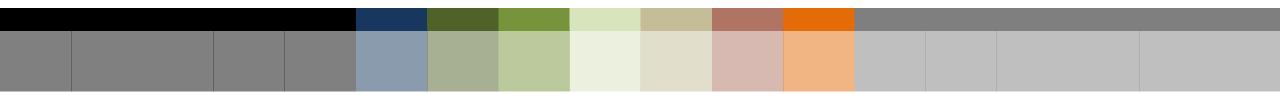
PERMIAN BASIN MPO POLICY BOARD PROJECT BRIEFING

Interregional Planning-Environmental Linkages (PEL) Study

JANUARY 29, 2024













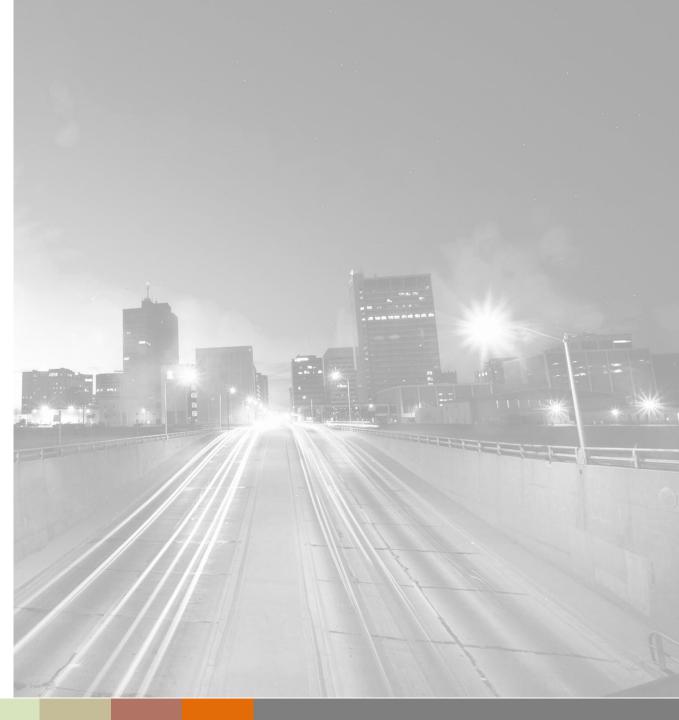
Project Overview

Permian Basin MPO Mercy Internation



Study Basis

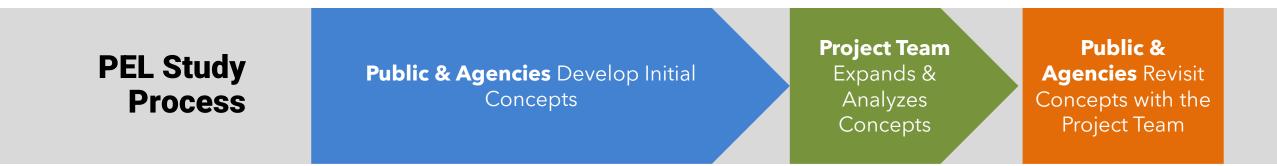
- Rapid regional growth and development
- Increased regional travel
- Diversification and increase of freight and goods movement
- Awareness of safety needs for all types of travelers





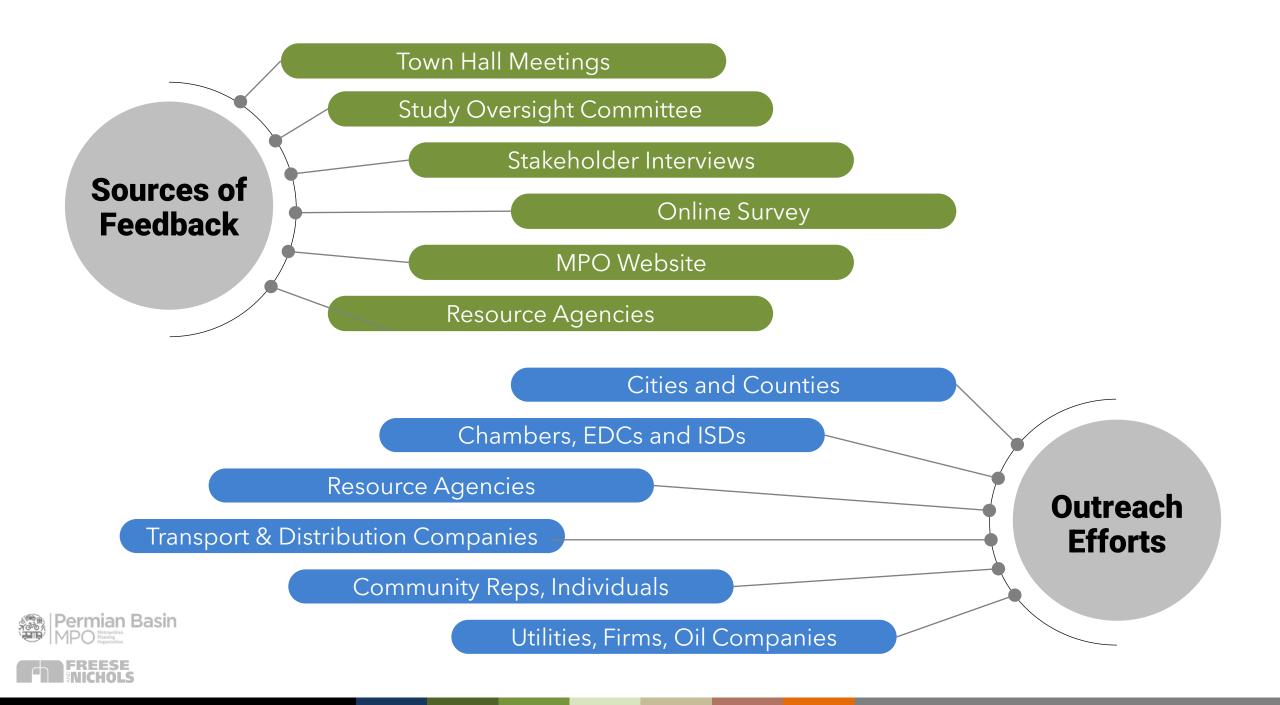
an Basin



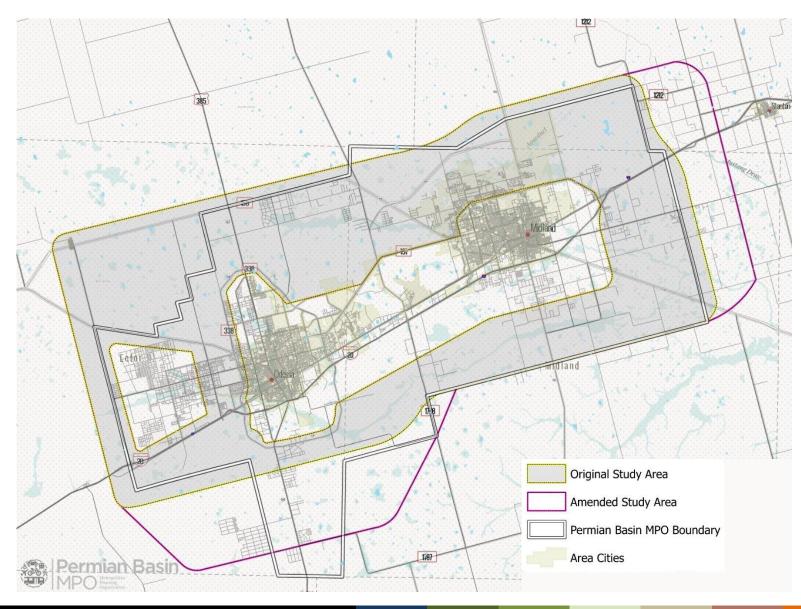






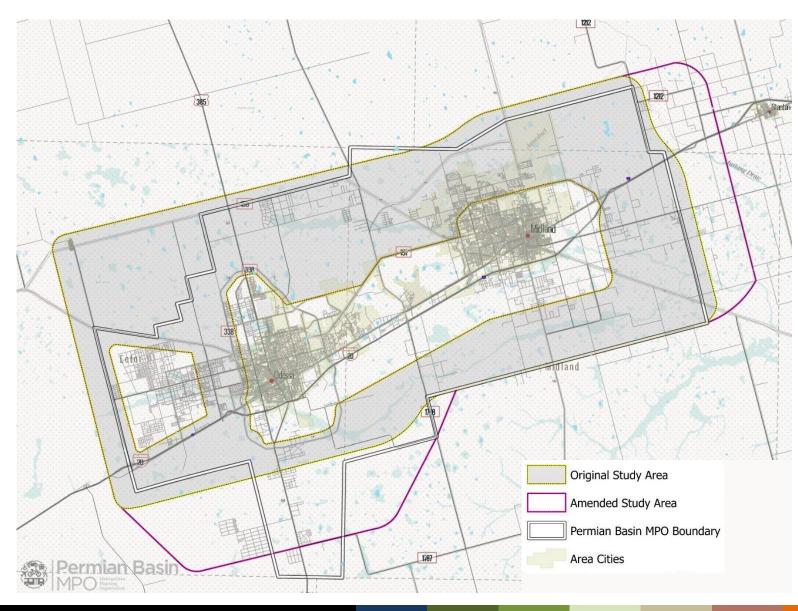


Study Area and Objectives



- Establish a common vision for an interregional transportation facility that will...
 - . Enhance safety and mobility
 - 2. Enable better movement of goods and services
 - 3. Provide a higher functional classification for more comprehensive service
- Identify potential corridors for future evaluation

Study Area and Objectives



- Region-wide shared vision
- Understanding study area stakeholder and partner capabilities/limitations
- Broad awareness and understanding of the area
- Collaboration tool to assist and facilitate orderly area development

Data Collection

PEL Study Process

Public & Stakeholder Involvement

Purpose and Needs Assessment

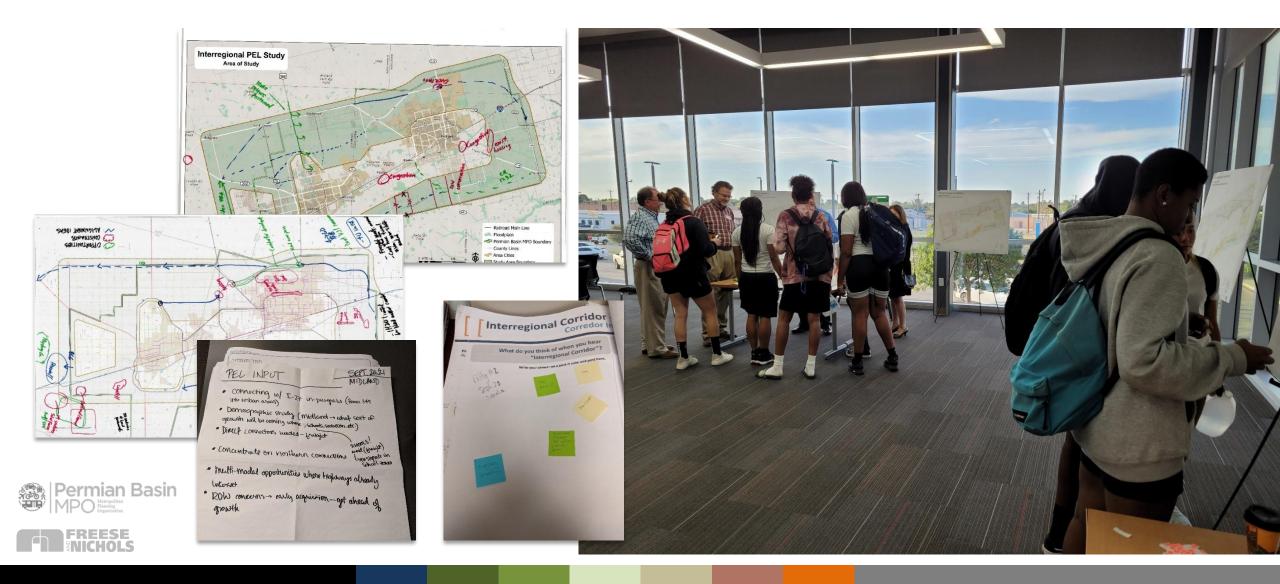
Develop and Screen Potential Alternatives

Project Next Steps

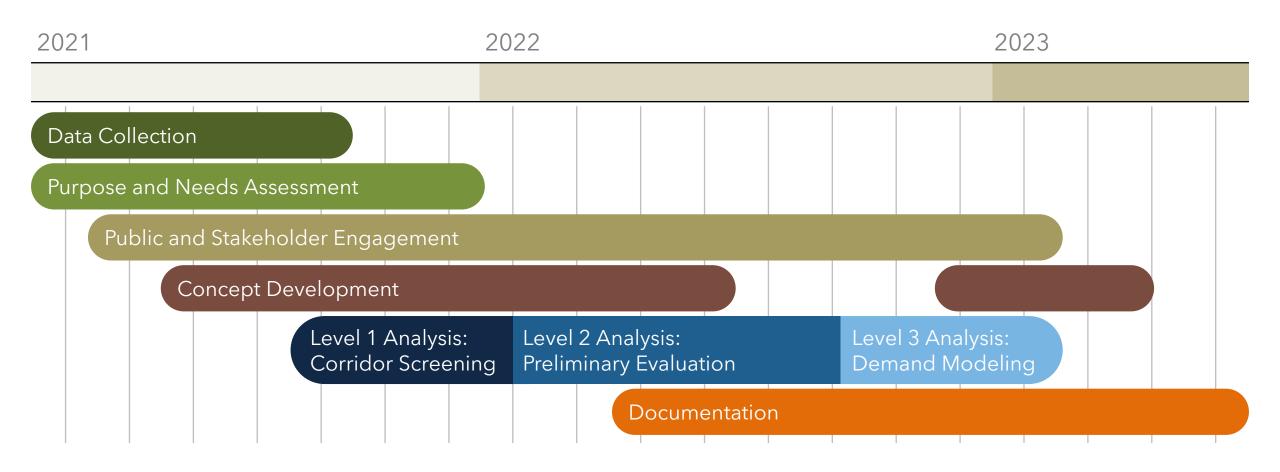




Public & Stakeholder Input as the basis for Alternatives Development



PEL Study Timeline



Permian Basin MPO Meropelita MPO Meropelita



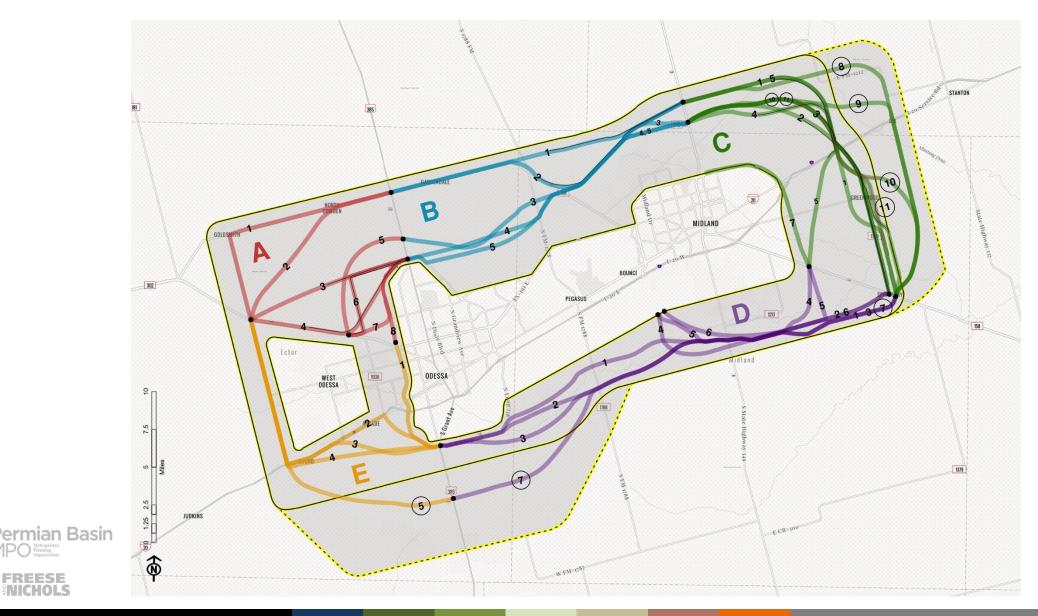
PEL Study Results



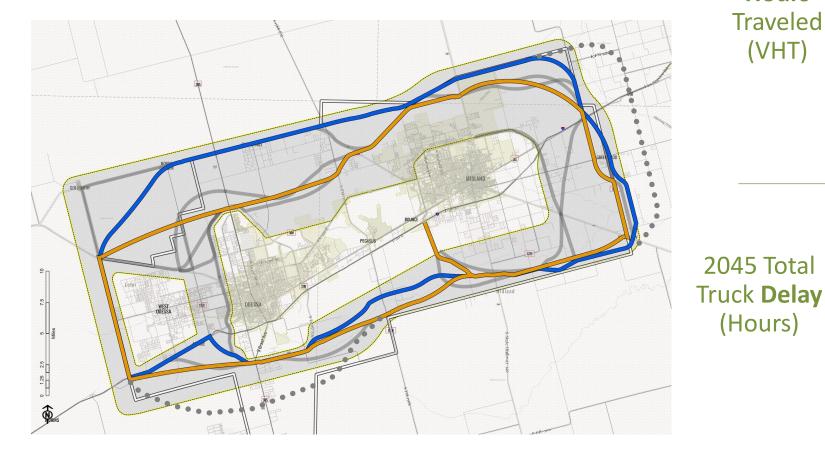


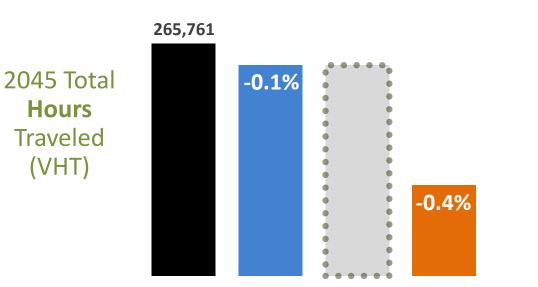


Regional Loop Concept Alternatives



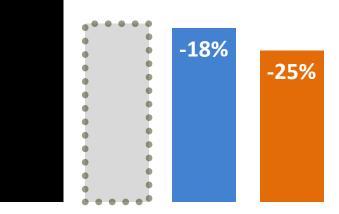
2045 Route Simulations & Performance Metrics



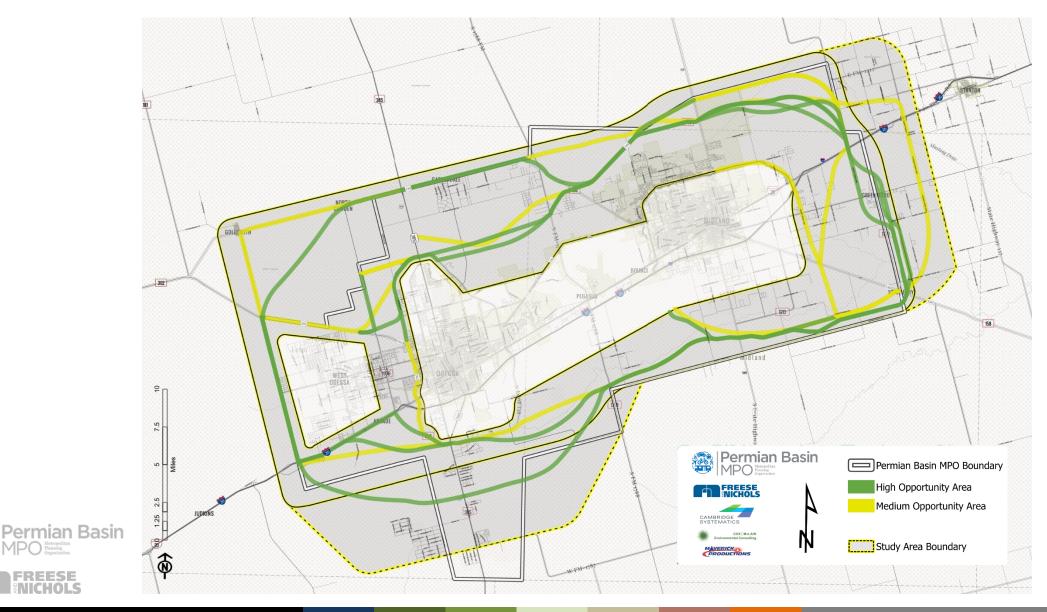


516

(Hours)

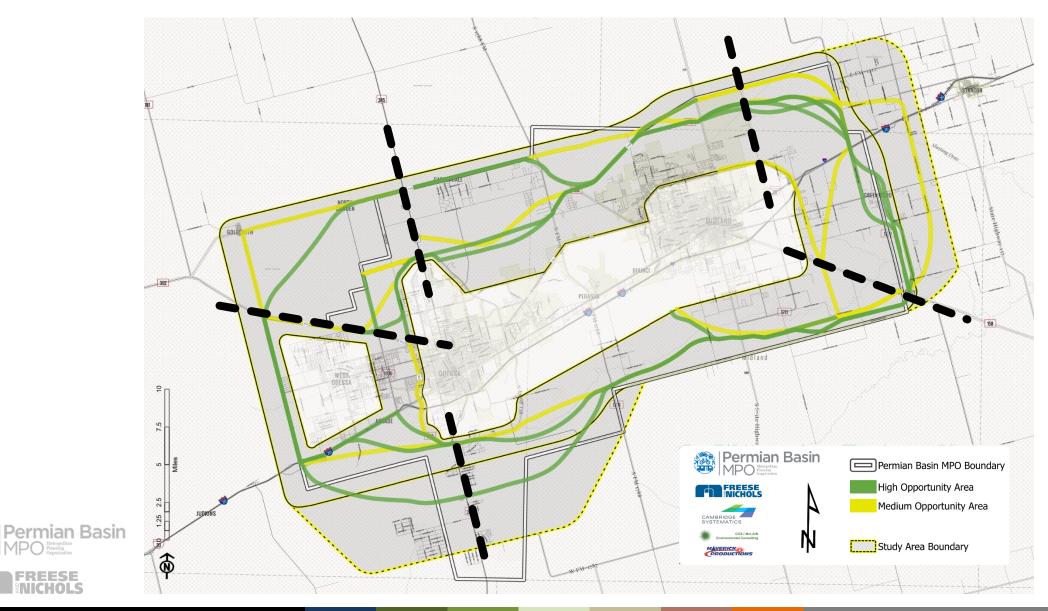


Study Results: Biggest Opportunities



FREESE

Study Results: Biggest Opportunities



FREESE

| Attribute Name | Resource Type/Measure | A1 | A2 | A3 | A4 | A5 | A6 | A7 | A8

 | E F | 1 E | 32 B3 | 3 B4
 | B5 | C1 | C2 | C3 | C4

 | C5

 | C6 | D1 | п | 2 D3
 | D4 | D5
 | D6 | E1 | E2 | E3 E4 |
|---|---|--|--|--|--|--|---|--
--
--
--
--|---|---
--|---|---|---|--

--

--
---|--
---|---|--|---
--|---
---|---|---|
| 2.1 Planned Systems | | | | | | | | |

 | | | |
 | | | | |

 |

 | | DI | |
 | |
 | | | | |
| | | - | | | | | | |

 | | | |
 | | | | |

 |

 | | | |
 | _ |
 | \square | | | |
| 2.2 Existing Systems | | | | | | | | |

 | | _ | |
 | | | | - |

 |

 | | | |
 | |
 | | | | |
| | | | | | | | | |

 | | - | | -
 | | | _ | _ | -

 |

 | | | _ |
 | |
 | | | | |
| 4.1 Archeological and Historical Sites | NRHP District
TXDOT Historic Properties
TXDOT Historic Bridges
Historical Markers
DOE Eligible Points | x | x | | | | | |

 | | c | x |
 | | | | |

 |

 | | | |
 | |
 | | | x | x x |
| | Archaeological Site | | | | | | | |

 | | | |
 | | | | |

 |

 | | | |
 | |
 | | | | |
| | Historic Highway Routes | | | | | | | |

 | | | |
 | | | | |

 | v

 | Ĵ | x |) | ×
 | x |
 | | | | |
| | Surface Wells | х | х | х | х | х | х | х | x

 | 1 - | (| x x | x
 | x | | | × | x

 | X

 | x | | <u> </u> |
 | | ~
 | _ | × | × | |
| 4.2 Oil and Gas | Pipeline Conflicts | x | х | x | х | х | х | x | ×

 | | c . | x x | x
 | x | | | x | x

 | x

 | x | Û | |
 | l û | Ĵ
 | Î Û Î | Û, | Î, | Û Û |
| | | x | | | | | | |

 | | | x |
 | | | | |

 | x

 | | î | |
 | |
 | | x | x | x |
| 4.3 Wetlands or Major Water | | x | х | x | х | × | х | x |

 | | (| x x | x
 | x | × | x | x | x

 | x

 | х | × |) | x x
 | x | x
 | x | × | x | x > |
| Features | - | | x | X | X | | X | x | x

 | | ¢ . | x x | x
 | x | × | x | x | x

 | x

 | х | × |) | x x
 | x | x
 | x | × | x | x > |
| 4.4 Threatened and Endangered
Species/Species of Concern | TXNDD | × | X | x | x | x | x | x | x

 | | <u>د</u> | x x | x
 | x | × | x | x | x

 | ×

 | x | × | > | x x
 | x | x
 | x | x | x | x x |
| 4.5 Parks/Open Space/Floodplain | Cemeteries
100-year Floodplain | x | x | x | x | x | x | x | x

 | | | xx | x
 | x | × | x | x | x

 | ×

 | x | | |
 | |
 | Ţ | , in the second | v | xx |
| | Petroleum Storage Tank | x
x | | | x | | | x | x

 | | + | |
 | | | ^ | x | x

 | Â

 | x | | | ^ ^
 | Â | ^

 | | × | × | |
| 4.6 Hazardous Site/Landfills | Industrial and Hazardous Waste Corrective Action
(IHWCA) | х | | | x | | | x | x

 | | | |
 | | | | |

 |

 | | | |
 | |
 | | x
x | x
x | x x |
| | | | | | | | | |

 | | | |
 | | | | |

 |

 | | | |
 | |
 | | | | |
| | Center Pivot | | | | | | | |

 | | | |
 | | | | |

 |

 | | | |
 | |
 | | | | |
| 4.7 Agricultural Areas | Prime Farm Land/Farmland of Statewide
Importance | | | | | | | |

 | | c i | x | ×
 | x | | | x | ×

 | ×

 | x | | |
 | × | x
 | X | | | |
| 5.1 Relocations/Displacements | Population + HHs in 2045 | | | | | | | |

 | | | |
 | | | | |

 |

 | | | |
 | |
 | | | | |
| 5.2 Area Development | City Limits y/n | х | | | | | | |

 | | | |
 | | | | |

 |

 | | | |
 | |
 | | | | |
| | Public Buildings | | | | | | | |

 | | (| x x | x
 | x | x | x | x | x

 | x

 | x | | |
 | |
 | | × | | |
| 5.3 Corridor Effect on Community | Hospitals | | | | | | | |

 | | | |
 | | | | |

 |

 | | | |
 | |
 | | | | |
| Facilities and Sensitive Receptors | | | | | | | | |

 | | | |
 | | | | |

 |

 | | | |
 | |
 | | | | |
| | Schools | | | | | | | | _

 | | | |
 | | | | |

 |

 | | | |
 | |
 | | | | |
| Populations | Block Groups w/ Minority Pop <50% | x | × | × | x | × | x | × | x

 | | _ | |
 | | | | x | X

 |

 | | | |
 | |
 | | | | |
| 5.5 Corridor Effect on Income Levels | Low Income Block Groups | | | | | | | |

 | | | ^ X |
 | | x | × | x | x

 | ×

 | x | × |) | ^ X
 | x | ×
 | | × | × | ××× |
| Conducivo to ED and LLI Compatibility | Jobs in 2045 | | | | | | - | - |

 | | | |
 | | | | |

 |

 | | | |
 | |
 | | | | |
| Conducive to ED and EU Compatibility | JODS IN 2045 | | | | L | | | |

 | | | |
 | | | | |

 |

 | | | |
 | |
 | | | | |
| | | | | | | | | |

 | | | |
 | | | | |

 |

 | | | |
 | |
 | | | | |
| TOTAL (FINAL) - Collaborative Resu | lt | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8

 | 9 | 43 1 | 10 11 | 12
 | 13 | 14 | 30 15 31 | 35 16 32 | 2 17 33

 | 29 34

 | 18 | 19 4 | 45 2 | 0 21
 | 22 | 23 47
 | 7 24 | 25 | 26 | 27 28 |
| 5 | 4.2 Oil and Gas 4.3 Wetlands or Major Water Features 4.4 Threatened and Endangered Species/Species of Concern 4.5 Parks/Open Space/Floodplain 4.6 Hazardous Site/Landfills 4.7 Agricultural Areas 5.1 Relocations/Displacements 5.2 Area Development 5.3 Corridor Effect on Community Facilities and Sensitive Receptors 5.4 Corridor Effect on EJ and Vulnerable Populations 5.5 Corridor Effect on Income Levels Conducive to ED and LU Compatibility | 4.1 Archeological and Historical Sites NRHP Property
NRHP District
TXDOT Historic Properties
TXDOT Historic Bridges 4.1 Archeological and Historical Sites TSDOT Historic Bridges
Historical Markers
DOE Eligible Polygons
Archaeological Site
Historic Highway Routes 4.2 Oil and Gas DOE Eligible Polygons
Archaeological Site
Historic Highway Routes 4.2 Oil and Gas Pipeline Conflicts
Storage Tanks 4.3 Wetlands or Major Water
Features NHD Flowline
NWI 4.4 Threatened and Endangered
Species/Species of Concern TXNDD 4.5 Parks/Open Space/Floodplain Cemeteries
100-year Floodplain
Park Areas 4.6 Hazardous Site/Landfills Center Pivot
Prime Farm Land/Farmland of Statewide
Importance 4.7 Agricultural Areas Population + HHs in 2045 5.1 Relocations/Displacements Population + HHs in 2045 5.2 Area Development City Limits y/n 5.4 Corridor Effect on EJ and Vulnerable
Populations Block Groups w/ Minority Pop <50% | 4.1 Archeological and Historical Sites NRHP Property
NRHP District
TXDOT Historic Properties × 4.1 Archeological and Historical Sites Historical Markers
DOE Eligible Polygons
Archaeological Site
Historic Highway Routes × 4.2 Oil and Gas Surface Wells
Storage Tanks × 4.2 Oil and Gas Surface Wells
NHD Flowline × 4.3 Wetlands or Major Water
Features NHD Flowline × 4.3 Wetlands or Major Water
Features NHD Flowline × 4.4 Threatened and Endangered
Species/Species of Concern NWI × 4.5 Parks/Open Space/Floodplain Cemeteries
100-year Floodplain × 4.6 Hazardous Site/Landfills Petroleum Storage Tank
Industrial and Hazardous Waste Corrective Action
(HWCA) × 4.7 Agricultural Areas Population + HHs in 2045 × 5.1 Relocations/Displacements Population + HHs in 2045 × 5.2 Area Development City Limits y/n
Fire Stations × 5.4 Corridor Effect on Community
Pacilities and Sensitive Receptors Block Groups w/ Minority Pop <50% | 4.1 Archeological and Historical Sites NRHP Property
NRHP District
TXDOT Historic Properties
TXDOT Historic Bridges x x 4.1 Archeological and Historical Sites Historical Markers x x DOE Eligible Polygons Archaeological Site x x 4.2 Oil and Gas Pipeline Conflicts x x 4.3 Wetlands or Major Water
Features NHD Flowline x x A.3 Wetlands or Major Water
Features NHD Flowline x x 4.4 Threatened and Endangered
Species/Species of Concern Cemeteries x x 4.5 Parks/Open Space/Floodplain Det Eligible Polygens x x 4.6 Hazardous Site/Landfills Petroleum Storage Tank x x 4.6 Hazardous Site/Landfills Center Pivot x x 4.7 Agricultural Areas Petroleum Storage Tank x 5.1 Relocations/Displacements Population + HHs in 2045 x 5.3 Corridor Effect on Community
Facilities and Sensitive Receptors Fire Stations x 5.4 Corridor Effect on EJ and Vulnerable
Populations Block Groups w/ Minority Pop <50% | 4.1 Archeological and Historical Sites NRHP District
TXDOT Historic Properties
TXDOT Historic Bridges x x 4.1 Archeological and Historical Sites Historical Markers
DOE Eligible Polygons
Archaeological Site
Historical Site x x x 4.2 Oil and Gas Surface Wells x x x x 4.3 Wetlands or Major Water
Features NHD Flowline x x x x 4.3 Wetlands or Major Water
Features NHD Flowline x x x x 4.3 Wetlands or Major Water
Features NHD Rowline x x x x 4.3 Wetlands or Major Water
Features NHD Rowline x x x x 4.3 Wetlands or Major Water
Features NHD Rowline x x x x 4.4 Threatened and Endangered
Species/Species of Concern Cemeteries x x x x 4.5 Parks/Open Space/Floodplain Cemeteries x x x x x 4.6 Hazardous Site/Landfills Industrial and Hazardous Waste Corrective Action
(HWCA) x x x x 5.1 Relocations/Displac | 4.1 Archeological and Historical Sites NRHP District
TXDOT Historic Properties
TXDOT Historic Properties
TXDOT Historic Properties
TXDOT Historic Properties x x x x 4.1 Archeological and Historical Sites DOE Eligible Points
DOE Eligible Points
DOE Eligible Points
DOE Eligible Points
DOE Eligible Points x x x x x 4.2 Oil and Gas Surface Wells x x x x x x 4.3 Wetlands or Major Water
Features NHD Flowline x x x x x 4.3 Wetlands or Major Water
Features NHD Vaterbody x x x x x 4.4 Threatened and Endangered
Species/Species of Concern TXNDD Image: Start St | 4.1 Archeological and Historical Sites NRHP Property
NHH District
TXDOT Historic Properties
TXDOT Historic Properties
DOE Eligible Polygons
Archeological Site x | NRHP Property
NRHP District
TXDOT Historic Properties
TXDOT Historic Properties
TXDOT Historic Bridges x | NRHP Property
NRHP District
TXDOT Historic Brogerities
TXDOT Type
Teatures
TXDDD X <thx< td=""><td>Image: constraint of the second se</td><td>NRIP Property
NRIP District
TXDOT Historic Properties
TXDOT HISTOR PROPERTIES TXDOT TXDOT HISTOR PROPERTIES TXDOT HISTOR PROPERTIES TXDOT HISTOR PROPER</td><td>NRHP Property
NRHP District
TKDOT Historic Properties
TKDOT Historic Properties
TKDOT Historic Properties
TKDOT Historic Properties
TKDOT Historic Properties
TKDOT Historic Properties x <</td><td>Image: constraint of the state of the s</td><td>Image: control Image: contro Image: contro Image:</td><td>Image: state interval in the property into the property intery into theproperty intery into theproperty into theproperty inte</td><td>NHP Property
MHP Datrict NHP Property
MH</td><td>NHP Property
NHP Duttic
TXOT Heator Registra
DOE lights Polaris
DOE lights Polaris
States Doe NUC
States Dependention
DOE lights Polaris
NHD Tooline
NHD Tooline
States Dependention
DOE lights Polaris
NHD Tooline
NHD Tooline
NHD Tooline
States Dependention
DOE lights Polaris
NHD Tooline
NHD Tooline
NHD Tooline
States Dependention
States Dependent
DOE lights Polaris
NHD Tooline
NHD To</td><td>Neile Neile <th< td=""><td>Image Image <thimage< th=""> <thimage< th=""> <thim< td=""><td>Image: program Noise program</td><td>A.1 A.1 Mode Property
NMP Operator
TXDOT Heater forgers
DOT Higher Forms
DOT High</td><td>All Archestagical and Historical Sizes Number Property
Name Practical
DOC Eligible Montes
DOC Eligible Montes
Notical Mathemas x</td><td>MNHP Property
NRND Dots No No</td><td>A1. Archeological and interval list NBP Property
MBP Dotating
DOT Histock Properties
TROPT Histock Properise
TROPT Histock Properties
TROPT Histock Pr</td><td>All Property Mole Mole<td>Important Important <thimportant< th=""> <thimportant< th=""> <thimportant< th=""></thimportant<></thimportant<></thimportant<></td><td>All when bases Most Progress No No</td><td>Image: state stat</td><td>Image: constraint of the constraint</td></td></thim<></thimage<></thimage<></td></th<></td></thx<> | Image: constraint of the second se | NRIP Property
NRIP District
TXDOT Historic Properties
TXDOT HISTOR PROPERTIES TXDOT TXDOT HISTOR PROPERTIES TXDOT HISTOR PROPERTIES TXDOT HISTOR PROPER | NRHP Property
NRHP District
TKDOT Historic Properties
TKDOT Historic Properties
TKDOT Historic Properties
TKDOT Historic Properties
TKDOT Historic Properties
TKDOT Historic Properties x < | Image: constraint of the state of the s | Image: control Image: contro Image: contro Image: | Image: state interval in the property into the property intery into theproperty intery into theproperty into theproperty inte | NHP Property
MHP Datrict NHP Property
MH | NHP Property
NHP Duttic
TXOT Heator Registra
DOE lights Polaris
DOE lights Polaris
States Doe NUC
States Dependention
DOE lights Polaris
NHD Tooline
NHD Tooline
States Dependention
DOE lights Polaris
NHD Tooline
NHD Tooline
NHD Tooline
States Dependention
DOE lights Polaris
NHD Tooline
NHD Tooline
NHD Tooline
States Dependention
States Dependent
DOE lights Polaris
NHD Tooline
NHD To | Neile Neile <th< td=""><td>Image Image <thimage< th=""> <thimage< th=""> <thim< td=""><td>Image: program Noise program</td><td>A.1 A.1 Mode Property
NMP Operator
TXDOT Heater forgers
DOT Higher Forms
DOT High</td><td>All Archestagical and Historical Sizes Number Property
Name Practical
DOC Eligible Montes
DOC Eligible Montes
Notical Mathemas x</td><td>MNHP Property
NRND Dots No No</td><td>A1. Archeological and interval list NBP Property
MBP Dotating
DOT Histock Properties
TROPT Histock Properise
TROPT Histock Properties
TROPT Histock Pr</td><td>All Property Mole Mole<td>Important Important <thimportant< th=""> <thimportant< th=""> <thimportant< th=""></thimportant<></thimportant<></thimportant<></td><td>All when bases Most Progress No No</td><td>Image: state stat</td><td>Image: constraint of the constraint</td></td></thim<></thimage<></thimage<></td></th<> | Image Image <thimage< th=""> <thimage< th=""> <thim< td=""><td>Image: program Noise program</td><td>A.1 A.1 Mode Property
NMP Operator
TXDOT Heater forgers
DOT Higher Forms
DOT High</td><td>All Archestagical and Historical Sizes Number Property
Name Practical
DOC Eligible Montes
DOC Eligible Montes
Notical Mathemas x</td><td>MNHP Property
NRND Dots No No</td><td>A1. Archeological and interval list NBP Property
MBP Dotating
DOT Histock Properties
TROPT Histock Properise
TROPT Histock Properties
TROPT Histock Pr</td><td>All Property Mole Mole<td>Important Important <thimportant< th=""> <thimportant< th=""> <thimportant< th=""></thimportant<></thimportant<></thimportant<></td><td>All when bases Most Progress No No</td><td>Image: state stat</td><td>Image: constraint of the constraint</td></td></thim<></thimage<></thimage<> | Image: program Noise program | A.1 A.1 Mode Property
NMP Operator
TXDOT Heater forgers
DOT Higher Forms
DOT High | All Archestagical and Historical Sizes Number Property
Name Practical
DOC Eligible Montes
DOC Eligible Montes
Notical Mathemas x | MNHP Property
NRND Dots No No | A1. Archeological and interval list NBP Property
MBP Dotating
DOT Histock Properties
TROPT Histock Properise
TROPT Histock Properties
TROPT Histock Pr | All Property Mole Mole <td>Important Important <thimportant< th=""> <thimportant< th=""> <thimportant< th=""></thimportant<></thimportant<></thimportant<></td> <td>All when bases Most Progress No No</td> <td>Image: state stat</td> <td>Image: constraint of the constraint</td> | Important Important <thimportant< th=""> <thimportant< th=""> <thimportant< th=""></thimportant<></thimportant<></thimportant<> | All when bases Most Progress No | Image: state stat | Image: constraint of the constraint |

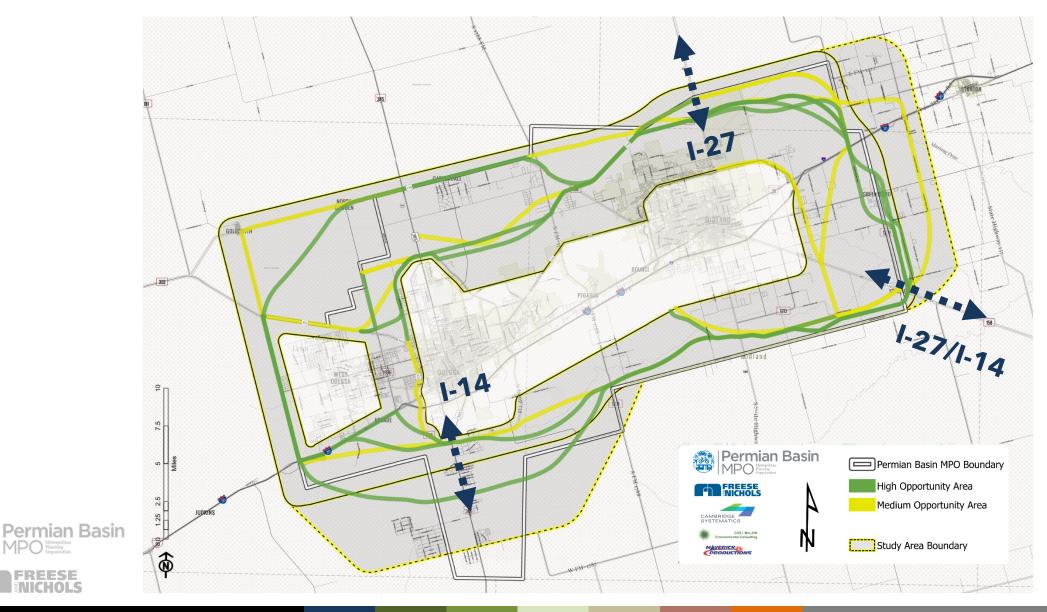
Recommendations







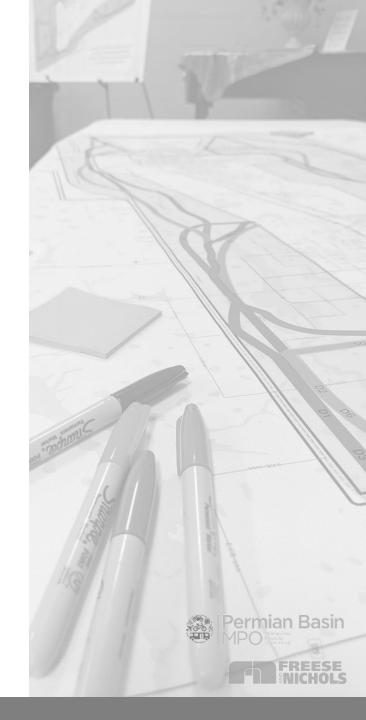
Study Results: Biggest Opportunities



FREESE

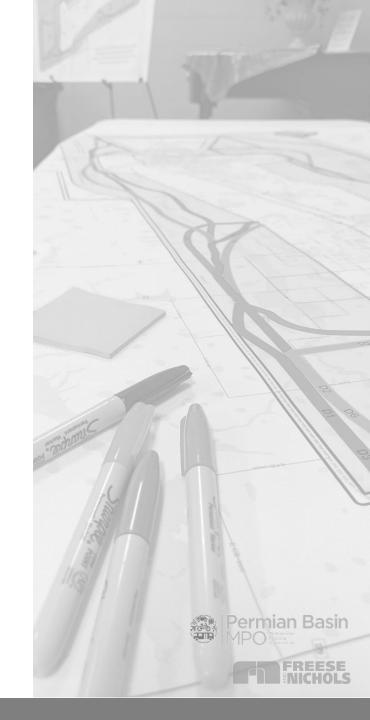
Recommendations

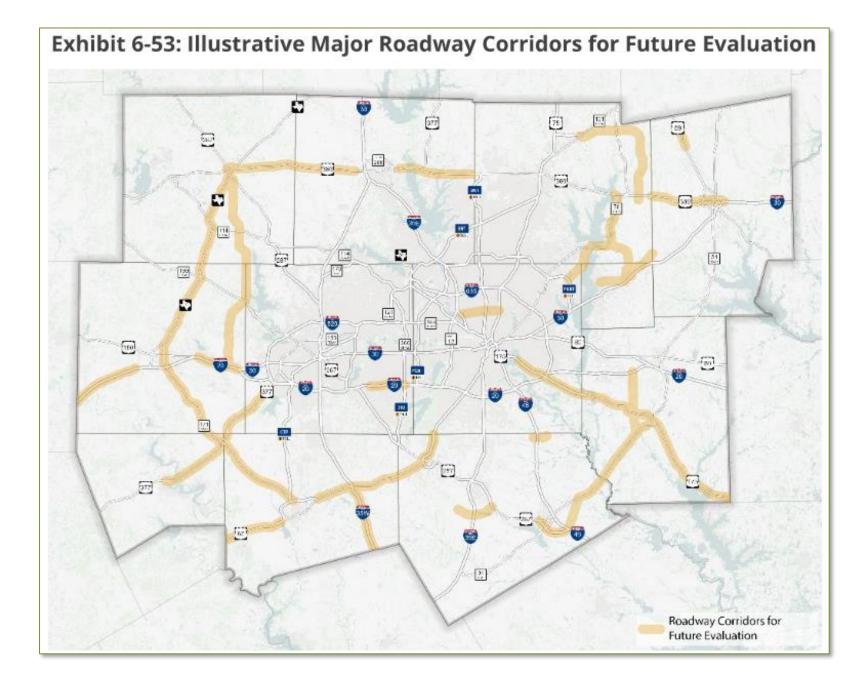
- Request that the Board accept the work done through this study
- Consider amending the regional MTP Forward 45
 - No project advancement until it is documented in the MTP
- MPO coordinates with agency partners for advanced documentation
 - Any follow up study should begin with the most opportunistic corridors (i.e., green)
 - o Potential to integrate with regional project selection criteria
- Keep this interregional facility in conversation with Forts-to-Ports (I-14), I-27/Ports-to-Plains, and other regional projects.



Advancing the Interregional Loop

- No project advancement until project in the MTP
- Consider Amending MTP Forward 45
 - o Future Mobility Options Chapter
 - Create Illustrative Map to identify regional mobility corridors for future evaluation
 - o Interregional Loop
 - \circ $\,$ Other mobility corridors IH-27, IH-14 $\,$
 - o Resiliency Plan corridors
- Interregional Loop PEL
 - o Purpose and Need Statement
 - o Stakeholder collaboration
 - Corridors of Opportunity Map
 - Segmented for Logical Termini
 - May be viewed for entire loop or segments of independent utility





Illustrative Map Example

Source: North Central Texas Council of Governments (NCTCOG) Mobility 2045 Update





Near term (~2 years)

Medium-term

Long-term

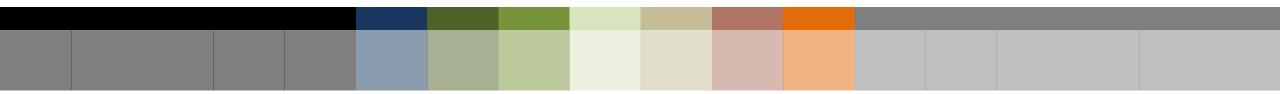
Next Steps Summary

- MPO Actions
 - o MTP amendment
 - Develop formalized project process
- Agency-led environmental documentation
 - Compare no-build + build alternatives
 - Defined corridors of least impact
- Formal Environmental Documentation/Public Hearing Process
- Corridor Design and Implementation

PERMIAN BASIN MPO POLICY BOARD PROJECT BRIEFING

Interregional Planning-Environmental Linkages (PEL) Study

SEPTEMBER 18, 2023









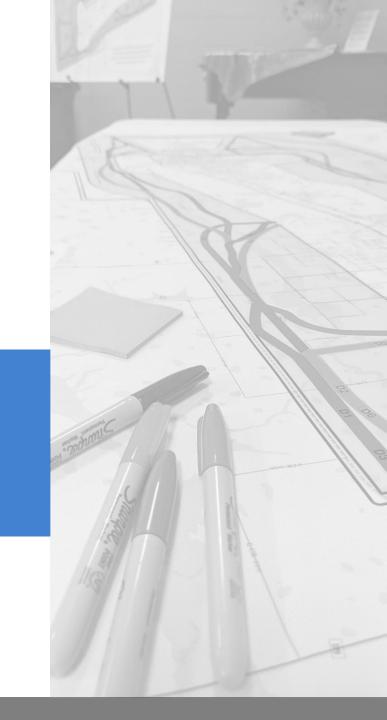


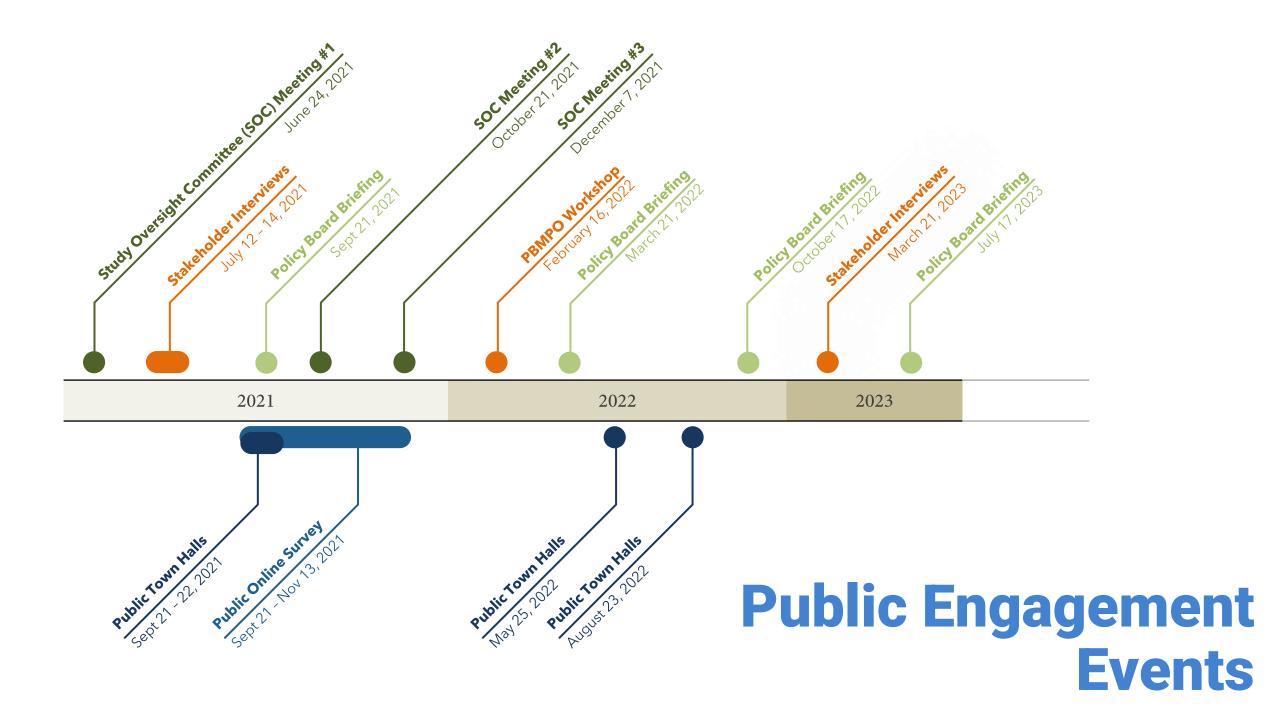


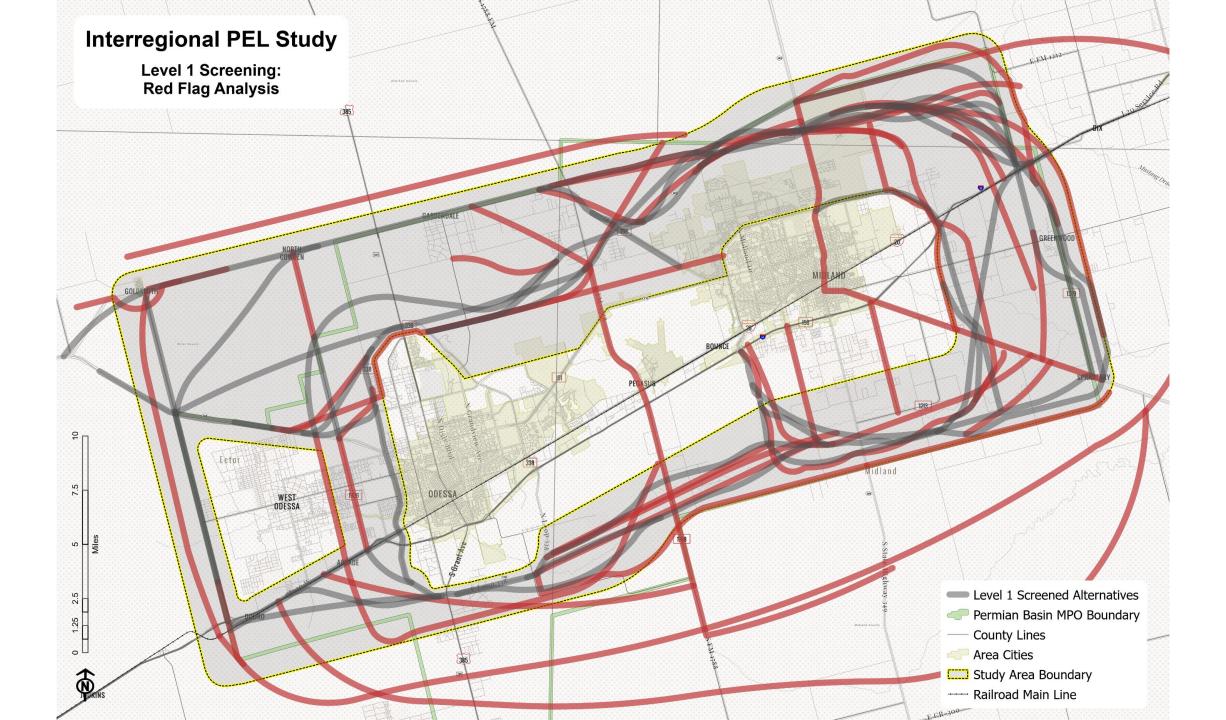
Supplemental Slides











Level 2 Screening Criteria

Consistency with Regional Plans & Infrastructure

Planned and Existing Systems and Projects

Natural Environmental Impacts

Archeological Sites Threatened/Endangered Species Parks and Open Space Agriculture Oil and Gas Infrastructure Etc.

Social Environmental Impacts

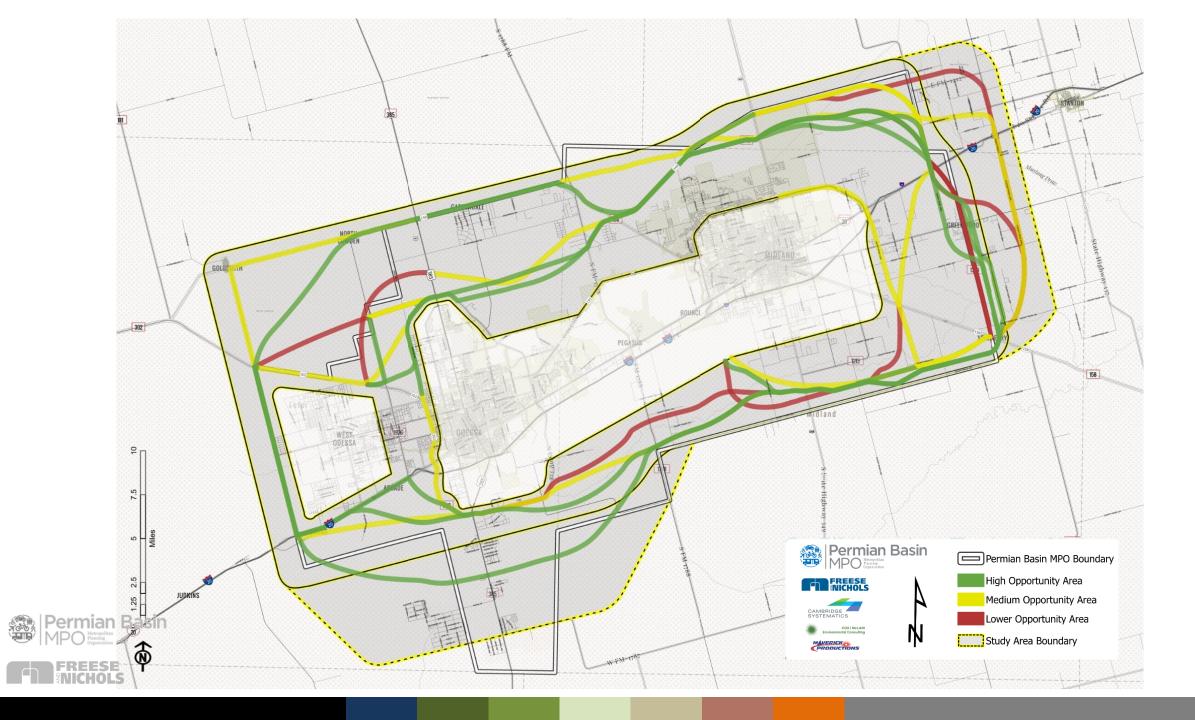
Vulnerable Populations Community Facilities Sensitive Receptors

Economic Development

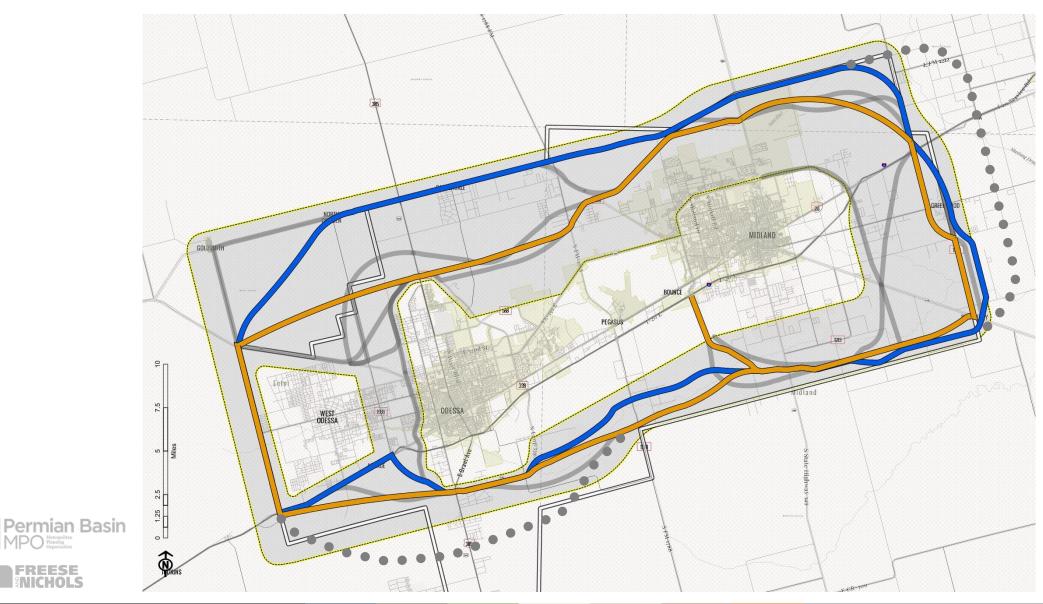
Conducive to future job growth Land Use Compatibility







Modeled Routes



200 700 100

FREESE NICHOLS

Performance Metrics

