

HIGHWAY FACTORS ATTACHMENT

Illinois DOT Statewide Truck Parking Study dated January 30, 2020

Highland, IL

HWY23MH015

(31 pages)



IDOT Statewide Truck Parking Study

ISFAC Meeting 1 January 30, 2020



Introductions and Project Overview

- IDOT Team
- CDM Smith Team
- Key Tasks
 - Data Gathering/Analysis
 - Alternatives Development
 - Outreach
 - Develop Policy





Outreach

- ISFAC Role- receiving valuable feedback. Possible workgroup between meetings
- 20 Meetings / Stakeholder Interviews
 - Industry (Trucking Associations, Parking site operations, trucking operators)
 - Public Agency (IL Tollway, select City/County representatives)
- Targeted industry/operator input





IDOT Policy Development

- Identify IDOT's role in truck parking
- Understand the roles of partners
- Identify safety impacts of truck parking
- Identify economic impacts of truck parking
- Recognize funding challenges and opportunities







Existing Conditions





Why Adequate Truck Parking is Needed

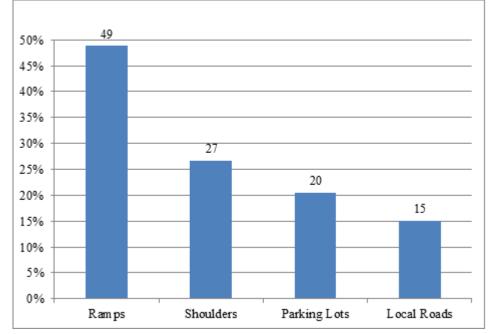
- Regulation increasing need for Parking—Hours of service rules from the FMCSA
- Safety—Tired truck drivers may choose to park at unsafe locations – road shoulders, exit ramps, or vacant lots
- Lack of Supply—75% of surveyed drivers reported having problems finding secure parking during the night (2012 FHWA survey)

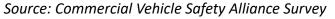






Unofficial Parking Locations Reported by State Motor Carrier Safety Personnel













Existing Conditions

- 54 Rest Areas Identified
- Overlaid with IDOT State Maintained Class I and II Truck Routes







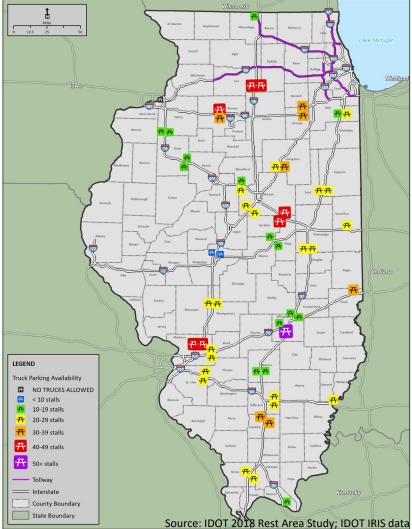


IRIS Heavy Commercial Volumes

- Segments experiencing high volumes of Heavy Commercial Vehicles are all located within the Chicago Metropolitan Area:
 - I-294,
 - I-80, and
 - **I-94**





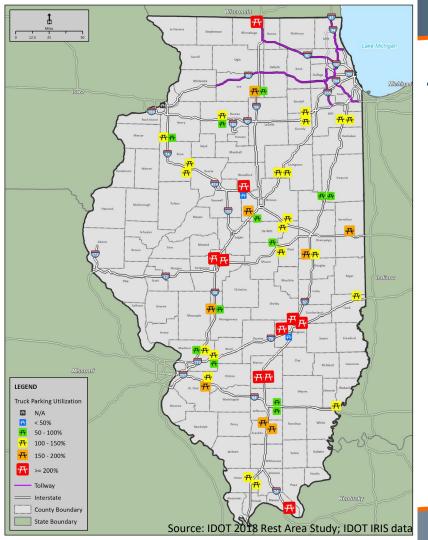


Truck Parking Availability

Truck Parking Availability	Number of Rest Areas
No Trucks Allowed	1
< 10 stalls	2
10-19 stalls	15
20-29 stalls	21
30-39 stalls	7
40-49 stalls	7
50+ stalls	1



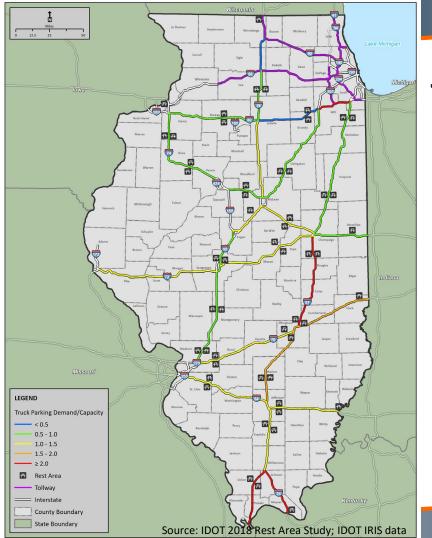




Truck Parking Utilization

 Average volume of truck shoulder parking highest on I-55 and I-57

Truck Parking Utilization	Number of Rest Areas
N/A (Not Applicable)	1
< 50%	2
50 - 100%	12
100 - 150%	21
150 - 200%	8
>= 200%	10
1	1 (V) Illinois Department CD



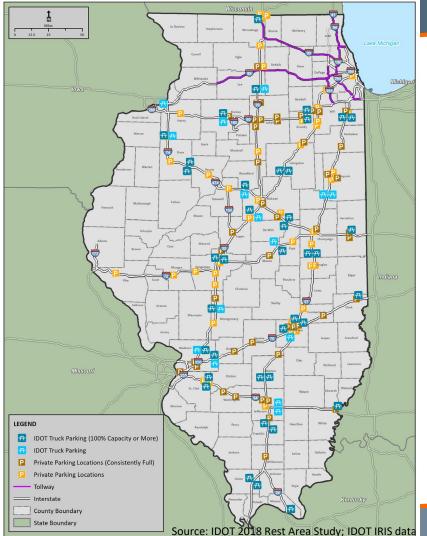
Truck Parking Demand/Capacity

Highest need segments:

- I-57 from I-70 to I-72
- I-80 from I-55 to I-57
- I-24 South of I-57
- I-57 South of Williamson County







Existing Parking

 IDOT Rest Areas and Private Parking Locations, by Utilization

Parking Facility	# of Parking Spaces	% of Spaces
IDOT Truck Parking (100% Capacity or More)	39	72%
IDOT Truck Parking, not full capacity	15	28%
Private Parking Locations (Consistently Full)	46	51%
Private Parking Locations, not full capacity	45	49%



Excessive Rest Area Spacing

- Highest Need Segments:
 - I-39
 - I-74 and I-55 in metro Bloomington
 - I-270, I-55, I-70, an I-255 in metro St. Louis



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Fatigue Related Crashes

Segments where HCV Percentage Ranked High

Interstate	Segment Limits	Truck Stops	Rest Areas	% HCV Crashes
I-72	US 67 to MO State Line	1	0	100%
I-70	I-57 to IN State Line	6	1	67%
I-57	I-64 to I-70	1	1	60%
I-74	I-474 to US 34	1	1	56%
I-80	I-74 to I-39	4	1	55%
I-39	I-39/90 Split to I-88	3	0	50%
I-39	I-80 to I-88	2	1	50%
I-39	I-88 to I-80	2	1	50%
I-74	US 34 to I-80	1	1	50%
I-55/74	I-55/74 Split to I-55/74	1	0	50%
I-74	I-57 to I-55/74 Split	1	1	50%
I-70	IN State Line to I-57	6	1	48%

Jason's Law Truck Parking Survey Results and Comparative Analysis, 2015







What is Jason's Law?

- Surveyed over 8,000 truck drivers, of which over 75 percent indicated they regularly have trouble finding parking at night.
- Requires the USDOT to conduct a survey and comparative assessment to:
 - 1. Evaluate the capability of each state to provide adequate parking and rest facilities for freight trucking;
 - 2. Assess the volume of freight trucking traffic in each state; and
 - 3. Develop a system of metrics to measure the adequacy of freight truck parking facilities in each state.





Challenges with Expanding Truck Parking-According to DOTs

Where Truck Parking can be Developed

- Issue with the supply and demand of land for truck rest stops, especially near urban areas
- Challenges in identifying parcels for parking, especially near major retail areas, which are heavily mixed with residential land uses
- Challenges in building support for new or expanded facilities from municipalities

Understanding What is Needed and Where?

- Accommodating parking with seasonal impacts of freight movement with increased truck activity create higher demand for parking
- Identifying and building better data sources was flagged as important for future measurement
- A need to better understand the requirements to provide good access to oversize and overweight vehicles







Jason's Law Parking Spaces Data

- Publicly provided spaces are rest areas and welcome centers, and sometimes at weigh stations or truck inspection locations.
- Privately provided spaces are commercial truck stops for use by drivers accessing associated facilities for fuel, maintenance, food, bathing facilities, and other amenities.
- Nationwide there are 308,920 total truck parking spaces. 36,222 spaces (12%) at public rest areas and 272,698 spaces (88%) at private truck stops.





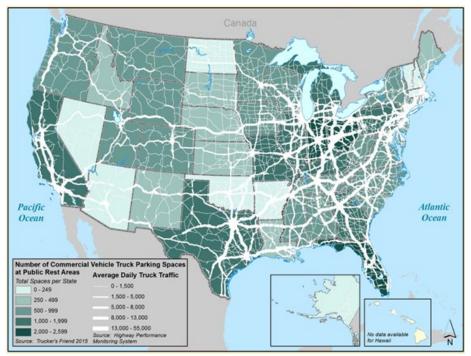
Illinois Truck Parking Comparisons to other States

- Ranks 8th for number of total spaces 11,262 (both public and private)—14.4% of truck spaces are public
- Ranks 5th for number of public facilities, 8th for private facilities
- Ranks 9th for number of public truck parking spaces, 8th for private truck parking spaces





Results from Survey of Illinois Truck Parking



Key Indicator	Results	
Number of Public Facilities	90	
Public Truck Spaces	1,622	
Number Private Truck Stops	206	
Private Truck Spaces	9,640	
Ratio of Private to Public Spaces	5.9	
Total Spaces	11,262	
Public Spaces per 100K Daily Truck VMT	11.1	
Private Spaces per 100K Daily Truck VMT	65.9	
All Spaces per 100K Daily Truck VMT	76.9	
Public Spaces per 100 miles of NHS	20.3	
Private Spaces per 100 miles of NHS	120.8	
All Spaces per 100 Miles of NHS	141.1	







Truck Parking Spaces per Daily 100,000 Miles of Combination Truck VMT

The shortage of truck parking is not unique to Illinois; stateswith large volumes of freight such as California and Texas also faces these challenges.





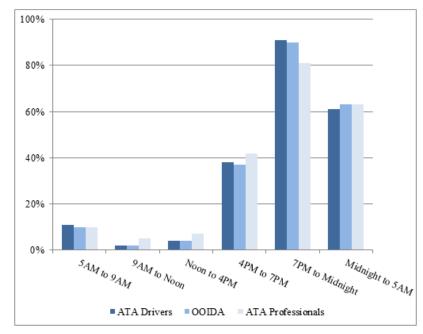
Takeaways

- Illinois is in the highest quartile of all 50 states for
 - Total Private Truck Stops,
 - Total Spaces, and
 - Spaces per Million GDP
- Illinois is in the *lowest quartile* of all 50 states for
 - All Spaces per 100K Daily Truck VMT





Time of Day When Drivers Experienced Most Difficulty in Finding Safe Parking

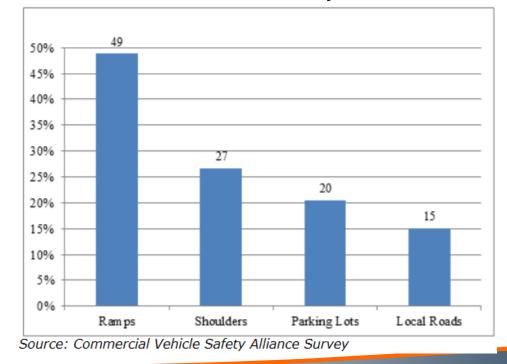


ATA = American Trucking Associations OOIDA = Owner Operator Independent Drivers Association Source: American Trucking Associations and Owner Operator Independent Drivers Association Survey





Unofficial Parking Locations as Reported by State Motor Carrier Safety Personnel





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Driver Preferences

- Drivers are most concerned about maximizing driving hours and distance they can fit into their hours of service.
- Drivers *prefer* to wake up at a *full-service truck stop* than a parking facility lacking amenities.
- At a parking facility, a driver's top priorities are that it is safe, secure, and conducive to sleep.
- For many drivers, options for different places to park along a route are at least as important as *amenities* at any given location.
- Drivers *avoid* parking facilities where their trucks cannot traverse the facility or may be blocked by other vehicles.

From trucking industry groups represented on the Stakeholder Technical Work Group (including the ATA and OOIDA)







Success Factors and ISFAC questions







Questions for ISFAC

- What role do you see IDOT solving the problem of Commercial Motor Vehicle parking shortages?
- Any recommendations on approaches to identify both truck parking shortages and areas of greatest need?
- What are key groups/agencies we should engage with to better understand locations for truck parking?





Questions for ISFAC

- Where are there truck parking shortages?
- What are the key amenities to provide in a truck parking facility?
 - Internet
 - Restrooms
 - Showers
 - Food
- What are key operational considerations?
 - Overnight parking
 - Security
 - Ease of Access/layout
- How far off an interchange could a truck parking facility be located?



Thank You!

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