California Freight Advisory Committee

July 7th 9:00-11:00am July 8th 3:00-5:00pm

House Keeping



Please make sure your full name and the name of your organization are displayed Use the "raise hand" function if you would like to speak. Dial *9 to raise your hand if you are calling in from a phone

A recording of this meeting will be available two weeks from today. We will send a follow up email with the link when it is ready

- 9:00 to 9:10: Call Meeting to Order
 Jeanie Ward-Waller, Deputy Director, Planning and Modal Programs, Caltrans
- 9:10 to 10:35: Statewide Truck Parking Study Workshop
 - Dan Andersen, Senior Transportation Project Manager, Cambridge Systematics, Inc.
 - Lila Singer Berk, Transportation Analyst, Cambridge Systematics, Inc.
 - Jim Brogan, Executive Vice President- Integrated Planning & Policy,
 - Cambridge Systematics, Inc.
- 10:35 to 10:40: 5 Minute Break

- 10:40 to 11:00: FHWA, CTC, CalSTA, and Caltrans Updates C
 - Antonio Johnson, Planning & Air Quality Team Leader Federal Highway Administration - California Division
 - Hannah Walter, Associate Deputy Director, California Transportation Commission
 - Matthew Yosgott, Deputy Director of SB 1 Programming at California Transportation Commission
 - Avital Barnea, Deputy Secretary for Transportation Planning, California State Transportation Agency
 - Marlon Flournoy, Chief, Division of Transportation Planning, Caltrans
- End of Day 1: Reconvene at 3:00pm tomorrow July 8th

- 3:00 to 3:45: Freight Automation: Dangers, Threats, and Opportunities for Health and Equity Presentation
 - Jessica Tovar, Project Director, Moving Forward Network
 - Martha Ockenfels-Martinez, Research Associate, Human Impact Partners
 - Joel Ervice, Associate Director, Regional Asthma Management and Prevention
- 3:45 to 3:40: 5 Minute Break

Ca

- 3:50 to 4:35: Port Congestion Panel Discussion
 - Hannah Walter, Associate Deputy Director, California Transportation Commission
 - Giles Giovinazzi, Senior Advisor, California State Transportation Agency
 - Frank Ramirez, Director of Goods Movement and Sustainable Freight, Governor's Office of Business and Economic Development
- 4:35 to 5:00: Public Comments and Action Item Review
 - Jeanie Ward-Waller, Deputy Director, Planning and Modal Programs,

CALIFORNIA STATEWIDE TRUCK PARKING STUDY

July 7, 202

CALIFORNIA FREIGHT ADVISORY COMMITTEE

Presenters:

- » Eric Fredericks, Acting Chief, Office of Sustainable Freight Planning, Caltrans Division of Transportation Planning
- » Dan Andersen, Cambridge Systematics
- » Lila Singer-Berk, Cambridge Systematics
- » Jodie Misiak, WSP



Agenda

- Study purpose and methodology
- Truck parking challenges
- Strategies for mitigating challenges
 - » Adding Capacity
 - » Partnership Approaches
 - » Additional strategies, policies, and programs
- Estimating Spaces Needed at Shippers & Receivers
- Next Steps

Study Purpose

- Identify statewide unmet demand for truck parking
- Identify existing truck parking challenges and recommendations for mitigating challenges
 - » Identify optimum size, layout, and amenities for publicly-owned truck parking facilities
 - » Consider feasibility for possible zero emissions fueling at truck parking lots
 - » Develop a Public-Private Partnership Action Plan for identifying and funding facilities
- Research funding strategies and prepare an implementation plan

Methodology: Inventory

- ID designated parking sites
 Count number of spaces at each
- **3**. Draw boundary around each





Methodology: 2019 ATRI GPS Data (Collected along freight corridors)

4. Overlay truck GPS data from ATRI



TRUCK PARKING ING CHALLENGES

SYGMA

Howar Johnson

SINN

SPÉED LIMIT

30

EXPI

ENTER



15,000 Designated Truck Parking Spaces Statewide



Undesignated Parking



Duration	Percent Share
% Short Break (< 1 hour)	34%
% Short Staging (1-4 hours)	32%
% Long Staging (4-8 hours)	7%
% 10-hour Rest (8-14 hours)	10%
% Long Break (>14 hours)	17%

District Statistics: Truck Parking within ROW (daily

average)			
District/ Region	24-Hour Demand	Percent of 24- Hour Demand	Total Peak Demand
1 – North Coast	58	1%	17
2 - Redding	353	3%	191
3 - Sacramento	1,343	8%	635
4- Bay Area	1,691	13%	528
5 – Central Coast	360	2%	94
6 – Central Valley	1,140	5%	488
7 – LA	4,088	36%	1,227
8 – Inland Empire	3,459	16%	1786
9 – Eastern Sierra	204	2%	55
10 – Stockton	1,062	4%	487
11 – San Diego	393	4%	111
12 – Orange County	713	6%	156



Truck Parking Deficit at Peak Hour (12am – 1am)



Total Parking Deficit (at Peak Hour)

District	Number of Designated Facilities with a Deficit	Total Deficit Spaces (Designated)	Undesignated Demand	Total Parking Deficit
1 – North Coast	0	0	17	17
2 – Redding	7	66	191	257
3 – Sacramento	12	137	635	772
4 – Bay Area	2	67	528	595
5 – Central Coast	2	70	94	164
6 – Central Valley	9	180	488	668
7 – LA	1	4	1,227	1,231
8 – Inland Empire	27	684	1,786	2,470
9 – Eastern Sierra	8	62	55	117
10 – Stockton	11	208	487	695
11 – San Diego	2	27	111	138
12 – Orange County	0	0	156	156
Total	81	1,505	5,775	7,280

Undesignated Truck Parking (from stakeholder input)



Statewide Crashes Involving a Parked Truck 2014-2018

- Almost every day in California a parked truck is struck by another vehicle
 - » About two of those collisions per month result in a fatality



Crashes Involving Parked Trucks Five Year Trend



Prioritization by Corridor Segment

Collision Factor

Stakeholder Factor

Demand Factor







Comprehensive Prioritized Score







QUESTIONS OR COMMENTS?

STRATEGIES FOR ADDING CAPACITY APACITY

Expand SRRAs that are At or Over Capacity

- Relative cost per site (\$ \$\$\$):
 » \$\$
 - » (~\$25,000 \$75,000 per space)
- Application:
 - » Best in rural or fringe areas
- Impact of doubling the number of spaces at 44 SRRAs:
 - » About 600 new spaces added (~\$15M - \$45M)
 - » 8% of statewide parking deficit



Build Public, Dedicated Truck Parking within Highway Right of Way

- Relative cost per site (\$ \$\$\$):
 - » \$\$\$
 - » (~\$100,000 per space)
- Application:
 - » Best in rural or fringe areas
- Impact of building 10 facilities:
 - » 500 new spaces added (~\$50M)
 - » 7% of statewide parking deficit



Manage Industrial Curb Space with Parking App

- Relative cost per site (\$ \$\$\$):
 » \$
- Application:
 - » Best in urban areas and for short-term staging
- Challenges:
 - » No services make it impractical for overnight use



Industrial Property Owners Provide Truck Parking on Unused Portions of Property

- Relative cost per site (\$ \$\$\$):
 - » none
- Application:
 - » Best in urban areas and for monthly truck and trailer storage
- Challenges:
 - » No/limited services limit day usage
 - » Land use constraints



Shippers/Receivers Provide On-site Parking

- Relative cost per site (\$ \$\$\$):
 - » none
- Application:
 - » Best in urban areas
 - » Easiest to apply to new developments
- Challenges:
 - » Estimating number of spaces needed
 - » Implementing ZEV
 - » Convincing shippers/receivers
 - Outreach
 - Incentives
 - Requirements





Which of these strategies for adding capacity do you feel should be implemented, and what are the challenges to implementation?

PARTNERSHIP APPROACHES ATOHES ADDING CAPACITY PACITY

Evaluate Partnerships with the Following Screening Factors



Evaluate Partnerships with the Following Screening Factors

Project Risk Allocation

- Would the partnership provide cost effective opportunities for appropriate allocation of key risks between the partners?
- What would be key responsibilities that the implementing public entity would want to retain? What are the associated risks?
- What would be the key responsibilities that the implementing public entity would seek to allocate to a partner? What are the associated risks?

Affordability

- What are the near term and long-term cost requirements?
- Would the results of the partnership's efforts potentially include scenarios that could involve revenue generation?
- Are there local funding sources that can support the cost requirements?
- Are there state funding sources that can support the cost requirements?
- Are there federal funding sources that can support the cost requirements?
- Would the potential partner be responsible for providing any funding sources that can support the cost requirements?

Public Sector RFP for DBFOM of Truck Parking Facility at...

- Publicly-owned parcel adjacent to a major freight hub
 - » Develop site under a long-term revenue-sharing agreement between the public and private partners



Public Sector RFP for DBFOM of Truck Parking Facility at...

Publicly-owned parcel within the interstate ROW

- » Develop site under a long-term revenue-sharing agreement between the public and private partners.
- » Fatal flaw: Inability to charge a fee for parking



Public Sector RFP for DBFOM of ZEV Truck Parking Facility at...

- Publicly-owned parcel within the interstate ROW
 - » Develop EV truck charging infrastructure on the parcel
- Existing SRRA within the interstate ROW
 - » Expand existing SRRA to include development of EV truck charging infrastructure

WattEV proposes to build a 110-acre, solar-powered, electric-only public truck stop just north of Bakersfield. Funded in part by money from the California Energy Commission, the project would eventually be scaled up to handle 40 charging bays.



Photo courtesy of WattEV. Accessed on 6/4/2021 from: https://www.bakersfield.com/news/electric-truck-stop-proposed-nearbakersfield-would-be-first-of-its-kind/article_4df7b6b8-b1ac-11eb-91d8-2329004b5c32.html______30

Caltran
Other Support of Private Development at...

- Publicly-owned parcel adjacent to an existing commercial truck parking facility
 - » Use public funds to construct additional parking on parcel, which could then be operated / maintained by the private owner of the truck parking facility.



- Parcel adjacent to an existing commercial truck parking facility
 - » Public funds provided to support the purchase and construction of additional parking on parcel, which then could be turned over to private owner of the truck parking facility for operations and maintenance.

Existing Commercial Truck Stop Private Parcel

Cooperative Agreements at...

- Large existing parking facility that is used on a periodic or seasonal basis, such as a stadium, racetrack, fairgrounds, park-and-ride, etc.
 - » Utilize parking facility during non-peak times for truck parking and/or EV charging
 - » Either a public-public or public-private agreement between the owner of the large parking facility and public sector (such as Caltrans)
 - » Caltrans has an arrangement with the below to allow truck parking during closures of I-80 over Donner Pass
 - Gold Country Fairgrounds & Event Center inAuburn
 - Boreal Ski Resort (after 11:00 p.m.)



Which of these partnership approaches do you feel are the most promising, and what are the challenges to implementation?



Better Utilize Existing Capacity

- Truck Parking Availability System (TPAS)
- I-10 Corridor Coalition
 - » Awarded \$6.85 million Advanced Transportation and Congestion Management Technologies Deployment grant
 - » California: 6 sites



Supportive Policies and Programs

- Integrate truck parking into roadway project development process
- Consider truck parking needs prior to purchase or sale of right-ofway
- Reassess public facility closures in high demand areas
- Allow parking under freeways
- Increase enforcement of undesignated parking, especially in areas with available truck parking spaces
- Create an awareness campaign on the importance of truck parking



Which of these additional strategies, policies, and programs do you feel are the most promising, and what are the challenges to implementation?

ESTIMATING SPACES NEEDED AEDED AT SHIPPERSESS ECRIVERSIVERS

Guidance for Estimating Number of Spaces Needed at Shippers/Receivers

- Case Study in San Diego County
 - » ATRI truck GPS data
 - » GIS shapefiles of all parcels and public right-of-way in County
- 10% of all service stops are preceded by a parking stop
- Many occur at the same time

Land Use	Parking Occupancy Factor
Manufacturing	12%
Warehousing	22%
Transportation and Logistics	42%

Application

1. Estimate number of daily truck trips to facility

- » Traffic impact analysis (TIA) for new development
- » Actual counts at existing facility
- 2. 10% of weekday truck trips will need parking
- 3. Up to 42% of those parking stops will be parked single point in time:
 - » Manufacturing 12%
 - » Warehousing 22%
 - » Transportation and Logistics 42%



Examples



- TIA estimates a new Widget Factory will generate 150 truck trips each weekday
- 10% of weekday truck trips
- (15) will need parking
- 12% of those will need parking at the same time
- 2 Truck Parking Spaces
 Needed

- TIA estimates a new Big Distribution Center will generate 1,000 truck trips each weekday
- 10% of weekday truck trips
- (100) will need parking
- 22% of those will need parking at the same time
- 22 Truck Parking Spaces Needed

QUESTIONS OR COMMENTS?

Next Steps

- Draft memos documenting work completed to-date:
 - » Supply & Demand
 - » Mitigation of Challenges (Strategies)
 - » Feasibility Guide (site selection and layout guidance based on San Diego case study)
 - » Public-Private Partnership (P3) Action Plan
 - » Demand Model (for estimating spaces needed at shippers & receivers)
- Develop Implementation Plan
- Develop draft Study Report



|| FREIGHT AUTOMATION **||**

Dangers, Threats, and Opportunities

for Health and Equity





Moving Forward Network

CA Freight Advisory Committee Webinar

July 8, 2021

TODAY'S GOAL AND PRESENTERS

- Goals:
 - Provide a high-level overview of our new report
 - Share policy and program recommendations for health and equity
- Presenters:
 - Jessica Tovar, Moving Forward Network
 - Martha Ockenfels-Martinez, Human Impact Partners
 - Joel Ervice, Regional Asthma Management and Prevention







WHY WE'REHERE

"The Ports and Freight Transportation Industry have a significant negative impact on my life, that of my family and EJ community.

Increased Air Pollution Increased Noise Increased Ground Vibration Increased Traffic Congestion Increased Accidents Increased Aultiple Public Health Problems, Costs Increased Premature Deaths Increased Premature Deaths Increased Public Safety Risks Increased Insurance Costs Increased Blight Property Depreciation."



Jesse Marquez, Coalition for a Safe Environment

WHAT WE DID

• Given today's freight impacts, will automation help or hurt workers and communities?







WHAT WE DID

- Developed research questions
- Scoped out issue areas: Traffic Safety, Air Quality, Employment, Economy, Noise/Vibration.
- Conducted research through literature reviews and stakeholder interviews.
 - Used dangers/threats/opportunities as a framework
- Developed policy and program recommendations for health and equity.

COMMUNITY ADVISORY COMMITTEE

- P.Qasimah Boston, Tallahassee Food Network
- Roberto Clack, Warehouse Workers for Justice
- Jimmy O'Dea, Union of Concerned Scientists
- Theral Golden, West Long Beach Neighborhood Association

- Vivian Malauulu, International Longshore and Warehouse Union Local 13 Registered Longshore Worker and Benefits Officer
- David A. Rahn, University of Kansas
- Regina Townes, ILA, Local 1233, Port of New York and New Jersey
- Kim Gaddy, Clean Water Action

TOP-LEVEL FINDINGS

- Automation is here and growing, and we have a critical window of opportunity for action
- Increased freight automation will have significant and largely negative health and equity effects on frontline workers and fence-line communities.
- Automation is at an inflection point. Policymakers, industry stakeholders, frontline workers, fence-line community members, and the public can make decisions — through policies and programs — that promote health and equity.





Freight Automation: Dangers, Threats, and Opportunities for Health and Equity



Viability of Trucking Technologies		
Driver-assist technologies	0-5 years	
Platooning	0-5 years	
Self-driving a portion of a route	5-15 years	
Self-driving the full route	+20 years	







Freight Automation: Dangers, Threats, and Opportunities for Health and Equity



Factors pushing for automation	Factors pushing against
Challenges meeting labor needs	Slim profit margins
Increasing rent costs	Cost-sensitive competition
Desire to decrease delivery times	Outsourcing warehouse services
Other factors	Other factors

 \checkmark

There is a critical window of opportunity. Policymakers, industry stakeholders, frontline workers, fence-line community members, and the public can make decisions— through policies and programs—that promote health and equity.

Freight Automation: Dangers, Threats, and Opportunities for Health and Equity

KEYFINDINGS

- Economic Security, Health, and Safety
- Air Quality
- Noise and Vibrations
- Traffic

KEY FINDINGS: ECONOMIC SECURITY, HEALTH, AND SAFETY

- Automation has and will likely continue to cut jobs for frontline workers, and wages and benefits may also decline
- Local economies tied to freight infrastructure experience negative ripp le effects
- Automation has and will likely continue to negatively affect frontline worker safety
- These impacts will inequitably affect lower-wage workers and workers of color

KEY FINDINGS: AIR QUALITY



"Ya hay muchos niños con cáncer, asma, problemas respiratorios, y pensar agregar otro proyecto a la comunidad es mucho." [There's already a lot of kids with cancer, asthma, respiratory health, lung issues, and to add another large project it is too much for our community.]

-- Veronica Roman, San Bernardino community member

"When [there are] changes [and] improvement in air quality, there's improvement in health."

-- Dr. Robert Laumbach, Rutgers University School of Public Health



KEY FINDINGS: AIR QUALITY

- In limited scenarios, automation may slightly reduce pollution through efficiency gains...
 - Train "cruise control"
 - Truck platooning
- But caution is warranted especially with possible trucking operational changes

KEY FINDINGS: AIR QUALITY

- Adopting zero-emission technologies, with or without automation, would provide much more significant pollution reductions.
- Pollution increases or decreases will be concentrated in low-income communities and communities of color.

KEY FINDINGS: NOISE AND VIBRATIONS



"Cuando yo me moví aquí, me pregunté porque se mueve todo mi comedor, y mi hijo me dijo no es que aqui cada que pasa el tren todo se menea y toma un buen rato. Es como si estuviera temblando muy seguido." [When I moved here, I wondered why my whole dining room moves, and my son told me that here every time the train passes everything shakes and it takes a good while to pass. It's like it is often trembling here.]

-- Veronica Roman, San Bernardino community member. She lives near a railyard, warehouses and freeways

KEY FINDINGS: NOISE AND VIBRATIONS

- If freight automation permits freight facilities to run for longer periods, including during more traditional "off-hours," the burden of noise and vibrations for fence-line communities may increase.
- Separate from automation, electrifying freight with zero-emission technologies can reduce noise and vibrations.



KEY FINDINGS: TRAFFIC

Wendell Mitchell has been driving trucks for over 25 years. "Truck drivers, you know, we're the heart of America."

Is driving stressful? "Aww man, stress isn't the word for it... You got a lot of cars on the road now, and a lot of people aren't really thinking about safety. When you don't think about safety, you have accidents."

One thing that makes Wendell feel safer: his new Volvo 2020 truck, which has automatic braking that kicks in when the truck senses a car slowing down quickly in front of it.



Freight Automation: Dangers, Threats, and Opportunities for Health and Equity

KEY FINDINGS: TRAFFIC



 Automation that complements or augments some truck and train driver labor holds significant promise for improving traffic-related safety.

KEY FINDINGS: TRAFFIC



 Automation that replaces most or all truck and train driver labor may worsen traffic-related safety in some situations.
 Overall, much more research is needed.

PUTTING PEOPLE FIRST: POLICY AND PROGRAM RECOMMENDATIONS

- Engaging frontline workers and fence-line communities in automation decisions
- Supporting frontline workers
- Supporting frontline workers and fence-line communities
ENGAGING FRONTLINE WORKERS AND FENCE-LINE COMMUNITIES IN AUTOMATION DECISIONS

- Meaningful engagement should take into account barriers to participation including: language access, access to information, limited ability to participate in meetings during work hours etc.
- Business leaders should engage the workers when thinking through automation-related decisions and impacts.

SUPPORTING FRONTLINEWORKERS

- Plan for automation that advances frontline workers
- Strengthen workers' rights to organize for fair wages, benefits, and to have a say in automation-related decisions
- Enforce and improve workplace safety standards for worker safety and health
- Correct worker-status misclassification of truck drivers and other freight workers to promote livable wages and benefits
- Reinvigorate and expand programs to meet the needs of Freight factor for the second is placed by automation

SUPPORTING FRONTLINE WORKERS AND FENCE-LINE COMMUNITIES

- Require Automation Impact Reports to better understand and mitigate automation's effects on health and equity
- Prohibit the use of public funding for any freight automation project that may have negative effects on worker and community health
- Accelerate efforts to shift freight transportation to a zero-emission system through incentives, regulations, and permitting decisions
- Implement federal policies to prioritize the safety of freight drivers and other road users

ADDITIONAL RESEARCH NEEDED

• Select examples



- What percentage of displaced freight workers will be able to transition into new positions created by automation?
- How will platooning trucks and passenger vehicles interact?
 Does the chance of collisions increase?
- How would the reduction in train crew size affect traffic safety in a variety of real-world conditions?

CALL TOACTION

- Share the report with your networks
 - Freight Automation Dangers, Threats, and Opportunities for Health and Equity
- Use the project as a tool for automation-related proposals and policymaking

CLOSING DISCUSSION



- •Any questions?
- What is one finding that you found compelling?
- How will this report be
 - useful for your work?
- Who else should hear about this report?

THANKYOU!

- Jessica Tovar, tovarj@oxy.edu
- Martha Ockenfels-Martinez, martha@humanimpact.org
- Joel Ervice, joel@rampasthma.org







Supporting Industry -State Plan in Support of Goods Movement **Bacl<ground**

freight/ Freight Competitiveness Workgroup/ Contract with CSU Long Beach

CalSTA - Monthly calls with ports

CTC - Commissioner Inman/ Lyau - support industry/ congestion issues

Some Challenges Facing Goods Movement Industry

Higher cargo volumes

Schedule delays – dwell times, late arrivals, equipment shortages Increased costs – spot rates, demurrage fees, chassis rental fees Exports – incentive to ship back empty containers, difficulty finding containers for some ag exporters, containers used as temporary storage

Distribution – full warehouses and distribution centers

Workforce - need for more drivers, workers Loss of market share – infrastructure, stricter standards, trade wars, rail costs

Action Plan

Event	Description	Timeframe
Social Media Campaign	Linked.In - Stimulate discussion and general interest	Mid-July through Mid-August
Pre-Summit White Paper	Historical perspective, geographical perspective, port challenges, social media findings	Mid-August
Virtual Roundtable	Discuss problems and solutions	Early September
In-Person Summit	With key decision makers - refined set of strategies with targeted outcomes/timeframes	September 21, 2021
Final Report	Summary of key findings and actions	Late October
GoBiz is working with Tom O'Brien from CSU Long Beach on this project. CalSTA and CTC staff will		

assist

CalSTA Leadership/ Coordination

CaISTA staff coordination with federal contacts Upcoming events

Future goals/actions