# GOALS AND NEEDS WORKING PAPER

**JANUARY 2020** 

Prepared for:



Caltrans'

In coordination with:

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## Acronyms

ATRI	American Transportation Research Institute
CA	California
Caltrans	California Department of Transportation
CBRE	Coldwell Banker Richard Ellis, a commercial real estate company
DOT	Department of Transportation
FHWA	Federal Highway Admnistration
FMCSA	Federal Motor Carrier Safety Administration
ITS	Intelligent Transporation System
MEP	Mobility Enhancement Plan
NDOT	Nevada Department of Transportation
NV	Nevada
SANDAG	San Diego Association of Governments
U.S.	United States

## Introduction and Purpose

## 1.1 Study Background

The California Department of Transportation (Caltrans) and the Nevada Department of Transportation (NDOT) were awarded a National Economic Partnerships grant by the Federal Highway Administration (FHWA) in June 2019 to develop an I-15 Freight Mobility Enhancement Plan (MEP). The National Economic Partnerships initiative promotes efficiency and regional cooperation by identifying best transportation planning practices that can be implemented across jurisdictional boundaries. The I-15 Freight MEP builds on the *Nevada State Freight Plan* 2017 and the *California Freight Mobility Plan* 2014 (2020 update underway), and complements the ongoing work associated with current truck parking efforts in both Nevada and California, concentrating on specific issues related to urban truck parking that impact the entire region.

## 1.2 Study Area

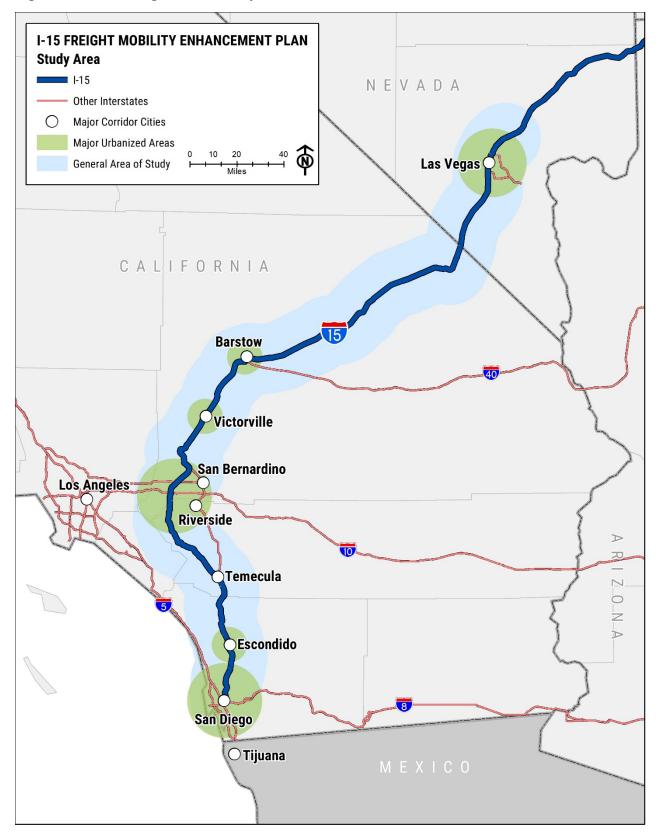
The study area for the I-15 Freight MEP is located in Southern California and Southern Nevada roughly 10 to 30 miles on either side of the I-15 corridor within the metropolitan areas in the following counties: San Diego (CA), Riverside (CA), San Bernardino (CA), and Clark (NV). Figure 1-1 shows the corridor in relation to major urban areas and the future I-11 corridor.

### 1.2.1 I-15 Freight Context

The I-15 corridor is a vital linkage in the economies of the western U.S. and the entire nation, with some of the largest economic and population centers relying on I-15 for inter-state and inter-regional mobility. Anchored in the south by Southern California, the I-15 corridor is a principal corridor linking coastal ports to inland population centers including San Diego (CA), Riverside-San Bernardino (CA), and Las Vegas (NV) and provides connections to other major east-west highways, including I-10 and I-40.

I-15 includes areas that carry more than 300,000 vehicles per day. In some portions of the corridor, truck traffic accounts for as much as 20 percent of the total traffic volume. It is estimated that 30 million tons of cargo (valued at \$95 billion) is moved along the I-15 corridor in this region each year. Partners in Nevada, southern California, and Arizona have a strong interest in investing in I-15 today so that it can best accommodate the needs of tomorrow.

Figure 1-1: I-15 Freight MEP Study Area



Given the tremendous economic impact of the I-15 corridor in this region, states and regions have been actively investing in important enhancements to help sustain and preserve this route. In addition to high volumes of traffic and congestion, the I-15 corridor also experiences major events (crashes, weather events, and special event congestion) that cause significant disruptions to operations along the freeway, crippling traffic for extended periods of time.

Because I-15 between California and Nevada have very few, or in some cases no alternate route options, detours can be extensive, and in place for a long time. I-15 also has a shortage of truck parking facilities, both along the freeway and in municipalities along the corridor, that can be used during these events or for regular freight operations. Considering the recent updates to Federal regulations related to monitoring the time drivers spend on the road, the lack of truck parking on I-15 continues to be a critical issue, and the focus of this current work effort.

## 1.3 Purpose of Working Paper

This working paper presents a summary of the goals and needs of this work effort, as captured through a review of agency freight planning studies, stakeholder interviews, and stakeholder workshops along the corridor. Truck parking needs may be regional in nature or unique to a location and may cover important infrastructure needs, as well as needs related to data, policies, processes, or collaboration.

## 2.1 Truck Parking Goals

The following overarching truck parking goals evolved through a collaborative effort between Caltrans, NDOT and their partnering agencies:

• Identify strategies, best practices and templates for providing effective urban truck parking along the I-15 Corridor

**Truck Parking Goals and Needs** 

- Establish new partnerships and a successful multi-state coalition
- Advance important near-term corridor improvement opportunities
- Advance key freight planning efforts in both California and Nevada for I-15
- Better coordinate local and megaregional corridor planning efforts
- Elevate engagement with local and regional planning agencies who have a vital role in mobility and safety planning and programming for I-15, including facilitating better land use and zoning requirements

## 2.2 Truck Parking Needs

A series of actions were carried out to understand and develop a comprehensive set of needs and strategies for the corridor related to truck parking. This included reviewing current freight planning documents in both California and Nevada, speaking with individual freight stakeholders/groups, and meeting with the regional planning agencies along the route. The following subsections summarize the common themes heard, as well as needs that may be more unique based on locational qualities.

### 2.2.1 Literature Review

State and regional freight planning documents were reviewed to understand projects, policies, or other recommendations related to truck parking needs. **Attachment A** includes a comprehensive review of such studies. Common themes included:

• Increase the number of truck parking spaces and facilities, along with supportive intelligent transportation systems (ITS)/other technology improvements, along major freight corridors

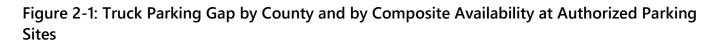
- Ensure that needs are met in both rural and urban areas, including maximizing truck parking in dense urban areas where parking spaces are limited, and providing overnight parking for longhaul trucks in rural areas
- Ensure that some truck parking is adjacent to commercial truck stops, travel plazas, or other amenity areas (e.g., restrooms)
- Provide short-term parking and staging opportunities in urban areas
- Provide long-term parking areas for owner-operators
- Investigate options for delivery space-booking systems or smart truck parking, allowing online booking in advance and/or the availability of real-time parking information
- Convert closed facilities (e.g., chain up, rest areas, inspection sites) to allow truck parking and/or identify facilities that are underutilized and may accommodate truck parking (e.g., park & rides)
- Develop a prioritization scheme to evaluate locations for truck parking
- Establish truck parking funding strategies
- Explore multi-state partnerships/coordination to resolve truck parking issues and learn from best practices

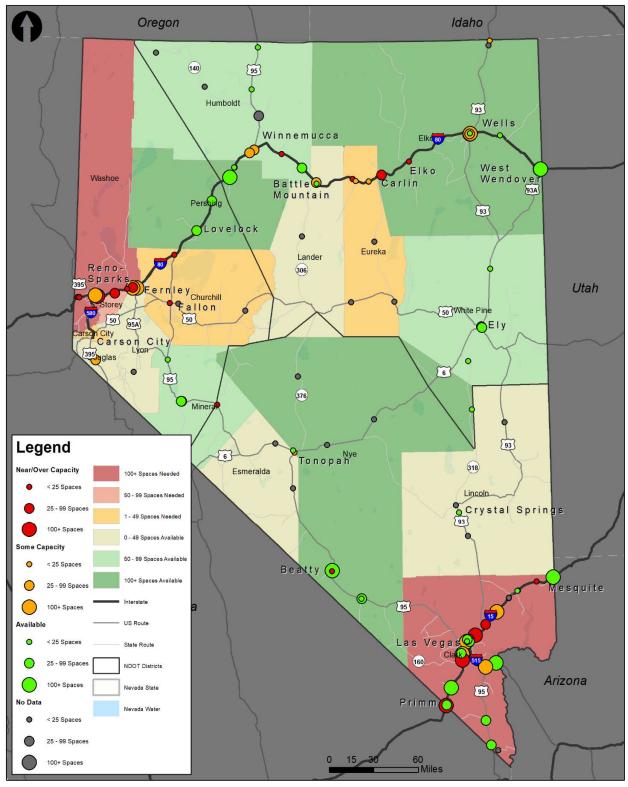
### 2.2.2 Data Analysis

A high-level analysis using available truck parking data was completed based on recent studies conducted in Nevada and Southern California's travel demand model to further understand and identify the needs.

NDOT's recent statewide truck parking study reported that "the largest gaps in truck parking occur in the two major urban areas in Nevada—Las Vegas, and Reno/Sparks. Clark County has a gap of more than 550 truck parking spaces. Stakeholder input identified I-15 in the southwest portion of Las Vegas as an area of particular need given the origin-destination patterns in the region and the important trade ties to Southern California." Figure 2-1 shows the existing gap at the county level as well as the gap at all authorized parking locations and the location of unauthorized public parking locations based on data from American Transportation Research Institute (ATRI)<sup>1</sup>.

<sup>&</sup>lt;sup>1</sup> NDOT. 2019. Nevada Truck Parking Implementation Plan. Accessed December 30, 2019: <u>https://www.nevadadot.com/doing-business/about-ndot/ndot-divisions/planning/freight-planning</u>.



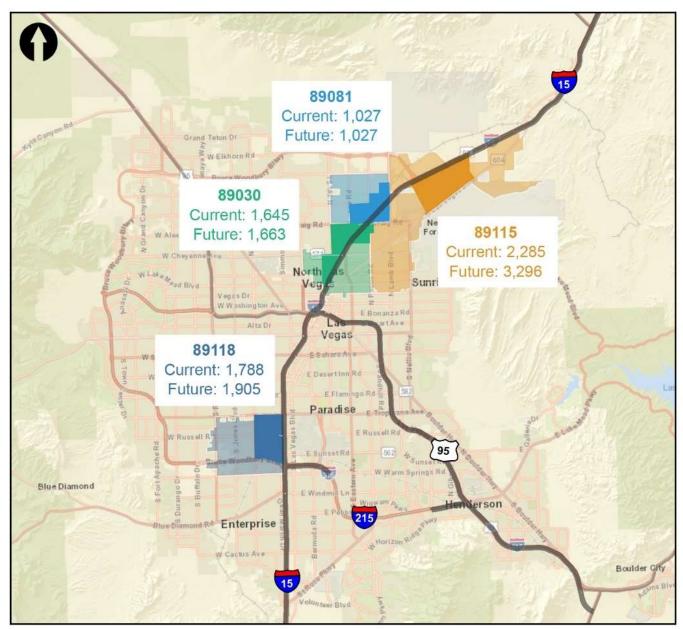


Source: Nevada Truck Parking Implementation Plan, August 2019

The NDOT report describes why demand for truck parking is so high relative to the inventory in urban areas and notes specific areas where the gap is most prominent.

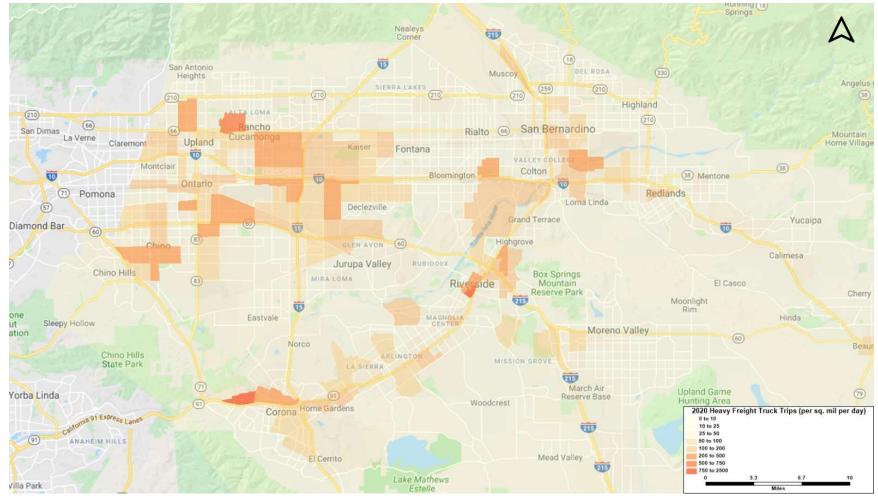
- "Short-term staging parking demand is different from long-haul demand in that trucks are parking while waiting to make a pickup or delivery instead of resting for a long period of time to satisfy Federal Motor Carrier Safety Administration (FMCSA) rest requirements. Therefore, trucks typically try to park as close to the loading/delivery location as possible and the short parking duration leads to more turnover at any single location.... Many commercial businesses have specific windows during which trucks can be on site to load or unload their goods. If drivers arrive before that time in order to guard against delays or other disruptions, they commonly are not allowed to park and wait on site. Without adequate short-term parking options near these industrial and commercial areas, trucks often park in unauthorized locations or on the street, leading to safety and maintenance issues.
- "There is limited research on the amount of on-site parking required to support short-term staging
  parking at truck-reliant businesses. However, most of these facilities reserve all of the on-site parking
  spaces for internal operations. Outside companies are often allowed to drop trailers in the yard to be
  off-loaded at a later time when docks are available. The truck parking spaces on-site are reserved for
  those trailer drops, and then yard hostlers are used to shuttle trailers around the yard. There are no
  guidelines for the number of parking spaces needed outside the gate for trucks waiting their turn to
  enter the gate.
- "To approximate the areas where short-term staging and parking is most needed in the Las Vegas metropolitan region, this study used data from Coldwell Banker Richard Ellis (CBRE), a commercial real estate company, to map out concentrations of truck bays (Figure 2-2). CBRE provided data for the number of truck bays for all facilities at the zip code level. The current and future number of truck bays by zip code in the Las Vegas metropolitan area for facilities with five or more bays was identified.....
   The majority of warehouses are located in four zip codes (89030, 89081, 89115, and 89118) in North Las Vegas. Two-thirds of the planned growth in truck bays is occurring in North Las Vegas. Truck bays in these zip codes are expected to increase by 17 percent through 2020."

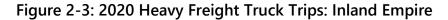
Figure 2-2: Southern Nevada Industrial and Commercial Concentrations (Number of Bays at Facilities with 5+ Bays: 2018 and Planned 2020)



Source: CBRE, Google Earth as reported in Nevada Truck Parking: Draft Needs Assessment - Truck Parking Demand and Gap Analysis, March 2019

In Southern California, regional planning studies have recognized the specific need for truck staging areas at the U.S./Mexico border, which can become very congested. The California statewide travel demand model was used to identify areas projected to have high concentrations of heavy truck origins and destinations in 2020 and 2050 (see Figures 2-3 through 2-6), which is an excellent indicator of areas with a high demand for urban truck parking.





Springs (18) Nealeys 215 18 T San Antonio DEL ROSA Muscoy Heights Angelus SIERRA LAKES Highland (210) A LOMA 66 ancho San Dimas (66) San Bernardino Rialto Mountain La Verne Claremont Upland Home Village Fontana T Montclair (38) Colton TO (38) Mentone T T Pomona inds Loma Linda 57 Declezville Grand Terrace Yucaipa **Diamond Bar** T TS (60) (83) Highgrove LEN AVON Calimesa Jurupa Valley Chino Hills **Box Springs** (83) El Casco Mountain **Reserve Park** Cherry Moonlight Rim Ū one Hinda Eastvale ut Sleepy Hollow Moreno Valley ation 60 Norco Beau MISSION GROVE State Park 215 March Air **Upland Game** Yorba Linda **Reserve Base** 2050 Heavy Freight Truck Trips (per sq. mile) Woodcrest Hunting iome Gardens Corona 0 to 10 a 91 Express Lanes 10 to 25 25 to 50 215 50 to 100 100 to 200 ANAHEIM HILLS 200 to 500 500 to 750 Mead Valley El Cerrito 750 to 2500 215 Other Lake Mathews 3.2 Villa Park Miles Estelle

Figure 2-4: 2050 Heavy Freight Truck Trips: Inland Empire

Figure 2-5: 2020 Heavy Freight Truck Trips: San Diego

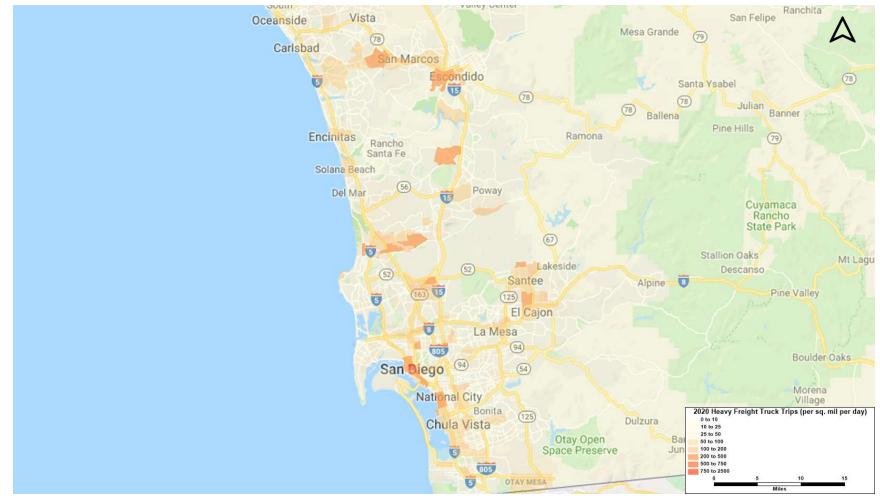
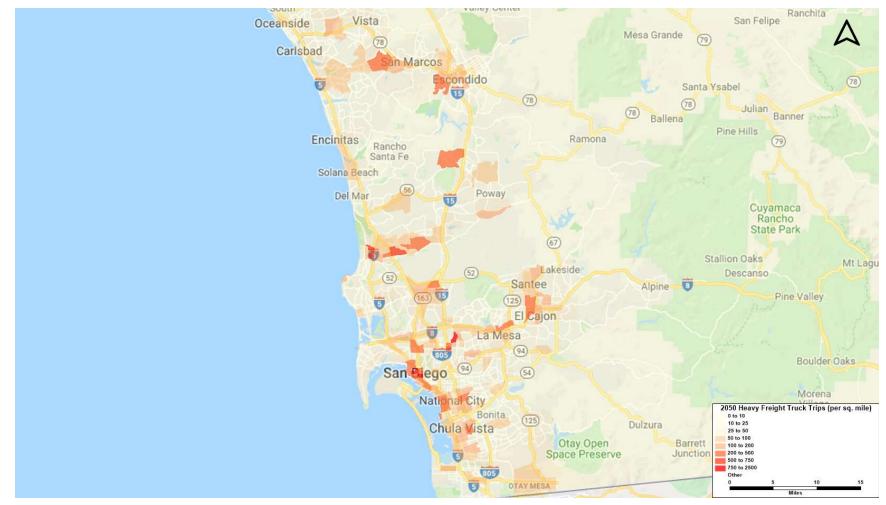


Figure 2-6: 2050 Heavy Freight Truck Trips: San Diego



### 2.2.3 Agency Workshops and Stakeholder Interviews

As part of the I-15 Freight MEP kick-off activities, the project team conducted a series of introductory workshops with partner agencies and regional stakeholders along the corridor (San Diego and Riverside, California; Las Vegas, Nevada). These workshops provided an opportunity to discuss the challenges and solutions surrounding truck parking in these regions. In addition, individual meetings were held with local stakeholder jurisdictions that could not attend the regional meetings. **Attachment B** includes the complete meeting summary document and **Attachment C** includes a summary of the additional stakeholder interviews. The following presents a summary of major truck parking needs identified by stakeholders.

Common themes included:

- The high cost of land makes it cost prohibitive to build new/independent truck parking facilities, especially in urban areas
  - Facilitate better land use and zoning requirements to:
    - Allow truck parking at underutilized parking locations, such as stadiums, particularly at night when not in use
    - Coordinate truck parking policies and technologies among adjacent jurisdictions to improve economic partnerships and benefits
  - Establish land use policies that require shippers/receivers to provide truck parking
- Relax the Federal law that prohibits commercialization of rest areas or Department of Transportation (DOT) properties
- Foster collaboration between different levels of government and public/private partnerships to collaborate on solutions; involve policymakers
- Provide real-time information on truck parking locations, availability, and amenities
- Identify champions in each region to continue the momentum and carry out recommendations

Location-specific needs included:

• Determine solutions for truck parking at the U.S./Mexico border and Port of San Diego

Two truck parking needs were recurrently identified by various stakeholders along the corridor, but will require follow-on work to complete, outside of this study:

- Conduct a curbside management study for short-term truck delivery parking in urban areas. The San Diego Association of Governments (SANDAG) will be completing a study in the San Diego area, but this concern was voiced in the Las Vegas area also. *It is recommended that SANDAG share their findings and lessons with communities experiencing this same urban parking issue.*
- Quantify where and how much truck parking is available, and where and how much is needed. This effort will require intensive data collection, as well as collaboration with state DOTs and local jurisdictions.

NDOT recently completed a data-driven study that identified where and how much parking is needed across Nevada, as noted above, and Caltrans is preparing to embark on a similar statewide study.

## 2.3 I-15 Freight MEP Purpose Statement

Based on the needs and goals identified, the purpose of investigating urban truck parking solutions through this I-15 Freight MEP is to:

Identify strategies for providing effective urban truck parking along the I-15 Corridor. Effective urban truck parking can be defined as reliable, secure, affordable, with the amenities drivers need, and supported by the surrounding community. Develop an actionable implementation plan that defines the partnerships, technology, policy, and funding frameworks needed for successful implementation, collaboration, and economic partnership.

The recommendations resulting from this study are intended to provide state, metropolitan, and local planning agencies with the tools they need, in the form of best practices and templates, to address the needs for urban truck parking within their jurisdiction. Actual implementation of study recommendations will be at their discretion.

# Attachment A

Literature Review

## Literature Review of Truck Parking Information

Subject:	Summary of Findings relative to Truck Parking from Partner Agencies' various studies and plans
Prepared for:	Nevada Department of Transportation, Caltrans, and Partner Agencies
Prepared by:	Christian Kirkham/Parametrix and Vern Keeslar/Parametrix
Date:	January 13, 2020

## Nevada State Freight Plan 2017

NDOT. (2017, January). Nevada State Freight Plan, URL: <u>https://www.nevadadot.com/mobility/freight-</u> <u>planning/nevada-freight-plan</u>. Accessed 11/7/2019.

### Strategic Goals

- Economic Competitiveness
- Safety
- Advanced Innovative Technology
- Sustainable Funding
- Mobility and Reliability
- Infrastructure Preservation
- Environmental Sustainability & Livability
- Collaboration, Land Use, and Community Values

### Specific Recommendations

- Truck parking facilities with amenities should be spaced closely enough to provide drivers more options for layovers to meet their hours-of-service regulations. Spacing greater than a 2-hour drive could force a driver to stop far short of the required hours-of-service, at a significant operational and financial loss, but spacing closer than that, especially in rural areas, may not be financially feasible for private developers of the facilities. (pg. 2-3)
- Increase the number of truck parking spaces and facilities, along with supportive ITS improvements. (pg. 1-26)
- Create a Nevada Truck Rest Stop Implementation Plan. Phase I is largely completed as part of the NSFP, and Phase II would consist of continued data collection and analysis, including surveys and interviews that will result in identification of issues as well as recommendations for additional truck parking areas. (pg. 1-26)

• Implement investments in partnership with private and public stakeholders on truck parking ITS and expanding rest areas along interstate and interregional highways. Explore multistate partnerships. (pg. 1-27)

### Nevada Truck Parking Implementation Plan

NDOT. (2019, July). *Nevada Truck Parking Implementation Plan*, URL: <u>https://www.nevadadot.com/home/showdocument?id=16775</u>. Accessed 11/7/2019.

- Focus on the creation of new truck parking, expansion of existing truck parking capacity, conversion of other uses into truck parking, and addition of amenities.
- Policy changes, education and outreach opportunities, and coordination efforts that can help close the truck parking gap in Nevada. Stakeholders within the truck stop industry commented that one of the best ways public agencies can support development of new or expanded facilities is not with financial support (which often comes with unwanted requirements) but help with local permitting requirements and fostering public support.
- Urban parking solutions must respond to Short-term staging parking, Long-term parking for independent owner-operators, and long-haul parking.
- Technology and data solutions do not increase capacity but can make finding parking easier and can reduce the impacts of idling (noise and air pollution) that are often the impetus behind community opposition to truck parking facilities. (pg. 7-3)
- Multi-State Coordination -- pool efforts to resolve truck parking issues and learn from best practices in other States. (pg. 7-5)
- Convert Closed Facilities -- explore allowing trucks to park at chain up areas or inspection sites that are not used on a consistent basis. (pg. 7-5)
- Public-Private Partnerships (P3) -- related or ancillary facilities useful for providing, operating, maintaining, or generating revenue for a transportation facility may be conducted or included under a P3. These ancillary facilities can include parking facilities and rights-of-way as deemed needed. (pg. 7-6)
- Competitive Loan or Grant Program -- responds to future changes in needs or demand more easily than having a specific set of scheduled projects. (pg. 7-6)

### California Freight Mobility Plan 2014

CalSTA. (2014, December). California Freight Mobility Plan. Received via e-mail 11/6/2019.

- Expand the system of truck parking facilities (pg. 21)
- Provision of safe, secure truck parking in urban and rural areas (pg. 31)
- Construction of safety rest areas with truck parking (pg. 222)
- Construction of truck parking areas adjacent to commercial truck stops and travel plazas (pg. 222)

- Opening existing facilities to truck parking, including inspection and weigh stations and park-and ride facilities (pg. 223)
- Promoting availability of publicly or privately-provided truck parking on the National Highway System (NHS) (pg. 223)
- Construction of turnouts along the NHS for commercial motor vehicles (pg. 223)
- Capital improvements to public truck parking facilities that close on a seasonal basis, allowing them to remain open all year (pg. 223)
- Improving the geometric design of interchanges on the NHS to improve access to truck parking facilities (pg. 223)
- US DOT to survey states within 18 months of (MAP-21) enactment regarding their CMV traffic and capability to provide CMV parking (pg. 223)
- Investigate the potential for creating a truck parking program (pg. 223)
- Delivery space-booking systems maximizing truck parking in dense urban areas where parking spaces are limited (pg. 236)
- Smart Truck Parking designed to demonstrate the application of real-time parking availability information at truck stops, Real-Time Parking Availability Information, Truck Stop Attribute Information, Parking Reservations (pg. 242)

### California Sustainable Freight Action Plan

Governor Edmund G. Brown Jr. (2016, July). California Sustainable Freight Action Plan. Received via e-mail 11/6/2019.

- Encourage investment in electric charging infrastructure for public truck parking facilities along the freight network. Strategies for this action may involve:
  - > Identifying current or future locations for potential electric charging stations.
  - Investigating in-motion (wireless) charging.
  - > Coordinating efforts and resources to fund a demonstration project.
  - > Assessing use and cost benefits for potential future projects. (C-9)
- Caltrans will work with partners to improve the truck parking supply issue. Research is also in progress to test a truck parking availability/reservation system, which will improve efficiency by guaranteeing a parking space for a fee. (C-74)
- Research opportunities to increase the supply of truck parking along the freight network. Included strategies may entail:
  - Assessing current and future planned public and private truck parking facilities to establish statewide needs.
  - Considering inclusion of refueling and/or charging stations for alternative fuel vehicles and implementation of parking space availability/reservation systems technology.

- > Siting and recommending potential future parking sites. (C-74)
- Truck parking and reservation systems will be in place at strategic locations, expandable as needed and as practical. (C-80)
- Recommendations included a statewide smart parking system. (F-3)

## San Diego 2019 Federal Regional Transportation Plan

SANDAG. (2019, October). San Diego Forward: The 2019 Federal Regional Transportation Plan. URL: <u>https://www.sdforward.com/mobility-planning/2019FederalRTP</u>. Accessed 11/12/2019.

- Truck Parking at SR 76/I-15 (\$19 million)
- Truck staging at border (\$41 million)
- Truck rest stop with restrooms, location TBD (NA)

## Caltrans Safety Roadside Rest Area Master Plan

Caltrans. (2011, April). Safety Roadside Rest Area Master Plan. URL: <u>https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-h-safety-roadside-rest-areas</u>. Accessed 11/7/2019.

- Raise the Priority of the Safety Rest Area System as Integral to Highway Safety
- Develop an Updated Safety Roadside Rest Area System Master Plan
- Rescind the Mandatory Privatization Policy
- Expand and Formalize Public and Private Partnerships
- Conduct Ongoing Evaluation of Rest Area System Performance
- Investigate In-Route Truck Parking Capacity Issues
- Maintain Ongoing Stakeholder Involvement
- Update Safety Roadside Rest Area Design Standards and Guidelines

## Safety Roadside Rest Area Study

Caltrans. (2007, May). Safety Roadside Rest Area Study. URL: <u>https://dot.ca.gov/-/media/dot-</u> media/programs/design/documents/srra-07-d8-d11-srra-south-va-a11y.pdf. Accessed 11/7/2019.

- An attractive, comfortable place for travelers to rest for their own safety and that of other travelers.
- A "welcome mat" for state and regional tourism, encouraging visitors to take advantage of cultural, historic, natural, and scenic attractions.
- A boon to the local and regional economy by directing the motorist off the highway to local communities.
- A highway feature contributing to efficient movement of freight commodities by providing truck stopping opportunities that are responsive to the needs of the goods movement industry and their customers.

- A showcase for environmentally sustainable design and management practices and cutting-edge technology.
- A demonstration of cost-effective partnerships among public agencies and between the public and private sectors.

## Truck Parking Survey

Caltrans Office of Freight Planning. (2018, May). Truck Parking Survey. Received via e-mail 11/8/2019.

- Determine top locations in each District that are in need of truck parking or expanded truck parking.
- Recommend locations for truck parking to the TAC and Caltrans executive management, as well as
  provide important foundation for a Statewide Truck Parking Study and exploring funding
  opportunities.
- Establish criteria for evaluating truck parking sites in Caltrans right of way within San Diego County, including underutilized Park & Ride facilities.
- Identify properties that meet the initial site constraints, document existing conditions of each site, and determine whether the site has accessibility to established services, such as restrooms, restaurants, etc.
- Prioritize locations and determine how to best move forward with the project and establish funding strategies.
- Partner with FHWA, Port of San Diego, SANDAG, and the City of National City in hosting a Truck Parking Summit on May 14<sup>th</sup>. The goal of this summit is to develop a truck parking action plan by evaluating the needs, issues, and potential solutions with industry stakeholders, including truck drivers, dispatchers/schedulers, and commercial operators.
- D11 to partner with other Districts to identify excess land that may help with the shortage of truck parking in District 11.

## Attachment B

## I-15 Urban Truck Parking Workshops Summary

## I-15 Urban Truck Parking Workshops Summary

Subject:	Summary of I-15 Urban Truck Parking Introductory Workshops with Stakeholders and Partner Agencies in San Diego, Inland Empire and Southern Nevada
Prepared for:	Nevada Department of Transportation, Caltrans, and Partner Agencies
Prepared by:	Jenny Roberts/Parametrix, Vern Keeslar/Parametrix and Dan Andersen/CS
Date:	January 13, 2020

The California Department of Transportation (Caltrans) and Nevada Department of Transportation (NDOT) were recently awarded a National Economic Partnerships (NEP) Grant by the Federal Highway Administration (FHWA) to develop an I-15 Freight Mobility Enhancement Plan (MEP) that can serve as a framework for more coordinated freight planning within the megaregion. As part of this plan, the project team conducted three introductory workshops with partner agencies and regional stakeholders along the corridor in San Diego and Riverside, California as well as in Las Vegas, Nevada. These workshops provided an opportunity to discuss the challenges and solutions surrounding urban truck parking in these regions. The date, time, and locations of these meetings are provided in Table 1, and a copy of the presentation is attached along with the list of attendees from each meeting.

DATE	TIME	LOCATION
November 13, 2019	2:30 – 4:30 p.m.	Caltrans District 11
		4050 Taylor Street
		San Diego, CA
November 19, 2019	1:00 – 3:00 p.m.	RTC of Southern Nevada
		600 S Grand Central Parkway
		Las Vegas, NV
December 11, 2019	1:00 – 3:00 p.m.	SCAG Riverside County Regional Office
		3403 10 <sup>th</sup> Street, Suite 805
		Riverside, CA

### Table 1: Introductory Stakeholder Workshops Logistics

Note: For those unable to attend in person, a webinar link was provided allowing stakeholders to participate remotely

Each meeting started with an overview of the National Economic Partnerships program and this I-15 Freight MEP project. The purpose of this grant program is to promote regional cooperation and the I-15 Freight MEP project encourages collaboration between megaregions to address truck parking needs from a corridor-focused perspective across jurisdictional boundaries. Project team members then summarized preliminary truck parking issues and needs along the I-15 corridor based on a literature review of freight documents in

I-15 Urban Truck Parking Workshops Summary

both California and Nevada. The meetings concluded with a discussion of truck parking needs and goals in each region, which is provided in the following section.

### Workshops Truck Parking Needs and Goals Discussions

A series of questions were posed at each workshop, and the discussions are summarized in the sections below.

### What do you feel are the truck parking needs in your area?

### San Diego

- Facilities are needed for queueing at the Port of Entry with Mexico as trucks can wait an average of two hours.
- Curbside truck parking is an issue
  - Facilitator: curbside management is outside the scope of this study, which focuses on parking for combination trucks passing through the area or making pick-ups/deliveries at shipper/receiver facilities
  - > SANDAG: SANDAG will be conducting a curbside management study in the near future
  - The general public will not see the difference of trucks parking in their neighborhood to make a retail delivery (curbside management) vs. those parking while waiting to pick-up/drop at a shipper/receiver.
- CHP does not have jurisdiction on local roads. CHP does enforce no truck parking at rest areas. On highways where they do have jurisdiction the officers generally will allow a driver to park in an unauthorized location if the officer deems it a safe place to park.
- SANDAG is interested in pooled, regional data purchases
- Port of San Diego
  - Conducting a multimodal corridor study to consider needed improvements to benefit freight, transit, bike/ped, etc.
  - Harbor Drive can't be dedicated to truck traffic, so considering ITS to separate traffic and for freight signal prioritization.
  - Would like to allow truck parking along the industrial roads surrounding the marina at National City, however, because it is a historic area there is a mix of industrial land uses and historic residences. The residents object to truck parking in their neighborhood.
- The high cost of land makes it cost prohibitive to build truck parking facilities
- Need greater collaboration, for example, to allow the use of underutilized car parking facilities for truck parking

- The RCTC recently accepted a Truck Fee Nexus Study, as part of the Transportation Uniform Mitigation Fee program
- We need to quantify how much and where parking is needed. If not considered as part of this study, need to clearly define the purpose and methodology.

### Inland Empire

- Curbside parking is an issue
  - Facilitator: curbside management is outside the scope of this study, which focuses on parking for large vehicles including 5-axle or tractor trailer combination trucks making pickups/deliveries at shipper/receiver facilities
- Identify "urban" areas where there are heavy concentrations of truck activity/distribution centers
- Will the study attempt to create an inventory of the extent of overflow parking or parking in undesired areas. How will you know the level of demand you are trying to meet?
  - Facilitator: This is a smaller study focusing on what are some solutions that could be supported across the region. We will develop templates that partners can use to address parking, but not detailed inventory or data collection and analysis of truck parking along the corridor. NDOT recently completed a data intensive analysis of truck parking, and Caltrans will embark on one in 2020.
- Can this study show where truck parking can be established maybe at a county level?
- Jurupa Valley has a lot of warehouse/distribution centers and is built out. There is a need for truck parking but limited spaced for building any kind of truck parking lot.
- Time of day makes a big difference for truck parking and most truckers don't get to set their own schedule on the road, these are set by the shippers/receivers. Peak times for truck parking are generally between 4:00 pm and midnight.
- City of Moreno Valley allows limited truck parking on some of their roads for drivers that have met their hours of service and local truck drivers who need to store/park their rigs. Drivers want a secure place to park, so even with on-street parking they prefer something more secure. The City has seen bad behavior from some drivers who park on roadsides, such as idling all night and littering trash and human waste. Has an agency been successful with charging a local fee for industrial partners to develop a commercially available lot for them to use, not exclusive to their business?
  - > Facilitator: this is one of the solutions we are looking at.
- As part of the statewide Safety Roadside Rest Area Master Plan, unauthorized parking locations were identified by CHP and verified by google earth review. Caltrans can share this information with the project team.

• USDOT receives complaints from trucking partners that they don't want to park in neighborhoods but they don't have anywhere else to go. They would like amenities and secure locations to park and would like for public/private partnerships to be explored.

### Southern Nevada

- Owner-operators don't have facilities or terminals so they take trucks home, creating parking issues in residential areas
- Other issues created by large carriers. If there are no terminals, employees are parking their trucks on city streets.
- Very expensive to develop parking in existing developed areas.
- What are drivers willing to pay for parking?
  - In Phoenix some are paying \$180/month. Building a lot in Las Vegas is more expensive than building a lot in Phoenix in large part because of air quality requirements to pave all disturbed land.
  - Some truck stops in Las Vegas allow drivers to reserve a space and charge \$12 to \$20 per day depending on the location and how far in advance the reservation is made.
  - At one major truck stop in Las Vegas, 50% of the spaces are set aside for reservations, and will soon expand to 75% of all spaces.

### Describe the policies in your region that might be affecting truck parking.

### San Diego

- Truck parking is not permitted in park and ride lots.
- A lack of policies or enforcement in some areas will attract unauthorized truck parking
- Lack of land use policies requiring shippers/receivers to provide truck parking
- Complete street guidance includes how to incorporate goods movement
- Housing opportunities for owner-operators might be limited to areas with no truck parking

### Inland Empire

- There are obstacles to public/private partnerships and how you can utilize ROW. A provider of urban truck parking & related services commented that they have been working for over a year with another state DOT to create a private/public partnership and it is continuously stopped due to the factors of costs of the properties within the urban areas including the properties that the state owns and does not use but are not allowed to set up in a share program.
- New developments should be required to provide on-site parking and/or contribute money to a common lot for truck parking.

### Southern Nevada

- NIMBYism is the largest obstacle to establishing new parking spaces.
- Clark County enacted a no truck parking ordinance in August 2019 with heavy fines, but to-date has not aggressively enforced it so there are still truck parking issues.
- Federal law does not allow for commercialization of rest areas or DOT properties, which prohibits charging a modest fee to help defray the operations and maintenance costs
- State DOT right-of-way restrictions may be outdated.
- Trucks not allowed to idle more than 15 or 20 minutes
  - Auxiliary power units (APU) are affordable and installed on the truck. They charge while the truck is moving and provide power to the cab when parked. No need to idle the truck, and a lot more affordable than idling all night every night.
  - > Operating emissions are much lower in trucks built after 2010

### What opportunities exist in your region to address truck parking issues?

### San Diego

- Many park and ride lots are underutilized, especially during the night.
  - > Would like to allow trucks to park there, but neighbors complain.
  - There are 12 truck parking spaces at the park and ride lot at I-15/SR76. Would like to add Shore Power so trucks can plug in.
- When permitting the construction of big retail centers, require them to allow truck parking during off hours
- Build truck parking facilities just outside the expensive urban areas
- Allow truck parking at underutilized car parking lots at night
- Humane considerations: drivers deserve clean restroom and personal care facilities. Provide incentives to allow drivers access to such facilities.
- Provide information on parking availability and amenities
- Provide incentives to truck stops to expand parking lots—most drivers prefer to park at truck stops
- Incorporate electrification

### Inland Empire

• Identify areas where unauthorized truck parking is occurring, such as at freeway ramps with wide shoulders, and convert them into authorized truck parking locations

- A former driver commented that a secure facility with a reservation system improves driver behavior they are no longer anonymous and have trash and restrooms available.
  - > A truck stop operator commented that drivers exhibit poor behavior at the far edges of their parking lot.
- Utilize empty space in warehousing districts, or other underutilized properties, for truck parking. Develop an "Uber" type app where property owners with available space can advertise that availability to drivers, and possibly charge a fee for them to park there.

### Southern Nevada

- Push truck parking availability system (TPAS) information to electronic logging devices (ELDs)
- Relax the Federal law that prohibits commercialization of rest areas or DOT properties
- Collaboration between different levels of government and agencies (FHWA, DOTs, MPOs, municipalities, states)
- Land use decisions are made at the local level, where policies , such as requiring shippers/receivers to provide parking, are needed.
  - > This could discourage new development
  - Facilitator: That is one of the purposes of this Economic Partnership grant—encourage municipalities within the megaregion to have uniform policies relative to truck parking so that all are on a level playing field.
- Establish a truck parking bank—developers can buy credits that will help fund a common lot
  - Nevada Revised Statutes mandate that similar fees be returned if not used within 5 years. If the fees are too modest it might be difficult to accrue enough funding within 5 years to construct a lot.
- Allow truck parking at underutilized car parking lots, such as stadiums, particularly at night when not in use.
  - Set up cones to delineate truck parking
  - > Accept that you'll never be able to fully utilize the space
  - > Create a membership or advanced registration to allow better control and reduce liability
- Nevada has fuel tax money going to truck parking, 10% of revenue will go towards improving truck parking in rural areas.
- VW settlement could be used to fund truck parking if a reduction in emissions could be shown

# Who can effect change? Who else can provide insight on needs and/or future solutions to truck parking challenges that we should invite to future meetings?

### San Diego

- Land use authorities
  - SANDAG hosts regular meetings with the planning directors—would be a good forum to present and discuss the issues with them

### Inland Empire

- Data companies
- Communication companies
- Technology companies
- American Planning Association (APA) state chapters
- Truck Stop Owner/Operators Association
- May want to include ESRI in the technology RFI

### Southern Nevada

- Policymakers, large truck load carriers without facilities, city mayors and county commissioners
- Representative from Clark County Chief Administrator Officer
- Clark County Commissioners

### What are you hoping this study accomplishes?

### San Diego

- Provide best practices for accommodating urban truck parking
- Consider how to use technology to improve truck parking information
- Identify hot spots or major routes where truck parking is needed
- Quantify the supply and demand
- Identify champions in each region to continue the momentum and carry out recommendations
- Consider the Strategic Highway Network (STRAHNET) and STRAHNET Connectors
  - "STRAHNET is critical to the Department of Defense's (DoD's) domestic operations. The STRAHNET is a 62,791-mile system of roads deemed necessary for emergency mobilization and peacetime movement of heavy armor, fuel, ammunition, repair parts, food, and other

commodities to support U.S. military operations. Even though DoD primarily deploys heavy equipment by rail, highways play a critical role." <u>https://www.fhwa.dot.gov/policy/2004cpr/chap18.cfm</u>. Accessed November 27, 2019)

### Inland Empire

- Promote economic development and revenue generation for cities
- Better utilize existing infrastructure using technology
- Should make a distinct delineation between long haul truck moves versus concentrated urban deliveries—sub-regional issues versus trunk line long-haul truck stops. In addition, separating the types of trucks (big wheels, containers on chassis, etc.). These details make a study credible or non-credible for operators. Need to show we are addressing their specific issues.
- Look at opportunities for public/private partnerships

### Southern Nevada

- Describe the tradeoffs and economics of providing parking, and conversely, not having sufficient parking
- Describe the societal value or benefits of investments in truck parking
- Develop best practices for the I-15 Corridor

## **Attachment 1: Workshop Attendees**

### I-15 Freight MEP Workshops - Meeting Attendees

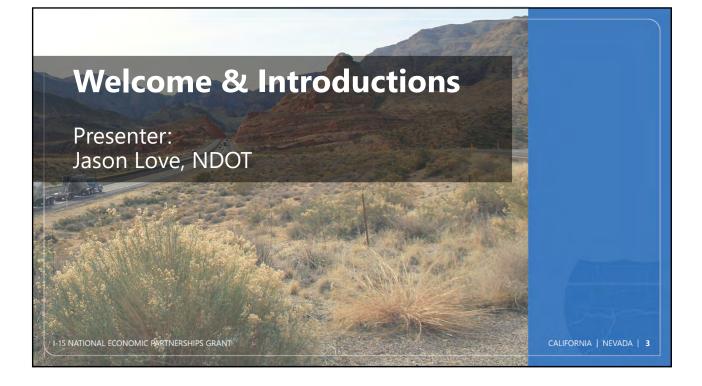
Email 3, 2019 naurice.eaton@dot.ca.gov ROWEN@DOT.CA.GOV ose.marguez@dot.ca.gov	Attendance In-Person In-Person
naurice.eaton@dot.ca.gov ROWEN@DOT.CA.GOV	
ROWEN@DOT.CA.GOV	
	In-Person
patrick.lee@dot.ca.gov	In-Person
parby.valentine@dot.ca.gov	In-Person
	In-Person
lefferson@chp.ca.gov	In-Person
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xverre@dot.nv.gov	Webinar
/Keeslar@parametrix.com	In-Person
	Webinar
	Webinar
lavid.zajac@navy.mil	In-Person
/irginia.lingham@wsp.com	In-Person
er 19, 2019	
ROWEN@DOT.CA.GOV	Webinar
DAndersen@Camsys.com	In-Person
schroder@LasVegasNevada.GOV	In-Person
amarach@cpcstrans.com	Webinar
uan.balbuena@dot.gov	Webinar
neather@hickoryridgegroup.org	In-Person
ecramer@intelligentimagingsystems.com	In-Person
eric.shen@dot.gov	Webinar
hernandez@dot.nv.gov	In-Person
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aron@nevadatrucking.com	In-Person
je@nevadatrucking.com	In-Person
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lplowman@dps.state.nv.gov	In-Person
/Keeslar@parametrix.com	In-Person
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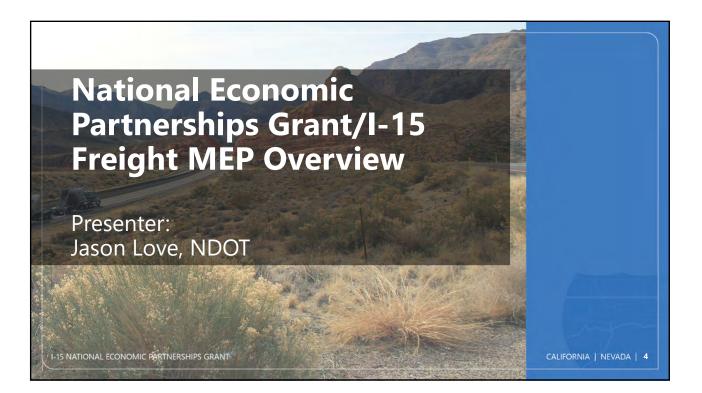
Company	First Name	Last Name	Email	Attendance
	Inland	d Empire - Decen	nber 11, 2019	
Cambridge Systematics Dan Andersen DAndersen@Camsys.com				
American Transportation Research Institute	Mike	Tunnell	MTunnell@trucking.org	Webinar
ATRI	Alexandra	Shirk	ashirk@trucking.org	Webinar
ATRI	Danny	Murray	dmurray@trucking.org	Webinar
California Trucking Association	Taylor	Collison	tcollison@caltrux.org	Webinar
Caltrans	Yatman	Kwan	<u>yatman.kwan@dot.ca.gov</u>	Webinar
Caltrans	Rob	Owen	ROWEN@DOT.CA.GOV	Webinar
Caltrans District 8	Danny	Arellano	daniel.arellano@dot.ca.gov	Webinar
Caltrans District 8	Thanya	Espericueta	Thanya.Espericueta@dot.ca.gov	Webinar
Caltrans HQ	Kelly	Eagan	kelly.eagan@dot.ca.gov	Webinar
City of Moreno Valley	Eric	Lewis	ericle@moval.org	Webinar
City of Rancho Cucamonga	lan	Таі	ian.tai@cityofrc.us	In-Person
CPCS	Dike	Ahanotu	dahanotu@cpcstrans.com	Webinar
CPS Express, Inc.	Jay	Sorg	jsorg@cpsexpress.com	Webinar
CPS Express, Inc.	Tim	Pollock	tpollock@cpsexpress.com	Webinar
Intelligent Imaging Systems	Enrique	Cramer	ecramer@intelligentimagingsystems.com	Webinar
Maritime Administration/USDOT	Eric	Shen	eric.shen@dot.gov	Webinar
NDOT	Jason	Love	<u>Jlove@dot.nv.gov</u>	In-Person
NDOT	Kevin	Verre	KVerre@dot.nv.gov	Webinar
Parametrix	Jenny	Roberts	jmroberts@parametrix.com	Webinar
Parametrix	Vern	Keeslar	VKeeslar@parametrix.com	Webinar
Riverside Transportation Commission	Lorelle	Luna	Imoe-Iuna@rctc.org	In-Person
SBCTA	Ginger	Koblasz	gkoblasz@gosbcta.com	Webinar
SBCTA	Steve	Smith	ssmith@gosbcta.com	Webinar
SCAG	Mike	Jones	jonesm@scag.ca.gov	In-Person
SCAG	Stephen	Yoon	yoon@scag.ca.gov	In-Person
TA/Petro	Ray	De La Luz	Rdelaluz@ta-petro.com	Webinar
Truck Depot LLC	Richard	Greer	Richard@truckdepotllc.com	Webinar
TSPS	Scott	Grenerth	sgrenerth@tsps.io	Webinar
WJS Consulting/LVCVA	Wendy	Strack	wendy@wjsconsult.com	In-Person

## **Attachment 2: Workshop Presentation**

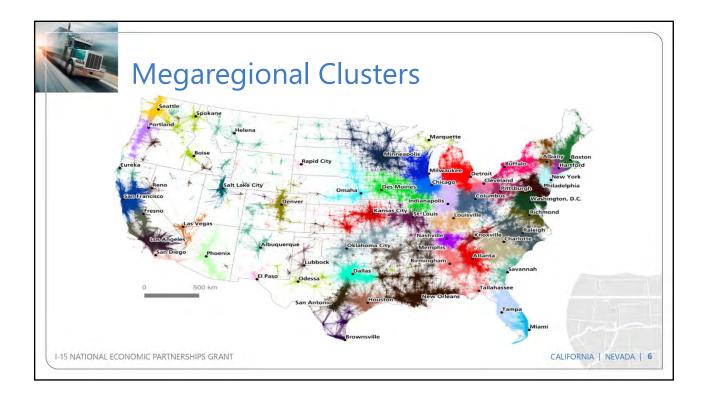


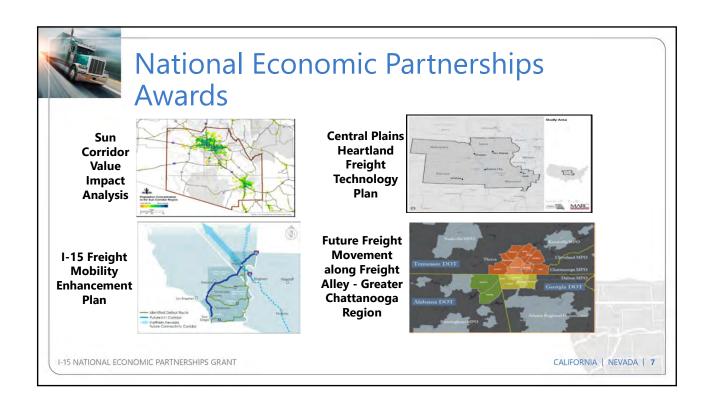








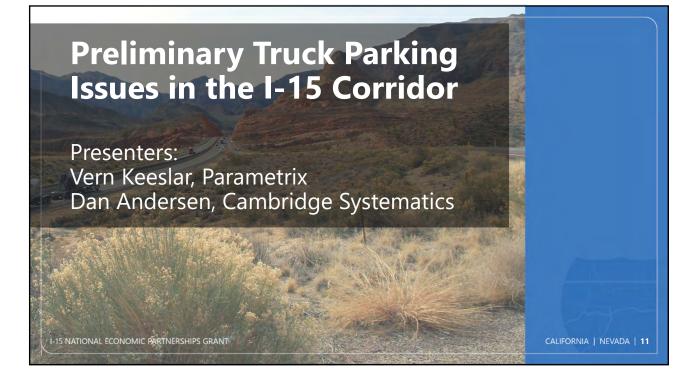


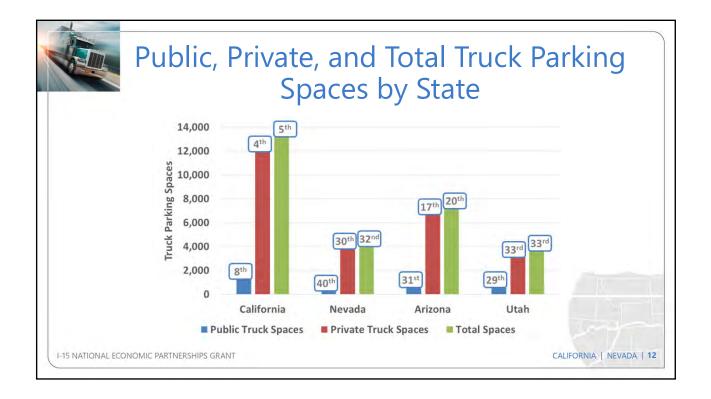


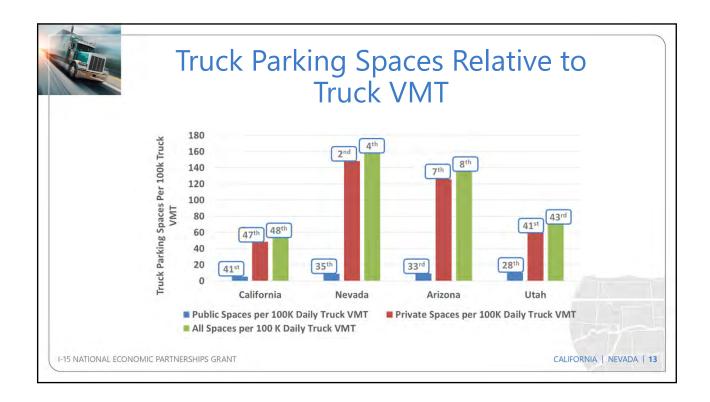




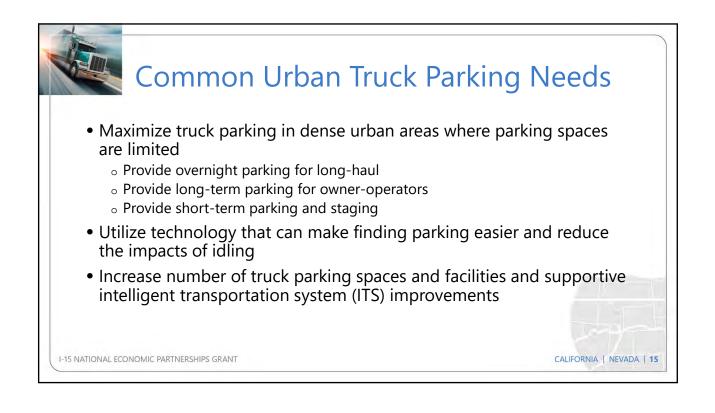
	enne and Staker	older Works	shops	
SEPTEMBER	NOVEMBER	JANUARY	AUGUST	NOVEMBER
Kickoff Meeting	Introductory Workshops/Freight Parking Goals and Needs Review	Technology Exploration Workshop	Implementation Framework Review Meeting	I-15 Freight MEP Findings
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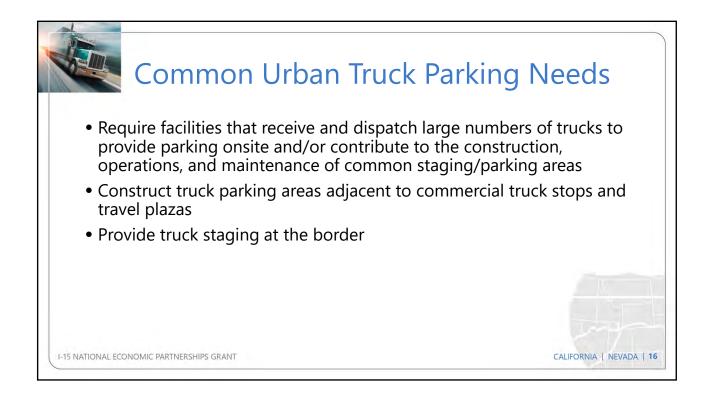










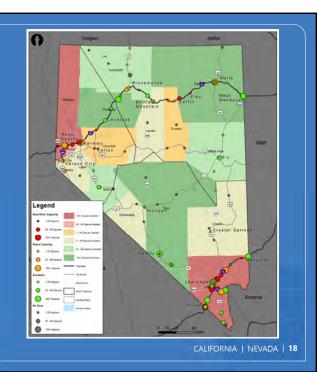


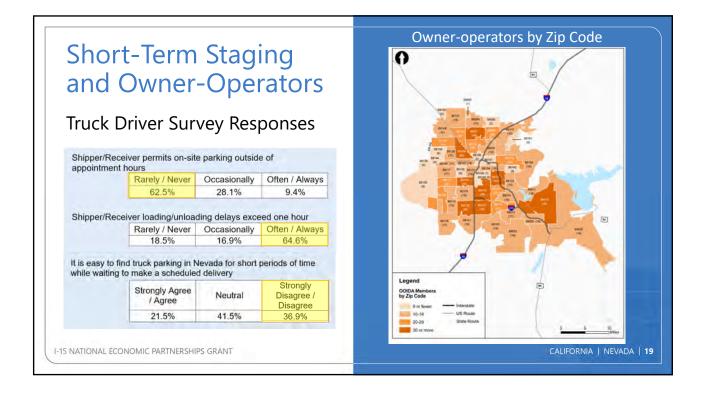


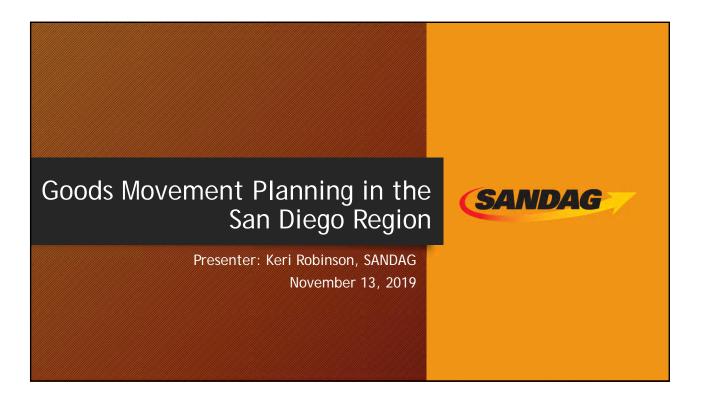
# Truck Parking Needs in Nevada

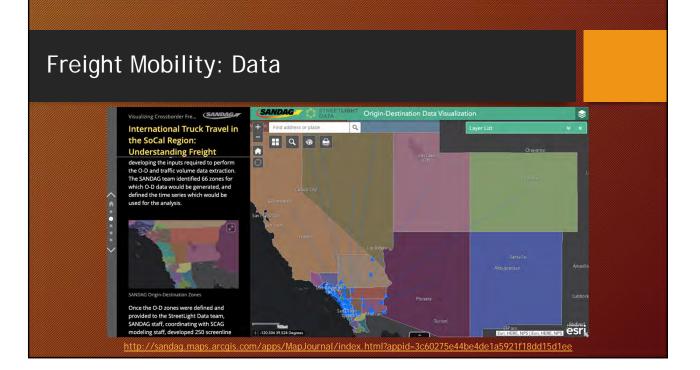
- Rural lower need
  - Large, full-service truck stops fill most of need
  - Small, parking-only lots needed for overflow and to help drivers maximize hours of service
- Urban highest need
  - Over-night parking for long-haul
  - Long-term parking for owneroperators
  - Short-term parking and staging
  - Convention Staging (unique to Las Vegas Resort Corridor)
  - Emergency parking during road closures (especially in Reno Metro area)

I-15 NATIONAL ECONOMIC PARTNERSHIPS GRANT

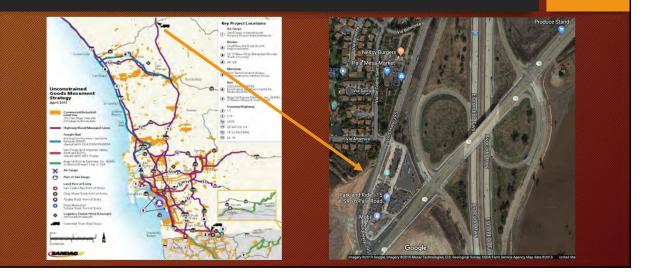








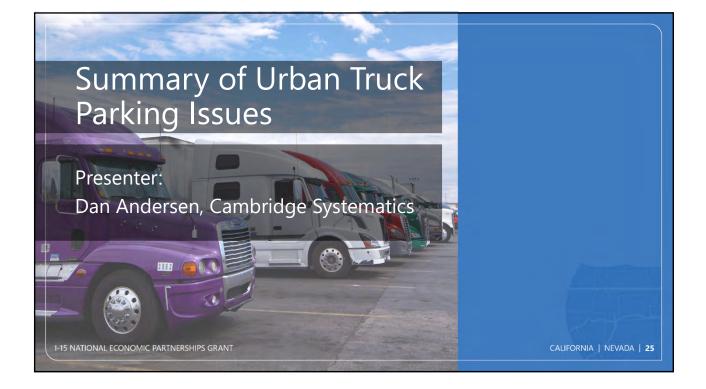
# Freight Mobility: Current Truck Parking Efforts



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# Freight Mobility: US/MX Border





# Urban Truck Parking Dilemma

"In late August, hooked to a load bound for the Dallas-Fort Worth metro area, driver Jack Smith found a truck stop near his delivery point via a popular mapping/locator app. Even though the app said the truck stop was full — at 2 p.m. in the afternoon — Smith decided to try his luck, anyway. To his frustration, the app was right, and Smith says he was faced with the possibility of having to drive 30-40 miles away from his delivery point to find parking — meaning he'd have to deal with rush hour traffic the next morning to get to the receiver.

"'I was able to find a warehousing district,' he says, and he drove around until he came across a handful of spaces at the end of dead-ended lanes where 'you're out of harm's way and out of traffic.""

('People don't understand — we have nowhere to go': GATS panel presses for parking solutions. By James Jaillet. Overdrive, September 09, 2019, https://www.overdriveonline.com/people-dont-understand-we-have-nowhere-to-go-gats-panel-presses-for-parking-solutions/)

I-15 NATIONAL ECONOMIC PARTNERSHIPS GRANT



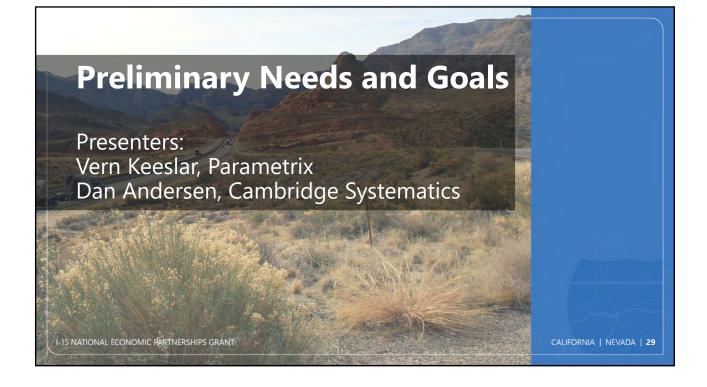
# Some Shippers Courting Drivers

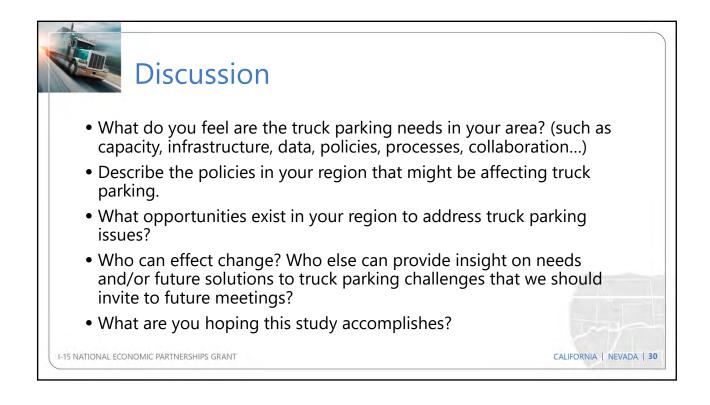
- "Carriers are now starting to score shippers and receivers, and the primary way of keeping score is money," said Cliff Finkle, vice president of Finkle Trucking, a New Jersey-based company with 250 rigs. "I'm just going to say, 'Your place sucks, and if you really want me to go in there, I want an extra \$300."
- Companies such as Nestle SA are rushing to make drivers feel welcome.
- Nestle converted part of its Ontario, Calif., warehouse into a break room with restrooms, coffee, bottled water and a television.

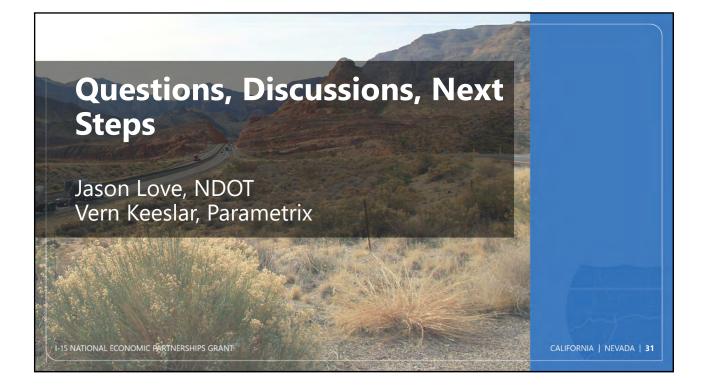
I-15 NATIONAL ECONOMIC PARTNERSHIPS GRANT



### **Truck Parking** I-15 FREIGHT CENTERS **Needs** Rural o 30-minute breaks 10+ hour breaks Emergency parking during road closures Large Warehouse Districts • 30-minute breaks Short-term staging • 10+ hour breaks Long-term parking for owneroperators Ports/Border Crossings Short-haul drayage companies don't need parking/staging 0 CALIFORNIA | NEVADA | 28 I-15 NATIONAL ECONOMIC PARTNERSHIPS GRANT











# Attachment C

Stakeholder Interviews Summary

# I-15 Urban Truck Parking Stakeholder Interviews Summary

Subject:	Summary of I-15 Urban Truck Parking Interviews with Stakeholders
Prepared for:	Nevada Department of Transportation, Caltrans, and Partner Agencies
Prepared by:	Jenny Roberts/Parametrix, Vern Keeslar/Parametrix and Dan Andersen/Cambridge
Date:	January 13, 2020

The California Department of Transportation (Caltrans) and Nevada Department of Transportation (NDOT) were recently awarded a National Economic Partnerships (NEP) Grant by the Federal Highway Administration (FHWA) to develop an I-15 Freight Mobility Enhancement Plan (MEP) that can serve as a framework for more coordinated freight planning within the megaregion. As part of this plan, the project team conducted three introductory workshops with partner agencies and regional stakeholders along the corridor in San Diego and Riverside, California as well as in Las Vegas, Nevada. These workshops provided an opportunity to discuss the challenges and solutions surrounding urban truck parking in these regions.

Interviews were conducted with some additional stakeholders who were unable to attend the workshops, to develop a comprehensive set of needs and strategies for the corridor related to freight. A summary of the discussions from these interviews is provided below.

# Riverside County Transportation Commission; Lorelle Moe-Luna, Multimodal Services Director; November 18, 2019

- Described the Transportation Uniform Mitigation Fee (TUMF) Program
  - "[The Western Riverside Council of Governments (WRCOG)] developed and administers the Transportation Uniform Mitigation Fee (TUMF), a program that ensures that new development pays its fair share for the increased traffic that it creates. The TUMF will raise over \$3 billion for transportation projects in Western Riverside County." (<u>http://www.wrcog.cog.ca.us/174/TUMF</u>. Accessed November 27, 2019)
  - Funds raised primarily used for arterial widenings, interchanges, transit, etc., and are regional in nature.
- Truck Fee Nexus Study
  - RCTC, Riverside County, and the air quality district sued the World Logistics Center to mitigate anticipated truck impacts.
  - Settlement led to this study to consider the highway improvements that would be needed as a result of the additional truck traffic
  - > Estimated that it would add about 12% to traffic

> Board accepted the study, but not the fee program recommended

# City of North Las Vegas; Mike Hudgeons, City Traffic Engineer, and Robert Eastman, Planning Manager; December 2, 2019

- Dan Andersen reviewed the Introductory Workshop slides
- Dan asked how the City might react to a recommendation requiring that generator of truck traffic be required to provide on-site truck parking or contribute to the development and maintenance of a shared truck parking facility.
  - Robert responded that it would be easier to implement a code change requiring on-site truck parking than to come up with the land and funding strategy for a shared lot.
    - Who would pay for the shared lot
    - Acquiring or dedicating land for it would be difficult to justify that a truck parking facility is the highest and best use.
    - Acquiring BLM land for that purpose might be the best approach
- The City is very aware of the need for additional truck parking.
  - ➤ A Maverick gas station/mini-mart recently submitted an application to develop land near the I-15/CC-215 interchange. Mayor Lee insisted that they include truck parking, and they complied.
- Mike and Robert will participate in the subsequent webinars for the project