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Executive Summary

Immediately adjacent to the larger city of Paris, Reno, Texas has good highway access, with State Highway 82 bisecting the principal portion of the City. Reno is also served by a General Aviation Airport, Cox Field, located south of the City within Paris.

Officials from the City of Reno approached the Institute of Urban Studies (IUS) at The University of Texas at Arlington with a request to undertake an economic assessment for the city. This study identifies Reno's current commercial, retail, and industrial conditions, and assesses future growth potential, providing a foundation for realistic and targeted economic development. The study provides information that may be used to develop strategies for the revitalization of existing business and attracting and stimulating business start-ups. This effort aims to provide new employment opportunities for Reno and a steady broadening of the local tax base with an attendant rise in local purchasing power.

This study is divided into four principal parts.

Part I: Demographics and Business Mix

The first portion is an examination of existing population, income, and broad employment patterns in Reno and the surrounding area, as well as a business mix analysis for the study area. Reno currently is a largely residential community, with businesses clustered along Highway 82. Population growth from 2000 to 2008 was faster in Reno than Lamar County or the US as a whole. Reno also demonstrates higher median household income, educational attainment, and a higher level of white collar employment than Lamar County as a whole. The business mix in Reno is dominated by retail trade in terms of number of establishments, sales volume, and number of employees.

Part II: Retail Gap/Surplus Analysis

The second part of the study is an in depth examination of the Retail Trade sector. Two trade areas are established for study purposes: a 20 minute drive time area for most consumer goods and a 40 minute drive time area for higher ticket items. Consumer expenditures and retail sales for both areas are compared to national averages to determine potential opportunities or unmet needs. Specific identified potential opportunities include personal care products and services, non-store retailers (such as mail order or electronic sales), pharmacies and drug stores, limited service eating places (coffee and doughnut shops, ice cream and dairy stores), and fuel and motor oil sales. In addition, the data suggests that the counties surrounding Lamar are lacking in primary health care providers, pointing to another potential opportunity.

Part III: Traffic Analysis

The third portion of the report presents traffic count data and business location patterns. Traffic counts are important information for economic developers, real estate agents, government agencies, and others. They help explain business location choices and inform urban planning and development activities. The data highlight the importance of State Highway 82 and FM 1508 to Reno's businesses and residents.

Part IV: Cox Field Analysis

The fourth and final section examines the potential economic impact of Cox Field. The study looks at the current economic impact, both direct and indirect, of the airport and makes comparisons to other similar general aviation airports in Texas. Cox Field had a 2006 impact of \$559,000 in direct payroll, \$418,000 in indirect payroll, and \$4.2 million in annual tenant output. The study then examines the potential for increasing the impact of airport related activities, such as "through the fence" operations. Finally, the study looks at the potential for airport business park activities.

An analysis and conclusions section summarizes the study findings, as well as also presents suggestions for further investigation. This includes suggestions arising from the study as well as from stakeholder interviews. Detailed data tables and additional information on all study sections can be found in extensive Appendices. The study also includes a list of references.

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Introduction

Reno, in Lamar County, is adjacent to the larger community of Paris, Texas. This analysis examines demographic, business mix, and economic characteristics of Reno, Paris, and Lamar

County as a whole, as well as adjacent counties (to a smaller extent). Reno and Lamar County fall within the area of the Ark-Tex Council of Government, and are considered by the State Comptroller of Public Accounts to fall within the Upper East Texas economic region.

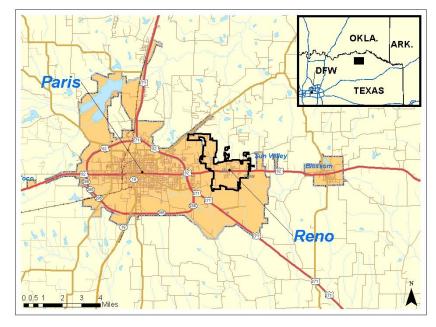


Figure 1: Location of Reno, Texas. This analysis examines demographic, business mix, and economic characteristics of Reno, Paris, and Lamar County as a whole, as well as adjacent counties.

Reno officials contacted the Institute of Urban Studies in the School of Urban and Public Affairs at The University of Texas at Arlington to assess current conditions and assess potential economic opportunities for the City. This study conducts that investigation through the use of



Figure 2: Economic Regions of Texas. The Texas Comptroller's Office has divided Texas into economic regions. Reno is in region number 4 or Upper East Texas.

available secondary data, including Census and Bureau of Labor Statistics data, business count and location information, GIS mapping tools, and State and Council of Government publications. In addition, interviews were conducted with city stakeholders to ascertain current concerns, desires, and potential economic development obstacles. An extensive listing of this data, including interview responses, may be found in the Appendices.

The Comptroller's report notes that "Transportation ... has played a pivotal role in the [North East Texas] area's economy", and that certainly is the case for Reno and the Paris area. Reno is bisected by State Highway 82, and enjoys good access to Paris Loop and State Highway 271. Other community assets include access to

education, including the recognized North Lamar School district and Paris Junior College, which boasted a fall 2007 enrollment of 4,286.

Current Zoning/Land Use

Reno currently is a largely residential community, with a preponderance of single family housing. It is well positioned for potential commercial and/or retail development, with a great deal of Highway 82 frontage. Its proximity to Paris and that city's retail, and especially medical clusters, offers employment for Reno's citizens as well as opportunities for business development. Nearby Cox Field is another important economic asset.

Zoning classifications are broad in Reno, with a single B-1 business zoning type. B-1 uses are tightly clustered along Highway 82, and represent primarily small retail and restaurant locations, along with some light industrial and vehicle sales and maintenance uses. There is a larger retail cluster at the intersection of SH 82/Lamar and the 286/271 Loop. This cluster includes retail, restaurant, and big box retail in the form of a Wal-Mart Super Center.

Transportation and accessibility are assets for Reno. Highway 82 serves the rural Upper East Texas area. The highway links communities like nearby Blossom and Detroit, and more distant towns like Clarksville and DeKalb, with Reno and Paris. However, the north and northeastern area of Reno lacks access to major thoroughfares, which might limit development.

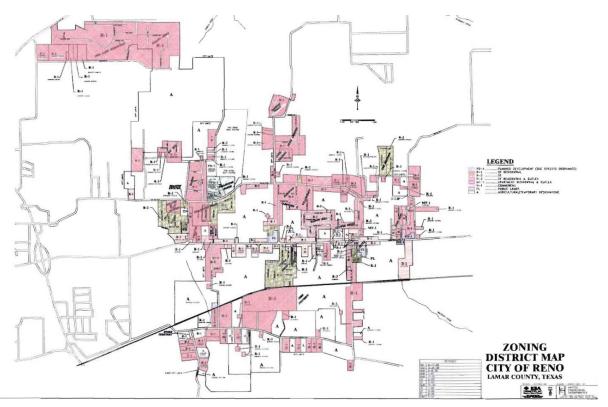


Figure 3: Reno Zoning Map. Zoning classifications are broad in Reno, with a single B-1 business zoning type. B-1 uses are tightly clustered along Highway 82, and represent primarily small retail and restaurant locations, along with some light industrial and vehicle sales and maintenance uses.

Part I: Demographics and Business Mix

Current Population Characteristics

The Reno study area had a 2008 population of 3,199. Lamar County's 2008 population was 49,883. Reno has been experiencing healthy population growth. It added 425 residents from 2000 to 2008, which represents a 15.3% increase. This compares favorably with both Lamar County and national growth.

In the current year, the occupational distribution of the employment population is: 51.5 percent in white collar jobs (compared to 60.2 percent of the U.S. employment), 19.4 percent

Population Growth: 2000 - 2008

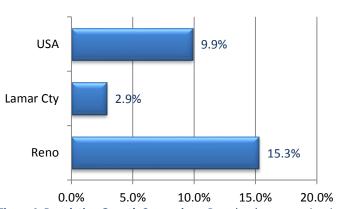


Figure 4: Population Growth Comparison. Reno has been experiencing healthy population growth. It added 425 residents from 2000 to 2008.

in service jobs (compared to 16.5 percent of U.S. employment), and 29.2 percent in blue collar jobs (compared to 23.3 percent of U.S. employment).

Reno's median age of 36.3 is slightly lower than the national median age of 36.8. The Age/Sex population distribution is more reflective of a suburban community than a rural small town. There is a substantial population of families with children, but the cohorts constrict in the 20-24 and 25-29 vear old range, representative of older children leaving home for school or job opportunities.

Racial and ethnic population distribution does reflect Reno's small town roots. Reno's

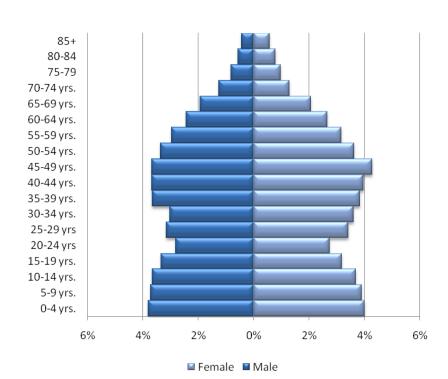


Figure 5: Reno Age/Sex Population Distribution: The distribution is more reflective of a suburban community than a rural small town with a gap in the 20-24 & 25-29 cohorts.

population is more homogeneous than more urban populations, and more homogeneous than

the national population. In 2008, Reno had 13.4% minority population, much lower compared to Lamar County (23.3%) and the United States as a whole (37.3%).

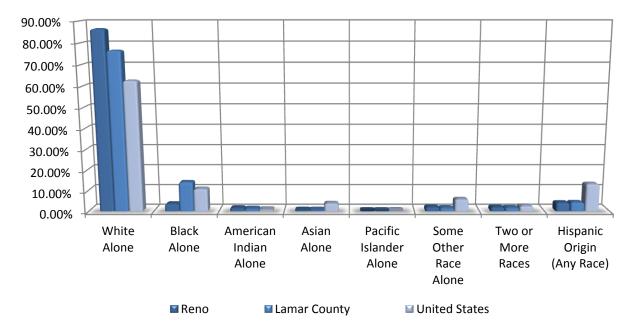


Figure 6: Racial/Ethnic Population Distribution. Reno's population is more homogeneous than more urban populations, and more homogeneous than the national population.

Current Education, Income, and Employment Characteristics

Reno has overall higher educational attainment (Associate's degree or higher) than Lamar County as a whole. Still, Reno lags behind the rest of the United States in Bachelor's Degree and Master's or professional degree attainment. Fewer of Reno's residents have a less than high school education compared to both Lamar County and the nation as a whole.

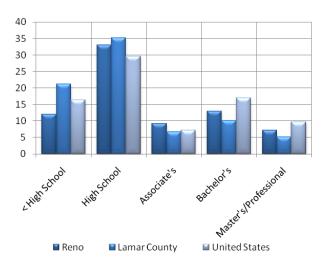


Figure 7: Educational Attainment. Reno has overall higher educational attainment (Associate's degree or higher) than Lamar County as a whole.

Educational attainment and job classification contribute to Reno's 2008 median household income of \$47,224. This is higher than Lamar County (\$38,884), but lower than the national median income of \$54,749.

Income distribution for Reno shows a closer grouping of household incomes. Reno has а lower proportion of total households with incomes below \$35.000 than nationally. Similarly, there are a lower proportion of households in Reno with incomes above \$75,000 than nationally.

Overall, Reno has a well educated workforce. This is reflected in its higher percentage of white collar workers than the surrounding county.

Reno's white collar employment (59.6%) is higher than Lamar County (51.5%), and only slightly less than the national average (60.2%). Reno has a lower percentage of service workers than either Lamar County or the nation as a whole. Blue collar employment is slightly higher than the national average, but lower than Lamar County.

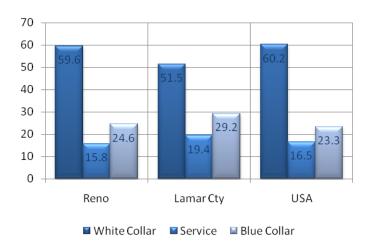
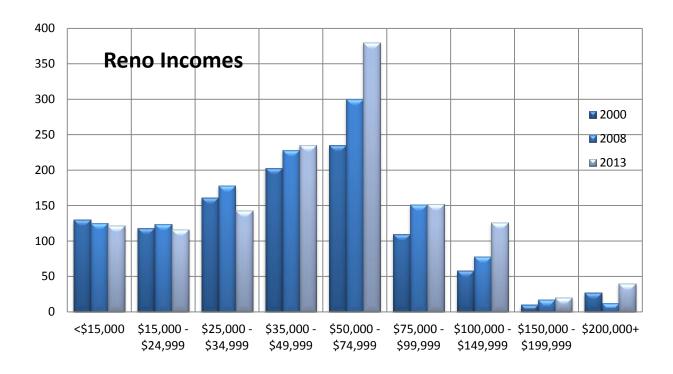


Figure 8: Employment Classification. Blue collar employment is slightly higher than the national average, but lower than Lamar County.



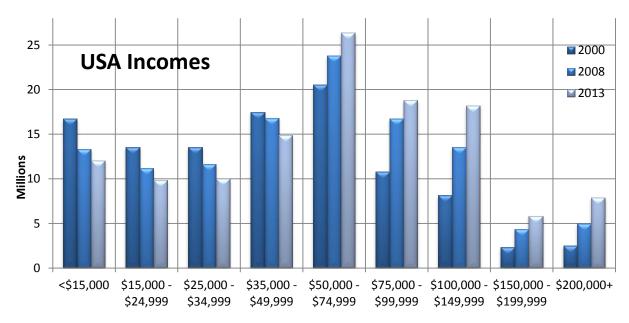


Figure 9: Income Distributions - Reno and United States: Reno has a lower proportion of total households with incomes below \$35,000 than nationally. Similarly, there are a lower proportion of households in Reno with incomes above \$75,000 than nationally.

Note: All demographic and income data from U.S. Census Bureau: ESRI Business Analyst

Construction and Housing

The monthly housing inventory for Paris has been steadily increasing since the beginning of 2007. While at the same time, monthly housing sales steadily decreasing. This important to Reno's economic development because more inventory and fewer sales within the market there is less opportunity for new housing construction. New construction and housing within Reno will depend largely upon changes in the much larger Paris housing market.

Paris Housing Sales and Inventory 70 60 50 40 30 Sales Months Inventory 10 0 North Red Red Red Ser Red yill

Figure 10: Paris Housing Sales and Inventory. With more inventories and less sales within the market, there is less opportunity for new housing construction. Source: Texas A&M Real Estate Center.

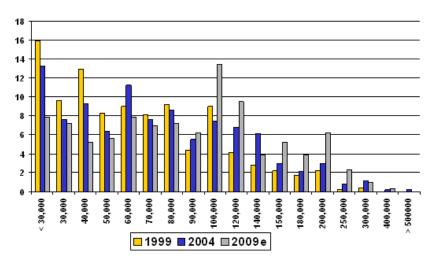


Figure 11: Price Distribution of MLS Homes Sold in Paris. A shift has been occurring within housing sales from 1999 to 2009, where a greater percentage of sales are skewing toward and over the \$100,000 mark. One concern with this trend is the impact it may have on housing affordability and the overall business mix. Source: Texas A&M Real Estate Center.

Figure 11, shows that a shift has been occurring within housing sales from 1999 to 2009, where a greater percentage of sales skewing toward and over the \$100,000 mark. There could be numerous reasons for this shift including increases in land value, zoning changes, or the addition of new housing stock. One concern with this trend is the impact it may have on housing affordability and the overall business mix.

Business Mix

Data describing the characteristics of establishments for the City of Reno was obtained from UTA Institute of Urban Studies GIS Business Analyst software. Comparison data was also obtained for the City of Paris and Lamar County. More specifically, the data highlights the top five sectors by number of establishments, sales volume, and number of employees. The number of employees per establishment and the sales volume per establishment is also shown.

The City of Reno at a Glance

Overall the City of Reno has a total of 90 establishments, with a total sales volume of \$92,325,000.00, and employs 314 persons. Presently, the retail trade sector is ranked first for the number of establishments; the sales volume and the number of persons employed in the city (see Table 1 and Figure 12, respectively). Despite this, the retail sector is not a leader in terms of employees per establishment or sales volume per establishment. The educational sector has the highest employee/establishment ratio and the fifth highest sales establishment ratio.

The City of Reno has no establishments in some of the major sectors including mining, quarrying, and oil and gas extraction; transportation and warehousing; and management of companies and enterprises.

NAICS Extension	# of Establishments	Sales Volume	# of Employees	Employee Establishment Ratio
22 - Utilities	1	1,290	0	0.0
23 - Construction	14	12,613	23	1.6
31-33 - Manufacturing	4	2,066	6	1.5
42 - Wholesale Trade	4	26,652	34	8.5
44-45 - Retail Trade	22	34,201	92	4.2
51 - Information	1	420	0	0.0
52 - Finance and Insurance	1	1,505	5	5.0
53 - Real Estate and Rental and Leasing	5	2,432	10	2.0
54 - Professional, Scientific, and Technical Services	3	2,400	10	3.3
56 - Administrative and Support	2	220	4	2.0
61 - Educational Services	1	1,144	13	13.0
62 - Health Care and Social Assistance	3	1,511	20	6.7
71 - Arts, Entertainment, and Recreation	2	756	9	4.5
72 - Accommodation and Food Services	2	920	23	11.5
81 - Other Services (except Public Administration)	20	4,100	47	2.4
92 - Public Administration	4	-	17	4.3
99 – Non-classifiable	1	1	1	1.0
Total Establishments	90	92,231	314	3.5

Table 1: NAICS Business Mix. Presently, the retail trade sector is ranked first for the number of establishments; the sales volume and the number of persons employed in the city. Source: ESRI Business Analyst.

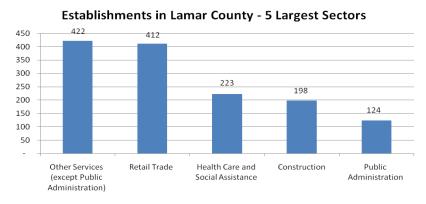
Number of Establishments

For the City of Reno, the retail sector and other services (except public administration)¹ lead the way with the most establishments (22 and 20 each). The manufacturing, wholesale trade and public administration sectors each have four establishments making them the sectors with the

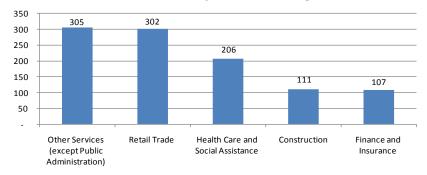
fifth most establishments. The top five sectors ranked by number of establishments account for over 80 percent of the total establishments within the City of Reno.

Four of the five sectors with the most number of establishments in the City of Paris and Lamar County are the same (other services except public administration, retail trade, health care and social assistance, and The fifth construction).

largest sectors for the City of Paris and Lamar County are finance and insurance, and public administration, respectively. The top five approximate sectors 60 of percent the total establishments for both the City and the County.



Establishments in the City of Paris - 5 Largest Sectors



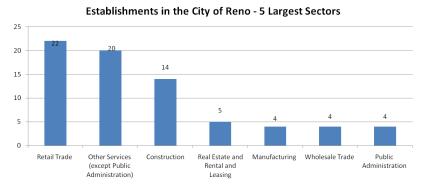


Figure 12: Largest Business Sectors. Four of the five sectors with the most number of establishments in the City of Paris and Lamar County are the same. Source: ESRI Business Analyst.

¹ The other services sector comprises establishments engaged in providing services not specifically provided for elsewhere in the classification system. Establishments in this sector are primarily engaged in activities, such as equipment and machinery repairing, promoting or administering religious activities, grant making, advocacy, and providing dry-cleaning and laundry services, personal care services, death care services, pet care services, photofinishing services, temporary parking services, and dating services. Source: U.S. Census Bureau.

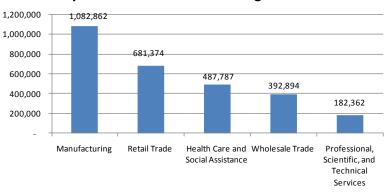
Sales Volume

The five leading sectors ranked by sales volume for the City of Reno, the City of Paris, and Lamar County represent 86.7 percent, 78.1 percent and 79.1 percent, respectively, of the total sales for the regions (table 5). Although ranked differently in each region, retail trade, wholesale manufacturing, trade, and consistent among the sectors by sales volume in all the regions. Figure 13 shows the sales volume of five largest sectors for the City of Reno, the City of Paris and Lamar County.

Lamar County Sales Volume - 5 Largest Sectors



City of Paris Sales Volume - 5 Largest Sectors



City of Reno Sales Volume - 5 Largest Sectors

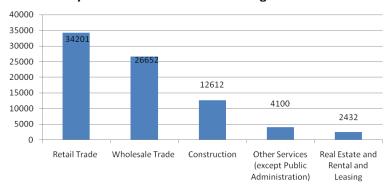
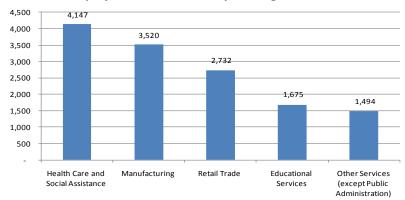


Figure 13: Largest Sector Sales Volumes. The five leading sectors ranked by sales volume for the City of Reno, the City of Paris, and Lamar County represent 83.5 percent, 78.1 percent and 79.1 percent, respectively, of the total sales for the regions. Source: ESRI Business Analyst.

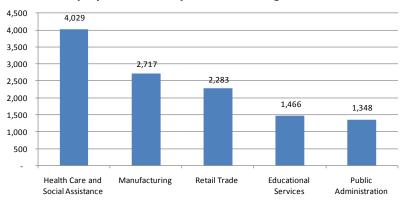
Number of Employees

The sector employing the most number of people in the City of Reno is retail trade, at 92. For both the City of Paris and Lamar County health care and social services sector has the highest employment with 4,029 employees and 4147 employees respectively (see Figure 14). The five largest sectors account for 69.7 percent of total employment in the City of Reno, 67.6 percent in the City of Paris, and 66.7 percent in Lamar County.

Employees in Lamar County - 5 Largest Sectors



Employees in the City of Paris - 5 Largest Sectors



Employees in the City of Reno - 5 Largest Sectors

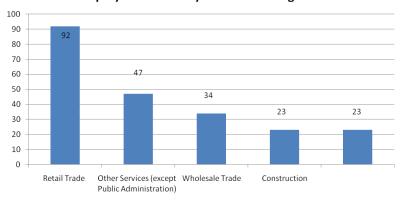


Figure 14: Largest Sector Employment. The five largest sectors account for 66.5 percent of total employment in the City of Reno, 67.6 percent in the City of Paris, and 66.7 percent in Lamar County. Source: ESRI Business Analyst.

Sales/Establishment Ratio

The sales/establishment ratios show the average sales volume per establishment in each of the sectors. A potential benefit of this ratio is to identify vibrant sector for increasing corporate tax revenue. At present, wholesale trade and retail have the highest sales/establishment ratios for the City of Reno. The retail trade sector also has the highest by number of sales and highest number of employees in the city of Reno. Manufacturing followed by utilities have the highest sales/establishment ratios for both the City of Paris and Lamar County. Figure 15 shows the five leading sectors in terms of sales/establishment ratio.

Lamar County Sales/Establishment Ratio



City of Paris Sales/Establishment Ratio



City of Reno Sales/Establishment Ratio

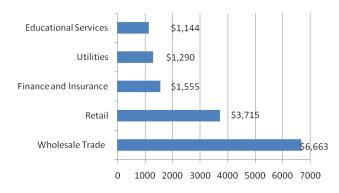
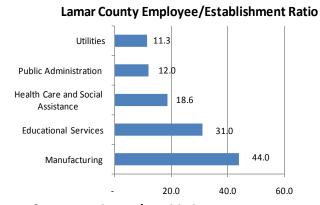


Figure 15: Sales/Establishment Ratio. The retail trade sector that is ranked highest by number of establishment, sales volume and number of employees in the city of Reno has the sixth highest ratio. Source: ESRI Business Analyst.

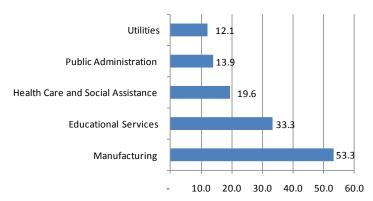
Employee/Establishment Ratio

The employee/establishment ratios show the average number of employees per establishment by sector. This is a potential indicator for identifying the sectors that can be used for job creation more quickly. The educational sector has the highest ratio for the City of Reno, while

manufacturing is highest for Paris and Lamar County with 53.3, and 44.0 employees per establishment respectively (Figure 16).



City of Paris Employee/Establishment Ratio



City of Reno Employee/Establishment Ratio

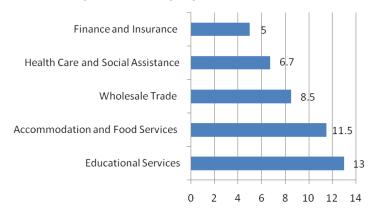


Figure 16: Employee/Establishment Ratio. The ratios show the average number of employees per establishment by sector. Source: ESRI Business Analyst.

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Part II: Retail Gap/Surplus Analysis

The retail gap/surplus analysis examines the current strengths of Reno's retail and locates where opportunities may exist. This is done by looking at actual consumer expenditures and firm sales for the Reno market area and comparing it against national trends. The purpose of this analysis, in conjunction with other sections of this report, is to guide the economic development process for the leaders and citizens of Reno.

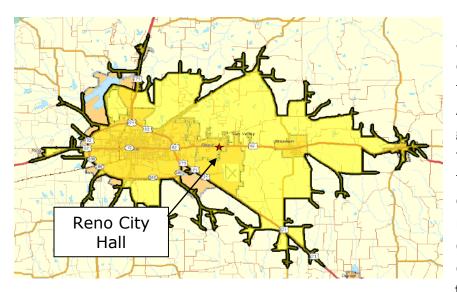


Figure 17: Reno Twenty Minute Drive Market Area. This drive time area covers all accessible areas of Paris to the West and Detroit in the East. Source: ESRI, 2008 Estimates & Projections.

Before starting this analysis, the project team established a market area for the Reno retail market. market area² is a geographic zone containing the people who are likely to purchase a firm's goods or services. For Reno, this market area determined by locating the distance customers would feasibly travel to Reno for goods and services. begin this analysis, the

team looked at a geographic area around Reno that could be driven to in twenty minutes. A twenty-minute drive time contains all of Reno, Paris, and goes as far East as Detroit, Texas. This geographic area seemed feasible to see who was traveling to Reno or who would be willing to travel to Reno for goods and services that they were not getting elsewhere. However, while this market area was sufficient for everyday goods such as food, personal care, and gasoline, it seemed upon further analysis that customers were willing to travel further for higher end goods and services such as automobiles, furniture, and appliances. To account for this, the team established a secondary trade area with a forty-minute drive time for these higher order goods to be analyzed. This report will evaluate all the retail demand and supply within a twenty-minute market area. Additional goods and services that were determined to be higher order will also contain a forty- minute drive time analysis.

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² A geographic zone containing the people who are likely to purchase a firm's goods or services. Source: Wade, T. and Sommer, S. eds. A to Z GIS.

What is a Gap in a Market Area?

A gap indicates that the market area has a potential unmet demand or supply for a product or service. On the demand side (consumer expenditures), it means that residents are spending more for products than what local businesses are capturing. On the supply side (retail trade sales), it means that businesses are pulling in less sales volume for a store than the national average and that additional demand for that good may exist. However, when looking to build a market plan around gaps, the Reno community should still exercise caution. Gaps do not always translate into opportunity. For example, competitors may still exist outside the market area or consumers may be substituting one good for another.

What Does a Surplus Mean for a Market Area?

Where a gap indicates a potential unmet demand, a surplus indicates that local business is pulling in dollars from outside the market area. A retail surplus does not necessarily mean that the community cannot support additional business. Many communities have developed strong clusters of stores that have broad geographic appeal. Examples of these types of retailers include: sporting goods stores, home furnishing stores, restaurants, and other specialty operations that become destination retailers and draw customers from outside the trade area.

Examining the quantitative aspects (gap/surplus index) is only part of the evaluation of community's retail opportunities. Before any conclusions can be drawn about potential business expansion or recruitment opportunities, qualitative considerations such as market

area values and buying habits must be analyzed in context of other market factors.

Gap/Surplus Index

To measure the level gap/surplus, this study will take the actual expenditures and sales for the market area and divide it by potential expenditures and sales. After these numbers are determined, a gap/surplus (G/S) ratio can be used to measure market demand and supply. A G/S index number less than 1 indicates a potential gap or unmet demand in the market. A G/S index over 1 indicates a potential surplus or

Expenditure	G/S Ratio	Actual Exp.	Potential Exp.
Personal care products	0.64	\$308.25	\$484
Gasoline and motor oil	0.75	\$1,850.60	\$2,465
Housekeeping supplies	1.00	\$557.69	\$560
Utilities, fuels, and public services	1.00	\$3,393.82	\$3,380
Food at home	1.03	\$3,486.34	\$3,380
Apparel and services	1.09	\$1,545.67	\$1,416
Food away from home	1.16	\$2,400.30	\$2,063
Healthcare	1.17	\$3,163.96	\$2,697
Alcoholic beverages	1.21	\$401.19	\$332
Household furnishings	1.21	\$1,458.55	\$1,203
Entertainment	1.25	\$2,629.56	\$2,107
Shelter	1.37	\$10,083.04	\$7,369
Vehicle purchases (net outlay)	1.60	\$3,609.53	\$2,252
Education	1.62	\$922.30	\$568

Table 2: Actual vs. Potential General Consumer Expenditures per Household. The table above shows the actual expenditures from residents in Reno compared to what potential expenditures might be achieved based on comparable national data.

adequate supply.

Consumer Expenditures

The consumer expenditure data is used to get a big picture of the buying habits for consumers in the Reno market area. This is done by comparing actual 2008 consumer expenditures against potential consumer expenditures. Actual expenditures are pulled from the ESRI GIS database for the drive time areas around Reno. To pull potential consumer expenditure measures, this study looked at national expenditure trends in educational attainment, median income, and population size from the Consumer Expenditure Survey of the U.S. Census Bureau. For educational attainment, expenditures were pulled for those with a High School diploma as their highest educational attainment, since they make up the largest educational category in the region. For median income, expenditures for those making \$30,000 to \$40,000 were pulled and for population areas fewer than 100,000 people were pulled. These numbers were then averaged together to develop a trend for potential consumer expenditures (see appendix). Once actual and potential consumer expenditures were obtained, we were able to use the G/S index discussed above.

In figure 18, the major categories of consumer expenditures have been listed to get an overview of consumer expenditures per household. As you can see by the graph, most of the general expenditure categories have a sufficient supply of goods available for Reno consumers with spending well over the national average on items such as vehicles (1.60), shelter (1.37), and education (1.62). However, some gaps do appear to exist. The most prominent gaps are in personal care products and services (0.64) and gasoline and motor oil (0.75) (see table).

Further Analysis of the Expenditure Gaps

So what do these gaps about us market demand? The largest visible gap was in personal care products and services where households spend on average \$308.25 vs. the \$484 spent at the national level. This category includes "products for the hair, oral hygiene products, shaving needs, cosmetics and bath products, electric personal care appliances, other

Gap/Surplus Index for General Consumer Expenditures

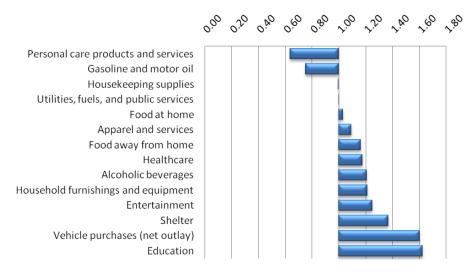


Figure 18: Gap/Surplus Index for General Consumer Expenditures (20 minute drive time). Within a twenty minute drive of city hall, two major expenditures gaps exist in personal care products and services and gasoline and motor oil.

personal care products, and personal care services for males and females" (U.S. Bureau of Labor Statistics, 2010).

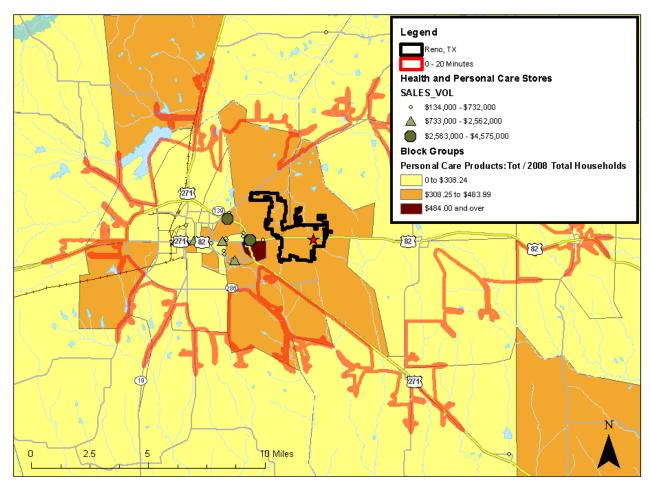


Figure 19: Reno Personal Care Products and Services Expenditures per Household. The map shows how much households are spending on personal care products. Areas (in orange) in and around Reno spend at or over the average for the market area, but below the national average.

The map above shows average household expenditures for the block groups within the market area. You can see that the block groups within and around Reno spend at or over the amount for households within the market area (\$308.25 to \$483.99). These products are typically found at drug stores or beauty supply stores. The map also shows the location of these stores in correlation with the average household expenditures for these goods. You can see the two highest grossing stores are located within the block group with highest median expenditure on personal care products and services spending at over the national average of \$484.00 per household; however, this analysis doesn't tell the whole story.

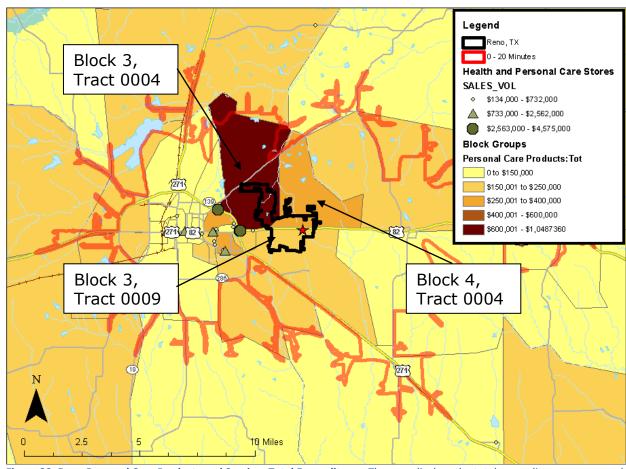


Figure 20: Reno Personal Care Products and Services Total Expenditures. The map displays the total expenditures on personal care products and services for the Reno Market area at the block group level. Three of the highest expenditures totals are within Reno city limits.

The next map shows the total purchasing power for each block group within the study area. This analysis shows that Reno has three of the five highest block group expenditure totals overlapping it borders (block 3, tract 0004; block 4, tract 0004; block 3 tract 0009), but it should also be noted that Paris has these same three block groups within its borders and contains all of the major stores within this category. Lastly, it should be said that an opportunity may exist for a store that sells personal care products as defined above, but this does not include prescription or non-prescription drugs. Looking at the expenditure gap ratio for drugs, Reno has a surplus of drug expenditures of 1.14. So a drug store like CVS or Walgreens may not be feasible, and Reno maybe should look at businesses that specialize just in personal care products or sell other goods that may compliment other consumer expenditure gaps.

The other major expenditure gap existed in gasoline and motor oil stores. In figure 21, the highest total expenditures are once again in block 3 of census tract 0004. Whereas, most of the other block groups in Reno and outside of Paris spend at or over the average for the market area. There is one gasoline station within Reno; however, given the road network and location of retail centers, it seems unlikely that many sales are being generated from block 3.

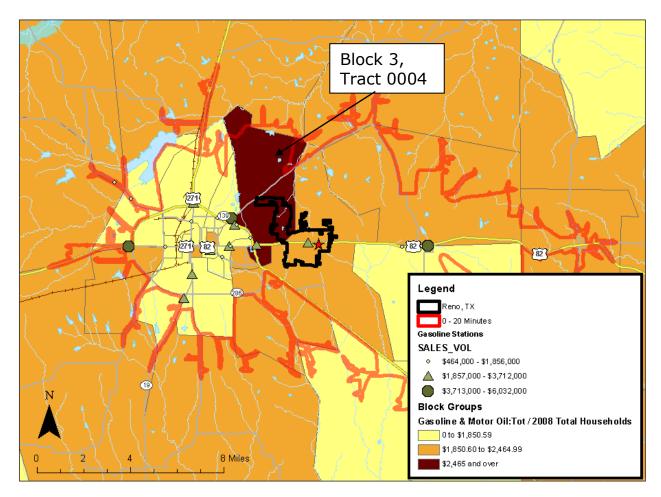


Figure 21: Reno Gasoline and Motor Oil Total Expenditures. Block group 3 in census tract 0004 leads the way in expenditures on gasoline and motor oil spending at or over the national average while inner city Paris spends below the average for the market

Other Potential Gaps

When looking at apparel and services expenditures as a broad category it didn't appear that a existed. However, further evaluation it was found that expenditure totals for girls age two to fifteen and footwear

Apparel Expenditure	G/S Ratio	Actual Exp.	Potent. Exp.
Men and boys	1.15	\$376.55	\$328
Men, 16 and over	1.11	\$286.53	\$257
Boys, 2 to 15	1.28	\$90.02	\$70
Women and girls	1.08	\$611.12	\$567
Women, 16 and over	1.12	\$521.10	\$466
Girls, 2 to 15	0.89	\$90.02	\$101
Children under 2	1.08	\$90.02	\$84
Footwear	0.86	\$229.71	\$268

Table 3: Apparel and Service Expenditure Details. When apparel and services are broken down a gap is revealed in "Girls, 2 to 15" and "Footwear".

was below the national average. This isn't to say that building a girls' clothing or shoe store will raise this expenditure, but that consumers may have use for such goods.

Retail Store Sales

The retail stores sales look at the sales volumes of retail businesses within the market area. These sales numbers are derived by looking at ESRI GIS data for NAICS retail trade categories 44 and 45 within the twenty-minute market area for primary or daily goods and a forty-minute

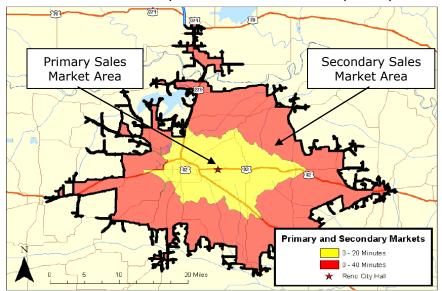


Figure 22: Retail Sales Market Areas. Looking at the map, a twenty minute market area has been established for daily goods such as groceries, personal care, and gasoline, and a larger secondary market has been established for higher end goods such as automobile, appliance, and furniture sales.

market area for secondary or higher order goods and services. These numbers are compared against the national average for retail trade derived from the Bureau of Labor Statistic's Census of Retail Trade to develop a gap/surplus ratio for all goods.

As previously stated, our initial analysis looked at all of the retail industries within a twenty minute drive time. Many of the

industries had a large surplus at this range. This indicates that these businesses are pulling sales

from a larger market area than twenty minutes. To better capture this market, the project team increased the market area to forty minutes for goods that had a surplus ratio greater than 1.50. This size area captures most of the County and spills over into the Counties East and West of Lamar.

Based on these market delineations, the sections below will review the major gaps and potential markets for the twenty and forty minute drive analysis. A more comprehensive view of gap/surplus ratios and volumes for each industry is available

Gap/Surplus Index for Primary Retail Trade Store (44-45) Sales



Figure 23: Retail Surplus. When looking all Retail Trade sales with a twenty minute drive time market area, the higher order goods had a much larger surplus at over 1.50.

in the appendices.

Twenty Minute Analysis

Looking at the twenty minute analysis, non-store retailers are by far the largest gap within the market. Non-store retailers include electronic shopping, vending services, mail order services and fuel dealers. The fuel dealing industry includes "retailing heating oil, liquefied petroleum (LP) gas, and other fuels via direct selling." Figure 24 below, indicates how much sales are generated in this industry for comparable study areas and how much sales the Reno study area is generating. As you can see, the Reno area businesses are capturing a very small percentage of this potential; however, is it unknown how locationally important mail order houses are and if Reno could fill this gap. Further analysis should be conducted to determine how this industry functions.

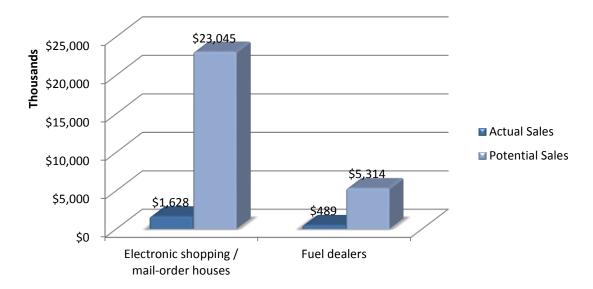


Figure 24: Non-Store Retailer Gaps. The Reno market is potentially underserved with fuel dealers and has an extremely large gap in electronic shopping compared to the national average with a potential sales volume of over \$23 million.

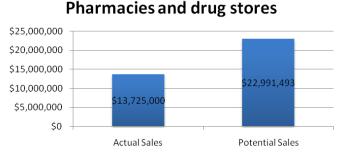


Figure 25: Pharmacy and Drug Store Gap. Reno area consumers are spending above the national average on prescription drugs, but well below the national average on other personal care products.

Another major gap identified was in health and personal care stores. Within this category, the largest gap existed in pharmacies and drug stores. Remember, as discussed in the consumer expenditures section, consumers were spending above the national average on prescription drugs, but well below the national average on other personal care products. Knowing

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³ http://www.census.gov/econ/census02/naics/sector44/45431.htm

this, it would be interesting to see if a majority of the sales from pharmacies in the Reno market are coming from prescription drugs.

A final major service gap identified is in food services and drinking places. As shown in figure 26, while full service restaurants have a large surplus, there is a gap in limited service eating places and drinking places. However, the sales volume generated for limited service eating places is much larger than drinking places and may be a better industry to focus development on. For instance, while the sales volume gap is (\$596,369) annually for drinking places, the current gap for limited serve eating places is (\$17,364,641). Limited service eating places are "engaged in

providing food services where patrons generally order or select items and pay before eating. Most establishments do not have waiter/waitress service, but some provide limited service, such cooking to order (i.e., per special request), bringing food seated customers, providing off-site delivery."4 This includes places coffee and doughnut shops, and ice cream and dairy stores.

Food Services & Drinking Places (NAICS 722)

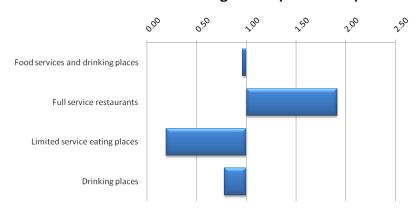


Figure 26: Food Service Gap. The largest gap in food service is in the limited service eating establishment. This includes places like coffee shops, ice cream stores, doughnut shops, or dairy stores.

Industry segment	Employment	Establishments	
Total	100.0	100.0	
Full-service restaurants	47.6	39.4	
Limited-service eating places	43.1	46.7	
Special food services	5.7	5.3	
Drinking places (alcoholic beverages)	3.7	8.6	
SOURCE: BLS Quarterly Census of Employment and Wages, 2008.			

Figure 27: National percent distribution of employment and establishments of food services and drinking places, 2008. Drinking places only accounts for 3.7 percent of the employment in this market segment while limited-service eating places make up 43.1 percent.

The University of Texas at Arlington

⁴ http://www.census.gov/econ/census02/naics/sector72/7222.htm

Forty Minute Analysis

The largest secondary trade area gaps found were found in the general merchandise industry. In figure 27, the largest gaps exist for discount department stores and general merchandise stores. Additionally, there are currently no actual sales volume numbers for warehouse clubs or superstores; however, the department store category has a gap/surplus index of 14.32, meaning that the Reno market is spending fourteen times the national average in the department store category. A large portion of these sales can be attributed to the Wal-Mart Supercenter along highway 82, which generates almost 90 million dollars in annual sales. Reno should use caution in taking advantage of gaps in the general merchandise industry since the department store category seems to be pulling sales from other categories.



Figure 28: General Merchandise Category Killer. The presence of the Wal-Mart Supercenter in department store category is taking sales volumes from other gaps in this industry.

Lastly, the sheer size of the motor vehicle and parts dealers industry warrants mentioning.

Although no gaps exist within this industry, it seems to have a considerable pull on the area, especially under

NAICS	Store Categories	Actual Sales	Potential Sales
441	Motor vehicle and parts dealers	\$281,859,000	\$139,435,462
4411,4412	Automobile and other motor vehicle dealers	\$230,613,000	\$125,604,622
4411	Automobile dealers	\$206,402,000	\$113,560,471
44111	New car dealers	\$148,696,000	\$100,198,284
44112	Used car dealers	\$57,706,000	\$13,362,186
4413	Automotive parts, acc., and tire stores	\$51,246,000	\$13,830,841

the new car dealer's category.

Figure 29: Automotive Dealer Destination Sales. Given the enormous sales surplus within this industry, the Reno market seems to be a destination point for consumers in other Counties.

These specialty goods are destination expenditures for consumers and given Reno's location along highway 82, it may be feasible to take advantage of this car dealer cluster.

Other Observations

The gap/surplus analysis is intended to assess where potential gaps or surpluses exist in the retail market that may be of use to future Reno economic development; however, this assessment should not be taken as a recommended course of action. Reno needs to assess other systems such as infrastructure, land use, and social conditions, reach consensus on economic development goals, and develop a strategy to achieve those goals before formal recommendations can be made. A first step in that direction may be the economic survey conducted on community stakeholders in this report.

Upper East Texas Counties Without a Hospital and Primary Care Health Professional Shortage Areas, 2007



Figure 30: Counties without Hospitals and with Primary Health Care Professional Shortages. Both Delta County and Red River County are listed as Primary Care Health Shortage Areas. Given an aging national population and an even more aging rural population, health care overall is likely to be a growth industry.

Finally, this study conducted a fairly rigorous analysis for the twenty and forty minute drive time areas. Economic opportunities do not stop at the forty minute drive line. Regional economic niches also exist.

One such niche is medical care. While the Paris area has numerous medical care related businesses, surrounding counties do not. For example, Delta County has no hospital, and not a single physician practices within the county. Both Delta County and Red River County are listed as Primary Care Health Shortage Areas. Given an aging national population and an even more aging rural population, health care overall is likely to be a growth industry. Further study would likely reveal more such potential regional opportunities.

Part III: Traffic Analysis

This section examines annual average daily traffic (AADT) counts for the City of Reno⁵. AADT counts are useful for identifying how busy a road is or has value in determining the amount of federal funds governments can expect to receive. This information is important for economic development, highway planning, urban planning, highway performance analysis and numerous other purposes. The information is regularly requested by developers, consultants, real estate agents, home owners associations, speculators, government agencies, and citizens.



Figure 31: Reno Area AADT Counts. Highway 82 is the only major highway running through the City of Reno and the majority of the AADT counts are located along it. The count is located at the intersection of highway 82 and 271 with 29,000 AADT counts. Source: Texas Department of Transportation.

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⁵ Data was obtained from the district traffic maps in the Texas Department of Transportation website. The AADT calculates the total volume of vehicular traffic on a highway or road annually and is divided by three hundred and sixty five.

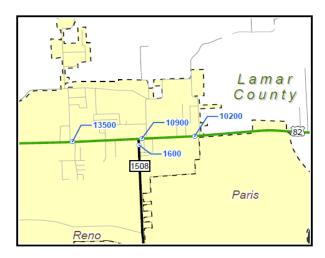


Figure 32: AADT Counts within Reno. From the easterlymost data point in the City of Reno the AADT count is about 10,200, and increases to approximately 14,900 at the westerly-most data point of the city.

Traffic counts for the City of Reno are performed in two locations: State Highway 82 and FM 1508. Highway 82 is the only major highway running through the City of Reno and the majority of the AADT counts are located along it. From the maps it can be seen that traffic increases steadily in a westward fashion towards the City of Paris (Figure 30). From the easterly-most data point in the City of Reno, the AADT count is about 10,200, and increases to approximately 14,900 at the westerly-most data point of the City. The lone AADT count identified on FM 1508 is near SH 82 (Figure 31). It has a count of 1,600, which is small in comparison to the points along the SH 82.

Three things can easily be identified from figure First, the majority of businesses in the City of Reno are clustered near Highway 82. This may be one reason why the traffic count is heaviest along this highway and less so on FM 1508. Of course, the converse can be argued that businesses cluster around the highway because traffic it attracts and for the ease of

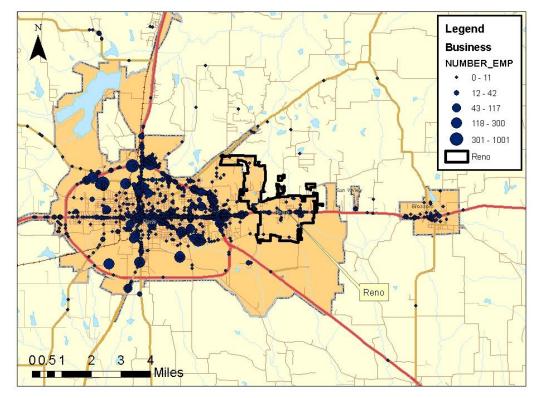


Figure 33: Number of Businesses and Size. The large clustering of businesses within Paris and at the highway 82/271 interchange helps explain why the Reno AADT count increases as it gets closer to Paris.

mobility. Second, the large business centers are located in the City of Paris, with the exception of one large business center located in the City of Reno. This keeps the two cities closely connected in many ways and helps explain why the AADT count in the direction of the City of Paris increases. Finally, the majority of all businesses (not just large business centers) within the study area are outside of the City of Reno. This further explains the reason traffic counts increase as we move closer to Paris.

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Part IV: Cox Field Analysis

Cox Field serves as the only public use airport within Lamar County, and its location just outside of Reno along with the economic potential warrant its inclusion in this assessment. General aviation airports have proven to be a great source of economic growth and development within Texas providing sources of revenue, jobs, and wages not only to the direct and indirect users of these airports, but also to the businesses that cater to the needs of airport visitors such as lodging, dining, and retail. Yet, beyond the monetary benefit of the airports, there is also value to a community's quality of life. This analysis of Cox Field looks at some of the qualitative benefits that general aviation airports provide to a community, then examines the current

economic impact the airport has on Lamar County as a whole, and finishes with potential ways Reno can better utilize the airport to further their economic development goals.



Figure 34: Cox Field. Cox Field serves as the only general aviation airport with Lamar County. The next closest airport is Clarksville/Red River-Trissell Field in Red River County. Source Microsoft Corp.; NAVTEQ; AND.

Qualities of General Aviation Airports

According to the 2006 report, "The Economic Impact of General Aviation in Texas", general aviation airports not only bring in a lot of dollars to a community, but they also bring benefits that "enhance the quality of life, health, welfare, and safety in the citizens of Texas." Examples of these benefits include:⁷

- Facilitating emergency medical transport
- Providing police and fire support
- Assisting search-and-rescue operations
- Supporting the U.S. military and other government organizations

⁶ TXDOT, 2006, p. 1.

⁷ List of benefits are courtesy of the 2006 Texas Department of Transportation report, *The Economic Impact of General Aviation in Texas*.

- Assisting with prisoner transport
- Facilitating mosquito control
- Assisting with traffic reporting
- Assisting with weather forecasting
- Supporting statewide agricultural activities
- Supporting the many statewide hunting and fishing venues
- Providing entertainment opportunities (e.g., museums, air shows)
- Hosting school field trips and other educational events
- Serving as a staging area for community events

Another essential use of general aviation airports for business is the flexibility it allows. When located closer to their destination, these airports may be preferred over a larger commercial service airport. The safe, flexible, and reliable use of the smaller public-use airport allows companies to avoid the congestion of larger airports, save employee time, minimize nonbusiness time away from home, provide greater safety and peace of mind, and allow more control over scheduling and rescheduling.8

General aviation airports also play a role in business expansion or relocation. According to TXDOT, when businesses were asked to rank the factors considered for expansion or relocation, "commercial service airport ranked third in importance, while proximity to general aviation facilities ranked eighth."9

Economic Impact of Cox Field

So how does Cox Field benefit Reno and the County monetarily? One way to determine this is through a measurement of economic impact associated with the airport or an economic impact analysis (EIA). For the EIA, data from the December 2006, The Economic Impact of General Aviation in Texas report was used. In this report, TXDOT determined economic impact for every commercial service and general aviation airport within Texas by "using actual survey data and data from an input-output model that estimates purchases and sales between the various sectors of the economy". 10 The model measured "total economic impact, or contribution" for each airport through an assessment of employment, payroll, and output (see definitions). Yet, beyond the direct economic impact from the airport itself, other indirect benefits such as visitors traveling via general aviation aircraft were also seen as contributing to regional economic development.¹¹

An EIA was also performed for select counties with similar demographics¹². A comparison was needed with counties that share similar population sizes, incomes, and education to glean a better understanding of how airports in similar environments benefit the local economy. Do

⁸ TXDOT, 2006, p. 26-28.

⁹ TXDOT, 2006, p. 29.

¹⁰ TXDOT, 2006, p. 5.

¹¹ See appendix for a comprehensive listing of Cox Field economic impact tables.

¹² The counties chosen were Rusk (Rusk County Airport), Navarro (Corsicana Municipal), and Hood (Granbury Municipal) County.

they have a larger or smaller impact on their economies versus Reno and Lamar County? Are there reasons these airports have more or less impact? Based on this comparison, what can Cox Field do to increase its economic impact or guard against decline?

Through use of the survey data and county comparisons, the economic impact of Cox Field on Lamar County is measured. The impact is determined by looking at both direct and indirect impacts caused by the airport. Direct impact includes economic impact associated with on-airport tenants. This consists of employee wages, expenditures, or business output, and any multiplier effects from these activities. Indirect impact includes economic impact generated through visitor's activities from the airport. This includes visitor expenditures, wages of jobs created to cater to visitors, and their expenditures and wages.

Direct Airport Impact

An airport's direct impact is the "benefits associated with businesses located at the airport, which are directly related to the provision of general aviation services". This includes the impact from employment, payroll and spending of FBOs (fixed base operators)¹⁴, government entities, and flight schools. Data from the 2006 TXDOT report on *The Economic Impact of General Aviation in Texas* was used to determine the direct impact from public use airports. The survey contacted airport sponsors and owners to get a listing of tenants of general aviation

airports, and included, "airport tenants that had employees at a Texas system airport." From this report, we were able to gather data for Cox Field and the comparable Counties.

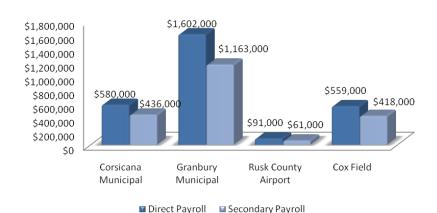


Figure 34 below shows employee¹⁵ payrolls from both the on-site tenants (direct payroll)

Figure 35: On-Airport Payroll Benefits. Cox Field generates close to \$1 million in direct and secondary payroll from on-airport and spillover wages; however, Granbury Municipal generates almost three times that volume.

of these airports along with the secondary payrolls. Secondary payrolls are payrolls generated within a local economy from the expenditures on items such as housing, food, entertainment, or education from the direct or on-site payrolls. This is money that is being re-circulated within

¹³ TXDOT, 2006, p. 6.

An FBO or fixed base operator (also known as fixed base of operation), is the primary provider of services to general aviation aircraft and operators located at or adjacent to an airport.

Employment is based on *full-time equivalent* positions. For example, two part-time employees were assumed to equal one full-time employee.

the economy. This is referred to as the multiplier effect or re-circulated benefit from the initial payroll creation. According to the report, Cox Field has an estimated \$559,000 associated with on-airport activities while also receiving a re-circulated payroll benefit of \$418,000 within the local economy. This places Cox Field well above the payroll impact associated with Rusk County and on par with Corsicana Municipal in Navarro County; however, Granbury Municipal in Hood County has almost three times the payroll of Cox Field.

Beyond the impact of employment and wage creation is the impact from on-airport tenant output. Tenant output is the "sum of average annual capital expenditures and annual gross sales,"16 and for government tenant output it's the "sum of average annual capital expenditures, payroll, and operating expenses."¹⁷ Since it's assumed they don't generate sales volume. Looking at the graph on the left in figure 35, you can see that both the Granbury and Corsicana airports are generating over two times the total output of Cox Field. A couple of possible explanations for this higher output 18 are that the other counties have more businesses

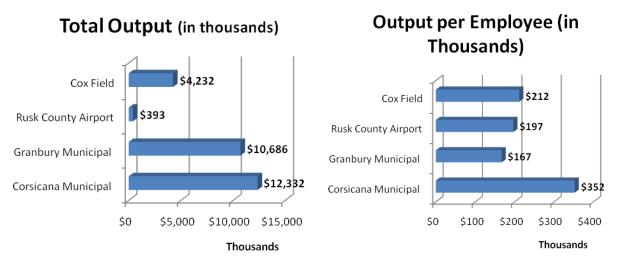


Figure 36: On-Airport Output: While Cox Field may have a much lower total output than Granbury; it is generating a higher total output per employee. This indicates that Cox Field has less business than Granbury, but that the business it is getting is more capital and sales intense.

or more capital intense businesses that generate higher sales and/or capital expenditures. How can we know this? One way to determine if this output is the result of either a greater quality of tenant businesses or higher capital businesses is to divide the total output by total employees. This tells us how much output is generated per employee, which tells us per employee which businesses are generating higher sales and capital expenditure totals. As you can see in figure

¹⁷ TXDOT, 2006, p. 22.

¹⁶ TXDOT, 2006, p. 22.

¹⁸ Output for an on-airport tenant is commonly assumed to be the sum of average annual capital expenditures and annual gross sales. Since government tenants typically do not generate sales, this assumption must be modified. To estimate the economic impact of government entities, output is derived from the sum of average annual capital expenditures, operating expenses, and payroll.

35, while Cox Field may have a much lower total output than Granbury, it is generating a higher total output per employee. This indicates that Cox Field has less business than Granbury, but that the business it is getting is more capital and sales intense.

Indirect Airport Impact

A starting point for determining an airport's indirect economic impact from visitors is to look at its general aviation and itinerant operations. According to the TXDOT 2006 report, "[i]tinerant operations are defined as non-training flights that enter or leave an airport's airspace". 19 The

table below shows, as of 2005, all four airports have about one-third of their operations designated as itinerant, and the variable that seems to impact itinerant operations volume the most is the volume of total aviation operations. Granbury Municipal, with of Transportation, 2006. 12,100 and 4,300 had the

2005 General Aviation Operations					
Associated		General Aviation Operations			
City	Airport Name	2005 Total	2005 Itinerant	2005 % Itinerant	
Corsicana	Corsicana Municipal	7800	2600	33.3	
Granbury	Granbury Municipal	12100	4300	35.5	
Henderson	Rusk County Airport	7900	2950	37.3	
Paris	Cox Field	9030	3030	33.6	

Table 4: 2005 General Aviation Operations. The variable that affects the number of itinerant operations the most is the volume of total operations. Source: Texas Department

highest total and itinerant operations, respectively, followed by Cox Field with 9,030 (total) and 3,030 (itinerant).

So why is the volume of itinerant operations²⁰ important to economic impact? Itinerant operation volumes are used to derive the number of general aviation visitors to an airport. These visitors impact how many people are employed to service the aircraft, operations, and use of the airport. When looking at itinerant operations, you get both the arrivals and departures from an airport. To determine visitor numbers you need to know how many people arrived via the airport. To do this we divide itinerant operations by two. For example, Cox Field has 3,030 itinerant operations, of which, half or 1,515 are arrivals. However, of these arrivals, according to the American Owners and Pilots Association, only about a third are considered "true transient arrivals" or arriving from an airport over 150 miles away or are transient. True transient arrivals²¹ are vital because these visitors will spend money on hotels, entertainment, and dinning. Based on a survey conducted by TXDOT, visitors, days stayed, and expenditures

¹⁹ TXDOT, 2006, p. 13.

²⁰ Non-training flights that enter or leave an airport's airspace.

²¹ Flights assumed to have departed from an airport at least 150 miles away from the destination airport.

vary based on the "type and location of the airport," 22 with airports in larger urban and advanced airports having more visitors, longer stays, and more expenditures per arrival than airports in smaller rural areas that offer basis services. All of the study airports below fall somewhere between urban or rural and advanced or basic for level of service. For example, Rusk County Airport had the most number of days stayed by visitors, but its expenditures were the lowest of all the airports. The reason for this is that the other three airports had more visitors and expenditures per arrival because the airports were considered more advanced and in more urban areas than the one in Rusk County.

Estimated General Aviation Visitor Expenditures					
Associated City	Airport Name	Estimated True Transient Arrivals	Estimated General Aviation Visitors	Total Annual Number of Days Stayed	Annual General Aviation Visitor Expenditure
Corsicana	Corsicana Municipal	429	1050	770	\$138,000
Granbury	Granbury Municipal	710	1730	1270	\$228,000
Henderson	Rusk County Airport	487	920	1390	\$78,000
Paris	Cox Field	500	1220	900	\$161,000

Table 5: Visitor Expenditures: Rusk County Airport lead the way in total annual number of days stayed, but it had lower visitor expenditures. The better conditions and locations of the other airports allowed more visitors per arrival and greater visitor expenditures. Source: Texas Department of Transportation, 2006.

These visitor expenditures also have value beyond the influx of outside money into the

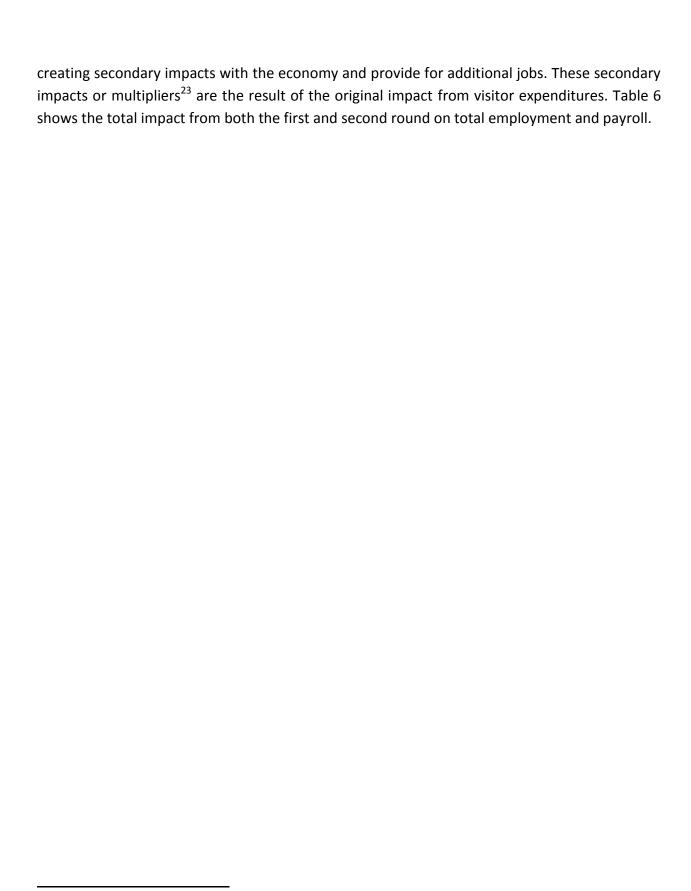
economy, they also create jobs. Service industry jobs are needed to support visitor expenditures and these jobs will be the first-round primary or impacts of visitor expenditures. Additionally, the people that are employed because of

general a	aviat	ion v	'isit	ors	will
re-circula	ate	thei	r	mo	ney
within	th	ie	ec	ono	omy

General Aviation Visitor Payroll						
Airport Name	Total Employment	Total Payroll	Average Income per Employee			
Corsicana Municipal	6	\$145,000	\$24,166.67			
Granbury Municipal	9	\$241,000	\$26,777.78			
Rusk County Airport	3	\$83,000	\$27,666.67			
Cox Field	7	\$169,000	\$24,142.86			

Table 6: Visitor Job Creation. The expenditures from visitors to each airport allowed for the creation of jobs to cater to the new expenditures. Source: Texas Department of Transportation, 2006.

²² See appendix for a comprehensive listing of Cox Field economic impact tables.



²³ Additional impacts recirculated within a local economy because of the initial economic impact of an activity or industry.

Total Economic Impact of General Aviation

In isolation, some of the benefits from the airport such as visitor expenditures or payroll seem to contribute little to the economy, but added together you can see the impact of Cox Field. Table 7 shows that after considering all direct and indirect impacts, the airport is responsible for the employment of 27 people at a payroll of almost 1 million dollars. Additionally, output from these businesses brings in another \$4.2 million to the regional economy. However, there may be room for improvement. Airports in Granbury and Corsicana with comparable county demographics have more employees, higher payrolls, and almost three times the total output.

	Total Economic Impact of General Aviation					
Associated City	Airport Name	Total Employment	Total Payroll	Total Output		
Corsicana	Corsicana Municipal	41	\$1,016,000	\$12,332,000		
Granbury	Granbury Municipal	73	\$2,765,000	\$10,686,000		
Henderson	Rusk County Airport	5	\$152,000	\$393,000		
Paris	Cox Field	27	\$977,000	\$4,232,000		

Table 7: Total Economic Impact. After considering all direct and indirect impacts, the airport is responsible for the employment of 27 people at a payroll of almost 1 million dollars. Additionally, output from these businesses brings in another \$4.2 million to the regional economy. Source: Texas Department of Transportation, 2006.

There is also the risk of a reduction total economic impact for Cox Field. The lack of employment and business opportunities at the Rusk County Airport has created a comparably minimal impact on its regional economy.

Existing Aircraft Industry Businesses

Beyond identifying the economic impact of Cox Field, we want to identify existing aircraft industries within the county that may use the airport for its business or may have a need for other goods and services that could further its operations. Looking at the sales volume from aircraft-related industries below (table 8), you can see that there are only two industries in Lamar County generating most of the sales volume: air cowls and sheet metal manufacturing; and aircraft assemblies, subassemblies, auxiliary parts, and control surfaces manufacturing. These two industries generate more sales volume than the total from the other comparable areas. In fact, the aircraft assembly industry alone (\$14,946,000) generates more sales volume than any other study area. Currently, all of these industries identified reside within the City of Paris, but there may be an opportunity to cater to the needs of these businesses or capture some of the economic spillover from additional activity.

		Aircraft Industry Sales Volume				
NAICS_EXT	DESCRIPTION	Cox Field	Corsicana Municipal	Granbury Municipal	Rusk County Airport	
314999	Aircraft Tie Down Strap Assemblies (except leather) manufacturing	\$ -	\$ 7,080,000	\$ -	\$ -	
3314	Aircraft and automotive wire or cable	\$ -	\$ -	\$ -	\$ -	
332312	Air cowls, sheet metal (except stampings), manufacturing	\$ 6,900,000	\$ -	\$ -	\$ 276,000	
332510	Fluid, hydraulic, pneumatic aircraft subassemblies manufacturing	\$ -	\$ -	\$ 3,108,000	\$ -	
333924	Aircraft engine cradles and loading hoists manufacturing	\$ -	\$ 7,216,000	\$ -	\$ -	
334220	Airborne radio communications equipment, antennas, GPS equipment, manufacturing	\$ -	\$ -	\$ -	\$ 1,461,000	
336411	Aircraft conversions (i.e., modifications to systems), aircraft overhauling	\$ -	\$ -	\$ -	\$ -	
336412	Aircraft engine parts manufacturing, aircraft engine overhauling, aircraft engine rebuilding, developing and producing prototypes for aircraft engines and engine parts	\$ -	\$ -	\$ -	\$ -	
336413	Aircraft assemblies, subassemblies, auxiliary parts, control surfaces manufacturing	\$14,946,000	\$ -	\$ 4,134,000	\$ -	
611512	Flight Training	\$ 352,000	\$ -	\$ 440,000	\$ -	
423860	Aircraft engines and parts merchant wholesalers	\$ -	\$ -	\$ 2,265,000	\$ 4,530,000	
488190	Aircraft inspection services	\$ -	\$ 356,000	\$ 712,000	\$ -	
	TOTAL SALES VOLUME	\$22,198,000	\$ 14,652,000	\$10,659,000	\$ 6,267,000	

Table 8: Aircraft-related Industry Sales Volume. There are only two industries in Lamar County generating most of the sales volume; air cowls and sheet metal manufacturing and aircraft assemblies, subassemblies, auxiliary parts, control surfaces manufacturing. These two industries generate more sales volume than the total from the other comparable areas. In fact, the aircraft assembly industry at \$14,946,000 generates more sales volume than the other areas by itself. Source: GIS by ESRI; Erie Municipal Airport Report.

"Through-the-Fence" Operations

One way for Reno to take advantage of a potential airport service gap is with a "through-thefence" agreement. Through-the-fence operations is where the FBO allows "access to the public landing area by independent operators offering an aeronautical activity or by aircraft based on land adjacent to, but not a part of, the airport property."24 This includes businesses or individuals that are granted access to airport infrastructure to conduct business, but don't rent space. Reno would benefit from this type of agreement through the property tax generated from a business within the city and the FBO would benefit by charging a fee to access the airport. However, Reno should remember that airport operators use funds generated from onairport tenants to maintain the airport. Given this, the Cox Field operator may not want activity that may be viewed as competitive with existing operations, and Reno should work with the airport management if they consider developing businesses around this concept.

Airport Business Park

A long term strategy for increasing the economic impact of the airport for Reno is through the development of an airport business park. An airport business park in Reno would not only provide a dedicated location for compatible off-airport and aviation industries like those listed above, but would also offer services and goods that complement the aviation industry. This includes executive suites or shared office for "small aviation related businesses such as aircraft brokers, aviation insurance agents, charter services, [or] aircraft engineering"²⁵, light industrial such as machine shops or other repair shops, professional services such as accounting or attorneys, or retail such a convenience or gasoline stations. ²⁶ Additionally, many of these uses could be grouped as a mixed use development. This has the benefit of reducing vehicle operations within the business center and reducing the amount of limited land that would be required. Lastly, a Reno airport park along highway 82 and with good access to the airport would offer the incentive of easy access to freight loading and unloading and could serve as an intermodal transfer point between the airport and trucking. However, this sort of opportunity would require extensive long-term planning, financing, and consensus from both Reno and airport stakeholders and would require further evaluation before recommendations can be made about its viability.

²⁵ Erie Municipal Airport Economic Development Study, 2009, p. 41.

²⁴ AOPA.org, 2010.

²⁶ A complete listing of potential businesses is listed in the appendix section.

Analysis and Conclusions

Current Conditions

This economic assessment study identifies Reno's current commercial, retail, and industrial conditions. Reno has a number of competitive advantages within Lamar County. Its location and highway access is one of these advantages:

- Reno is well positioned to "intercept" customer traffic travelling from Red River County as well as smaller eastern Lamar County communities to Paris.
- Reno's Highway 82 frontage provides potential for additional retail/office/commercial uses providing a place for these customers to shop, dine, or do other business closer to their homes.
- Reno has some room to expand along Highway 82 as well.

Reno also has a better educated and faster growing workforce than Lamar County as a whole:

- 62.4% of Reno's workforce has attained a High School education or higher and 29.3% have attained an Associate's Degree or higher, compared to 57.2% and 22% for Lamar County, respectively.
- Reno's 2000-2008 population growth of 15.3% far exceeds Lamar County's 2.9%, and even surpasses the United States as a whole.

The residents of Reno have more purchasing power than the average Lamar County resident:

- Median household income in Reno is \$8,340 higher than Lamar County.
- 46% of Reno households earn at least \$50,000, versus 38% for Lamar County as a whole.
- Reno has more favorable tax rates and a more business friendly environment than its larger neighbor, Paris.

Retail Sector/Opportunities for Economic Growth

Analysis of Reno's retail sector highlights several potential opportunities for economic growth:

- personal care products and services
- pharmacies and drug stores
- limited service eating places (such as coffee, doughnut, and ice cream and dairy shops)
- fuel and motor oil sales

In addition, there is potential opportunity in the current identified shortage of primary health care services in Red River and Delta Counties. While Paris has an existing hospital and medical care business cluster, it is possible that a primary care clinic or allied health services (physical therapy, sonography, x-ray, visiting nurses and nurse practitioners, etc.) located in Reno could also "intercept" customer traffic from underserved areas of eastern Lamar and outlying counties.

Cox Field

Cox Field is the final economic asset evaluated in this study.

- Cox Field has a total direct and indirect employee base of 27 FTE's, with total payroll of almost \$1 million dollars.
- Total economic output of Cox Field is \$4.2 million.
- The aircraft and parts assembly business associated with Cox Field represents \$14.5 million in sales volume, more than any other study area.

Reno has potential opportunities to enhance the economic impact of Cox Field via "through the fence" operations or development of an airport business park featuring businesses that complement direct airport related activity or that utilize air transport for their operations. Due to Cox Field's location in Paris, enhanced economic development of this kind would involve cooperation with Paris and/or airport authorities, requiring additional research and planning.

Obstacles

There are, therefore, numerous opportunities for Reno to foster economic development. Reno is well positioned to pursue these. However, Reno must also develop a means to prioritize these opportunities, and evaluate potential obstacles to pursuing them. This study, and the stakeholder interviews conducted (results in Appendix G), has also identified some of these potential obstacles:

- Reno, like any city, has limited resources with which to pursue economic develop opportunities.
- Reno's zoning ordinance lacks specificity, and could benefit from review and revision.
- Land availability is also an issue, and lack of easily available parcel data creates difficulties in identifying and assembling likely development parcels.
- Reno also has issues of water availability and expense that might make industrial development more difficult.

Action Steps

Each of these potential obstacles can be managed, however. Reno can take additional planning and assessment steps to facilitate economic development:

- Establish a planning vision and strategic framework to shape economic development priorities. A clear vision for the future helps ensure citizen support and provides clear metrics for deciding which economic development opportunities fit the kind of community that Reno wants to be.
- Develop a Comprehensive Land Use Plan, which is required by statute for zoning revisions.
- Develop of a comprehensive map of parcel data to facilitate land assembly and research.
- Create a formal economic development plan.

Final Note

This economic assessment highlights potential opportunities for economic development. Realization of these opportunities depends upon numerous factors, many of which are outside the control of government or research institutions. Overall economic conditions, cooperation (or lack thereof) from County, State, or other cities' governments and agencies, and numerous other societal trends can influence whether or not a given opportunity comes to fruition. This study provides a number of possible avenues for economic development. Each opportunity herein presented is a call for further investigation and effort.

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²⁷ Zoning is authorized by Chapter 211 of the Texas Local Government Code. Texas law requires that zoning systems be based on a comprehensive plan. In order for a city to enact zoning ordinances, the governing body of a home-rule city shall, and the governing body of a general-law city may appoint a zoning commission to make recommendations on zoning matters. If the municipality has a planning commission, the governing body may appoint that commission to also serve as the zoning commission. The zoning ordinance must be adopted in accordance with a comprehensive plan and all subsequent zoning decisions should be compatible with the goals of the comprehensive plan. Source: Comprehensive Planning For Small Texas Cities, Office of Rural Community Affairs, Outreach and Training Services, 2002.

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Appendix A: Selected Demographic Data

Reno, Texas Demographic Data

ESRI Business Analyst - 2008

	2000	2008	2013
Population	2,774	3,199	3,440
Households	1,044	1,232	1,332
Avg HH Size	2.66	2.60	2.58
Median Age	34.6	36.3	37.5
Median HH Income	\$42,832	\$47,224	\$53,169
Avg Household Income	\$55,509	\$60,562	\$66,446
Owner Occupied HU's	844	1008	1076
Renter Occupied HU's	200	224	256
Households by Income			
<\$15,000	130	125	122
\$15,000 - \$24,999	118	124	116
\$25,000 - \$34,999	161	178	143
\$35,000 - \$49,999	203	228	235
\$50,000 - \$74,999	235	300	380
\$75,000 - \$99,999	110	151	152
\$100,000 - \$149,999	58	78	126
\$150,000 - \$199,999	10	17	20
\$200,000+	27	12	40
		0.5	
Total Businesses		95	
Total Employees		358	7 50/
Population Growth		15.3%	7.5%
Race and Ethnicity			
White Alone	2,565	2,890	3,060
Black Alone	2,303	119	3,000 144
American Indian Alone	36	49	58
American mulan Alone Asian Alone	11	16	21
Pacific Islander Alone	0	0	0
Some Other Race Alone	36	63	82
Two or More Races	41	61	76
Hispanic Origin (Any Race)	81	138	184

Lamar County, TX Demographic Data

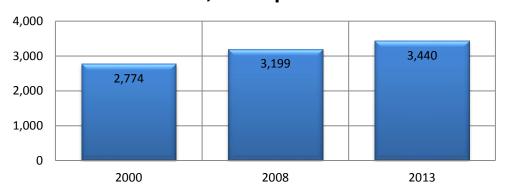
ESRI Business Analyst - 2008

ESKI BUSINESS Allalyst - 2006		_	_
	2000	2008	2013
Population	48,499	49,883	50,645
Households	19,077	19,722	20,103
Avg HH Size	2.48	2.47	2.46
Median Age	36.9	38.8	40.2
Median HH Income	\$31,560	\$38,884	\$44,452
Avg Household Income	\$42,718	\$50,544	\$56,964
Owner Occupied HU's	12,826	13,739	13,807
Renter Occupied HU's	6,251	5,983	6,296
Households by Income			
<\$15,000	4,609	3,698	3,306
\$15,000 - \$24,999	3,114	2,802	2,506
\$25,000 - \$34,999	2,537	2,543	2,222
\$35,000 - \$49,999	3,341	3,097	2,784
\$50,000 - \$74,999	3,219	4,247	5,003
\$75,000 - \$99,999	1,265	1,857	2,002
\$100,000 - \$149,999	591	896	1,510
\$150,000 - \$199,999	96	252	243
\$200,000+	276	330	437
Total Businesses		2,319	
Total Employees		20,348	
Population Growth		2.9%	1.5%
Race and Ethnicity			
White Alone	39,990	39,961	39,799
Black Alone	6,534	7,405	7,943
American Indian Alone	522	614	675
Asian Alone	192	259	308
Pacific Islander Alone	11	13	13
Some Other Race Alone	567	780	940
Two or More Races	683	851	967
Hispanic Origin (Any Race)	1,614	2,219	2,667

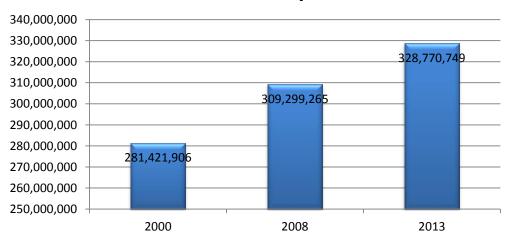
United States Demographic Data ESRI Business Analyst - 2008

ESKI Business Analyst - 2008	2000	2008	2013
Population	281,421,906	309,299,265	328,770,749
Households	105,480,101	116,384,754	123,932,585
Avg HH Size	2.59	2.59	2.59
Median Age	35.3	36.8	37.7
Median HH Income	\$42,164	\$54,749	\$64,042
Avg Household Income	\$56,644	\$73,771	\$87,814
Owner Occupied HU's	69,815,753	78,840,213	83,160,256
Renter Occupied HU's	35,664,348	37,544,541	40,772,329
Households by Income			
<\$15,000	16,724,255	13,332,405	12,051,423
\$15,000 - \$24,999	13,536,965	11,204,651	9,829,344
\$25,000 - \$34,999	13,519,242	11,660,712	10,042,052
\$35,000 - \$49,999	17,446,272	16,789,139	14,873,935
\$50,000 - \$74,999	20,540,604	23,818,163	26,370,777
\$75,000 - \$99,999	10,799,245	16,732,307	18,806,981
\$100,000 - \$149,999	8,147,826	13,527,998	18,230,597
\$150,000 - \$199,999	2,322,038	4,348,002	5,831,873
\$200,000+	2,502,675	4,970,228	7,894,457
Population Growth		9.9%	6.3%
Race and Ethnicity			
White Alone	211,460,626	223,773,663	232,342,836
Black Alone	34,658,190	39,041,905	41,861,310
American Indian Alone	2,475,956	2,807,524	3,029,383
Asian Alone	10,242,998	13,628,692	16,066,237
Pacific Islander Alone	398,835	461,853	504,905
Some Other Race Alone	15,359,073	20,646,167	24,512,978
Two or More Races	6,826,228	8,939,461	10,452,100
Hispanic Origin (Any Race)	35,305,818	47,637,207	56,644,186

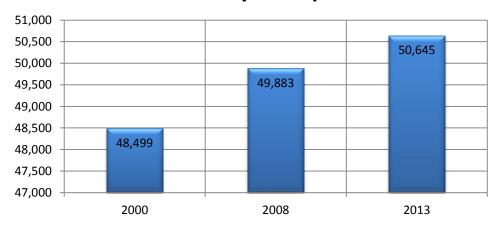
Reno, TX Population

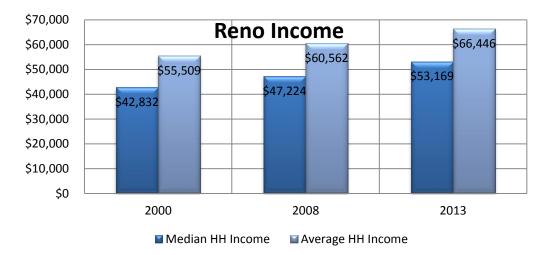


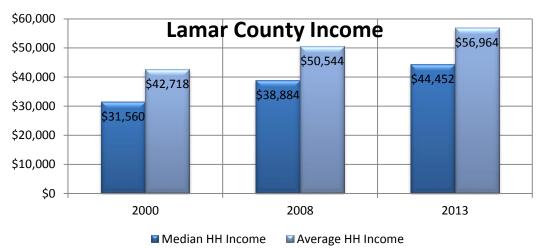
United States Population

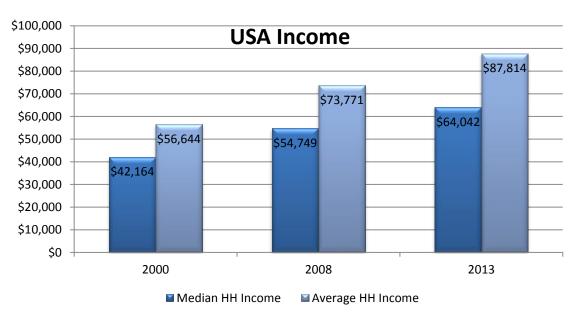


Lamar County TX Population

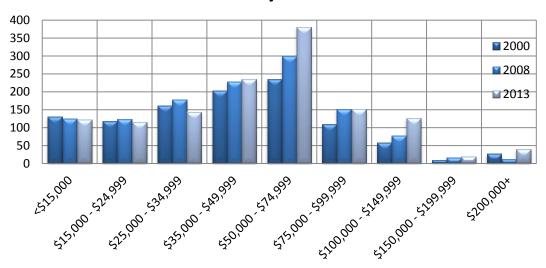




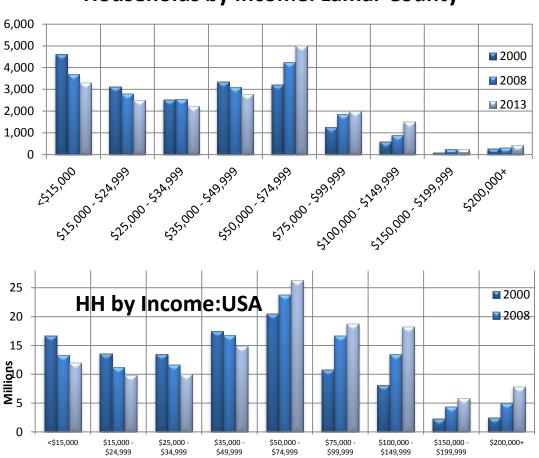




Households by Income: Reno



Households by Income: Lamar County



Appendix B: Airport Economic Impact Tables

2005 General Aviation Operations

Associated		General Aviation Operations				
City	Airport Name	2005 Total	2005 Itinerant	2005 % Itinerant		
Corsicana	Corsicana Municipal	7800	2600	33.3		
Granbury	Granbury Municipal	12100	4300	35.5		
Henderson	Rusk County Airport	7900	2950	37.3		
Paris	Cox Field	9030	3030	33.6		

Estimated General Aviation Visitor Expenditures

Associated City	Airport Name	Estimated True Transient Arrivals	Estimated General Aviation Visitors	Total Annual Number of Days Stayed	Annual General Aviation Visitor Expenditure
Corsicana	Corsicana Municipal	429	1050	770	138000
Granbury	Granbury Municipal	710	1730	1270	228000
Henderson	Rusk County Airport	487	920	1390	78000
Paris	Cox Field	500	1220	900	161000

On-Airport General Aviation Tenant Employment

Associated City	Airport Name	Direct Employment	Secondary Employment	Total Employment
Corsicana	Corsicana Municipal	19	16	35
Granbury	Granbury Municipal	36	28	64
Henderson	Rusk County Airport	1	1	2
Paris	Cox Field	11	9	20

General Aviation Visitor

Employment

Associated City	Airport Name	Direct Employment	Secondary Employment	Total Employment
•		Employment	Employment	Employment
Corsicana	Corsicana Municipal	4	2	6
Granbury	Granbury Municipal	7	2	9
Henderson	Rusk County Airport	2	1	3
Paris	Cox Field	5	2	7

Total General Aviation Employment

Associated City	Airport Name	Direct Employment	Secondary Employment	Total Employment
Corsicana	Corsicana Municipal	23	18	41
Granbury	Granbury Municipal	43	30	73
Henderson	Rusk County Airport	3	2	5
Paris	Cox Field	16	11	27

On-Airport General Aviation Tenant Payroll

Associated City	Airport Name	Direct Payroll	Secondary Payroll	Total Payroll
Corsicana	Corsicana Municipal	\$493,000	\$378,000	\$871,000
Granbury	Granbury Municipal	\$1,458,000	\$1,066,000	\$2,524,000
Henderson	Rusk County Airport	\$42,000	\$27,000	\$69,000
Paris	Cox Field	\$458,000	\$350,000	\$808,000

General Aviation Visitor Payroll

Associated City	Airport Name	Direct Payroll	Secondary Payroll	Total Payroll
Corsicana	Corsicana Municipal	\$87,000	\$58,000	\$145,000
Granbury	Granbury Municipal	\$144,000	\$97,000	\$241,000
Henderson	Rusk County Airport	\$49,000	\$34,000	\$83,000
Paris	Cox Field	\$101,000	\$68,000	\$169,000

Total General Aviation Payroll

Associated City	Airport Name	Direct Payroll	Secondary Payroll	Total Payroll
Corsicana	Corsicana Municipal	\$580,000	\$436,000	\$1,016,000
Granbury	Granbury Municipal	\$1,602,000	\$1,163,000	\$2,765,000
Henderson	Rusk County Airport	\$91,000	\$61,000	\$152,000
Paris	Cox Field	\$559,000	\$418,000	\$977,000

On-Airport General Aviation Tenant Output

Associated City	Airport Name	Direct Output	Secondary Output	Total Output
Corsicana	Corsicana Municipal	\$6,293,000	\$5,787,000	\$12,080,000
Granbury	Granbury Municipal	\$5,353,000	\$4,916,000	\$10,269,000
Henderson	Rusk County Airport	\$131,000	\$119,000	\$250,000
Paris	Cox Field	\$2,055,000	\$1,883,000	\$3,938,000

General Aviation Visitor Output

Associated City	Airport Name	Direct Output	Secondary Output	Total Output
Corsicana	Corsicana Municipal	\$138,000	\$114,000	\$252,000
Granbury	Granbury Municipal	\$228,000	\$189,000	\$417,000
Henderson	Rusk County Airport	\$78,000	\$65,000	\$143,000
Paris	Cox Field	\$161,000	\$133,000	\$294,000

Total General Aviation Output

Associated City	Airport Name	Direct Output	Secondary Output	Total Output
Corsicana	Corsicana Municipal	\$6,431,000	\$5,901,000	\$12,332,000
Granbury	Granbury Municipal	\$5,581,000	\$5,105,000	\$10,686,000
Henderson	Rusk County Airport	\$209,000	\$184,000	\$393,000
Paris	Cox Field	\$2,216,000	\$2,016,000	\$4,232,000

Total Economic Impact of General Aviation

Associated City	Airport Name	Total Employment	Total Payroll	Total Output
Corsicana	Corsicana Municipal	41	\$1,016,000	\$12,332,000
Granbury	Granbury Municipal	73	\$2,765,000	\$10,686,000
Henderson	Rusk County Airport	5	\$152,000	\$393,000
Paris	Cox Field	27	\$977,000	\$4,232,000

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Appendix C: Services and Goods of Aircraft-related Industries

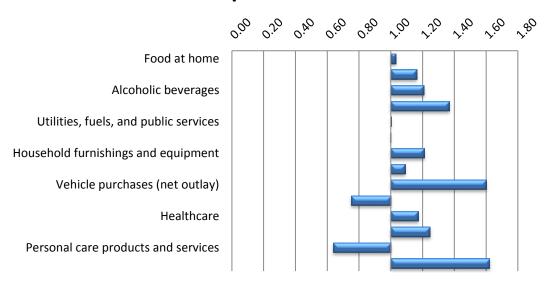
NAICS Code	Light Industrial/Office
441229	Aircraft dealers, used aircraft dealers
23831	Drywall and Insulation Contractors
23832	Painting and Wall Covering Contractors
23821	Electrical Contractors and Other Wiring Installation Contractors
23832	Plumbing, Heating, and Air-Conditioning Contractors
23835	Finish Carpentry Contractors
323110	Commercial Lithographic Printing
33271	Machine Shops
42492	Book, Periodical, and Newspaper Merchant Wholesalers
532111	Passenger Car Rental
56171	Exterminating and Pest Control Services
454210	Vending Machine Operators
54174	Carpet and Upholstery Cleaning Services
48411	General Freight Trucking, Local
49311	General Warehousing and Storage
53231	General Rental Centers
54138	Testing Laboratories
811111	General Automotive Repair
811121	Automotive Body, Paint, and Interior Repair and Maintenance
811211	Consumer Electronics Repair and Maintenance
61151	Technical and Trade Schools
811212	Computer and Office Machine Repair and Maintenance
81141	Home and Garden Equipment and Appliance Repair and Maintenance
81142	Reupholsters and Furniture Repair

NAICS Code	Mixed Use/Retail/Office
445120	Convenience Stores
447110	Gasoline Stations with Convenience Stores
52211	Commercial Banking
52212	Savings Institutions
52231	Mortgage and Nonmortgage Loan Brokers
52312	Securities Brokerage
52421	Insurance Agencies and Brokerages
53121	Offices of Real Estate Agents and Brokers
54111	Offices of Lawyers
54121	Accounting, Tax Preparation, Bookkeeping, and Payroll Services
54133	Engineering Services
54134	Drafting Services
54141	Interior Design Services
541611	Administrative Management and General Management Consulting Services
54192	Photographic Services

Appendix D: Gap/Surplus Analysis Index and Tables

General Consumer Expenditures (20 minutes drive time)

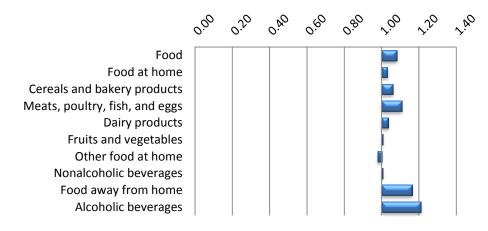
Gap/Surplus Index for General Consumer Expenditures



Expenditure	Gap/Surplus Ratio	Actual Expenditures	Potential Expenditures
Food at home	1.03	\$3,486.34	\$3,380
Food away from home	1.16	\$2,400.30	\$2,063
Alcoholic beverages	1.21	\$401.19	\$332
Shelter	1.37	\$10,083.04	\$7,369
Utilities, fuels, and public services	1.00	\$3,393.82	\$3,380
Housekeeping supplies	1.00	\$557.69	\$560
Household furnishings and equipment	1.21	\$1,458.55	\$1,203
Apparel and services	1.09	\$1,545.67	\$1,416
Vehicle purchases (net outlay)	1.60	\$3,609.53	\$2,252
Gasoline and motor oil	0.75	\$1,850.60	\$2,465
Healthcare	1.17	\$3,163.96	\$2,697
Entertainment	1.25	\$2,629.56	\$2,107
Personal care products and services	0.64	\$308.25	\$484
Education	1.62	\$922.30	\$568

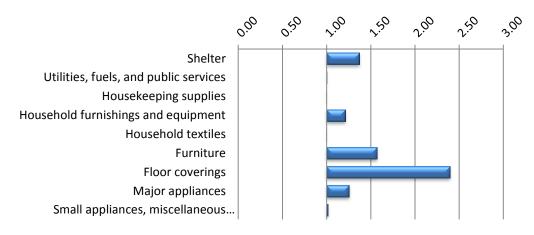
Food and Beverage Consumer Expenditures (20 minutes drive time)

Gap/Surplus Index for Food and Beverage Expenditures



Expenditure	Gap/Surplus Ratio	Actual Expenditures	Potential Expenditures
Food	1.08	\$5,886.64	\$5,443
Food at home	1.03	\$3,486.34	\$3,380
Cereals and bakery products	1.06	\$485.65	\$458
Meats, poultry, fish, and eggs	1.11	\$875.11	\$791
Dairy products	1.04	\$397.38	\$383
Fruits and vegetables	1.01	\$574.00	\$570
Other food at home	0.98	\$1,154.04	\$1,178
Nonalcoholic beverages	1.01	\$319.70	\$318
Food away from home	1.16	\$2,400.30	\$2,063
Alcoholic beverages	1.21	\$401.19	\$332

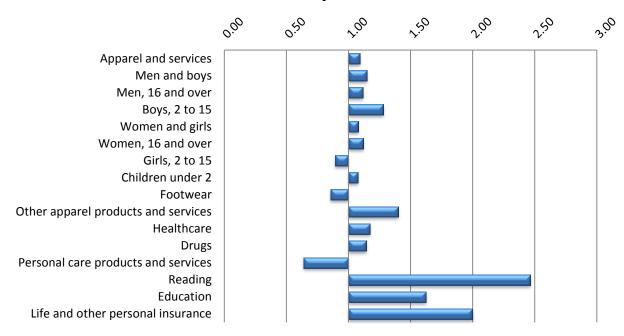
Gap/Surplus Index for Home and Housekeeping Expenditures



Expenditure	Gap/Surplus Ratio	Actual Expenditures	Potential Expenditures
Shelter	1.37	\$10,083.04	\$7,369
Utilities, fuels, and public services	1.00	\$3,393.82	\$3,380
Housekeeping supplies	1.00	\$557.69	\$560
Household furnishings and equipment	1.21	\$1,458.55	\$1,203
Household textiles	1.00	\$95.99	\$96
Furniture	1.57	\$425.19	\$271
Floor coverings	2.39	\$64.63	\$27
Major appliances	1.25	\$210.49	\$168
Small appliances, miscellaneous housewares	1.01	\$87.54	\$86

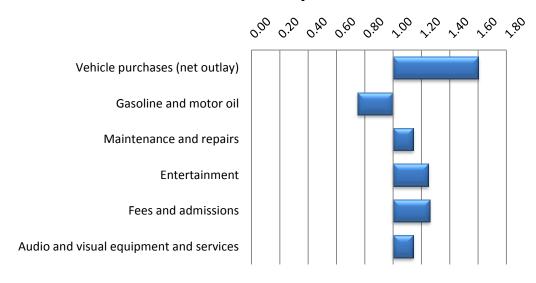
Clothing, Healthcare, and Education Consumer Expenditures (20 minutes drive time)

Gap/Surplus Index for Clothing, Healthcare, and **Education Expenditures**



Expenditure	Gap/Surplus Ratio	Actual Expenditures	Potential Expenditures
Apparel and services	1.09	\$1,545.67	\$1,416
Men and boys	1.15	\$376.55	\$328
Men, 16 and over	1.11	\$286.53	\$257
Boys, 2 to 15	1.28	\$90.02	\$70
Women and girls	1.08	\$611.12	\$567
Women, 16 and over	1.12	\$521.10	\$466
Girls, 2 to 15	0.89	\$90.02	\$101
Children under 2	1.08	\$90.02	\$84
Footwear	0.86	\$229.71	\$268
Other apparel products and services	1.40	\$238.27	\$170
Healthcare	1.17	\$3,163.96	\$2,697
Drugs	1.14	\$554.77	\$485
Personal care products and services	0.64	\$308.25	\$484
Reading	2.47	\$205.44	\$83
Education	1.62	\$922.30	\$568
Life and other personal insurance	2.00	\$433.19	\$217

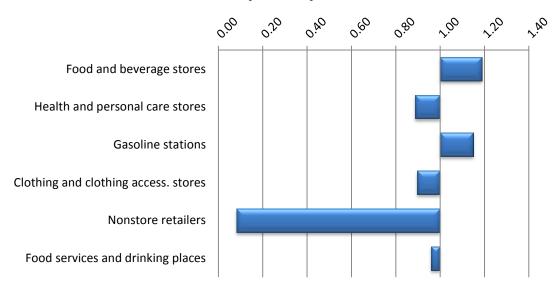
Gap/Surplus Index for Transportation and Entertainment Expenditures



Expenditure	Gap/Surplus Ratio	Actual Expenditures	Potential Expenditures
Vehicle purchases (net outlay)	1.60	\$3,609.53	\$2,252
Gasoline and motor oil	0.75	\$1,850.60	\$2,465
Maintenance and repairs	1.14	\$690.37	\$603
Entertainment	1.25	\$2,629.56	\$2,107
Fees and admissions	1.26	\$402.84	\$320
Audio and visual equipment and services	1.14	\$1,016.87	\$890

Primary Retail Trade Sales – NAICS 44-45 (20 minutes drive time)

Gap/Surplus Index for Primary Retail Trade Store (44-45) Sales



Store Categories	Gap/Surplus Ratio	Actual Sales	Potential Sales
Food and beverage stores	1.19	\$78,754,000	\$66,310,813
Health and personal care stores	0.89	\$24,601,000	\$27,727,939
Gasoline stations	1.15	\$62,176,000	\$54,028,254
Clothing and clothing access. stores	0.90	\$21,845,000	\$24,366,765
Nonstore retailers	0.08	\$2,720,000	\$33,576,428
Food services and drinking places	0.96	\$49,019,000	\$51,103,502

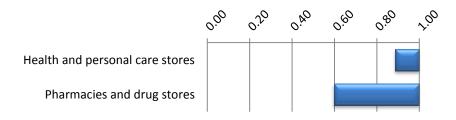
Gap/Surplus Index for Food & Beverage Stores (NAICS 445) Sales



Store Categories	Gap/Surplus Ratio	Actual Sales	Potential Sales
Food and beverage stores	1.19	\$78,754,000	\$66,310,813
Grocery stores	1.16	\$68,918,000	\$59,400,379
Supermarkets and other grocery (except convenience) stores	1.11	\$61,750,000	\$55,545,239
Beer, wine, and liquor stores	1.53	\$7,106,000	\$4,658,256

Health & Personal Care Store Sales - NAICS 446 (20 minutes drive time)

Gap/Surplus Index for Health & Personal Care Stores (NAICS 446) Stores



Store Categories	Gap/Surplus Ratio	Actual Sales	Potential Sales
Health and personal care stores	0.89	\$24,601,000	\$27,727,939
Pharmacies and drug stores	0.60	\$13,725,000	\$22,991,493

Gasoline Station Sales – NAICS 447 (20 minutes drive time)

Gap/Surplus Index for Gasoline stations (NAICS...



Store Categories	Gap/Surplus Ratio	Actual Sales	Potential Sales
Gasoline stations	1.15	\$62,176,000	\$54,028,254

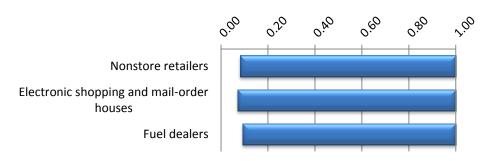
Clothing & Clothing Accessory Stores Sales – NAICS 448 (20 minutes drive time)

Gap/Surplus Index for Clothing & Clothing Access. (NAICS 448) Stores



Store Categories	Gap/Surplus Ratio	Actual Sales	Potential Sales
Clothing and clothing access. stores	0.90	\$21,845,000	\$24,366,765
Clothing stores	0.69	\$12,411,000	\$17,898,169
Men's clothing stores	1.97	\$2,123,000	\$1,076,952
Women's clothing stores	0.70	\$3,002,000	\$4,267,304
Family clothing stores	0.42	\$3,917,000	\$9,387,820
Other clothing stores	2.41	\$3,059,000	\$1,266,843
Shoe stores	1.00	\$3,024,000	\$3,027,201
Jewelry stores	1.87	\$5,950,000	\$3,189,336

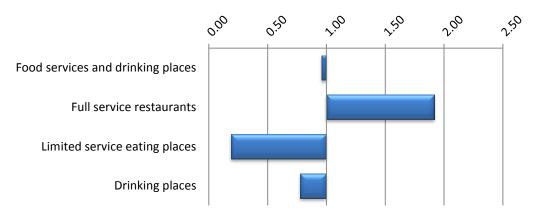
Gap/Surplus Index for Nonstore Retailers (NAICS 454)



Store Categories	Gap/Surplus Ratio	Actual Sales	Potential Sales
Nonstore retailers	0.08	\$2,720,000	\$33,576,428
Electronic shopping and mail-order houses	0.07	\$1,628,000	\$23,044,636
Fuel dealers	0.09	\$489,000	\$5,313,905

Food Services & Drinking Places – NAICS 722 (20 minutes drive time)

Gap/Surplus Index for Food Services & Drinking Places (NAICS 722)

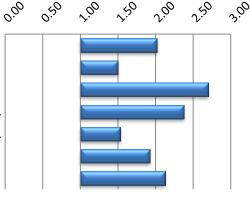


Store Categories	Gap/Surplus Ratio	Actual Sales	Potential Sales
Food services and drinking places	0.96	\$49,019,000	\$51,103,502
Full service restaurants	1.92	\$42,632,000	\$22,254,946
Limited service eating places	0.19	\$4,104,000	\$21,468,641
Drinking places	0.78	\$2,077,000	\$2,673,369

Secondary Market Retail Sales – NAICS 44-45 (40 minutes drive time)

Gap/Surplus Index for Secondary Sales (NAICS 44-45)

Motor vehicle and parts dealers Furniture and home furnishings stores Electronics and appliance stores Building mat. and garden equip. and... Sporting goods, hobby, book, and... General merchandise stores Miscellaneous store retailers



Store Categories	Gap/Surplus Ratio	Actual Sales	Potential Sales
Motor vehicle and parts dealers	2.02	\$281,859,000	\$139,513,709
Furniture and home furnishings stores	1.50	\$27,827,000	\$18,568,948
Electronics and appliance stores	2.70	\$52,758,606	\$19,545,140
Building mat. and garden equip. and supplies dealers	2.38	\$135,178,431	\$56,882,216
Sporting goods, hobby, book, and music stores	1.53	\$23,651,001	\$15,432,745
General merchandise stores	1.92	\$201,683,811	\$104,876,295
Miscellaneous store retailers	2.13	\$44,017,748	\$20,683,211

Gap/Surplus Index for Motor Vehicle and Parts Dealers Sales (NAICS 441)



Store Categories	Gap/Surplus Ratio	Actual Sales	Potential Sales
Motor vehicle and parts dealers	2.02	\$281,859,000	\$139,435,462
Automobile and other motor vehicle dealers	1.84	\$230,613,000	\$125,604,622
Automobile dealers	1.82	\$206,402,000	\$113,560,471
New car dealers	1.48	\$148,696,000	\$100,198,284
Used car dealers	4.32	\$57,706,000	\$13,362,186
Automotive parts, acc., and tire stores	3.71	\$51,246,000	\$13,830,841

Furniture and Home Furnishings Store Sales – NAICS 442 (40 minutes drive time)

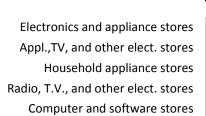
& Home Furnishings Stores (442)Sales

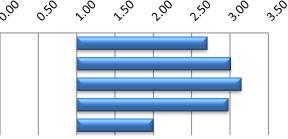


Store Categories	Gap/Surplus Ratio	Actual Sales	Potential Sales
Furniture and home furnishings stores	1.50	\$27,827,000	\$18,558,533
Furniture stores	1.45	\$14,382,000	\$9,923,161
Home furnishings stores	1.56	\$13,445,000	\$8,635,373
Floor covering stores	3.31	\$12,685,000	\$3,827,842
All other home furnishings stores	0.17	\$760,000	\$4,512,798

Electronics and Appliance Store Sales – NAICS 443 (40 minutes drive time)

Gap/Surplus Index for Electronics and Appliance Stores (NAICS 443) Sales

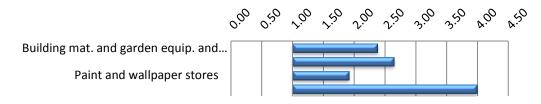




Store Categories	Gap/Surplus Ratio	Actual Sales	Potential Sales
Electronics and appliance stores	2.70	\$52,758,606	\$19,545,140
Appl.,TV, and other elect. stores	3.01	\$44,735,106	\$14,884,824
Household appliance stores	3.14	\$9,543,988	\$3,041,012
Radio, T.V., and other elect. stores	2.97	\$35,191,118	\$11,843,812
Computer and software stores	1.99	\$8,023,500	\$4,028,642

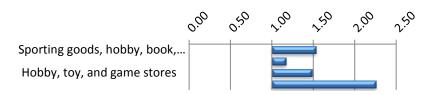
Building Materials, Garden, and Supplies Dealers – NAICS 444 (40 minutes drive time)

Gap/Surplus Index for Building Materials, Garden, and Supplies Dealers (NAICS 444) Sales



Store Categories	Gap/Surplus Ratio	Actual Sales	Potential Sales
Building mat. and garden equip. and supplies dealers	2.38	\$135,178,431	\$56,882,216
Building mat. and supplies dealers	2.65	\$127,950,263	\$48,366,573
Paint and wallpaper stores	1.91	\$3,176,651	\$1,660,301
Hardware stores	3.99	\$13,801,356	\$3,462,774

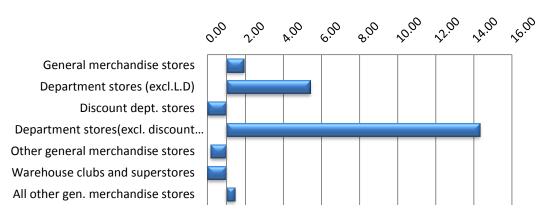
Gap/Surplus Index for Sporting Goods, Hobby, Book, & Music Stores (NAICS 451) Sales



Store Categories	Gap/Surplus Ratio	Actual Sales	Potential Sales	
Sporting goods, hobby, book, and music stores	1.53	\$23,651,001	\$15,432,745	
Sporting goods stores	1.17	\$7,616,477	\$6,528,595	
Hobby, toy, and game stores	1.48	\$4,743,924	\$3,194,972	
Book stores	2.25	\$6,637,127	\$2,946,173	

General Merchandise Stores – NAICS 452 (40 minutes drive time)

Gap/Surplus Index for General Merchandise Stores (NAICS 452) Sales



Store Categories	Gap/Surplus Ratio	Actual Sales	Potential Sales	
General merchandise stores	1.92	\$201,683,811	\$104,876,295	
Department stores (excl.L.D)	5.41	\$190,234,144	\$35,191,141	
Discount dept. stores	0.02	\$505,270	\$21,929,316	
Department stores(excl. discount department stores)	14.31	\$189,728,874	\$13,261,825	
Other general merchandise stores	0.16	\$11,449,667	\$69,685,153	
Warehouse clubs and superstores	0.00	\$0	\$61,799,073	
All other gen. merchandise stores	1.45	\$11,449,667	\$7,886,080	

Misc. Store Retailers – NAICS 453 (40 minutes drive time)

Gap/Surplus Index for Misc. Store Retailers (NAICS 453) Sales



Store Categories	Gap/Surplus Ratio	Actual Sales	Potential Sales	
Miscellaneous store retailers	2.13	\$44,017,747.52	\$20,683,211	
Office supplies, stationery, and gift stores	1.83	\$12,667,617.20	\$6,928,715	
Office supplies and stationery stores	1.58	\$6,226,984.55	\$3,945,767	
Gift, novelty, and souvenir stores	2.16	\$6,440,632.65	\$2,982,947	
Used merchandise stores	2.77	\$6,142,772.89	\$2,214,556	

Average annual expenditures	Actual Expenditures	Potential Expenditures (= I+E+P/3)	Income (\$30,000 - \$40,000)	Education (HS Grad)	Population (fewer than 100,000)
Food	\$5,887	\$5,443	\$5,130	\$5,583	\$5,616
Food at home	\$3,486	\$3,380	\$3,243	\$3,486	\$3,411
Cereals and bakery products	\$486	\$458	\$425	\$480	\$469
Meats, poultry, fish, and eggs	\$875	\$791	\$791	\$839	\$742
Dairy products	\$397	\$383	\$379	\$386	\$385
Fruits and vegetables	\$574	\$570	\$570	\$573	\$567
Other food at home	\$1,154	\$1,178	\$1,079	\$1,208	\$1,247
Nonalcoholic beverages	\$320	\$318	\$296	\$336	\$321
Food away from home	\$2,400	\$2,063	\$1,887	\$2,097	\$2,206
Alcoholic beverages	\$401	\$332	\$317	\$326	\$352
Home and Housekeeping					
Shelter	\$10,083	\$7,369	\$7,266	\$7,627	\$7,215
Utilities, fuels, and public services	\$3,394	\$3,380	\$3,244	\$3,536	\$3,360
Housekeeping supplies	\$558	\$560	\$515	\$546	\$618
Household furnishings and equipment	\$1,459	\$1,203	\$975	\$1,169	\$1,465
Household textiles	\$96	\$96	\$77	\$73	\$139
Furniture	\$425	\$271	\$207	\$294	\$313
Floor coverings	\$65	\$27	\$17	\$37	\$27
Major appliances	\$210	\$168	\$140	\$195	\$169
Small appliances, miscellaneous house wares	\$88	\$86	\$80	\$75	\$104
Clothing, Healthcare, and Education					
Apparel and services	\$1,546	\$1,416	\$1,381	\$1,357	\$1,509
Men and boys	\$377	\$328	\$350	\$310	\$324
Men, 16 and over	\$287	\$257	\$280	\$234	\$258
Boys, 2 to 15	\$90	\$70	\$69	\$76	\$66
Women and girls	\$611	\$567	\$543	\$529	\$628

Average annual expenditures	Actual Expenditures	Potential Expenditures (= I+E+P/3)	Income (\$30,000 - \$40,000)	Education (HS Grad)	Population (fewer than 100,000)
Women, 16 and over	\$521	\$466	\$462	\$434	\$502
Girls, 2 to 15	\$90	\$101	\$81	\$95	\$126
Children under 2	\$90	\$84	\$74	\$77	\$100
Footwear	\$230	\$268	\$275	\$266	\$263
Other apparel products and services	\$238	\$170	\$141	\$175	\$194
Healthcare	\$3,164	\$2,697	\$2,696	\$2,733	\$2,661
Drugs	\$555	\$485	\$494	\$485	\$477
Personal care products and services	\$308	\$484	\$467	\$479	\$505
Reading	\$205	\$83	\$77	\$76	\$97
Education	\$922	\$568	\$406	\$419	\$880
Life and other personal insurance	\$433	\$217	\$181	\$237	\$232
Transportation and Entertainment					
Vehicle purchases (net outlay)	\$3,610	\$2,252	\$2,069	\$2,461	\$2,225
Gasoline and motor oil	\$1,851	\$2,465	\$2,310	\$2,620	\$2,464
Maintenance and repairs	\$690	\$603	\$572	\$626	\$612
Entertainment	\$2,630	\$2,107	\$1,874	\$2,129	\$2,317
Fees and admissions	\$403	\$320	\$265	\$297	\$397
Audio and visual equipment and services	\$1,017	\$890	\$797	\$947	\$927

Source: Consumer Expenditure Survey, U.S. Census Bureau; ESRI GIS Business Analyst.

Appendix E: Market Area and Business Maps

