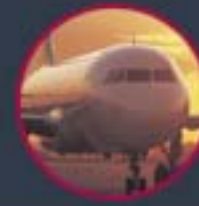
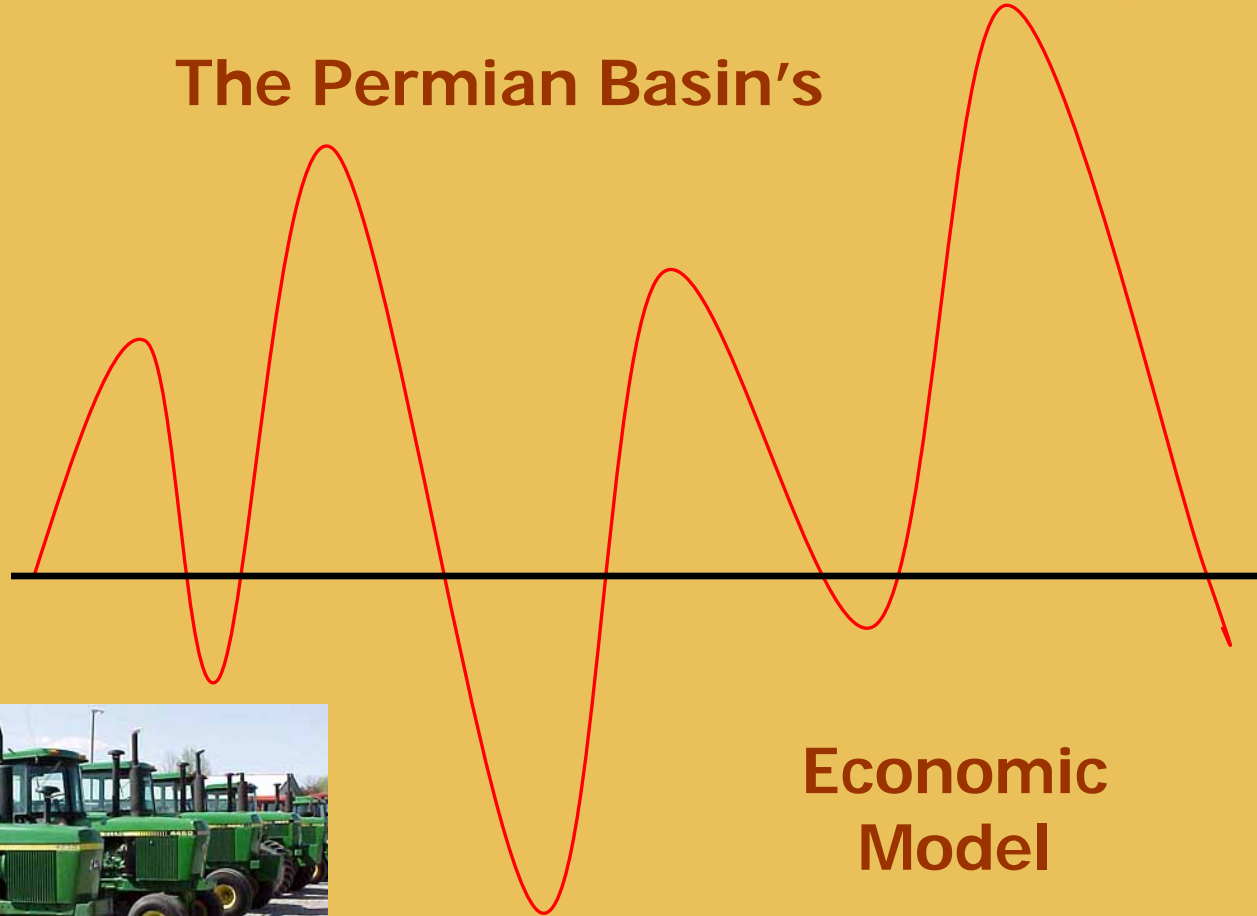


The Economic Impact of Infrastructure in The Permian Basin



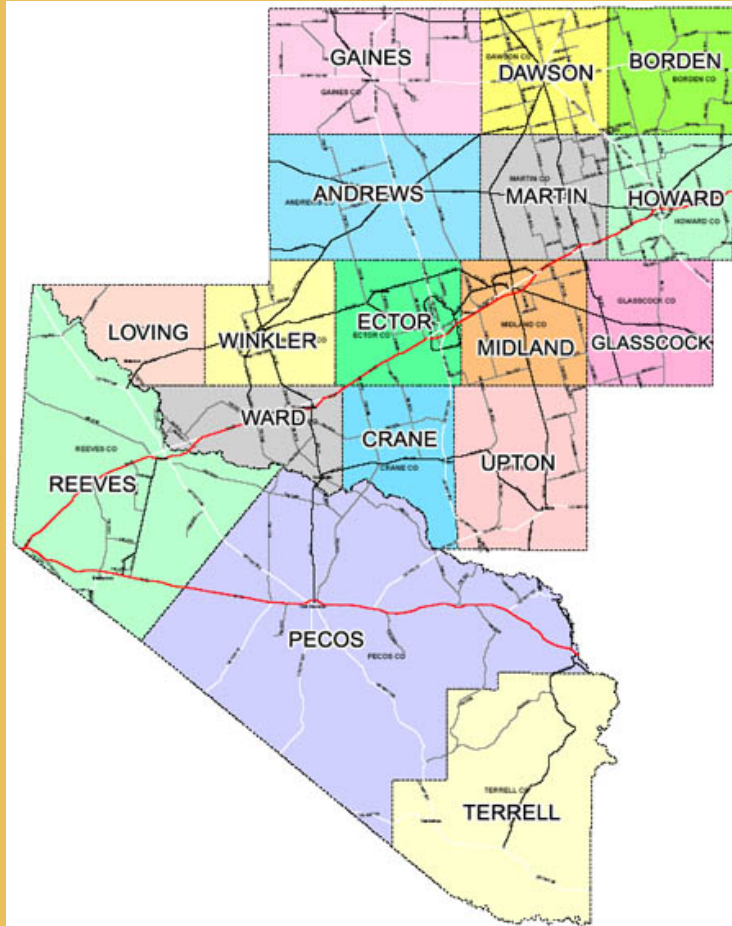
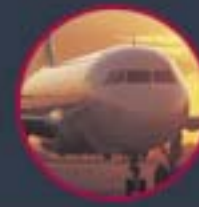
The Permian Basin's



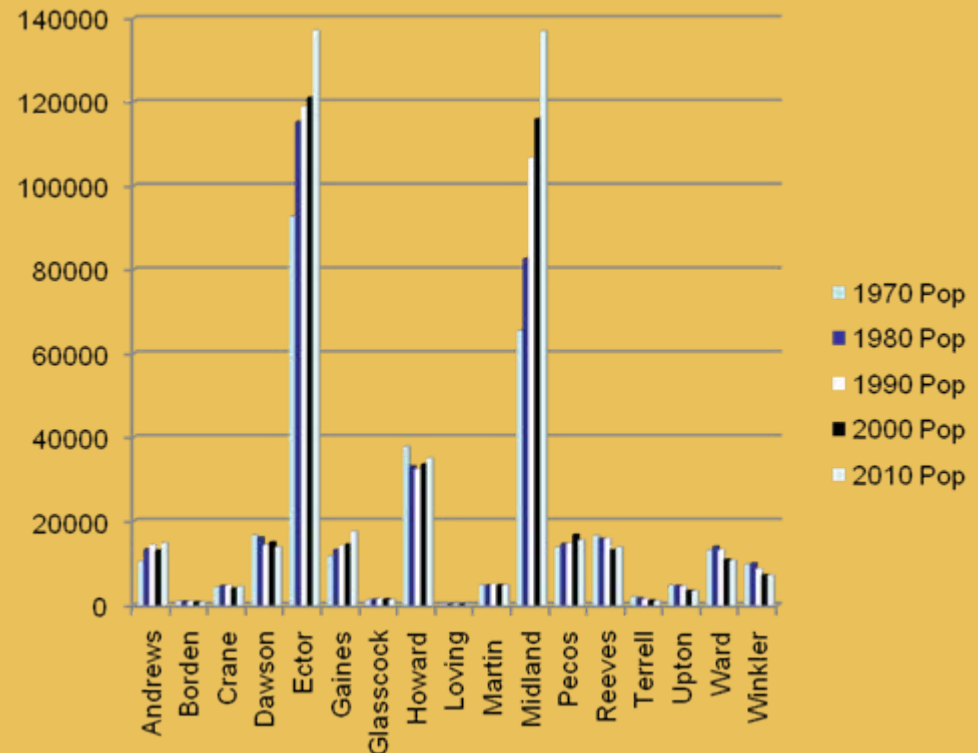
**Economic
Model**



The Economic Impact of Infrastructure in The Permian Basin



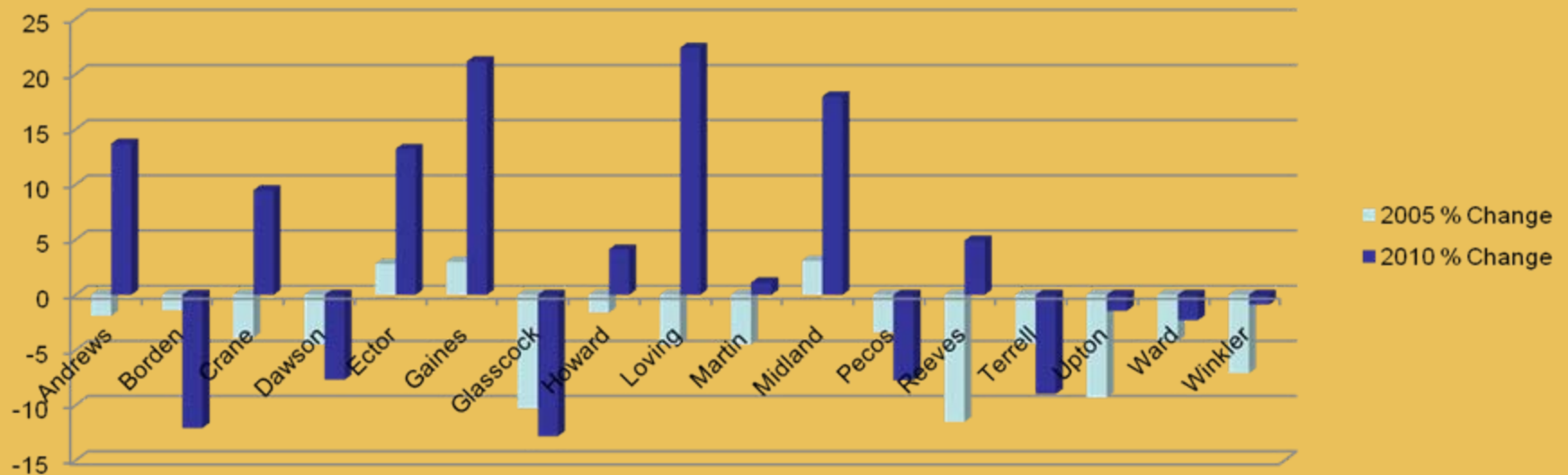
Population 1970-2010

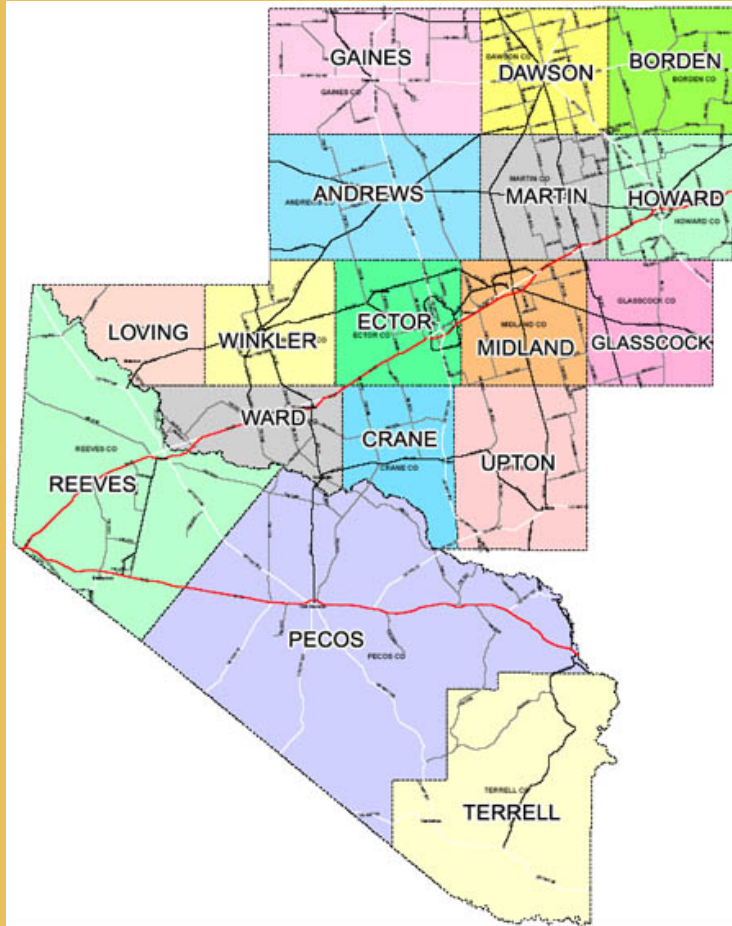
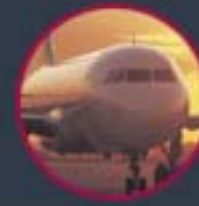


The Economic Impact of Infrastructure in The Permian Basin

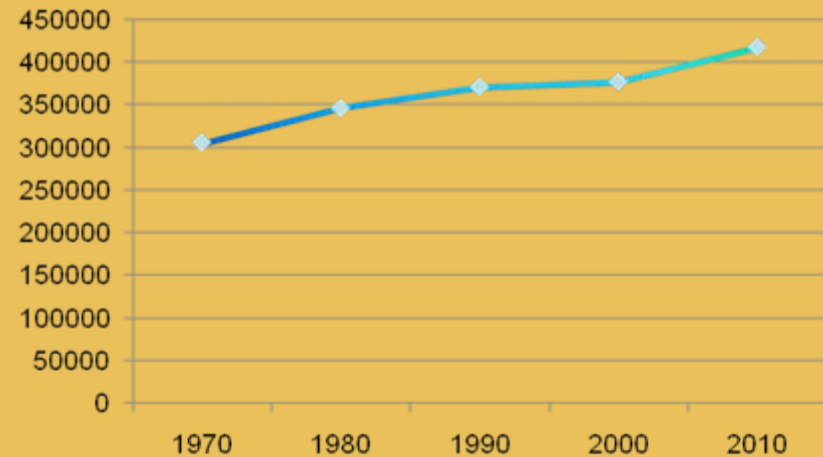


Population Shifts 2005 Estimate vs. 2010 Census

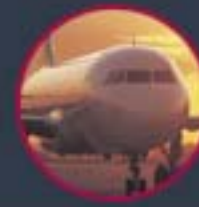




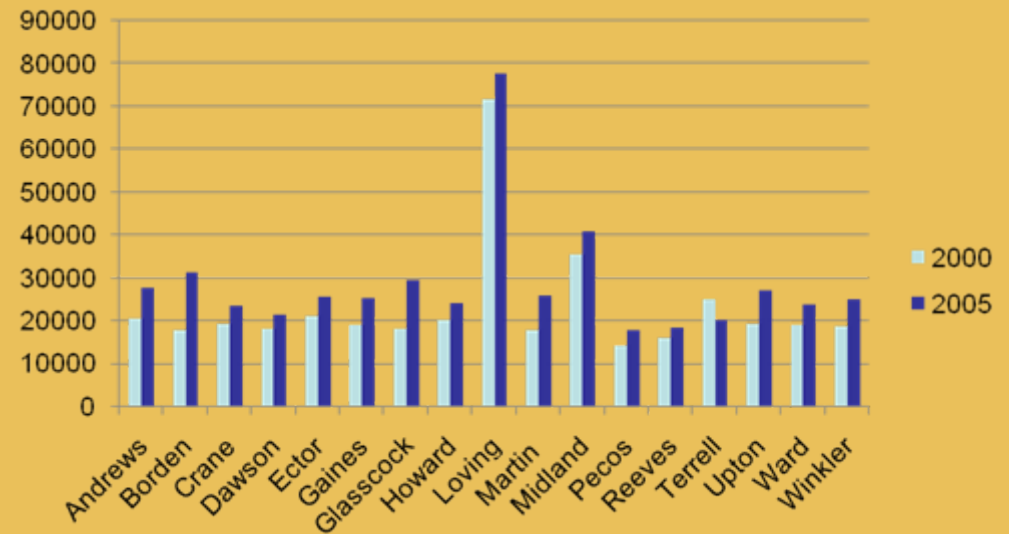
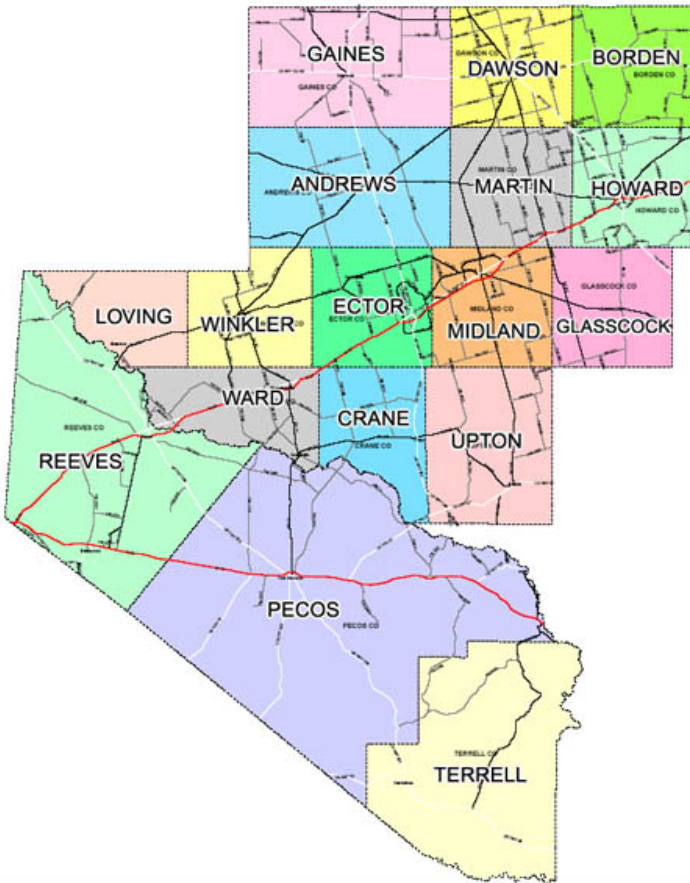
Population 1970-2010



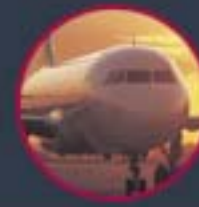
The Economic Impact of Infrastructure in The Permian Basin



Increase in Per Capita Income

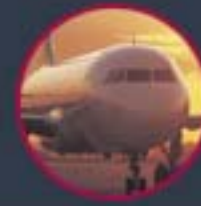


The Economic Impact of Infrastructure in The Permian Basin



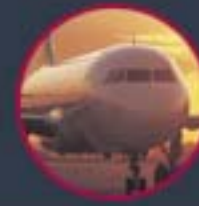
Population Notes

- Lots of People
(Just spread out)
- Mobile Workforce
 - 74.8% Local
 - 19% commute to or from adjacent county
 - 6.2% commute to or from further away

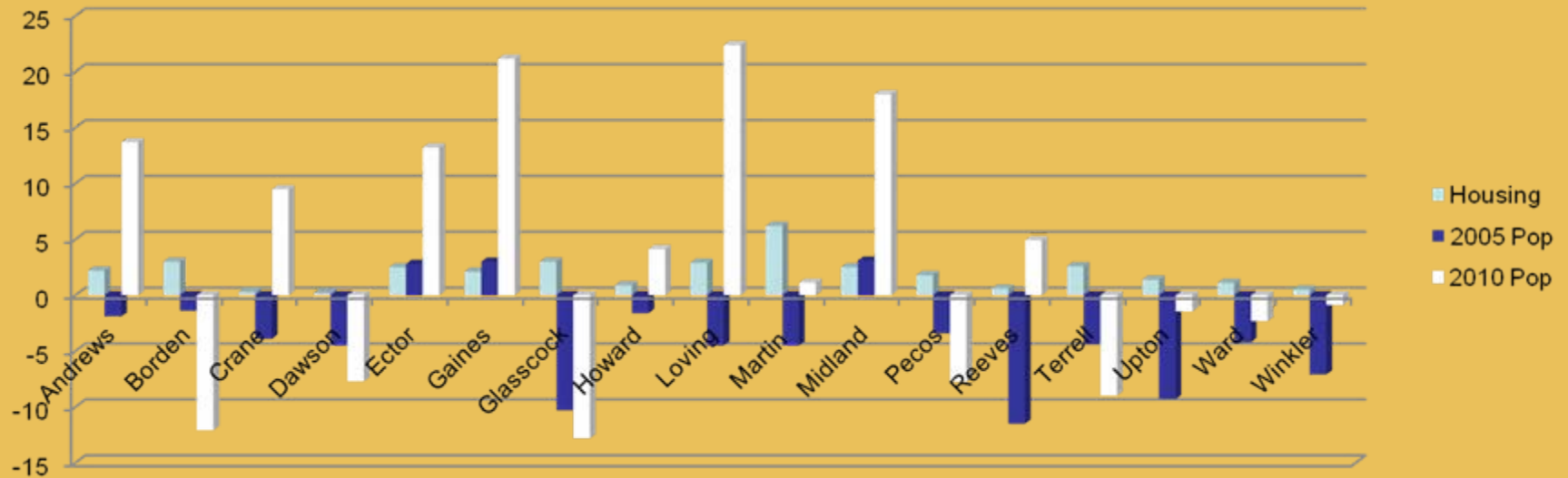


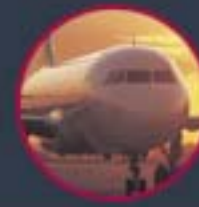
Infrastructure

1) Available Homes

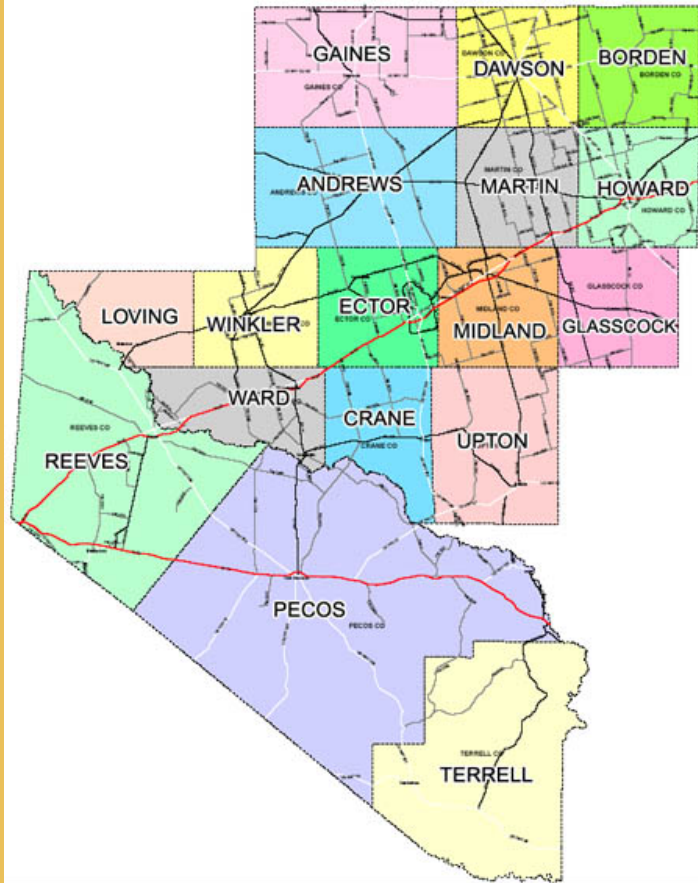
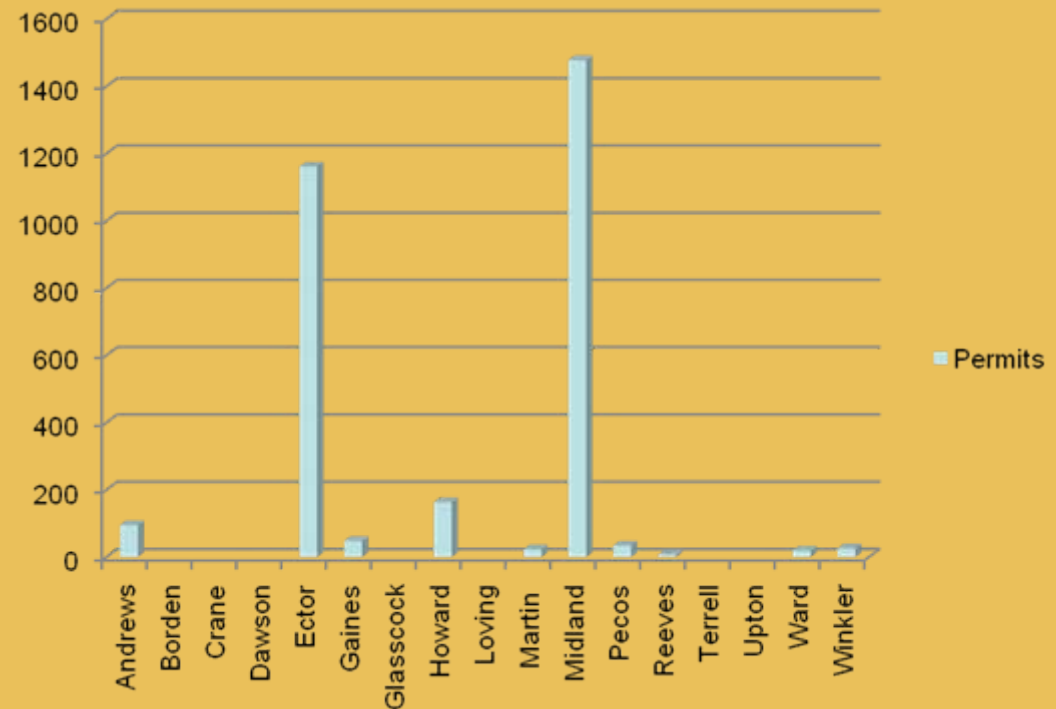


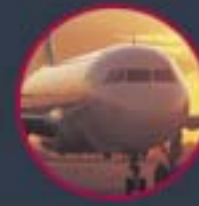
% Change in Housing to % Change in Population (2000-2005) (2000 to 2005 & 2010)



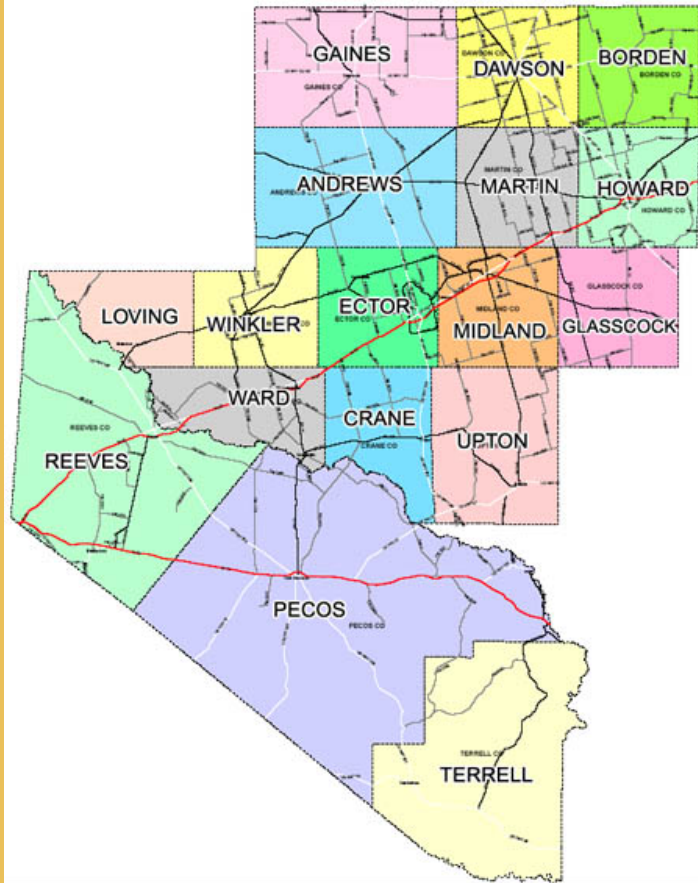
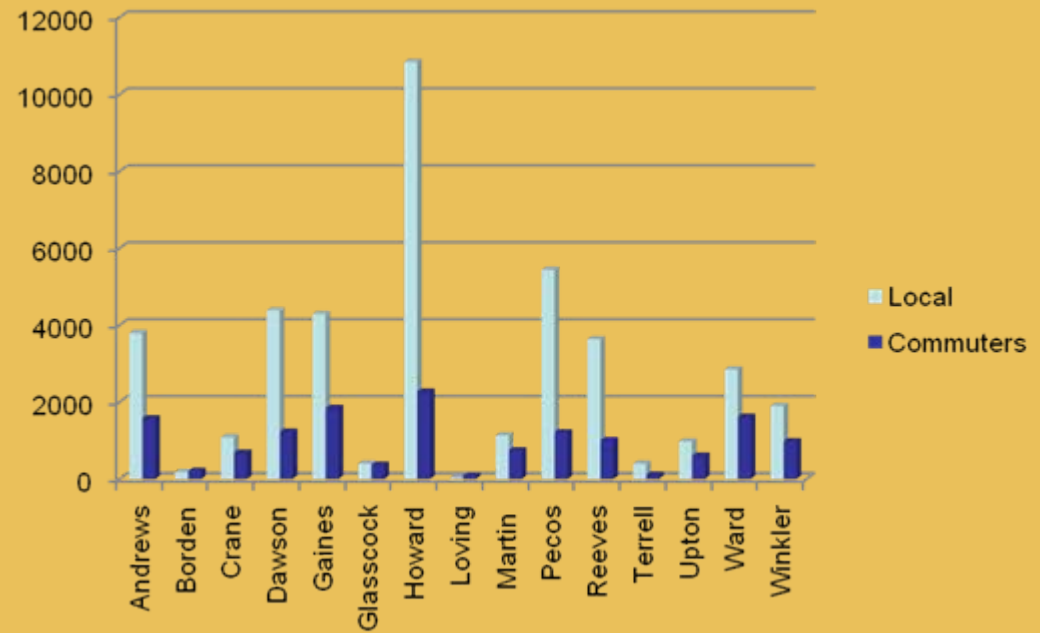


New Housing Starts



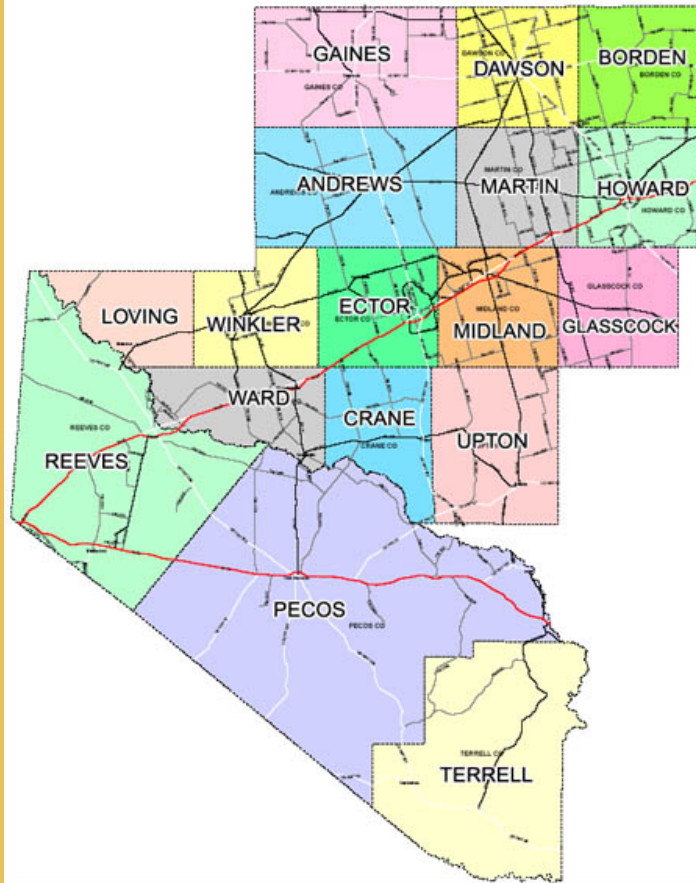
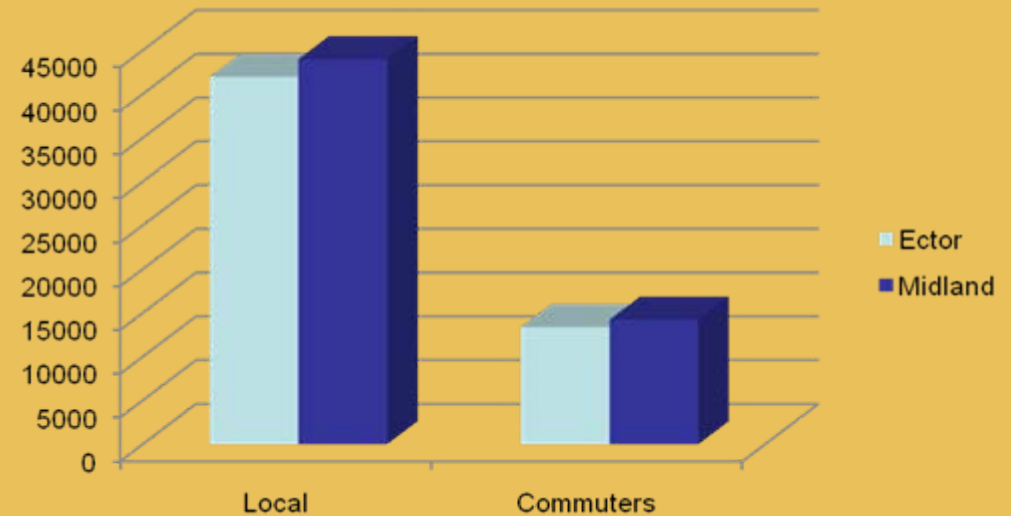


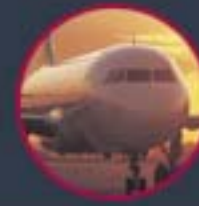
Workforce Commute





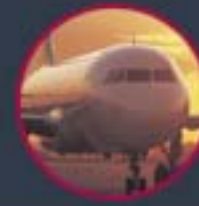
Workforce Commute





*Over 1 million of the friendliest and hardest
working folks you will ever meet!*

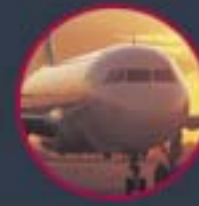
The Economic Impact of Infrastructure in The Permian Basin



Infrastructure

2) Transportation Capabilities



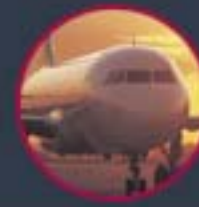


Highways



- Move Goods & Services
- Connect Markets

- Ability of work force to efficiently commute



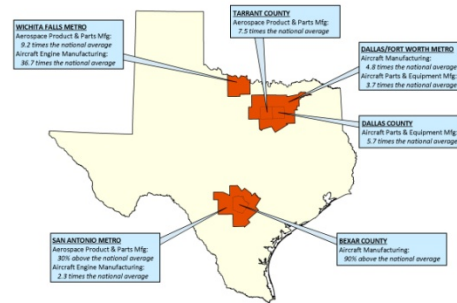
Economic Clusters

Aerospace

Work Force Concentrations: Aerospace Manufacturing

This map highlights regions of Texas that have a significant specialization in aerospace manufacturing. This is determined by comparing the portion of a region's work force employed in the air transportation sector to the portion of the entire U.S. work force employed in that sector. The regions noted below

have a significantly higher percentage than the U.S. average. Note: These regions do not represent the only areas in Texas where available workers in this sector can be found, but rather the areas of the state with the highest concentrations of workers in this sector.

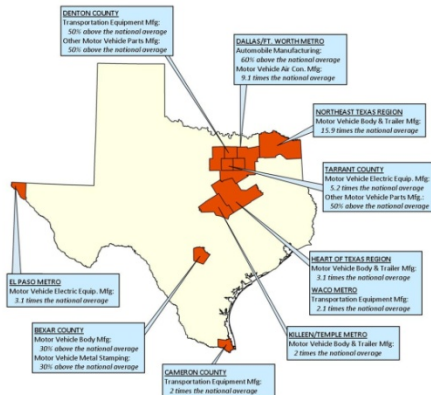


Office of the Governor | Economic Development & Tourism | 2013

Automotive Manufacturing Employment Concentrations

This map highlights regions of Texas that have a significant specialization in automotive manufacturing. This is determined by comparing the portion of a region's work force employed in the automotive sector to the portion of the entire U.S. work force employed in that sector. The regions noted

below have a significantly higher percentage than the U.S. average. Note: These regions do not represent the only areas in Texas where available workers in this sector can be found, but rather the areas of the state with the highest concentrations of workers in this sector.



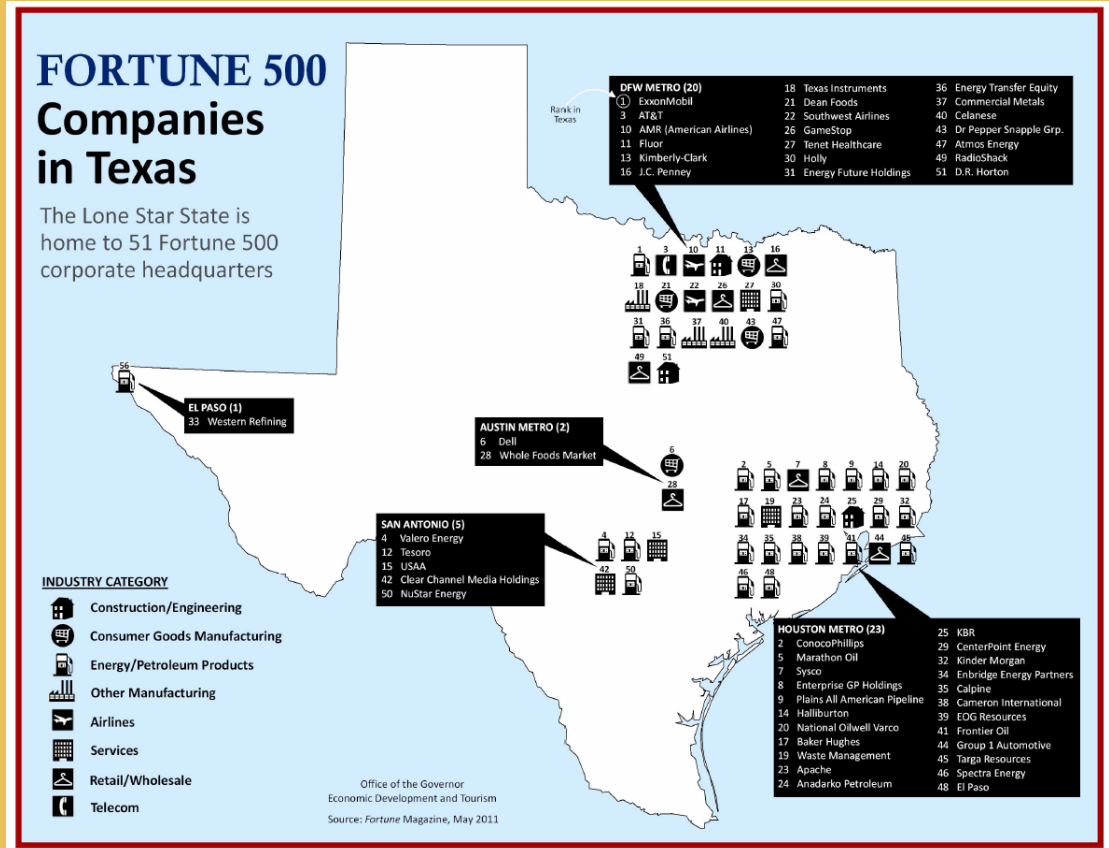
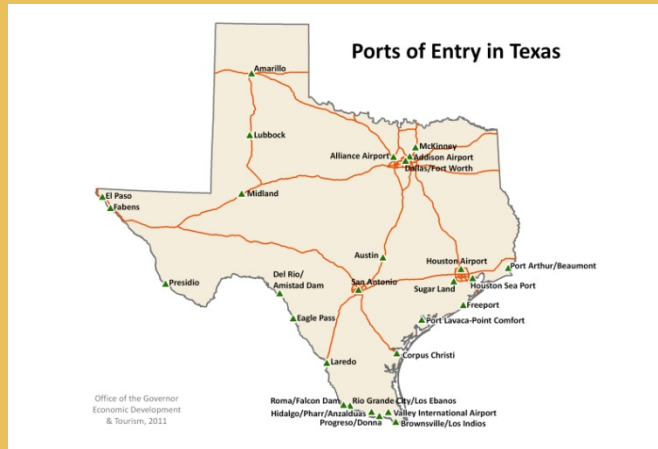
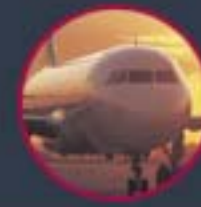
Office of the Governor
Economic Development & Tourism
2013

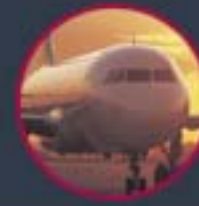
Automotive



The Economic Impact of Infrastructure in The Permian Basin



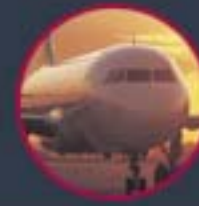




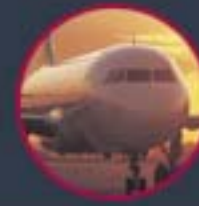
Think Big...



The Economic Impact of Infrastructure in The Permian Basin

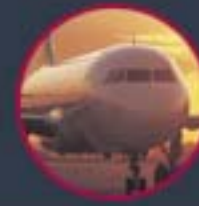


The Economic Impact of Infrastructure in The Permian Basin

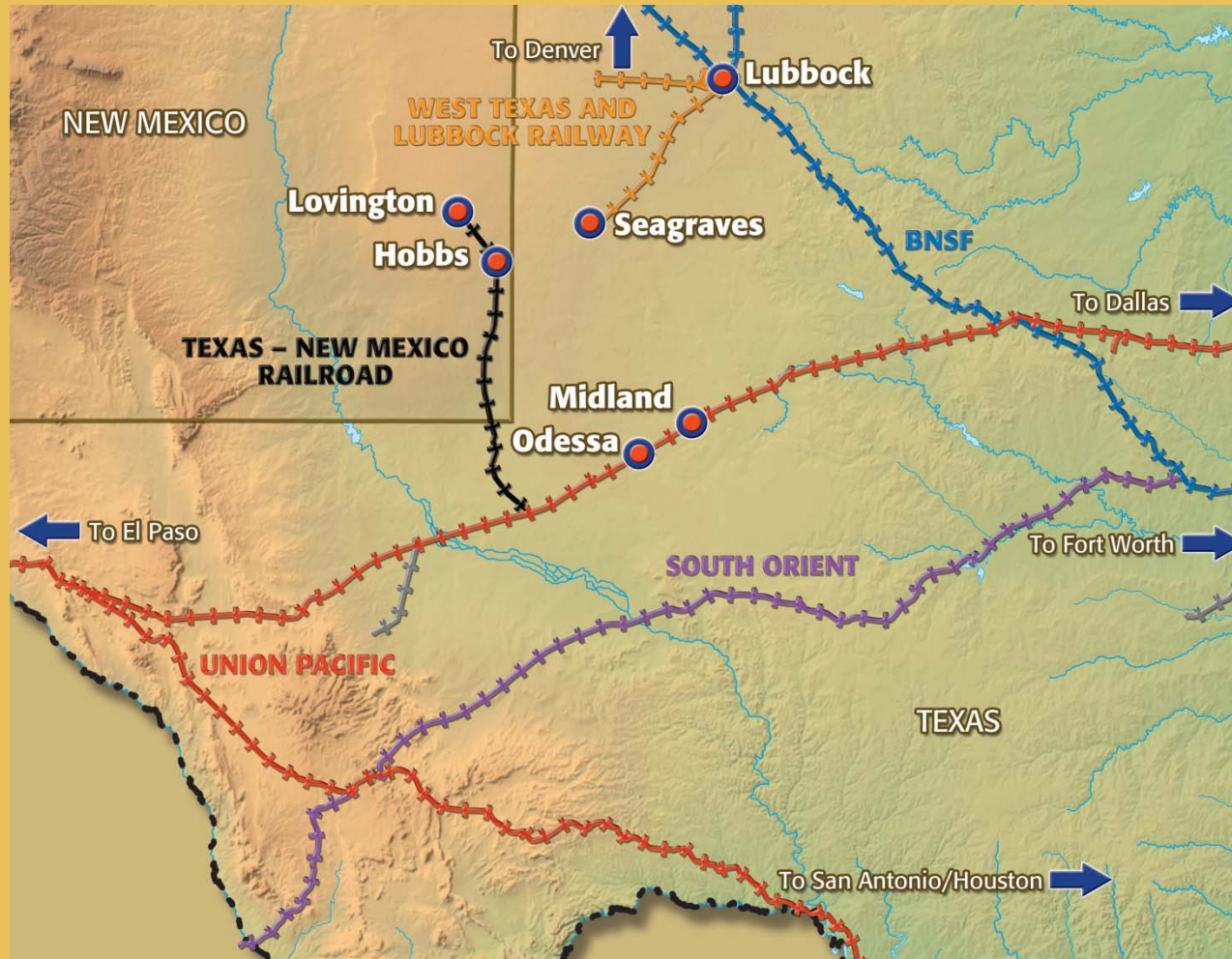
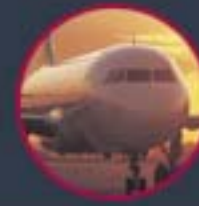


The Economic Impact of Infrastructure in The Permian Basin

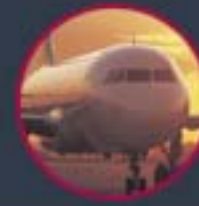




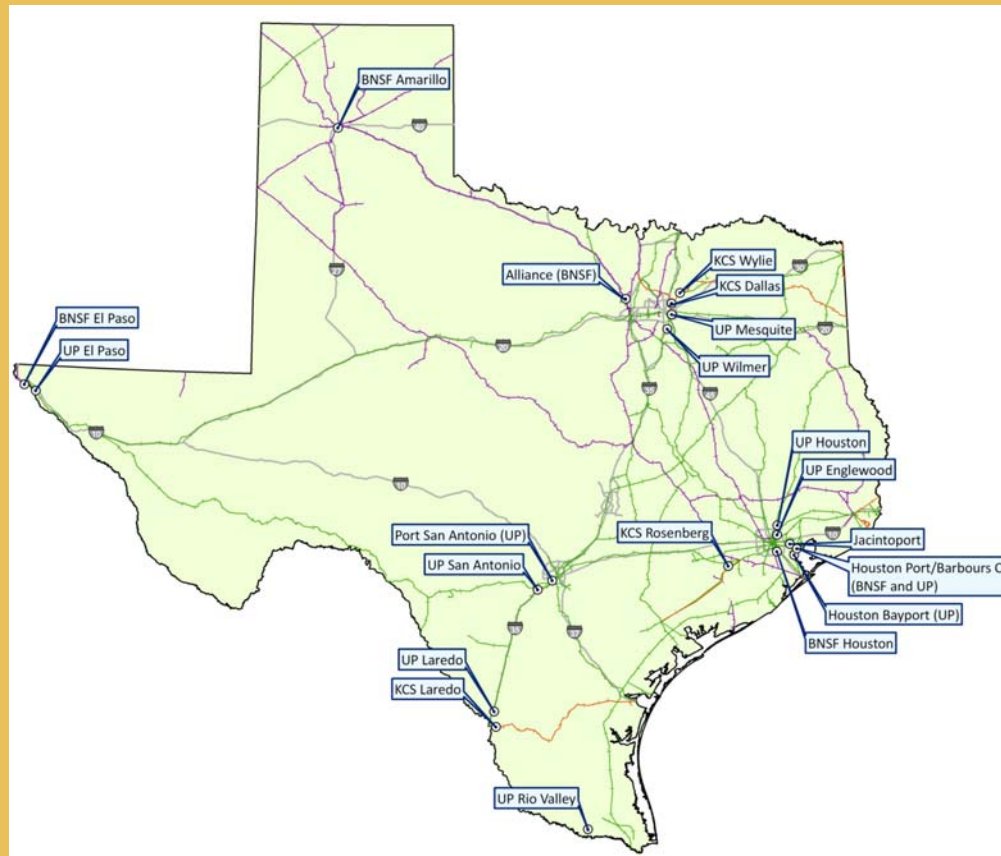
The Economic Impact of Infrastructure in The Permian Basin



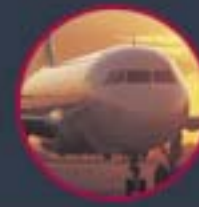
The Economic Impact of Infrastructure in The Permian Basin



Regional Intermodal Facility



The Economic Impact of Infrastructure in The Permian Basin

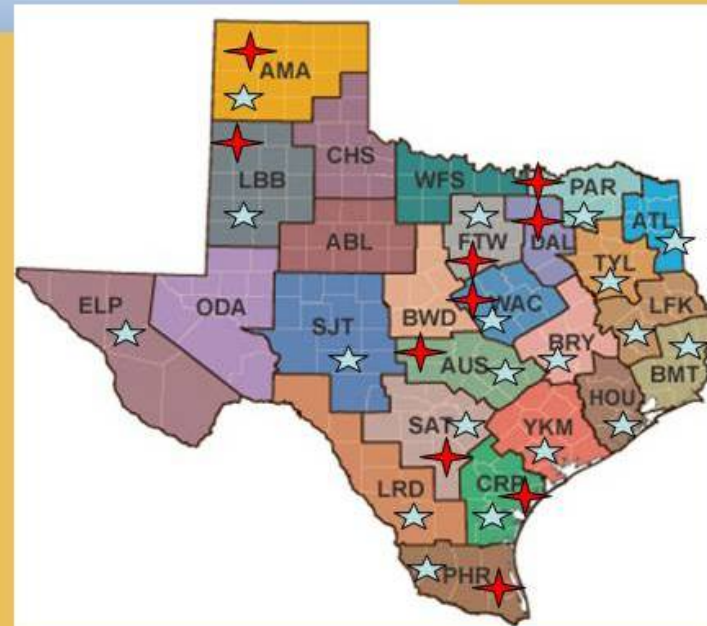


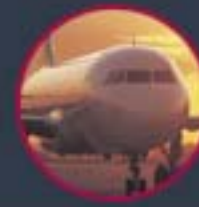
Stimulus Funds

- Of \$2.25 billion American Recovery and Reinvestment Act (ARRA) funds for highways and bridges:
 - \$1.68 billion to the Texas Transportation Commission.
 - \$500 million to the state's Metropolitan Planning Organizations (MPOs).
 - \$67.5 million for transportation enhancement projects (e.g. hike and bike trails).
- Additional \$371 million to transit agencies, with \$50 million provided to TxDOT for disbursement to rural and smaller cities.

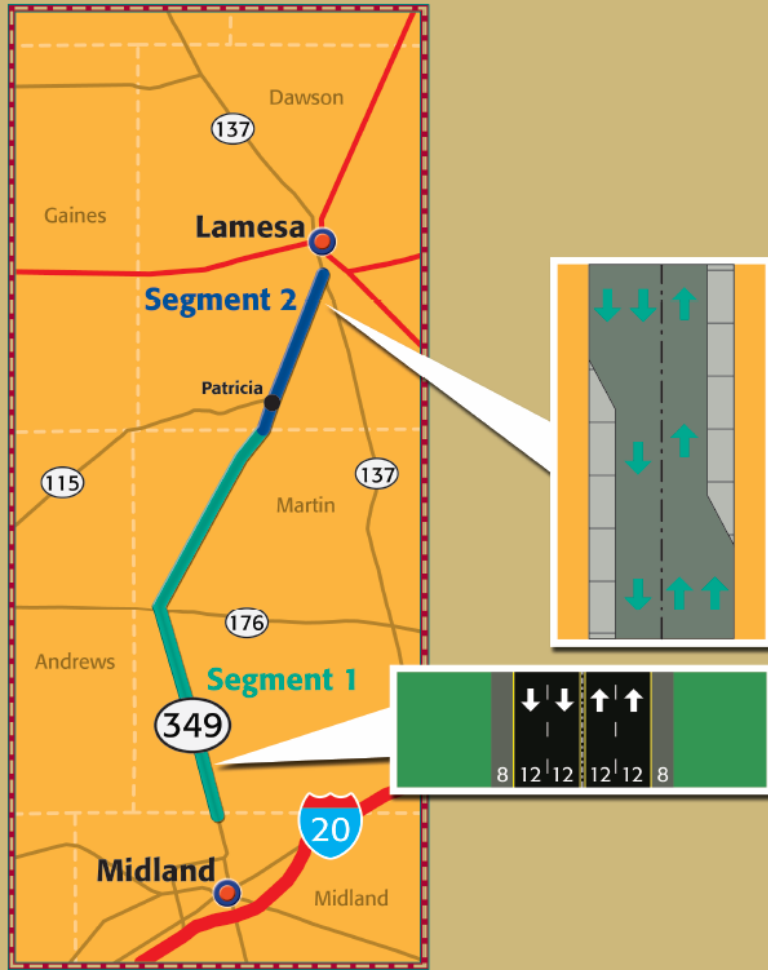
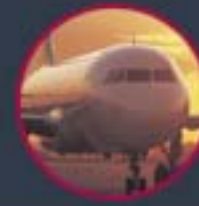
☆ State Stimulus Funds

★ 2010 Bond Projects





	2009	Registered	Total MFT	MFT Available	Vehicle Reg.	Total MFT	2009-10 ARRA	Prop 12 & 14	FY 2009 TOTAL	2011-14 TIP
District/MPO	Population	Vehicles	Paid 2009	for Hwys 2009	Fees	& VRF Avail.	Projects Let	2009 Expend	Contracted Funds	Program Funds
Odessa District	71,541	81,380	\$17,418,087	\$12,164,116	\$4,069,000	\$16,233,116	\$13,780,000		\$52,004,767	\$2,598,783
Midland-Odessa MPO	266,941	286,605	\$64,944,075	\$45,389,793	\$14,330,250	\$59,720,043	\$14,960,000	\$12,000,000	\$52,434,350	\$2,124,105
Lubbock District	175,681	185,136	\$42,773,053	\$46,001,616	\$9,256,800	\$55,258,416	\$15,700,000		\$76,912,687	\$1,784,098
Lubbock MPO	270,550	223,960	\$65,870,808	\$45,993,500	\$11,198,000	\$57,191,500	\$66,200,000		\$84,588,114	\$25,275,623
San Angelo District	46,493	67,428	\$11,319,650	\$7,903,810	\$3,371,400	\$11,275,210	\$31,300,000	\$10,500,000	\$48,055,851	\$76,601
San Angelo MPO Area	108,378	106,542	\$26,386,791	\$18,424,260	\$5,327,100	\$23,751,360	\$10,900,000		\$14,130,957	\$20,074,706
Abilene District	120,380	130,098	\$29,308,918	\$20,464,600	\$6,504,900	\$26,969,500	\$0		\$59,515,436	\$721,321
Abilene MPO	127,683	124,428	\$31,086,980	\$21,706,110	\$6,221,400	\$27,927,510	\$7,400,000		\$39,435,526	\$0
Wichita Falls District	114,626	143,860	\$27,907,992	\$19,486,420	\$7,193,000	\$26,679,420	\$17,840,000		\$67,645,675	\$35,241,070
Wichita Falls MPO	127,616	115,366	\$31,070,667	\$21,698,548	\$5,768,300	\$27,466,848	\$7,680,000		\$40,596,072	\$0
Amarillo District	129,800	156,115	\$31,602,406	\$22,066,000	\$7,805,750	\$29,871,750	\$51,600,000	\$5,500,000	\$61,242,243	\$5,300,000
Amarillo MPO	238,299	221,383	\$58,018,657	\$40,510,830	\$11,069,150	\$51,579,980	\$17,581,000		\$25,153,082	\$569,733
Brownwood District	89,598	113,321	\$21,814,425	\$15,231,660	\$5,666,050	\$20,897,710	\$12,520,000		\$55,924,753	\$82,315,059
Brownwood MPO	38,088	41,942	\$9,273,285	\$6,474,960	\$2,097,100	\$8,572,060	\$0		\$11,198,498	\$6,726,010
TOTAL	1,925,674	1,997,564	\$468,795,794	\$343,516,223	\$99,878,200	\$443,394,423	\$267,461,000	\$28,000,000	\$688,838,011	\$182,807,109



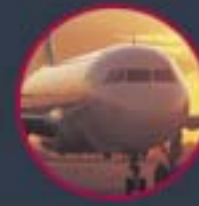
Regional Support



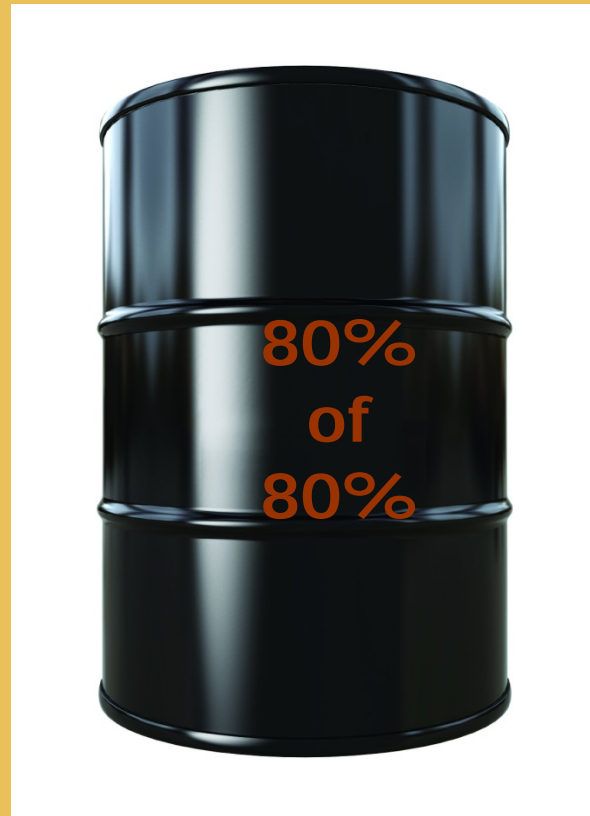
& Community Lead Planning

The Economic Impact of Infrastructure in The Permian Basin





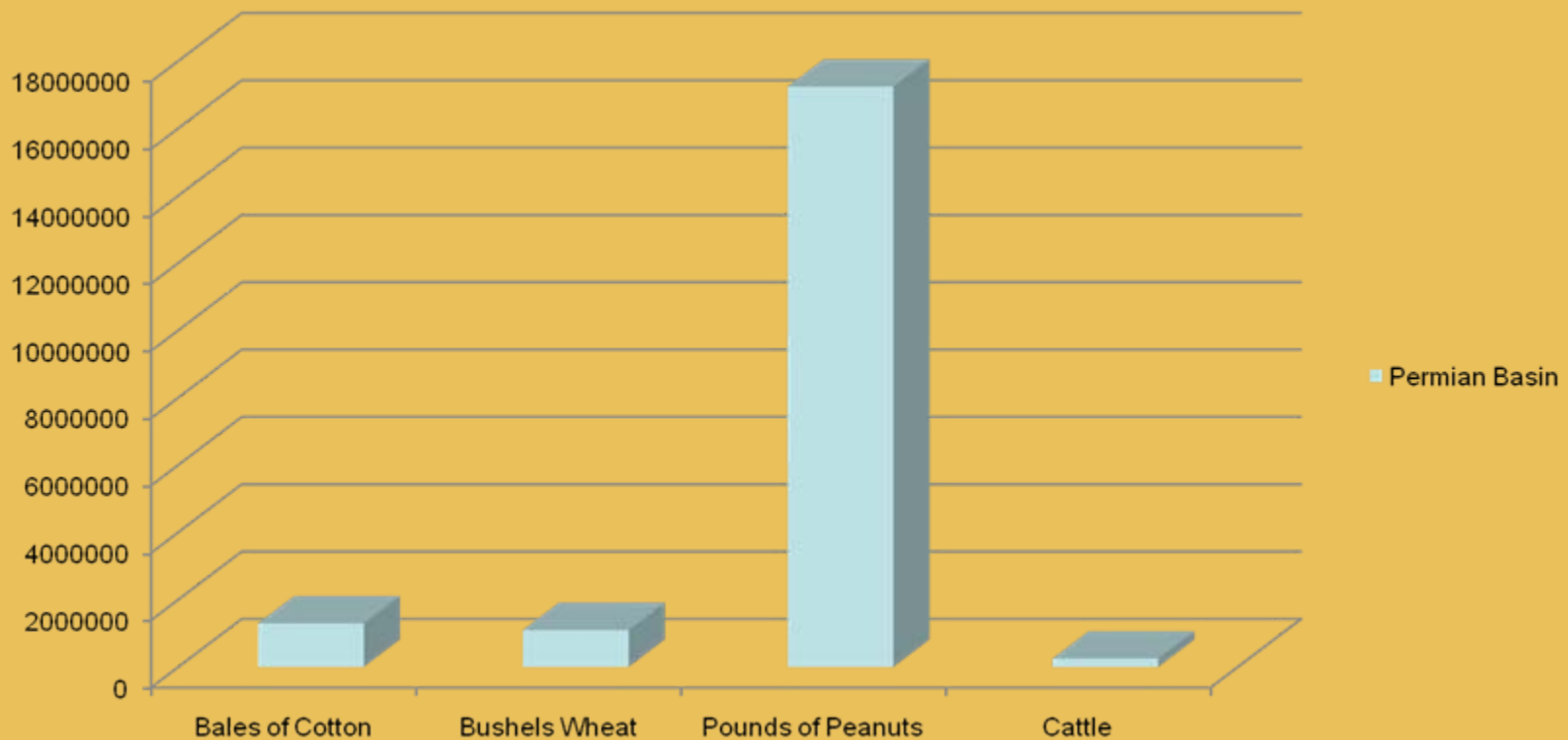
Crude Oil Production



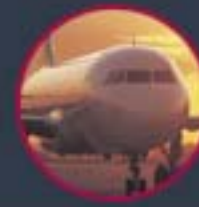
The Economic Impact of Infrastructure in The Permian Basin



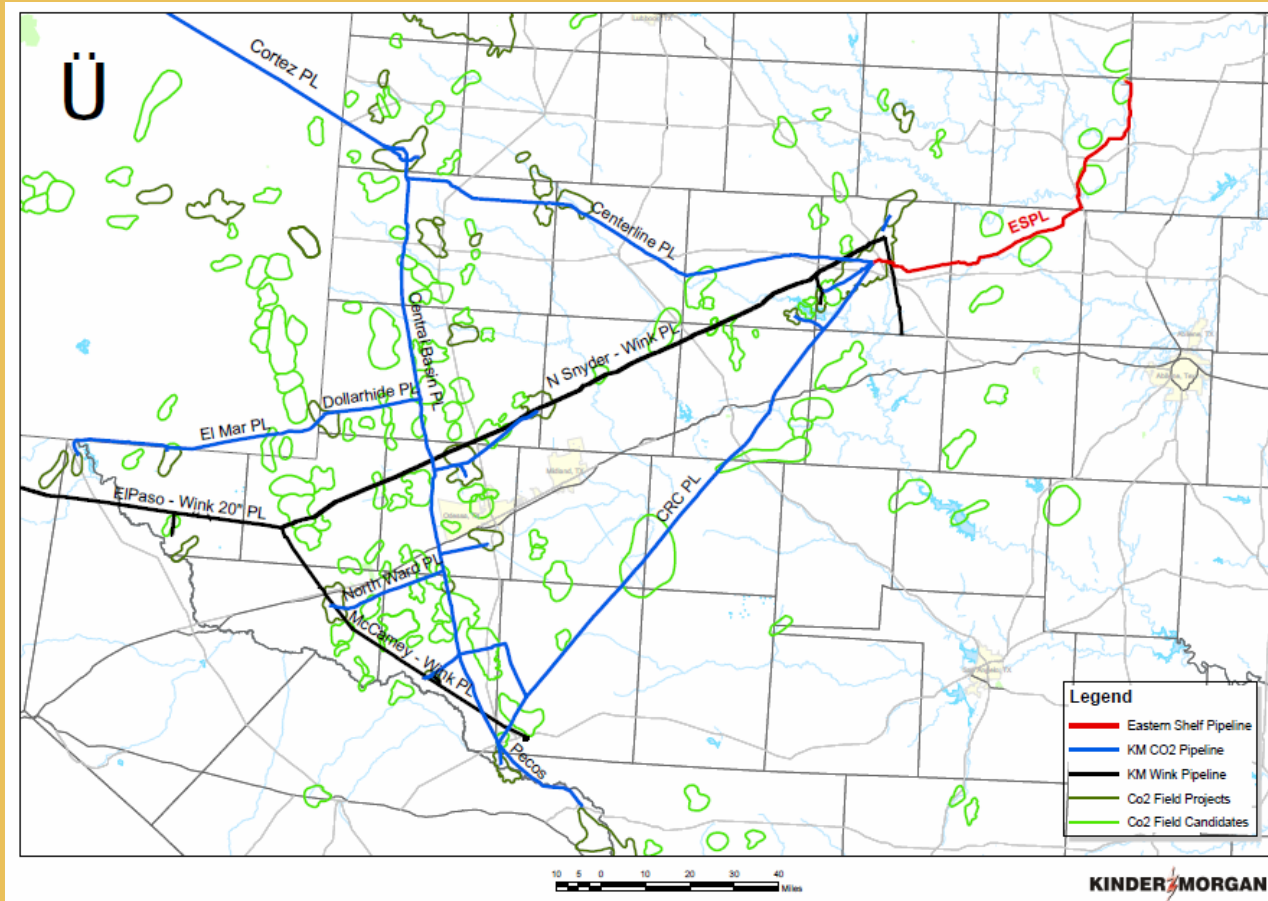
Significant Agriculture Production (2010)



The Economic Impact of Infrastructure in The Permian Basin

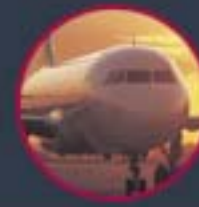


CO₂ Transmission Capacity

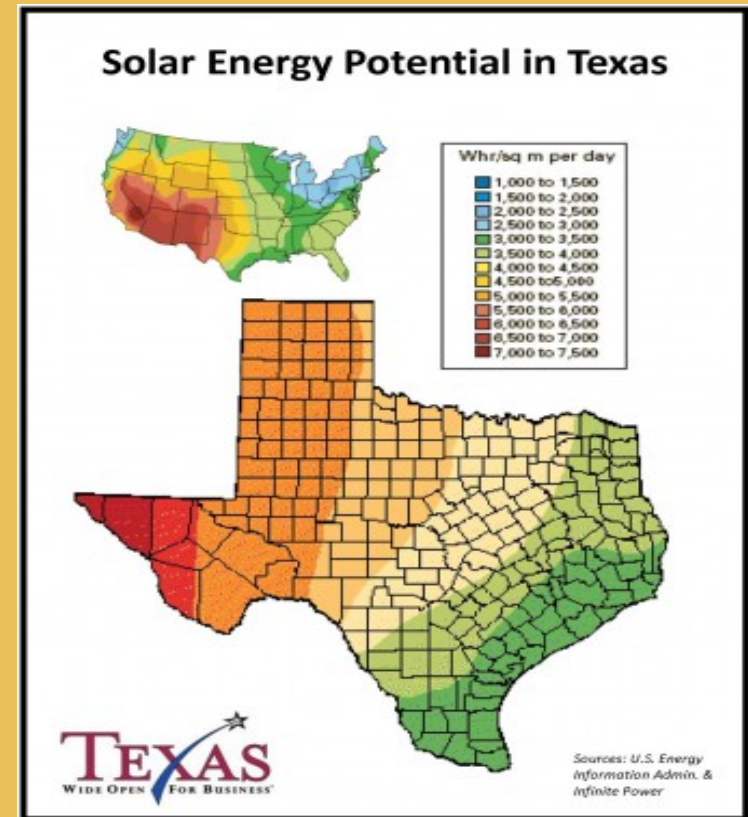
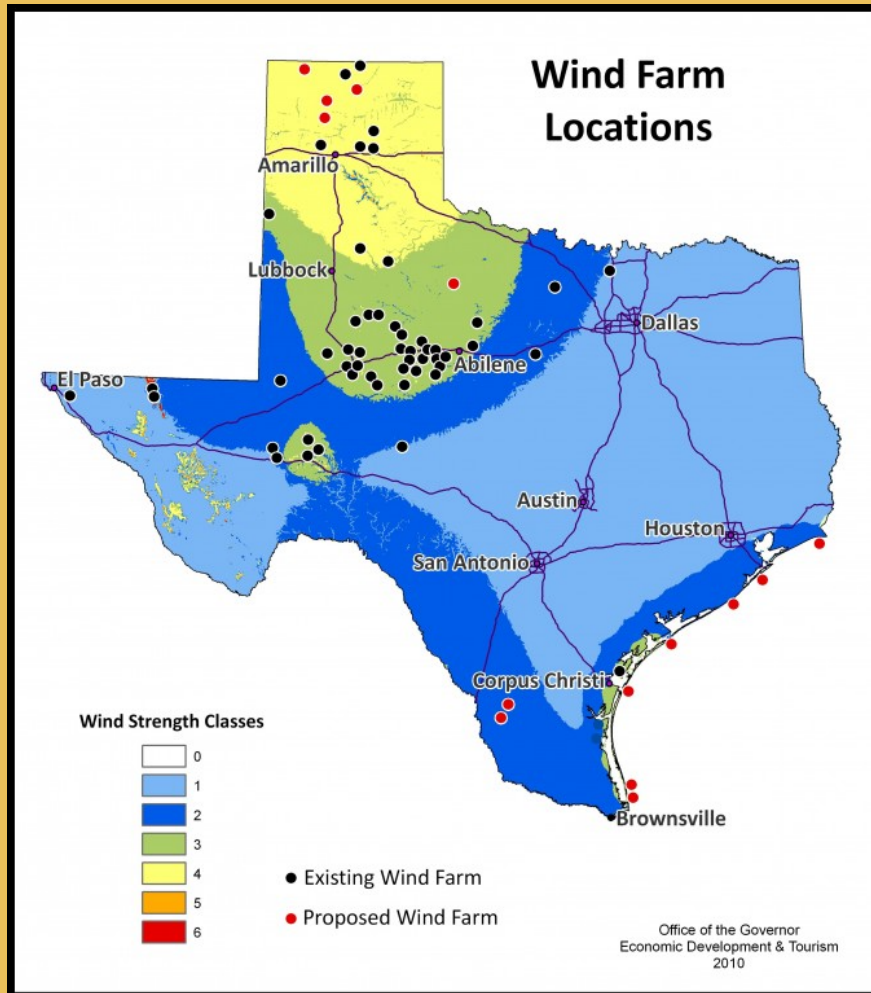


The Economic Impact of Infrastructure in The Permian Basin



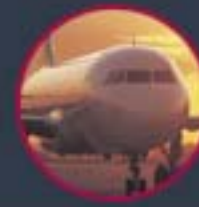


Alternative Energy



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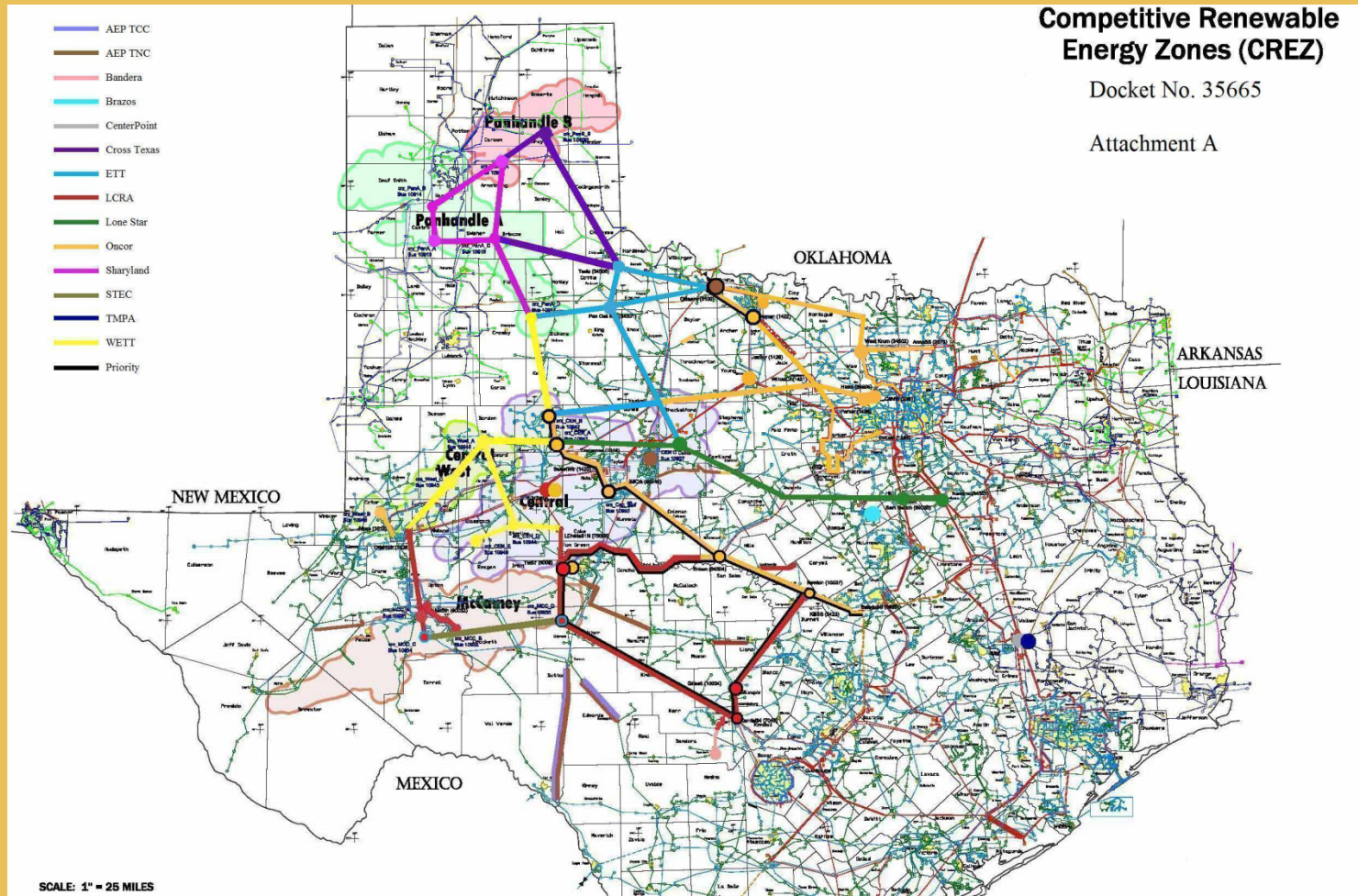




Competitive Renewable Energy Zones (CREZ)

Docket No. 35665

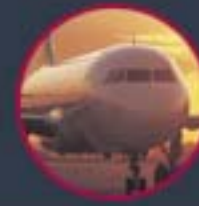
Attachment A



The Economic Impact of Infrastructure in The Permian Basin

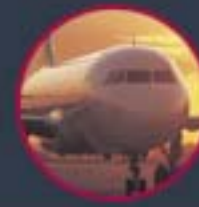






Infrastructure

3) Idea/Technology Manufacturing



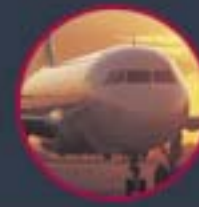
Industrial Need for Engineers

- Industries such as aerospace manufacturing, architectural and engineering services, computer and electronic manufacturing, and oil and gas extraction are particularly dependent on engineers. They also employ approximately 40% of some of the most popular engineering specialties.

Concentration of Engineering Employment in Selected Industries		
Specialty	Industry	Percent
Aerospace	Aerospace product and parts manufacturing	59.6
Civil	Architectural, engineering and related services	46.0
Computer Hardware	Computer and electronic product manufacturing	43.2
Chemical	Chemical manufacturing	27.8
Chemical	Architectural, engineering and related services	16.3
Electrical	Architectural, engineering and related services	19.6
Electrical	Navigational, measuring, electro-medical and control instruments manufacturing	10.8
Materials	Computer and electronic product manufacturing	14.3
Mechanical	Architectural, engineering and related services	18.1
Mechanical	Machinery manufacturing	13.4
Mining & Geological	Mining	49.9
Petroleum	Oil and gas extraction	47.4

13

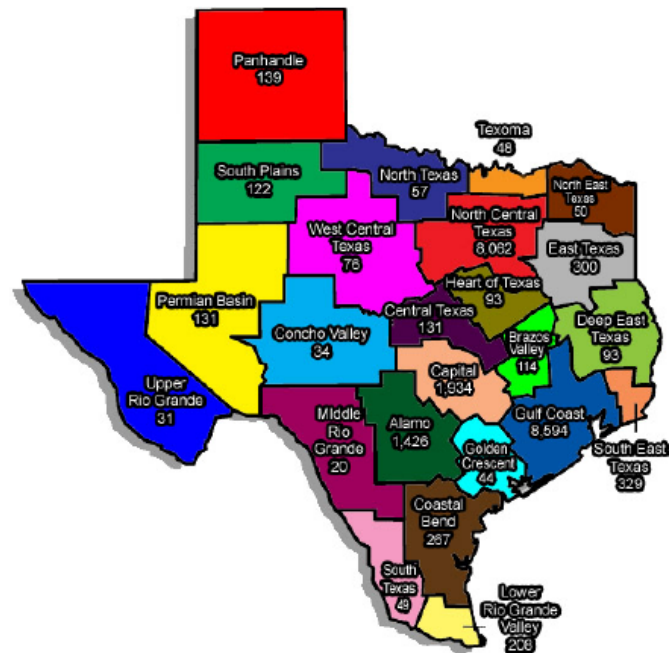
perrymangroup.com
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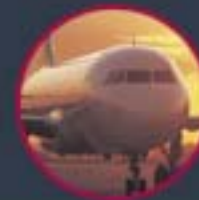


Gains in Gross Product (constant 2006 dollars) by Region—Year 10



Gains in Employment by Region—Year 10





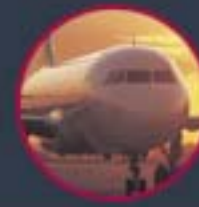
Gains in Gross Product (constant 2006 dollars) by Region—Year 15

Gains in Employment by Region—Year 15

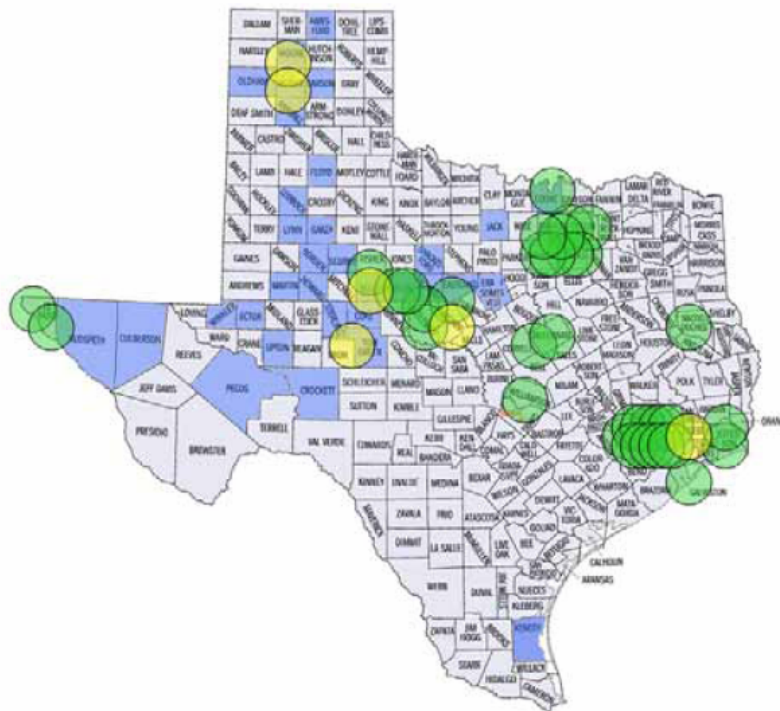


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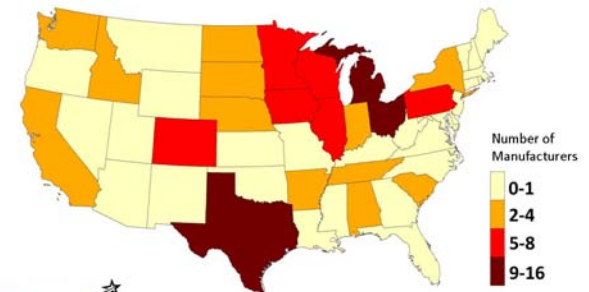


Installed Wind Projects & Manufacturing Facilities



- Counties with installed wind projects
- Online wind energy manufacturing facilities
- Announced manufacturing facilities

U.S. Wind Energy Component Manufacturers



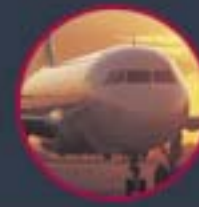
TEXAS
 WIDE OPEN FOR BUSINESS

Data Source: Area Development Magazine, 2010



The Economic Impact of Infrastructure in The Permian Basin





Petrochemical Patents in Texas by Subcategory, 1997 - 2004⁴

Subcategory	Number of Patents
Composites and Films	200
Dyes/Paints/Coatings	568
Other Chemical Processes	727
Other Chemistry	624
Other Organic Compounds	1390
Resins/Polymers/Rubber	1641
Total	5150

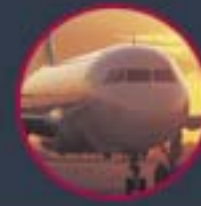
Business Oriented – Locally Driven
 Contract Research with Public Universities

80%

of Petrochemical Patents
 were issued to entities in
 Houston or DFW areas

Petrochemical Patents in Texas by Region, 1997 - 2004⁴

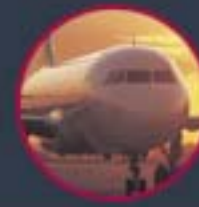
Region	Number of Patents
Houston-Galveston	2826
Dallas-Fort Worth	1057
Austin	422
Other Regions	292
South Texas	138
San Antonio	123
Beaumont-Port Arthur	107
College Station	102
Midland-Odessa	26
Lubbock	18
Tyler	16
Amarillo	13
El Paso	10
Total	5150



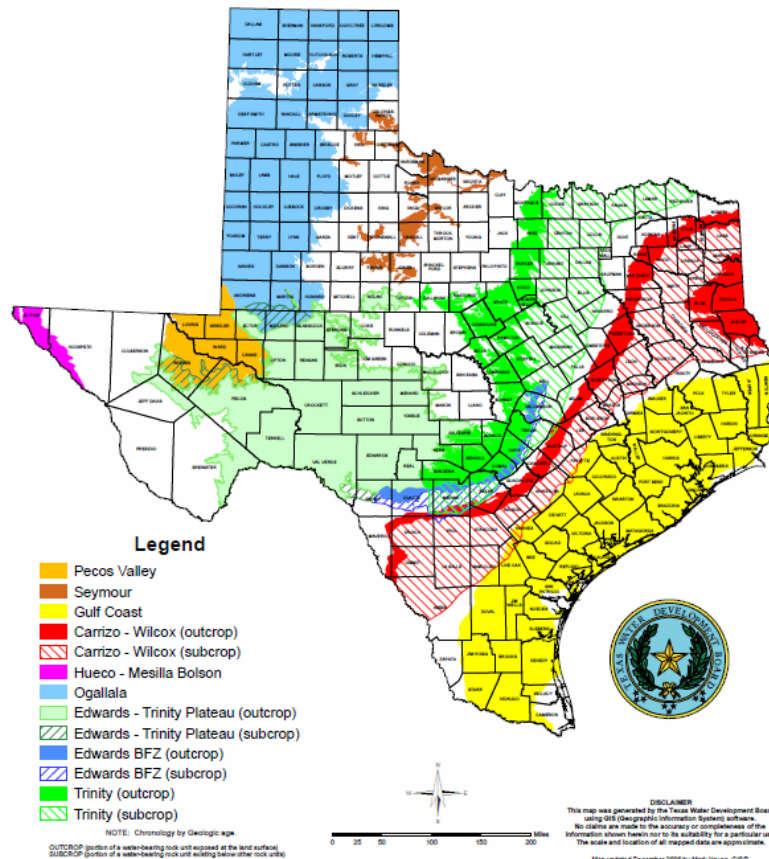
Infrastructure 4) Water Supply



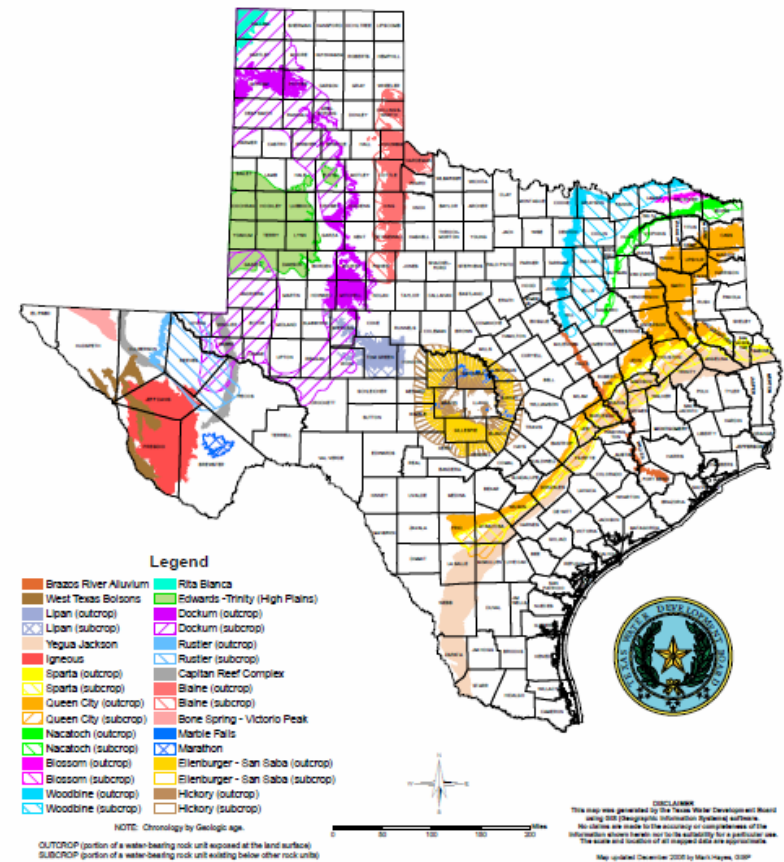
The Economic Impact of Infrastructure in The Permian Basin



Major Aquifers of Texas

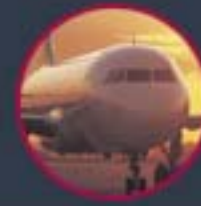


Minor Aquifers of Texas



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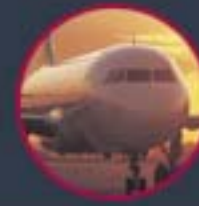




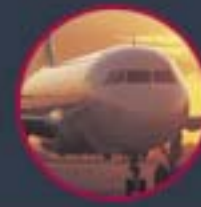
Fun Water Facts

- 18% reduction in current capabilities by 2060 due to increased lake sedimentation and aquifer depletion
- 37% increased demand due to Texas population growth (more than doubles by 2060)
- \$231 billion in cost
- OUR problem
vs.
YOUR problem





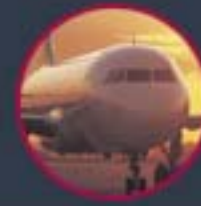
- Industrial/Agriculture Re-use
- Desalinization
- Maintenance of existing assets (dredge/brush)
- Improved technology
- Non-profit Regional Industrial Water Corp.



Hydroponic Agriculture

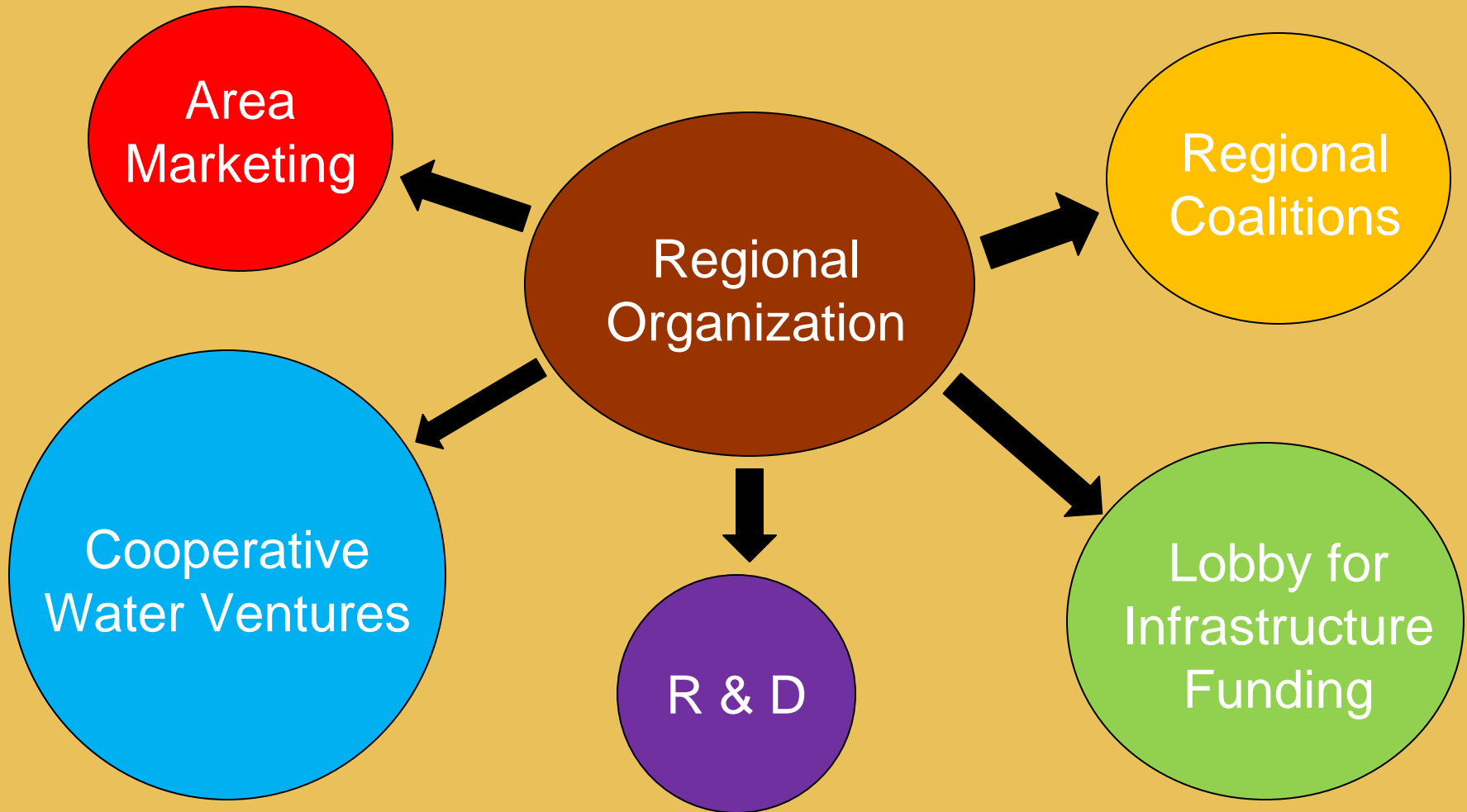
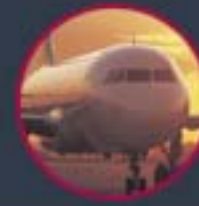


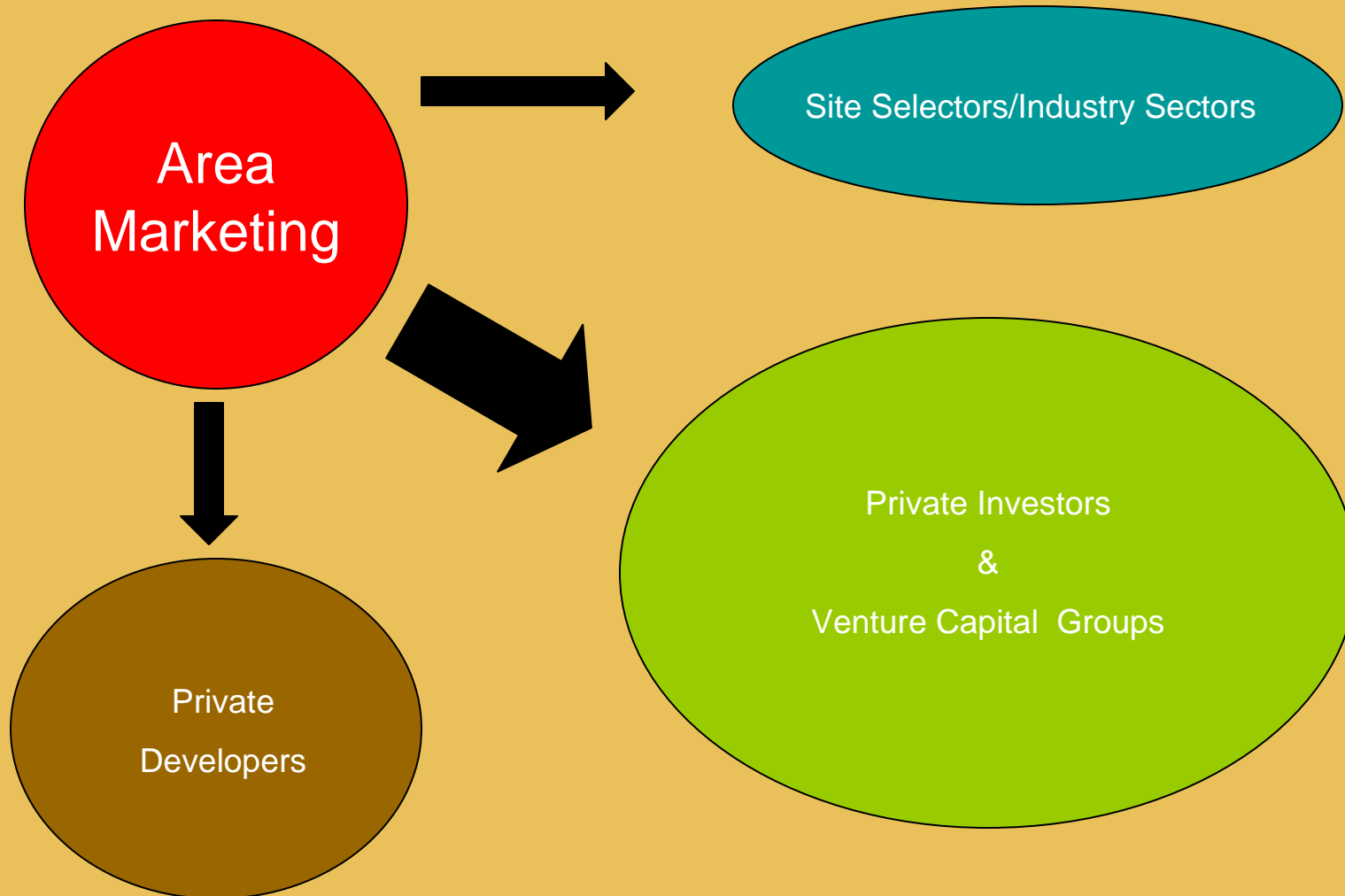
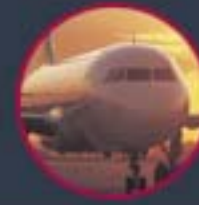
The Economic Impact of Infrastructure in The Permian Basin

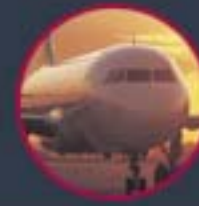


What do we look like?









Rate of Return

The Economic Impact of Infrastructure in The Permian Basin

