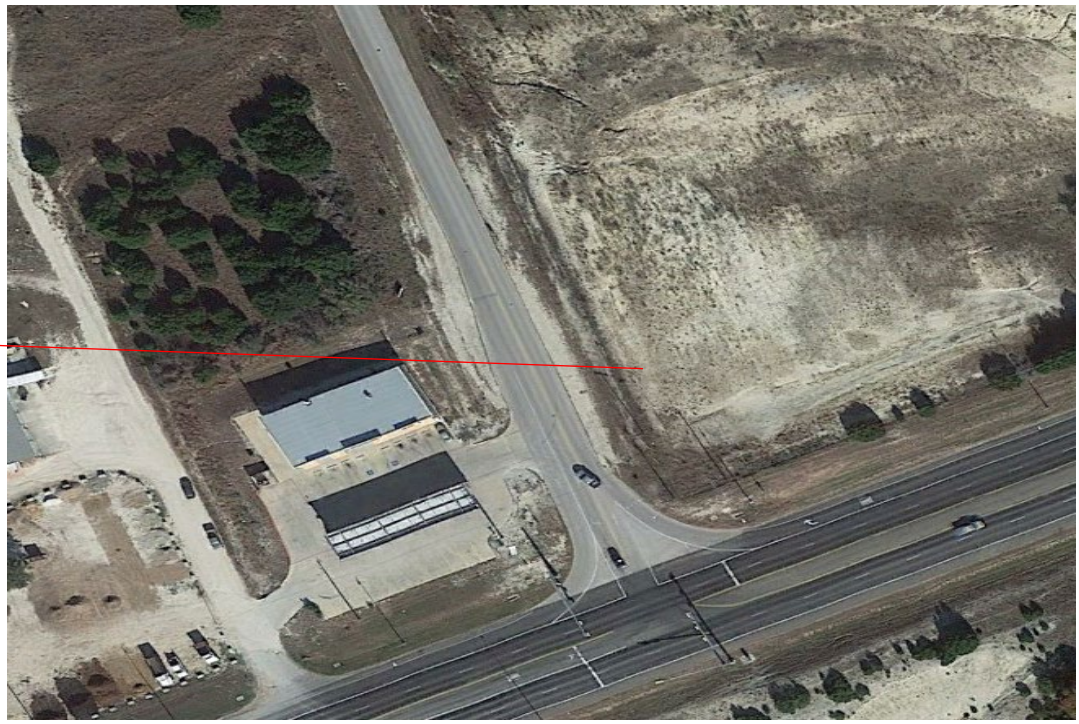
Parcel Owner: N/A

2020 Assessed Value: N/A

Total Parcel Acreage: 2.48 acres

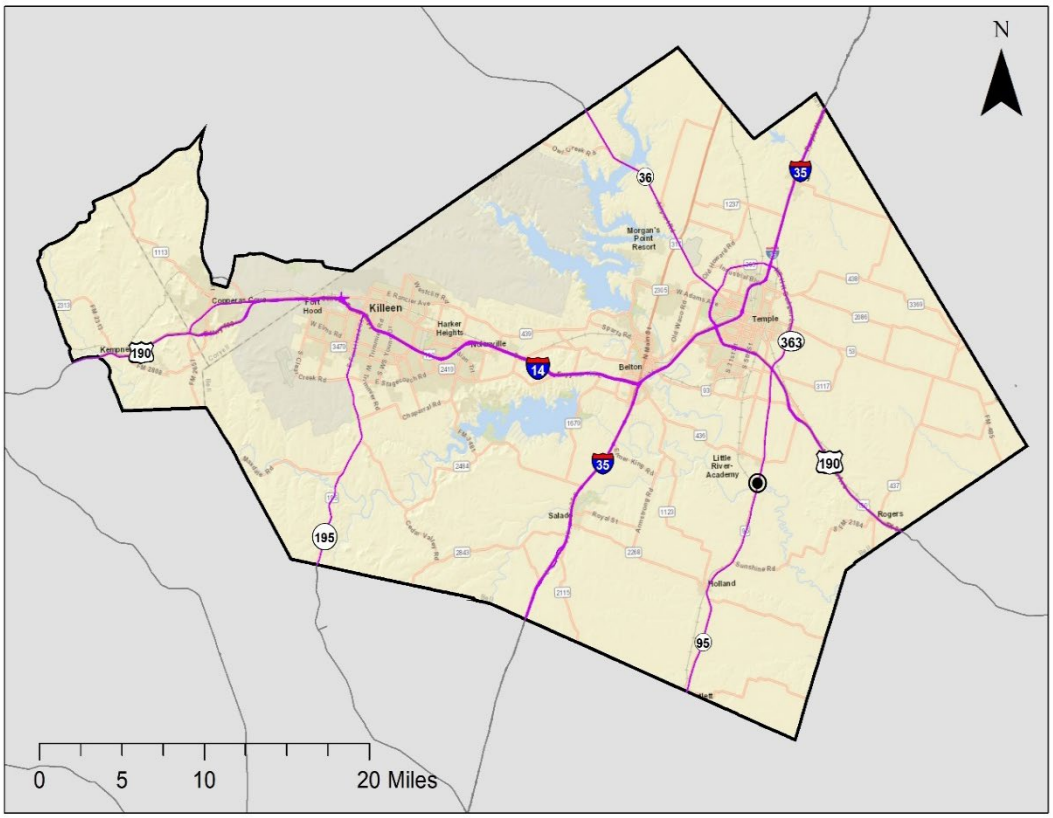
Estimate of Truck Parking: 25 spaces

Potential Future Truck Parking



Opportunity Site #58

Hwy 95 Bell County, Rural Texas



Coordinates: 30.963784, -97.350031

Land Use: Open Space and single family residential a few miles south

Property ID: 117384

Parcel Owners: Freddy D Garvin Sr and James M II

2020 Assessed Value: $250,000

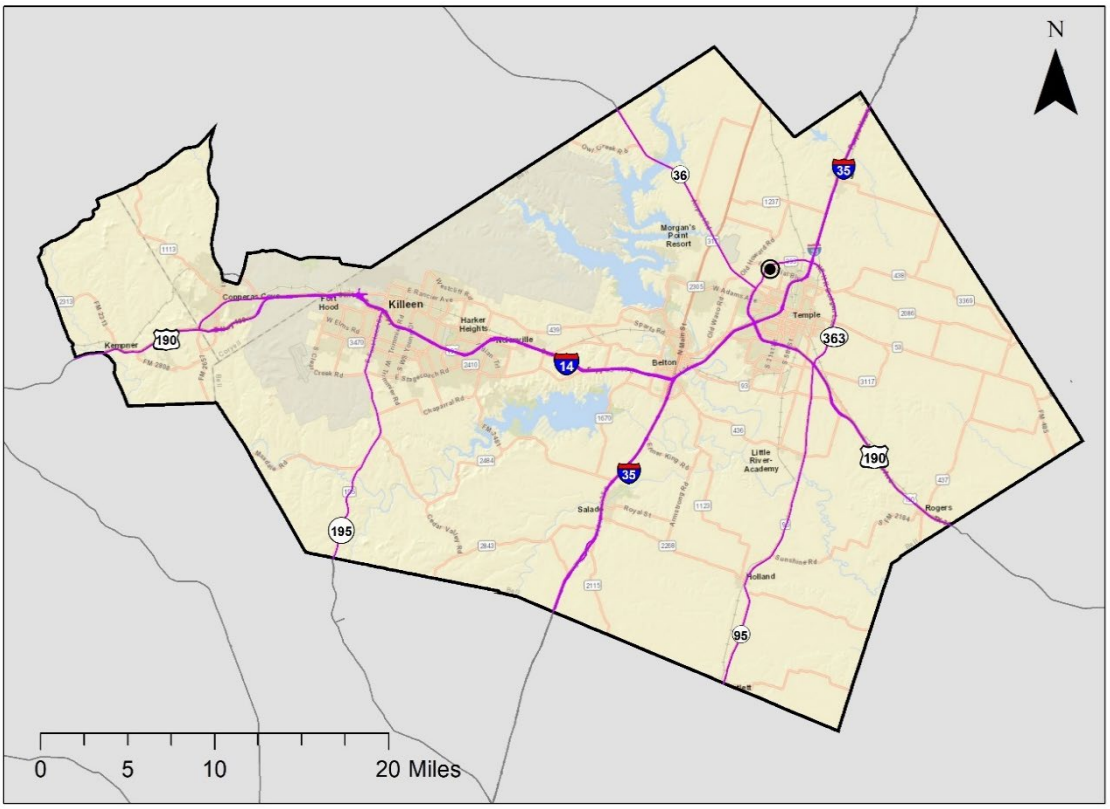
Total Parcel Acreage: 23.27 acres

Estimate of Truck Parking: 290 spaces

Potential Future Truck Parking

Opportunity Site #59

9202 NW H K Dodgen Loop, Temple, Texas



Coordinates: 31.134664, -97.370286

Land Use: Open Space, surrounded by commercial and industrial land uses

Property ID: 71471

Parcel Owners: McClane Company Inc

2020 Assessed Value: $78,897

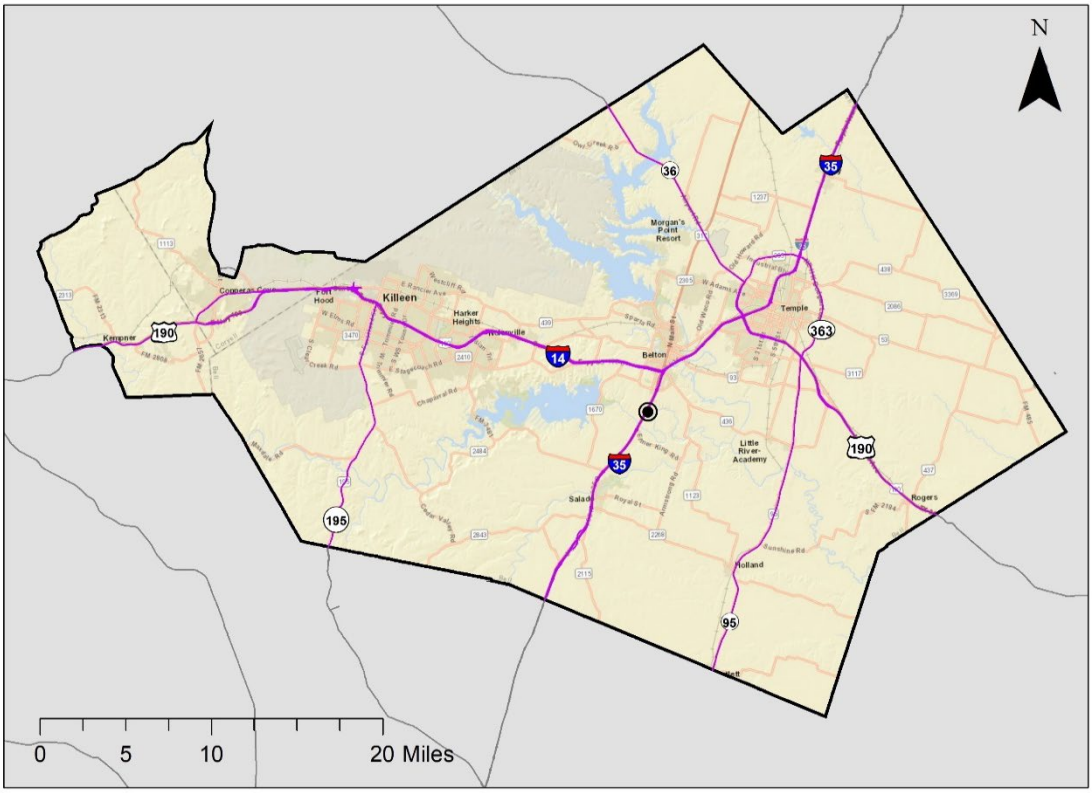
Total Parcel Acreage: 19.8 acres

Estimate of Truck Parking: 470 spaces

Potential Future Truck Parking

Opportunity Site #60

4931 S IH-35, Belton, Texas



Coordinates: 31.012698, -97.482956

Land Use: Commercial surrounded by open space and single family residential

Property ID: 169379

Parcel Owner: Herrick Properties LLC- Series C

2020 Assessed Value: $274,702

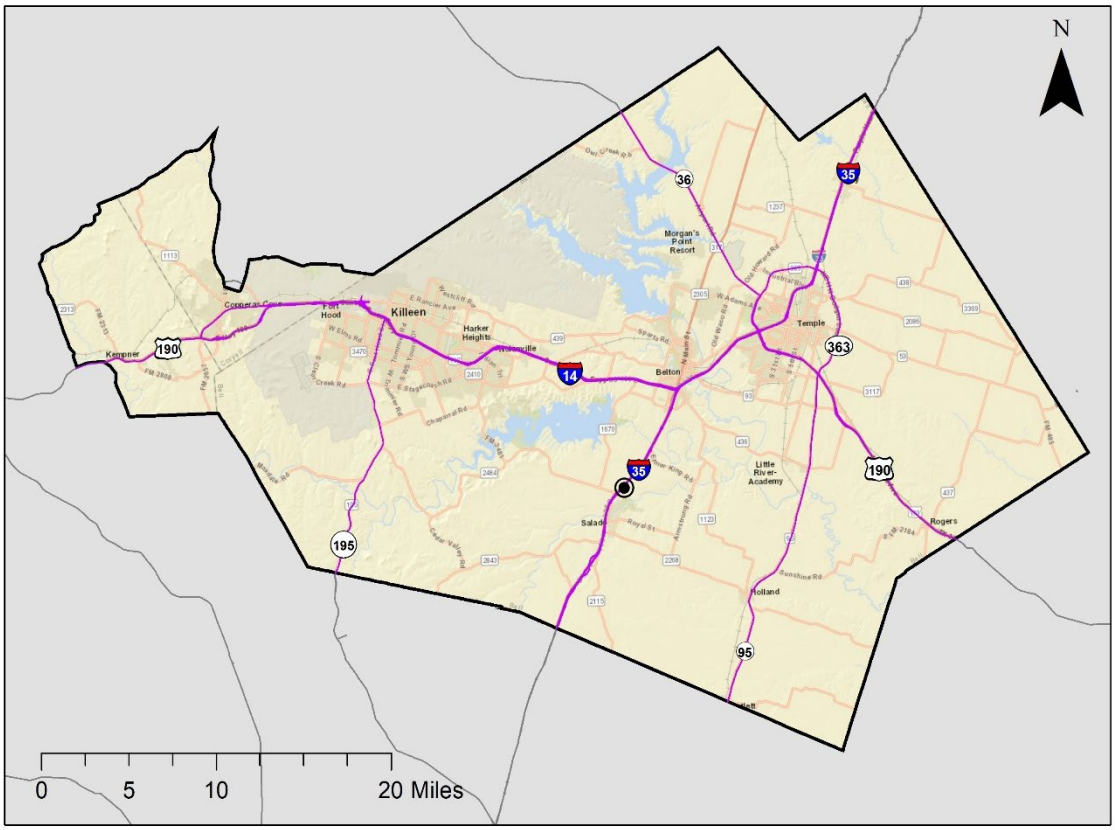
Total Parcel Acreage: 3.98 acres

Estimate of Truck Parking: 38 spaces

Potential Future Truck Parking

Opportunity Site #61

IH-35 Belton, Texas



Coordinates: 30.968714, -97.520674

Land Use: Located next to open space and single family residential

Property ID: 316531

Parcel Owner: CIO Land Development LLC

2020 Assessed Value: $10,414

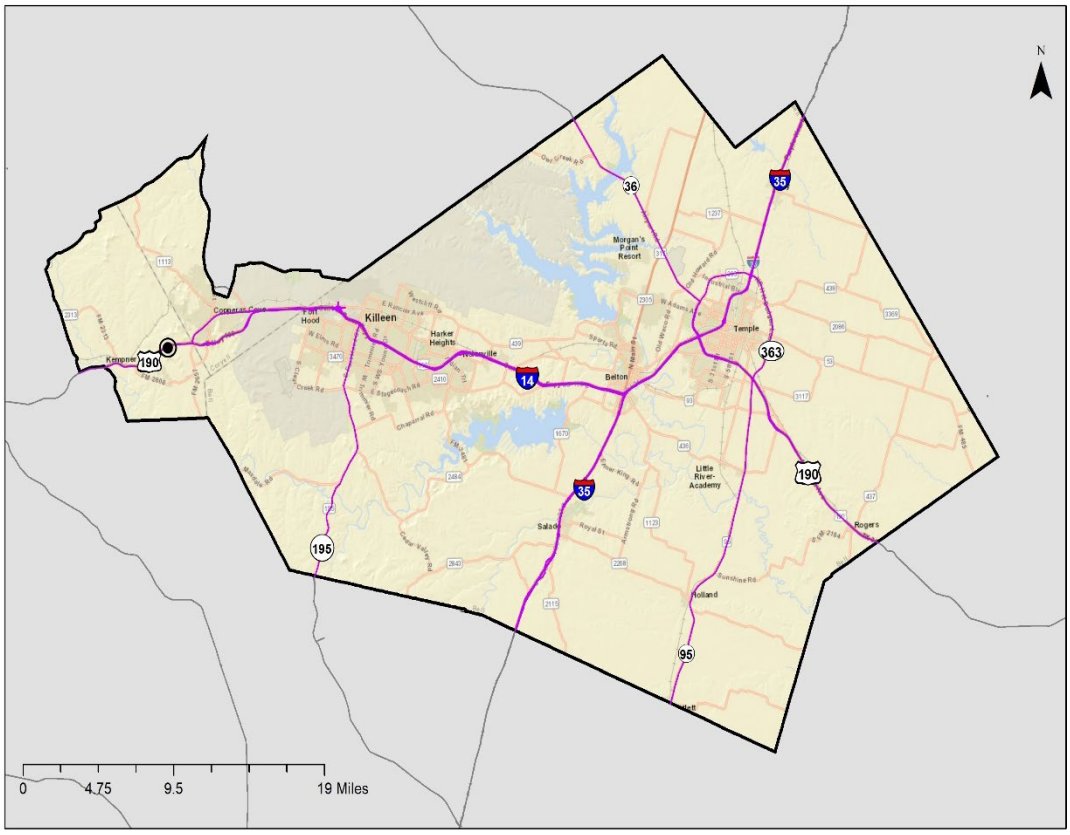
Total Parcel Acreage: 23.34 acres

Estimate of Truck Parking: 230 spaces

Potential Future Truck Parking

Opportunity Site #63

Hwy 190 at Big Divide Road, Copperas Cove, Texas



Coordinates: 31.093654, -97.95248

Land Use: Commercial and open space

Property ID: N/A

Parcel Owner: N/A

2020 Assessed Value: N/A

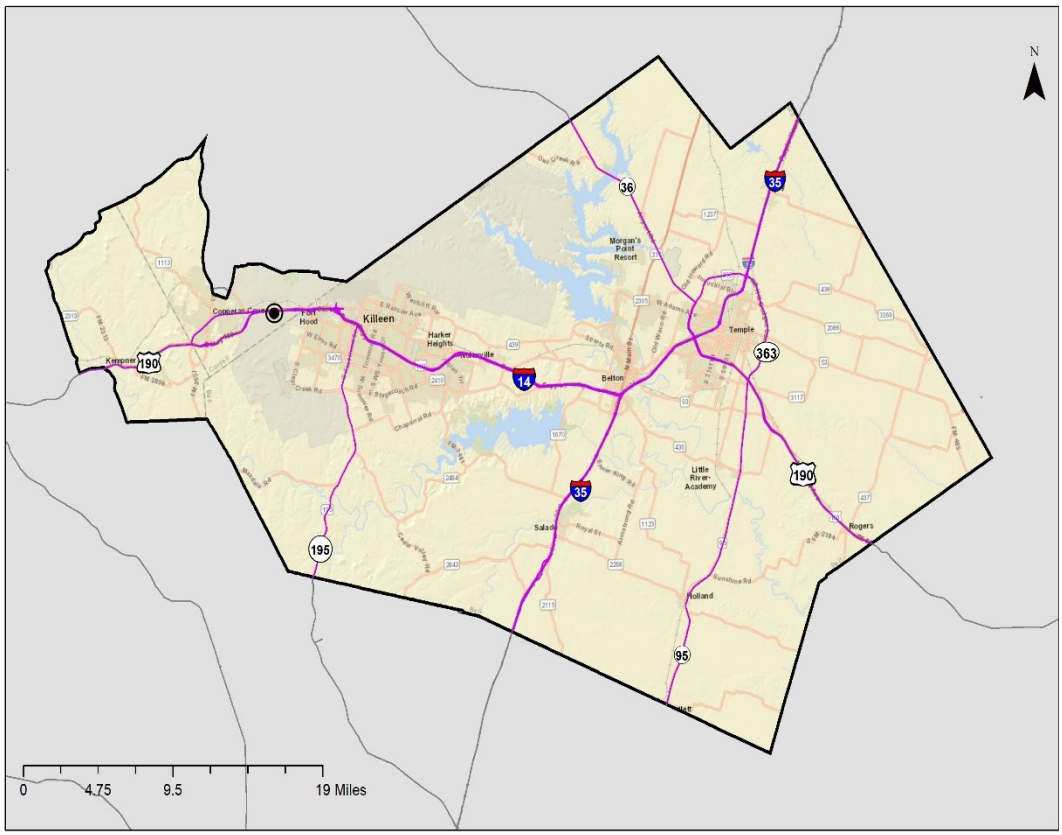
Total Parcel Acreage:

Estimate of Truck Parking:

Potential Future Truck Parking

Opportunity Site #64

US 190 at Clarke Road, Copperas Cove, Texas



Coordinates: 31.119783, -97.836477

Land Use: Surrounded by open space and multi-family residential

Property ID: N/A

Parcel Owner: N/A

2020 Assessed Value: N/A

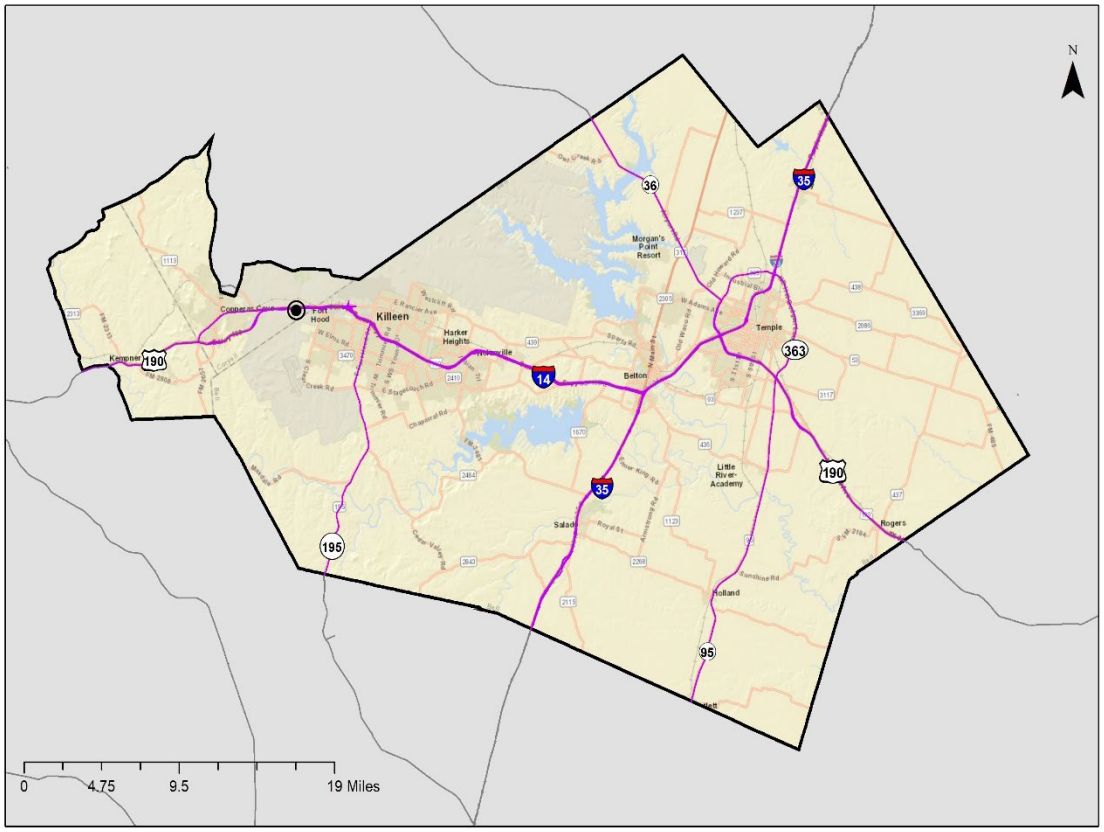
Total Parcel Acreage: 4.33 acres

Estimate of Truck Parking: 43 spaces

Potential Future Truck Parking

Opportunity Site #65

US 190 West of Montague Village, Fort Hood, Texas



Coordinates: 31.120282, -97.824109

Land Use: Multi-family housing surrounded by public/institutional

Property ID: N/A

Parcel Owner: N/A

2020 Assessed Value: N/A

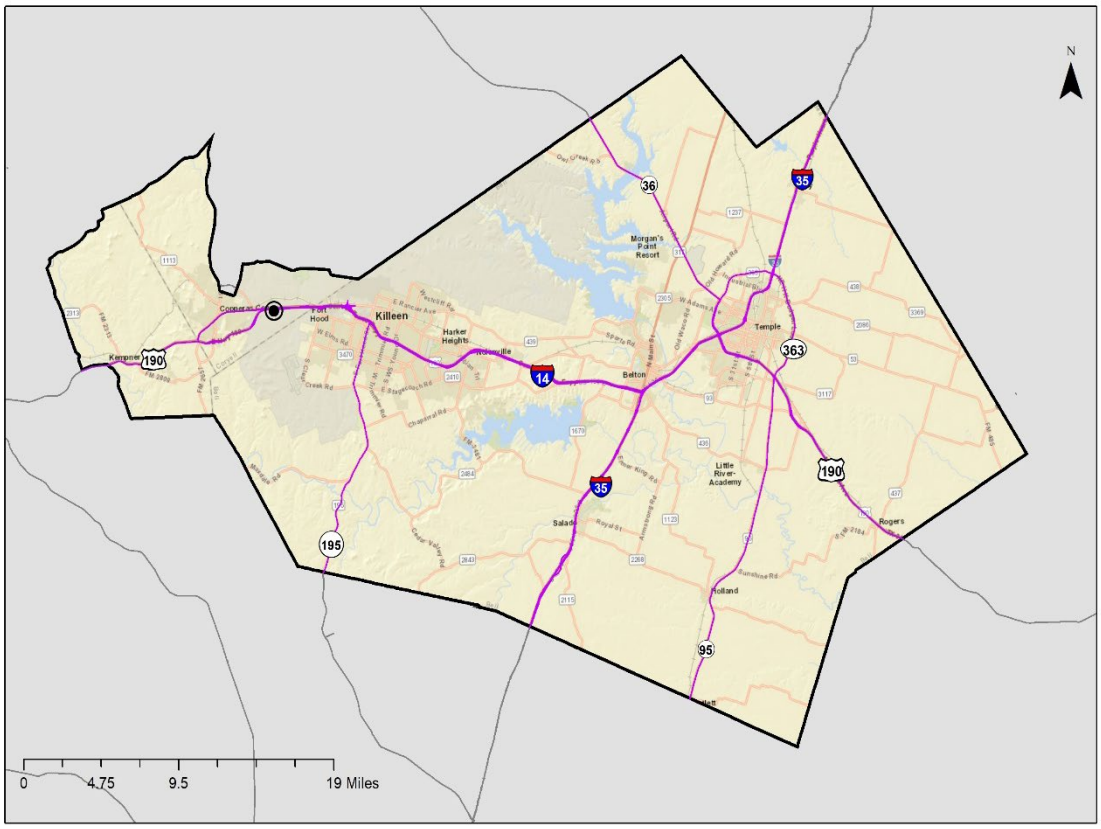
Total Parcel Acreage: 161 acres

Estimate of Truck Parking: 1,610 spaces

Potential Future Truck Parking

Opportunity Site #66

US 190 Between Montague Village and College, Fort Hood, Texas



Coordinates: 31.119705, -97.846687

Land Use: Open space next to multi-family housing

Property ID: N/A

Parcel Owner: N/A

2020 Assessed Value: N/A

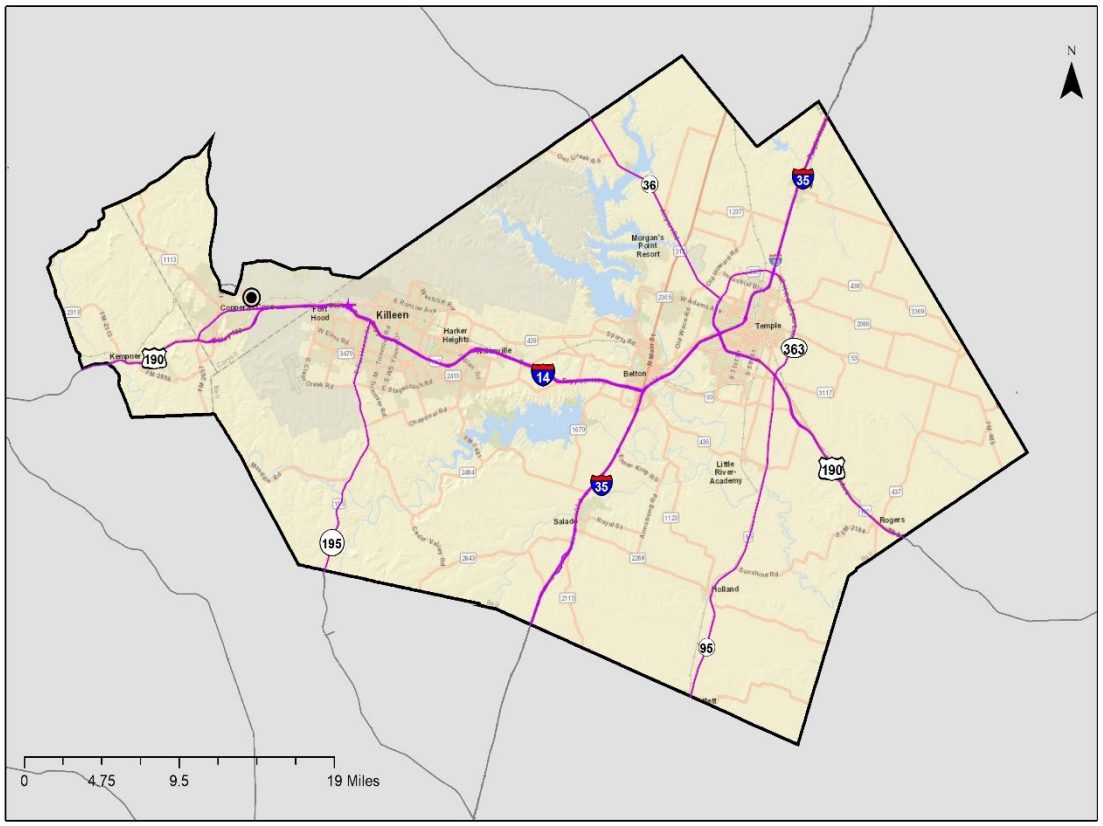
Total Parcel Acreage: 33.07 acres

Estimate of Truck Parking: 330 spaces

Potential Future Truck Parking

Opportunity Site #67

Highway 9 and Tank Destroyer Boulevard, Copperas Cove, Texas



Coordinates: 31.128783, -97.869473

Land Use: Open space

Property ID: N/A

Parcel Owner: N/A

2020 Assessed Value: N/A

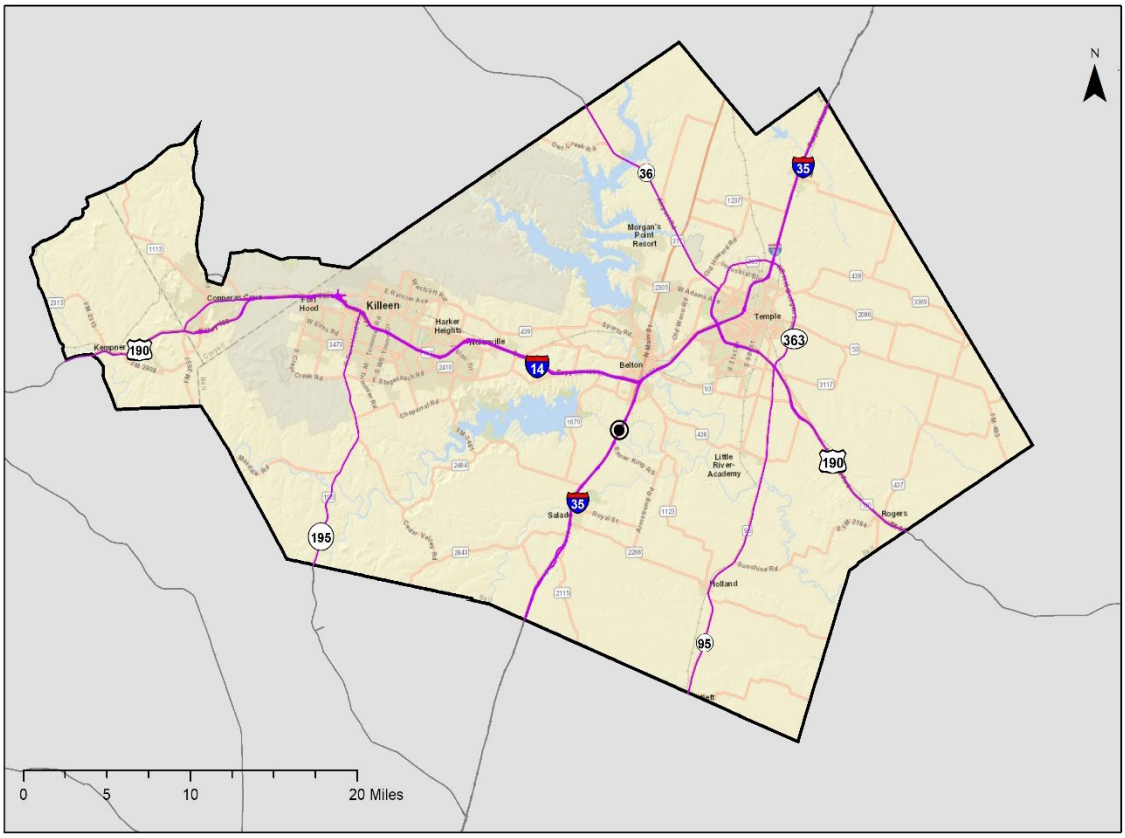
Total Parcel Acreage: 17.56 acres

Estimate of Truck Parking: 175 spaces

Potential Future Truck Parking

Opportunity Site #68

IH-35 at Shanklin Road, Salado, Texas



Coordinates: 31.008313, -97.489004

Land Use: Open space next to single family residential and commercial

Property ID: N/A

Parcel Owner: N/A

2020 Assessed Value: N/A

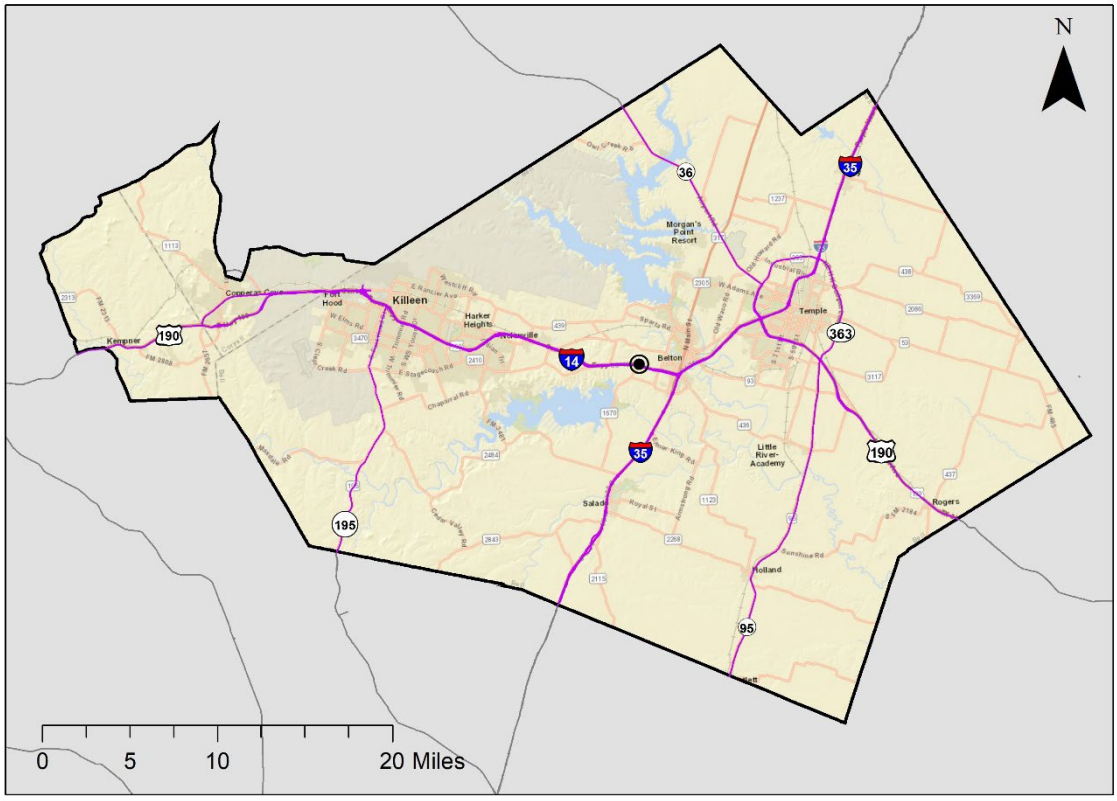
Total Parcel Acreage: 7.75 acres

Estimate of Truck Parking: 77 spaces

Potential Future Truck Parking

Opportunity Site #69

3555 West Highway 190, Belton, Texas



Coordinates: 31.05366, -97.50603

Land Use: Commercial surrounded by open space and single family residential

Property ID: 486819

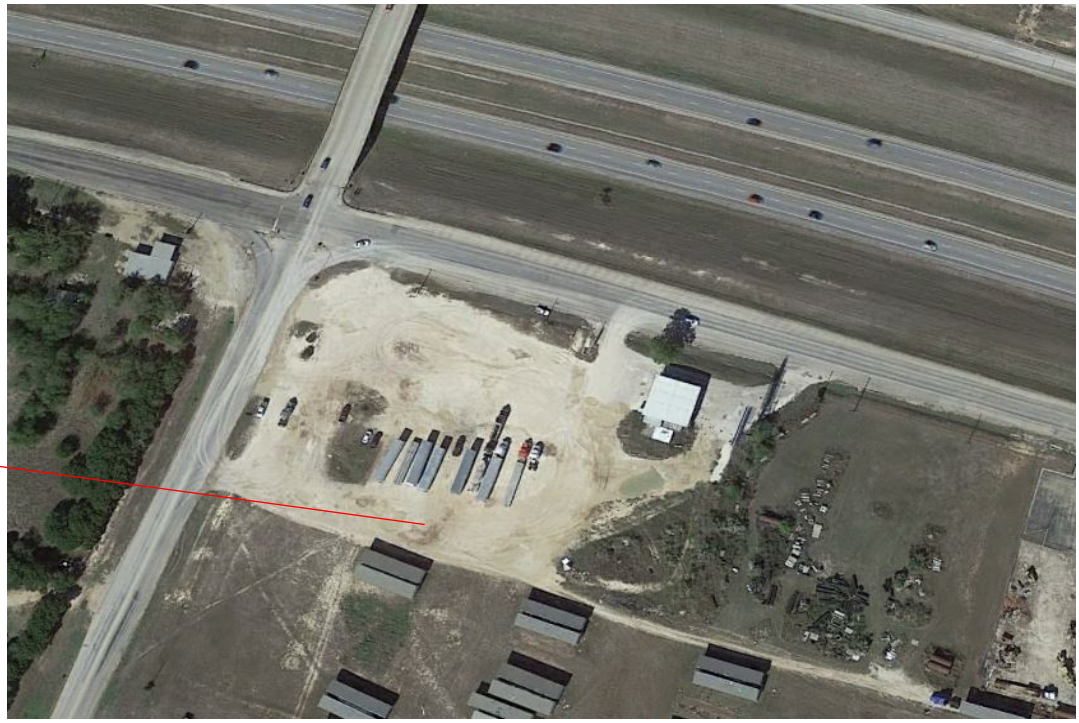
Parcel Owner: Premier Belton Two LLC

2020 Assessed Value: $231,343

Total Parcel Acreage: 4.07 acres

Estimate of Truck Parking: 40 spaces

Potential Future Truck Parking



Appendix E: Summary of Truck Parking Site Survey Responses

		Truck Opportunity Site ID Number																					
		5	21	31	39	48	50	51	52	54	55	56	58	59	60	61	63	64	65	66	67	68	69
1	Are there active plans for developing this property? (if yes, please provide details)	1	1		1	1	1	1	1	1				1	1	1	1						1
2	Are there active plans for developing surrounding land which may result in conflicts? (if yes, please provide details)	1	1		1	1	1	1	1	1				1	1	1	1						1
3	Is increased truck traffic acceptable at this site? (if no, please provide details)	1	1		1, 1	1	1	1	1	1	1	1	1	1	1	1	1	1		1	1		1
4	Are there any conflicts with zoning or other regulatory issues? (if yes, please provide details)	1	1		1, 1	1	1	1	1	1				1	1	1	1	1		1	1		1
5	Are there any conflicts with environmental issues? (if yes, please provide details)	1	1		1		1	1	1	1				1	1	1							1
6	Are there any conflicts with other transportation modes? (if yes, please provide details)	1	1		1		1	1	1	1				1	1	1		1			1		1
7	Is it practical to develop this site with amenities?	1	1		1		1	1	1	1		1		1	1	1		1		1	1		1
8	Overall, would you recommend this site for development for truck parking?	1	1		1		0	1	1	1	1	1	1	1	1	1		1		1	1		1

Responses		
Yes	No	Maybe
1	1	0

Survey Comments from Copperas Cove

Site 39 is not a good location for increased truck traffic and there are zoning conflicts.
Site 48 is not a good location for economic development and there are zoning conflicts.
Site 56 is perhaps the best location for truck parking in Copperas Cove.
Site 63 is not a good location for increased truck traffic and there are zoning conflicts.

Survey Comments from Killeen

3. Increased truck traffic is not desired at site 39 due to its proximity to residential and other commercial developments. Increasing truck traffic through a centralized area of the City is not desirable.

6. The traffic in this area is mainly comprised of passenger vehicles with a significant turning volume. Combining these traffic characteristics is not desired.

Survey Comments from Temple

Site #5 - It's located in the floodplain which adds to the cost of development. It's not near any industry or commercial activity to make it a viable site.
Site #50 - PRO -Would have direct access to North Outer Loop. CON - Site is in the I-35 Gateway Zoning overlay. Strict development standards would apply and truck parking may not be appropriate.
Site #59 - Proximity to Industrial Park and Loop 363 make location convenient. Currenlty owned by McLane Inc.

Survey Comments from Bell County

Site 55 appears to have two picnic tables and paved for roadside rest breaks by the public. Looks like an old TxDOT rest stop without restrooms.
Site 58 is the old Academy Dragstrip. There is the Leon River and pecan orchards nearby. Care to prevent runoff of oils, etc should be considered.

Survey Comments from Belton

Site # 51 - This site is under two acres and seems too small for a truck stop. A development plan has been submitted and approved for the adjacent prorperty to the east Property ID 3238. This property is zoned C-2, which does not allow truck stops. A zoning change to Commercial Highway would be required.
Site #52 - This site is zoned appropriately. The City is currently installing an 8" water line in this vicinty. Sewer line installation is scheduled in the area.

Site #60 - This property is not appropriately zoned and will require a zoning change. The City is currently installing an 8" water line in this vicinty. Sewer line installation is scheduled in the area.

Site #61 - This property is not appropriately zoned and will require a zoning change. Although this property is within the City of Belton's Water CCN, water is currently not available at this location.
site #69 - A truck stop is currently under development at this location.

Survey Comments from Fort Hood

Site #64 - The road adjacent to this site is an entrance to a West Fort Hood Military installation and military family housing. Truck parking at this location is not feasible.
Site #66 - I believe this property belongs to Fort Hood Military installation. Truck parking at this location is not feasible.
Site #67 - Truck parking at this location is feasible. If Fort Hood opens the gate on Tank Destroyer road truck traffic can move off I-14 (Exit 277 Clark Road).