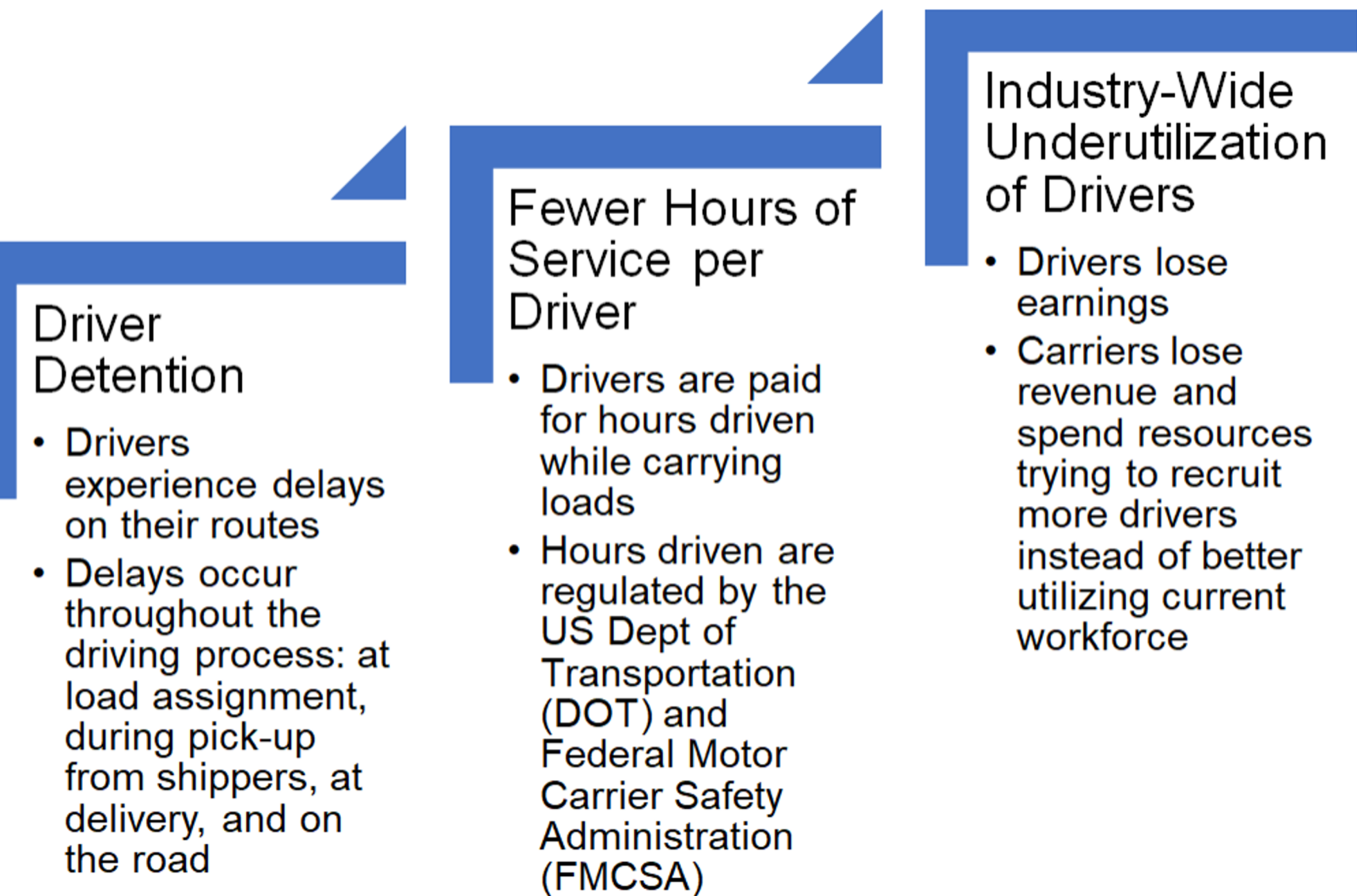


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Diving Deep into the Determinants of Driver Dwell

Research Fest 2021

Motivation / Background



Key Question

What opportunities exist to increase U.S. Xpress truckers' average driving time in a daily shift?

Exploring dwell:

- **Nodal dwell:** the time spent at a shipper or receiver node over the expected time by load/unload type (2 hours for live, 45 minutes for drop-and-hook)
- **Status dwell:** time spent in on-duty status (as this is time counted against a driver's allotted working time, but is not spent driving)

Relevant Literature

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The Problem

A daily shift for a truck driver is considered 11 driving hours within a legally mandated 14-hour total workday. Currently, industry truckers average 6.5 hours driving time per day due to driver detention.

Current average
6.5 hours driven per day



Methodology

Our methodology is both quantitative and qualitative in nature.

We will analyze nodal dwell, considering geographical location, time of day, and type of load. We will also consider drivers and assess how demographics and background affect status dwell.

These analyses will be complimented by interviews with U.S. Xpress drivers and managers.

Results + Key Insights

- Drivers themselves do not hold the power in better utilizing their own time
 - U.S. Xpress should not look to one driver demographic as the “blueprint” for best utilized time
- Dispatchers and node staff have a greater impact on driver utilization and decreasing dwell
- Dispatchers should aim to send drivers to the same locations repeatedly, and should send drivers to nodes during peak activity times whenever possible

Expected Contribution

- Relieve the trucking industry of the pressure to aggressively recruit and retain
- Emphasize focus on improvement within a workforce that is growing sustainably
- Identify the factors and behavior that enable drivers to best utilize their working hours

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