



The Tioga Group, Inc. – Dowling Associates, Inc.

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I. Executive Summary

The ACCMA and Caltrans are trying to better understand the needs of truck parking and ways to accommodate such activities that would lessen traffic congestion in Alameda County. While this study has a very specific focus, truck parking, it does relate to the broader issue of goods movement and the impact of goods movement on traffic congestion in Alameda County. The I-80, I-580 and I-880 corridors through the County have the highest incidents of truck traffic, trucks parking, and congestion. This congestion negatively impacts, amongst others, truckers and businesses to which trucks seek access and traffic in major thoroughfares along major truck routes. The situation is expected to worsen. Projections are that by 2017 the U.S. will have 40% more trucks operating 48% more miles than in 2005.

Most parking of trucks is not in the public eye because it occurs on private property and is conducted appropriately. Truck drivers have four basic reasons for parking their trucks, which creates the need for temporary and long term (greater than 10 hours) parking. First, to serve customers at the customer's site. Second to stop temporarily for personal needs and/or to await instructions as to what to do next. Third is when the driver must take the mandated 10 hour rest period. Fourth is at the end of the day when the truck returns to its home base. The occasion that provokes public involvement is when the truck is parked in a location that is deemed inappropriate. Often this results in local regulations prohibiting parking in designated locations, sometimes including the entire local jurisdiction. Such prohibitions do not lessen the need for temporary or long term truck parking. The focus of this study is primarily on the second and third reasons and reason number four if the truck is parked inappropriately.

This project concludes that:

- There is a shortage of truck parking facilities, in part because no one provides for them.
- Drivers that are not domiciled locally prefer to leave the Bay Area at the end of their work assignment in large part because they no there are no satisfactory facilities in the immediate area. They know that when they get "stuck" within the Bay Area, the choices of where to park are few and not satisfactory.
- Public agencies often are put in the position of reacting to individual complaints of inappropriate truck parking rather than planning for truck parking as a community requirement.
- Commercial truckstop operators cannot find suitable sites, and if they do, they face very onerous local conditions and objections.

There are sites in Alameda County that might be suitable for stopping or parking even if not suitable in the judgment of truckstop operators. Thirty three were located; ten ranked highest in opportunity. Drivers have distinct preferences for locations for such sites.

Specifically, they prefer sites that are:



- Close to the customers
- In the vicinity of I-238 and I-880 and along I-880 in Oakland

This report provides substantial information and a status report. It makes recommendations for what should be done next. Recommendations are made to begin a dialogue about creating temporary and long term truck parking locations in Alameda County. Because many of the actions are under the purview of local jurisdictions, all recommendations are intended as first steps in working with the jurisdictions to find a balance among economic, community, environmental and trucking needs and in identifying one or more truck parking facilities in Alameda County. They are presented in three categories intended for CMA Board approval: policy actions, implementation actions, and other actions.

The top recommendations in each category are:

<u>*Policy actions:*</u> The CMA should work with the local jurisdictions to identify and adopt guidelines for accommodating and developing truck parking facilities, including identifying ways to accommodate truck parking in local land use development and redevelopment processes. Local jurisdictions should be encouraged to adopt and implement the guidelines.

Implementation actions: The CMA should develop a one-page Fact Sheet highlighting the benefits trucks provide to Alameda County and its communities and why temporary and long term truck parking areas are needed.

<u>Other actions:</u> These actions would require that the CMA pursue additional grants or other funding to support them. The first is that the CMA should continue to work with local community groups, the air district, MTC, Caltrans, and the trucking industry to gather input on the issue of truck parking in Alameda County.

All of the actions are interdependent and deserve to be considered as an integrated whole.



II. Introduction

Background

The Alameda County Congestion Management Agency (ACCMA), which is responsible for managing congestion on the County's roadways, and Caltrans District 4, which is responsible for the maintenance and operations of State Highways, are trying to better understand the cause of trucks stopping or parking and to identify ways that truck parking can be accommodated to lessen traffic congestion in Alameda County. While this study has a very specific focus, truck parking, it does relate to the broader issue of goods movement and the impact of goods movement on traffic congestion in Alameda County.

The I-80, I-880 and I-580 corridors have the highest truck volumes of any highway corridors in the Bay Area. They comprise portions of the regional and interregional routes between the Bay Area and other locations in other portions of the Bay Area, Southern California, and the California valleys. These corridors are congested due to competition for limited roadway capacity from local, commute, freight, and recreational traffic and, as such, experience significant delays. This congestion negatively impacts, among others, truckers and businesses to which trucks are seeking access and Alameda County's ability to provide access to goods and services.

Truck operators in Alameda County report that they are currently experiencing a significant shortage of space for truck parking. This can impact truck operations to the extent that space that would otherwise be used for operations is subordinated to truck parking or storage. It also potentially affects neighborhoods and freeway ramps, particularly those adjacent to trucking facilities, as trucks may be forced to park on city streets or state highway ramps. This has negative impacts to neighborhoods including reduced air quality, increased noise pollution and blight and to state highways including possible safety issues. The shortage of truck parking is compounded by increases in freight activity and overall congestion.

The occasions of truck stopping or parking may be getting worse. Based on data from the American Trucking Associations' report "U.S. Freight Forecast to...2017" 40% more trucks are expected on the nation's roads with a corresponding 48% increase in miles traveled as compared to 2006. Hence, the expectation is that the occasions of truck parking and stopping, particularly in and around metropolitan areas, could increase as well.

There are no existing full service truck stops in the immediate Bay Area. Some, which are not in the immediate Bay Area, have been closed (Cordelia and Gilroy), and more departures (Sacramento) are expected. Newer sites (Westley and Lodi) appear to be prospering. A planned facility at Dixon is having difficulties with the approval process. But, nothing is planned "close in" except OMSS at the Port of Oakland, which will exist to cater to trucks serving the Port of Oakland.

Most parking of trucks is not in the public eye because it occurs on private property and is conducted appropriately. Primarily this includes parking at truck terminals or parking facilities located at industrial sites where the trucks spend the night and weekends. The second most prevalent locations are the shipping and receiving locations where the trucks load and unload their



cargos, which is usually the customers' locations. The third is at a truck stop usually along a major freeway in the countryside or on the perimeter of a metro area.

However, trucks at the above locations are rarely the locations where truck parking or stopping is controversial. The occasion that provokes public involvement is when the truck is parked/stopped in a location that is deemed inappropriate. Most involve truck parking in residential areas, in business zones where curb space is lacking, along major freeways and roadways, and where a nuisance is created. The nuisance can be a wide range of activities, anything from unnecessary idling of the truck engine to blocking line of sight to making noise to lack of enforcement of truck parking regulations. Sometimes the locations the driver selects can be deemed unsafe or unsecured, and while a driver probably knows that, the driver has elected to park/stop anyway.

Organization Of This Report

This Final Report for this project is organized as follows. It contains an Introduction including Project Purpose and Scope. Next there is an abridged version of the Key Findings that cut across the four Technical Reports. That is followed by two analyses. The first is a Description of the Characteristics of Parked or Stopped Trucks. The second is an Assessment of the Types of Parking Sites Considered. Findings and Conclusions that transcend the individual Findings in the individual Technical Reports follow. Recommendations is the final chapter. At the end is an Appendix. The first four items in the Appendix are the four Technical Reports. The last five items in the Appendix are the supplemental papers created by the consultant, The Tioga Group, to help guide the project. These reports were written primarily to aid in understanding trucking operations.

Project Purpose And Scope

This Final Report for the "Truck Parking Facility Feasibility and Location Study" is sponsored by the Alameda County Congestion Management Agency (ACCMA) and Caltrans District 4 and conducted for the ACCMA by The Tioga Group, Inc. (Tioga). Caltrans funded the project with Federal funds through a State Planning and Research grant in the amount of \$170,000.

In an attempt to provide solutions for short and long-term truck parking issues in Alameda County, this study was conducted to investigate the need for and feasibility of truck parking facilities, with emphasis in Alameda County, and to recommend potential truck parking facility locations in the I-80, I-880, and I-580 corridors. The focus of the study was on regional truck parking needs and the patterns of inappropriate truck parking in the metropolitan area in and surrounding Alameda County.

Two decisions helped focus the issues and the project. While Port of Oakland parking issues are considered in this study, they are not analyzed. The Port situation is the topic of other intensive actions by the Port, its neighbors, and the truckers that serve the Port. Similarly, there is an acknowledged shortage of parking/stopping spaces at rest stops on the major Interstate highways in the U.S. This is a the topic of a major project being conducted at the federal level by the U.S. Department of Transportation which was referenced in order to inform this study. A key finding is that the federal effort does not include the Interstate Highways in this study's area because there are no existing roadside rest areas on the Interstate Highways in this study area.



To develop the study, a Task Force was formed that included staff members from the following stakeholder and impacted jurisdictions: Caltrans, Metropolitan Transportation Commission (MTC), San Joaquin Council of Governments, Port of Oakland, East Bay Economic Development Alliance, West Contra Costa Transportation Advisory Committee, Bay Area Air Quality Management District, members of the trucking community, and the Bay Area World Trade Center. Once the results of the study were available, the Task Force was expanded to include the following jurisdictions to assist in developing the recommendations and to provide input on the Draft Report. The jurisdictions include: Oakland, Hayward, Alameda County, Union City, Dublin, Pleasanton, and Livermore.

Definition of Trucks

There are industry standards for defining trucks, but depending on the party doing the classification, such classifications are not consistent. Two are provided here. The first is the manufacturers' definition that covers only powered units, not combination vehicles, is shown in , below. The second is the definition used by the U.S. Department of Transportation (FHWA Scheme F). It includes powered units plus power units in combination with semi and/or full trailers as shown in Exhibit 2, below. This project is primarily concerned with manufacturers' Class 7 and 8 tractors and FHWA Class 6 through 13.



Exhibit 1: Manufacturer's Version of Truck Classification Categories





Exhibit 2: FHWA's Version of Truck Classifications

Unfortunately neither definition includes the combination vehicle that is a truck pulling a full/pull trailer, which is a combination prevalent in California particularly as a liquid or gas tank combination or a hayrack combination. These are a special case of Class 11 where the tractor and first semi trailer is a Class 6 truck pulling a full (not semi trailer) as in Class 11 (where the first axle of the second trailer is a permanent integral axle as opposed to a detachable converter gear). This project is primarily concerned with manufacturers' Class 7 and 8 vehicles (powered) and FHWA Class 6 through 13.

It is important to note that neither is the classification system used by Caltrans. Also, most in the trucking industry use the manufacturers' version, and when they use it, they include trailers.

III. Key Technical Findings

This chapter summarizes the key findings from the technical reports produced for this study. The Project Work Plan called for six tasks. Task 2 provided for four technical reports consisting of surveys and data collection on the topics of:

- Sites, including characteristics and services, and potential/existing locations. (Appendix A)
- Input from local agency officials. (Appendix B)
- Input from national and local truckstop operators. (Appendix C)
- Input from truck drivers stopped or parked at the time of survey. (Appendix D)

In addition, as guided by the study Task Force and ACCMA Project Manager, there were a number of topical items that were isolated and for which Tioga created descriptions and evaluations.

Truck Activity Data

A number of important facts and data about truck activity in Alameda County and the San Francisco-Oakland-San Jose census based statistical area are summarized below and detailed in Appendix E. Specifically:

Of the "trucks" of 4,000 pounds gross vehicle weight or more as defined by the Society of Automotive Engineers and as reported by the Census Bureau in its "Vehicle Inventory and Use Survey: 2002", 77.6% are personal (mostly larger autos, vans and pickup trucks), 17% are used in business, and 5.4% are service and freight trucks.

Of the on-highway truck trips in the nine county Bay Area (as uniquely defined by the Census Bureau for its "Vehicle Inventory and Use Survey: 2002"), 71% are 50 one-way miles or less, 23% are more than 50 one-way miles and less than 200 one-way miles; and 6% are more than 200 one-way miles.

Nationally, by 2017, the number of freight trucks is expected to increase by 40% and the miles operated by 48% over 2005 levels. The greater increases will be in Class 7 and 8 tractors within local areas. The Class 7 & 8 population is expected to increase over 40% with the miles traveled nearly doubling. The greater increase in local areas, such as the Bay Area and central California is due to increasing population and commercial activities.

The total number of establishments dominates the trucking intensiveness of various East Bay corridors and employment as displayed in Exhibit 3. The Tioga Group compiled this data for the Metropolitan Transportation Commission for a report that is not yet released by MTC.



Interstate	Corridor	Business Establishments	Employment
I-80	Richmond to Emeryville	2,275	57,526
I-80/I-880	Oakland	2,491	64,388
I-880	San Leandro to Union City	4,105	94,724
I-880	Fremont to Newark	1,213	46,719
	Total	10,084	263,357

Exhibit 3: Count of Businesses and Employment by Corridor

The map below, Exhibit 4, shows by "band width" the number of heavy-duty trucks (whether for service or freight, and defined as vehicles or combination of vehicles with 4 or more axles) on the key East Bay Area Interstate, Federal and State highways. It shows that the counts are concentrated on the Interstate System that serves the East Bay business establishments located in Alameda County.





Exhibit 4: Truck Trips (4+ axles) in Alameda County

Larger versions of the maps are in the Appendices.

Even with these sources, there are reports from realtors and development agencies of both for-hire and private carriers, particularly those not based in the area, not being able to find suitable, economic accommodations, particularly for just a few trucks for overnight. Hence, such truckers will tend to be on public roadways leaving/entering the Bay Area, particularly during rush hours, and particularly in the commute direction, aggravating congestion.

In the Tri-Valley area, I-580 is a major truck route. However, I-680 through Alameda County (between about Alcosta Blvd. and about Scott Creek Road) has fewer truck trips than any of the corridors listed above. Many of those, at the northerly end, go to and from I-580 East and/or, at the southerly end go across State Route 262 to connect to I-880. In the I-680 corridor in Alameda County as compared to the other corridors listed, it is observed that a larger percentage of the trucks are simply transiting through Alameda County rather than serving local businesses. In part this is due to the fact that the corridor has a much lower density of businesses than the other corridors. Hence, while there is a need for truck parking in the Tri-Valley, particularly along the I-580 corridor, the need is far less in the I-680 corridor.

Site Characteristics And Potential/Existing Truck Parking Locations

Types of sites, including characteristics and services, and potential/existing locations were identified and categorized, see Appendix A. The summary of findings for existing public and private truck parking locations and potential truck parking locations are described below.

Public sites

There are no existing authorized truck parking sites in Alameda or adjacent counties, except for one small truck stop in Oakland, which does not provide overnight services and is so small that most trucks that patronize it park on the curb on San Leandro Street.

The demand for such sites for temporarily stopping and/or for overnight parking is not measured in this study because it was beyond the available scope and budget. There is no established, industry conventional metric for determining such demand. For this study, the demand for truck parking, overnight or short term, was dependent on observation and reports from interested parties.

Private sites

Private sites are trucking terminals or yards/lots controlled by for-hire carriers, manufacturing/distribution facilities operators, and private citizens on which for-hire and private trucks are domiciled. Also there are public works garages on which public service trucks are domiciled.

There is no comprehensive inventory of private sites, but the MISTER report published by the CHP shows many as pictured below in Exhibit 5. Note that this version of the MISTER data cuts off at sites with 25 or more vehicles. There are hundreds more that are sites with fewer than 25 vehicles. The locations are clustered near the major freeways.





Even with these sources, there are reports from realtors and development agencies of both for-hire and private carriers, particularly those not based in the area, not being able to find suitable,



economical accommodations, particularly for just a few trucks for overnight. Hence, such truckers will tend to be on public roadways leaving/entering the Bay Area, particularly during rush hours, and particularly in the commute direction, aggravating congestion.

Potential sites

Approximately 33 potential sites were identified, screened and graded on weighted criteria dealing with site characteristics (not services available).

- This resulted in 10 top candidate sites in the map below designated by green dots. All are more suited to accommodating temporary stopping, but several hold the potential to also be suitable for overnight parking.
- Other sites with potential for either short term or long-term parking (or both) are in the remaining 23 sites.

The sites in the top 10 with the better prospects than the others for overnight parking are numbers 2, 13, 15, 20, 29, 30, 31. Amongst the other 21, the sites with better prospects for longer term parking are 16 and 17. Exhibit 6, below, is a map of the sites.





Exhibit 6: Possible Sites for Truck Parking/Stopping/Overnight Facilities



Local Agency Input

Interviews were conducted with city officials in Alameda County and West Contra Costa County and with Caltrans. A summary of the findings is presented below. More detailed information is found in Appendix B.

Thirteen cities in Alameda County, plus the Port of Oakland Business Park, Alameda County (for unincorporated areas, particularly Castro Valley and San Lorenzo) and the City of Richmond (in Contra Costa County) were surveyed as to current truck parking/stopping regulations, zoning restrictions and reports of inappropriate truck parking. Most reported a distinctly "unfriendly" approach towards trucking and sporadic incidents of trucks parking or stopping deemed inappropriate.

National and Local Truckstop Operator Input

Interviews were conducted with truckstop operators to gain insight on their needs or in interest in locating a site in Alameda County. A summary of the findings from truckstop operators is presented below. More detailed information is found in Appendix C.

A total of 10 truckstop operators were surveyed; one (and there only is one) was local; four were regional operators closest to Bay Area; five were national operators.

Only the local operator expressed a distinct interest in opening another site, which preference was for another within the City of Oakland, albeit for a site on which he would provide only limited services.

One national company is currently developing a site on I-80 at Dixon in Solano County, and the search process could not find a suitable site any closer to the Bay Area.

All national operators observed that land is too expensive, a large enough plot cannot be found, and the California permitting process is so onerous as be to a substantive obstacle. Two observed that due to national fuel pricing with carriers domiciled outside California, the incremental cost of "California diesel" was so much that they could not get an adequate margin on sales in California and that all out of state carriers (and inferred that some carriers with California domiciles) minimized California purchases thereby minimizing the gallonage they might be able to sell.

Truck Driver Input

Surveys were conducted with truck drivers. A summary of the findings is presented below. More detailed information is found in Appendix D. 179 completed interviews were obtained from which there are three dominate conclusions:

• All truck drivers surveyed were looking for locations to stop, and the preferred locations for such stopping locations were on Interstates 880 and 238 in Hayward, Oakland, San Leandro and San Lorenzo.



- All drivers surveyed that are not domiciled in the Bay Area try to plan their trip to get out of the Bay Area by evening, in large part because there are no known, desirable locations where they can "spend the night".
- During daylight hours, most drivers are stopped temporarily awaiting their next leg. They must wait primarily for appointment times or for further instructions.

A couple of other points merit comment:

- Drivers domiciled locally (those based in local truck terminals and manufacturing/distribution centers and therefore return to these locations at the end of the on-duty period) also need places to temporarily stop that are not their home terminals.
- The dominate reasons to stop temporarily involve some variation of waiting for another party to take action so that the trip may proceed, e.g. waiting for an appointment time, waiting for a dispatcher to tell the driver what to do next, etc.
- Virtually every stop or park incident is at the driver's discretion; the company does not suggest locations. The primary source for knowledge of where to stop is observation and/or talking to other drivers.



IV. Characteristics of Parked or Stopped Trucks

Parking Situations

Trucks, including tractor-trailer combinations, usually are found in five situations based on the knowledge and observations by the study team and comments by drivers and local officials surveyed during this project.

- Enroute on the public roadways
- At a customer's location
- At the trucking company's location
- Parked or stopped alongside or near a public roadway
- Parked or stopped on private property

When the truck is not performing its trip, usually the truck is either

- Parked at the company's terminal, yard, or lot),
- Parked alongside the public roadway, possibly in a residential or retail area, but usually in an industrial area, or
- Temporarily stopped alongside or just off a public roadway, which may be on private property.

When trucks are observed stopped (temporarily) or parked (at least for overnight) there is a need to understand why the driver has selected the specific site on which to park. Such selection is discretionary with the driver. Usually the reasons the site has been selected relate to some combination of a) where the driver is domiciled, b) what the driver is expects to do next, and c) the topographical/geographical characteristics of the highway routes.

Bay Area trucking is dominated by local trips that are 50 miles in length or less. There are very few trips that just transit through the Bay Area, e.g. Gilroy to Healdsburg. Therefore, local drivers dominate those trucks that are stopped temporarily or parked overnight in commercial or residential areas. That is because they return to their starting point at the end of each workday, and the starting point is their domicile.

Drivers domiciled outside the Bay Area tend to prefer to exit the Bay Area in part because regional and national trips tend to be overbalanced inbound and, in part, in the effort to get back home. But when "stuck" in the Bay Area, such drivers will tend to park either at/in a motel's parking lot, on the street nearby, or on the street in a commercial area close to the next point at which the driver is to pickup or make a delivery.



The topography of the Bay Area causes almost all regional or national trips to funnel through only five distinct points: Cordelia/Vallejo/Crockett on I-80, the Altamont Pass on I-580, Pacheco Pass on SR 152, Gilroy on United States Highway (USH) 101 South, and Santa Rosa on USH 101 North. The vehicle flow map, in Chapter 2, shows the I-80, I-880 and I-580 effect. Topographical considerations dictate where highways are located. This causes drivers to try to stop and/or park an apex (or funnel) point created by the topography and the geography of the interstate and state highway system.

Some parking sites selected by the driver may be unsatisfactory to the driver and/or the neighbors. Usually this is when the area has residential characteristics.



V. Types of Truck Parking Sites

Parking Site Types

There are three characteristics of truck parking sites that need to be considered when determining what type or types of facilities are appropriate for Alameda or nearby counties. These characteristics are (1) the site, (2) what goes on (or into) the site (herein labeled facilities) and (3) the activities (herein labeled activities or services provided) conducted on the site at the facilities that are on the site. There are two perspectives from which to evaluate the three characteristics: (1) truck drivers and (2) the host community. These perspectives can be very different, but are equally important. This section focuses on the characteristics that are most important to the truck driver(s) and the host community that surrounds a prospective site. This is based on the experience and observations by the study team including comments from the surveys of drivers and truckstop operators.

Sites, Facilities And Activities

Sites, facilities, and activities or services are defined differently depending on whether one is a truck driver or a member of the community. To the driver, the definition of an acceptable site can run the gamut from "just a place to pull over (hopefully safely and securely) for a short moment" to a "full service" truck stop that may be patronized for up to a week at one visit. (The special case of an emergency stop by the truck is not considered here.) To the community, it can range from a minor, temporary nuisance to a major, permanent complication for established or prospective residents/businesses.

Site criteria versus facility criteria

There are various criteria to be considered when evaluating sites, facilities and activities. Valid site criteria tend to be land use and zoning, access to major truck routes, ease of ingress and egress, topography, type of neighborhood and the impact thereon, and cost to prepare the site. Valid facility criteria tend to be the nature of improvements needed such as surfacing, lighting, physical security, space to maneuver a tractor-trailer combination, clearances, set backs and screening. Valid activities or services criteria tend to be the basics that the user would patronize such a trash receptacles, toilet facilities, and fast food/coffee vendors or machines, but they can run to more complex needs such as tire service, truck wash and repair, sleeping facilities. They can also run to unique conveniences and aesthetics such as dog run and "peace and quiet". Those mentioned are not intended to be exhaustive.

Criteria based on truckers' needs

The truck driver is the party that selects the site and is the exclusive user. Hence, for a site to be meaningful, it has to meet certain minimal criteria. These criteria will vary depending on the circumstance and duration of a given driver's expected use of the site.

To a truck driver, the primary site criteria are:



- Vehicle safety and security
- Personal safety and security
- Proximity to expected route of travel
- Sufficient space available to maneuver and park the vehicle the driver is operating

To a truck driver, the basic facility criteria are:

- Ease of ingress/egress
- Level, stable surface
- Free from intrusion by outsiders (fenced)
- Secure (personal, vehicle and cargo) enough to allow sleeping and/or leaving the vehicle

To a truck driver, the basic service criteria are:

- Truck parking available and authorized
- No or low cash cost to access site
- Low cash costs to use services
- No or low indirect cost of added trip miles
- No or low risk of adding driving time due to unexpected traffic complications
- Toilet
- Waste receptacles
- Coffee/soft drink service
- Public or shuttle transportation to nearby services (or walking distance)
- Sit down restaurant

Criteria based on community needs

The immediate community around the parking/stopping site wants little or no disruption to the community. Therefore many residential and mixed used communities do not want such sites in their vicinity. This is true even if the present community arrived after the pre-existing trucking use. Hence, the task is to mitigate impacts of a truck parking facility or work with the community to permit a facility that will have acceptable impacts to the surrounding area.



This is accomplished by locating the truck parking facility at a site that has appropriate General Plan or master planning designations and which includes:

- Compatible surroundings, e.g. industrial, warehousing, commercial, or open land
- Access that does not disturb existing neighbors
- Natural barriers to light and noise emitted from the site

It is done by having facilities that have:

- Artificial barriers to light and noise emission
- Auxiliary power that makes engine idling unnecessary, e.g. Idle-Aire installation

It is done by having services that are:

- Benign in character
- Attractive to local neighbors as patrons
- Provide employment for locals
- Support local community programs

Long Term or Short Term Stopping or Parking Needs

When all that is required is truck parking for a short-term stop, the site requirements are the same as a long-term stop but the situation is materially different than if facilities and services have to accommodate long-term truck parking. When only short term stopping is involved the facilities can be minimal and sparse even if it requires the driver to stay with his truck.

If long-term parking is required, then the facilities have to have the features outlined above in the driver's site and facilities criteria. Often, there need not be any services other than receptacles and portable toilets. However, from the community's point of view, the situation is best when all of the site and facilities are operated to a high level of excellence and satisfaction.

Well-located sites with basic functionality and limited facilities are a good option. Particularly before and during the business day, when there is a demand for long-term parking.

Long-term parking facilities are more complex, but again, basic functionality with limited facilities at sites that have limited community impact has potential. Here the demand is less obvious and less well quantified because it is being met by the actions of individual truck drivers to cope with the present limited parking conditions. Specifically, the driver survey showed that one of the actions is for regional and interregional trucks and drivers to time their entry to and retreat from the Bay Area so as to congregate on the perimeter of the region and to avoid being "stuck" in the Bay Area overnight. However, that is not a fully satisfactory practice, because at least some regional and national drivers do get "stuck" and have few options for satisfactory overnight or long-term parking.



VI. Findings and Conclusions

Overview

There are several overarching findings and conclusions that come from viewing this project in a comprehensive manner. In addition, and not summarized here, are the findings and conclusions in the individual Technical Reports attached as appendices.

This project had two primary objectives. The first was to investigate the need and feasibility for locations where truck drivers could stop temporarily and/or park longer term. The second was to locate some possible sites. The project started with a predilection for full service truck stops or travel plazas but soon became aware of two conditions that are the more prevalent. The first condition is for a truck parking spot to stop temporarily, preferably very close to existing customers. The second is for drivers from out of town that do not do work locally in the Bay Area and prefer to leave the area at the end of the work day to go home or to get pre-positioned for the next job assignment. In particular, drivers do not want to have to try to find a location to stay in the Bay Area overnight because it is well known to the drivers that such locations are few and not very satisfactory.

There Is A Need

Drivers select where they park. The company for which the driver is working only rarely makes the choice. Drivers have at least two dominate reasons to park. The first is just to temporarily stop. The two primary reasons for stopping temporarily are personal needs and waiting for instructions as to what to do next. The second is to park more permanently, particularly for at least ten hours (usually overnight), to either take a mandated rest period and/or to wait for the next business day when customers are open for business.

The only established locations where drivers park are either on their own site, the site of the company for which the driver is working, the property of a customer, or on the street at the curb if not prohibited. The primary purpose of each of the second and third categories is not to accommodate trucks stopping or parking. There are no public locations in the immediate Bay Area where the primary purpose is to accommodate truck stopping or parking. Hence, it is common to observe trucks parked in locations that may be inappropriate.

There are no existing full service truck stops in the immediate Bay Area. Some have been closed (Cordelia and Gilroy), and more departures (Sacramento) are expected. Newer sites (Westley and Lodi) appear to be prospering. A planned facility at Dixon is having difficulties with the approval process. But, nothing is planned "close in" except OMSS at the Port of Oakland, which will be limited to serving port trucks.

There Is A Shortage of Parking In Certain Circumstances

There is a shortage of locations for both stopping temporarily and for parking for a longer period such as the statutory ten-hour period of rest required of drivers. The majority of the parties polled



agree that there is such a shortage. The nature of the shortage depends on the viewpoint and if the party involved has a local facility as follows as diagramed in Exhibit 7, below.

	Local drivers	Regional and national drivers
With a local facility; domiciled locally	Those in this circumstance have a terminal, yard or lot where they go after the workday to park their vehicle, but they do not have designated, organized locations at which to stop during the workday if they are not at a customer's facility. Hence, they may stop temporarily in an inappropriate location on the public roadways or private property.	Those in this circumstance have a terminal, or yard lot where they go after the workday to park their vehicle, but they do not have designated, organized locations at which to stop during the workday if they are not at a customer's facility. Hence, they may stop temporarily in an inappropriate location on the public roadways or private property.
With a local facility; domiciled outside the Bay Area	Not applicable	If domiciled outside the Bay Area, they may return to the local facility to be accommodated but most likely will leave the Bay Area in order either a) to return to their domicile or b) to be pre-positioned for their next work assignment.
Without a local facility; domiciled locally	After the workday is completed, lacking formal locations, they may stop overnight in an inappropriate location on the public roadways or private property. When they want to stop temporarily, they may do so inappropriately for lack of suitable locations.	Those in this circumstance do not have a terminal or lot where they go after the workday to park their vehicle and go to their residence, and they do not have designated, organized locations at which to stop during the workday if they are not at a customer's facility. Hence, they may park and/or stop temporarily in an inappropriate location on the public roadways or private property.
Without a local facility; domiciled outside the Bay Area	Not applicable	Such drivers might prefer to remain in the Bay Area, but generally are aware of the lack of locations either for temporary stopping to wait or for parking to take a rest period. Hence they tend to leave the Bay Area either to get to their domicile or to be pre- positioned for their next work assignment.

Exhibit 7: Drivers' Perspective on Parking Shortage

Metrics and common definitions for defining and sizing the nature of the shortfall do not exist. There is no known compilation of the shortfall (or surplus, if any, anywhere). It is known that certain truck stops that used to exist have been eliminated and that planners do not appear to accommodate the need for trucks and their drivers when considering zoning and local regulations.

Potential Sites

There are no existing full service truck stops in the Bay Area. The closest are on I-5 in the central valley or I-80 at Sacramento, which stop is being forced to close. There is only one limited service truck stop in the Bay Area. That is in Oakland at 85th and San Leandro Blvd. and it is not full service and has so little parking area that often trucks must park on San Leandro Blvd. while the driver walks to the location.

It is feasible to create some locations for short term stopping particularly for the purpose of waiting or personal needs. Selected locations are suggested. Drivers state that they would prefer such locations to be as close a possible to shipping/receiving locations.

Creating long-term parking (overnight) is much more difficult. Possible locations exist, but commercial operators of such facilities see several, significant obstacles to erecting and operating such locations.

Drivers expressed the desire that sites be along I-880, particularly near its junctions with I-238, and close as possible to shipping/receiving locations.

Thirty three sites were found that have varying merits. Ten of the sites were rated as most probable, but each has its own issues that would have to be addressed. These sites, shown in Exhibit 6, should be studied further to determine prospects for potential development.

More generally, the sites already exist and are being used, but such usage is informal and many such sites are fraught with difficulties. Not the least of which is that many municipalities simply prohibit truck parking altogether and most industrial developments to not provide a public site for such stopping or parking.

The difficulties with any potential site have two perspectives. From the viewpoint of the driver, they have to be "at hand" not a good distance away. Also, the bigger they are the better. They must be safe, cargos must be able to be secure, access needs to be immediate, ingress and egress has to be easy, good lighting and fencing are preferred. Drivers also recognize that they have to be acceptable to the surrounding community. From the viewpoint of the neighboring community, they have to be a compatible usage, unobtrusive, and difficulties have to be mitigated before commencing activity.

There is a third factor. Because it is so difficult to get proper permitting at a big enough site at a price for the land that allows commercial success, commercial operators have been discouraged from developing truck parking sites in the Bay Area. Additionally local communities have created blanket prohibitions without providing for this need as part of the local zoning for retail, commercial, industrial, redevelopment sites.



Benefits and Obstacles

Trucking, which moves goods and provides services within and through Alameda County, provides economic benefits to local businesses and residents. Providing adequate, safe truck parking facilities helps the economy, reduces congestion, and improves air quality. Also, it provides an opportunity for productivity enhancements for truckers, shippers and receivers, improvements to safety on state roadways, and for truckers, it provides for minimizing community impacts by consolidating scattered, informal and often inappropriate sites into a few well organized and developed sites.

However, there are obstacles to developing truck parking facilities in Alameda County, including high land prices, fuel prices that are higher than in neighboring states, re-zoning of potentially desirable sites away from industrial uses, and local business practices that adversely affect truck delivery and parking.

Economic considerations from the truck driver and commercial truck stop operators perspectives may present obstacles as well. Drivers are unwilling to pay for parking that can be obtained for free on the public streets. Commercial truckstop operators are unwilling to confront the myriad of restraints and objections to developing truck parking sites.



VII. Recommendations

The ACCMA and Caltrans are trying to better understand the needs of truck parking and ways to accommodate such activities that would lessen traffic congestion in Alameda County. While this study has a very specific focus, truck parking, it does relate to the broader issue of goods movement and the impact of goods movement on traffic congestion in Alameda County. This study was conducted to investigate the need for and feasibility of truck parking facilities, with emphasis in Alameda County, and to recommend potential truck parking facility locations in the I-80, I-880, and I-580 corridors.

Most parking of trucks is not in the public eye because it occurs on private property and is conducted appropriately. Truck drivers have four basic reasons for parking their trucks, which creates the need for temporary and long term (greater than 10 hours) parking. First, to serve customers at the customer's site. Second to stop temporarily for personal needs and/or to await instructions as to what to do next. Third is when the driver must take the mandated 10 hour rest period. Fourth is at the end of the day when the truck returns to its home base. The occasion that provokes public involvement is when the truck is parked in a location that is deemed inappropriate. Often this results in local regulations prohibiting parking in designated locations, sometimes including the entire local jurisdiction. Such prohibitions do not lessen the need for temporary or long term truck parking. The focus of this study is primarily on the second and third reasons and reason number four if the truck is parked inappropriately.

Trucking, which moves goods and provides services into and through Alameda County, has economic benefit to businesses and residents. Providing adequate, safe truck parking facilities helps the economy, helps to reduce congestion, and helps to improve air quality. Providing truck parking can result in a number of benefits including opportunities for truckers, shippers and receivers to enhance their productivity. It can result in improving safety on state highways and for truckers. And by consolidating scattered informal and often inappropriate truck parking sites into a few well-organized and developed sites, community impacts can be minimized.

However, there are obstacles to developing truck parking facilities in Alameda County, including high land prices, fuel prices higher than those in neighboring states, and local business practices that adversely affect truck delivery and parking. Economic considerations for the truck driver and commercial truck stop operator may present obstacles as well. Drivers are unwilling to pay for parking that can be obtained for free on the public street. Commercial operators are unwilling to confront the myriad of restraints and objections to developing truck parking sites.

The following recommendations are made to begin a dialogue about creating temporary and long term truck parking locations in Alameda County. Because many of the actions are under the purview of local jurisdictions, all recommendations are intended as first steps in working with the jurisdictions to find a balance among economic, community, environmental and trucking needs and in identifying one or more truck parking facilities in Alameda County. They are presented in three categories:



Policy Actions

- 1. The CMA should work with the local jurisdictions to identify and adopt guidelines for accommodating and developing truck parking facilities, including identifying ways to accommodate truck parking in local land use development and redevelopment processes. Local jurisdictions should be encouraged to adopt and implement the guidelines.
- 2. The CMA should work with truck centered organizations to a) develop a public education program that identifies the importance of trucking to the Bay Area, State and national economy, b) highlight the impact that the rapid rezoning of local land uses away from industrial uses is having on the trucking industry, and c) identify ways the trucking industry can help minimize truck parking impacts to communities.

Implementation Actions

- 3. The CMA should develop a one-page Fact Sheet highlighting the benefits trucks provide to Alameda County and its communities and why temporary and long term truck parking areas are needed. Distribute the Fact Sheet to local and regional government and/or host a summit to present the findings of the study. At a minimum, the Fact Sheet should highlight the following:
 - Most trucking is local,
 - Truckers need locations to park while delivering goods and services to businesses in Alameda County,
 - Local land use decisions are resulting in re-zoning of potentially desirable truck parking sites away from industrial uses adjacent to highways where truck parking is most likely to be implemented,
 - Truck parking is a regional/state/national issue, but establishing places for them to park is a local decision, and
 - Receiving goods and services via trucks is key to regional economic stability and job diversification.
- 4. The CMA should continue to work with local jurisdictions to identify one or more formal, designated, no-fee facilities for temporary and long term truck parking/stopping in Alameda County. Because this study focused on the needs of truckers, local jurisdiction input is now needed to identify and confirm site criteria and potential sites. Also, the CMA should work with the private sector in developing and funding a facility. Sites at a minimum should:
 - Provide minimal facilities (lavatory, trash barrels, etc.)
 - Be located immediately adjacent to the Interstate routes

- Provide a means of allowing trucks to turn off their engines so that emissions are minimized
- Support general quality of life requirements including safety, environmental justice and social equity issues within potentially impacted neighborhoods and communities

The potential sites identified should be located at apex/gateway points, preferably in Hayward, Oakland, San Leandro, and San Lorenzo where demand for truck parking was identified to be the greatest followed by the Altamont Pass/Tri-Valley area. The study has identified 33 preliminary sites of which 10 had the most potential based on initial screening. Others, such as shared parking opportunities at park and ride lots and other facilities, could be considered as well. At the direction of the Board, staff will investigate what transportation infrastructure improvements would be needed to accommodate a truck parking facility near the I-880 and Industrial Parkway interchange.

If a site is developed, monitor the site's success through detailed records about why a user elected to use it and what else a user needs.

Other Actions

The following actions would require that the CMA pursue additional grants or other funding to support them.

- 5. The CMA should continue to work with local community groups, the air district, MTC, Caltrans, and the trucking industry to gather input on the issue of truck parking in Alameda County.
- 6. Because the survey data's usefulness in determining the need for long term truck parking was limited, the CMA should conduct further evaluation on the need for a full-service, overnight truck parking including the impact that diverting truck trips to rail intermodal would have in reducing the need for truck parking.
- 7. The CMA should work with MTC and Caltrans to develop improved methods of determining demand for short and long term truck parking. No current metric available.
- 8. The CMA should track closely what happens at the new Oakland Maritime Support Center (OMSS) site, which is expected to cater to trucks serving the Port of Oakland; see if OMSS attracts truck other than Port trucks and if so, why.



Appendix A: Sites

Introduction

The purpose of Task 2-1 was to identify and evaluate potential sites for facilities that would accommodate truck parking for tractor-trailer combination vehicles of four or more axles and respond to the needs of truck drivers in Alameda County and adjacent counties. Today, truck drivers are doing at least three things that create this objective.

- Drivers are parking just for a few minutes at any number of sites that may not be meant to be used for truck parking, some of which create issues with the general public or private landowners.
- Drivers are parking for a period of at least 10 hours at any number of sites that are not really meant to be used for extended parking, some of which may create issues with the general public or private land owners.
- Drivers are leaving vehicles (primarily just tractors without the trailers, but sometime with trailers) at the curb or on private property in residential areas. Usually this is for a minimum of overnight or over a weekend.

The objective of this task is to identify potential truck parking sites that could be candidates for authorized, orderly parking of trucks in lieu of the current practices outlined above. Truck parking facilities of these kinds would benefit truck drivers in Alameda County as well as neighborhoods where uncontrolled truck parking occurs. It also has the potential to reduce system wide congestion on Alameda Count roadways by directing trucks to park in a few orderly sites instead of many uncontrolled sites.

Also, it is known that many drivers park trucks on public streets in industrial areas. However, that practice is not the subject of this project. That is because such parking, whether temporary or overnight/weekend tends to be an authorized use of such roadways.

List of candidate sites

This list has been created based on the consultant's observation of potential sites of various types and suggestions from various parties involved in this project. Suggestions of additional sites are welcome as long as this project is not yet finished. A complete list of sites considered to date is in provided in Exhibit 8 and mapped in Exhibit 9.

Based on observation by those conducting the driver survey, Task 2-4, and the consultant's knowledge of trucking operations in and around Alameda County, there are six locations that act as geographic gateways (or apex or funnels) in Alameda County. These tend to create natural locations for truck parking sites due to the number of trucks that pass through these gateways and the proximity of the gateways to shipper/receiver facilities and to the terminals/yards used by trucking companies. These are:



- In Oakland Southbound I-880 at the northern/western Oakland city limits near the intersection of I-880/I-80; this is a gateway to all of Oakland and south to the most important industrial sites in Alameda County.
- In Oakland Northbound I-880 at the southern Oakland city limits near 98th or Hegenberger; this is a gateway to all of Oakland and northbound to San Francisco and Contra Costa Counties.
- In Central Alameda County (San Leandro/Hayward) near the triangle where I-580/I-238/I-880 intersect; this is a gateway to the nearby industrial sites.
- In Hayward/Union City near I-880 at Industrial Parkway and at Whipple; this is a gateway to the nearby industrial sites.
- In unincorporated Alameda County in both directions on I-580 at the top of Altamont Pass; this is a gateway to/from all of Alameda County and the metropolitan area.
- In Fremont (Warm Springs district) in both directions where I-880 and eastbound SR 262 intersect; this is gateway both directions, north to Alameda County and Contra Costa County and south to Santa Clara County.

To the extent that possible parking sites are at these six gateway points, the level of patronage by truck drivers may be maximized thereby minimizing neighborhood impacts and system wide congestion to the Alameda County roadways.

Rating of Sites

The purpose of rating each site is to determine if a particular site is suitable for further consideration. Rating is the first step in a process to identify the need for and availability of potential truck parking sites in Alameda County and adjacent counties. The project Task Force agreed on a three-tiered list of criteria (with weightings for each) for evaluating potential sites. The primary criteria are the focus of this effort in determining if specific sites should be further considered. The secondary and tertiary criteria are provided for informational purposes only. The criteria are:

Primary Criteria

- Safety/Security 3
- Ingress/egress 3
- Immediately adjacent to a major truck route 3
- Community acceptance 3

Secondary Criteria

- Immediately prior to or after departure from a receiving/shipping point 2
- Maneuverability 2
- Compatibility with surrounding land uses 2



- Existing site uses (if any) 1
- Ownership; owner's willingness to sell, lease or temporarily rent the property 1

Other Criteria

- Quiet (applies primarily to driver comfort) 2
- Environmental justice impacts (principally emissions, noise and lighting) 3
- Topography and clearances (i.e., flat sites are best) 1
- Cost to isolate and mitigate impacts 3
- Meets local standards for permits -1
- Economic impact (jobs and training) 3
- Appropriate size and shape of parcel 1
- Visibility from freeways/key truck routes 2
- Compatibility with surrounding land uses 1
- Proximity to public transit 1

The consultant considered the 33 specific sites listed in Exhibit 8. Each site was visited for visual evaluation. Eight sites were eliminated. Three were eliminated because there was not enough existing space to park tractor-trailer combination vehicles without creating safety issues. Three were eliminated because they were in or abutted West Oakland residential areas either existing or under development. Two already are public use areas.



Exhibit 8: Potential Truck Parking Sites

Possible Sites for Truck Parking/Stopping/Overnight Facilities

Surveyed as of 120607

Control # Location	Name (if anv)	City	Primary	Secondary	<u>Sc</u> Su
1 Eastbound I-580 just after leaving San Rafael-Richmond Bridge*	old toll plaza	Richmond	21	<u>3econdary</u> 18	<u>3u</u>
2 West of Garrard Blvd at Canal Blvd **	old Santa Fe Intermodal Ramp	Richmond	30	18	
3 West side of Frontage Road off Southbound I-80 south of Gilman		Berkeley	0	10	
4 West side of Frontage Road on I-80 at Ashby*	South of Golden Gate Fields	Berkeley	0		
5 West side of Frontage Road on I-80 south of Ashby*		Berkeley	0		
6 Northbound I-880 north of 7th Street, west of Frontage Road*	between and under I-880	Oakland	0		
7 27th at Northgate	commuter lot	Oakland	9	12	
8 West of Wood Street*		Oakland	0	12	
9 East side of Maritime Blvd near Grand Ave		Oakland	Õ		
10 Under and adjacent to I-880 between Filbert and Jefferson*		Oakland	24	22	
11 Under I-880 Between Del Monte and one block south of Fruitvale*	Fruitvale	Oakland	21	14	
12 Under I-880 at High Street, one block each direction*	Fruitvale	Oakland	24	20	
13 Frontage Road northeast of 66th Street**	end of 66th	Oakland	33	21	
14 I-880 northbound at in front of Oracle Arena*		Oakland	30	18	
15 East side of Coliseum Way north of Hegenberger**	Malibu lot	Oakland	33	23	
16 West side of San Leandro Street between 81st and 85th St**	adjacent to existing small truck stop	Oakland	24	12	
17 Southwest corner I-880 and Marina Blvd**	old Albertsons and Dean Foods	San Leandro	24	21	
18 Hesperian/Lewelling Loop at I-238 and I-880	old Target	San Leandro	21	14	
19 Southland Mall south of Winton	Southland	Haywafd	21	18	
20 Southeast corner I-880 and Industrial Parkway**	BCAA	Hayward	30	22	
21 Empty lot on south side of Industrial Parkway at Hall Road	Murdoch	Hayward	24	22	
22 I-880 northbound before Industrial and after Whipple*	open ditch	Hayward and Union City	30	21	
23 Empty lot south of NUMMI north of Kato Road	raw land	Fremont	21	21	
24 I-880 northbound underneath SR 262*	new interchange	Fremont	33	22	
25 Empty lot at 19000 Mission*	empty lot	Hayward	24	14	
26 Stub end of I-580/I-238/Mission Blvd/Castro Valley Blvd*	unfinished freeway	Hayward	24	22	
27 West side of Oak, north of Grove Way*		Hayward	6	10	
28 Eastbound I-880 underneath Center Street*	wide spot eastbound trucker use	Castro Valley	21	12	
29 I-580 and Eden Canyon Road**		Alameda County	33	24	
30 I-580 and Fallon/EI Charro**		Dublin/Alameda County	33	20	
31 I-580 and Carroll Road**	Top of Altamont	Alameda County	30	18	
32 Westbound I-80 at the top of the crest before CaSH 37	roadside rest	Napa/Solano (?) County	0		
33 Southbound I-680 at 2nd Street	scenic view	Benecia	0		

* Caltrans property

** Large enough for a full service truckstop

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Exhibit 9: Map of Site Locations


Twenty five sites were rated on each of the criteria on a 0-3 scale. Originally a 1-5 scale had been expected, but as the consultant did its evaluation, it found that the four-point scale was sufficient; that is, there were not enough meaningful points of differentiation to have to use a five-point scale. Also, zero (or not applicable or not available) became a meaningful rating. The rating for each criterion was multiplied by the weighting for the criterion to give a score for each criterion, e.g. Criterion #1 was rated 2, then multiplied by its weighting of 3, equals a score of 6 for that Criterion. Then the scores for each of the four primary criteria were summed to get a total score. The scores for each criterion were summed for each of the three sets (primary, secondary and tertiary) of criteria as follows:

- For the 4 primary criteria (maximum score would be 36), a score of 30 (83%) became a meaningful point to distinguish scores.
- For the 5 secondary criteria (maximum score would be 24), a score of 20 (83%) became a meaningful point to distinguish scores.
- For the 10 tertiary criteria (maximum score would be 54), a score of 44 (81%) became a meaningful point to distinguish scores.

Results of the Rating

The following ten sites ranked highest on the primary criteria (Exhibit 10). Scores for the secondary and tertiary criteria are provided for information only. When the score is in bold print, it is considered to have met even of the criteria to be further considered. When the score is italicized, it is below the meaningful break point. An asterisk indicates that site may be on Caltrans property. Two asterisks indicate that the site may be large enough to hold a truck stop as opposed to just parking.

Control # and Location	Nickname	<u>City</u>		<u>c</u>	Scores		
			Primary	Secondary	Subtotal	Teritary	Total
13- Frontage Road northwest of 66th Street**	end of 66th	Oakland	33	21	54	43	97
15- East side of Coliseum Way north of Hegenberger**	Malibu lot	Oakland	33	23	56	44	100
24- I-880 northbound underneath CaSH 262*	new interchange	Fremont	33	22	55	41	96
29- I-580 and Eden Canyon Road**	-	Alameda County	33	24	57	36	93
30 -I-580 and Fallon/El Charro**		Dublin/County	33	20	53	41	94
2- West of Garrard Blvd at Canal Blvd.**	old Santa Fe Ramp	Richmond	30	18	48	34	82
14- I-880 northbound at in front of Oracle Arena*		Oakland	30	18	48	34	82
20- Southeast corner I-880 and Industrial Parkway**	BCAA	Hayward	30	22	52	45	97
22- I-880 northbound before Industrial and after Whipple*	open ditch	Hayward/Union City	30	21	51	39	90
31- I-580 and Carroll Road**	Top of Altamont	Alameda County	30	18	48	36	84

Exhibit 10: Highest Ranked Sites



Appendix B: Public Officials

The matrix attached shows the results of contacting all of the cities in Alameda County, except Piedmont. The study team also contacted the:

- County of Alameda regarding unincorporated areas, focusing on San Lorenzo and Castro Valley as the areas most likely to be affected by truck parking
- Port of Oakland's airport and real estate (business park) divisions. We did not contact the maritime division, because they have been doing their own studies in the West Oakland/Port area and the issues there are well known.

Initial contact was generally with the planning department, but we often were referred to public works and/or law enforcement for additional information.

- All but two agencies have truck route systems designated. Emeryville and Pleasanton do not have formal truck routes at this time
- Eleven agencies said they had some truck parking issues or problems.
- Most problems occur when trucks park overnight; a few agencies also cited weekend parking of trucks as a problem.
- Most agencies allow truck terminals under their general industrial or heavy industrial zoning categories. A few, mostly smaller cities, do not allow truck terminals at all.
- Only the Port of Oakland stated that they have a pending truck terminal under development (on/near the former OAB property).

Detailed results are presented in Exhibit 11, below.



Exhibit 11: Contacts w	vith Public Officials
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Agency	Date	Contact	Department	Phone	Designated Truck Route System?	Truck Parking Issues?	Where?	Time(s)	Citizen Complaints	Citywide Restrictions	General Plan Designation for Truck Terminal	Pending Truck Terminal?
Alameda (City of)	7/12	Virendra Patel Sgt Ted Horlbeck	Public Works/Police	749-5852 337-8403	Yes, see Police dept website	Yes	1700 to 2200 blk of Clement Ave btw Park & Grand	mainly at night	No	Code 8.7-10 overnight parking of large vehicles Code 8.7-9 truck in residential area	See general plan & zoning map	No
Albany	7/19	Ann Chaney	Community Development	528 5760	Yes, 3 major thoroughfares	No.	Small panel trucks congregate on main arterials to advertise their companies		Νο	No truck over 3/4 ton can park on residential area	No	No
Berkeley	7/13		Land Use Planning/Code Enforcement	981-7400 981-2492	Yes. On website. Section 14.56.060 of Code	Yes	Eastshore btw Hearst & Gilman 6th St btw Bancroft & Gilman San Pablo Ave btw Cesar & Allston MLK Blvd btw Dwlight & Ashby Sacramento btw Dwight & Ashby	day & night, sometime for 3 to 4 days	Yes. Both residents and business. Problems are due to home-base biz	Chp 14 of muni code though code is being revised to add more teeth		No
Dublin	7/13	Dean Baxley	Planning - Code Enforcement	833-6610	Yes	Yes	Near Dublin Square at the corner of Dublin Blvd & Dublin wy - apt across the street - trucker- operator park near home possbly Dublin Blvd/San Ramon Road In warehouse parking lot @ 6600 Golden Gate Drive - south of Dublin Blvd	Overnight	Home-base trucks parking in vacant lot, shopping center overnight. Biz owners complain. Also panel trucks	See zoning code under off-street parking; cannot park within residential district - enforced by code enforcement dept Regulations related to commercial truck is enforced by Police dept	?	No
Emeryville	7/13	Charlie Bryant Ken James	Planning/Police	596-4361 596-3705	No but informal truck route signs exist on local streets - origin unknown	No	Had problems along Hollis Street near I-580. Owner-operators park overnight. Put up parking restriction signs and considered resolved	Overnight, generally	No	Trucks over 3 tons not allowed in the 2 SFD areas within the city Also city code restricts idling on streets	No	No. Not now, not ever.
Fremont	7/19	Jeff Schwob Kunle Odumade Sgt Pat Epps	Planning Transportation/Engineering Police		Yes. See Chp 8 of General Plan	Yes	Dusterberry Wy near Central/DMV Posl/Thornton Albrae around Boscell Comm Prune/Osgood Industrial Wy @ Ingot St Gurdwara Rd near Sitk Tempble on westside of Mission Blvd Peralta near Acacia	Overnight	Trucks over 20 feet park on street Residents are very knowledgeable	No blanket restrictions but prohibit truck parking along truck route with residential frontage		No. High land value tends to displace truck facilities
Hayward		David Rizk Sgt Corey Quinn	Planning Police	583-4004 293-7036	Yes	Yes	All industrial area within city Industrial Blv btw Hesperian & Hwy 92 Industrial Pkwy btw Ruus Rd & side streets where hotels are located Hayman @ San Antonio	Varies, overnight and up to 2 to 3 days	Usually biz complains about trucks blocking their line of sight when they get out of their driveways	6.38 - vehicle over 5 tons 6.33 - pkg in residential area 6.32 - time limit for commercial vehicle	Industrial designation but require administrative use permit	No
Oakland	7/19	Peter Chun	Public Works	238 3466	Yes	Yes	Citywide issue - problem in West Oakland has very long history. On-going effort by planning, Port, and neighborhood to address issues. Trucks congregate all along frontage roads along I-880 near ramps, particularly San Leandro Bivd.	ali day long	Yes	Yes	Yes	No. However, the aforementioned West Oakland effort may result in parking facilities.

Exhibit 12: Contacts with Public Officials

Agency	Date	Contact	Department	Phone	Designated Truck Route System?	Truck Parking Issues?	Where?	Time(s)	Citizen Complaints	Citywide Restrictions	General Plan Designation for Truck Terminal	Pending Truck Terminal?
Pleasanton	7/23	Lt. Tom Fenner	Police	(925) 931- 5180	No. But the City encourages use of main routes. The current intepretation of the law is that Pleasanton biz can use any direct route they choose. Sensitive issue.	No	N/A	N/A	N/A	Yes. See municipal codes online	?	?
San Leandro	7/13	Reh-Lin Chen/Bob Fitzgerald	Engineering & Transportation	577-3438 577-3482	Yes. Has both through truck route and local truck route	Yes	McCormick @ Adams Neptune Dr north of Williams St on east side Catalina St by Fairway Calgary St near Llewlyn related to FoodMax supermarket	Overnight	biz complains about trucks lining up along street blocking their biz	6.1.40 No truck over 20'L & 7'H may park in residential area	Industrial/commercial designation	No
Newark	7/23	Sgt. Fred Zachau	Police	794 2369	Yes	Yes	In industrial areas where parking restriction signs are removed/ destroyed such as Redeker Place near Cherry. Also work closely with biz so trucks parking on vacant lots are rare.	Overnight	Biz complains about truck parking in front of their biz making it difficult to pull out of driveways	No truck over 20 feet can park on street Trucks over 26,000 lbs can be cited for not using truck route if they do not have local needs	Yes	No
Port of Oakland - Airport	7/19	Brandon Marks	Aviation	563-3693		Not really	Fedex trucks park on Air Cargo Way west of Fedex facility for a few hours at a time. Due to security reasons, they are very diligent about parking enforcement		No			
Union City	7/23	Glenn Kirby	Neighborhood Preservation	675-5382	Yes. Code 10.40. See website	Yes	Whipple Road btw Central Ave to I-880, along the southside in front of Federated site Bettencourt Rd - near Whipple Business Park	Overnight, weekends	Truck parking on arterial close to residential neighborhoods Drivers sleeping in the rigs Motor left running for hours Parking in back of shopping mall/lots	Code 10.35	General Industrial	No
Livermore	7/24	Steve Vail	Police	(925) 321- 4850	Yes but only on I-580 and US 84. No local truck routes. City council is considering designating Vasco Rd but has not yet adopted.	Yes.	75% of the problem occurs within the big square area bounded by I- 580 on the north, Vasco Rd on the west, Greenville on the east and Patterson Pass Rd on the south. The remaining 25% is throughout the city.	Overnight, weekend, daytime	Truck park on residential street, truck park in industrial area, sleep on truck. Many industrial biz do not have enough loading docks to accommodate delivery; resulting in parking on streets.	Since trucks are not allowed to travel on local streets, implicitly they cannot park there. Posted no parking signs are found on US84. No parking is allowed in industrial area as well. The Home Occupation Ordinance stipulates no parking in residential area	Allowable Use under Heavy Industrial Zoning District; Conditional Use under Light Industrial Zoning District	No
Port of Oakland - Business Park	7/24	Bob Jones	Real Estate Manager	627-1488		No						A 15-acre truck lot will be opened in the near future near the Army Base. This is managed by the Maritime Division.
Alameda County Castro Valley San Lorenzo	7/27 8/7	Office Rob Tuason	California Highway Patrol	581- 9028	Yes	Yes	Worthley Dr - south of Grant Ave Grove Wy east of Center E 14th @ Hwy 238 under freeway overpass Usher St north of Lewelling	Day & night. But generally not for continuous 24 hrs	Yes. HOA complains about trucks parking in residential area, on sidewalk; also consider a blight issue. Biz, mainly on E 14th St complains about blockage of their store front.	Trucks over 5 tons has 2-hr parking limit on public streets; some areas do not allow vehicle over 20 feet to park; some streets prohibit trucks >7 tons to pass through;		

Appendix C: Truckstop Operators

Introduction

Task 2.3 of this project was to interview operators of existing truck stops to:

- To gain insight on why there are no 24 hour truckstops in operation in the East Bay
- To determine what the attractions are for an operator
- To determine what the deterrents are for an operator

In the course of considering this topic, a number of other observations about the status of truckstops in and near the East Bay area were obtained that help provide context.

The Interview Guide

Based on its knowledge of the project objectives and the truckstop industry, Tioga selected the questions and a list of possible respondents. The project Task Force reviewed them. It is very important to know the questions asked when interpreting the results.

Questions

- 1. Has your firm ever had a truck stop in the San Francisco Bay area? If yes, why was it discontinued?
- 2. Has your firm ever considered opening a truck stop in the East Bay?
 - a. What are some of the primary considerations that appear favorable?
 - b. What are some of the primary considerations that do not appear favorable?
 - c. Do you have such a location currently under consideration?
- 3. What kind of conditions would be required for you to be interested in operating an additional facility in the Bay Area, particularly Alameda County?

Continue with the following questions if talking to the California regional manager for a national firm and for each regional firm.

- 4. Do you get any inquiries from truck drivers or trucking companies about truckstops that are closer in to the East Bay than you are located? What is the nature of these?
- 5. Do you have data or anecdotes about why there are no truckstop facilities closer to the Bay Area?
- 6. Have you ever surveyed your overnight patrons for locations that they might have preferred, in particular, locations closer to the East Bay area? If so, what were the results?



Methodology

Tioga screened the individual respondents to be sure that each was qualified to respond. With local and regional firms, Tioga's approach was to have additional questions in order to allow more anecdotes and comments as the respondents were expected to have more specifics and personal exposure. Respondents were assured that their responses would be anonymous and used in combination with all others.

Respondents

National Operators. There are only five such companies. There are:

- Travel Centers of America (T/A) of Westlake, OH which recently purchased Petro Stopping Centers of El Paso and has since consolidated the development and real estate functions of Petro into those at T/A
- Flying J of Ogden, UT
- Pilot Travel Centers of Knoxville, TX
- Love's Travel Stops & Country Stores of Oklahoma City, OK

Regional Operators. The four that are geographically closest were selected:

- Joe's Travel Plaza of Lathrop
- Joe's Travel Plaza of Westley, which is no longer, related to the Lathrop location
- Jimco Truck Plaza of Ripon
- Tracy Truck & Auto Stop of Tracy

Local Operator. There is only one:

• S.F. – Oakland Truck Stop at 8255 San Leandro Street in Oakland

In total, this is ten possible respondents.

Results

All of the listed prospects were contacted and all ten responded. Results from one regional firm are incomplete as the respondent, who was the owner, refused to give his name and continuously stated that he was not interested and did not want to be bothered with the questions, but in the course of his complaining stayed on the phone for over five minutes and answered most of the questions.

Quantitative

Question 1. Only one presently has a site in the immediate area, one used to have a stop that was no more than a fuel station but it has been closed for over ten years, and one is in the process of getting permits for a new location on I-80 at Dixon. The reason that the one with the fuel stop closed it was because it was far too small and did not fit with the company's strategy or style of facility.



Question 2. All of the national firms have considered having a site in the immediate East Bay Area as have two of the regional firms. Obviously the local firm is already here. The two regional firms with no interest stated that it was a matter of preference of existing ownership not to expand anywhere and that the decision was personal, not a bias toward an East Bay location. Two national firms stated that they do not actively look in the area.

- The favorable conditions are the volume of "traffic" (meaning, number of trips) and the lack of a full service competitor.
- The unfavorable conditions are a long list all of which can be condensed into the following real estate related items:
 - No site available.
 - And, if there were, the cost of land is too high.
 - Plus a host of specifics from no logical place of a logical size to local zoning prohibitions to high taxes to cities unfriendly to this type of business.
- Also, there were some unfavorable commercial considerations, as follows:
 - Two mentioned that their stops cater to both trucks and autos and that at metropolitan locations they do not get much patronage from motorists.
 - Two mentioned that sites only for trucks are not being pursued by anyone in the industry that they know of.
 - Two mentioned that it is difficult to sell diesel in California for two reasons: 1). It is so expensive that they have to subsidize the California price when the give a national fleet price (same price all over the country) to a large percentage of their truck fleet patrons. 2). It is so expensive that out of state trucks and motorists buy only enough to get out of the state.
 - Two mentioned that if the cost of land and permitting is expensive, which it is everywhere in California, it gets should get reflected in the price for services, but they cannot capture that higher cost in a price premium because the patrons "just go down the road to where the same item is cheaper." Both mentioned charging for hot showers as an example.
- Therefore, none have a site currently under consideration although three mentioned that they have actively looked at sites recently.

Question 3. The conditions necessary to be further interested would be cooperation from local city officials and a suitable site meeting the individual company's specifications

Question 4. All the local and regional locations confirmed that they are frequently asked by both drivers and companies about the existence of an location either with 24 hour parking or closer in, or both; but none have kept a tally of the inquires or those making the inquiry.

Question 5. Every respondent had at least one anecdote and every anecdote ran to the difficulty of obtaining permits and city cooperation.



Question 6. No one knew of a formal or informal survey of overnight patrons; one did not allow the interview to get to this question.

Qualitative

Three qualitative items stood out.

- Four were very anxious to find a site and get started; so much so that two named possible investors and both left their name and contact info hoping that Tioga might provide a lead some time in the future.
- Six mentioned that California is the most difficult location in the nation (save one that thought that parts of New England were just as bad and a second that thought that Florida was a difficult as California) to get permits for this type of business, and for a site to be developed would require local cooperation that has not been prevalent. Three national firms stated that for this reason, they we confining their interest to only county land and, therefore, metro sites were not being research (although if one did arise that had local support, they all would pursue it).
- Of the five that were specifically asked a supplemental question about it, none were aware of the recent activity with the two sites at the Port of Oakland on the reclaimed land that once was the Oakland Army Base.

Other Data and Observations

Based on this research and other items that are related that have come to Tioga's attention during the course of this project, there are some additional thoughts:

- Three respondents mentioned that drivers and trucking companies minimize fueling in the State of California; that is, "they buy just enough to get out of the state where it is cheaper".
- The 49er Truck Stop off I-80 at Exit 85 northeast of Sacramento (which was not interviewed) separately reports that it did do a survey of truck drivers who spent the night at its location for lack of an overnight location closer to the Bay Area. The findings were that in a given week 227 drivers headed to/from the Bay Area stayed overnight at 49er for lack of a location closer to the Bay Area.
- No one has been approached, as they were in this case, by a party (Tioga in this case) representing any public sector entity or asking the questions asked in this survey
- One characteristic of this business is that most drivers will not pay anything for some basic services, e.g. a shower, much less a premium caused by high land costs/ rents; instead, they just "go down the road" looking for alternatives, some of which might be cheaper.
- It is not generally known that Caltrans is allowing some trucks to rent property under the I-880 freeway in Oakland near MLK Drive.



- There are newly available parcels from the Port of Oakland and the City of Oakland on the site of the former Oakland Army Base. Which raises a corollary question about if the Port and the City did not consider contacting this segment of industry when it asked for bids to develop their sites.
- The San Francisco-Oakland Metropolitan Planning Commission is presently doing a project that calls into question the lack of land suitable for the industrial purposes of the trucking (and/or truckstop) industry.
- The Economic Development Alliance for Business in Alameda County regularly receives inquiries about the availability of truck parking in the County.
- All new truckstop sites may be "out in the countryside" in the counties if only because the cities don't want them; even though there is some demand for overnight truck and driver accommodations and services is in the cities and suburbs

Opportunities

Based on the responses obtained, if public sector entities had sites and local cooperation, there would be substantial interest in building full service truckstops and/or full service travel centers (trucks plus autos).



Appendix D: Driver Survey

Purpose of the Survey

The Truck Driver Interview Survey ("the survey") collected information that would assist in describing and explaining the knowledge, attitudes, and behavior of truck drivers parked on public streets, especially those parked in, or headed toward, Alameda County. The data collected is intended to help identify:

- Where trucks are currently parking on public streets
- Why they are parking there, and for how long
- How drivers select a parking location
- What the hypothetical demand would be for a dedicated off-street parking location
- What types of services would be important to drivers in such a facility

Due to a shortage of legal parking for tractors and trailers, and the absence of dedicated off-street truck parking/stopping locations, many Alameda County communities and commercial areas experience unwanted truck parking. This occurs in residential districts and along roadsides on freeways and at interchanges as well as in commercial and industrial zones. In industrial zones, such parking usually is acceptable, but can be a nuisance if it blocks the entry/exit to/from commercial locations.

Inappropriate truck parking occurs throughout the day for a variety of reasons. During peak commute hours, particularly in the morning, drivers may be parked inappropriately due to their inability to arrive early and legally park at the delivery site before a delivery appointment. Throughout the day, drivers may have occasion to stop, and often there is not an appropriate location to do so, particularly if the driver is not in a commercial or industrial neighborhood. Towards evening, some drivers will park to wait for congestion on area freeways to clear. Finally, on occasion, drivers that must park overnight for mandatory rest may not be able to locate a completely legal and safe environment. Therefore, they often are forced to park in locations that some may deem inappropriate.

A number of communities in Alameda County have regulations prohibiting overnight truck parking on city streets, but none are known to provide a suitable alternative for truck parking, resulting in complaints and lax enforcement of the rules.

Truck parking facility needs are ultimately determined by two questions faced by every truck driver and dispatcher on every trip:



- Why stop to park? Drivers park when they must, and when they have no assignment to drive. The need to park is seldom discretionary and tends to be driven by the commercial practices of the customers such as hours of operation, when the load is ready to be picked up, day of the week, etc. For all drivers, the need to park in order to take a 10-hour rest is also governed by federal and state safety rules related to hours of driving and mandatory rest periods.
- Where to park? The location choice for local drivers often is a companyfurnished facility (terminal or yard) in the area. But, for drivers not at such a terminal or yard whether local drivers or from out of town, the location choice is usually discretionary with the driver, who may get suggestions from a dispatcher. Short stops or waits between assignments may be spent in the first available spot. For overnight parking or mandated rest periods, the driver may drive a significant distance for the right location.

The purpose of this survey to understand the answers to these questions, to determine how the decision to park is made, and to identify the parking needs for truck drivers operating in Alameda County and adjacent counties.

Survey Design and Administration

Type of Survey/Dates Conducted

The survey consisted of face-to-face surveys conducted at truck parking locations. The survey began on Friday, September 21, 2007 and continued through Friday, November 30. In-person surveys at the parking site were done primarily because other types of surveys (mail back, telephone interview) were impractical because truck driver populations are difficult to reach and define. The personal interview technique is also believed to enhance trust between surveyor and subject, and potentially result in more accurate responses and a higher response rate. There were a total of 179 completed interviews, so a variety of locations and drivers were included. No driver was interviewed more than once.

Site Selection for Interviews

Sites were selected using a number of techniques based on:

- Interviews with municipal staffs in Alameda County and Richmond.
- Locations known to the consultant team and the study's Task Force.
- Locations identified by the survey contractor while doing fieldwork.





The locations of sites are depicted in the map below.



The number of interviews conducted at each site is indicated. Many additional sites were visited. A depiction of all sites visited is in the Task 2 - 1 Technical Report in the ACCMA project files.

Some sites were outside of Alameda County in order to obtain sufficient interviews. In such cases, the respondents were screened to be sure that they currently were on a trip to or from the East Bay area. Many times during the early morning hours, parked (eligible) trucks either were empty or the driver was resting in the truck. It was decided not to wake such drivers, and of course, it was not feasible to either try to locate drivers not in the truck or to await their return to their truck. Rather, the interviewers continued to another site. Of the 179 surveys, 40 percent were administered in Alameda County and 60 percent were administered at truck stops on I-5.

Time of Day Selection for Interviews

Interviews were conducted in the early morning and mid-afternoon so that the survey crew would achieve maximum productivity. It was found that early in the morning there were often trucks parked at survey sites, but that the driver would be absent or sleeping. This information was recorded, but did not result in a completed interview. As a result, most of the surveys were obtained in the afternoon on weekdays. Surveys were not conducted on the weekends, because truck activity levels are lower, travel patterns are different, and the results might not be applicable to reducing weekday peak period congestion on Alameda County highways.

Survey Contents

The survey was administered using the instructions to survey workers shown in Appendix A. The survey included 32 questions (see sample survey form included in Appendix B).

- Q1-8 relate to what the driver is doing now, here, at this stop
- Q9-11 relate to what is the driver's expectations about where and why to stop
- Q10 and 12 are classification questions
- Q13 and 14 relate to what the driver has done in the past about stopping/parking
- Q15 and 16 relate to what the driver prefers in a facility at which s/he stops.
- Q17+ are more classification questionnaires

There were some "logical jumps" within the survey, depending on the response given by the interview subject (i.e., some follow-on questions depended on the response to a prior question). The survey was developed by the consultant team and reviewed by the study Task Force. Some questions were not directly relevant to truck parking locations, but were included at the request of Task Force members, for example, Question 27 regarding whether the engine was on or off at the time of the interview.

It is critical that the questions in the survey and the structure of the survey be understood by anyone attempting to understand and/or interpret the data from the survey. Please consult the printed survey in Appendix B to aid in understanding the data and the results reported herein.



Length of Time to Complete Survey Interview

Once contact was initiated with a driver, the survey took approximately 15 minutes to complete, on average. Two survey workers were used to enhance the security of the survey field crew. In some cases, no trucks were observed at a location, so no interviews were conducted and the surveyors drove on to the next location. This information (lack of trucks) was recorded separately in surveyor logs. The logs are available separately in a hand-recorded form from ACCMA.

Potential Biases/Validity Issues

On-the-road truck drivers are a difficult to reach population. There is no compiled list of phone numbers of such individuals, and even if there were, the survey was best administered in the field at the actual parking locations, not at home or in a trucking company office. Implementing a scientifically drawn random sample of this population was not considered practical because of the difficulties in reaching this group and establishing the parameters necessary to develop a true probability sample. Non-probability samples do not guarantee that all eligible sampling units have an equal chance of being included in the sample, but they have the advantage of being convenient, economical, and appropriate for some surveys.

Like most samples, this one was self-selecting (i.e., a driver could choose not to participate). However, the refusal rate was very low for this study, and had mainly to do with the driver needing to leave shortly for his/her appointment time. Although a written survey was prepared in Spanish, only one driver requested it; all other drivers approached had sufficient ability with English that language was not a barrier. Any generalization of the results should be interpreted cautiously, as results may not be representative of the entire universe, or any one segment thereof, of truck drivers in the Bay Area.

Survey Results and Analysis

This section of this report presents the survey form with the responses of the 179 drivers interviewed. The survey form has been used as a template for reporting the survey results. More detail is also available in Appendix D and in a project data file that will be provided to ACCMA regarding comments or other difficult-to-categorize responses. The information is generally organized as follows, except when the organization did not appear appropriate given the question or the responses:

- The question, exactly as asked
- The data (i.e., result)
- Discussion of the results
- Conclusion(s) to be drawn from the question

Readers are advised to regularly consult the actual questionnaire in order to best understand what was asked and how the sequence of questions affects the responses.

Content questions



The numeral is the question number.

1. Rather than being stopped here, where would you rather be located at this time?

This was essentially a "throw away" question to engage the driver. Responses were often places like "Hawaii," "Caribbean," or home. There are no conclusions from this question.

- 2. About how long have you been parked here? Hours ______; If more than 2 hours, ask
 - a. Why has it been that long? *Insert response*:

The distribution of responses is shown on the following page.



Duration Parked	No. Responses	Pct. Total
Less than 30 minutes	83	46.4
(3 responses said 0 minutes)		
30 to less than 60 minutes	18	10.1
60 minutes to less than 2 hours	29	16.2
2 hours to less than 3 hours	12	6.7
3 hours to less than 4 hours	4	2.2
4 hours to less than 8 hours	16	8.9
8 hours to less than 14 hours	6	3.4
14 hours to less than 21 hours	1	0.5
21 hours to less than 24 hours	0	0.0
24 hours or more	10	5.6
Total	179	100.0



The median time parked was 30 minutes, and the mean was 274 minutes (because a few trucks were parked for very long durations—up to 6 days—the mean was 'pulled up' far above the median response). Because some drivers were interviewed immediately upon pulling into a truck



parking area, this may not provide the truest distribution of actual truck parking times. Also, drivers who parked for extended periods (e.g. several hours, or more) would be more likely to be sleeping, or to have left their vehicles. However, despite those caveats, it appears that most trucks are parking for relatively short durations of time, an hour or less being typical. This would tend to indicate a need for short-term parking facilities for trucks, rather than long-term (i.e., overnight) parking.

The answers to the second part of the question (Why are you parked here?), which was asked **only** if the time was more than 2 hours:

	Answer Options	Response Percent		sponse Count
i.	Waiting for appointment time	7.4%	6	
ii.	Waiting for instructions/dispatch from company/broker	17.3%	14	
iii.	Getting/Waiting for load	23.5%	19	
iv.	Dropping off load	2.5%	2	
٧.	Personal need (eat, toilet, shower/laundry)	12.4%	10	
vi.	Rest (could also include waiting)	19.8%	16	
vii.	Truck broke down (go to Q7)	2.5%	2	
viii.	Getting Gas	6.2%	5	
ix.	Off-duty, mandatory, at least 10 hours off	1.3%	1	
	Other (please specify)	16.1%	13	
		Answers	81	
	Not applica	able (<2 hrs.)	98	

There were a variety of 14 "other responses." Two said "truck wash," 1 said "delivering to Tracy," 2 "catching up on log book," or "paperwork," 1 "safety check,"1 "have to move from yard," 1 "fuel", 1 "cigarette break", 1 "can only take one trailer at a time", 1 "just arrived", and 1 "trailer swap."

Some form of "waiting" dominated the results because this situation is not within the exclusive control of the driver. Often drivers depend on someone else to arrange timing, load status,



equipment availability, etc. When this occurs, to the driver, he is waiting for something or someone else to happen first after which he can proceed.

3. Why are you parked here? (*indicate response with a check mark, probe as there may be more than one reason, and continue*)

The results of this question were:

	Answer Options	Response Percent	Response Count
a.	Waiting for appointment time (go to Q4)	23.3%	37
b.	Waiting for instructions/dispatch from company/broker (go to Q5)	12.6%	20
с.	Personal need (eat, toilet, etc.) (go to Q6)	15.7%	25
d.	Brief rest (go to Q6)	28.3%	45
e.	Truck broke down (go to Q7)	0.6%	1
f.	Off-duty, mandatory, at least 10 hours off (go to Q8)	12.6%	20
g.	Other (specify) (go to Q9)	10.1%	16
	159		
	19		

The conclusion here was that most drivers were waiting for something, or taking a brief rest (which could also include waiting for something).

- 4. And when it gets close to your appointment time do you expect to leave here?
 - a. Yes (go to Q9)
 - b. No, continue; Why not? Insert response: _____ (If response is one of the answers to Q3, go there. If not, go to Q9.)

Forty-two drivers said "Yes" to this question, although technically only 37 were eligible (since that was the number who responded that they were waiting for an appointment time in Question 3).



The conclusion is that virtually all incidents of waiting for appointment have a duration that ends when it is time to fulfill the appointment time. That is, it is intuitive that the driver will depart when it becomes time to do so in order to arrive at the appointed time.

- 5. And when you get your instructions/dispatch do you expect to leave this site?
 - a. Yes (go to Q9)
 - b. No, continue; Why not? Insert response: _____ (If response is one of the answers to Q3, go there. If not, go to Q9.)

Twenty-five drivers said "Yes" to this question.

The conclusion is that virtually all incidents of waiting for instructions/dispatch result in the driver departing when he receives the instructions/dispatch information. It is obvious that departure is the appropriate action.

- 6. And when you finish, do you expect to leave here?
 - a. Yes (go to Q9)
 - b. No, continue; Why not? Insert response: _____ (If response is one of the answers to Q3, go there. If not, go to Q9.)

Seventy-two drivers responded "Yes" to this question. The conclusion is that virtually all that stop for a personal reason expect to depart when the reason in Question 5 or 6 expires.

- 7. And when you get underway again, do you expect to leave here?
 - a. Yes (go to Q9)
 - b. No, continue; Why not? Insert response: _____ (If response is one of the answers to Q3, go there. If not, go to Q9.)

Six drivers, or 3.4%, responded "Yes" to this question. The conclusion is that the one driver whose truck was broken down expected to depart as soon as the truck was worthy.

8. Why did you pick this location to stop for your 10 hours of rest?

(Note that this question was only answered if the driver was taking the mandatory rest period. Therefore, there were only 22 responses, with two drivers giving more than one reason.)



Answe	er Options	Response Percent	Response Count		
i.	Only truck stop	13.6%	3		
ii.	Convenience/Easy Access	9.1%	2		
iii.	Nicer Area; location, view, quiet	0.0%	0		
iv.	Close to delivery	0.0%	0		
v.	Close to pickup	9.1%	2		
vi.	Waiting for appointment time	0.0%	0		
vii.	Waiting for instructions/dispatch from company/ broker	0.0%	0		
viii.	Getting/Waiting for load	0.0%	0		
ix.	Dropping off load	0.0%	0		
х.	Personal need (eat, toilet, shower/laundry)	0.0%	0		
xi.	Rest	0.0%	0		
xii.	Truck broke down	4.5%	1		
xiii.	Getting Gas	4.5%	1		
xiv.	Off-duty, mandatory, at least 10 hours off	0.0%	0		
	Other (please specify)	68.2%	15		
	Answered question				
	Not applicable/ did not stop for 10-hour rest				

There were a small number of drivers (22) to draw conclusions from, because of the restriction to a subgroup of driver respondents. No one reason stands out for why a location was picked for the driver's 10 hours rest. The 15 "Other" responses were mostly answers like "no other choices," "closest I could get," "no 'No Parking' signs," etc. Two drivers mentioned the availability of services or facilities nearby.

The conclusion is that, overall, no single reason stands out as the reason why the location was picked; the availability of services or facilities nearby does not appear to play as strong a role.



a. Is there a location you would have preferred to stop at rather this location? *If no, go to Q10; If yes, continue.*

Only 12 of the 22 drivers answered this question; 75% (9) said No.

The conclusion is that, based on a small sample of drivers, most were content with the location they at which they were stopped.

- b. Where is that location, geographically? *Insert response, try to get an intersection, at least get the name of town:*
- c. Why would you prefer to have stopped there? Insert response and then go to Q10:

There were no responses to questions 8b and 8c. Why that is the case is not known.

9. Why did you pick this location to stop? (Note this question included all drivers, not just those stopping for their 10-hour break, as in the previous question.)

Answe	er Options	Response Percent	Response Count
i.	Only truck stop	10.1%	16
ii.	Location: Convenience/Easy Access	5.1%	8
iii.	Location: Nicer Area; location, view, quiet	1.3%	2
iv.	Close to delivery	9.5%	15
v.	Close to pickup	11.4%	18
vi.	Waiting for appointment time	0.0%	0
vii.	Waiting for instructions/dispatch from company/broker	0.0%	0
viii.	Getting\Waiting for load	1.3%	2
ix.	Dropping off load	2.5%	4
х.	Personal need (eat, toilet, shower/laundry)	0.6%	1
xi.	Rest (or break time)	0.6%	1

xiii.	Getting Gas	1.3%	2
xiv.	Off-duty, mandatory, at least 10 hours off	0.0%	0
	Other (please specify)	62.7%	99
	158		
	20		
	No	ot answered	20

There was a wide variety of responses to the reason why the driver picked his/her location to stop at. "Only truck stop" means that the driver wanted a truck stop and that he is at the only one that he knows of. Being close to the driver's pickup or delivery point, and easy access, were important, though did not represent a majority of all responses. Most of the 99 "other" responses were general in nature, e.g., 6 said a convenient location, 2 said "decent truck stop," 15 said "on the way," 12 said, "close to Bay Area" or "close to load" or variations thereof. Four drivers said "no where else" or "no truck stops in East Bay." A complete list of all of the "Other" responses is included in Appendix D.

a. Is there a location you would have preferred to stop rather than this location? Yes <u>19% (29 drivers)</u>, No <u>81% (122 drivers)</u>____

If no, go to Q10; If yes, continue.

Given that less than a fifth of the drivers had a preferred location different than the one they were at, there may some limitations on the potential for a new, designated off-street parking facility.

- b. Where is that location, geographically? *Insert response, try to get an intersection, at least get the name of town:*
- 4 Hayward
- 3 Tracy
- 3 Livermore

All other responses were mentioned by only one driver (e.g., "any place between Sacramento and here," "between here and San Jose," etc.

This question elicited a variety of locations, although most were at an "apex" or "gateway" point (one with high accessibility). These three locations are also relatively important trucking centers today, and probably were picked in part for their proximity to customers.

c. Why would you prefer to have stopped there? *Insert response:*

This is an alphabetized list, as recorded:



- 1 better than [on] street,
- 1 bigger streets
- 2 closer
- 1 closer to job
- 1 closer to yard
- 1 Denny's
- 1 empty space to park
- 1 gone for 2 months
- 1 has delivery, here you get warning and tickets
- 1 In between
- 1 local to (where I) stay
- 1 more facilities
- 1 not as busy
- 1 not be ticketed
- 1 park truck
- 1 proximity
- 1 quiet, this [present location] is too far.

This question also elicited a variety of responses, with no predominant answer for why drivers would have preferred to stop at another location. Proximity and the desire to avoid tickets were perhaps more important than others, but the results should be interpreted cautiously because of the small sample size.

10. Is your trailer loaded 52% (90 drivers) or empty 48% (83 drivers)?

The relatively balanced counts are typical of a local metropolitan area as each truck can expect to be both loaded and empty in the course of the workday because it will be both delivering and picking up loads in the course of the business day.

11. When you leave here,



a. Where do you expect your next stop will be (what town or exit off of what freeway)? *Insert response:*

The most common ones, with the number of responses (out of 171 who answered the question) were:

- Corning (5)
- Fremont (4)
- Hayward (10)
- Lost Hills (4)
- Nevada or Reno (9)
- Oakland (9)
- Sacramento (8)
- San Leandro (4)
- Stockton (13)
- Don't know or similar (9).

Other responses had 3 or fewer drivers indicating that destination.

There were a wide variety of answers to this question. Results may have also been skewed somewhat by the interviews conducted outside Alameda County, especially in the I-5 corridor (e.g., those having a next stop in Corning or Lost Hills).

b. What do you expect to do at that stop? Pickup load <u>42% (40 responses)</u>; deliver load <u>56% (54)</u>; both 2<u>% (2)</u>.

Given the relatively balanced split of loaded/unloaded trailers (Question 10), the split between picking up and delivering loads were also fairly balanced.

- 12. Does the trucking company that you are working for have a terminal/yard in the Bay Area
 - a. Yes, 23% (37); No 77% (124); Not Answered: 17 drivers

The low percentage of "yes" responses indicates that a substantial number of trucks are parking because their company has no terminal or storage facilities in the Bay Area. These trucks are most likely from outside the Bay Area and need short-term, transient parking at one, or possibly several, locations in the East Bay. Also, due to the locations of some of the interviews, drivers working for trucking companies with local terminals may be driving only locally and, therefore, not be driving as far away as the site of many of the interviews.



i. Where is it; what town? Insert response: _____

There were 40 valid responses here covering a variety of cities (for whatever reasons, three more than said their company had a terminal/yard in the Bay Area). The most frequently mentioned were:

- Oakland (7)
- Hayward (7)
- San Leandro (7)

One driver said, "just an agency yard." None were out of state.

The CHP MISTER database also indicated these cities had some of the larger concentration of truck terminals in the East Bay; the three cities made up more than half of the responses to this question.

ii. Why did you not stop there? (Note to interviewer: the driver may have started at that terminal/yard earlier in the trip.) Insert response:

2 indicated that they did started their trip there. 3 responded that they were only taking a break (inferring that they would not go back to their terminal to do that). 5 indicated that at their terminal there was no parking (inferring that it is only an office without a yard). Appendix D includes a list of all the verbatim responses.

b. No, *circle and continue*

The conclusion is that there are many reasons that drivers stop that cannot be filled by a terminal somewhere in the area because the occasion to stop occurs no where near the location of the company's terminal and/or the "terminal" actually is only an office and therefore does not have a yard for parking trucks.

- 13. When was the last time you had to stay overnight to take your 10-hour rest in the East Bay Area? *Insert response*:
 - a. If never have done so or last time was more than a year ago, go to Q15

165 drivers fell into this category (92% of interviews).

This indicates two things. One, many drivers are local drivers that have no need to stay overnight with their truck; instead, they go back to terminal and go to their home for the night. Second, many drivers not domiciled in the Bay Area, try to get into the Bay Area, do their business, and get out as quickly as possible. When they do stay overnight in the East Bay, they most frequently sleep in their cab. This probably tends to bias the survey towards local drivers/short term parking needs because it wasn't possible to interview drivers sleeping overnight in their trucks.



If within the last year, continue

- 14. Where did you stay?
 - a. What town? *Insert response*:

59 drivers answered this question; the most common responses were:

- Oakland (9)
- San Jose (5)
- Fremont (5)
- Hayward (9)
- San Leandro (9)
- Union City (4)
 - b. What kind of location/facility was it?

"Truck" or "In truck" were by far the most common answer, with 27 out of 59 drivers. Several said "side street" or "side road," which may also indicate the driver stayed in his truck.

c. Who picked that location? Virtually all were the driver's pick; dispatch 2% (1);

This indicates that information about any new truck parking facility needs to be communicated effectively to drivers, not just dispatchers or company managers, dispatchers or owners.

15. When you have to take your 10 hour rest period somewhere here in the East Bay,

- a. What location/town would you prefer? There were a wide variety of responses among the 166 drivers who answered this question:
- Didn't matter (12)
- Fremont (14)
- Hayward (56)
- Oakland (19)
- San Leandro/San Lorenzo (20)

Like all of the questions asking about locations, the dominant cities are Hayward, San Leandro, San Lorenzo and Oakland. There is consistent interest in these locales. That is logical because those are the towns (plus Union City, Fremont and Richmond) that have the most customer



locations, have the most trucking terminals or drop lots, and are at the gateway points on the highway system.

- b. What kind of facility would you prefer? Of the 160 responses:
- 119 responses (74%) were "truck stop"
- 29 (18%) said "full service"

Several named a brand of truck stop (e.g., Flying J).

- 16. What are the two or three primary services you would find desirable at a truck parking facility?
 - i. Showers/laundry—101 drivers (56%)
 - ii. Food—96 drivers (54%)
 - iii. Parking—44 drivers (25%)

Only 4 respondents (2%) mentioned lodging, possibly because (as noted earlier here) drivers are comfortable sleeping in their trucks, or else overnight elsewhere. There were a variety of "other" responses; they are included in Appendix D.

Thirty-three mentioned "serenity" or "quiet." 14 mentioned a truck scale or "CAT" scale. (CAT Scale is a brand name of a scale manufacturer.) Others (see Appendix D) mentioned a gym, dog run, or other features.

Perhaps not unexpectedly for long haul over the road truckers, showers, laundry, and food were the most frequently mentioned attributes of a truck parking facility. However, local drivers, when they want a facility, also want it for the same reasons as long haul drivers. The responses to this question also appear consistent with responses to other questions; specifically drivers do not want or need overnight lodging (they can stay in their trucks); or they want to turn-around and leave the Bay Area as soon as possible.

Classification questions

17. Where are you domiciled (where is your home base)? (City, State)

There were 171 responses; the most frequent were:

- Hayward (12)
- Modesto (5)
- Oregon (5)



- Sacramento (5)
- Stockton (18)
- Texas (4)
- Washington state (7)

All others had three or fewer responses.

Very few of the drivers interviewed were domiciled within the East Bay Area even if they were driving locally within the East Bay Area. Also, locally domiciled drivers driving only locally within the Bay Area would not be at the interview locations that were outside of the Bay Area.

- 18. Where did you start this workday? *(City, State)* Of all the responses, those with 4 or more drivers answering affirmatively:
 - Corning (4)
 - Fremont (6)
 - Hayward (10)
 - Los Angeles (5)
 - Lodi (8)
 - Modesto (5)
 - Oakland (9)
 - Sacramento (13) [includes one West Sacramento]
 - San Leandro (4)
 - Santa Nella (6)
 - Stockton (19)
 - Union City (5)
 - Westley (5)

Very few start in the Bay Area; they do not spend the night there. Had the survey captured more drivers that operate solely locally within the Bay Area, there might have been more drivers starting (and domiciled, Question #17 above) in the Bay Area.

19. Where do you expect to end this workday? (City, State)

_____T io g a

Of the 175 responses, the most frequent (those with 4 or more affirmatives) were:

- Fremont (4)
- Hayward (12)
- Lodi (16)
- Modesto (5)
- Nevada (4)
- Oakland (7)
- Sacramento (9)
- Santa Nella (7)
- Stockton (17)
- Westley (22).

20. How long ago did you get off your last rest period? _____ hours



	Response	Percent of
Time	Count	Total
1 hr	10	5.9%



2 hrs	17	10.0%
3 hrs	6	3.5%
4 hrs	10	5.9%
5 hrs	14	8.2%
6 hrs	27	15.9%
7 hrs	29	17.1%
8 hrs	24	14.1%
9 hrs	5	2.9%
10 hrs	11	6.5%
11-14 hrs	14	8.2%
>14 hrs	3	1.8%
Total	170	100.0%

The time since the driver took a required rest period was highly variable, although was generally clustered in the 6-8 hour range, which made up almost half of the drivers interviewed. The number of responses is also consistent with Question 8, in which 22 drivers said that they were on their 10 hours of rest. (Note: over 14 hours is not necessarily a statutory violation.)

- 21. Is your tractor owned by you <u>67 (38.5%)</u> or the company for which you are driving? <u>107 (61.5%)</u>
- 22. Are you an independent contractor 69 (40%) or an employee driver? 105 (60%)
- 23. How do you get information on the best place to park your rig? Insert response:

The vast majority—almost 60% of the drivers—said "Experience." Some said "book" "truck book" or "the guide."

Interviewer: complete following, ask driver if necessary:

- 24. Type of tractor:
 - 16 were Trucks, 75 were tractor units



- 4 were Cab Over Engine (COE) units, 144 were conventional units
- 25 drivers had 2-axle units; most had 3 or more axles (136 responses)
- 25. Type of trailer:
 - Chassis (with containers: 10 drivers, or without containers, 5 drivers)
 - Dry van 82
 - Reefer 36
 - Flatbed 21
 - Dump 3
 - Auto rack 1
 - Other *(specify)* 13

There were no open top, liquid tank, or dry tank truck drivers interviewed.



26. Type/length of trailer:

Answer Options	Response Percent	Response Count
Single axle semi (pup/double)	7.9%	12
Set of pups/doubles	1.3%	2
Tandem axle semi	78.8%	119
Short chassis	2.6%	4
Long chassis	3.3%	5
Other (please specify)	9.9%	15
	Valid response	151
Missing/no information		28

27. Is engine on 41 (24%)_ or off 132 (76%)___?

Some drivers may have had their engines on because they were preparing to leave or had just arrived; others may have been running auxiliaries (e.g., heat or air conditioning). During the season in which the survey was done (fall), Bay Area weather is typically fairly mild. In other seasons, the percentage could be higher or lower. Also, as many drivers were interviewed, as they were about to leave their parking location, it is natural that many would have started their engines in anticipation of leaving. This information was collected from the surveyor's observation, rather than asking the driver.

28. Location of this interview is:

- a. On (name of roadway) <u>See Appendix C for this Information</u>
- b. Near (name of cross street or large building)
- c. Direction of travel (on the leg of the trip at the point where the interview occurs):

Northbound 25%(43)

Southbound 25%(43)

Eastbound 29% (49)



Westbound 12%(21)

Not apparent 8%(14)

26. Time of day 14% (24) am 86% (151) pm

As noted earlier, surveyors attempted to make contact with drivers in the morning (generally, before delivery times), but this proved largely unsuccessful. Most trucks in the morning were not occupied or the driver was sleeping.

- 27. Interviewer's initials
- 28. ____Check if left a copy of survey with stamped envelope due to language barrier. 0% (0) Only one driver interviewed had a language barrier, and he was given a Spanish mail-back survey form, but it was not returned.

Count of eligible vehicles parked at this site at this time

A map showing the location of each site where interviews occurred and the count of trucks on hand at the site is on page 3, above. Of the reported count,

- Average per site was 14.6. This relatively large number means that a lot of interviews were done at bigger truck stops
- Count that are bare chassis averaged 2
- Count that are chassis with container mounted averaged 1.8

This point is the end of the questionnaire.

Additional Analysis

Purpose and methodology

The analysis above is for each question asked. Often an analytical process called "cross tabulation" can obtain more insight. This methodology splits the responses to a given question based on the responses to each of the other questions in an attempt to see if further insights are obtained. The critical item in such analysis is to carefully select the basis for segmenting the responses to the given question. As an example, Question #12 asks if the company for which the respondent driver has a terminal or yard in the Bay Area. The logical answers to this question are yes, no, don't know or no response. In the case of Question 12, the results were split based on



"yes" and "no" answers to see if the responses to each of the other questions in the survey were significantly different depending on if the answer to Question 12 was "yes" or "no".

Cross tabulations were made for the nine questions listed below in an attempt to gain further insights. Detailed results are available in the project file both electronically and as printouts. These specific questions were selected because as part of the survey design there was speculation that there might be meaningful differences between the sub segments in each question:

Question #3: Why are you parked here?

Question #12: Does the trucking company that you re working for have a terminal/yard in the Bay Area?

Question #14: Where did you stay? What town?

Question #17: Where are you domiciled (where is your home base)?

Question #18: Where did you start this workday?

Question #19: Where do you expect to end this workday?

Question #20: How long ago did you get off your last rest period?

Question #28: Location of the interview?

Question #29: Time of day interview was conducted?

A "universal cross tab" (each question's segmented response with the segmented response for each of the other questions) was not conducted. Hence, it is possible that to further "mine" the data might reveal significant differences, some of which would be spurious.

Results

It is a very meaningful finding that as a generalization, the segmented responses to each question resulted in the same findings as the responses to the totality of each question.

For instance, for Question #17, which was "Where are you domiciled?" there is no difference between the two segmented answers and the total. That is, 33 of the 42 (79%) that are domiciled in the Bay Area stayed in Hayward, San Leandro, and San Lorenzo, as did 72% of the 137 not domiciled in the Bay Area.

Only a very few distinctions were found and are mentioned next.

For Question #12, which was "Does the trucking company you are working for have a terminal in the Bay Area?" responses were segmented on Yes/No. 37 said yes; 125 said no. The responses to the following questions stood out as meaningful or distinctive.

• Of the 125 without terminals, when the driver stayed in the Bay Area (Question 14), 89 of them (71%) stopped in Hayward, San Leandro or San Lorenzo.



• And, 97 of them (77%) indicated that they would prefer to have stopped at a truck stop. (Note, there is no truck stop available in any of these three towns; therefore, some will return to the Central Valley where there are truckstops.)

For Question #19, which was "Where do you expect to end this workday?" responses were segmented on Bay Area (39) and Outside Bay Area (128). The responses to the following questions stood out.

- 35 (90%) of those that expect to end in the Bay Area would prefer to be there now (Question 1), and only 41% of those that expect to end the day outside the Bay Area preferred to be there now.
- However, while 95% of those that expect to end the workday in the Bay Area would prefer to stop there, so did 96% of those that expect to end there work day outside of the Bay Area. This indicates that when seeking a location to stop, within the Bay Area is preferable (even if it is known that such is not available (Note: Likely this is because the stopping location is closer to a shipper/receiver and/or the location of the next load.)
- Also, of those that expect to end their workday in the Bay Area, 77% stopped in Hayward, San Leandro or San Lorenzo and as did 74% of those that expect to end the workday outside of the Bay Area.

For Question #28, which was the "Location of the interview", responses were segmented on those that occurred along I-5 (60%), those that occurred on I-580 at Altamont Pass (12%) and those that occurred elsewhere, primarily in Alameda County (but not at Altamont) (28%). Comparing the activities at each of the three location:

- As to whether the trailer was empty or loaded, Question 10, it was more often empty in Alameda County and more often loaded when along I-5 or at Altamont Pass.
- As to where the next stop was expected to occur, Question 11a, when the location of the interview was in Alameda County it was more often expected to be in the East Bay, but at Altamont Pass, the next stop was most often outside the County.
- As to where the driver stayed overnight, Question 14, the stay was less likely to be in the East Bay if the interview occurred in Alameda County excluding at Altamont Pass.
- As to where they would prefer to take their 10-hour rest, Question 15a, the location was more likely in the East Bay if the interview occurred in the Alameda County but not at Altamont Pass.
- As to what kind of facility would be preferred, Question 15b, the preference for a Truckstop or Full Service was less when the interview occurred in Alameda County other than at Altamont Pass.



- As to whether the driver was an employee or an independent contractor, Question 22, those at Altamont Pass were more likely to be independent contractors.
- As to the type of trailer, Question 25b, dry vans and dumps were more prominent in Alameda County, refrigerated were more prominent outside Alameda County.
- As to the length of trailer, Question 26, short chassis were more prominent on Altamont Pass.
- As to the count of vehicles at the interview site, Question 32a, the number was far greater at sites on I-5 and far fewer at sites in Alameda County other than at Altamont Pass. This is because all the interview sites on I-5 were either truck stops or restaurants, both of which cater to truck drivers. By comparison, only one such site (a truckstop) is known to exist in Alameda County and none are at Altamont Pass.

For Question #29, which was "Time of day the interview was conducted?" responses were segmented on AM or PM. AM were 25 (14%) of the responses and PM was 151 (86%). The responses to the following questions stood out.

- Of the drivers at the stop for over two hours and waiting, which was Question #2a, there was only one (4%) in the AM but there were 19 (12%) in the PM. (Likely this is because in the afternoon there is more waiting for instruction on where to next load than there is in the am.)
- As to whether the trailer was loaded or empty, which was Question #10, in the AM 56%, were loaded (and therefore 44% were empty) but in the PM, 47% were loaded and 53% were empty. Note, while this probably is not statistically significant, it is directionally correct for a metropolitan area dominated by consumption. That is, the Bay Area has significantly more inbound loads than outbound loads.
- Of the drivers that stopped in Hayward, San Leandro or San Lorenzo, 52% of the AM drivers did so and 77% of the PM drivers did so. (Note, because so many PM interviews occurred in the I-5 corridor, this is logical because of two causes. The first is the drivers try to get out of the Bay Area as soon after delivery as possible, and secondly, they want to pickup another load and the probability of one available is greater in the Central Valley for lack of outbound loads from the Bay Area.).

Major Findings and Conclusions From Survey

There are several major findings from the data in this survey and conclusions that can be drawn that are applicable to this project.

1. Most drivers stop for only a short period of time, not for overnight. Note, just because a driver is asleep in his cab does not mean that it is any more than a short nap, not necessarily that he is on his ten-hour mandatory rest.


- 2. Most stops occur for reasons outside of a driver's direct control and probably are better described as waiting.
- 3. The location where the driver stops is almost always at the driver's discretion.
- 4. There is a meaningful distinction between stopping to wait for something that is outside the driver's control and stopping for a 10-hour mandatory rest period (which is within the driver's control).
- 5. Stopping to wait and stopping for a mandatory rest period can occur concurrently at a common site particularly if it is a truck stop.
- 6. Most drivers prefer to stop at a location that is in the proximity of what they expect to do next.
- 7. Drivers favor locations in Hayward, Oakland, San Leandro, and San Lorenzo for whatever might be the activity that the driver expects to conduct there, including overnight stays. This is logical because it is in those towns that most of the shipping and receiving facilities are located, most of the terminals and drop lots used by trucking companies are located, and most of the drivers domiciled in the Bay Area have their residence.
- 8. Drivers domiciled at locations outside the Bay Area do not want to overnight in the Bay Area. If they must overnight in the Bay Area, they prefer a truck stop with full facilities (but not with lodging because most will use the bunk in their truck when they want to sleep). Note, this applies to the 10-hour mandatory rest, not to the temporary stop to wait during which the driver might take a nap.
- 9. Drivers domiciled in the Bay Area tend to return to their normal, permanent parking locations and do not utilize full service truck stops.
- 10. That out of town domiciled drivers would prefer to stop at a truck stop says nothing about if the extent of patronage would make the truck stop economically viable.
- 11. This survey probably under represents two categories of drivers that are stopped.
 - a. Drivers that drive wholly locally (within the Bay Area proper, say west of the Altamont, south of Novato/Vallejo/Benicia, north of Gilroy/Santa Cruz) within a day's driving activity.
 - b. Because surveyors did not wake sleeping drivers or wait for drivers that were away from their trucks to return, characteristics of drivers in the AM interview times are under represented and maybe skewed.
 - c. There may be need to find another method to interview these two sub segments of the driver population if additional data is required.
- 12. The most desirable locations for a truck stopping/parking facility are in East Oakland, Hayward, and San Leandro as close to an Interstate Highway as possible with easy ingress and egress.





Appendix A

SCOPE OF WORK FOR WILTEC FOR ALAMEDA COUNTY TRUCK DRIVER SURVEY

9/4/07 Revised

Surveyors to interview truck drivers at the locations specified (approximately 88). Most locations are in Alameda County, although some are outside. At each location, note how many trucks are parked, even if no interviews can be completed.

Survey should be done during hours as follows: Monday through Friday only, 6-9 AM and 4-7 PM. Approach occupied trucks/truck drivers (driver present) and ask survey questions. Note the location and time of the interview on the survey form.

Survey questionnaire has been developed by Tioga (latest version is 8/28/07), however, some adjustments may be needed to wording or number of questions asked. Tioga will try to keep these to a minimum. Budget for at least one session at which surveyors can come into office and "debrief" Tioga on interim results (i.e., providing a "pre-test" of the survey questionnaire).

All locations should be visited at least once. Do not interview small delivery truck drivers (e.g., Fed Ex, 2 axle trucks, etc.). Do not interview the same individual driver more than one time.

If surveyors see other locations where large (3+ axle) trucks appear to be congregating, they should note the location and may do interviews there.



Wiltec to enter data in an Excel spreadsheet. Some coding to be determined. Each response (survey) should be one row (e.g., 200 rows), with the questions as columns. Also provide Tioga with a copy of the original (field) survey forms, as well as the spreadsheet.

Schedule for Completion: Complete survey work by October 12. Complete and deliver data entry and spreadsheet by October 19. Provide recap of status and data on surveys completed as an interim report on September 24.

Surveyors should must wear reflective safety vests and Caltrans identification badge when conducting survey.



Appendix B

ACCMA: Truck Parking Facilities Feasibility and Location Study

Driver Survey – as of August 28, 2007

Introduction:

Be sure that you are standing in a safe spot. Approach the truck from the front so you can see if a driver is in the seat or along side his truck, and so he can see you. If it is not apparent where the driver is located, e.g. sleeper berth, go on to next truck; return later.

Hello, I am ______, and I am working for Caltrans and the Alameda County Congestion Management Agency (ACCMA). We are surveying truck drivers about alternative truck parking options. Please help us figure out some alternative parking options that would help you. This should take only 5 or 6 minutes. I want you to know that there is no law enforcement purpose involved. Your answers to our questions will be kept anonymous. May we get started? If yes, continue; if no, thank *and go on to next candidate. (If asked who is sponsoring the survey and/or who to talk to verify the survey, give Beth Walukas 510/836-2560 at ACCMA.)*

Question #:

- 1. Rather than being stopped here, where would you rather be located at this time? *Insert* response
- 2. About how long have you been parked here? Hours ______ minutes ____; *If more than 2 hours, ask*
 - a. Why has it been that long? Insert response:
- 3. Why are you parked here? (*indicate response with a check mark, probe as there may be more than one reason, and continue*)
 - b. ____ Waiting for appointment time (go to Q4)
 - c. ____ Waiting for instructions/dispatch from company/broker (go to Q5)
 - d. ____Personal need (eat, toilet, etc.) (go to Q6)
 - e. ___Brief rest (go to Q6)
 - f. ____ Truck broke down (go to Q7)
 - g. __Off-duty, mandatory, at least 10 hours off (go to Q8)

- h. ___Other (specify) ______ (go to Q9)
- 4. And when it gets close to your appointment time do you expect to leave here?
 - a. Yes (go to Q9)
 - a. No, *continue;* Why not? Insert response: $\overline{Q3, go there. If not, go to Q9.)}$ (If response is one of the answers to
- 5. And when you get your instructions/dispatch do you expect to leave this site?
 - a. Yes (go to Q9)
 - b. No, *continue;* Why not? Insert response: Q3, go there. If not, go to Q9.)
- 6. And when you finish, do you expect to leave here?
 - a. Yes (go to Q9)
 - b. No, *continue;* Why not? *Insert response: Q3, go there. If not, go to Q9.) Insert response is one of the answers to*
- 7. And when you get underway again, do you expect to leave here?
 - a. Yes (go to Q9)
 - b. No, *continue;* Why not? *Insert response: Q3, go there. If not, go to Q9.) Insert response is one of the answers to*
- 8. Why did you pick this location to stop for your 10 hours of rest? Insert response:
 - a. Is there a location you would have preferred to stop at rather this location? *If no, go to Q10; If yes, continue.*
 - b. Where is that location, geographically? *Insert response, try to get an intersection, at least get the name of town:*
 - c. Why would you prefer to have stopped there? *Insert response and then go to Q10:*

- 9. Why did you pick this location to stop? Insert response:
 - a. Is there a location you would have preferred to stop rather than this location?
 Yes , No If no, go to Q10; If yes, continue.
 - b. Where is that location, geographically? *Insert response, try to get an intersection, at least get the name of town::*
 - c. Why would you prefer to have stopped there? Insert response:

10. Is your trailer loaded or empty ?

- 11. When you leave here,
 - a. Where do you expect your next stop will be (what town or exit off of what freeway)? *Insert response:*
 - b. What do you expect to do at that stop? Pickup load ____; deliver load
- 12. Does the trucking company that you are working for have a terminal/yard in the Bay Area
 - a. Yes, *circle and continue*
 - i. Where is it; what town? Insert response:
 - ii. Why did you not stop there? (Note to interviewer: the driver may have started at that terminal/yard earlier in the trip.) Insert response:
 - b. No, *circle and continue*
- 13. When was the last time you had to stay overnight to take your 10 hour rest in the
EastEastBayArea?Insertresponse:

a. If never have done so or last time was more than a year ago, go to Q15

- b. If within the last year, continue
- 14. Where did you stay?
 - a. What town? Insert response: _____

- b. What kind of location/facility was it? Insert response:
- c. Who picked that location? Insert response:

15. When you have to take your 10 hour rest period somewhere here in the East Bay,

- a. What location/town would you prefer? Insert response:
- b. What kind of facility would you prefer? Insert response:
- 16. What are the two or three primary services you would find desirable at a truck parking facility? *Insert responses*:

i.	
ii.	
iii.	

Classification questions

17. Where are you domiciled (where is your home base)? (City, State)

18. Where did you start this workday? (City, State)_____

19. Where do you expect to end this workday? (City, State)

- 20. How long ago did you get off your last rest period? _____ hours
- 21. Is your tractor owned by you ____ or the company for which you are driving? ____
- 22. Are you an independent contractor ____ or an employee driver? _____
- 23. How do you get information on the best place to park your rig? Insert response:

Interviewer: complete following, ask driver if necessary:

- 24. Type of tractor: Truck __ or tractor __; COE __ or Conventional __; 2 axles ___ or 3 axles ____
- 25. Type of trailer: Chassis (with __ or without __ container); Dry van ___, reefer ___, open top ___, flatbed ___, dump, ___, liquid tank ___, dry tank ___, auto rack ___, other (*specify*) _____. *Control for location and count (not to exceed 30) of chassis with or without container.*



- 26. Type/length of trailer: single axle semi (pup/double) ____, set of pups/doubles ____, tandem axle semi ____, short chassis ____, long chassis ____, other (*specify*) ____
- 27. Is engine on ____ or off ____?
- 28. Location of this interview is:

a.	On	(name	(name of			roadway)		
b.	Near (name	of cross	street	or	large	building)		
c.	Direction of travel westbound, not a		, south	bound	, eastb	ound,		
29. Time o	of day am	pm						
30. Intervi	ewer's initials							
31Cl	neck if left a copy of s	survey with stam	ped envelo	pe due t	to languag	e barrier.		
32 C	ount of eligible vehic	eles parked at thi	s site at th	is time [.]	of that m	ımber		

32. ____ Count of eligible vehicles parked at this site at this time; of that number, _____ count that are bare chassis ____, count that are chassis with container mounted ___.

Terminate and thank.



Appendix C

ACCMA: List of initial locations for driver intercept survey

<u>Co.</u>	<u>City</u>	<u>Road name</u>	<u>Dir.</u>	<u>Between 1</u>	<u>and 2</u>	<u>Prospect</u> <u>s</u>	<u>Coun</u> <u>t on</u> <u>hand</u>	<u>Nature of</u> neighbor-hood		
									Comme	ents
Contr Costa	Richmond	I-580	EB	at east end of	RSR bridge	good in am			weekday m at curb	ornings
	Richmond	Richmond Parkway	WB	I-80	Fitzgerald Driv	ve		retail	just off I-8 sides and ra	
	Richmond	??		at Hilltop Shop	ping Center			retail	need detail	
	Richmond	Cutting							Richmond Engineer; detail	City need
	Richmond	Canal							Richmond Engineer; detail	City need
	Richmond	Harbor							Richmond Engineer;	City need

<u>Co.</u>	<u>City</u>	<u>Road name</u>	<u>Dir.</u>	<u>Between 1</u>	<u>and 2</u>	<u>Prospect</u> <u>s</u>	<u>Coun</u> <u>t on</u> <u>hand</u>	<u>Nature of</u> neighbor-hood	
									<u>Comments</u>
									detail
	Richmond	Marina Way South							Richmond City Engineer; neea detail
Solano	unincorp	I-80 rest area	WB	American Canyon	Columbus Pkwy	good in am		open land	what is going or there
	unincorp	Lake Herman Road	WB	I-680	end of 2nd St ((view area)		open land	Scenic overview of Mothballeo Fleet
Santa Clara	Milpitas	I-880	NB	ramps at Calav	/eras Blvd			interchange	mornings or ramps
	Milpitas	I-880	NB	ramps at Dixon	I Landing Rd			interchange	mornings or ramps
Alameda	unincorp	I-580	EB	ramps at top of	f Altamont	good in am		interchange	afternoon

<u>Co.</u>	<u>City</u>	<u>Road name</u>	<u>Dir.</u>	<u>Between 1</u>	<u>and 2</u>	<u>Prospect</u> <u>s</u>	<u>Coun</u> <u>t on</u> <u>hand</u>	<u>Nature of</u> <u>neighbor-hood</u>	
									<u>Comments</u>
									eastbound
	unincorp	I-580	WB	ramps at top o	f Altamont	good in am		interchange	both am and pm
	unincorp	I-580	both	ramps at El Ch	narro/Fallon			interchange	westbound in am; both in pm
	Livermore	I-580	both	ramps at Airway				interchange	westbound in am; both in pm
	Livermore	Kitty Hawk Drive	both	Airway	Airway east			business park	frontage road intersects Airway twice
	Livermore	Altamont/Northfront	WB	westbound ramps	northside of	1580		rural	frontage road
	Livermore	I-580	WB	Caltrans weight scale	east o Vasco	of		on- freeway/residential	scale house usually closed

<u>Co.</u>	<u>City</u>	<u>Road name</u>	<u>Dir.</u>	<u>Between 1</u>	<u>and 2</u> F	<u>s</u>	<u>Coun</u> <u>t on</u> <u>hand</u>	<u>Nature of</u> neighbor-hood	
									<u>Comments</u>
	Livermore	I-580	EB	Caltrans weight scale	east of Vasco			on- freeway/business park	scale house usually closed
	Livermore	I-580	in box	I-580 and Patterson Pass	Vasco and Green	ville		mixed	on and inside this box; local comment
	Dublin	Dublin Blvd	both	at Donlin Road	west of San Ramo	on Rd		retail	local comment
	Dublin	Dublin Blvd	both	San Ramon Road	Amador Plaza Rd	l		retail	local comment
	Berkeley	Eastshore	both	Hearst	Gilman			industrial	local comment
	Berkeley	Sixth Street	both	Bancroft	Gilman			mixed	local comment
	Berkeley	San Pablo	both	Cedar	Allston			mixed	local comment

<u>Co.</u>	<u>City</u>	<u>Road name</u>	<u>Dir.</u>	<u>Between 1</u>	<u>and 2</u>	<u>Prospect</u> <u>s</u>	<u>Coun</u> <u>t on</u> <u>hand</u>	<u>Nature of</u> neighbor-hood	
									<u>Comments</u>
	Berkeley	Sacramento	both	Durant	Ashby			mixed	local comment
	Berkeley	MLK Way	both	Ashby	Dwight			mixed	local comment
	Emeryville	I80/I580 Front Road	age WB/SI	3 Ashby	Powell			shoreside	
	Emeryville	I80/I580 Front Road	age EB/NE	3 Ashby				mixed	on west side of I-80; on ramps at Powell, 64 th St. and Ashby
	Emeryville/Oakland	Hollis	both	40th	34 th			mixed	local comment
	Oakland	Grand Ave	both	I-880	Market St			industrial	ignore containers/ chassis
	Oakland	Wood Street	both	40th	12th (including	12th, Pine)		mixed	ignore containers/ chassis

<u>Co.</u>	<u>City</u>	<u>Road name</u>	<u>Dir.</u>	<u>Between 1</u>	<u>and 2</u>	<u>Prospect</u> <u>s</u>	<u>Coun</u> <u>t on</u> <u>hand</u>	<u>Nature of</u> <u>neighbor-hood</u>	
									<u>Comments</u>
	Oakland	Mandela	both	Horton	7th St			mixed	ignore containers/ chassis
	Oakland	7th St	both	1880	1980			mixed	ignore containers/ chassis
	Oakland	5th St	both	Adeline (Middle Harbor)	Market St			industrial	ignore containers/ chassis
	Oakland	3rd St	both	Union	Market St			industrial	ignore containers/ chassis
	Oakland	5th and 6th St	both	Market	Broadway			mixed	ignore containers/ chassis
	Oakland	Embarcadero	EB/SB	10th Av	16th Av			industrial	at and in front of motels
	Alameda	Clement	both	Grand	Park			mixed	local comment

<u>Co.</u>	<u>City</u>	<u>Road name</u>	<u>Dir.</u>	<u>Between 1</u>	<u>and 2</u>	<u>Prospect</u> <u>s</u>	<u>Coun</u> <u>t on</u> hand	<u>Nature of</u> <u>neighbor-hood</u>	
									<u>Comments</u>
	Oakland	Oakport	SB	High Street	66th Av			shoreside	
	Oakland	South Coliseum Way	NB	66th Av	Hegenberger	good in am		sports complex	directly in front of Oakland Arena at easy off/on for EB I-880
	Oakland	San Leandro Street	both	High Street	98th Av			industrial	
	Oakland	San Leandro Street	both	near 8255 San	Leandro	good both		industrial	near SF/Oakland Auto/Truck Plaza
	Oakland	Baldwin	both	Hegenberger	85th Av			industrial	near Freightliner dealer
	Oakland	Hegenberger	both	Baldwin	Left St			industrial	
	Oakland	Edes Avenue	both	Hegenberger	85th Av			industrial	in front of motels and DMV

<u>Co.</u>	<u>City</u>	<u>Road name</u>	<u>Dir.</u>	<u>Between 1</u>	<u>and 2</u>	<u>Prospect</u> <u>s</u>	<u>Coun</u> <u>t on</u> hand	<u>Nature of</u> neighbor-hood	
									<u>Comments</u>
	Oakland	I-880 at 98th St	both					industrial	just off I-880 both sides on ramps
	San Leandro	McCormick	?	at Adams				?	local comment
	San Leandro	Neptune	?	north of William	าร			?	local comment
	San Leandro	Catalina	?	at Fairway				?	local comment
	San Leandro	Davis Street (CSR 61)	both	each side of I-8	380 ramps				
	San Leandro	Marina Blvd	both	Doolittle	Teagarden			retail	
	San Leandro	Merced St	both	Williams	Fairway			industrial	
	San Leandro	Washington	?	I-880	Grant			?	
	San Leandro	Lewelling	?	Washington	Hesperian			?	

<u>Co.</u>	<u>City</u>	<u>Road name</u>	<u>Dir.</u>	<u>Between 1</u>	<u>and 2</u>	<u>Prospect</u> <u>s</u>	<u>Coun</u> <u>t on</u> <u>hand</u>	<u>Nature of</u> neighbor-hood	
									<u>Comments</u>
	San Leandro	Hesperian	?	I-238	Grant			?	
	San Lorenzo	Worthley Dr	?	south of Grant				?	local comment
	Castro Valley	Grove Way	?	east of Center				?	local comment
	Castro Valley	E. 14th St	?	under I-238				?	local comment
	Castro Valley	Usher St	?	north of Lewe	lling			?	local comment
	Hayward	A Street	?	each side of I-880 ramps	Hesperian			?	
	Hayward	Clawiter	?	Industrial	south end of C	Clawiter		industrial	
	Hayward	Industrial	?	Clawiter	Industrial Park	way Southwes	st	?	
	Hayward	Hesperian	?	Industrial	Union City city	' limits		?	

<u>Co.</u>	<u>City</u>	<u>Road name</u>	<u>Dir.</u>	<u>Between 1</u>	<u>and 2</u>	<u>Prospect</u> <u>s</u>	<u>Coun</u> <u>t on</u> hand	<u>Nature of</u> neighbor-hood		
									<u>Commei</u>	<u>nts</u>
	Hayward	Industrial Pkwy SW	?	Industrial	Whipple			?		
	Hayward	Whipple	?	each side of I-8	380 ramps			?		
	Hayward	Industrial Pkwy SW	?	Ruus	other side stree	ets			where mote local comme	
	Hayward	Hayman	?	San Antonio					local comme	ent
	Hayward	Calgary	?	near Lewelling					relates FoodMax; comment	to local
	Union City	Union City Blvd	?	Hayward city limits	Smith			?		
	Union City	Dyer Street	?	Whipple	Alvarado Niles	Road		?		
	Union City	Alvarado Niles	?	each side of I-8	380 ramps			?		

<u>Co.</u>	<u>City</u>	<u>Road name</u>	<u>Dir.</u>	<u>Between 1</u>	<u>and 2</u>	<u>Prospect</u> <u>s</u>	<u>Coun</u> <u>t on</u> <u>hand</u>	<u>Nature of</u> <u>neighbor-hood</u>	
									<u>Comments</u>
	Union City	Whipple	south side	Central	I-880	***		?	in front of Federated; local comment
	Union City	Bettencourt Road	?	Union City Blvd.					near Whipple Business Park (issue?); local comment
	Union City	?	?	?	?			retail	in back of shopping malls; local comment
	Fremont	Guadwara	?	west of Mission				?	Sikh Temple; local comment
	Fremont	Post	?	Thornton				?	local comment
	Fremont	Albrae	?	Bocell				?	????; local

<u>Co.</u>	<u>City</u>	<u>Road name</u>	<u>Dir.</u>	<u>Between 1</u>	and 2 Pros	<u>spect</u> <u>s</u>	<u>Coun</u> <u>t on</u> <u>hand</u>	<u>Nature of</u> neighbor-hood	
									<u>Comments</u>
									comment
	Fremont	Dusterberry	?	Thornton	Central			?	Near DMV; local comment
	Fremont	Peralta	?	Acacia				?	local comment
	Fremont	Redeker	?	Cherry				?	local comment
	Fremont	I-880	?	Mowry	both sides of interchar	nge		?	
	Fremont	Osgood	?	Prune				?	local comment
	Fremont	Industrial Way	?	Ingot				?	local comment
	Fremont	Auto Mall Pkwy	?	both sides of I	-880			?	
	Fremont	Kato Road	?	in front of NUN	ИМI			?	
	Fremont	Mission Blvd (CSR	?	I-880	I-680			?	

<u>Co.</u>	<u>City</u>	<u>Road name</u>	<u>Dir.</u>	<u>Between 1</u>	<u>and 2</u>	<u>Prospect</u> <u>s</u>	<u>Coun</u> <u>t on</u> <u>hand</u>	<u>Nature of</u> neighbor-hood	
									<u>Comments</u>
		262)							
	Fremont	I-680	?	beyond NB scales	8 past Vargas Roa	ad		?	

& & Comments Summary

Q9. "Other" Responses to Question 9: Why Did you Pick This Location to Stop?

		Comment Text	Response Date
Error! Hyperlink reference not valid.	1.	Wash his truck	
Error! Hyperlink reference not valid.	2.	Only scale on way out	
Error! Hyperlink reference not valid.	3.	Wash his truck	
Error! Hyperlink reference not valid.	4.	Near delivery	
Error! Hyperlink reference not valid.	5.	Closest to possible pick-up	
Error! Hyperlink reference not valid.	6.	Only truck wash around	

Error! 7. Truck wash Hyperlink reference not valid. Error! 8. On the way Hyperlink reference not valid. Error! 9. No other place to stop Hyperlink reference not valid. Error! 10. Close to Bay Area Hyperlink reference not valid. Error! 11. Convenient Hyperlink reference not valid. Error! 12. Close to Bay Area Hyperlink reference not valid. Error! 13. On the way Hyperlink reference not valid. Error! 14. Closest to Bay Area Hyperlink reference not valid. Error! 15. Close to Bay Area Hyperlink reference

not valid. Error! 16. Better facility Hyperlink reference not valid. Error! **17.** No truck stop in East Bay Hyperlink reference not valid. Error! 18. Convenient Hyperlink reference not valid. Error! 19. On the way Hyperlink reference not valid. Error! 20. On the way Hyperlink reference not valid. Error! 21. Convenient Hyperlink reference not valid. Error! 22. On the way Hyperlink reference not valid. Error! 23. On the way Hyperlink reference not valid. Error! 24. On his way

Hyperlink reference not valid.		
Error! Hyperlink reference not valid.	25.	No where else
Error! Hyperlink reference not valid.	26.	On the way
Error! Hyperlink reference not valid.	27.	Convenient
Error! Hyperlink reference not valid.	28.	On the way
Error! Hyperlink reference not valid.	29.	On the way
Error! Hyperlink reference not valid.	30.	In between
Error! Hyperlink reference not valid.	31.	On the way
Error! Hyperlink reference not valid.	32.	Can legally park here

Error! **33.** Best place on the way Hyperlink reference not valid. Error! 34. Inspect Truck Hyperlink reference not valid. Error! **35.** Idle air / convenient Hyperlink reference not valid. 36. Only place Error! Hyperlink reference not valid. Error! 37. Ran out of hours Hyperlink reference not valid. Error! 38. Decent truck stop Hyperlink reference not valid. Error! 39. Biggest truck stop Hyperlink reference not valid. Error! 40. First stop after Sac. Hyperlink reference not valid. Error! **41.** Quiet Hyperlink reference

not valid. Error! 42. In between stops Hyperlink reference not valid. Error! **43.** Waiting to meet someone Hyperlink reference not valid. Error! 44. In between delivery Hyperlink reference not valid. Error! 45. Top of the grade Hyperlink reference not valid. Error! 46. On the way Hyperlink reference not valid. Error! 47. Meeting friend Hyperlink reference not valid. Error! 48. Quiznos Hyperlink reference not valid. Error! 49. Decent truck stop Hyperlink reference not valid. Error! **50.** Hours ran out here

Hyperlink reference not valid.		
Error! Hyperlink reference not valid.	51.	Convenient
Error! Hyperlink reference not valid.	52.	On the way home
Error! Hyperlink reference not valid.	53.	Closest to S.F.
Error! Hyperlink reference not valid.	54.	Not crowed here
Error! Hyperlink reference not valid.	55.	Good area
Error! Hyperlink reference not valid.	56.	Convenience
Error! Hyperlink reference not valid.	57.	Nice view
Error! Hyperlink reference not valid.	58.	Only place to park

Error! 59. Only place to park Hyperlink reference not valid. Error! 60. On the way Hyperlink reference not valid. Error! 61. Always stop here Hyperlink reference not valid. Error! 62. only place to stop Hyperlink reference not valid. Error! 63. Close to load Hyperlink reference not valid. Error! 64. It's adequate Hyperlink reference not valid. Error! 65. Close to load Hyperlink reference not valid. Error! 66. Closest to load Hyperlink reference not valid. Error! 67. Good food Hyperlink reference

not valid.		
Error! Hyperlink reference not valid.	68.	Closest to load
Error! Hyperlink reference not valid.	69.	Closest to load
Error! Hyperlink reference not valid.	70.	Fuel stop
Error! Hyperlink reference not valid.	71.	Closest to where he unloaded
Error! Hyperlink reference not valid.	72.	On his way to S. F.
Error! Hyperlink reference not valid.	73.	Closest
Error! Hyperlink reference not valid.	74.	delivered in Tracey
Error! Hyperlink reference not valid.	75.	Food
Error!	76.	last stop

Hyperlink reference not valid.	
Error! Hyperlink reference not valid.	77. Drop off and pick up area
Error! Hyperlink reference not valid.	78. nearest truck stop
Error! Hyperlink reference not valid.	79. Wal-Mart only place allowed to park
Error! Hyperlink reference not valid.	80. No truck stops
Error! Hyperlink reference not valid.	81. only place to get fuel and rest
Error! Hyperlink reference not valid.	82. Side of road
Error! Hyperlink reference not valid.	83. Only safe place around
Error! Hyperlink reference not valid.	84. best place to park around here

Error! 85. only stop around Hyperlink reference not valid. Error! 86. no where to go Hyperlink reference not valid. Error! 87. rest area Hyperlink reference not valid. Error! 88. First one I saw Hyperlink reference not valid. Error! 89. More convenient Hyperlink reference not valid. Error! 90. dispatch Hyperlink reference not valid. Error! 91. Only rest stop close by Hyperlink reference not valid. Error! 92. I needed to sleep Hyperlink reference not valid. Error! 93. no traffic Hyperlink reference

not valid.		
Error! Hyperlink reference not valid.	94.	rest before san Mateo bridge
Error! Hyperlink reference not valid.	95.	Company is close by
Error! Hyperlink reference not valid.	96.	close to his house
Error! Hyperlink reference not valid.	97.	dispatch
Error! Hyperlink reference not valid.	98.	live close by
Error! Hyperlink reference not valid.	99.	close to dispatch

Response to Question 12a. (ii) Why didn't you stop at your Company's terminal/yard in the Bay Area?

Representation Comments Summary

<u>close window</u>

		Displaying 1 - 18 of 18 responses	<< Prev	Next >>	Jump To:	Go >>
		Comment Text			Respo	nse Date
Error! Hyperlink reference not valid.	1.	Wanted to get truck washed			Wed, 12/5,	/07 3:13 PM
Error! Hyperlink reference not valid.	2.	Off 680 and closest to Martinez			Mon, 11/26	6/07 5:47 PM
Error! Hyperlink reference not valid.	3.	No truck parking			Fri, 11/16/()7 2:31 PM
Error! Hyperlink reference not valid.	4.	Started there			Fri, 11/16/(07 11:03 AM
Error! Hyperlink reference	5.	Doing paper work			Fri, 11/16/(07 10:12 AM

not valid.

Error! Hyperlink reference not valid.	6.	Take brake	Fri, 11/16/07 9:59 AM
Error! Hyperlink reference not valid.	7.	Safety check	Fri, 11/16/07 9:33 AM
Error! Hyperlink reference not valid.	8.	Take a brake	Fri, 11/16/07 6:10 AM
Error! Hyperlink reference not valid.	9.	no where to park, long term	Mon, 11/12/07 8:18 PM
Error! Hyperlink reference not valid.	10.	Local driver	Mon, 11/12/07 8:11 PM
Error! Hyperlink reference not valid.	11.	can't stay at terminal	Mon, 11/12/07 7:55 PM
Error! Hyperlink reference not valid.	12.	Fill out paperwork	Thu, 11/8/07 3:50 PM
Error! Hyperlink reference not valid.	13.	required to take a break before he gets to yard	Thu, 11/8/07 1:07 PM
Error!	14.	Hayward is his route	Thu, 11/8/07 1:02 PM
Hyperlink reference not valid.			
--	---	-----------------------	
Error! Hyperlink reference not valid.	15. did not want to go all the way	Thu, 11/8/07 12:50 PM	
Error! Hyperlink reference not valid.	16 . no parking at yard	Thu, 11/8/07 12:15 PM	
Error! Hyperlink reference not valid.	17. started there	Thu, 11/8/07 12:08 PM	
Error! Hyperlink reference not valid.	18. no parking	Thu, 11/8/07 10:53 AM	

Q. 16: What are the two or three primary services you would find desirable at a truck parking facility?

Comments Summary

close window

		Displaying 1 - 141 of 141 responses	<< Prev	Next >>	Jump To:	Go >>
		Comment Text			Respon	se Date
Error! Hyperlink reference not valid.	1.	Serenity / Drivers to be charged for garbage of get all the amenities	cleanup / O	ne paid price	e to Wed, 12/5/0	7 3:44 PM
Error! Hyperlink reference not valid.	2.	Lighting / Serenity / Safety			Wed, 12/5/0	7 3:31 PM
Error! Hyperlink reference not valid.	3.	Serene parking area / Cyclone Fence / Nice fa	acilities		Wed, 12/5/0	7 3:24 PM
Error! Hyperlink reference not valid.	4.	Serenity / Gym / Nice restaurant			Wed, 12/5/0	7 3:13 PM
Error! Hyperlink reference not valid.	5.	Lots of parking			Wed, 12/5/0	7 3:03 PM
Error! Hyperlink reference	6.	Serenity			Wed, 12/5/0	7 2:55 PM

Error! Hyperlink reference not valid.	7.	Serenity / Well lit / Clean facilities	Wed, 12/5/07 2:49 PM
Error! Hyperlink reference not valid.	8.	Paved parking / lounge	Wed, 12/5/07 2:31 PM
Error! Hyperlink reference not valid.	9.	Well lit	Wed, 12/5/07 2:22 PM
Error! Hyperlink reference not valid.	10.	Lots of parking / Serenity	Wed, 12/5/07 2:11 PM
Error! Hyperlink reference not valid.	11.	Truck wash / Good mechanic / Serenity	Sun, 11/25/07 9:56 PM
Error! Hyperlink reference not valid.	12.	Big lot / Gym	Sun, 11/25/07 9:48 PM
Error! Hyperlink reference not valid.	13.	Western Union / Food / ATM machine	Sun, 11/25/07 8:08 PM
Error! Hyperlink reference not valid.	14.	Paved parking / Arcade	Sun, 11/25/07 8:00 PM
Error!	15.	Serenity / Cameras / Plenty of free parking / Certified scale	Sun, 11/25/07 7:45 PM

Hyperlink reference not valid.			
Error! Hyperlink reference not valid.	16.	Cameras / Serenity / Gym	Sun, 11/25/07 7:35 PM
Error! Hyperlink reference not valid.	17.	Lots of parking / Cat scale / Restaurant	Sun, 11/25/07 7:15 PM
Error! Hyperlink reference not valid.	18.	Serenity / Paved parking	Sun, 11/25/07 7:05 PM
Error! Hyperlink reference not valid.	19.	Serenity / Well lit / Truck maintenance	Sun, 11/25/07 6:56 PM
Error! Hyperlink reference not valid.	20.	Plenty of free parking / Scale / Friendly service	Sun, 11/25/07 6:49 PM
Error! Hyperlink reference not valid.	21.	Cameras / Serenity / Paved parking	Sun, 11/25/07 6:42 PM
Error! Hyperlink reference not valid.	22.	Serenity / Gym	Sun, 11/25/07 6:35 PM
Error! Hyperlink reference not valid.	23.	Serenity / Cameras / Nice lounge / Family oriented facility	Sun, 11/25/07 6:27 PM

Error! Hyperlink reference not valid.	24.	Serenity / Lighting / Internet	Sun, 11/25/07 6:18 PM
Error! Hyperlink reference not valid.	25.	Paved parking / Trash cans / Good lighting / Cameras	Sun, 11/25/07 6:11 PM
Error! Hyperlink reference not valid.	26.	Free Parking /	Sun, 11/25/07 6:00 PM
Error! Hyperlink reference not valid.	27.	Well lit / Cameras / Truckwash	Sun, 11/25/07 5:53 PM
Error! Hyperlink reference not valid.	28.	Friendly service / Fast food / Serenity	Sun, 11/25/07 5:47 PM
Error! Hyperlink reference not valid.	29.	Free Parking / Well Lit / Serenity	Sun, 11/25/07 5:39 PM
Error! Hyperlink reference not valid.	30.	Fee parking / Grocery store / Driver lounge	Sun, 11/25/07 5:33 PM
Error! Hyperlink reference not valid.	31.	Gym / Maintenance / Truck wash	Sun, 11/25/07 5:24 PM
Error! Hyperlink reference	32.	Fast food / Pool, Jacuzzi / Serenity / Cameras	Sun, 11/25/07 5:18 PM

Error! Hyperlink reference not valid.	33.	Fast food / Restroom / Cameras	Sun, 11/25/07 5:09 PM
Error! Hyperlink reference not valid.	34.	Fast food / Truck wash	Sun, 11/25/07 4:58 PM
Error! Hyperlink reference not valid.	35.	Gym / Serenity	Sun, 11/25/07 4:56 PM
Error! Hyperlink reference not valid.	36.	Well lit / Serenity /	Sun, 11/25/07 4:21 PM
Error! Hyperlink reference not valid.	37.	Cat scale / Internet	Sun, 11/25/07 4:13 PM
Error! Hyperlink reference not valid.	38.	Grocery store / Dog park / Serenity	Sun, 11/25/07 4:06 PM
Error! Hyperlink reference not valid.	39.	Maintenance / Truck wash / Fast Food	Sun, 11/25/07 3:58 PM
Error! Hyperlink reference not valid.	40.	Serenity / Gym	Sun, 11/25/07 3:50 PM
Error!	41.	Scale / Friendly services /	Sun, 11/25/07 3:42 PM

Hyperlink reference not valid.			
Error! Hyperlink reference not valid.	42.	Plenty of parking / lounge	Sun, 11/25/07 3:34 PM
Error! Hyperlink reference not valid.	43.	Well lit / Razor wire around it	Sun, 11/25/07 3:27 PM
Error! Hyperlink reference not valid.	44.	Plenty of parking / Truck service /	Sun, 11/25/07 3:19 PM
Error! Hyperlink reference not valid.	45.	Restroom / Plenty of parking / Fast food	Sun, 11/25/07 3:05 PM
Error! Hyperlink reference not valid.	46.	Serene Parking	Sat, 11/24/07 12:43 PM
Error! Hyperlink reference not valid.	47.	Serene Parking / Cat scale / Fast food	Sat, 11/24/07 12:39 PM
Error! Hyperlink reference not valid.	48.	Serene Facility / Dog park /	Sat, 11/24/07 12:34 PM
Error! Hyperlink reference not valid.	49.	Serenity / Internet access	Fri, 11/23/07 7:04 AM

Error! Hyperlink reference not valid.	50.	Truck wash / Serenity / Friendly Service	Fri, 11/23/07 6:54 AM
Error! Hyperlink reference not valid.	51.	Serenity / Well lit / Plenty of space	Fri, 11/23/07 6:40 AM
Error! Hyperlink reference not valid.	52.	Free Parking / lounge / Cat Scale	Fri, 11/23/07 6:31 AM
Error! Hyperlink reference not valid.	53.	Serene Parking / Truckers only	Fri, 11/23/07 6:12 AM
Error! Hyperlink reference not valid.	54.	Serene Parking / Scale / WI. Fi.	Fri, 11/23/07 6:01 AM
Error! Hyperlink reference not valid.	55.	Internet access / Lounge	Fri, 11/23/07 5:39 AM
Error! Hyperlink reference not valid.	56.	Restroom / Friendly service	Sat, 11/17/07 6:21 AM
Error! Hyperlink reference not valid.	57.	Serenity	Sat, 11/17/07 6:12 AM
Error! Hyperlink reference	58.	Serenity	Sat, 11/17/07 6:04 AM

Error! Hyperlink reference not valid.	59.	Water	Sat, 11/17/07 5:53 AM
Error! Hyperlink reference not valid.	60.	T. V. room / Safety / Food	Sat, 11/17/07 5:41 AM
Error! Hyperlink reference not valid.	61.	Maintenance	Sat, 11/17/07 5:28 AM
Error! Hyperlink reference not valid.	62.	Serenity / Future growth / Level parking lot with good drainage	Sat, 11/17/07 5:17 AM
Error! Hyperlink reference not valid.	63.	Lounge	Sat, 11/17/07 5:01 AM
Error! Hyperlink reference not valid.	64.	Serenity	Fri, 11/16/07 5:56 PM
Error! Hyperlink reference not valid.	65.	Amble parking	Fri, 11/16/07 5:45 PM
Error! Hyperlink reference not valid.	66.	Well lit	Fri, 11/16/07 5:35 PM
Error!	67.	Truck scale	Fri, 11/16/07 5:23 PM

Hyperlink reference not valid.			
Error! Hyperlink reference not valid.	68.	A lot of free truck parking / Serenity / Lighting	Fri, 11/16/07 5:13 PM
Error! Hyperlink reference not valid.	69.	Well lit	Fri, 11/16/07 4:23 PM
Error! Hyperlink reference not valid.	70.	Internet access / Restroom	Fri, 11/16/07 4:10 PM
Error! Hyperlink reference not valid.	71.	Serenity	Fri, 11/16/07 3:39 PM
Error! Hyperlink reference not valid.	72.	Well lit area / serenity	Fri, 11/16/07 3:30 PM
Error! Hyperlink reference not valid.	73.	Friendly service	Fri, 11/16/07 3:20 PM
Error! Hyperlink reference not valid.	74.	Quiet / Friendly service	Fri, 11/16/07 3:10 PM
Error! Hyperlink reference not valid.	75.	Scale / Free parking	Fri, 11/16/07 2:56 PM

Error! Hyperlink reference not valid.	76.	Hotel	Fri, 11/16/07 2:41 PM
Error! Hyperlink reference not valid.	77.	Supplies	Fri, 11/16/07 2:31 PM
Error! Hyperlink reference not valid.	78.	Truck wash	Fri, 11/16/07 1:36 PM
Error! Hyperlink reference not valid.	79.	Entertainment / Market	Fri, 11/16/07 1:21 PM
Error! Hyperlink reference not valid.	80.	Restroom	Fri, 11/16/07 1:00 PM
Error! Hyperlink reference not valid.	81.	Accessories for truck	Fri, 11/16/07 11:15 AM
Error! Hyperlink reference not valid.	82.	Scales / lounge	Fri, 11/16/07 10:53 AM
Error! Hyperlink reference not valid.	83.	Plenty of free parking	Fri, 11/16/07 10:29 AM
Error! Hyperlink reference	84.	Truck service	Fri, 11/16/07 10:12 AM

Error! Hyperlink reference not valid.	85.	Serenity / Fly Machine / Western Union	Fri, 11/16/07 9:45 AM
Error! Hyperlink reference not valid.	86.	Truck wash	Fri, 11/16/07 9:33 AM
Error! Hyperlink reference not valid.	87.	Truck wash	Fri, 11/16/07 8:52 AM
Error! Hyperlink reference not valid.	88.	Groceries / Shade	Fri, 11/16/07 8:38 AM
Error! Hyperlink reference not valid.	89.	Internet access	Fri, 11/16/07 7:15 AM
Error! Hyperlink reference not valid.	90.	Fitness center / Serenity / Western Union	Fri, 11/16/07 6:26 AM
Error! Hyperlink reference not valid.	91.	A lot of room / Internet access	Fri, 11/16/07 6:10 AM
Error! Hyperlink reference not valid.	92.	Serenity / Good lighting / Shower	Thu, 11/15/07 2:02 PM
Error!	93.	Free parking / Idle air / Internet	Thu, 11/15/07 1:48 PM

Hyperlink reference not valid.			
Error! Hyperlink reference not valid.	94.	Free parking / Scales	Thu, 11/15/07 5:52 AM
Error! Hyperlink reference not valid.	95.	Serenity / Restaurant / Free parking	Thu, 11/15/07 5:40 AM
Error! Hyperlink reference not valid.	96.	Serenity / Enough parking ,free / Friendly service	Thu, 11/15/07 5:25 AM
Error! Hyperlink reference not valid.	97.	Plenty of parking /Serenity	Thu, 11/15/07 5:12 AM
Error! Hyperlink reference not valid.	98.	Qualified truck drivers only / No cars be allowed or motor homes / Attendant for the showers	Thu, 11/15/07 5:00 AM
Error! Hyperlink reference not valid.	99.	Plenty of room to park / Tire shop / Wi. Fi	Thu, 11/15/07 4:43 AM
Error! Hyperlink reference not valid.	100.	Free parking / Serenity	Thu, 11/15/07 4:30 AM
Error! Hyperlink reference not valid.	101.	Safe place to stay	Thu, 11/15/07 4:14 AM

Error! Hyperlink reference not valid.	102. Serenity	Thu, 11/15/07 3:55 AM
Error! Hyperlink reference not valid.	103. Serenity	Wed, 11/14/07 4:30 PM
Error! Hyperlink reference not valid.	104. Serenity	Wed, 11/14/07 4:13 PM
Error! Hyperlink reference not valid.	105. Serenity	Wed, 11/14/07 3:57 PM
Error! Hyperlink reference not valid.	106. hotel/motel/restaurant	Wed, 11/14/07 12:03 PM
Error! Hyperlink reference not valid.	107. well lit, security	Wed, 11/14/07 6:49 AM
Error! Hyperlink reference not valid.	108. well lit, truck wash	Wed, 11/14/07 6:41 AM
Error! Hyperlink reference not valid.	109. restroom, security	Wed, 11/14/07 6:35 AM
Error! Hyperlink reference	110. more food	Wed, 11/14/07 6:13 AM

Error! Hyperlink reference not valid.	111. mini bar, rest room	Wed, 11/14/07 6:07 AM
Error! Hyperlink reference not valid.	112. Restroom	Wed, 11/14/07 6:02 AM
Error! Hyperlink reference not valid.	113. Stores	Wed, 11/14/07 5:49 AM
Error! Hyperlink reference not valid.	114. need it all	Tue, 11/13/07 4:45 PM
Error! Hyperlink reference not valid.	115. Entertainment	Mon, 11/12/07 9:08 PM
Error! Hyperlink reference not valid.	116. Stores	Mon, 11/12/07 8:52 PM
Error! Hyperlink reference not valid.	117. Lounge	Mon, 11/12/07 8:38 PM
Error! Hyperlink reference not valid.	118. large lot	Mon, 11/12/07 8:18 PM
Error!	119. Secure area	Mon, 11/12/07 8:11 PM

Hyperlink reference not valid.		
Error! Hyperlink reference not valid.	120. rooms, parts store, shopping	Mon, 11/12/07 7:55 PM
Error! Hyperlink reference not valid.	121. Sleep	Mon, 11/12/07 7:46 PM
Error! Hyperlink reference not valid.	122. store, safe place	Mon, 11/12/07 7:41 PM
Error! Hyperlink reference not valid.	123. more parking, rec.	Mon, 11/12/07 7:21 PM
Error! Hyperlink reference not valid.	124. More parking spaces	Mon, 11/12/07 7:11 PM
Error! Hyperlink reference not valid.	125. Rest area. Restaurant	Mon, 11/12/07 7:00 PM
Error! Hyperlink reference not valid.	126. more parking space, lounge/TV	Mon, 11/12/07 5:08 PM
Error! Hyperlink reference not valid.	127. Store, Phones/rec.	Mon, 11/12/07 4:51 PM

Error! Hyperlink reference not valid.	128. well lit, FREE parking	Thu, 11/8/07 3:50 PM
Error! Hyperlink reference not valid.	129. Wash truck	Thu, 11/8/07 3:40 PM
Error! Hyperlink reference not valid.	130. Maintenance	Thu, 11/8/07 3:24 PM
Error! Hyperlink reference not valid.	131. truck scale	Thu, 11/8/07 3:13 PM
Error! Hyperlink reference not valid.	132 . Shade	Thu, 11/8/07 1:56 PM
Error! Hyperlink reference not valid.	133. truck wash	Thu, 11/8/07 1:24 PM
Error! Hyperlink reference not valid.	134. Shade	Thu, 11/8/07 1:12 PM
Error! Hyperlink reference not valid.	135. safe parking	Thu, 11/8/07 1:07 PM
Error! Hyperlink reference	136. shade and scale	Thu, 11/8/07 1:02 PM

Error! Hyperlink reference not valid.	137. Truck Wash maintenance	Thu, 11/8/07 12:50 PM
Error! Hyperlink reference not valid.	138. Payment	Thu, 11/8/07 12:34 PM
Error! Hyperlink reference not valid.	139. Coffee shop and CLEAN restrooms	Thu, 11/8/07 12:29 PM
Error! Hyperlink reference not valid.	140. Stores	Thu, 11/8/07 12:08 PM
Error! Hyperlink reference not valid.	141. secrecy and comfort	Thu, 11/8/07 11:23 AM

8

Appendix E: Topical Background Paper

Introduction

There are many issues, and few opportunities, surrounding the parking of commercial trucks in places where the trucks are co-existing with the general public. Most of the issues have to do with trucks as nuisances, trucks aggravating the environment, illegal parking of trucks, enforcement of existing regulations governing trucks and trucking operations, and new neighbors being disturbed by the presence of pre-existing trucks and truck facilities in the neighborhood. Hence, even for the few that recognize the commercial benefits of trucks, trucks are viewed as undesirable if "in my back yard" or "affecting me personally".

Opportunities to do something constructive to lessen the impact of trucking operations on the citizenry are few. This project is focused on what may be an opportunity. It is to lessen the impact of trucks parked in locations viewed as "inappropriate" and trucks operating on the freeways during the hours of major traffic congestion. The idea is to provide an authorized, appropriate facility, at which trucks can park, if they care to, which facility provides benefits to the public. Just what those benefits might be and what features of such a facility might attract trucks (particularly, large tractor semi-trailer combination trucks) is what is to be studied in this project.

This paper summarizes truck travel and parking activities in Alameda County, identifies truck parking needs in terms of who wants to park and what types of facilities they need, and provides background information on truck volumes in Alameda County. It is the initial attempt to describe trucking and truck parking activities in Alameda County.

Truck Patterns in Alameda County

In the State of California, the US Census Bureau reports in its 2002 Vehicle Inventory and Use Survey that for "trucks" 4,000 pounds gross vehicle weight and over

- 75.0% are used for personal transportation and another 8.3% are for other, not reported or not applicable; hence 16.7% are used in business
- 94.6% are pickup, minivan, other light vans, and sport utility trucks; leaving 5.4% for service and freight trucks

By range of operation as measure in truck trip distance:

- 53.6% are 50 miles or less
- 17.5% are 51-200 miles (therefore 71.1% are 200 miles or less)
- 4.2% are 201 miles or more
- 24.7% are off-road, not reported, or not applicable

Therefore, on highway, 71.2 % of the trips are 50 miles or less, 94.5% are 200 miles or less, and 5.6% are over 200 miles

The U.S. Department of Transportation (Bureau of Transportation Statistics) "Commodity Flow Survey: 2002 San Jose-San Francisco-Oakland Combined Business Statistical Area (CBSA, also CSA)" reports commodity flow in tons (as opposed to truck trips). Tons most closely correlate to truck trips and vehicle miles traveled by trucks.

Outbound from the CBSA,

- 152.7 million tons are moved; 66.8% by truck, 2.1% by rail, 25.5% by other single modes (primarily water and pipeline); 0.5% are moved by multiple modes of which 0.3% is parcel, courier or United States Postal Service (USPS)
- 76.0% of the tons are moved less than 50 miles; 86.6% are moved less than 250 miles

Of the tons moved by truck,

- 78.4% move less than 50 miles and 88.8% move less than 250 miles
- 3.0% are a shipments less than 1000 pounds and 88.6% are a shipments 10,000 pounds or more

Of the tons moved by parcel, courier or USPS,

- 22.5% move less than 250 miles and 46.7% move 1000 miles or more
- 90.6% are shipments less than 500 pounds and 0.0% are over 1,000 pounds

By destination,

- 91.5% of the tons are to California, of which 75.9% is internal to the reporting CBSA (San Jose-San Francisco-Oakland), 5.4% is to the Los Angeles-Long Beach-Riverside CBSA, 2.1% is to Sacramento-Arden-Arcade-Truckee CBSA) 0.1% is to San Diego-Carlsbad-San Marcos CBSA, and 8.0 is to the remainder of California
- 1.5% of the tons are to WA, 0.6 are to OR, 1.0 are to NV

Inbound to the CBSA,

• 174.7 tons are moved; 95.1 % uses only a single mode of which truck is 72.3%, rail is 4.2%, all other is 18.6%; 0.7% uses multiple modes of which parcel, courier or USPS is 0.3%

By point of origin,

• 86.3% of the tons are to California, of which 66.4% is internal to the San Jose-San Francisco-Oakland CBSA, 8.2% is from Los Angeles-Long Beach-Riverside

CBSA, 3.8% is from Sacramento-Arden-Arcade-Truckee CSA), nil% is from San Diego-Carlsbad-San Marcos CSA, and 7.8% is from the remainder of California

• 1.0% of the tons are from WA, 1.1 are from OR, nil are from NV, 0.9 are from IN

In addition, due to the physical location of the Bay Area, it is the "end of the line"; that is, very few truck trips transit the region, e.g. Salinas to Yreka, and all of it is north-south using I-880 or I-680 to transit Alameda County. The Bay Area is not a hub for through truck activity in the sense that Sacramento or St. Louis are.

Therefore, most of the local commercial trucking firms whether for-hire or private and virtually all of the public sector trucking activities operate truck trips to/from established locations, or "terminals" or "yards" or "domicile". To the extent that these firms use independent contractors that are the owner-operator of their own tractor (or tractor trailer combination), many of the independent contractors, but not all, will begin and end their daily tour of duty at a "terminal. The terminals may be located locally (in Alameda County), or they may be on the "other end" of the daily tour, e.g. Stockton, Fresno, Woodland, or they may be at a mid-point, e.g. Stockton, Fresno or Woodland for trips operating in a radial pattern from a mid-point terminal. To some extent there is a long-term trend to operate from terminals in the far suburbs of the Bay Area when serving the Bay Area as opposed to having terminals in the older sections of Oakland or Emeryville. Examples are Safeway moving from Richmond to Tracy, Cost Plus moving from Oakland to Modesto, Sears moving from San Leandro to Vacaville, or Yellow Freight moving from Oakland/Barstow to Tracy.

Also, there is a long-term trend for more truck trips to carry the same amount of goods. This is due to "just in time" delivery coupled with "lean production" in the attempt to minimize inventory-carrying costs, and to smaller order sizes ("just enough for today") particularly to retail and residences. Also, more offshore sourcing as opposed to domestic production is lengthening supply chains thereby "putting more miles on the freight". When these shifting logistics management practices are coupled with increases in population (more goods consumed and produced) and highway congestion (less productivity) the projection (nationally) is for 21% more volume with 41% more trucks by 2017 and even more trucks per unit of volume in the subsequent years.

Characteristics of the Trucking Industry and its Customers in Alameda County

The Metropolitan Transportation Commission has provided certain statistics about the nature of business in East Bay communities. Data are North American Industrial Classification System (NAICS) codes at the six digit level, number of establishments, and number of employees all by city. Slightly over simplified, the NAICS codes can be grouped into three tiers that relate to the transportation characteristics of each tier.

Tier 1 – Businesses dependent on good movement; there are two sub-groups:

• This sub-group is freight operations and therefore the activity at the site reflects frequent truck trips even though the firm(s) creates no shipments.

• This sub-group creates shipments (therefore truck trips, including in private trucks operated by such businesses) and is very dependent on freight transportation, e.g. distribution centers, manufacturing or processing, big box retailers, etc.

Tier 2 – Customers of the firms that are in the business of handling (or arranging for hauling and storage) freight. Even though they may operate private trucks, trucking is not their primary business, e.g. food services, equipment rental, industrial services, small retailers, etc. Many of these business actually support the trucking industry along with other segments of industry, e.g. truck rental, tires, truck dealers, etc.

Tier 3 – Incidental customers that normally ship or receive goods only rarely and usually in smaller volumes, e.g. finance and insurance, real estate, entertainment, building management, etc.; these companies can be major users of parcel service providers.

That creates data that gives another measure of the trucking intensiveness of various corridors.

Corridor	Number of Establishments	Employment		
Richmond to Emeryville				
Tier 1	558	19,176		
Tier 2	821	15,164		
Tier 3	896	23,186		
Subtotal	2,275	57,526		
Oakland (including Alameda)				
Tier 1	657	22,295		
Tier 2	872	16,890		
Tier 3	962	25,203		
Subtotal	2,491	64,388		
San Leandro to Union City				
Tier 1	1,454	40,290		
Tier 2	1,427	27,751		
Tier 3	1,224	26,683		
Subtotal	4,105	94,724		
Fremont to Newark				
Tier 1	567	25,239		
Tier 2	581	21,992		
Tier 3	423	14,511		
Subtotal	1,213	46,719		
Grand Total	10,084	263,357		

Two of the classifications for establishments are "LTL carriers" and "Truckload carriers". These are for-hire carriers, not private carriers, and the employee counts should exclude both independent contractors and drivers employed by the company but not domiciled at such locations. The totals for just this NACIS classification are shown in Exhibit 14

Corridor	Number of Establishments	Employment
Richmond to Emeryville	12	122
Oakland (including Alameda)	52	955
San Leandro to Union City	93	2,539
Fremont to Newark	16	949
Total	173	4,565

Exhibit 14: NAICS Trucking Establishments

Street address for these establishments are not provided as no data about individual companies is provided.

Truck Parking Needs in Alameda County

This project is to try to determine the attraction of publicly available, common-user parking sites for trucks within close proximity to the truck trip origins and destinations. In England these are called "lorry parks". In the U.S. they are call "shared facilities" but they are privately owned and very limited in number due to landowners not favoring this use for their land. Even trucking companies with "extra" space will limit the number and type of tenants so as not to "spoil" their own trucking operation. And, because it is not their primary business, they will tend to sell (or lease) an entire facility while relocating their own trucking operation to a "right sized" location.

The attraction could be any of a number of things. It is not going to eliminate truck trips. But, it may change the temporal characteristics of trips that would otherwise occur during hours of peak highway congestion. Or, it might change the nature of dispatch practices to better assure timeliness and reliability of trucking operations. It might provide a "traffic calming" characteristic to traffic issues. It might change the locations of where out of town drivers chose to spend their off-duty time. It might even reduce the number of vehicle miles operated as such sites eliminated a leg of a trip to/from a more remote off-duty site.

There is a need to define the market(s) for such a public, common user facility. One market segment may be the driver that comes into the Bay Area very early in the morning to assure arriving on-time for an appointment delivery, but given the unpredictability of the morning traffic congestion, finds that he has arrived early, needs to "kill" some time, parks in an inappropriate location (in the sense that he probably would like to be as close to his appointment as possible but the receiver does not provide sufficient parking or services for early arrivals) for 15-90 minutes, and then proceeds to destination in the peak of the morning rush hour on the freeway. Another market is the driver that is on a longer haul and has to find a place to park while he takes his statutory rest of 10 hours which often is overnight. Likely there are many other markets (customer groups) for a public, common user facility.

There is the need to define the characteristics of the parking facility, e.g. secure, lighted, vending machines, etc. There is a need to describe the logical locations that might be well patronized, e.g. nearby to major shipper/receivers, unobtrusive to neighbors, right off the freeway, at a point where a lot of trucking activity occurs.

Segments of the Trucking Industry Affected by This Proposal

No two truck trips are truly identical in every respect. Even for identical shipments between identical shippers and receivers, by definition there has to be different tractors, trailers, drivers, location on the roadway, and times at which integral actions occur. Hence, the industry is susceptible to significant amounts of segmentation based on hundreds of variables. There are certain common segmentations that are particularly applicable to this project, but data about these segmentations is company specific and not generally known much less available.

As for trucks that are parked "overnight", the following characterizations would tend to dominate. Therefore, in the various surveys and analysis that will be conducted, focus will be on tractors, drivers trucking companies, and parking situations with the following characteristics. Precompiled lists of these do not exist. Hence, the surveyors and analysts will have to have these segmentation in their mind as they do their work :

Tractor (or truck)

- Is not domiciled at a local terminal or drop lot
- Is from an out of town domicile
- If operated by a local company (or a national company with a local terminal or lot), tractor is domiciled/parked at a site selected by the tractor's owner-operator)
- If the location is a repair or service facility, the vehicle is "in for service" even though the driver maybe doing something else

Driver

- Driving solo, although may have a second, non-driver along on the trip
- Is not domiciled at a local terminal or drop lot (he is from out of town or a local resident that parks his tractor where he cares to)
- Driver is not on duty (is logging on Line 1 of his Driver's Daily Log); and driver may be in the tractor's sleeper bunk if it is so equipped
- Most likely is an independent owner-operator
- Or, if an employee, works for a trucking company that does not pre-specify locations for taking a required statutory rest period (such as at a named motel or truck stop)

Trucking company (or truck broker or customer)

- Is not parcel, express, or LTL company
- Does not pre-designate location for driver to take statutory rest

Parking is in a spontaneous, rather than a pre-arranged location

As for trucks that are temporarily stopped (parked) awaiting an event the following segmentations would tend to dominate.

Tractor (or truck)

- Is not a distinguishing factor in the decision to stop
- Unless it is broken down awaiting repair

Driver has made a spontaneous decision to stop here

- By arriving early (likely due to expected traffic congestion) to be pre-positioned to await an appointment time
- Take care of personnel need
- Obtain dispatch or instructions from the party for which it is working
- Is looking for a next load/trip by contacting trucking companies and truck brokers

Trucking company (or truck broker or customer)

- Has specified an appointment time for which the driver is pre-positioned and waiting
- Has the driver waiting for his next dispatch and/or further instructions before proceeding

Parking is at a location that

- "Looks" like it is a spontaneous decision by the driver
- Not nearby to a customer or truck servicing facility
- Other trucks (with drivers) have congregated

Caltrans Data

Caltrans periodically counts trucks passing various locations on the highway system. From those records, the flow of trucks can be mapped onto the local highway system, see map on next page. In this case, only trucks of 4 or more axles are counted and only selected routes are mapped. The width of the line on the map indicated the number of trucks per day. Most state routes carry less than 100 such trucks per week day. However, and as is particularly applicable to this project, the Interstate System are the roadways with the most trucks as depicted on the map below:

Exhibit 15: Roadways with Truck Activity

The geographical locations of truck terminals and places where trucks are domiciled in the East Bay gives a good view of where trucks probably operate. This is because all local truck trips will eventually originate and terminate at these terminal, drop lot and parking sites. There are several compilations of such sites, and they are not mutually consistent. Hence, it is critical to understand just what each is based on and what it tries to depict.

The first such compilation is above in the listing of businesses by NACIS code by city. Note that that compilation totals 173 businesses. But, by definition is covers only for-hire LTL and TL carriers.

California Highway Patrol Data

A far more comprehensive, but still incomplete, list is provided by MISTER (Management Information Systems for Terminals) as compiled by the California Highway Patrol (CHP). This compilation comes from the requirement that CHP must conduct a Biennial Inspection of Terminals (BIT program) to inspect the safety aspects of all on-highway vehicles based at each location regardless of the nature of the carrier/trucker. CHP indicates that they believe that they have found about 80+% of the locations that house such vehicles and over 98% of all vehicles subject to the BIT inspections. The current MISTER file lists 3549 locations in Alameda County. Amongst other data, it counts power units at each location. The current list shows the following distribution of counts of power units at such locations. Locations with zero power units are provided, also, because the BIT program includes trailers. This frequency distribution is shown in Exhibit 16.

Number of Tractors and Trucks	Number of Terminals	Percentage
100+	4	.2
50-99	23	.7
25-49	68	2.0
15-24	76	2.2
10-14	91	2.6
5-9	276	7.8
1-4	2634	74.2
0	377	10.7
Total	3549	

This display shows rather clearly that trucking is really a very fragmented industry. Nationally the average fleet size is 1 (mode), 2 (median) and 4 (mean) and that is across all locations everywhere a fleet operates. Hence, the bigger fleets based in Alameda county, e.g. Waste Management, UPS, Conway, Caltrans may be more visible, but they a minor in many respects.

Exhibit 17 plots the locations of the fleets in Alameda County that are 25 trucks or larger:

Exhibit 17: Fleets of 25+ Trucks

In actuality, based on the date of the MISTER data, some of these locations are now occupied by different trucking companies. This is due to changes in the nature of the trucking business. The two largest causes for a location to change the trucker that occupies it are 1) change in the nature of the business conducted by the trucker, and 2) the trucker goes out of business. The third is that a new trucking company is created or moves into town. Despite changes in the nature of the occupant of a trucking site, the site tends to remain as a truck location because land use requirements are so restrictive.

Appendix F: Literature Search

Literature Search

The best-known report is:

"Study of Adequacy of Commercial Truck Parking Facilities – Technical Report" prepared for the Federal Highway Administration in 2002 by Science Applications International Corporation.

This effort involved:

- A national assessment of the extent and geographic distribution of parking shortage,
- Research to clarify drivers parking-related needs and decision-making, and
- Development of a technical guidance document to be used...for inventorying current facilities...analyzing current and projected shortages...and developing plans for action....

At first blush, this appears promising for the ACCMA project, but a thorough review of the content of the report is far less fruitful. This study was prompted by a perceived shortage of truckstops near and rest areas on the National Highway System. It concentrated on the territory between metropolitan areas, not within them. It obtained certain data on a statewide basis without distinguishing the data between a metropolitan area and open country. There is passing comment on certain activities within metropolitan areas without supporting data. Nonetheless, for the long haul, intercity segment of trucking, it is a landmark report.

In the report in Table 17, it states that the State of California has a "shortage" of accommodations on routes carrying more than 1,000 trucks per day both for public rest area sites and commercial truck stop sites. Tioga contacted District 4 of Caltrans to determine if Caltrans could retrieve the data that it submitted for the State of California for this study and determine if any data submitted was directly related to the San Francisco-Oakland Metropolitan area. Caltrans apparently could not find this data.

In the course of searching national sources, Tioga found two additional items worth mentioning. The first is that the bibliography for the 2002 FHWA report provided reference to a number of other sources, pre 2002, but none of them concentrated on the two aspects that are paramount in this project. That is, they did not isolate on metropolitan areas, and secondly, they did not isolate on reasons why truck drivers stop on occasion for reasons other than to load/unload their trailer.

However, in the course of searching, with an emphasis on metropolitan areas, truck driver needs and more current literature, Tioga did find two other efforts that are meritorious.

The "*Final Report: Truck Parking Partnership Study*" dated October 2006 was done by Gannett Fleming for the Baltimore Metropolitan Council. It services as the current landmark report because it concentrates on the driver, the metropolitan area, and the actions that can be considered to help relieve drivers stopping their vehicles to "hold" for a period of time. Also, it breaks the

issues into manageable tasks, and it invites replicating its process for coping with additional, chronic or sensitive situation in a constructive manner that assist the truck driver.

Similar to what is reported in the Baltimore report, there are three additional, similar efforts in progress at this time (September 2007). There is one each in Connecticut, New Jersey and Eastern Pennsylvania in different stages of completion and following similar but not identical work paths and work tasks. It is premature to state how helpful the will be as templates or workbooks for other areas, but they bear watching.

On a tangential matter, there is a report "*Intelligent Transportation Systems and Truck Parking*" dated February 2005 done for the Federal Motor Carrier Safety Administration by the Volpe National Transportation Systems Center of the U.S. Department of Transportation. This concentrates on the opportunity for using ITS techniques to communicate with truck drivers the status of supply and demand for truck parking slots in a given, limited area.

This use of electronic assistance for the truck driver is just evolving. Caltrans' Department of Goods Movement has an initiative in place that should be followed as it may soon be to the point of needing a beta test site, and the East Bay region may be a candidate. What must be cautioned is that use of such electronic or communications assist features may or may not be as "driver friendly" as they may have to be to be classified as genuine assistance.

Other Local Initiatives

Similarly, three local initiatives must be monitored. As a result of the City of Oakland and the Port of Oakland taking back the property that is the site of the former Oakland Army Terminal, both the City and the Port have designated 15 acres apiece to be developed for purposes supporting logistics and distribution. The Port's site is being award to AMPCO parking services as the concessionaire. This is a continuation of the Port's efforts to try to find space, albeit on a temporary, interim basis that has a history of being interrupted, that can be used by port truckers (only) to park their trucks when off duty. The City's site is a permanent use that is currently the subject of a Request for Proposals, and seven applicants have replied. The third initiative is that Caltrans has rented property underneath raised portions of I-880 for truck and automobile parking. Such action by Caltrans is highly decentralized, and it may be that the opportunity for using such parcels, either temporarily or permanently, for the purpose of truck parking can be formalized with Caltrans.

Best Practices from SCAG

Tioga scoured the websites for the Southern California Council of Governments, Gateway Cities, Metropolitan Transportation Authority, Riverside County Transportation Commission and the San Bernardino Association of Governments for any reporting on the topic of this project. Virtually nothing was found. To the extent that there is reference to truck parking, it came in the context of violations and complaints about truck parking judged to be unsatisfactory.

Despite this lack of available study or project materials, Tioga is aware of at least two studies conducted in Southern California that provided some positive perspective on opportunities for properly accommodating parked trucks. Tioga's awareness comes from having participated in these two studies. Both studies originated due to the negative aspects of truck parking being

intrusive, but both made some constructive comments about the topic. Meyer, Mohaddes Associates was the prime contractor on each study.

- The "County of Riverside Truck Routing and Parking Study Report" done for the County of Riverside's Transportation Department dated in early 2005 concentrated on explaining the issues and suggesting certain remedies and preferred practices.
- The "North County Truck Study" done in very late 2002 for SCAG and administered by the City of Palmdale Planning Department touched on truck parking issues. It made some constructive explanations and offered some possible solutions. However, that was not the focus of the work.
- While many might agree that there are issues concerning illegal or inadvisable truck parking practices surrounding truck parking, there is little recognition. For instance,
- The "Critical Goods Movement Issues Scan for Riverside County" dated September 2006 which was produced for the Riverside County Transportation Commission by Cambridge Systematics excludes any mention of truck parking.

The thought that looking to the SCAG region for some best practices might be productive has developed not to be a fertile source.

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Input was generously provided by individuals that represented commercial truck stops and municipalities in Alameda County. Finally, but very importantly, there were the individual truck drivers who while stopped/parked cooperated with the interviewers to provide answers to the driver questionnaire -- and a lot of color commentary.