

Freight-Related Economic Development Opportunity Study

November 2016



FREIGHT-RELATED ECONOMIC DEVELOPMENT OPPORTUNITY STUDY

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NEW MEXICO DEPARTMENT OF TRANSPORTATION

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I. EXECUTIVE SUMMARY

The truck freight industry in the United States is facing a significant change that has the potential to positively influence job creation, business expansion, and economic development. Truck freight driving operations are governed by federal surface transportation law, currently the Fixing America's Surface Transportation (FAST) Act. This includes an hours-of-service (HOS) mandate that requires commercial motor vehicle (CMV) operators, including truck drivers, to stop for at least ten hours after driving for eleven hours in a 14-consecutive-hour period. This mandate will be enforced through the use of electronic logging devices (ELDs) starting on December 12, 2017.

The Federal Motor Carrier Safety Administration (FMCSA) established the requirement for ELDs to ensure compliance with HOS rules. ELDs are computerized recording devices that truckers will carry, which will replace paper logs. According to the Federal Register, the purpose of the ELD mandate is to improve CMV safety and reduce the overall paperwork burden for both motor carriers and drivers by increasing the use of ELDs within the motor carrier industry, which will, in turn, improve compliance with the applicable HOS rules.

These provisions were recognized by the New Mexico House of Representatives, who passed House Memorial 96 (HM-96), titled "Study Federal Surface Transportation Law," in 2016 to study emerging opportunities for statewide truck driver accommodations. HM-96 aims to capitalize on the presence of three major truck freight routes that cross New Mexico: Interstate 10 (I-10), Interstate 25 (I-25), and Interstate 40 (I-40) to develop multi-service locations for truck drivers reaching their eleven hours-of-service limit within New Mexico. The expected outcome provides ideal conditions for economic success in New Mexico.

The study is being conducted by Bohannon Huston, Inc. and Cambridge Systematics, Inc. with guidance from and coordination with the New Mexico Department of Transportation (NMDOT), New Mexico Economic Development Department (NMEDD), New Mexico State University (NMSU), and New Mexico Trucking Association (NMTA).

This team developed and distributed a "Truck Driver Parking and Services Preferences and Needs" survey, which was used to assess truck driver preferences for truck

parking and service-related amenities. Collected responses were used to inform the decision-making criteria that shaped the final recommendations on truck-related service improvements.

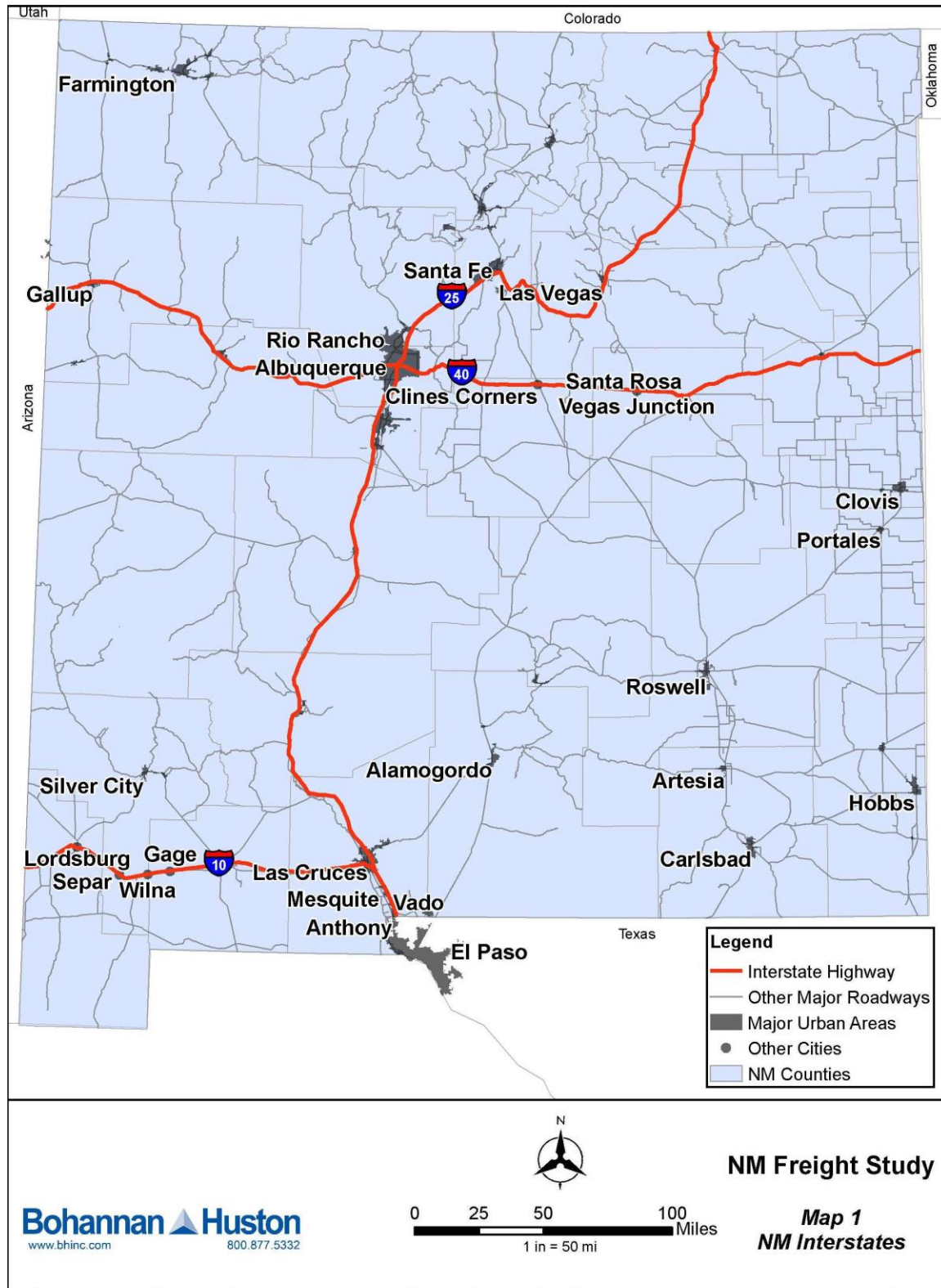
The survey questions were divided into three categories that covered driver background, current travel patterns, and future service options. The survey was distributed online with web-based survey technology and in-person through site visits. In total, the survey effort collected 97 responses from truck drivers across the country.

Truck-related economic development potential in New Mexico was evaluated through three screening phases. The first phase analyzed existing truck flows, which indicated that I-25 wasn't as much of a priority as I-10 and I-40, based on current and forecasted truck volumes. The second phase aimed to identify the major freight-producing metropolitan areas and the corresponding interstate segments that are within the maximum drive time of eleven hours from New Mexico. The third phase assessed existing truck parking, driver-preferred amenities as ranked by the survey responses, and land use/ ownership in the previously located focus areas to identify specific sites with the most potential for investment in truck-specific facilities.

For this study and report, a trucking center (or trucking rest center as identified in HM-96) is assumed to be comprehensive in nature and expand beyond a single facility or structure. Per the survey responses, many truck drivers seek out dining options, green space, recreation, health care, and other amenities. As these options may already exist within a community, trucking centers may also benefit from local transit to expand accessibility to amenities located in nearby urban areas.

Results from the economic development analysis indicate seven locations with potential for support and/or expand trucking centers. However, there are likely opportunities beyond those identified in this study which should be analyzed further. Following the economic analysis, the study team developed next steps to include evaluation of truck parking utilization, consideration of opportunities to expand existing trucking centers or offer additional amenities at these locations, exploring potential public-private partnerships, and conducting a gap analysis to determine the potential utilization of new trucking centers.

Map 1 New Mexico Interstates



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II. TRUCK DRIVER PARKING & SERVICES PREFERENCES & NEEDS SURVEY

A. SURVEY PROCESS METHODOLOGY

The “Truck Driver Parking and Services Preferences and Needs” survey was developed to assess truck driver preferences for parking and service-related amenities at truck stops and rest centers. Collected responses were used to inform the decision-making criteria for the recommendations on truck-related service improvements.

The use of the term “truck stop” in this report section assumed the venue included some level of amenities such as food and diesel, while the term “rest area” assumed the venue provided parking only, and no other amenities listed in the survey.

The survey was developed collaboratively by the study team who built off of an initial survey conducted by the Greater Gallup Economic Development Corporation (GGEDC) and New Mexico Economic Development Department (NMEDD). The initial survey by GGEDC and NMEDD utilized the “Truck Parking Needs and Preferences” survey that was created for the Federal Highway Administration’s (FHWA’s) study titled “Commercial Vehicle Driver Survey: Assessment of Parking Needs and Preferences” that focused primarily on the parking needs of truck drivers. The study team used this survey as a starting point and drafted additional questions regarding service-related amenities that truck drivers desire.

The survey questions were separated into three categories:

1. Driver Background,
2. Current Travel Patterns, and
3. Future Service Options.

Questions in the “Driver Background” category inquired about the age group of each truck driver, the type of carrier they are employed by, the duration of their haul, and where their base of operations is located. These questions helped to contextualize truck driver background.

Questions in the “Current Travel Patterns” category functioned to gain insight on driver’s actions and choices by focusing on what types of services truck drivers currently use. Truck drivers were asked to answer questions regarding parking preferences for long-

term rest, the importance of particular truck stop services, and specific pickup/ drop-off locations.

The survey also requested feedback in the “Future Service Options” category on the desirability of potential services at truck stops and rest centers, including food, security, health and wellness, and shuttle services. Results from this survey category in particular helped to inform the decision-making criteria developed for site evaluations.

The survey was distributed online and in-person through site visits to reach a sample of truck drivers in New Mexico and nationally. The online survey was sent to and distributed by several locally owned and operated shipping companies, national driver led organizations, and other truck driver associations. These include: Mesilla Valley Transportation, Outwest Express LLC, Wild West Express, Inc., Sky Transportation Services, Inc., New Mexico Trucking Association, and Real Women in Trucking. The online survey was available for four weeks and 78 survey responses were completed electronically.

An initial survey was led by staff from the GGEDC and the NMEDD. This survey effort took place at the Love’s Travel Stop along I-40 in Gallup, NM. Data collected from this survey were not analyzed as part of the “Truck Driver Parking Services Preferences and Needs” survey; however, the data from the initial survey aligned with the results from the survey completed for this study.

The second in-person survey effort was conducted by study team staff. An in-person survey was conducted on I-10 west of Las Cruces, NM at the Love’s Travel Stop. The location of this survey site visit was chosen because it emerged as a potential site for further analysis. The in-person survey collected 19 responses. Additionally, a total of 1,000 post-cards were delivered to the Anthony, NM and Lordsburg, NM ports of entry to be distributed to truck drivers passing through the port and purchasing permits, which directed drivers to take the online survey.

In total, the survey effort collected 97 responses. The study team is pleased with the quantity of responses for the purposes of this study; however, the response rate cannot be evaluated because it is not possible to know how many people were exposed to the survey.

B. SURVEY RESULTS

1. DRIVER BACKGROUND

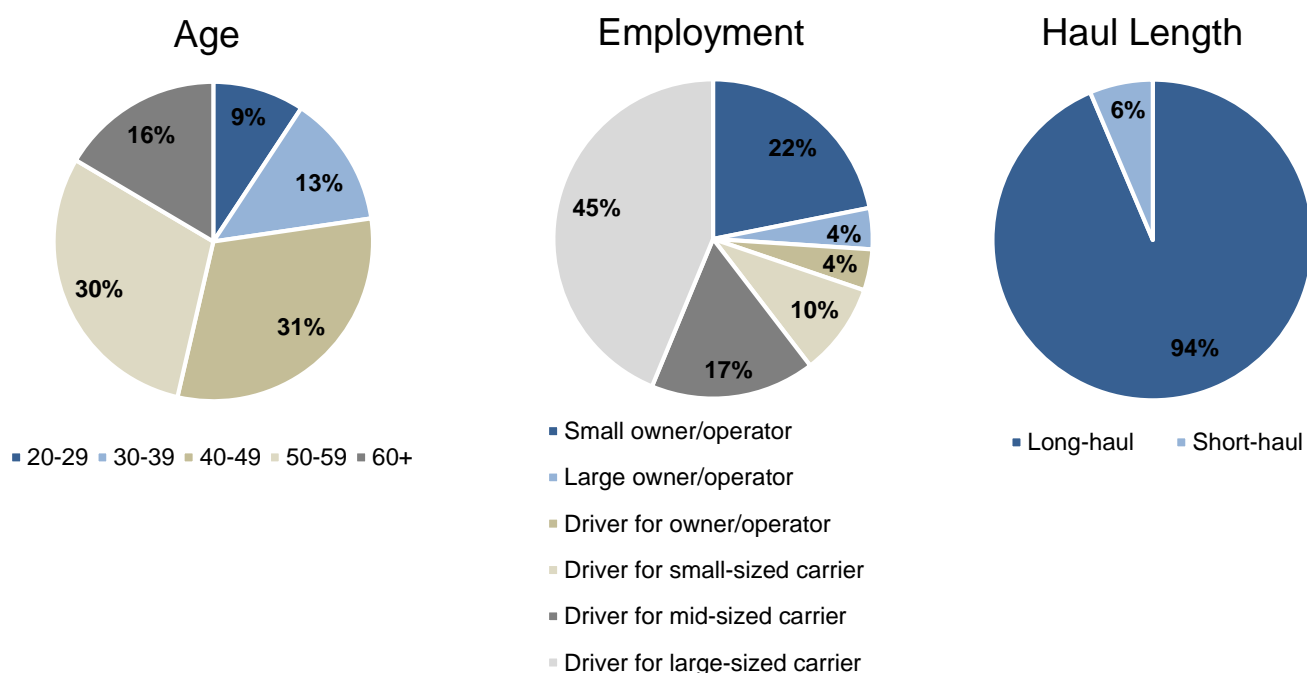
The most commonly reported age among the sample of truck drivers is middle-aged adults with approximately 61% of the drivers between 40-59 years. Approximately 9% reported that they are 20-29 years old, 13% are 30-39 years old, and 16% are 60 or older.

The majority of truck drivers are employed by large-sized carriers, at 45%, while 22% are independent owners/operators with a single power unit, and 17% are drivers for mid-sized carriers. The remaining 18% of truck drivers identified themselves as independent owners/operators with multiple power units, a driver for an owner/operator, or a driver for a small-sized carrier.

Ninety-four percent of survey respondents identified themselves as long-haul drivers, while 6% reported that they were short-haul drivers.

Results of the driver background portion of the survey are displayed in Figure 1.

Figure 1 Driver Background

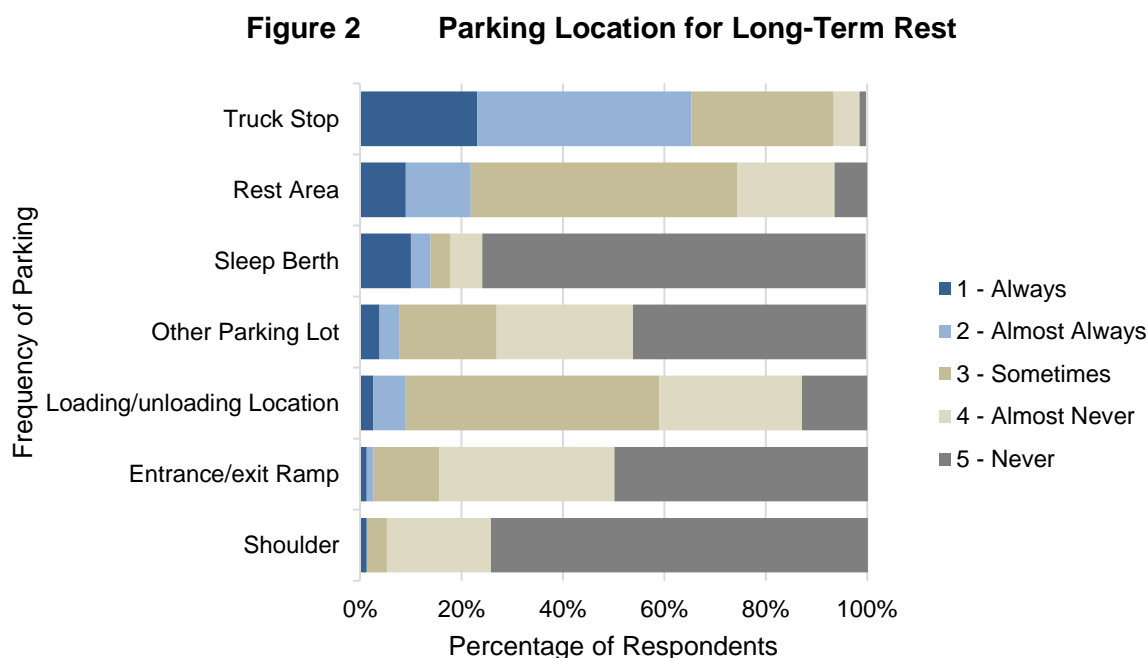


2. CURRENT TRAVEL PATTERNS

The survey asked drivers to select truck stop services and locations that they prefer on a scale from 1 (always important) to 5 (never important).

When asked to rate the type of area where they park for long-term rest, 96% of survey respondents reported that they always, almost always, or sometimes prefer to park in a truck stop parking lot. Additionally, 74% of survey respondents reported that they always, almost always, or sometimes park in a rest center parking lot for long-term rest while 60% of the sample park at a loading/ unloading facility. The least utilized locations to park for long-term rest are those that are not designated for truck parking, including highway shoulders, on entrance and exit ramps, and in other types of parking lots. Ninety-five percent of survey respondents reported that they never or almost never choose to park on the shoulder of the highway for long-term rest, while 85% rated the entrance and exit ramp similarly, and 74% of the sample choose to never or almost never park in parking lots not designated for truck parking. Eighty-two percent of survey respondents never or almost never rest in the sleep berth while a team driver drives.

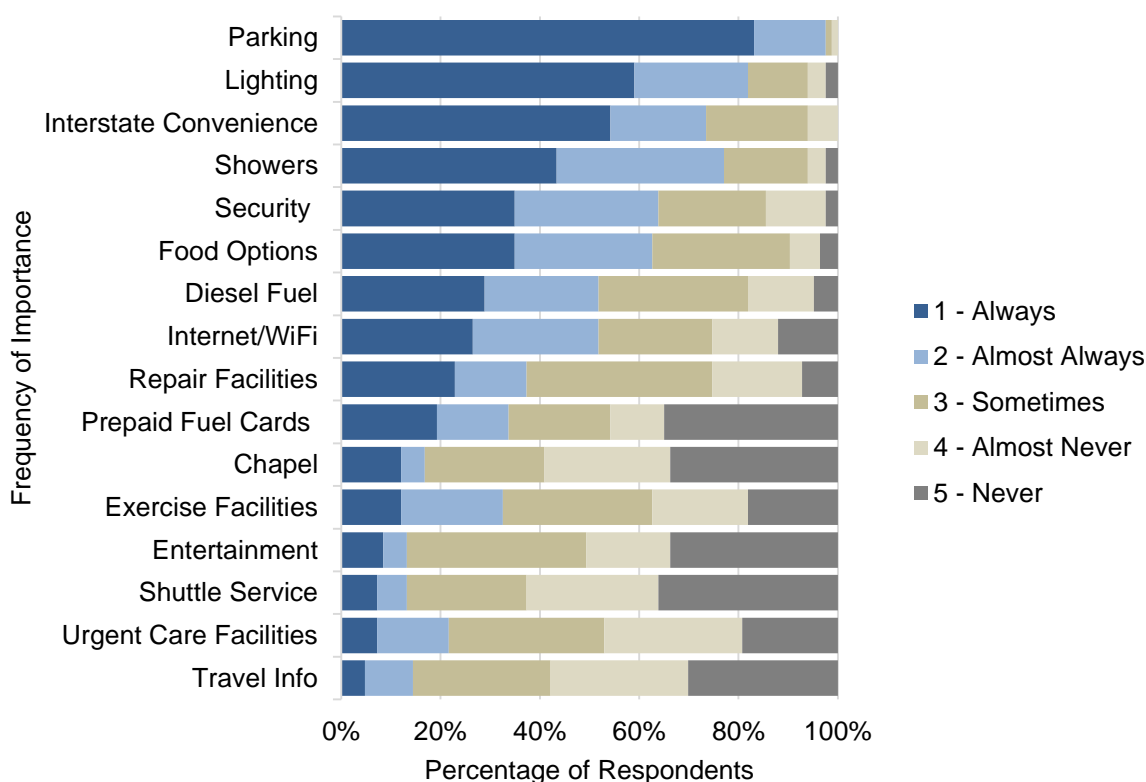
Other parking locations often used by survey respondents include casinos, hotels, or shopping centers. Figure 2 depicts truck driver's parking preferences for long-term rest.



Truck drivers were also asked to rate how often certain services or amenities are important when they park for extended periods of time. Services and features rated most highly are those that serve driver's basic needs, such as convenience to the interstate, restaurants and food options, the presence of security, available parking, a well-lit parking lot, and showers. Truck stop services that are sometimes but not always preferred are diesel fuel availability, internet/ Wi-Fi, exercise/ fitness facilities, and urgent care facilities. Survey respondents rated prepaid fuel cards, travel information, entertainment facilities, a chapel, and local shuttle services as services/ features that are generally not important. The highest rated service/ feature is available parking, with 98% of survey respondents reporting that it is always or almost always important. The lowest rated service/ feature is shuttle service, with 63% of the sample responding that it is never or almost never important.

Truck drivers provided comments indicating need for salon services for hair and nails, large parking spots with availability for doubles parking, better quality of food, and grass areas for pets. Figure 3 displays the services evaluated and frequency of their importance.

Figure 3 Importance of Services



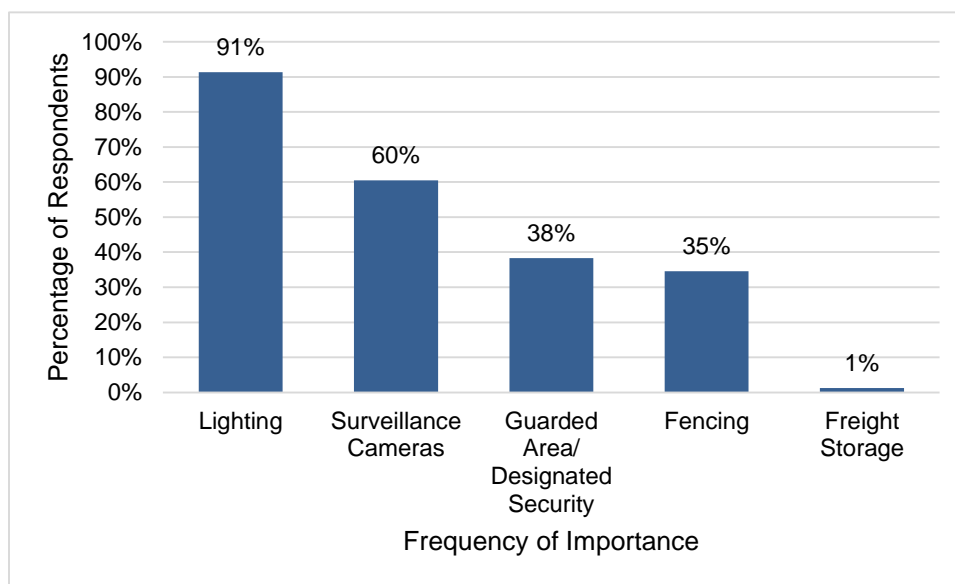
When asked the length of time on average it takes to find parking when stopping in New Mexico, 43% of truck drivers reported that it takes less than 30 minutes, 49% reported that it takes 30 minutes to 1 hour, and 9% reported that it takes more than 1 hour.

3. FUTURE SERVICE OPTIONS

a) Safety Needs

When asked to report the type of safety services that are important, lighting was identified as the highest driver preference, with surveillance cameras, fencing, and guarded areas with designated security also reported as important services. Survey respondents provided comments that it is important for truck driver services to not be located in high-crime areas and that there are no obvious signs of crime activity.

Figure 4 Important Factors for Safety Needs

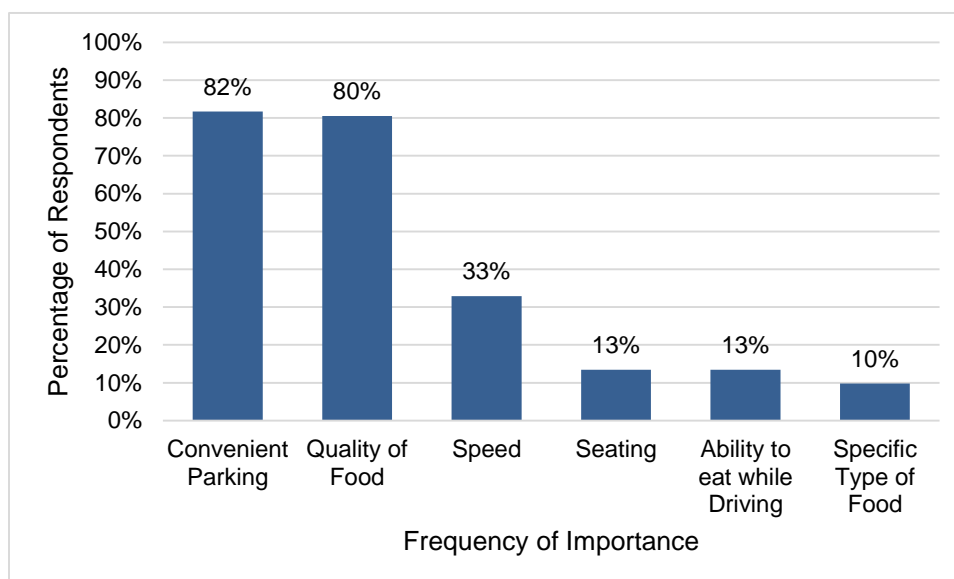


**The percentages do not sum to 100 because survey respondents were asked to mark all that apply.*

b) Food Needs

Survey respondents were asked to identify the most important factors for choosing where to eat meals. Convenient parking and quality of food were almost equally rated as the most important factors. The speed of food service was also identified as an important factor when choosing where to eat, while seating availability, ability to eat while driving, and restaurants with a specific type of food were not rated as important factors with as much frequency. Truck drivers commented that other important factors and services are healthy food that is fast, like a salad bar, food that is unique to the local culture, price of food, and food that can be used to cook with in a truck.

Figure 5 Important Factors for Choosing Where to Eat Meals

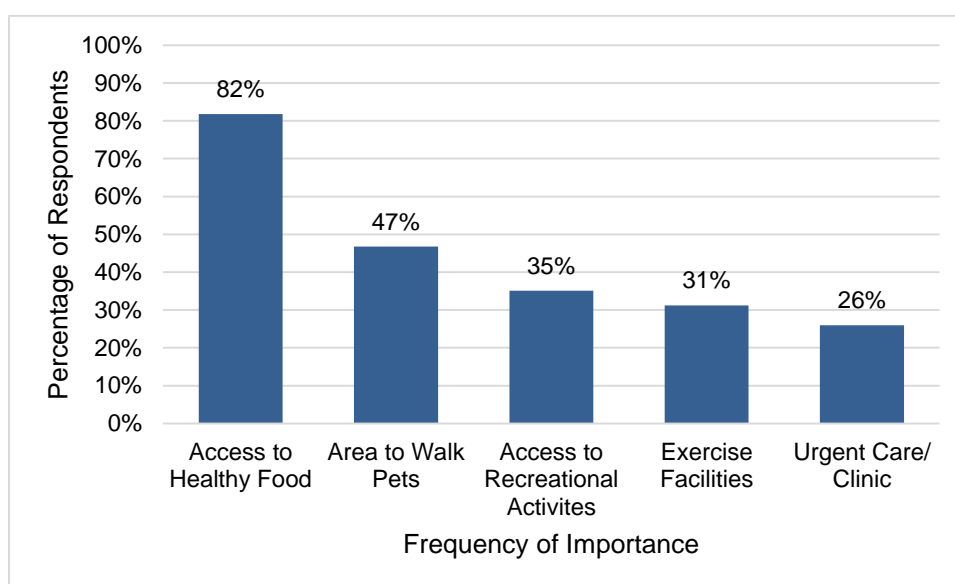


**The percentages do not sum to 100 because survey respondents were asked to mark all that apply.*

c) *Health and Wellness Needs*

Survey respondents indicated the most important health and wellness services are access to healthy food, areas to walk pets, and access to recreational activities. Exercise facilities and urgent care facilities and clinic were not rated as highly, but are still noted as important to truck drivers. Truck drivers commented that dental services and hair care, nails, and massages are other important health and wellness services.

Figure 6 Important Factors for Health and Wellness Needs



**The percentages do not sum to 100 because survey respondents were asked to mark all that apply.*

Lastly, survey respondents were asked if they would utilize a shuttle to reach additional services in a nearby metro area. Fifty-eight percent reported that would use the shuttle, while 42% indicated they would not. Of those who responded that they would utilize a shuttle, 49% reported that they would travel on a shuttle for 0-10 minutes, 46% would travel on a shuttle for 10-30 minutes, and 5% would travel for 30 minutes or more. (Note: the survey question did not specify whether the time spent on the shuttle was round trip or single direction only).

C. KEY FINDINGS

The survey collected nearly 100 responses which provided insights into the types of truck stop services and amenities truck drivers use frequently and are in need of in the future. Four key types of services emerged from the survey results:

1. Available, convenient, and safe parking for long-term rest and to access food and other services
2. Dining options with quality, fresh, and healthy food
3. Areas for recreational activities and exercise, including areas to walk pets
4. Facilities with urgent care and clinics

III. DATA COLLECTION AND MAPPING

A. DATA COLLECTION

The data required to complete the freight analysis was obtained from the NMDOT travel demand model and other NMDOT data sources, as well as NMEDD, USDOT, and other readily available sources. The types of data received are listed in Table 1.

Table 1 Data Received

Data Type	Received from
Truck parking survey and results	NMEDD
Existing parking facilities	NMDOT
Travel time data	NMDOT, Google
Shipping patterns along NM interstates	NMDOT, USDOT
Tribal, municipal, and governmental boundaries	NMDOT
NMDOT travel demand model	NMDOT
Other NMDOT data	NMDOT

On occasions when data was unattainable, the study team modified the project process to allow for best use of data that was available.

B. MAPPING

The data received from NMDOT and other sources were mapped and visually represented for further analysis. The mapping effort supported the economic development analysis, which is presented in subsequent report sections.

IV. ECONOMIC DEVELOPMENT ANALYSIS

A. METHODOLOGY

The study team developed a three-phase screening process to identify areas with economic development potential for trucking centers:

- **Phase 1: Truck Flow Analysis** includes a screen of the entire New Mexico interstate system, based on existing truck flows.
- **Phase 2: Major Freight Generators** weights key regional freight generators by their exports and driving distance from New Mexico interstates.
- **Phase 3: Truck Parking, Driver Amenities, and Land Use** identifies safe and convenient parking facilities for trucks, key driver amenities, and land ownership for the surrounding area around interstate exits.

B. PHASE 1: TRUCK FLOW ANALYSIS

New Mexico has three primary interstate highway facilities (Map 1):

- **Interstate 10** (I-10) runs due east from the Arizona border, passing through the southern part of the state (including the towns of Deming and Lordsburg) before reaching Las Cruces. Here, it turns south, crossing into Texas at El Paso. Its length in New Mexico is 162 miles.
- **Interstate 25** (I-25) begins in Las Cruces, continuing north from I-10; it turns northeast at Albuquerque to reach Santa Fe before heading north to the Colorado border. Its length in New Mexico is 460 miles.
- **Interstate 40** (I-40) begins just west of Gallup at the Arizona Border, passing east through the central part of the state to Albuquerque and continuing through Santa Rosa and Tucumcari to the Texas border. Its length in New Mexico is 369 miles.

Using the US Department of Transportation’s (USDOT) Freight Analysis Framework (FAF) network-level freight flow dataset, the study team ranked the three facilities according to total truck flow (Table 2).¹ Truck flow is measured as Average Annual Daily Truck Traffic (AADTT), which is calculated by dividing total annual truck passages across a roadway segment by the number of days in a year.

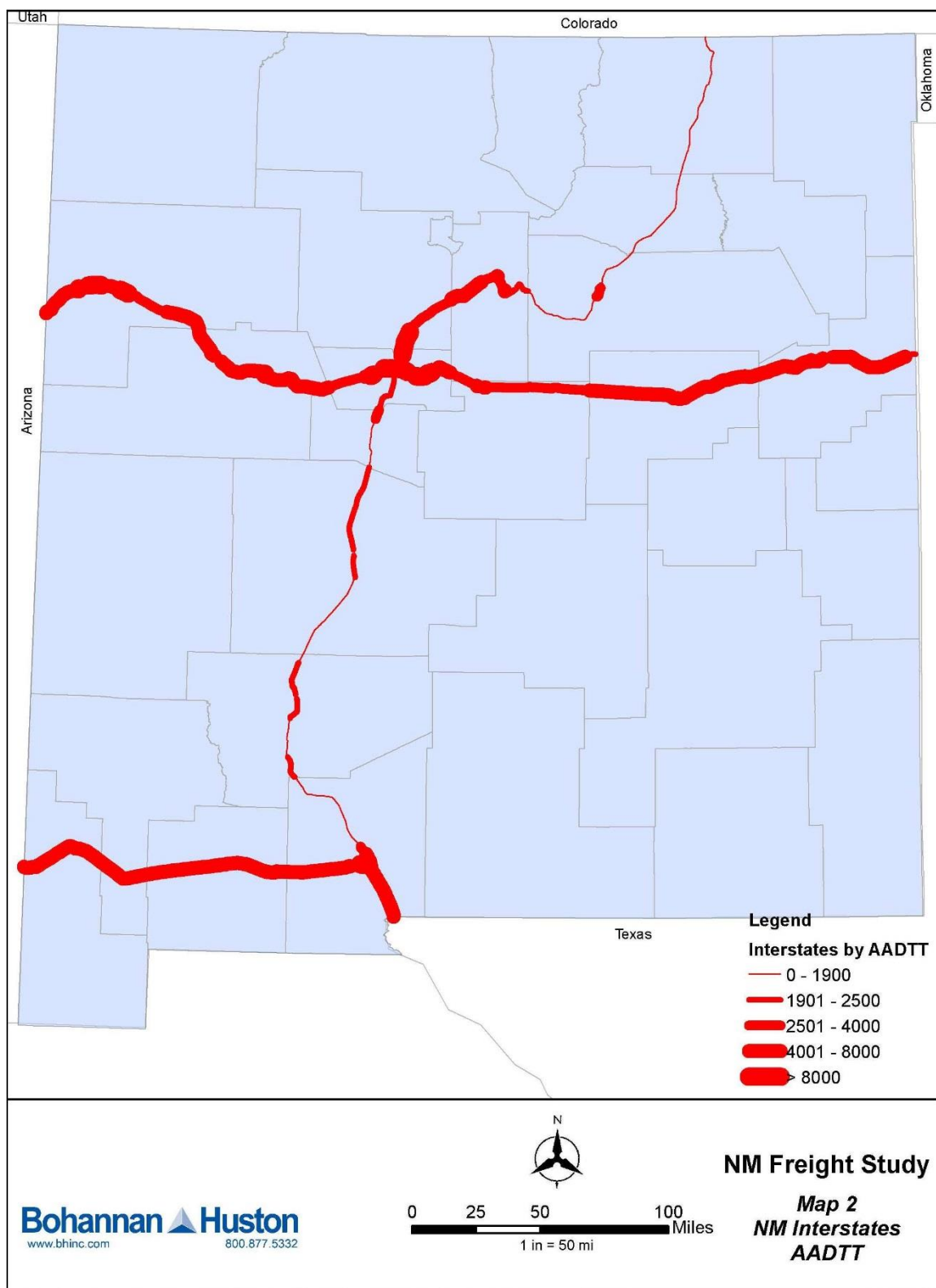
Table 2 Interstate Combination Truck Flows

Interstate	AADTT (2015)
I-40	Peak: 19,926; Average: 7,354
I-10	Peak: 8,426; Average: 5,877
I-25	Peak: 9,024; Average: 2,096

** Note that truck volumes on I-25 peak around the I-40 and I-10 interchanges (see Map 2)*

¹ Network-assigned FAF data is only available for FAF3 (2007). The most recent FAF data—used in the remainder of this work—is FAF4 (2012).

Map 2 Average Annual Daily Truck Traffic

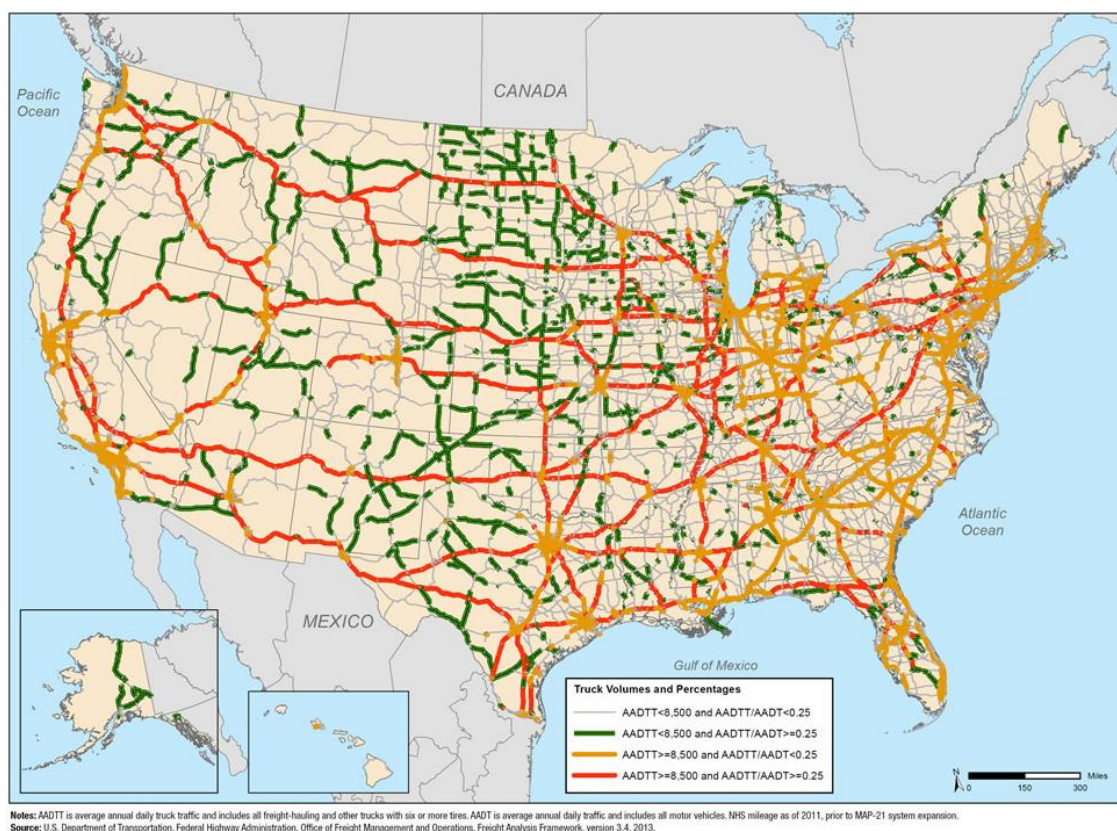


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Author: amaynard

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Clearly I-10 and I-40 serve as the state's two key freight corridors for long-distance truck traffic. Forecasting ahead to 2040, the Federal Highway Administration (FHWA) has developed a map of truck volumes and percentages across the U.S. (Figure 7). While I-10 and I-40 are expected to continue serving as two of the most significant national truck routes, I-25 falls below FHWA's threshold of major truck routes on the National Highway System. Based on its substantially lower truck flows, and thus lower demand for trucking centers, the study team removed I-25 from further consideration in this study.

Figure 7 Major Truck Routes on the NHS: 2040



Source: USDOT Federal Highway Administration, 2013

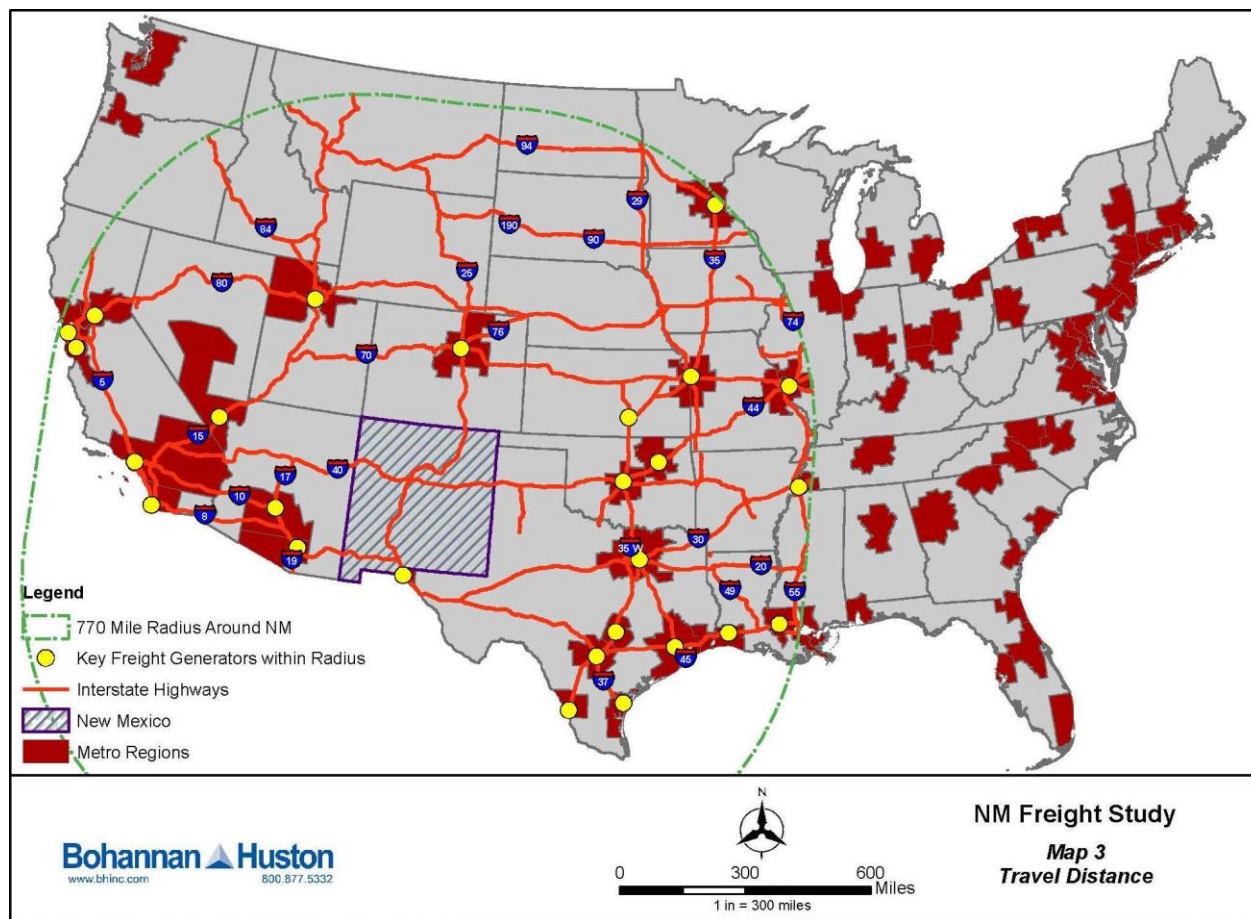
C. PHASE 2: MAJOR FREIGHT GENERATORS

Based on an assumed maximum drive time of eleven hours, the study team conducted a geographic analysis to identify which major freight-producing metropolitan areas are within an eleven-hour drive of New Mexico.

1. ORIGIN-DESTINATION ANALYSIS

The study team conducted an initial screen for origins—that is, major metropolitan areas with FAF freight production data available—using a simple buffer analysis. As an upper bound, all origins more than 770 linear miles (i.e., eleven hours at 70 miles per hour) from the New Mexico border were eliminated from consideration (Map 3). Due to lack of data and difficulty estimating border crossing duration, origins from Mexico were not considered.

Map 3 Travel Distance



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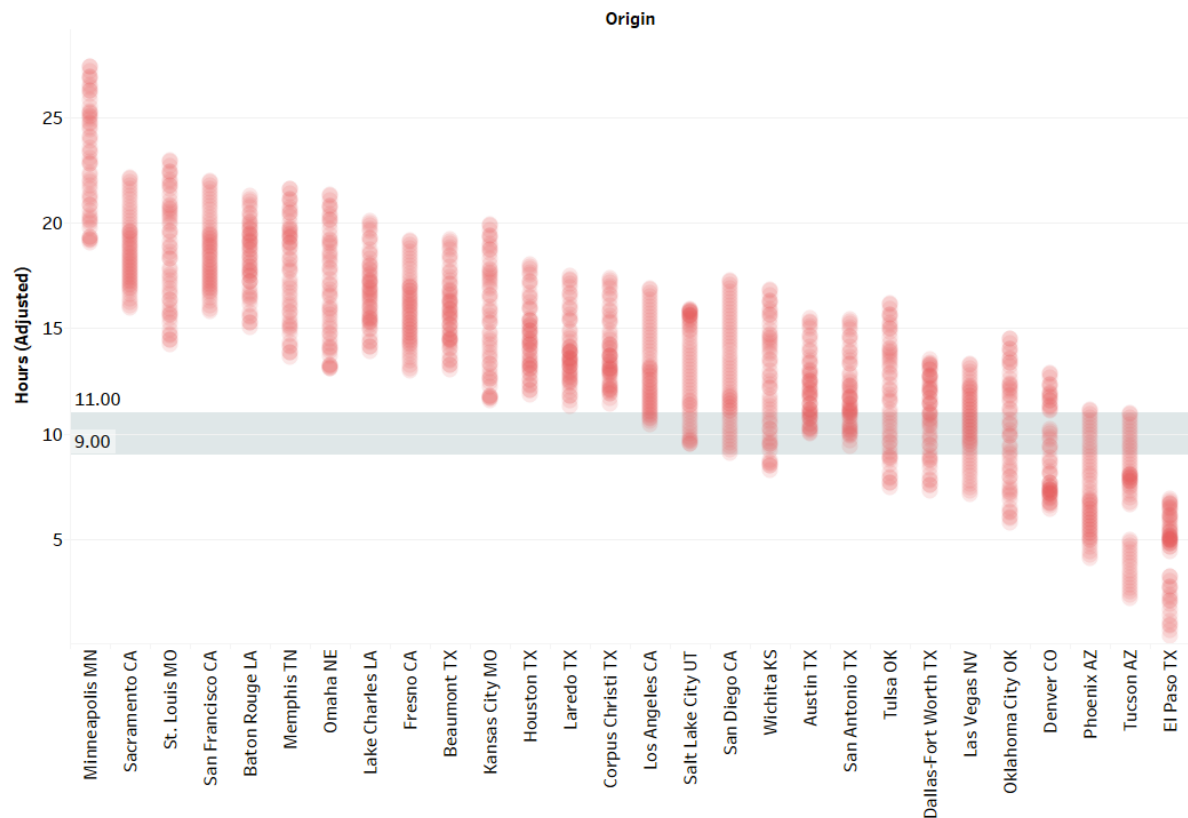
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2. TRAVEL TIME CALCULATION

For each origin metropolitan area inside the 770 mile buffer, over-the-road driving time to each destination was calculated using the following approach (Figure 8):

- Exact origins were chosen at large intermodal facilities located near major interstates or at major interstate interchanges close to the center of the major metropolitan area.
- Destinations were chosen as mileposts located at 10-mile intervals along I-10 and I-40 within New Mexico.
- Driving times were obtained using the Google distance matrix API.²
- Driving times were inflated by 20 percent to account for lower truck travel speeds and traffic conditions.
- Two origins – Salt Lake City and Las Vegas – were eliminated due to implausible interstate travel routes to the study area.

Figure 8 Drive Time by Origin



² The Google distance matrix API provides information on travel time and distance between user-defined start and end points. The API incorporates current and historical traffic conditions to predict travel times between the two trip ends. <https://developers.google.com/maps/documentation/distance-matrix/>

The grey band depicts driving time of nine to eleven hours, which is assumed to be the approximate number of hours a truck driver would travel before deciding to stop. Each red dot represents the adjusted driving time in hours from the origin to each separate milepost on the interstate system. The red dots that lie within the grey band signify a potential area of interest to further investigate.

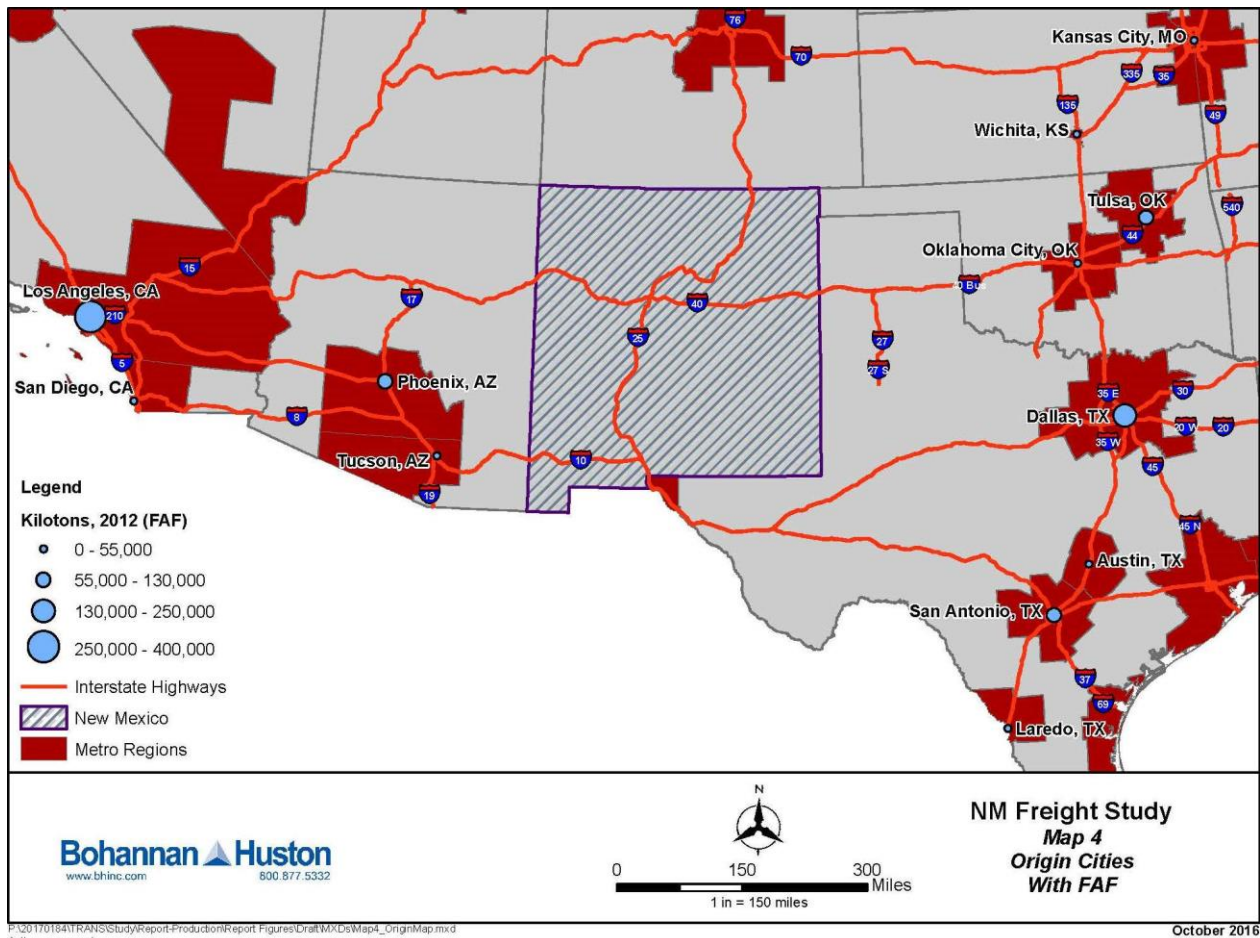
Of the candidate origins, eleven are within an eleven-hour journey of significant portions of I-10 and I-40 in New Mexico and were flagged for additional analysis (Table 3, Map 4).

Table 3 Total Freight Exports by Origin (FAF 2012)

Metropolitan Area	Kilotons (2012) *
Austin, TX	53,000
Dallas-Ft Worth, TX	241,000
Laredo, TX	34,000
Los Angeles, CA	397,000
Oklahoma City, OK	46,000
Phoenix, AZ	85,000
San Antonio, TX	126,000
San Diego, CA	43,000
Tucson, AZ	28,000
Tulsa, OK	74,000
Wichita, KS	25,000

* Kilotonnage is for trucks only, originating at the City listed.

Map 4 Origin Cities with FAF

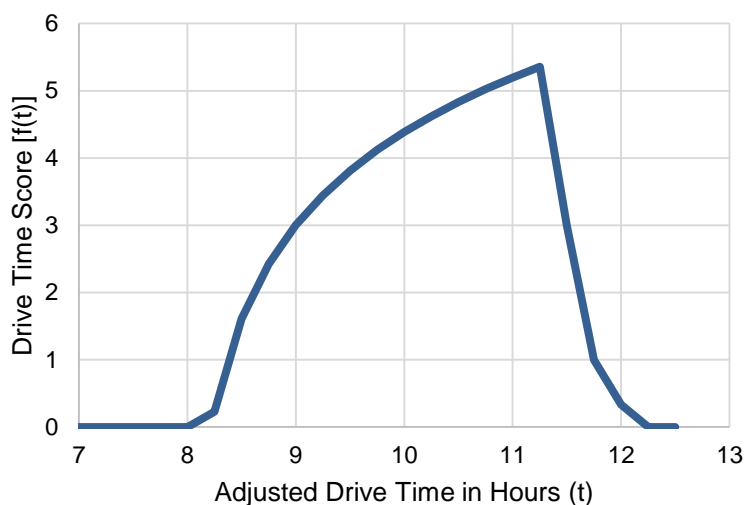


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3. SCORING AND WEIGHTING

Each origin-to-destination drive time was assigned a score using the curve shown in Figure 9. Since the assumed legal drive time is eleven hours, drivers are assumed to be increasingly likely to stop after about 8.5 to 11 hours of continuous driving time, and very unlikely to drive much longer than 11 hours. In addition to drive times, scores were weighted according to the volume of freight tonnage originating from each of the metropolitan areas listed in Table 3.

Figure 9 Drive Time Scoring Curve

Drive time scores were summed and weighted using the following formula:

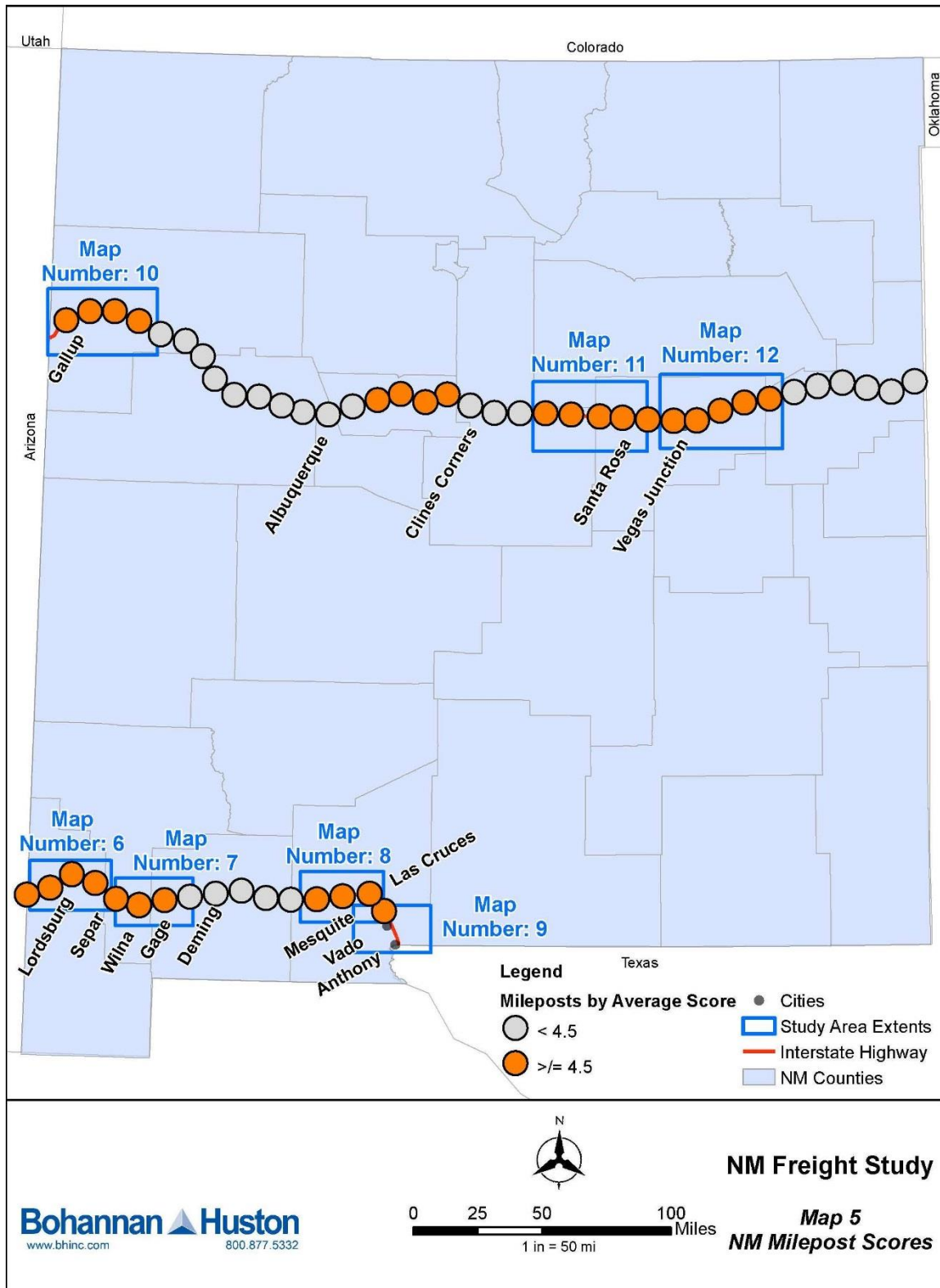
$$\text{Exit Score} = \sum_i f(t_i) \cdot \frac{FAF_i}{\max(FAF)}$$

Where t_i is the drive time from location i , $f(t_i)$ is the drive time score as shown in Figure 9, and FAF_i is the total freight tonnage from location i . To identify segments of interstate in New Mexico with the highest potential for truck drivers to reach their eleven-hour service limit, the study team selected a cutoff score of 4.5 based on its ability to generate useful segment clusters (Map 5). Based on this methodology, seven interstate segments were identified for further study (Table 4).

Table 4 Interstate Segments Emerging from Phase 2 Screen

Sector	Interstate	From (exit)	To (exit)
Lordsburg	I-10	3	34
Separ-Wilna-Gage	I-10	42	68
Las Cruces	I-10	116	144
Mesquite-Vado-Anthony	I-10	151	164
Gallup	I-40	3	44
Clines Corner-Vegas Junction	I-40	218	256
Santa Rosa	I-40	263	311

Map 5 NM Milepost Scores



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 Author: amaynard

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Though the Albuquerque region scored highly as well, it was excluded due to substantial existing economic investment.

D. PHASE 3: TRUCK PARKING, AMENITIES, AND LAND USE

Within each of the interstate segments identified in Phase 2, the study team identified the location of each interchange. Given that convenience is a key factor in determining where a truck driver is likely to stop, the study team drew a one-mile buffer around each exit to identify the vicinity that drivers could conceivably reach within a four-minute drive or less. These one-mile buffer regions became the area of focus for the Phase 3 screen. The study team evaluated each buffer region's attributes related to the four categories: existing truck parking, land ownership, amenities, and distance to nearest urban area (Table 5).

Table 5 Phase 3 Evaluation Criteria

Attribute	Description
Truck Parking	<p>Areas for truck parking, by the following categories:</p> <ul style="list-style-type: none"> • Paved (truck-specific) parking • Lighted (truck-specific) parking
Land Ownership	<p>Land ownership, by the following categories:</p> <ul style="list-style-type: none"> • US Bureau of Land Management (BLM) • US Department of Defense (DOD) • US Forest Service (FS) • Tribal • Privately Owned • State of New Mexico
Amenities	<p>Amenities for truckers in the following categories:</p> <ul style="list-style-type: none"> • Diesel fuel • Green space (defined as the presence of some park-like feature such as physical separation from roadway, bench, path, trash can, etc.) • Physical Activity (Recreation center, basketball court, running track, golf course, etc.) • Fast food dining • Sit down dining
Distance to Nearest Urban Area	<p>Distance drivers would have to travel by shuttle or other mode to reach additional amenities most typically located in urban areas, such as urgent care clinics, fresh food groceries, and entertainment.</p>

1. TRUCK PARKING

For this analysis, truck parking was defined as two categories of truck-specific parking areas: paved facilities and lighted facilities. Given that survey respondents prioritized convenient and safe parking as one of the top amenities they seek in a trucking center, truck parking facilities that are neither paved nor lighted were not considered of sufficient quality to attract overnight parking as a preferred choice (Figure 10). The study team relied on the most recently available orthophotography and street-level photography to identify truck parking within each interchange buffer.

Presence of truck parking represents areas with high potential for additional investment in truck-specific facilities. An absence of truck parking, especially in urban areas, may preclude truck-specific facilities, depending on available land and local desire for presence or lack of such facilities.

Given data limitations, current truck parking usage and capacity were not considered; that is, some facilities may have insufficient parking facilities that would require expansion in order to accommodate existing or future demand. Alternatively, unpaved or unlighted parking areas currently in use due to high parking demand in some locations could present potential opportunities for future upgrade investments.

Figure 10 Paved/Lighted Truck Parking (Left); Unimproved Truck Parking (Right)



(Google, 2016)

2. LAND OWNERSHIP

For each of the one-mile buffer regions around each interstate exit, the study team calculated the land ownership composition within the following categories:

- US Bureau of Land Management (BLM),
- US Department of Defense (DOD),
- US Forest Service (FS),
- Tribal,
- Privately Owned, and
- State of New Mexico.

In general, areas with high proportions of land owned privately or by the State of New Mexico were considered more suitable for economic development, though exceptions are always possible.

3. AMENITIES

Though the original House Memorial language directs the study towards development of “trucking rest centers,” the range of services that truckers may request or find inviting can extend beyond amenities offered within traditional trucking centers, including recreation and health facilities.

Informed by findings from the “Truck Driver Parking and Services Preferences and Needs” survey summarized in Section II, the study team located the presence of high-priority amenities, such as fueling options (diesel), recreation facilities, and dining options, in each buffer region using orthophotography and online business listings. Recreation facilities were categorized as either green space, defined as the presence of some park-like feature such as physical separation from the roadway, bench, path, trash can, etc., or physical activity, such as a recreation center, basketball court, running track, golf course, or similar recreational infrastructure. Dining options were categorized as either fast food or full-service, sit down restaurants.

4. DISTANCE TO NEAREST URBAN AREA

The “Truck Driver Parking and Services Preferences and Needs” survey revealed that the majority of truck drivers are willing to travel up to 30 minutes on a shuttle to access additional amenities. This was translated into a five-mile travel shed from the trucking center. For each buffer region, the study team calculated the distance to the nearest urban area as a proxy for access to additional amenities, including medical care, groceries, entertainment, and regional transportation.

5. ADDITIONAL CONSIDERATIONS

Safety before, during, and after weather events can also be a consideration when developing or expanding trucking centers. Interstate 40, especially eastern I-40 towards Texas, can be impacted by winter weather, while I-10 is subject to dust events. Major closures usually happen at the Arizona state line and Las Cruces, as both Deming and Lordsburg cannot hold much traffic at present. Specific locations with repeat closures occur on I-10 between mile markers 5-15 (Map 7), 29-42 (Map 8), 68-78 (Map 8), and 86-102. Additionally, there can be more localized closures for problem area less than one-half a mile wide. Such closures last for the duration of the dust storm, which can pass in less than an hour or last more than three hours.

Though beyond the scope of this report, there are additional common dust closures in the southern part of New Mexico: US 180 between mile markers 142-152, State Route 11 between mile marker 5-23, and sporadically along State Route 26.

E. SUMMARY OF ECONOMIC DEVELOPMENT POTENTIAL

An overview of each of the seven identified sectors can be found in Table 6. The summary includes a list of opportunities and challenges for each location. It provides insight into features which should be considered as decision-makers consider location options to pursue future trucking centers.

Table 6 Interstate Sector Overview

Interstate Sectors	Challenges and Benefits
Lordsburg	Generally rural, with a good mix of facilities and amenities on either side of Lordsburg. A large proportion of land in the western portion is owned by the US BLM. There is an abandoned truck stop at exit 5. Segments of this sector (between mile markers 5 and 15) are prone to repeat closures due to dust events, resulting in an increased need for truck parking facilities.
Separ-Wilna-Gage	A predominately rural sector, with the easternmost truck stop near the town of Deming (which itself lies outside this area, as defined by travel times). The westernmost and easternmost segments of this sector (west from mile marker 42 and east from mile marker 68) are prone to repeat closures due to dust events, resulting in an increased need for truck parking facilities.
Las Cruces	A well-served area including a scenic overlook with truck parking, including two truck-specific complexes. Many amenities in the Las Cruces area, though parking is limited.
Mesquite-Vado-Anthony	A shorter segment on the north-south portion of I-10 near the Texas border. One truck-specific complex, with a string of small towns to the west just outside of the study area. Exit 164 has a New Mexico visitors' center, with truck parking but no amenities.
Gallup	There are full-service facilities on either side of Gallup. A New Mexico rest stop is located to the west; another truck stop is located at exit 39. Proximity to the proposed Energy Logistics Park. Many exits are located in predominately Tribal land.
Clines Corner-Vegas Junction	A few truck stops and facilities appear in this predominately rural stretch. Land is mostly owned privately or by New Mexico.
Santa Rosa	Santa Rosa has several truck complexes and many amenities. Elsewhere, a few small towns offer services but the sector is otherwise rural. Land is mostly owned privately or by New Mexico.

Summary tables for each sector are shown in Table 7 through Table 13 and Map 6 through Map 12. Interstate exits with both parking facilities and a good selection of amenities (defined as amenities in two of the three categories: diesel fuel, recreation, and dining) are highlighted in bold.

Table 7 Lordsburg

Geography				Land Ownership						Parking		Amenities				
Route	Sector	Milepost	Distance to Metro	US BLM	US DOD	US FS	Tribal	Private	NM	Paved Truck Parking	Lit Parking	Diesel Fuel	Green Space	Physical Activity	Fast Food	Sit Down
I-10	Lordsburg	3	19	93%				1%	7%							
I-10	Lordsburg	5	17	65%				26%	9%							
I-10	Lordsburg	11	11	79%				21%								
I-10	Lordsburg	15	7	88%				4%	8%							
I-10	Lordsburg	20	2	13%				64%	23%	•	•	•	•		•	
I-10	Lordsburg	22	0	2%				97%	2%			•	•	•	•	•
I-10	Lordsburg	24	2	9%				86%	4%	•	•	•			•	•
I-10	Lordsburg	29	7					77%	23%							
I-10	Lordsburg	34	12					97%	3%							

Map 6 Lordsburg

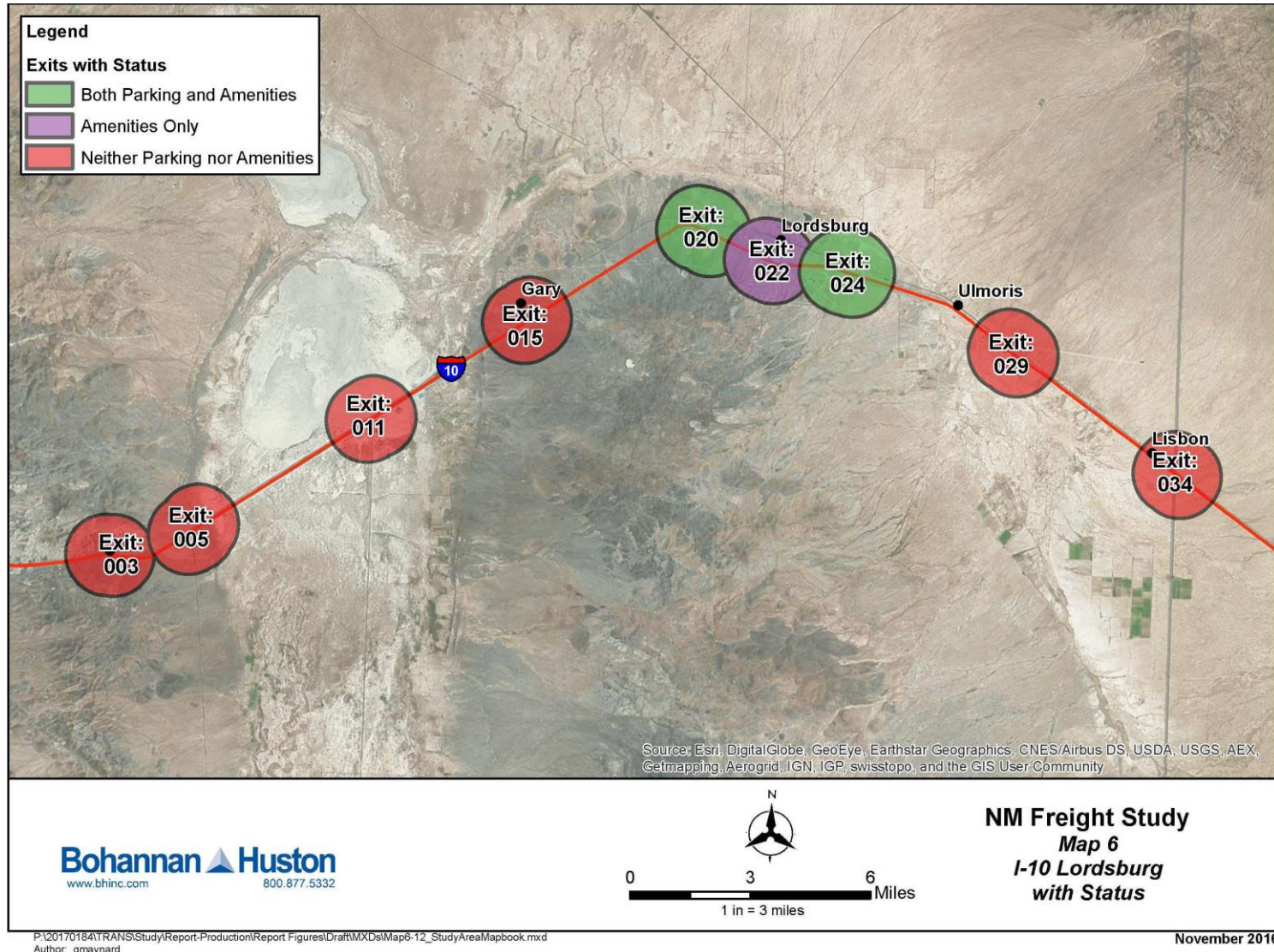
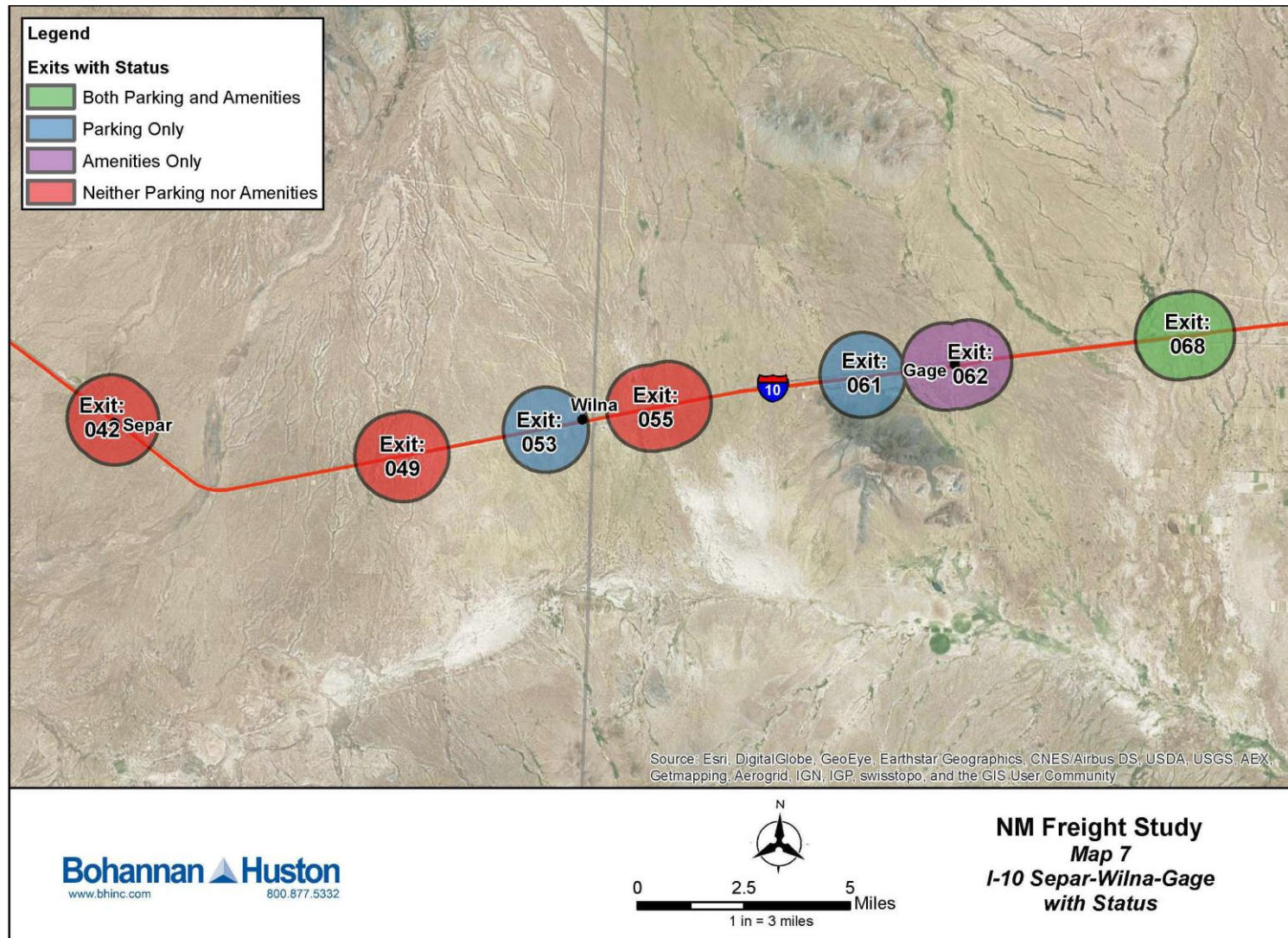


Table 8 Separ-Wilna-Gage

Geography				Land Use						Parking		Amenities				
Route	Sector	Milepost	Distance to Metro	US BLM	US DOD	US FS	Tribal	Private	NM	Paved Truck Parking	Lit Parking	Diesel Fuel	Green Space	Physical Activity	Fast Food	Sit Down
I-10	Separ-Wilna-Gage	42	20					60%	40%							
I-10	Separ-Wilna-Gage	49	27	42%				43%	15%							
I-10	Separ-Wilna-Gage	53	31	23%				67%	10%	•	•		•			
I-10	Separ-Wilna-Gage	55	33					41%	59%							
I-10	Separ-Wilna-Gage	61	39					100%		•	•		•			
I-10	Separ-Wilna-Gage	62	40					79%	21%			•			•	
I-10	Separ-Wilna-Gage	68	46					20%	80%	•	•	•			•	•

Map 7 Separ-Wilna-Gage



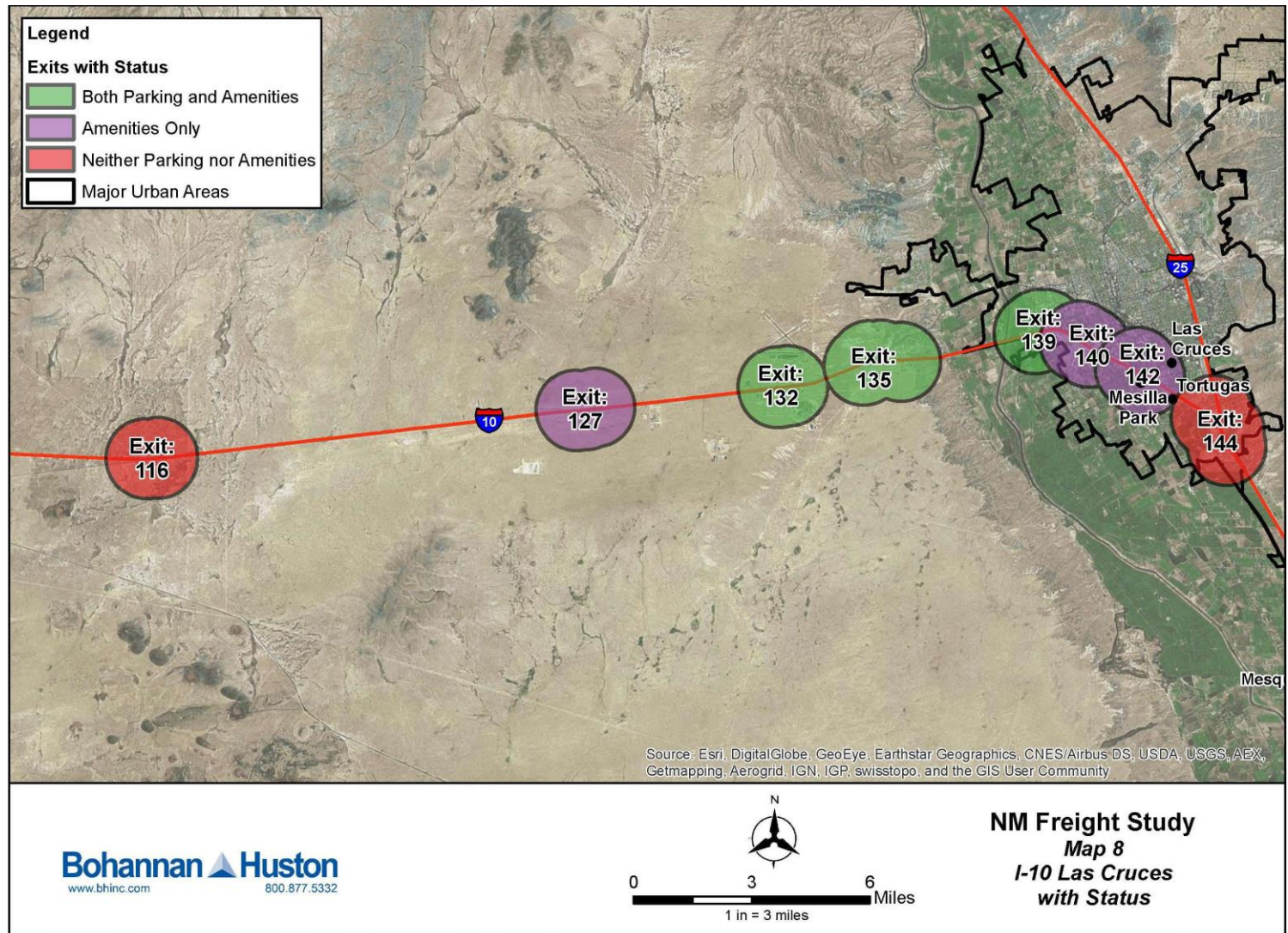
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Author: gmaynard

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Table 9 Las Cruces

Geography				Land Use						Parking		Amenities				
Route	Sector	Milepost	Distance to Metro	US BLM	US DOD	US FS	Tribal	Private	NM	Paved Truck Parking	Lit Parking	Diesel Fuel	Green Space	Physical Activity	Fast Food	Sit Down
I-10	Las Cruces	116	24	34%				58%	7%							
I-10	Las Cruces	127	13	63%					37%			•				
I-10	Las Cruces	132	8	1%				95%	3%	•	•	•			•	
I-10	Las Cruces	135	5	49%				35%	16%	•	•		•			
I-10	Las Cruces	139	1					100%		•	•	•	•		•	•
I-10	Las Cruces	140	0					100%				•	•		•	•
I-10	Las Cruces	142	0					100%				•	•		•	•
I-10	Las Cruces	144	2					100%								

Map 8 Las Cruces



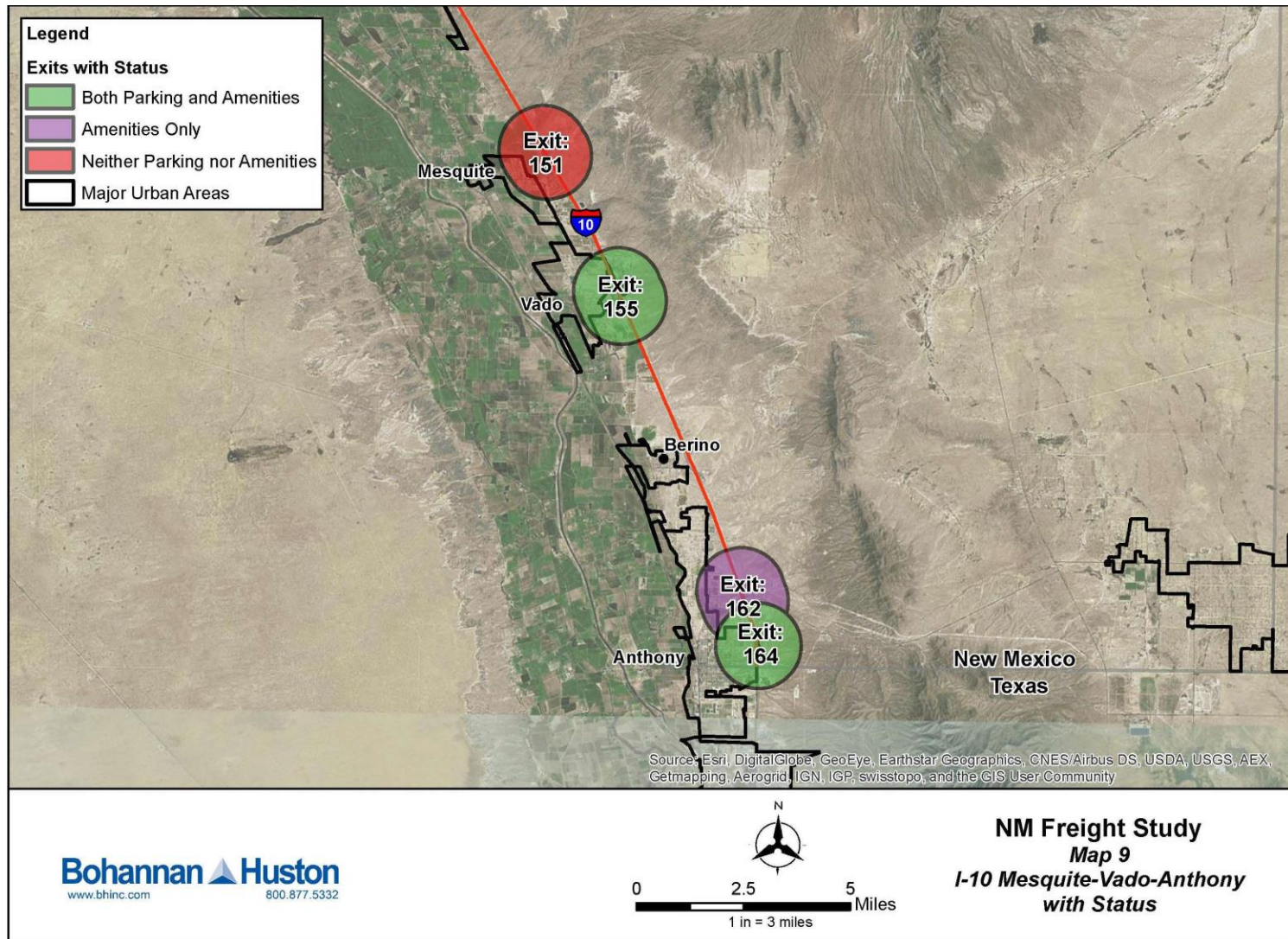
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Author: gmaynard

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Table 10 Mesquite-Vado-Anthony

Geography				Land Use						Parking		Amenities				
Route	Sector	Milepost	Distance to Metro	US BLM	US DOD	US FS	Tribal	Private	NM	Paved Truck Parking	Lit Parking	Diesel Fuel	Green Space	Physical Activity	Fast Food	Sit Down
I-10	Mesquite-Vado-Anthony	151	9	10%				71%	19%							
I-10	Mesquite-Vado-Anthony	155	13	14%				74%	12%	•	•	•	•		•	•
I-10	Mesquite-Vado-Anthony	162	20	27%				73%				•		•		
I-10	Mesquite-Vado-Anthony	164	22	38%				42%		•	•		•			

Map 9 Mesquite-Vado-Anthony



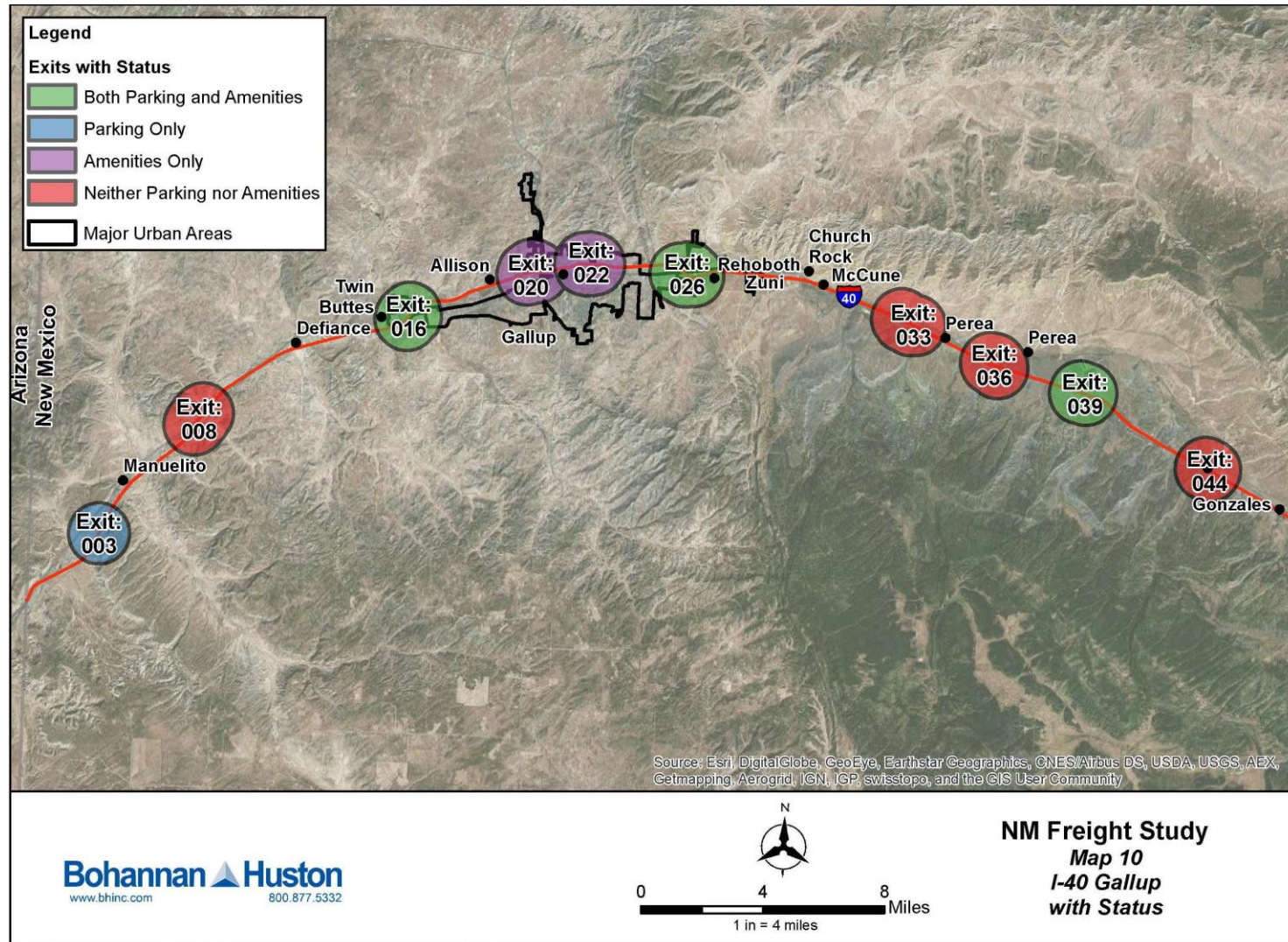
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 Author: gmaynard

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Table 11 Gallup

Geography				Land Ownership						Parking		Amenities				
Route	Sector	Milepost	Distance to Metro	US BLM	US DOD	US FS	Tribal	Private	NM	Paved Truck Parking	Lit Parking	Diesel Fuel	Green Space	Physical Activity	Fast Food	Sit Down
I-40	Gallup	3	17	1%			93%	6%		•	•		•			
I-40	Gallup	8	12				57%	43%								
I-40	Gallup	16	4				1%	96%	3%	•	•	•	•	•	•	•
I-40	Gallup	20	0					100%				•	•	•	•	•
I-40	Gallup	22	0				0%	100%				•	•	•	•	•
I-40	Gallup	26	4	6%			25%	69%		•	•	•	•	•	•	•
I-40	Gallup	33	11		21%		79%									
I-40	Gallup	36	14			5%	95%									
I-40	Gallup	39	17			9%	3%	70%	19%	•	•	•	•		•	•
I-40	Gallup	44	22			5%	3%	91%								

Map 10 Gallup



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Author: gmaynard

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Table 12 Clines Corner-Vegas Junction

Geography		Land Ownership								Parking		Amenities				
Route	Sector	Milepost	Distance to Metro	US BLM	US DOD	US FS	Tribal	Private	NM	Paved Truck Parking	Lit Parking	Diesel Fuel	Green Space	Physical Activity	Fast Food	Sit Down
I-40	Clines Corner-Vegas Junction	218	57					41%	59%	•		•			•	•
I-40	Clines Corner-Vegas Junction	220	55					24%	76%	•			•			
I-40	Clines Corner-Vegas Junction	226	49					79%	21%							
I-40	Clines Corner-Vegas Junction	230	45					50%	50%							
I-40	Clines Corner-Vegas Junction	234	41					23%	77%	•	•	•			•	
I-40	Clines Corner-Vegas Junction	239	36					72%	28%							
I-40	Clines Corner-Vegas Junction	243	32					100%								
I-40	Clines Corner-Vegas Junction	252	23					100%		•	•		•			
I-40	Clines Corner-Vegas Junction	256	19					92%	8%							

Map 11 Clines Corners-Vegas Junction

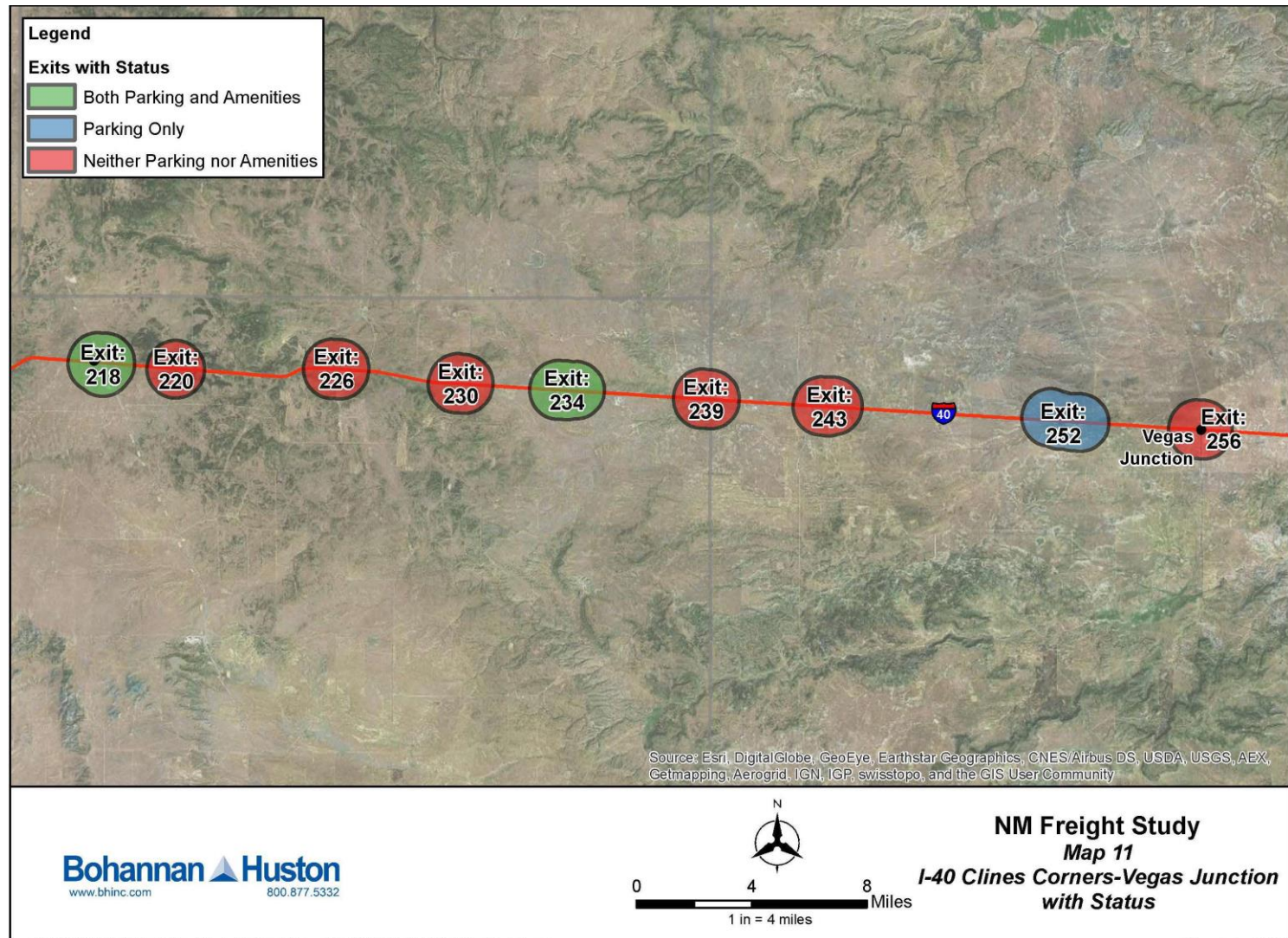
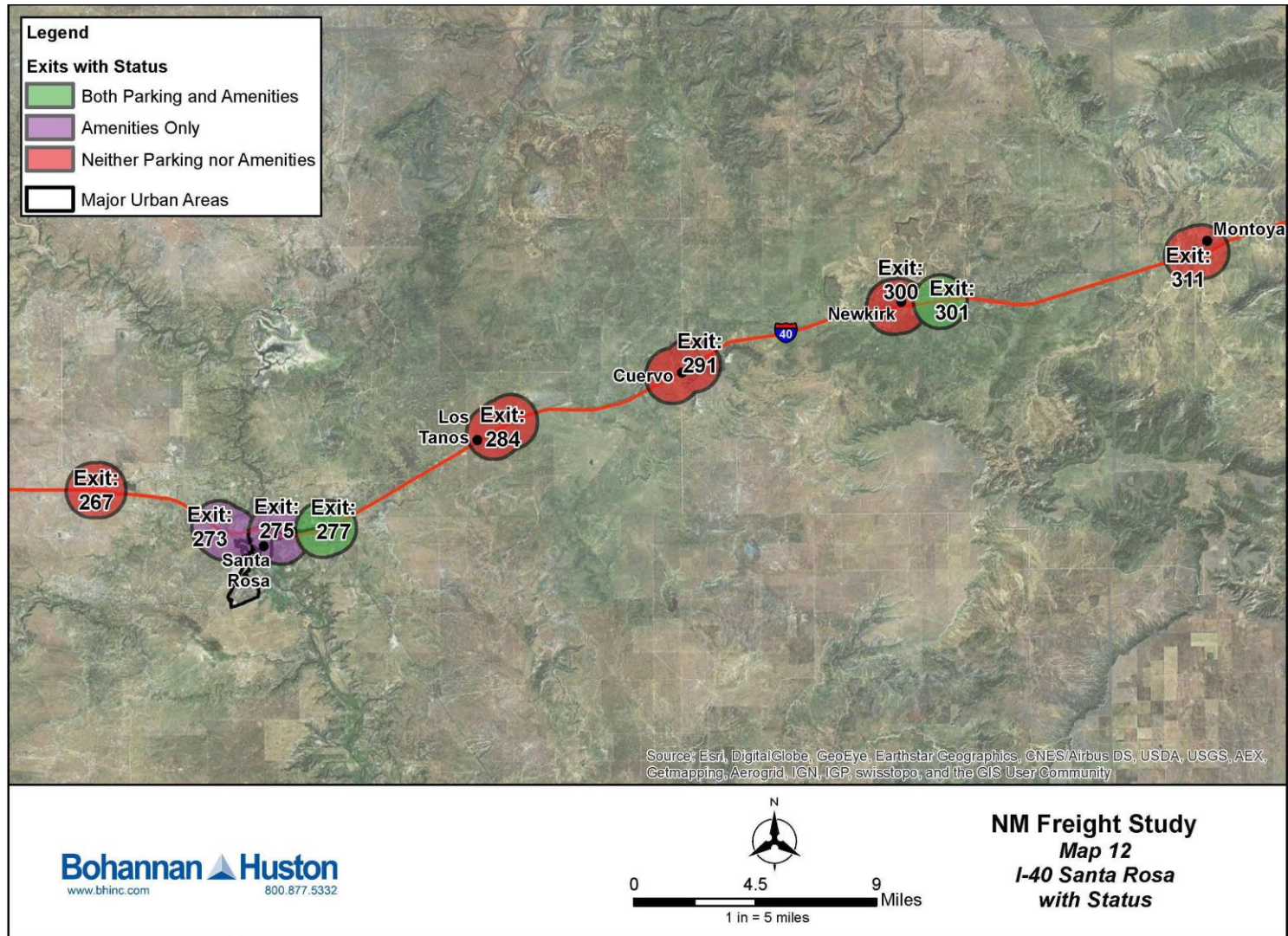


Table 13 Santa Rosa

Geography				Land Ownership						Parking		Amenities				
Route	Sector	Milepost	Distance to Metro	US BLM	US DOD	US FS	Tribal	Private	NM	Paved Truck Parking	Lit Parking	Diesel Fuel	Green Space	Physical Activity	Fast Food	Sit Down
I-40	Santa Rosa	263	12					76%	24%							
I-40	Santa Rosa	267	8					86%	14%		•	•				
I-40	Santa Rosa	273	2	1%				99%					•	•		•
I-40	Santa Rosa	275	0					92%	8%			•	•	•	•	•
I-40	Santa Rosa	277	2					99%	1%	•	•	•	•		•	•
I-40	Santa Rosa	284	9					86%	14%							
I-40	Santa Rosa	291	16					95%	5%							
I-40	Santa Rosa	300	25					100%				•				
I-40	Santa Rosa	301	26					96%	4%	•	•		•			
I-40	Santa Rosa	311	36					81%	19%							

Map 12 Santa Rosa



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Author: gmaynard

V. CONCLUSION

Several large freight generator markets, including Long Beach-Los Angeles, Dallas-Fort Worth, and San Antonio, are within an eleven-hour drive of significant portions of I-10 and/or I-40 in New Mexico. As truck drivers reach the threshold of the eleven-hour drive time limit, many will seek trucking centers within New Mexico. This study identified the locations within the eleven-hour frequency zones that have the best existing infrastructure to support new and/or expand existing trucking centers. A trucking center as represented in the recommendations is assumed to include some level of amenities beyond parking and diesel. Each interchange provides different opportunities, and there are likely opportunities beyond those identified in this study; each location should be assessed on a case-by-case basis.

The study team recommends the following next steps to continue the assessment of potential economic development opportunities around current and future trucking centers:

- ***Evaluate Parking Capacity***

Conduct an evaluation of truck parking utilization along New Mexico interstates to identify areas that consistently exceed capacity and locations where trucks may park out of necessity. Of these sites, assess the availability of adjacent property and identify opportunities to develop and/or expand parking capacity.

- ***Evaluate Parking Demand***

Conduct a gap analysis to determine if any new trucking centers or other trucking-supportive amenities would fill a critical gap in existing services. This would be supported by developing minimum thresholds for truck parking demand and amenity utilization at a given location.

- ***Support Urban Areas***

Collaborate with local officials as well as shippers and receivers around the state, especially in the Albuquerque, Las Cruces, and El Paso metro areas, to identify opportunities for providing staging areas for truck parking, so truckers can meet HOS requirements in these congested areas.

- ***Enhance Existing Facilities***

Evaluate opportunities to support development of additional amenities at and adjacent to existing trucking centers, such as fresh and healthy food options, recreational opportunities and exercise facilities.

- ***Extend Transit***

Evaluate the potential to extend transit options, including fixed route public transit and on-demand shuttle services, to connect trucking centers to nearby urban centers that have desired amenities.

- ***Create Incentives***

Evaluate the potential to develop incentives to expand private trucking centers, such as streamlining certain regulatory and development requirements or creating tax abatements or low-cost loans for new or expanded trucking centers along the corridors identified in this report.

- ***Engage Public-Private Partnerships***

Continue to engage private companies, especially travel center companies, in identifying and evaluating potential economic development opportunities and explore the potential for state and local governments to enter into public-private partnerships to develop or expand trucking centers and adjacent lands.

- ***Market Trucking Centers***

Market new and improved trucking centers and promote expanded parking options in New Mexico.

- ***Coordinate Locally, Regionally, and State-wide***

Work with local, regional, and state officials to identify appropriate sites for trucking centers and additional amenities that are consistent with the development, redevelopment and investment of resources identified in community comprehensive plans.

TRUCKING CENTER PREFERRED SERVICES

According to results from the “Truck Driver Parking and Services Preferences and Needs” survey, there are a range of amenities that make a location a preferred multi-service

trucking center for a range of truck drivers. The services that should be prioritized for trucking centers are listed in order of importance below, as identified from the survey responses.

Table 14 Trucking Center Preferred Services

Preferred Services	Description
Parking Features	Parking facilities should have a security presence and safety features, including lighting, surveillance cameras, and a guarded area/designated security. Facilities should also allow for truck accessibility and maneuverability. Diesel fuel availability should also be included in trucking centers. It is also assumed that truck drivers will utilize trucking centers to park for long-term rest.
Food and Dining	Food choices should include high quality, fresh, and healthy options. Potential dining and shopping options could include salad bars and grocery stores.
Recreation and Exercise	Opportunities for recreation and exercise should include informal green space and areas to walk pets, in addition to formal facilities to exercise.
Proximity	It is beneficial to locate the trucking center in close proximity to both the interstate and an urban area. This could include a local transit service to local amenities.
Personal Care and Leisure	Typical needs for personal care include showers, clinics, and salons for hair and nail services. Trucking centers should also include Internet and Wi-Fi availability.

CLOSING COMMENTS

The sectors identified in this study should not be prioritized among one another because each sector location was established independently and brings distinct value to different areas of New Mexico based on varying origins and destinations of truck drivers. Additionally, national truck parking shortages have been identified as a top issue for truck driver for years. With HOS mandate and forthcoming requirement to use ELDs, the time that truck drivers spend looking for safe, secure parking near desired amenities will eat into the limited amount of time they can driving towards their destination, making this issue all the more pressing in the coming years. With that, there is a significant opportunity to capitalize on this and bring new and expanded economic development to communities in New Mexico.

APPENDICES

APPENDIX A SURVEY DATA AND RESULTS

Truck Driver Parking and Services Preferences and Needs Survey

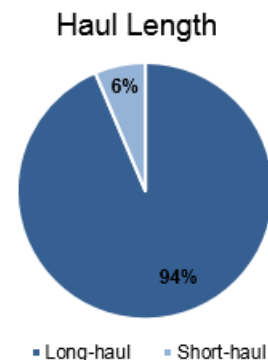
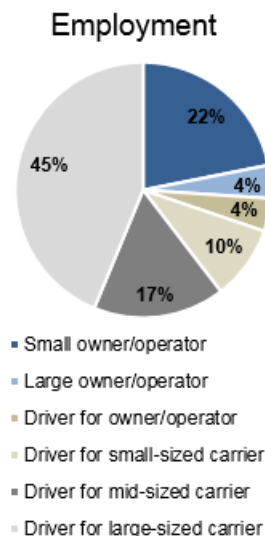
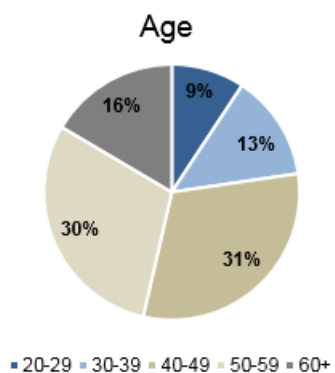
Note: The blue spreadsheets summarize data from the online survey and the green spreadsheets summarize data from both the online survey and the in-person survey along I-10. The charts and graphs summarize data from both the online survey and the in-person survey along I-10.

Driver Background

1. What is your age?			Survey Monkey and I-10	
Answer Options	Response Percent	Response Count	Response Percent	Response Count
20-29	9.0%	7	9%	9
30-39	15.4%	12	13%	13
40-49	26.9%	21	31%	30
50-59	28.2%	22	30%	29
60+	20.5%	16	16%	16
<i>answered question</i>		78	97	
<i>skipped question</i>		0	0	

2. Which of the following driver categories best describes you? (Please check all that apply)			Survey Monkey and I-10	
Answer Options	Response Percent	Response Count	Response Percent	Response Count
Independent owner/operator (1 power unit)	22.7%	17	22%	21
Independent owner/operator (multiple power units)	4.0%	3	4%	4
Driver for an owner/operator	5.3%	4	4%	4
Driver for a small-sized carrier (carrier with 2-10	9.3%	7	10%	9
Driver for a mid-sized carrier (carrier with 11-100	17.3%	13	17%	16
Driver for a large-sized carrier (carrier with over 100	44.0%	33	45%	42
<i>answered question</i>		75	94	
<i>skipped question</i>		3	3	

3. Are you typically a long-haul/ regional or short-haul/ local driver?			Survey Monkey and I-10	
Answer Options	Response Percent	Response Count	Response Percent	Response Count
Long-haul (sleep away from home for work)	92.0%	69	94%	88
Short-haul (sleep at home)	8.0%	6	6%	6
<i>answered question</i>		75	94	
<i>skipped question</i>		3	3	



4. Where is your base of operations (normal work reporting location)?

			Survey Monkey and I-10	
Answer Options	Response Percent	Response Count	Response Percent	Response Count
City	95.8%	69	96.7%	88
State	100.0%	72	100.0%	91
<i>answered question</i>		72	91	
<i>skipped question</i>		6	6	

Number	City	State
1	Winfield	Missouri
2	Apache Junction	AZ
3	Atlanta	Georgia
4	Albuquerque	New Mexico
5	albuquerque	nm
6	Oklahoma City	Oklahoma
7	Las Vegas	NM
8	albuquerque	new mexico
9	Channelview	Texas
10	malvern	pa
11	Springfield	Missouri
12	dallas	tx
13	Portland	Oregon
14		South
15	Missoula	Montana
16	Colcord	Ok
17	Huntington Station	NY
18	Howe	Indiana
19	Toronto	Ontario
20	Gary	South Dakota
21	Oakville	No stare but Province Canada
22	Shelbyville	TN
23	world	none
24	Sault Ste. Marie	On
25	Miami	FL
26	Indianapolis	IN
27		North Carolina
28	Ft smith	Arkansas
29	Flippin	Arkansas
30	Newberry	South Carolina
31	Prescott	Ontario
32	Norton	Kansas
33	Orlando	Florida
34	Rialto	CA
35	Valparaiso	Indiana
36	Tulsa	Oklahoma
37	Missoula	Montana
38	Wroxeter	Ontario Canada
39	Kingsland	Georgia
40	Dallas	Texas
41	Dalton	Oh
42	Dalton	Georgia
43	Montreal	Quebec
44	Pittston	Pa
45	Millersburg	Ohio
46	Gillette	WY

Number	City	State
47	Layton	Utah
48	Calgary	Alberta
49	Nowata	Ok
50	Liberty	Mo
51	Phoenix	Arizona
52	Salt Lake city	Utah
53	Portland	Oregon
54	St Louis	MO
55	St cloud	Minnesota
56	Oklahoma City	Oklahoma
57	Toronto	ont
58		48 state
59	Saskatoon	Saskatchewan
60	Las Cruces and E	NM, TX
61	Plancity	Ohio
62	Vancouver	wA
63	Ft Scott	Ks
64	Billingsley	Alabama
65	Joplin	Missouri
66	Las Vegas	Nevada
67	Loxahatchee	Fl
68	Byron Center	MI
69	Arlington	Wa
70	Columbus	Ohio
71	Trenton	New Jetsey
72	roswell	nm
73	Jackson	TN
74	Fontana	CA
75	Dallas	TX
76	Dallas	TX
77	Henderson	CO
78	Riverside	CA
79	Vinito	OK
80	Frisco	TX
81	Los Angeles	CA
82	Houston	TX
83	Martin	SD
84	Phoenix	AZ
85	Phoenix	AZ
86	Houston	TX
87	Frisco	TX
88	San Bernardino	CA
89	Fontana	CA
90	El Paso	TX
91	Los Angeles	CA

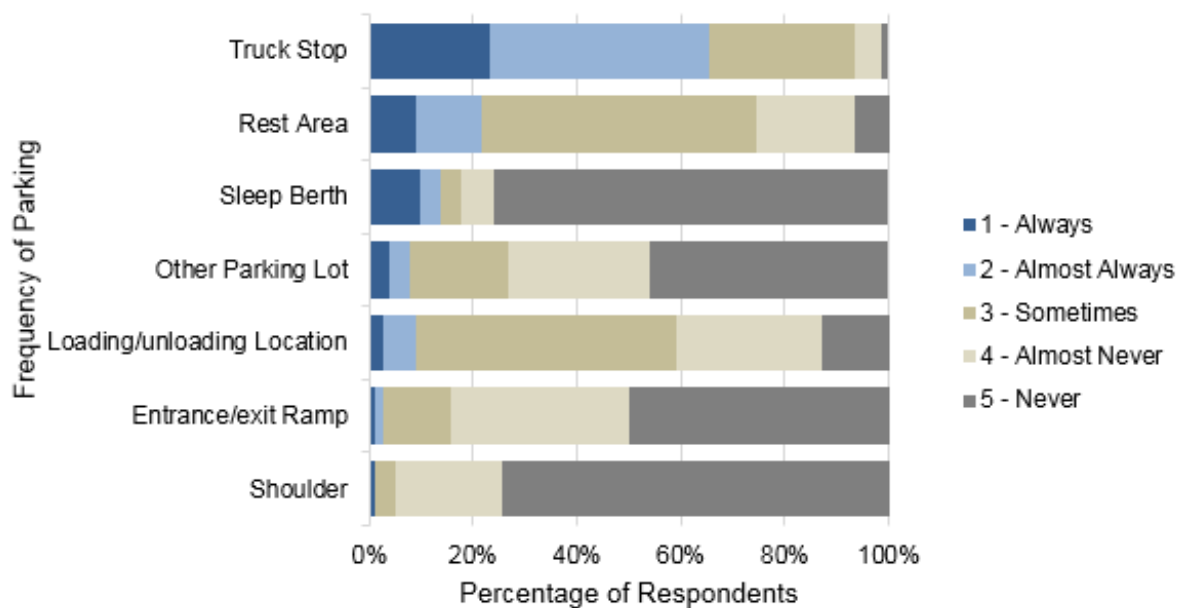
Current Travel Patterns

5. On a scale from 1 (always) to 5 (never), please rate where you park for long-term rest (at least 4 hours of rest).

Answer Options	1 (always)	2	3 (sometimes)	4	5 (never)	Response Count
In a rest area parking lot	7	5	32	15	4	63
In a truck stop parking lot	13	28	19	4	1	65
In a parking lot not designated for truck parking (e.g.	3	1	13	16	31	64
On the shoulder of the highway	1	0	3	11	49	64
On an entrance/ exit ramp	1	1	5	21	36	64
In sleep berth while team driver drives	3	2	3	4	49	61
At a loading/ unloading location	2	4	36	14	8	64
Other (please specify)						4
<i>answered question</i>						65
<i>skipped question</i>						13

Number	Other (please specify)	Survey Monkey and I-10					Response Count
1	Hotels	1 - Always	2 - Almost Always	3 - Sometimes	4 - Almost Never	5 - Never	
2	Shopping center	7	10	41	15	5	78
3	Sometimes at a Walmart	18	33	24	4	1	80
4	Casinos	3	3	15	21	37	79
		1	0	4	16	58	79
		1	1	11	27	39	79
		6	3	3	5	59	76
		2	5	40	22	10	79
							4
<i>answered question</i>							80
<i>skipped question</i>							17

Parking Location for Long-Term Rest



6. Does your company identify stops for you?

Answer Options	Response Percent	Response Count	Survey Monkey and I-10	
Yes	6.2%	4	Response Percent	Response Count
No	93.8%	61	10.7%	9
<i>answered question</i>		65	89.3%	75
<i>skipped question</i>		13		84
				13

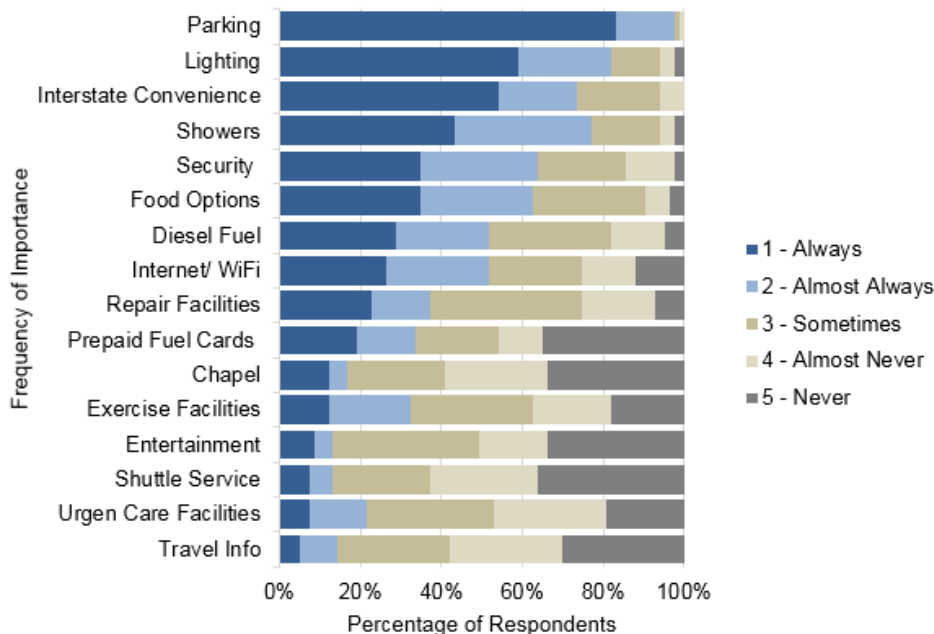
7. On a scale from 1 (always important) to 5 (never important), please rate how often the following services are important to you when you park at a truck stop or rest area.

Answer Options	1 (always important)	2	3 (sometimes important)	4	5 (never important)	Response Count
Convenience to interstate	30	15	15	5	0	65
Restaurant/ food options	20	18	19	5	3	65
Security presence/ features (e.g. guards, cameras,	20	19	16	9	1	65
Available parking	55	8	1	1	0	65
Well-lit parking lot	39	13	9	3	1	65
Diesel fuel available	18	10	22	11	4	65
Prepaid fuel cards accepted	10	8	11	9	27	65
Travel info (e.g. info kiosks, maps)	2	7	16	18	22	65
Internet/ WiFi	15	18	13	9	10	65
Entertainment facilities (e.g. movie theater, arcade,	3	4	22	11	25	65
Repair facilities	11	9	27	12	6	65
Showers	28	21	11	3	2	65
Exercise/ fitness facilities (e.g. gym, golf, walking,	5	13	21	13	13	65
Urgent care facilities	3	7	21	19	15	65
Chapel	6	4	14	17	24	65
Local shuttle service	4	4	18	14	25	65
Other						7
<i>answered question</i>						65
<i>skipped question</i>						13

Number	Other (please specify)
1	Grassy area to play fetch with my dog
2	Just a legal place to park is all I need. Even a dirt parking lot with no facilities will suffice
3	I take offence this survey is altered more for Americans
4	The size of parking spot is wide and long enough for conventional tractor and 53 ft trailer
5	Good home cooking, not cookie cutter restaurants
6	wish those options were available
7	Services for women, like hair, nail salons
8	Doubles parking

Survey Monkey and I-10					
1 - Always	2 - Almost Always	3 - Sometimes	4 - Almost Never	5 - Never	Response Count
45	16	17	5	0	83
29	23	23	5	3	83
29	24	18	10	2	83
69	12	1	1	0	83
49	19	10	3	2	83
24	19	25	11	4	83
16	12	17	9	29	83
4	8	23	23	25	83
22	21	19	11	10	83
7	4	30	14	28	83
19	12	31	15	6	83
36	28	14	3	2	83
10	17	25	16	15	83
6	12	26	23	16	83
10	4	20	21	28	83
6	5	20	22	30	83
<i>answered question</i>					83
<i>skipped question</i>					14

Importance of Services



8. Where did you pick up (or drop off) your last load?			Survey Monkey and I-10	
Answer Options	Response Percent	Response Count	Response Percent	Response Count
City	100.0%	57		76
State	100.0%	57		76
<i>answered question</i>		57		76
<i>skipped question</i>		21		21

Number	City	State
1	Cincinnati	Ohio
2	Demming	New Mexico
3	Anniston	Alabama
4	Hillsboro	Oregon
5	albuquerque	New Mexico
6	Dallas	Texas
7	Albuquerque	New Mexico
8	Baytown	Texas
9	Hoboken	New Jersey
10	Atlanta	Georgia
11	Atlanta	Georgie
12	Springfield	Missouri
13	Hagerstown	Maryland
14	Hershey	Pennsylvania
15	Hebron	Kentucky
16	Prescott	Ontario
17	Albuquerque	New Mexico
18	Calgary	Alberta
19	Atlanta	Georgia
20	ny	New York
21	Indianapolis	Indiana
22	Little Rock	Arkansas
23	Miami	Florida
24	Winston-Salem	North Carolina
25	Newville	Pensylavania
26	Hutchinson	Kansas
27	Mira Loma	California
28	Phx	Arizona
29	Groveport	Ohio
30	Laredo	Texas
31	Winnipeg	Manitoba
32	Firebaugg	California
33	Fort Worth	Texas
34	Can't	Say
35	Kissimmee	Florida
36	Calgary	Alberta
37	Longview	Texas
38	Indianapolis	Indiana

Number	City	State
39	Greenwood	South Carolina
40	Chico	California
41	Sacramento	California
42	Portland	Oregon
43	Laredo	Texas
44	Oklahoma City	Oklahoma
45	Phoenix	Arizona
46	Fresno	California
47	el paso,	Texas
48	Columbus	Ohio
49	Henrico	Virginia
50	Dallas	Texas
51	El Paso	Texas
52	Dallas	Texas
53	Casa Grande	Arizona
54	Lansing	Michigan
55	Ft worth	Texas
56	Philadelphia	Pennsylvania
57	Olive Branch	Mississippi
58	Jackson	TN
59	Dallas	TX
60	San Antonio	TX
61	Murray	KY
62	Tucson	AZ
63	Palm Springs	CA
64	Phoenix	AZ
65	Arlington	TX
66	Long Beach	CA
67	Phoenix	AZ
68	Nogales	AZ
69	Tucson	AZ
70	Dallas	TX
71	Phoenix	AZ
72	Arlington	TX
73	San Bernardino	CA
74	Tucson	AZ
75	Boyleins	VA
76	Dallas	TX

9. Where will you drop off this load (or pick up the next load)?			Survey Monkey and I-10	
Answer Options	Response Percent	Response Count	Response Percent	Response Count
City	100.0%	55		74
State	100.0%	55		74
<i>answered question</i>		55		74
<i>skipped question</i>		23		23

Number	City	State
1	Baltimore	Maryland
2	Phoenix	AZ
3	Renton	Washington
4	Albuquerque	New Mexico
5	clovis	nm
6	Oklahoma City	Oklahoma
7	Buckeye	Arizona
8	Ontario	California
9	Chester	PA
10	Dallas	Texas
11	San Francisco	Ca
12	Phoenix	Arizona
13	Huntington	NY
14	Boise	Idaho
15	Harrisburg	PA
16	Salt Lake city	Utah
17	Indianapolis	IN
18	Shelbyville	TN
19	ny	ny
20	Brampton	ON
21	Dallas	Texas
22	Flippin	Arkansas
23	Atlanta	GA
24	Toronto	Ontario
25	Lexington	Nebraska
26	West Memphis	AR
27	Dallas	Tx
28	Kitchener	Ontario
29	Little Rock	Arkansas
30	Villa Rica	Georgia
31	Milton	Pa
32	Dallas	Texas
33	Can't	Say
34	Chicago	Illinois
35	Anaheim	California
36	Borger	Tx
37	Coppel	Tx

Number	City	State
38	Nashville	TN
39	Mesa	Arizona
40	Portland	Oregon
41	Albuquerque	New Mexico
42	Atlanta	Georgia
43	Pueblo	Colorado
44	Fort Worth	TX
45	Calgary	Alberta
46	los angeles	CA
47	Orange city	Iowa
48	Richmond	VA
49	Dallas	Texas
50	Reno	Nevada
51	Riviera Beach	FL
52	Holland	MI
53	Ft worth	Tx
54	Memphis	TN
55	Trenton	New Jersey
56	San Diego	CA
57	Fontana	CA
58	Gilbert	AZ
59	Gustine	CA
60	Espanola	NM
61	Austin	TX
62	Payor	OK
63	Crona	CA
64	New Orleans	LA
65	El Paso	TX
66	Dalhart	TX
67	Shreveport	LA
68	Phoenix	AZ
69	El Paso	TX
70	Corona	CA
71	Houston	TX
72	Tucson	AZ
73	Douglas	AZ
74	Tollison	AZ

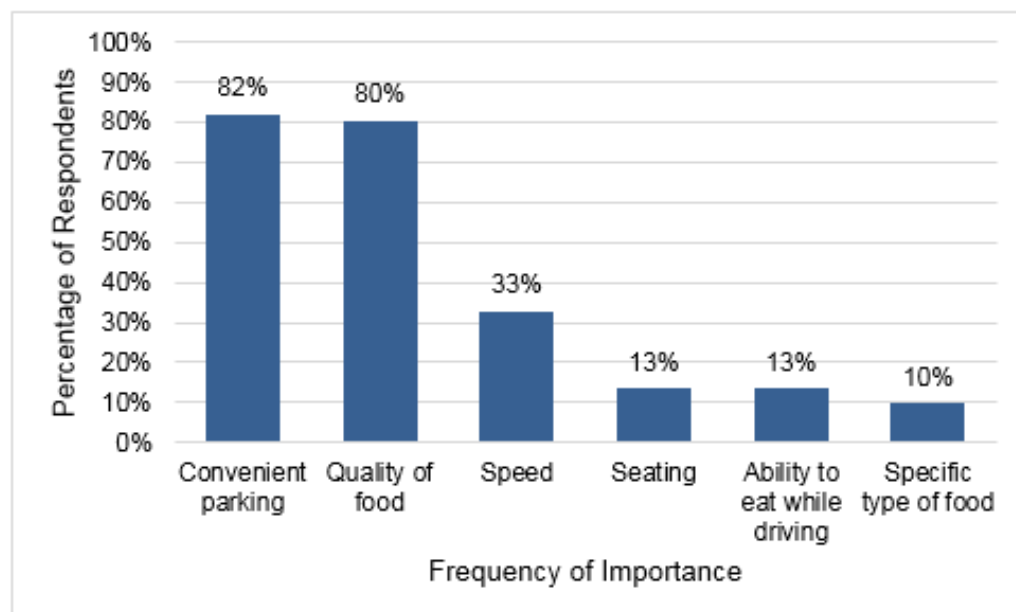
10. How much time on average does it take you to find parking when stopping in New Mexico?			Survey Monkey and I-10	
Answer Options	Response Percent	Response Count	Response Percent	Response Count
Less than 30 minutes	33.3%	21	43%	35
30 minutes to 1 hour	55.6%	35	49%	40
More than 1 hour	11.1%	7	9%	7
<i>answered question</i>		63		82
<i>skipped question</i>		15		15

Future Service Options

11. What are the most important factors for choosing where to eat meals? (mark all that apply)			Survey Monkey and I-10	
Answer Options	Response Percent	Response Count	Response Percent	Response Count
Speed	28.6%	18	33%	27
Convenient parking	81.0%	51	82%	67
Seating	12.7%	8	13%	11
Quality of food	77.8%	49	80%	66
Ability to eat while driving	15.9%	10	13%	11
Specific type of food	12.7%	8	10%	8
Other (please specify)		7		9
answered question		63	82	
skipped question		15	15	

Number	Other (please specify)
1	Salad bar
2	Parking comes first. Quality of food comes second. None I cook in my truck I won't spend money on the States if I don't have to. Americans think there too well no without Canadians you wouldn't have a lot of
3	products
4	Price
5	No fast food/greasy spoon
6	Unique to local culture if possible Fresh and healthy. Also things I can use
7	to cook with in my truck.
8	Healthy options
9	Healthy food

Important Factors for Choosing Where to Eat Meals

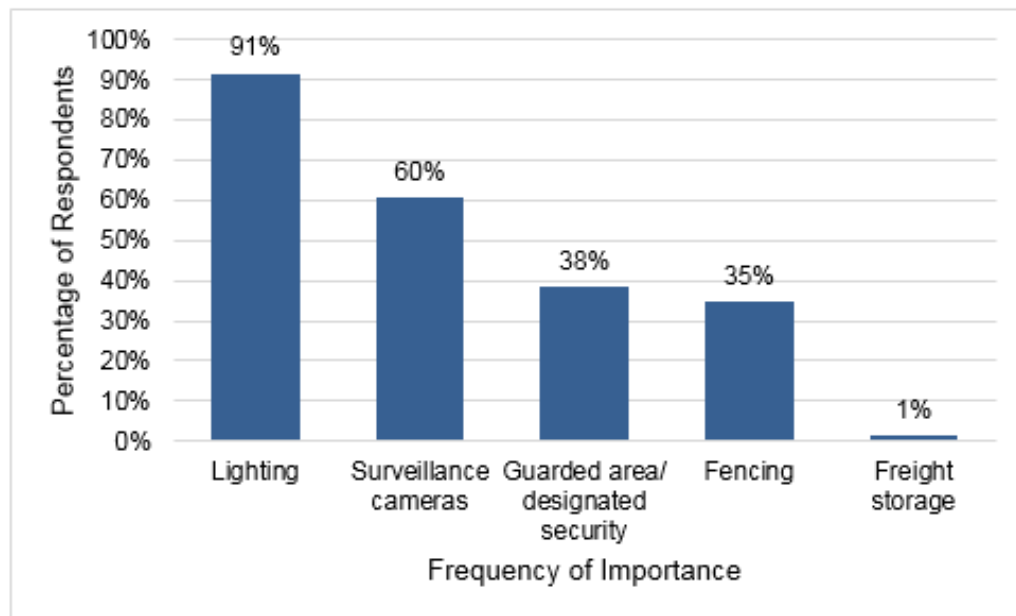


*The percentages do not sum to 100 because survey respondents were asked to mark all that apply.

12. What security services are important to you? (mark all that apply)			Survey Monkey and I-10	
Answer Options	Response Percent	Response Count	Response Percent	Response Count
Guarded area/ designated security	34.9%	22	38%	31
Fencing	36.5%	23	35%	28
Surveillance cameras	58.7%	37	60%	49
Lighting	87.3%	55	91%	74
Freight storage	1.6%	1	1%	1
Other (please specify)	4.8%	3	6%	5
		answered question	63	
		skipped question	15	
			81	
			16	

Number	Other (please specify)
1	Carry permit for ALL states!
2	Not in high-crime area
3	No obvious signs of crime activity
4	I won't stop at NM rest area after dark after seeing drug dealers
5	No civilians

Important Factors for Safety Needs

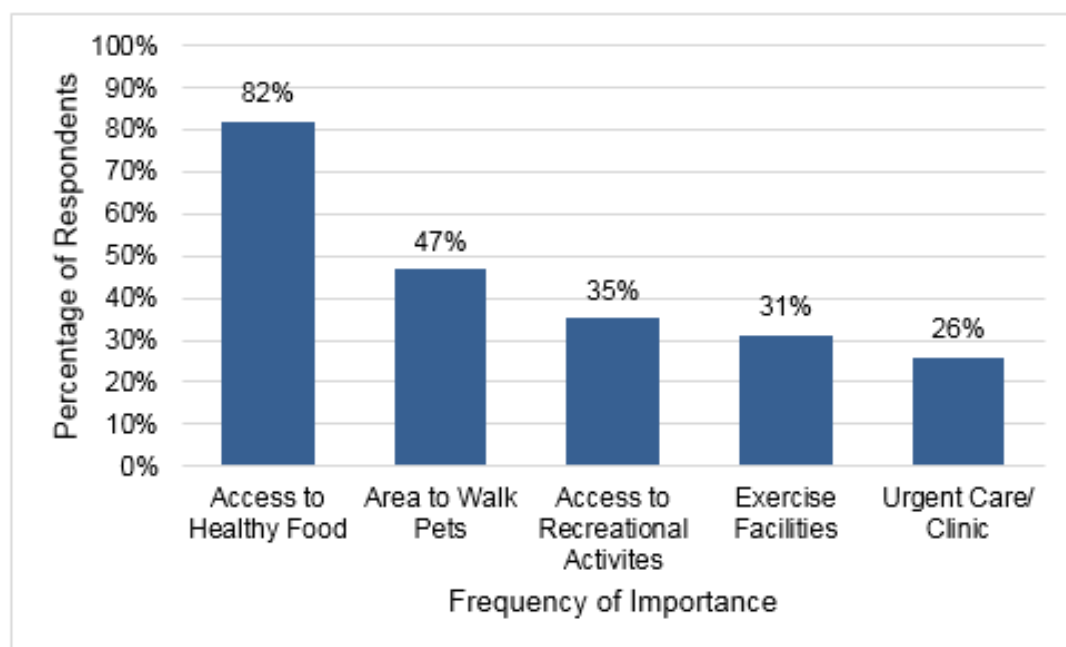


*The percentages do not sum to 100 because survey respondents were asked to mark all that apply.

13. Which of the following health/ wellness services are important to you? (mark all that apply)			Survey Monkey and I-10	
Answer Options	Response Percent	Response Count	Response Percent	Response Count
Access to Healthy Food	83.1%	49	82%	63
Area to Walk Pets	49.2%	29	47%	36
Exercise Facilities	22.0%	13	31%	24
Access to Recreational Activities	39.0%	23	35%	27
Urgent Care/ Clinic	23.7%	14	26%	20
Other (please specify)		3		3
<i>answered question</i>		59		77
<i>skipped question</i>		19		20

Number	Other (please specify)
1	Dentist
2	these are dream options
3	Hair care, nails, massage

Important Factors for Health and Wellness Needs



*The percentages do not sum to 100 because survey respondents were asked to mark all that apply.

14. Would you use a shuttle to reach additional services?			Survey Monkey and I-10	
Answer Options	Response Percent	Response Count	Response Percent	Response Count
Yes	59.4%	38	58%	48
No	40.6%	26	42%	35
<i>answered question</i>		64		83
<i>skipped question</i>		14		14

15. If so, how long would you travel on a shuttle?			Survey Monkey and I-10	
Answer Options	Response Percent	Response Count	Response Percent	Response Count
0-10 minutes	43.2%	19	49%	29
10-30 minutes	50.0%	22	46%	27
30+ minutes	6.8%	3	5%	3
<i>answered question</i>		44		59
<i>skipped question</i>		34		38

16. If you would like the opportunity for a follow-up discussion, please leave your contact information below and we will get in touch with you.		Survey Monkey and I-10
Answer Options	Response Count	Response Count
	11	14
<i>answered question</i>	11	14
<i>skipped question</i>	67	83

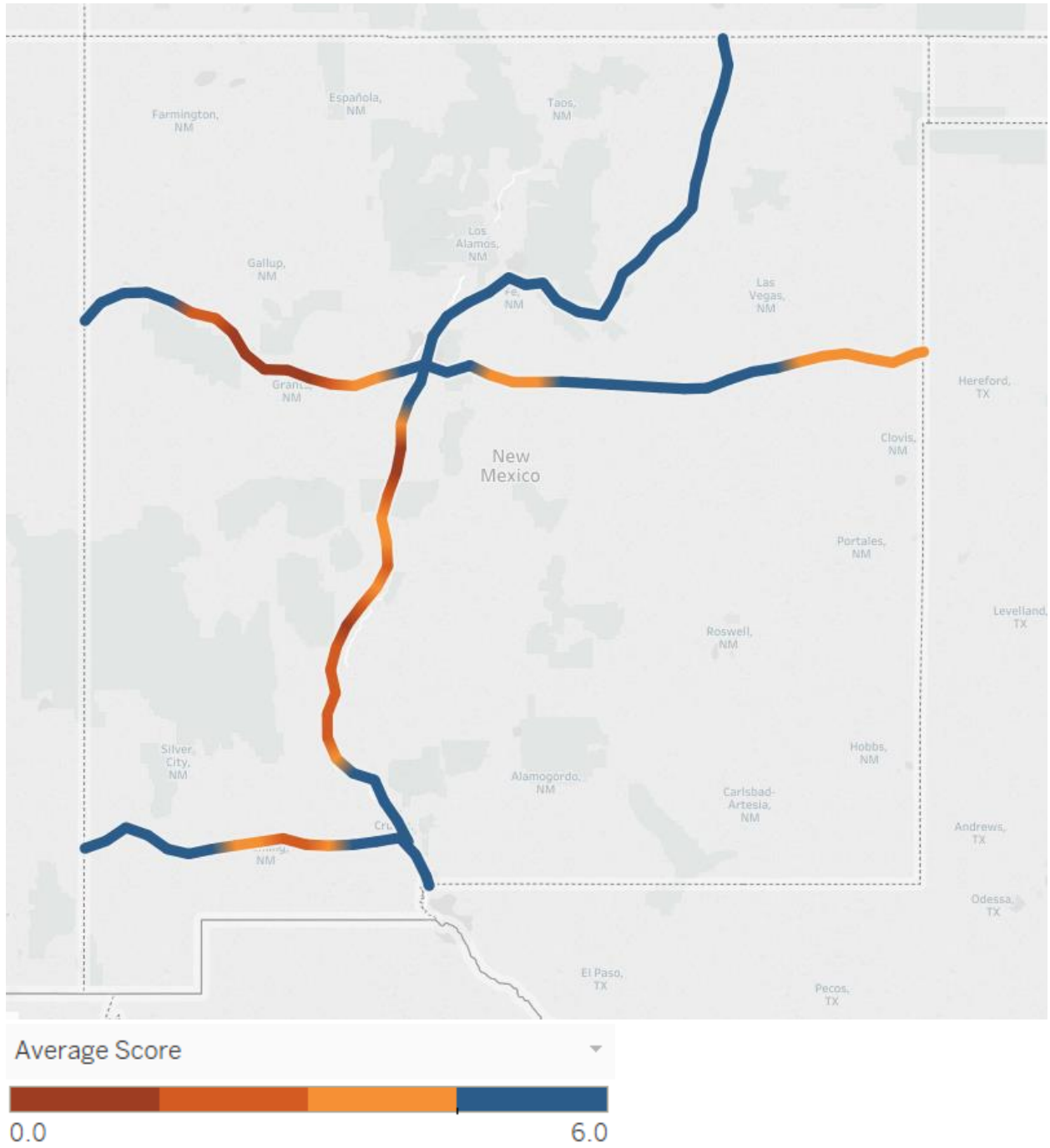
Survey Conducted by the Greater Gallup Economic Development Corporation (GGEDC)

Age	Which of the following driver categories best describes you?	Does your company offer a health & wellness program?	Are you TYPICALLY a LONG-HAUL or SHORT-HAUL driver?	In a TYPICAL week on the road, HOW MANY TIMES do you park in the following HAUJ/REGIO places for long-term rest (at least 4 hours of rest)?	Who TYPICALLY decides where you will stop to park?	If you park to SLEEP AWAY FROM HOME, WHEN IS THE DECISION MADE about where you will park?	On scale from 1 to 5	Where did you pick up (or drop off) your last load?	Where will you drop off this load (or pick up the next load)?	Where is your home base (normal work reporting location)?	On this trip, where did you last park your truck to sleep?	Where is the next place that you plan to park your truck to sleep?	Notes					
41-45	Independent owner/operator (1)	Yes - Health Insurance	Long-haul	Rest Area Parking Lot Truck Stop Parking Lot Entrance/Exit Ramp Loading/Unloading Location	I do	As I'm driving, the decision is made	Convenience to highway Well-lit parking lot Ample parking Travel Info Entertainment Facilities Internet/Wifi Security Presence Repair Facilities Exercise / fitness Restaurant Urgent care facilities Chapel Local shuttle service Other	1 1 1 2 2 2 1 1 2 1 2 1	1 1 2 2 1 1 1 2 1	Mettler	CA	Rosenhayn	NJ	Lester	IA	Rest Area - AZ	1. Roads need to be better. Roads in AZ really bad. 2. Likes NM's 75MPH speed limit 3. Had travel dog which needed to be walked	
56-60	Driver for mid-sized carrier	Yes - Health Insurance	Short-haul	Sleep at home	N/A	N/A	Convenience to highway Well-lit parking lot Ample parking Travel Info Entertainment Facilities Internet/Wifi Security Presence Repair Facilities Exercise / fitness Restaurant Urgent care facilities Chapel Local shuttle service Other	1 1 1 4 4 1 1 1 1 4 1	1 1 4 4 1 1 1 4 1	Hesperus	CO	Gallup	NM	Fruitland	NM	N/A	N/A	1. High Country Trucking * More fuel stalls
25-30	NA	NA	NA	NA	NA	NA	NA	Salt Lake City	UT	NA	OK	Sacramento	CA	Bakersfield	CA	N/A	N/A	1. Stopped here because only place with [east] Indian food
46-50	Independent owner/operator (multiple power units)	NO	Long-haul	Truck Stop Parking Lot In sleep birth while team driver drives Loading/Unloading Location	I do	Before I start driving, the decision is made	Convenience to highway Well-lit parking lot Ample parking Travel Info Entertainment Facilities Internet/Wifi Security Presence Repair Facilities Exercise / fitness Restaurant Urgent care facilities Chapel Local shuttle service Other	1 1 1 4 4 1 1 1 1 2 4 5	1 1 1 4 4 1 1 1 2 4	Oklahoma City	OK	Sacramento	CA	Oklahoma City	OK	Have not stopped	Loading dock	
41-45	Independent owner/operator (multiple power units)	NO	Long-haul	Truck Stop Parking Lot	I do	Before I start driving, the decision is made	Convenience to highway Well-lit parking lot Ample parking Travel Info Entertainment Facilities Internet/Wifi Security Presence Repair Facilities Exercise / fitness Restaurant Urgent care facilities Chapel	1 1 3 4 4 3 3 1 1 1	1 1 3 4 3 1 1 5	Fresno	CA	Boston	MA	Moriarity	NM	TruckStop	TruckStop	1. Cell Phones negate need for kiosks 2. Driving route is planned out

APPENDIX B I-25 SCREENING PROCESS OVERVIEW

I-25 SCREENING PROCESS OVERVIEW

Below is a preliminary image, generated during Phase 1, which identifies I-25 interstate sections that are more likely to be areas where truck drivers will reach at the end of their 11 hours of service drive time. The higher values, identified on the blue end of the scale below, indicate a greater chance that drivers will reach a given area in 11 hours from their origin. However, I-25 was removed from further evaluations due to low current and projected truck volumes on the corridor.



**APPENDIX C PRIVATE PARKING FACILITY
OUTREACH**

PRIVATE PARKING FACILITY OUTREACH

In parallel to the analysis described above, the study team contacted the two largest private travel center companies with facilities along I-40 and I-10: Pilot and Love's Travel Centers. Pilot Travel Centers (which include Flying J) have over 550 company-owned sites nationwide and an additional 50 sites shared with other companies. Each year they construct 15-25 new sites nationwide. Approximately 90 sites nationwide are under construction for retrofits each year.¹ In New Mexico there are nine Pilot Travels/Flying J Centers, the largest of which is located in Jamestown (McKinley County) along I-40 (milepost 39 on Map 10), which features a truck repair facility. Additional facilities along I-40 include:

- Albuquerque (Bernalillo County),
- Moriarty (Torrance County),
- Santa Rosa (exits 273 and 275 on Map 12, Guadalupe County),
- Tucumcari (Quay County).

Along I-10 there are facilities in Lordsburg (exit 24 on Map 6, Hidalgo County) and in Las Cruces (exit 139 on Map 8, Doña Ana County). Other facilities in New Mexico are not located on interstates and include locations in Carlsbad (Eddy County) and Eunice (Lea County).

Love's Travel Centers has approximately 350 travel centers in the United States and the company is building new ones each year. In New Mexico there are eight Love's facilities, including one in Tucumcari (Quay County) along I-40 that was recently razed and a new facility built with additional parking. This new site is now full most nights. At the old Albuquerque location along I-40 there were no locations to expand parking cost effectively, which is one reason why Love's built an additional location west of town. The new location west of Albuquerque has a frequently full parking lot. Additionally, Love's has determined that it would not be economically feasible to purchase the property adjacent to this location for additional parking.

The Milan location in Cibola County on I-40 is an older store and the parking is often at capacity. There is adjacent property, but Love's does not know about availability. In Gallup (McKinley County) along I-40 there is an older store (exit 16, Map 10), and parking is full

¹ Rick Ellison, Vice President of Strategic Excellence, Pilot Travel Centers 9/16/2016

continually. There is some adjacent property but Love's does not know about availability. The Santa Rosa store in Guadalupe County along I-40 (exit 277 on Map 12) is a new design store and parking is full most nights. Loves owns the adjacent property, but it would be expensive at this time to add more parking. The Las Cruces facility located in Doña Ana County along I-10 (exit 132 on Map 8) is an older location, and parking is full most nights. There is some adjacent property but Love's does not know about availability. At the Lordsburg facility in Hidalgo County along I-10 (exit 20 on Map 6), Love's recently added more parking; nevertheless, this facility is still full most nights. Love's has plans for new sites under consideration in the City of Belen in Valencia County and the City of Las Vegas in San Miguel County, both along I-25.²

² Rick Shuffield, Vice President Real Estate, Loves Travel Centers 10/14/ 2016