



MnDOT Statewide Truck Parking Study

MINNESOTA FREIGHT ADVISORY COMMITTEE

MARCH 29, 2019

Project Overview

- Assess the number and availability of truck parking throughout Minnesota
- Identify solutions and opportunities for truck parking needs
- Gather data on truck parking supply, demand, and utilization
- Coordinate with public and private stakeholders
- Develop goals and strategies for future public investment

Project Schedule

➤ Project began in December with completion expected mid-summer 2019

	2018	2019						
	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
Task 0: Project Management	[Yellow bar spanning Dec 2018 to Jul 2019]							
Task 1: Background Research, Develop Introductory Materials and Communications	[Yellow bar spanning Dec 2018 to Jan 2019]							
Task 2: Survey Existing Public Rest Areas, Travel Centers, and Private Truck Stops	[Yellow bar spanning Dec 2018 to Feb 2019]							
Task 3: Oversize-Overweight and Superload Truck Parking/Staging Solutions			[Yellow bar spanning Feb 2019 to Mar 2019]					
Task 4: Coordination Meetings and/or Workshops with Industry			[Yellow bar spanning Feb 2019 to Apr 2019]					
Task 5: Minnesota Truck Parking Solutions and Opportunities				[Yellow bar spanning Mar 2019 to May 2019]				
Task 6: Identify Future Public Truck Parking Investment Recommendations						[Yellow bar spanning May 2019 to Jun 2019]		
Task 7: Draft and Deliver a Completed Truck Parking Study							[Yellow bar spanning Jun 2019 to Jul 2019]	

Why Truck Parking?

More Trucks – In the past ten years, overall tonnage carried by trucks increased 24 percent.

Hours of Service – The Federal Motor Carrier Safety Administration (FMCSA) made significant changes to regulations limiting the number of consecutive hours a truck driver can drive. Although the changes have been modified somewhat, they still significantly impact the demand for truck parking facilities.

Electronic Logging Devices – Moving Ahead for Progress in the 21st Century Act (MAP-21) mandated that trucking operations shift from a paper logbook to an electronic logbook that automatically logs a driver's activities based on the truck's operations. In general, the mandate has led to stricter enforcement of the hours of service (HOS) regulations.

Productivity Expectations – Rising customer expectations for delivery times and an increasingly cost competitive marketplace have placed pressure on truck drivers to push the limits of their HOS.

National/Regional Initiatives

- Jason's Law
 - Minnesota 39th for overall truck parking space supply
 - Also placed 39th for the supply of spaces provided by the private sector.
 - Conflicting information from OOIDA/ATA surveys on the adequacy of the supply of truck parking in Minnesota.
- ATRI Annual Survey
 - Truck parking has been a top industry issue for a decade
 - Follow-up memo: Willingness to pay to reserve a parking space
- MAASTO TPIMS
 - Rolled out in 2019
 - IA, KS, KY, MI, MN, OH and WI
 - I-35, I-64, I-65, I-70, I-71, I-75, I-80, I-94 and I-135.



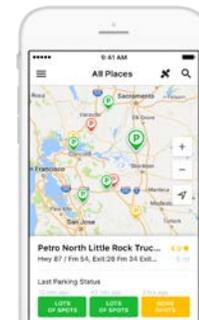
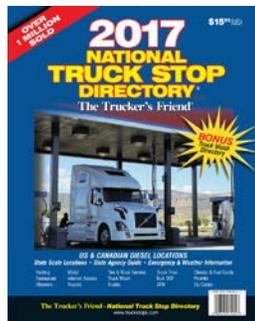
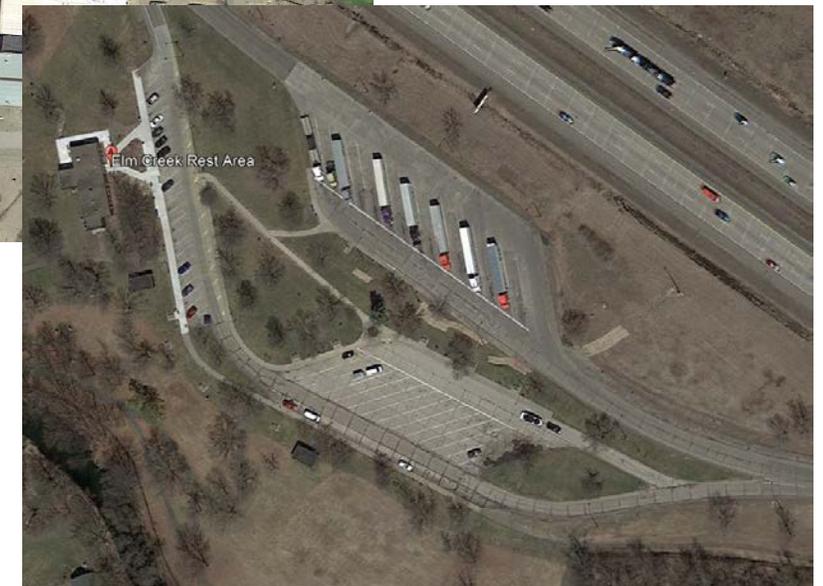
Truck Parking Capacity Assessment

➤ Public Rest Areas

- 2015 Jason's Law Survey
- Updated 2018 MnDOT Counts
- Google Earth aerial verification

➤ Private Truck Stops

- Trucker's Friend
- NATSO
- TruckSmart (TA/Petro)
- Pilot
- Trucker Path
- Google Earth aerial verification



Final Capacity Counts

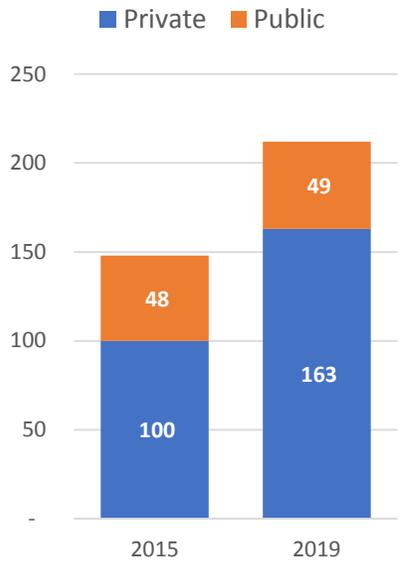
Parking Facilities:

○ 148 → 212

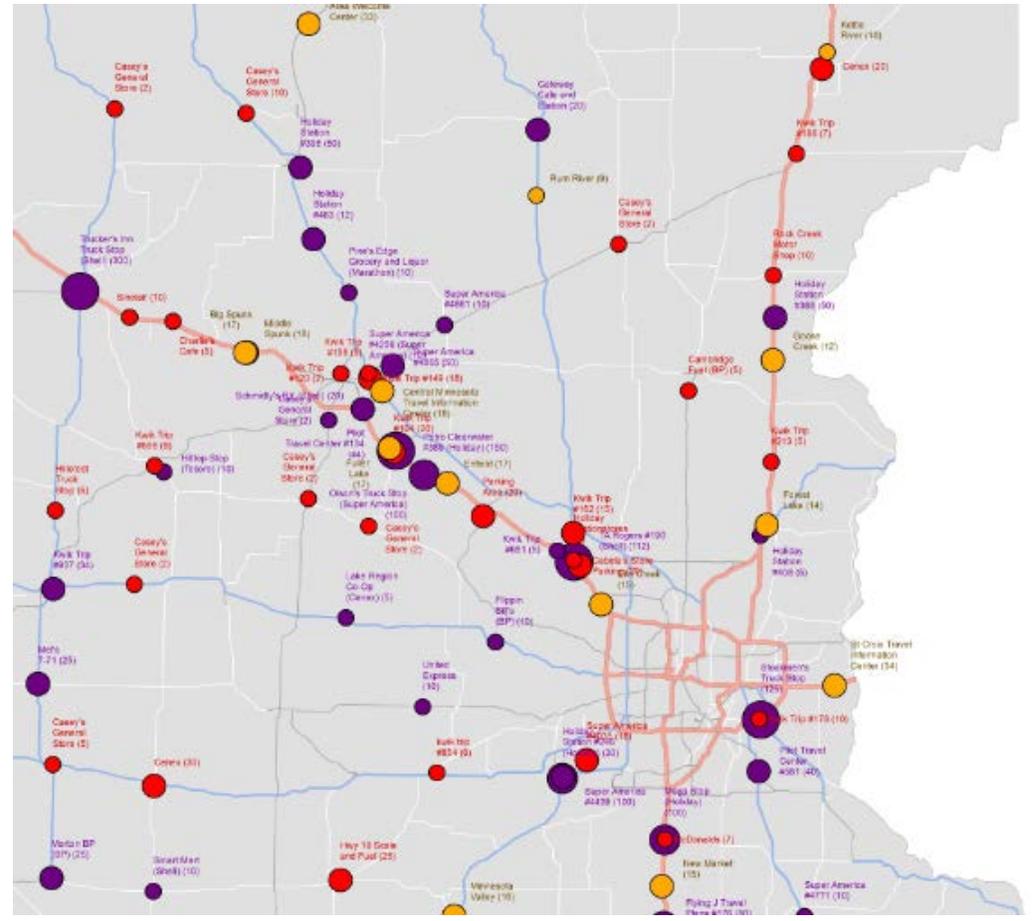
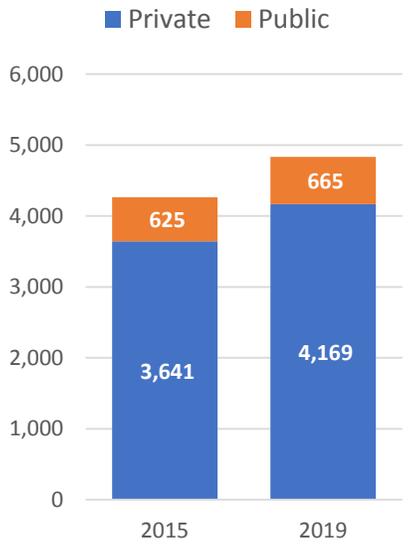
Parking Spaces:

○ 4,266 → 4,834

Parking Facilities



Parking Spaces



Field Review

Total of 20 Sites Reviewed

- I-94 (7 sites)
- I-35 (5 sites)
- I-90 (8 sites)

Completed February 11 through 14

- Monday through Thursday
- Snowy and windy conditions

Collected site conditions information

- Pavement condition
- Adequate lighting
- Unauthorized parking on adjacent entrance/exit ramps
- Barriers to parking

Summary of Results

- 9 of 20 sites at/exceeding marked capacity
- 15 of 20 sites at/exceeding 2/3 of marked capacity

Stop Name	Field Utilization Count	Updated MnDOT Stall Count (2018)	Unauthorized Truck Count	Percent Utilization (%)
Adrian WB	4	6	0	66.7%
Albert Lea Travel Information Center	61	29	32	210.3%
Big Spunk	16	17	1	94.1%
Blue Earth EB	8	11	1	72.7%
Blue Earth WB	7	10	1	70.0%
Burgen Lake	11	12	1	91.7%
Clear Lake	4	7	0	57.1%
Elm Creek	21	10	7	210.0%
Fuller Lake	16	17	0	94.1%
Hansel Lake	8	10	1	80.0%
Hayward	8	14	0	57.1%
Heath Creek	14	20	0	70.0%
High Forest	9	20	0	45.0%
Lake Latoka	15	18	3	83.3%
Marion	28	20	14	140.0%
New Market	19	15	4	126.7%
Oakland Woods	4	22	0	18.2%
St Croix Travel Information Center	72	52	30	138.5%
Straight River NB	19	31	3	61.3%
Straight River SB	17	13	4	130.8%
Total	361	354	102	Average = 95.9%

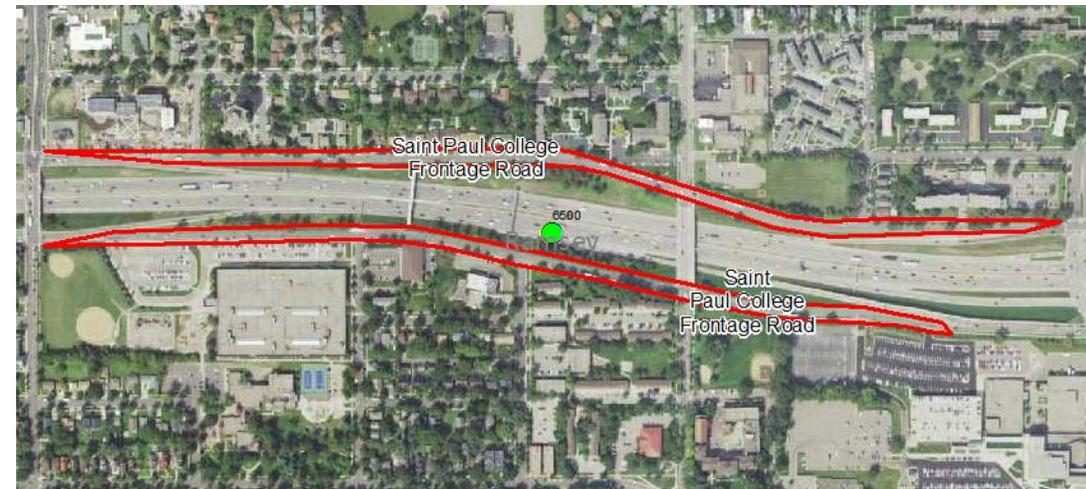
ATRI Truck Parking Demand Analysis

40 Sites

- Public Rest Areas (24)
- Private Truck Stops (Top 10)
- On/Off Ramps
 - St. Croix
 - Elm Creek
 - Super America (Carver)
- Frontage Roads
 - Saint Paul College
 - I-94, North Minneapolis
 - Gateway Drive NW, Coon Rapids

Time Period

- Two weeks per quarter-year (2018)
 - March 5-18
 - May 7-20
 - September 10-23
 - December 3-16



Oakland Woods



- 31 - 45
- 46 - 55
- 56 - 84
- Data Join Boundaries

Straight River North and South Bound Rest Areas



Online Survey

16 questions

- Truck parking behavior
- Location of truck parking need
- Issues that arise related to truck parking
- Driver knowledge of existing technology
- Demographics

Example Question

- “On average, how long does it take for you to find truck parking in Minnesota?”
 - Less than 15 minutes
 - 15 – 30 minutes
 - 30 minutes – 1 hour
 - More than 1 hour

Distribution

- Through 5 Midwest state trucking associations
- Through ATRI database to Midwest carriers
- OOIDA to distribute further

6. MnDOT has recently installed message boards that show public rest areas with truck parking and space availability to make it easier to find truck parking in Minnesota. Signs look like those shown below. If you are not familiar with these signs, more information is available at: <https://trucksparkhere.com/>



The recently installed variable message boards make it easier for me to find truck parking in Minnesota.

I am not familiar with this system OR This system is not installed on routes that I drive

Strongly Agree Agree Neutral Disagree Strongly Disagree

Answer Choices

Online Survey Link

<https://www.surveymonkey.com/r/MN-Truck-Parking-Study-2019>



Minnesota Statewide Truck Parking Survey

Welcome!

The American Transportation Research Institute (ATRI), the not-for-profit research arm of the trucking industry, is assisting the Minnesota Department of Transportation (MnDOT) in better understanding the truck parking issues that truck drivers face. ATRI is now seeking truck driver input on the attached survey.

The survey data will be used to help MnDOT improve truck parking in the state of Minnesota.

All responses to this survey will be kept strictly confidential and will only be reported in aggregate form. Due to the sensitivity of this research, under no circumstances will we release any of your personal or organizational information.

Stakeholder Workshops

- Three Stakeholder Workshops
 - Truck Drivers
 - Truck Stop Operators
 - Shippers/Carriers
- Held at MnDOT with teleconference option
- Approximately 1 hour duration
- 6-10 participants
- General comments/concerns

Potential Opportunities/Solutions

➤ Policy

- Truck parking opportunities in State Project Selection Process
- Land use compatibility
- Tax incentives and public investment to leverage private sector investment
- Parking requirements at/near major freight generators

➤ Technology

- TPIMS
 - Expanded deployment
 - Technological upgrades
 - Predictive tools
- Vehicle to Infrastructure (V2I) investments
- Parking reservation systems

➤ Capacity

- Expand Existing Facilities
 - Leverage public land near private facilities
 - Allow parking at closed facilities (e.g., weigh stations)
 - Convert underutilized rest areas to truck only
 - Coordination with private businesses (e.g., big box stores)
- New Facility Locations
 - Between divided highways
 - Interchanges
 - Adjacent property

Next Steps

➤ Public and Private Sector Outreach

- Industry Focus Group Meetings and Workshops: Truck Drivers, Truck Stop Operators, Shippers/Carriers
- MnDOT staff engagement

➤ ATRI Parking Demand Analysis

➤ Identification of Opportunities and Solutions

➤ Draft and Final Report Development