

**El Paso  
Metropolitan Planning Organization**

**TRANSPORTATION POLICY BOARD AGENDA ITEM SUMMARY**

**August 18, 2023**

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**AGENDA ITEM NO. 5:**

Update on Elevated Freight Technologies

**RECOMMENDED MOTION:**

Status report, no action required

**SUPPORT INFORMATION:**

None

**DISCUSSION/OPTIONS:**

Elevated Freight Technologies will provide an update on their continuing work toward implementation of an all-electric, elevated freight shuttle that would connect Ciudad Juarez, Chihuahua, to El Paso, Texas.



PRESENTATION FOR EL PASO METROPOLITAN PLANNING ORGANIZATION  
CROSS-BORDER FREIGHT TRANSPORTATION  
EL PASO-CIUDAD JUÁREZ  
AUGUST 18, 2023



## EXECUTION TEAM



Mitch Carlson  
CEO



Karla Blonsky  
CSO



Robert Hinchcliffe  
COO



David Leininger  
CFO



Juan Carlos Gastelum  
SVP LPOE



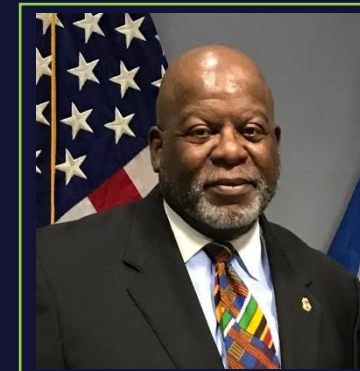
Clay Signor  
Chairman of Board



Henry Druker  
Board Director



Mike Hardt  
Board Advisor



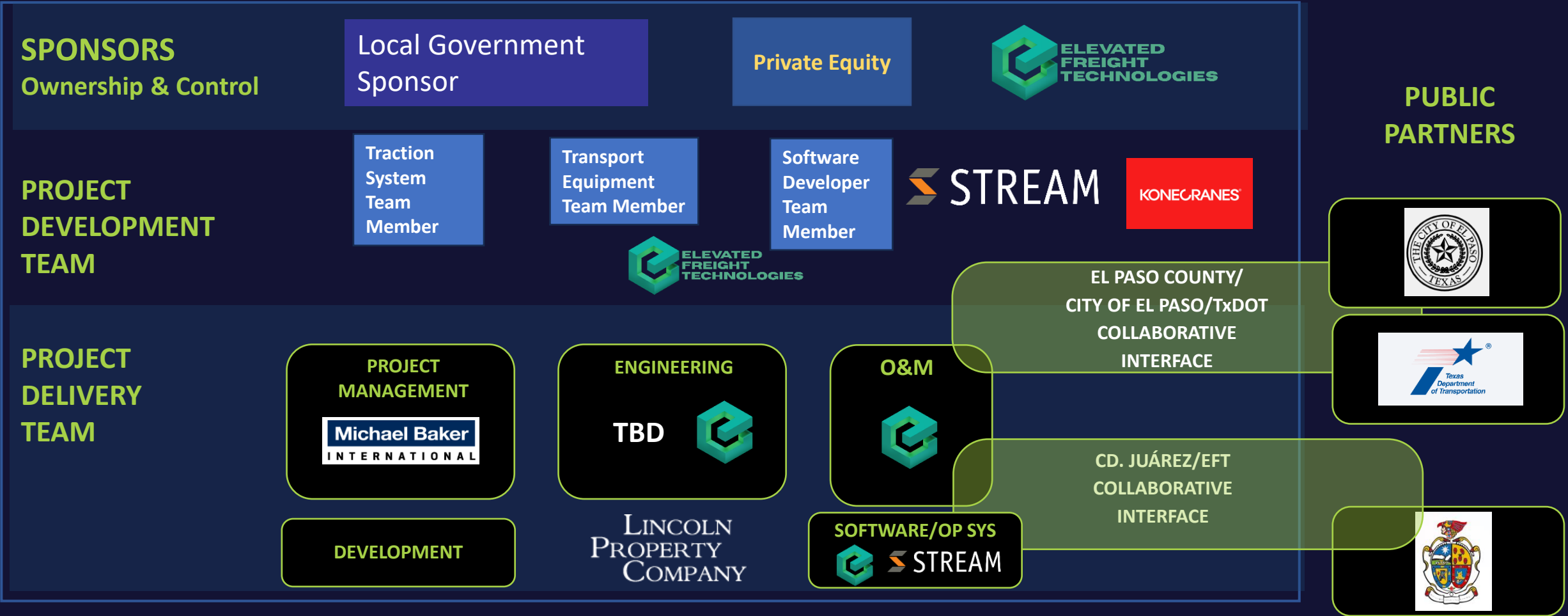
Jeffery Baldwin  
Customs & Border  
Protection



Bill Calderon  
Government &  
Public Finance



# PHASE I AND II SYSTEMS INTEGRATOR



# INTELLIGENT FREIGHT TRANSPORT SYSTEM CONNECTING A NETWORK OF FREIGHT HUBS

## Efficient Freight Movement

Elevates freight traffic above bridge and road lanes

- Alleviates congestion
- Facilitates Inspection
- Improves Security
- Reduces accidents
- Decreases road maintenance and rehabilitation costs



## High Environmental Impact

100% renewable electricity strategy

- Reduces GHG emissions, air pollution and ozone levels
- Improves noise pollution, health and quality of life for route-adjacent communities
- Regulatory-grade carbon credit certification

## Economic Development Catalyst

Creates a green corridor connecting freight hubs at strategic locations

- Attracts manufacturing and distribution businesses
- Improves supply chain efficiencies and overall productivity





# IFTS IMPACT: CONGESTION & ROAD SAFETY



Before



After



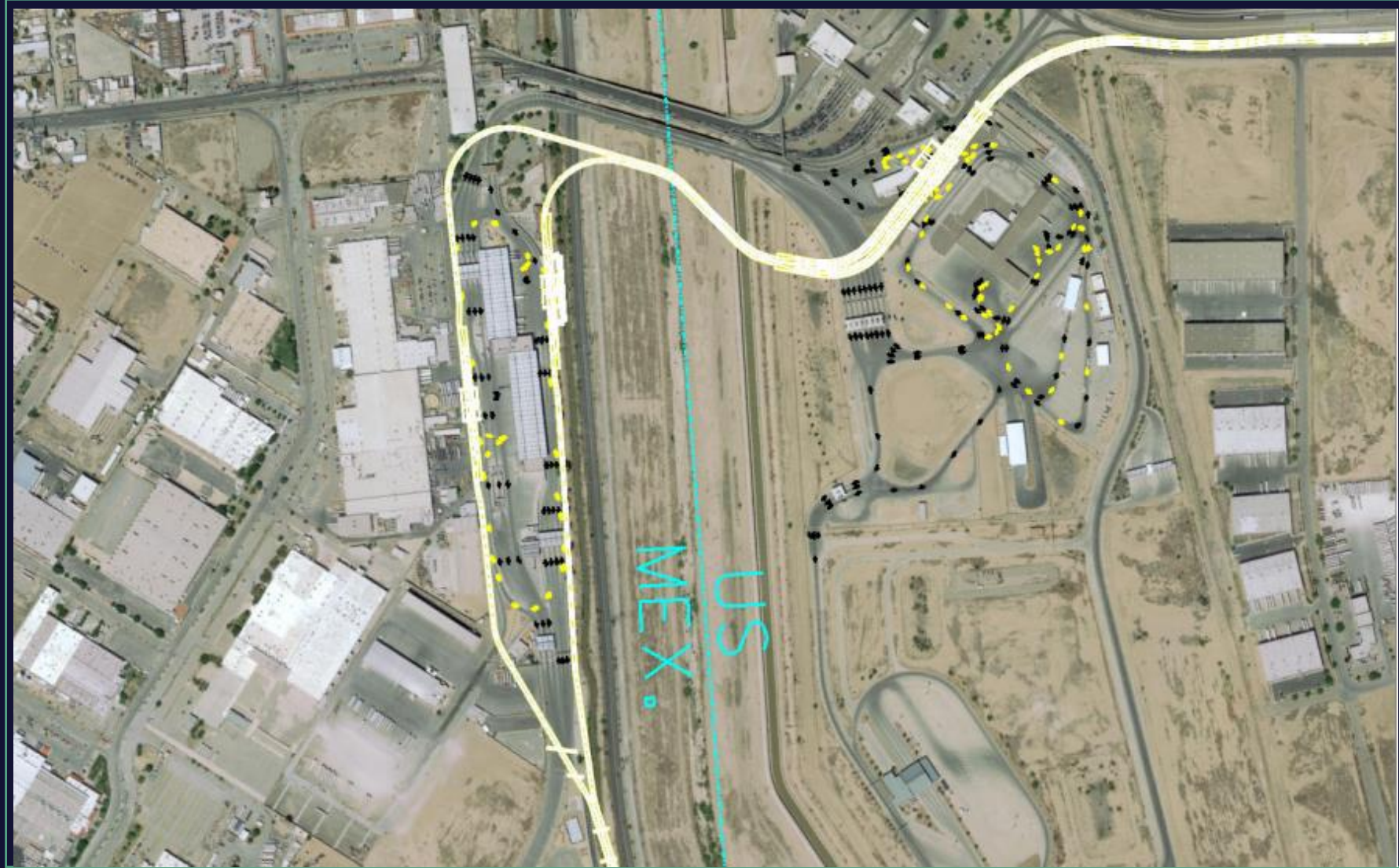
## IFTS IMPACT: SECURITY & SUPPLY CHAIN



- ❖ Dedicated system for safe autonomous operations
- ❖ Electric propulsion moves cargo between freight hubs
- ❖ Cargo remains within a chain of custody system
- ❖ AI /ML-driven proprietary operating system locates and tracks each container
- ❖ Predictable scheduling and just-in-time delivery opportunities to improve supply chain efficiencies

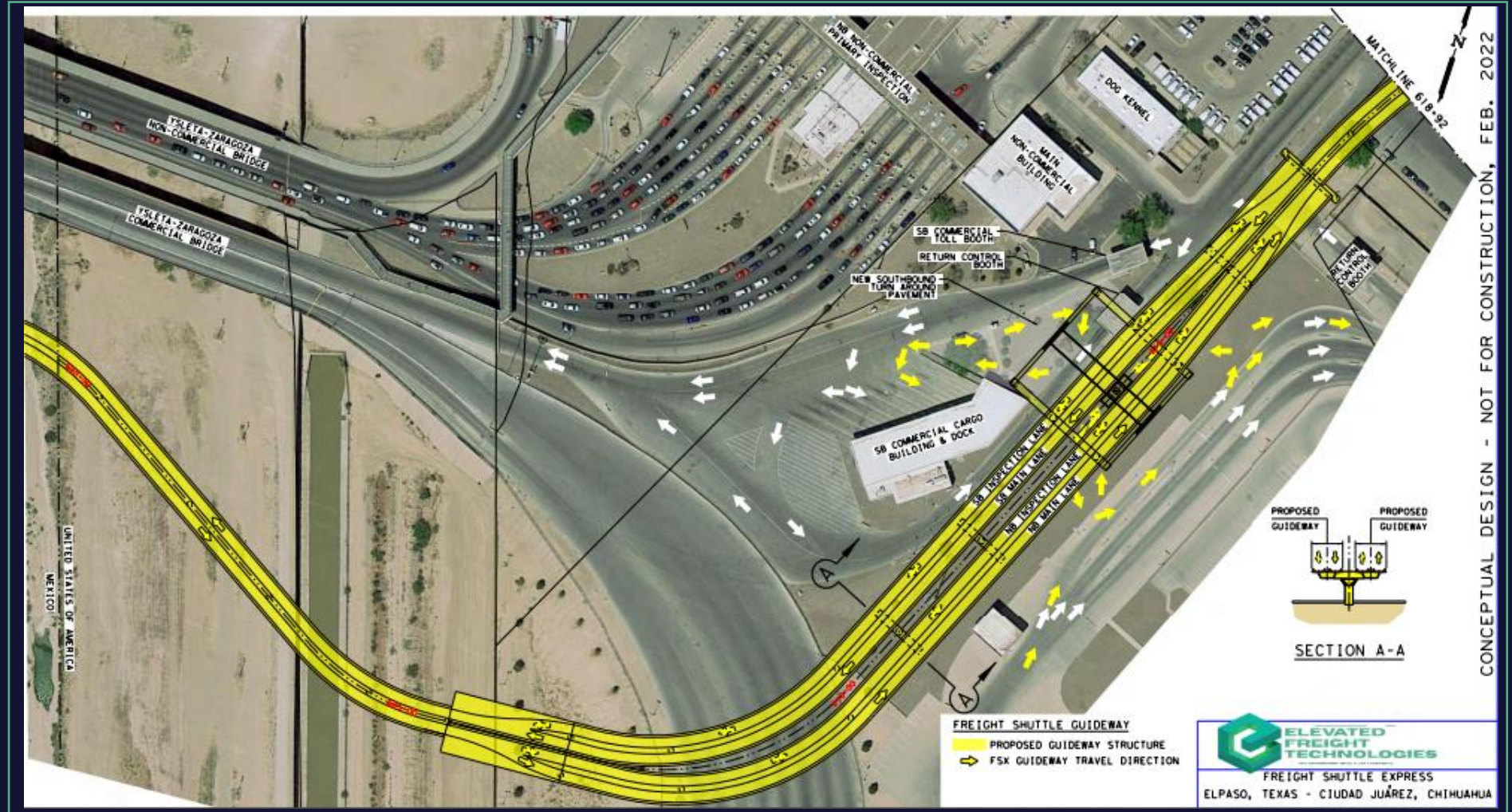


# MINIMUM ADDED FOOTPRINT:





# MINIMUM ADDED FOOTPRINT:



Current average volume through the IFTS (4,000 trucks/day)

# of truck trips removed  
from the road/yr:

**1,236,000**



# of vehicle miles travelled

**17,460,000**



**186 x**  
times around  
the world



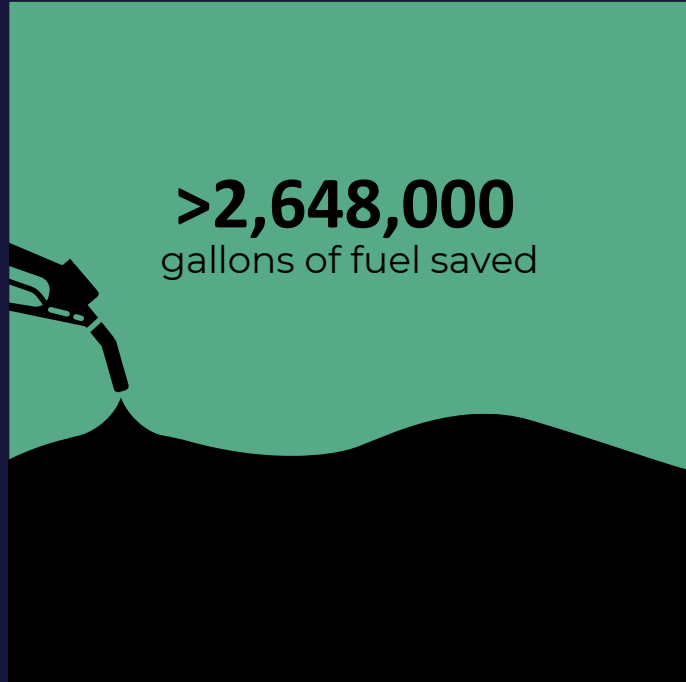
**10 x**  
times to moon  
and back

Emissions reduction:

**46,556**  
Tonnes of CO<sub>2</sub>e/yr



Current average volume through the IFTS (4,000 trucks/day)





# STAGED DEVELOPMENT OF GUADALUPE-TORNILLO POE

## PHASE 1

El Paso Landing Terminal operational



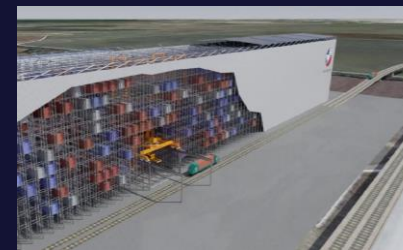
## PHASE 2

Designated autonomous lanes



## PHASE 3

Development of Northern Terminal



## PHASE 4

EFT Elevated Guideway and Shuttles



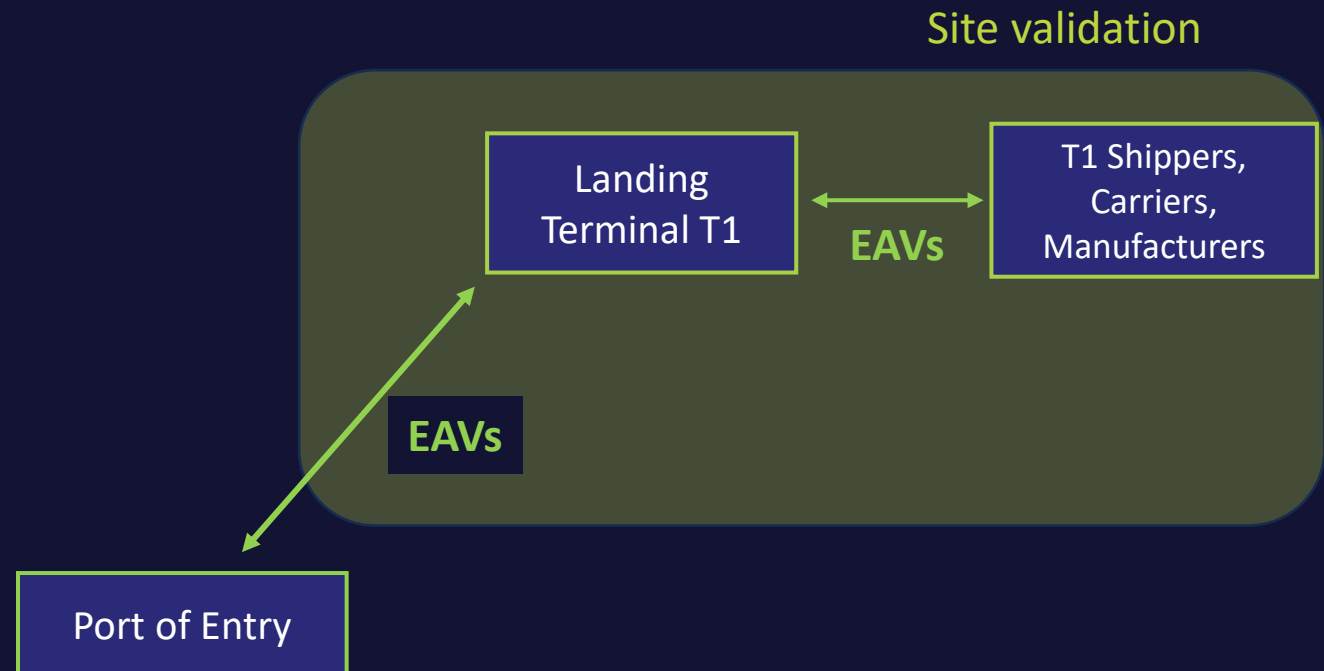
Vehicle	Electric +/- autonomous vehicles	Electric autonomous vehicles	Electric autonomous vehicles	EFT shuttles
Operation timing	Regular POE hours traffic alleviation	Added extended hours	Added nights and weekends	24/7 operations
Key features	Green corridor to/from landing terminal	Designated lanes for better usage of current CBP and TxDOT infrastructure	Expanded Northern El Paso infrastructure. Multimodal connection	Full shuttle logistics
Benefits	Security enhancement, GHG emissions reduced, Trailer volume capacity, Reduced congestion	Traffic congestion, Security, Freight movement efficiency, Safety, Alleviate I-10 congestion at peak hours	Economic catalysts for the Northern terminal/ Airport area/ Western, Traffic efficiency	Roadway congestion, TxDOT maintenance costs, Less energy usage



2025

EAVs transfer trailers/containers from the Port of Entry to the first landing terminal

Possible last mile transport to partner Shippers, Carriers, Manufacturers

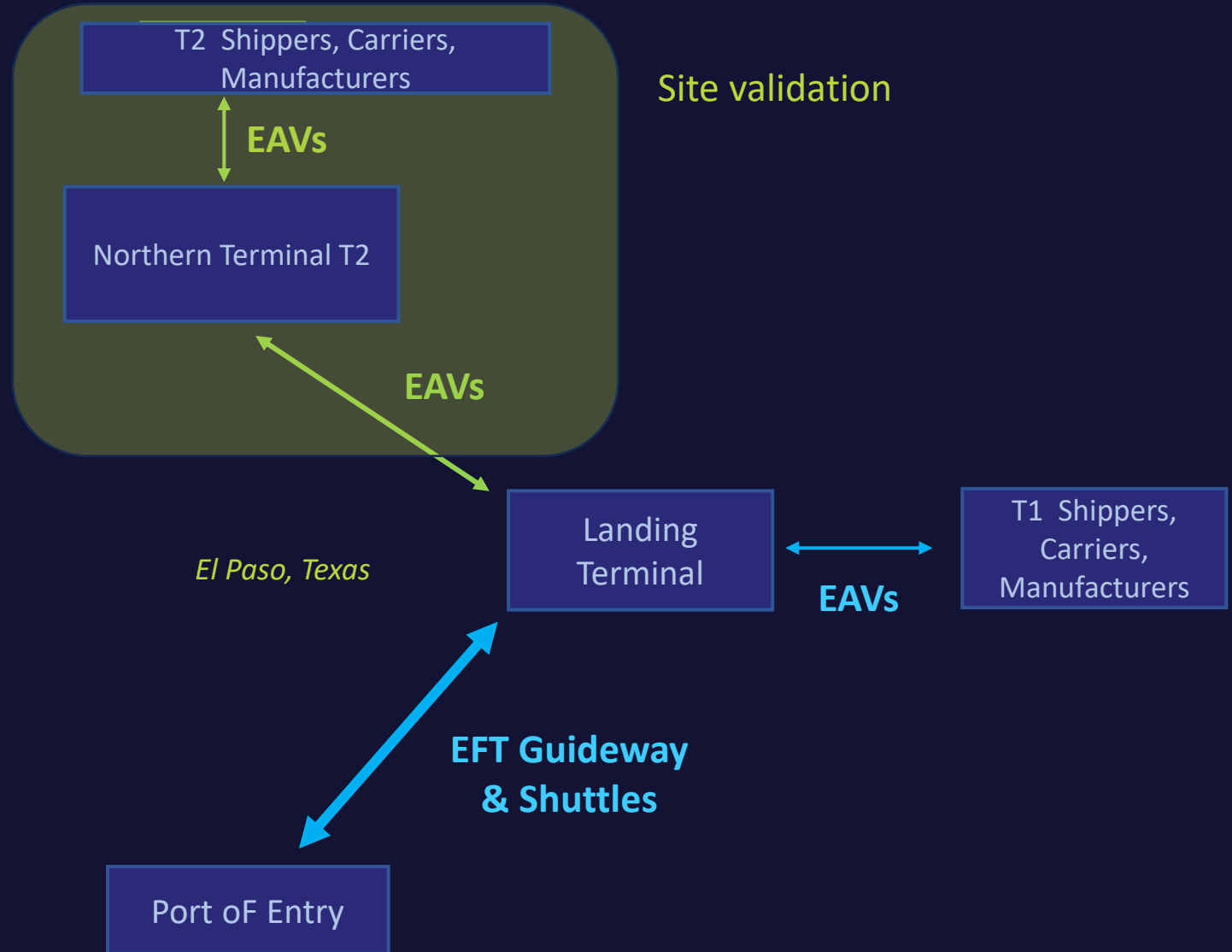


# STAGED DEVELOPMENT OF MULTIPLE TERMINALS

2028

EFT shuttles transfer trailers/containers from the Port of Entry to the landing terminal

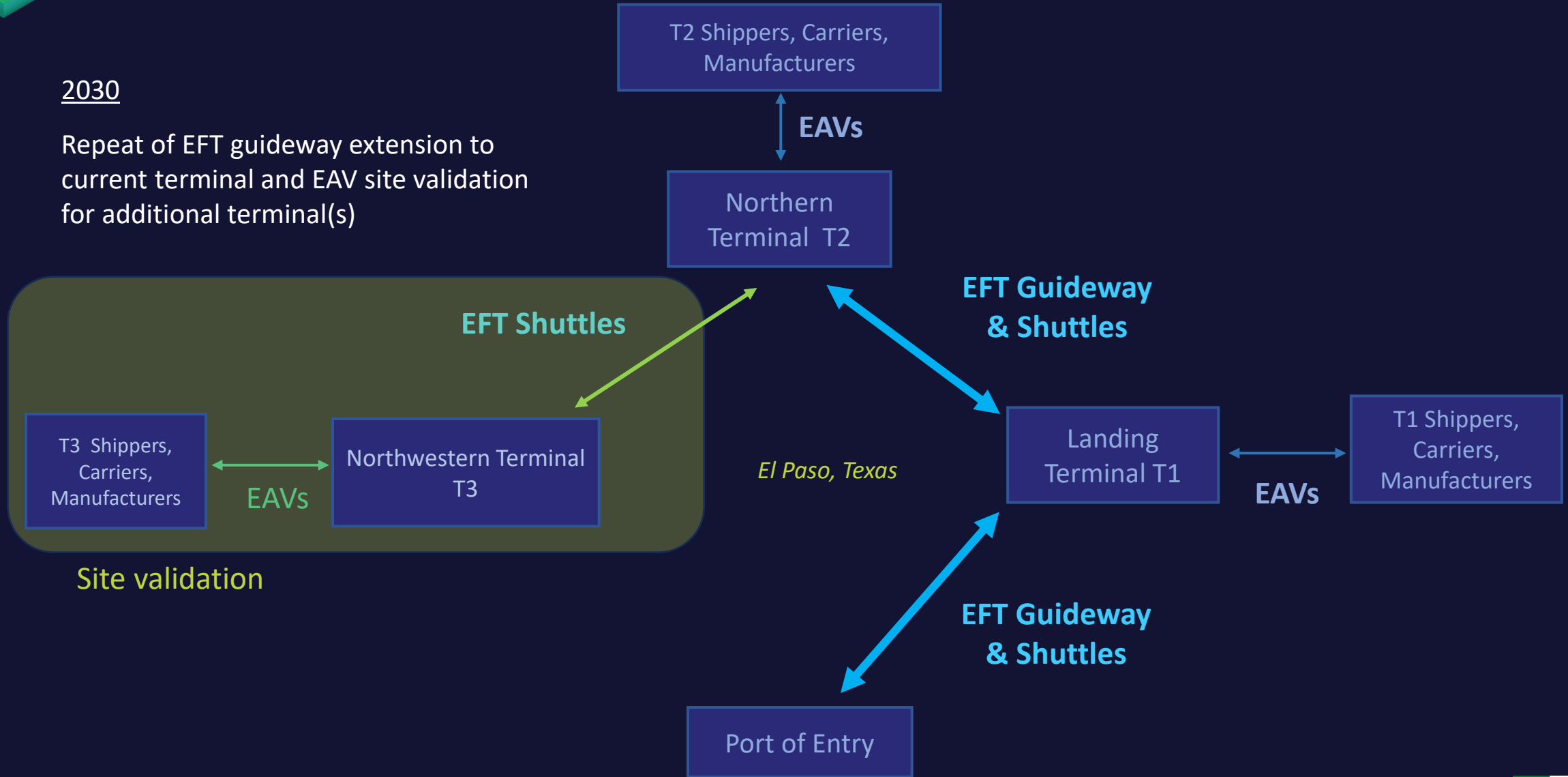
EAVs freed up for additional last mile Shippers, Carriers, Manufacturers transfers at the landing terminal and for site validation at a second Northern terminal

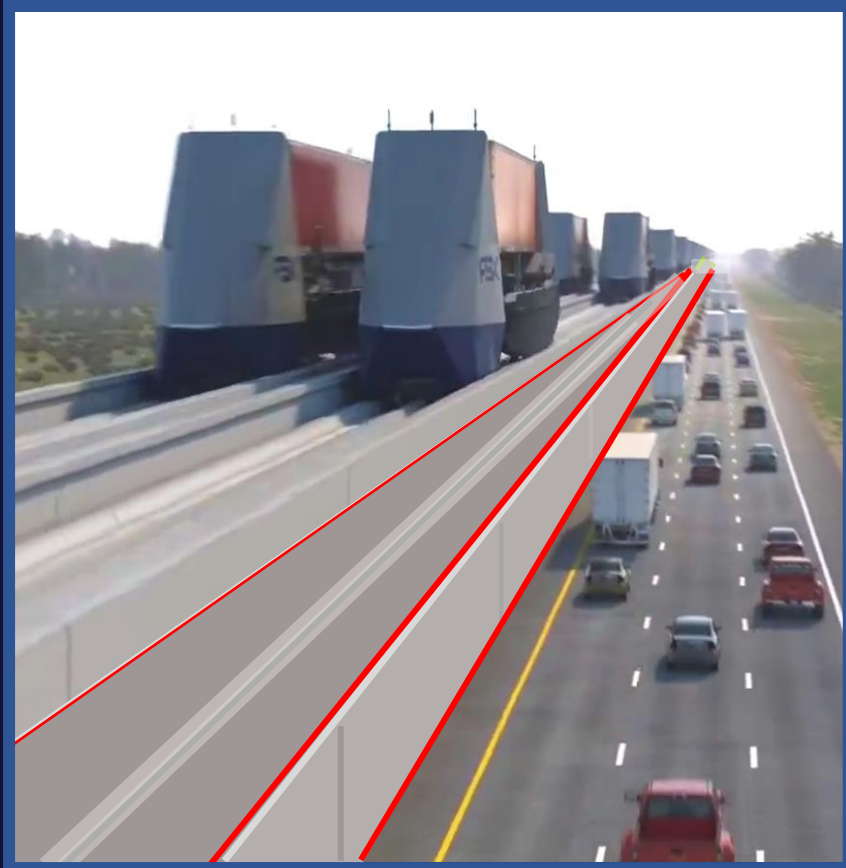




2030

Repeat of EFT guideway extension to current terminal and EAV site validation for additional terminal(s)





- ❖ Opportunity to add a designated express lane to the guideways for EAVs and Emergency Response Vehicles
- ❖ All guideway traffic managed by EFT operating system
- ❖ Synergies with TxDOT and El Paso MPO plans with elevated expressways leading to a network of freight hubs and terminals
- ❖ Integration with long term Border Highway East project



## NEAR TERM BENEFIT FROM STAGED PORT OF ENTRY BUILDOUT

- Early solution for managing trailer/container capacity at the Port of Entry
- Early GHG emission reduction for near Port of Entry communities
- Site validation for landing terminals during infrastructure planning
- Mitigation of traffic congestion during peak hours (until the guideway is built)
- Potential for end-to-end solution for Shippers, Carriers and Manufacturers
- Potential for early engagement of Manufacturers and 3PLs to buildout distribution centers close to the landing terminal areas

























[www.greencorridors.com](http://www.greencorridors.com)

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