



CONCEPT OF OPERATIONS STUDY

Connected Corridor Technology Examples







Connected Corridor Could Mean:

Public Data

 Easier permitting across states

Real-Time

 Information on weather, congestion, incidents

Safety Info

 Shared from vehicles to roadside

Truck-to-Truck

 Info for platooning or safety

What Could Be Possible on I-10?

Safety/Enforcement		Truck Parking		Intermodal	
Technologies		Systems		Approaches	
	Freight		Oper	Operations	
	Technologies		Improv	Improvements	

Enforcement and Safety Applications



Smart Roadside Initiative

- Electronic screening for vehicle and driver credentials
- Virtual weigh stations
- More inspection stations
- Vehicle on-board safety monitoring

Hazardous materials routing preclearance and routing



Truck Parking Systems

Truck parking shortages pose safety problems for truck drivers and for other motorists Truck Parking Systems can measure:

- Capacity of truck parking lots
- Monitor parking use to announce availability



Systems being tested:



- Michigan, Florida, other states
- Park My Truck App (truck stop operators)

Intermodal Approaches



Port systems that connect vessels to terminals and motor carriers

Private sector apps

- Load matching
- Dispatching, routing and payments





Border Crossing Systems

Measuring wait times and processing delays

Use Bluetooth and RFID readers to track truck crossings

Bridge Height Detection Systems

Electronic or low-tech detection systems to warn tall trucks away from low bridges Not all bridges over interstate lanes are high enough for

some freight moves



Other Freight Technologies



Freight Traveler Information Systems

Information on port congestion shared between dispatchers, drivers, terminal operators

Real-time roadway data on weather, incidents, congestion across all four states on corridor

Truck Platooning

Truck to truck connections that control braking, acceleration and lane changes Closer following distances improve aerodynamics, saving 5-20% in fuel costs USDOT demonstration projects, research and pilot testing in California and Texas Operational testing could move across I-10 corridor



Other Connected Vehicle Tests/Pilots

Wyoming weather tests using DOT trucks as probes

Hypothetical Connected Vehicle Pilot Demonstrations

Connected vehicle demonstrations using fleets of automobiles in urban areas

Operational Improvements



Smoother registration, credentialing of equipment and drivers across all four states

Oversize/overweight vehicle permitting through multiple states

Additional reciprocity for truck driver licensing, and more harmonization among special classes of trucks (tankers, waste haulers, double and triple trailers), all subject to further study